

PPP Fiscal Risk Assessment Model (PFRAM) - International Monetary Fund



Objective and features

1. Objective

PFRAM is a macro-fiscal analytical tool designed to assess the potential fiscal costs and risks arising from public-private partnership (PPP) projects.

2. Institutional coverage

National governments, subnational governments, local governments or local-level units, and individual state-owned enterprises (SOEs) and public institutions (for both PFRAM 1 and 2). There are two versions of PFRAM that share the same institutional coverage: PFRAM 1 is only suitable for single projects, and PFRAM 2 can assess a portfolio of PPPs.

3. Technical coverage

The model covers public investment management, following a macro-based calculation that estimates financial statement variables and projections. Five key outputs are produced:

1. Cash flows of project company
2. Fiscal impact charts and tables
3. Government's financial statements
4. Sensitivity analysis
5. Project risk matrix.

4. Application method

Self-assessment by national authorities or private companies, or external assessment undertaken by developer/custodian (IMF/WB).

Methodology



5. Methodology

PFRAM 1 is an Excel-based tool. The first step involves inputting key PPP contract details: initial year, length of contract, and level of government funding. The risk matrix groups risks under 11 main risk categories broken down into 52 subcategories (in parentheses):

1. Governance Risks (3 detailed risks)
2. Construction Risks (19 detailed risks)
3. Demand Risks (10 detailed risks)
4. Operation and Performance Risks (7 detailed risks)
5. Financial Risks (4 detailed risks)
6. Force Majeure Risks (No detailed risks)
7. Material Adverse Government Actions (MAGA) (No detailed risks)
8. Change in Law (No detailed risks)
9. Rebalancing of Financial Equilibrium (3 detailed risks)
10. Renegotiation Risks (No detailed risks)
11. Contract Termination Risks (2 detailed risks).

PFRAM 2 differs in that it has increased input variables to cover a portfolio of PPP projects since PFRAM 1 only works on one project at a time. The end results of the risk matrix follow the same methodology outlined in the paragraph above.

6. Benchmarking system

For PFRAM to allow benchmarking against internationally accepted standards, the inputs are aligned with international financial reporting standards (IFRS).

The main output is the risk matrix which groups risks under the main risk categories. The user first allocates the risk between private and public, then assesses the likelihood and fiscal impact (low, medium, or high), which produces an overall risk rating of either irrelevant, low, medium, high, or critical. The scoring system is consistent between PFRAM 1 and PFRAM 2.

7. Linkage to PEFA framework

There are three linkages with the PEFA framework: (1) budget documentation (PI-5), Element 9 – summary information of fiscal risks, including contingent liabilities such as guarantees, and contingent obligations embedded in structure financing instruments such as PPP contracts; (2) fiscal risk reporting (PI-10), Dimension 10.3 – contingent liabilities and other fiscal risks; and (3) public investment management (PI-11), all dimensions – only applicable if the country uses PPP.

8. Complementarity with PEFA framework

Compared with the PEFA framework, PFRAM provides details on the risks and their quantification.

Development and use



9. Development and coordination

The original idea for the tool came during the height of the 2008 financial crisis, where the use of PPPs had caused significant contingent liabilities to materialize. Many countries were increasingly using PPPs for investment projects in order to circumvent budget constraints or postpone recording of fiscal costs. As a consequence, many governments have exposed themselves to excessive fiscal risks without sufficient means to quantify them. At that time, there were no tools available to assess the fiscal risks of PPPs. In response, IMF and WB jointly developed PFRAM.

PFRAM 1.0 was created in 2016. PFRAM 2.0 was released in 2019 and extended its scope from single project assessments to being able to assess portfolios of PPPs and having additional capabilities to model economic shocks as part of sensitivity analysis. Accessibility of the Excel-based tool was increased by making the tool more user-friendly for non-PPP experts.

10. Assessment management

As the tool is jointly developed/managed by IMF and WB, there are two avenues to seek support and provide feedback. IMF can be contacted via their standard email inquiry address for support (imfpubinv@imf.org) while the World Bank has a dedicated [link](#) for feedback. The IMF has conducted specific missions utilizing the tool either through internal requests from technical assistance personnel or external requests from national authorities.

11. Uses by the government and members of the PFM community

The tool is used by IMF and WB as part of their technical assistance programs. National authorities and private companies, such as S&P and Moody's, may use it in an independent capacity.

12. Sequencing with other tools

As an ad-hoc tool, there is no sequencing required with other tools for either PFRAM 1 or 2. However, P-FRAM is occasionally used in conjunction with IMF's Public Investment Management Assessment (B12). This is not a standard sequencing as it has only occurred in a few distinct cases.

13. PFM capacity building

IMF and WB capacity development activities include (1) direct support to country authorities in assessing the impact of their PPP portfolio on the fiscal position, and (2) regional workshops to train country authorities in using PFRAM for analytical purposes.

14. Tracking of changes and frequency of assessments

The tool is not designed to track changes. There is no predefined frequency for repeated assessments.

15. Resource requirements

Cost is minimal as the tool can be used remotely. For remote support and training, the financial costs would be limited. For specific missions, the costs can be significant as these typically involve a team being based on-site.

Workshops and training normally require one or two days. Some training sessions may require additional days to cover different locations, schedules, or cohorts of national authority officials. Specific missions by the IMF to assess fiscal risks of PPPs using the PFRAM tool are normally five to ten days. When an assessment is required as part of an existing IMF technical assistance program in a country, it usually requires significantly more time than a separate mission focused solely on PFRAM.

Transparency



16. Access to methodology

There is public access to both PFRAM 1 and 2 user guides, available at [PFRAM 1](#) and [PFRAM 2](#).

17. Access to assessment results

Internal repository is available with the custodian. However, outputs are not published.