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Options to Improve the Incorporation of PPPs into Debt Sustainability Analyses

Abdoul Aziz Wane

IMF

Fiscal Affairs Department

Outline of the Presentation

I. Introduction

II. Accounting standards of PPPs: SNA; Eurostat; IPSAS;

III. Fiscal Risks and Accounting: IMF

IV. Options to Improve Incorporation of PPPs risks into DSAs

I. Introduction

Motivation

- Hidden deficits (Kharas and Misra, 2001; Irwin, 2011; IMF 2011, forthcoming):
  - Mismatches debt -deficits (one-off operations below the line)
  - Eurostat, IMF “re-link” (stock-flow adjustments), but discrepancies, including because of accounting stratagems
- Increased awareness of PPPs’ impact on fiscal sustainability
  - Attempt to offset lower public investments during crisis
  - PPPs often ignored in public books (“Accounting Gimmicks”) leading to apparently sustainable debt until a crisis occurs
  - Markets can however perceive the real fiscal vulnerabilities
- How to align debt and deficits and report right debt outlook?

II. Accounting standards of PPPs

SNA (2008), GFSM 2001, Public Debt Manual (upcoming)

- Based on economic ownership
  - PPP in fiscal accounts if government bears risks and reaps rewards of ownership of asset
  - PPP indistinguishable from traditional public investment, except for differences in time profile of cash payments
- Ignored in fiscal accounts if not considered public

II. Accounting standards of PPPs

Eurostat decision

- Private investment if private partner bears most construction risk, and either most availability risk or demand risk.
- Simple rule
- Considerable concerns:
  - Projects being done as PPPs to classify them as private.
  - Projects that are well suited for PPPs are designed sub-optimally so they can be classified as private.
  - Contingent liabilities for the public sector pile up from investments that are not on the public sector's books.
  - Budgetary rigidities are created, as future revenues are in fact being pre-committed, without this being evident.

II. Accounting standards of PPPs

IPSASB

- Standard for Service Concession Arrangements, based on **control approach**:
  - Regulation and fee/price setting powers, choice of beneficiaries; and
  - Control—e.g., through ownership— of any residual interest at end of the term of the arrangement.
- Would put virtually **all PPPs on public books** because, in most PPP contracts:
  - Public entity influences contractually at least the kind of services that must be provided; and
  - Price received by operator for service provision (shadow toll) is regulated in contract

III. Fiscal Risks and Accounting: IMF

Unbundle components of risks …

- Traditional approach is binary; attributes asset to one partner based on:
  - Risks and/or reward (Eurostat, GFS);
  - Access to (future) benefits and exposure to risks (UK)
  - Control (through ownership or regulation) the assets (IPSASB)
- IMF approach (2006) seek to unbundle components:
  - Conceptually appealing
  - Requires quantification of risks and rewards , and splitting the value of assets and liabilities to private and public sector partners
  - Challenging to implement: involves significant value judgment

III. Fiscal Risks and Accounting: IMF

…while mitigating potential moral hazard through…

- Emphasis on comprehensive disclosure of known and potential future costs of PPPs for public finances

- Incorporation of costs (as primary spending) into Debt Sustainability Analysis
  - Future payments by government under PPP contracts; and
  - expected payments under called guarantees

III. Fiscal Risks and Accounting: IMF

Comprehensive disclosure:

- For each PPP project/sector, information should be provided on:
  - Future expected or contingent payment/revenue stream up to over 20 years
  - Terms of project that may affect amount, timing, and certainty of cash flows
  - Extent of rights/obligations to use/provide specified assets' services
  - Arrangements after concession period, including on renewal and termination
  - Any preferential financing through on-lending or public financial institutions.
  - Any project financing or off-balance sheet elements such as contingent liabilities provided by entities owned or controlled by government.
- Whether PPP assets (or any part thereof) are recognized on balance sheet of any SPV, or in private partner's statements.

III. Fiscal Risks and Accounting: IMF

Debt Sustainability Analysis:

- **For PPPs that are classified as private:**
  - Primary spending: Future payments by the government under PPP contracts and expected future costs of guarantees.
  - Potential costs of contingent liabilities: explore with multiple scenarios and stress tests.

- **For PPPs that are classified as public:**
  - Investment is public spending and its financing is public debt.
  - Separate future government payments into its economic components
    - Primary spending: services provided on an ongoing basis;
    - Cost of financing is Interest spending;
    - **Work with multiple scenarios.**

IV. Options to Improve Incorporation PPPs risks into DSAs

Implicit or contingent liabilities are often not reported in DSAs

Appendix Table I.2. Country: Public Sector Debt Sustainability Framework, 2006–16

(Percent of GDP, unless otherwise indicated)

	Actual			Projections				Debt-stabilizing primary balance 9/
	2006	2008	2010	2011	2012	2014	2016	
Baseline: public sector debt 1/	20.8	8.3	11.6	11.1	16.0	15.8	13.2	-0.9
Change in public sector debt	-1.2	-0.8	2.8	-0.5	4.9	-1.2	-1.2	
Identified debt-creating flows (4+7+12)	0.7	-0.5	0.7	0.2	-0.8	0.1	0.2	
Primary deficit	1.3	0.3	-0.8	-0.2	-1.4	0.2	1.2	
Automatic debt dynamics (xrate and r-g)	-2.1	-1.9	-1.1	-2.2	-0.6	-1.3	-2.1	
Contribution from interest rate/growth differential 3/	-2.9	-1.9	-1.1	-2.2	-0.6	-1.3	-2.1	
Contribution from exchange rate depreciation 4/	0.7	0.0	0.0	...	...	...	...	
Other identified debt-creating flows	1.6	1.1	2.7	2.6	1.2	1.2	1.0	
Privatization receipts (negative)	0.1	0.1	2.0	1.0	1.2	0.2	0.0	
Recognition of implicit or contingent liabilities	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
Other (specify, e.g. bank recapitalization)	1.5	1.1	0.7	1.6	0.0	1.0	1.0	
Residual, including asset changes (2-3) 5/	-1.9	-0.4	2.1	-0.7	5.7	-1.4	-1.3	
Public sector debt-to-revenue ratio 1/	22.7	17.4	23.2	21.3	32.7	33.2	28.7	
Gross financing need 6/	2.7	1.3	2.5	5.3	3.3	4.3	4.1	
Billions of U.S. dollars	0.5	0.4	1.1	3.1	1.9	3.1	4.0	
Scenario with key variables at their historical averages 7/				11.1	15.4	11.1	6.7	-0.2
Scenario with no policy change (constant primary balance) in 2008–13				11.1	17.6	17.1	12.1	-0.8

IV. Options to Improve Incorporation of PPPs risks into DSAs

There may be room for refining DSAs

Growing importance of PPPs → need to reflect them better in DSAs

- Option 1: Memo line for PPP liabilities (stock; relevant for pensions)
- Option 2: Measure implicit PPP debt :
  - Expected increases in PPP-related payments to derive needed adjustment
  - Include a line for total PPP implicit debt in NPV terms
- Option 3: Use main risk factors on future payments for stress tests:
  - Construction
  - Financial, including exchange rate risks/guarantees
  - Availability ; Demand
  - Political ; Residual value; Force majeure.

IV. Options to Improve Incorporation of PPPs risks into DSAs

Option 3. Estimate impact of risks on debt profile for each scenario

Payments for Contingent Liabilities under PPPs: Risks Stress Tests (US$ million)

Sector j (ex: Transport)

		2010e	Long-Term Projections
Demand Scenario	Actual and baseline projected demand		
	Demand is x% below baseline level		
Exchange Rate Scenario	Actual and baseline projected exchange rates		
	x% xrate depreciation compared to baseline		
Availability Scenario	Actual and baseline projected availability		
	Availability is x% below baseline level		
⋮	⋮		
Combined Shocks	**Baseline projection**		
	All shocks		

IV. Options to Improve Incorporation of PPPs risks into DSAs

Valuing PPPs-related liabilities:

No information on PPP because no idea on default probability and risk valuation

- Face value or maximum loss
- Expected cost (50% confidence level)
- Cash-flow at risk or unexpected cost (95-99% confidence level)
- Market value of the guarantee
  - Implicit guarantee pricing
    - Estimate market value as: Value of risk-free bond—Value of nonguaranteed bond issued by recipient of the guarantee
    - Estimate expected cost by using historical default and recovery rates compiled by rating agencies and compare these to actual yield spreads
    - Historical data on loan loss experience could also be used to estimate expected costs if there is a large portfolio of similar contingent liabilities.
  - Direct guarantee pricing:
    - Option pricing by exploiting similarities between guarantees and put option. By guaranteeing a firm's loan, state issues a put option on assets of the firm
    - Simulation models (e.g., Monte Carlo) to estimate the probability distribution of losses from the guarantee

THANK YOU

COMMENTS WELCOME