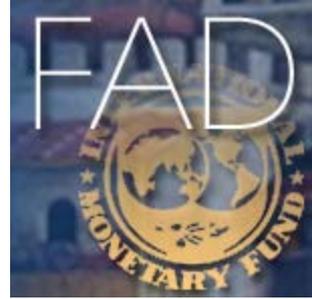


4th ANNUAL MEETING OF PUBLIC-PRIVATE PARTNERSHIPS (PPPs) SENIOR OFFICIALS
OECD Conference Centre
Paris March 24-25 2011



Options to Improve the Incorporation of PPPs into Debt Sustainability Analyses

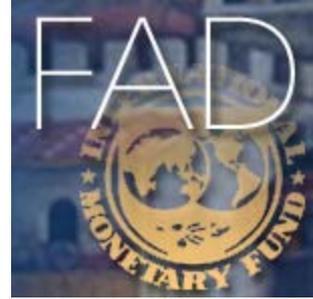
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Outline of the Presentation

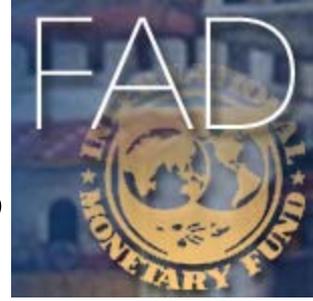
- I. Introduction
- II. Accounting standards of PPPs: SNA; Eurostat; IPSAS;
- III. Fiscal Risks and Accounting: IMF
- IV. Options to Improve Incorporation of PPPs risks into DSAs



I. Introduction

Motivation

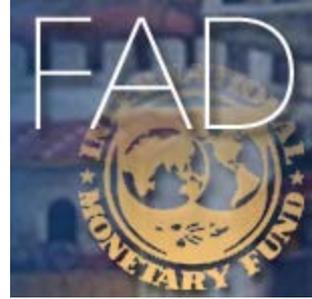
- Hidden deficits (Kharas and Misra, 2001; Irwin, 2011; IMF 2011, forthcoming):
 - Mismatches debt -deficits (one-off operations below the line)
 - Eurostat, IMF “re-link” (stock-flow adjustments), but discrepancies, including because of accounting stratagems
- Increased awareness of PPPs’ impact on 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)

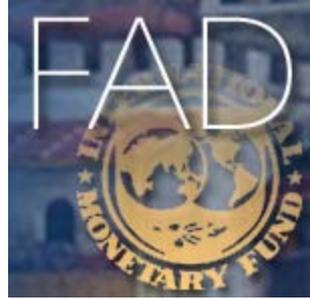
- **Based on economic ownership**
 - PPP in fiscal accounts if government bears risks and reaps rewards of ownership of asset
 - PPP indistinguishable from traditional public investment, except for differences in time profile of cash payments
- **Ignored in fiscal accounts if not considered public**



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.

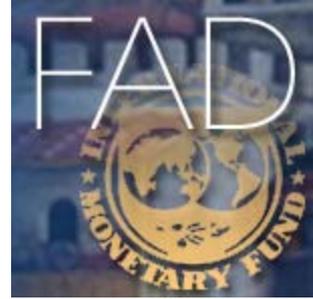


II. Accounting standards of PPPs

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

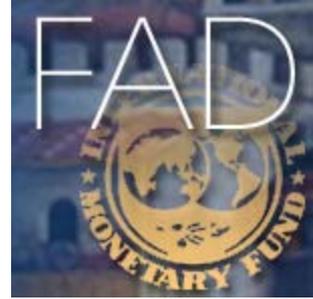


...while mitigating potential moral hazard through...

- 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 PPP's risks into DSAs



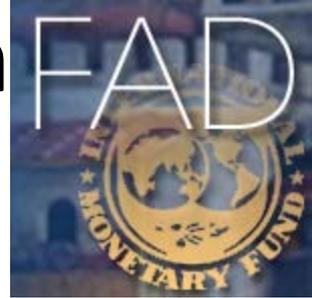
Implicit or contingent liabilities are often not reported in DSAs

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

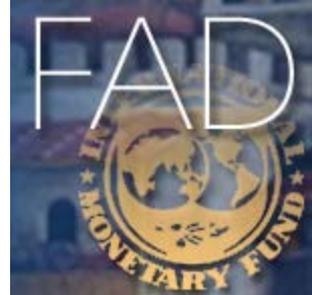
IV. Options to Improve Incorporation of PPPs risks into DSAs



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