



10th UNCTAD DEBT MANAGEMENT
CONFERENCE
Geneva, 23th – 25th November 2015

Mitigating the Risk Associated with Contingent Liabilities

by

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD



Government Guarantee – Risk Measurement

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Key Characteristics

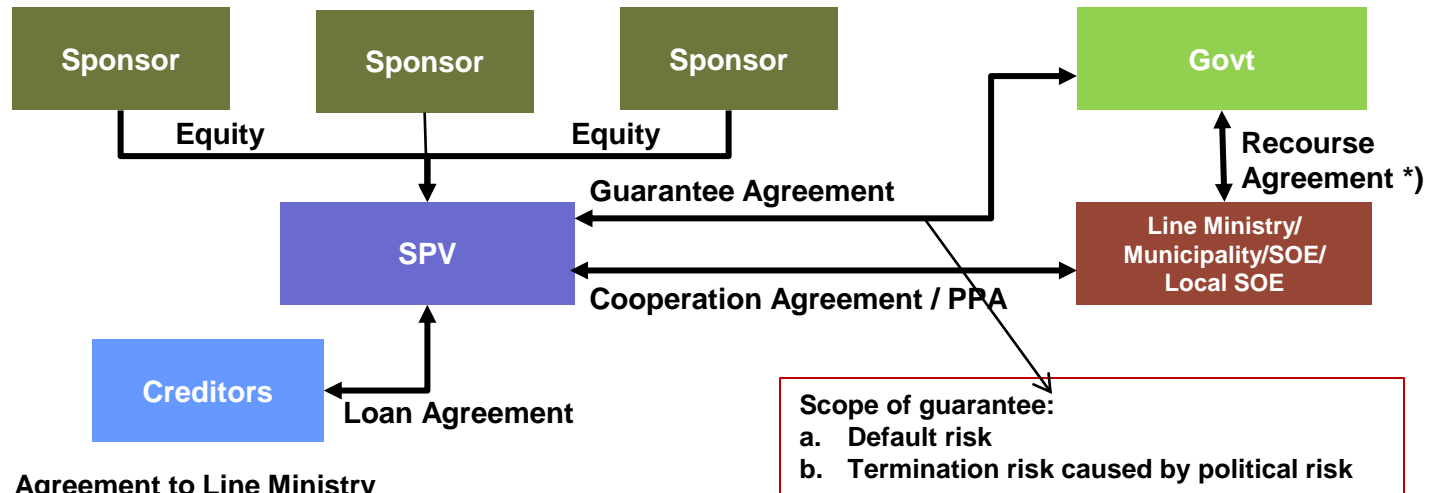
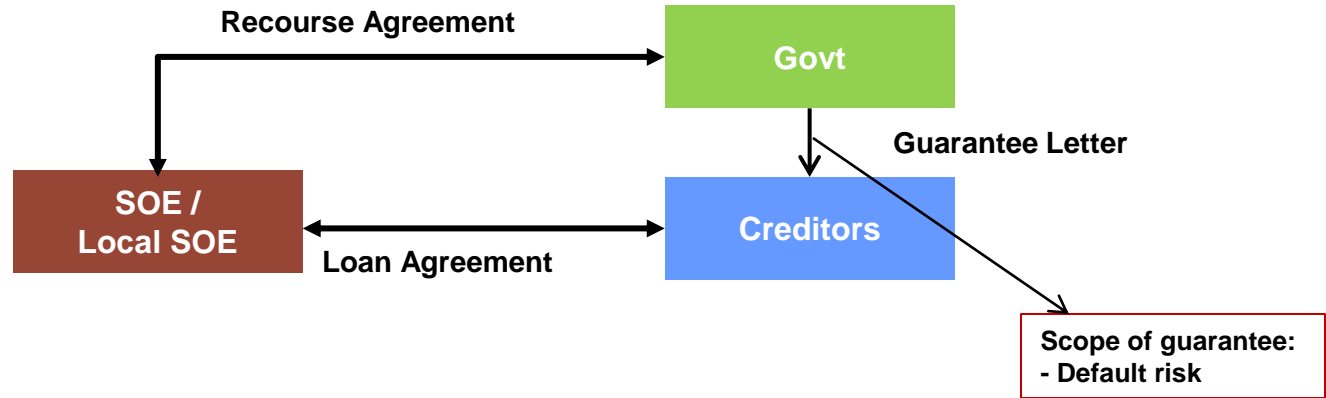
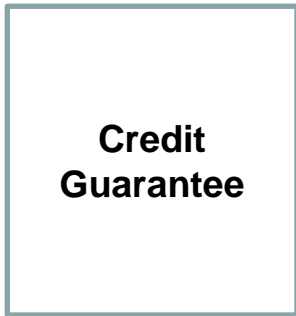
Background :

- ❑ Encourage private sector involvement in infrastructure development programs
- ❑ Attracting investors/creditors (credit worthiness)
- ❑ Sharing risks between government and investor/creditor
 - Decreasing cost
 - Decreasing tariff



Key Characteristics

Guarantee Schemes:



*) Exception recourse Agreement to Line Ministry



Key Characteristics (Current Government Guarantee Programs)

<p>Fast Track Program Phase 1 (FTP 1)</p> <ul style="list-style-type: none"> • Full credit guarantee – Government will directly pay to creditor(s) of PLN when PLN fails to service its financial obligation 	Power	Credit Guarantee
<p>Clean Water Availability Program</p> <ul style="list-style-type: none"> • Guarantees 70% of repayment of PDAM to creditor(s) 	Water	
<p>SOE Direct Lending</p> <ul style="list-style-type: none"> • Full credit guarantee – Government will directly pay to creditor(s) of SOE when SOE fails to service its financial obligation 	All	
<p>Fast Track Program Phase 2 (FTP 2)</p> <ul style="list-style-type: none"> • Business Viability Guarantee – Guarantee on the viability of PLN to fulfill its obligation in Purchase Contract of Electricity with Private Developer and guarantee against political risk 	Power	Investment Guarantee
<p>Public and Private Partnership (PPP)</p> <ul style="list-style-type: none"> • Guarantees the obligation of Ministry/Agency, Local Government, SOEs/Local SOEs to an entity in accordance to the Agreement 	Power, Water, Toll Roads, Railways, Bridges, Ports, and Others	



Fundamental Risk Analysis

Internal Credit Rating (ICR), Why ?

- ❑ Not all guaranteed parties have been rated by credit rating agency
- ❑ Setting threshold for acceptable risk level in providing guarantees
- ❑ Strong capability of credit analysis is necessary for ongoing credit monitoring and credit risk mitigation
- ❑ Different sectors have different characteristics
 - Regulated electricity
 - Regulated water
 - Project financing
 - The next projects (?)
- ❑ Different kinds of guaranteed parties :
 - Line Ministry
 - Municipality
 - SOEs
 - Local SOE s



Fundamental Risk Analysis

Functions of ICR :

- ❑ Assessing level of credit risk to which government would be exposed;
- ❑ Analyzing credit risks factors: regulatory risks, business risks, operational risks, financial risks.
- ❑ Monitoring and setting up risk mitigation plan
- ❑ Used to determine:
 - Probability of default
 - Expected loss
 - Guarantee fee
 - State budget allocation



DMFAS Utilization and Way Forward

❑ DMFAS utilization

- Based on its features, DMFAS can only support for recording credit guarantees (such as FTP 1, Clean Water Availability Program, SOE Direct Lending).
- currently, DGBFRM is recording and validating credit guarantee transaction into DMFAS.

❑ For the next step:

- DGBFRM will be utilizing DMFAS for:
 - Monitoring tools
 - Reporting tools
 - Verification of guarantee claims and payment.
- DGBFRM is developing methodologies for measuring guarantee obligations that are suitable for Indonesia, such as :
 - Determining probability default
 - Calculating expected losses



List most of loan guarantee recorded in DMFAS

Instrument ID - Mozilla Firefox
10.242.47.101/dmfas/selectorPopUp.jsf

Filter: Filter

Lo No	Name	Amt	Cu Base	D Eff	Cd Lo Typ	Cd Tr Mgt Op
80000001	PLTU 1 JAWA TIMUR - PACITAN	293,226,064.00	USD	01/07/2010		1
80000002	PLTU 1 BANTEN - SURALAYA	284,288,744.10	USD	30/10/2008		1
80000003	PENGEMB Pelay Air PDAM BOGOR	24,312,000,000.00	IDR	12/12/2011		1
80000004	PERCEPAT AIR MINUM CIAMIS	14,700,000,000.00	IDR	12/12/2011		1
80000005	PLTU 2 JATIM - PAITON	289,322,989.23	USD	30/10/2008		1
80000006	PLTU Luar Jawa III - PK62	2,926,692,300,357.00	IDR	20/08/2009		1
80000007	PLTU 1 BANTEN - SURALAYA	735,387,524,690.00	IDR	18/04/2008		1
80000008	Teluk Naga USD	454,974,082.00	USD	04/06/2010		1
80000009	NAD USD - BLA 0910	124,339,936.00	USD	13/01/2010		1

DMFAS | Negotiation | Administration | Mobilization | Debt Service | Reports | Analysis | Inbox(1) | Portal | Close Session

Loans - General Information

Agreement Info 1 | Agreement Info 2 | Participants | User Info | Other Classifications | Notes | Attachments

General Information

Identification

Instrument ID: 80000016 | Name: Transmisi Paket 2 - PK 32

Creditor Reference: | Other Reference: |

Long Name: Transmisi Paket 2 - PK 32

Maturity: MEDIUM/LONG-TERM SHORT-TERM

Status: ACTIVE

Agreement Dates

Signed: 14/12/2009 | Effective Limit: 02/02/2010

Effective: 02/02/2010 | Drawing Limit: 31/12/2013

Agreement Amount

Amount: 2,613,011,648,000.000

Currency: IDR Currency Pool Loan

Agreement Authorization

Authorized On: | Authorization Type: | Authorization ID: |

Asian Development Fund Loan

Consult | Record (Optional) | If Revolving Credit

DMFAS | Negotiation | Administration | Mobilization | Debt Service | Reports | Analysis | Inbox(1) | Portal | Close Session

Loans - Tranches

Instrument ID: 80000016 | Tranche No.: 1

Tranches Info | User Info | Estimated Drawings | Principal | Interest | Amortization Table

Date	Drawings	Principal ¹	Interest ¹	Capitalized Interest ¹
30/07/2010	38,003,549,841.310			
30/07/2010	32,925,061,284.690			
30/07/2010	32,925,061,284.690			
30/07/2010	38,003,549,841.310			
01/09/2010	17,200,682,788.910			
01/09/2010	17,200,682,788.910			
01/09/2010	14,980,095,002.590			
01/09/2010	14,980,095,002.590			
23/10/2010			3,020,834,400.000	
28/10/2010	234,371,146,587.410			
28/10/2010	270,521,457,004.590			
28/10/2010	270,521,457,004.590			
28/10/2010	234,371,146,587.410			
30/12/2010	109,206,771,685.650			
Totals	2,613,011,648,000.000	2,613,011,647,868.000	479,684,555,708.510	0.000

¹ indicates that real transactions were recorded. M-2324 | Status: AMORTIZATION SCHEDULE IS CORRECT | Calculate

Close Current Tranche | Save | Exit

Example of loan guarantee General information

Example of loan guarantee Amortization Table



Thank You



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Extra Slides

Fundamental Risk Analysis (example: regulated electricity)

Internal Credit Rating for Company XYZ		Weight	Sub Score	Final Score
Regulatory Framework		20.0%		0.70
a. Legislative and Judicial Underpinnings of the Regulatory Framework		10.0%	4	
b. Consistency and Predictability of Regulation		10.0%	3	
Ability to Recover Cost and Earn Return		20.0%		2.60
a. Timeliness of Recovery of Operating and Capital Costs		10.0%	12	
b. Sufficiency of Rates and Return		10.0%	14	
Diversification		10.0%		1.30
a. Market Position		5.0%	12	
b. Generation and Fuel Diversity		5.0%	14	
Management		10.0%		1.40
a. Strategic Positioning		3.3%	15	
b. Operational Effectiveness		3.3%	12	
c. Governance (BoD)		3.3%	15	
Key Credit Metrics		40.0%		5.10
a. $(CFO \text{ pre } WC + Interest)/(Interest+Principal)$		15.0%	12	
b. CFO pre WC/Debt		15.0%	12	
c. Debt/Total Asset		5.0%	18	
d. Rasio utang-Valas-IDR		5.0%	12	
				Ba1
Base Rating				11.10

Modifiers	Factors	Base	Notch	Adjusted Score
	Base Rating	11.10		
	Liquidity	3	0	11.10
	Financial Policy	2	0	11.10

Final Rating	<i>Non Investment Grade</i>	Ba1	11.10
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ICR Score Table

Score	Rating	Rating Description
<1,5	Aaa	Very High Ability to Pay Debt
1,5 ≤ X < 2,5	Aa1	High Ability to Pay Debt
2,5 ≤ X < 3,5	Aa2	High Ability to Pay Debt
3,5 ≤ X < 4,5	Aa3	High Ability to Pay Debt
4,5 ≤ X < 5,5	A1	Medium Ability to Pay Debt
5,5 ≤ X < 6,5	A2	Medium Ability to Pay Debt
6,5 ≤ X < 7,5	A3	Medium Ability to Pay Debt
7,5 ≤ X < 8,5	Baa1	Sufficient Ability to Pay Debt
8,5 ≤ X < 9,5	Baa2	Sufficient Ability to Pay Debt
9,5 ≤ X < 10,5	Baa3	Sufficient Ability to Pay Debt
10,5 ≤ X < 11,5	Ba1	Non-Investment Grade
11,5 ≤ X < 12,5	Ba2	Non-Investment Grade
12,5 ≤ X < 13,5	Ba3	Non-Investment Grade
13,5 ≤ X < 14,5	B1	Highly Speculative
14,5 ≤ X < 15,5	B2	Highly Speculative
15,5 ≤ X < 16,5	B3	Highly Speculative
16,5 ≤ X < 17,5	Caa1	Substantial Risks
17,5 ≤ X < 18,5	Caa2	Extremely Speculative
18,5 ≤	Caa3	Default imminent



Example: Expected Losses at COD period

ICR = Ba1 (Moody's)

- ❑ The Expected Losses are calculated with the following formula:

$$EL = PD \times EAD \times LGD$$

- ❑ PD = Refers to Probability of Default from default study of rating agency
- ❑ EAD = Exposure at Default is the annual credit exposure depending on disbursements and amortizations for credit guarantee **OR** realization of equity + debt for investment guarantee = USD 3.200.000.000
- ❑ LGD = Loss Given Default = 1 - recovery rate = 50%

$$EL = 0,674\% \times 3.200.000.000 \times 50\%$$

$$EL = \text{USD}10.784.000$$

Application of Risk Measurement

Guarantee Fee:

- ❑ One time fee : arranging fee, front end fee, processing fee
- ❑ Recurring fee : guarantee fee

Fee calculated based on the yield spread between unguaranteed bonds of the guaranteed party with the yield of government bonds

$$\text{Fee} = 50\% * x [\text{government bond yields} - \text{XYZ} ** \text{ bond yields}]$$

$$\text{Fee} = 50\% x [80 \text{ bps}]$$

$$\text{Fee} = 40 \text{ bps}$$

Example: Fee at COD period

$$\text{Fee} = 40 \text{ bps} \times \text{exposure}$$

$$\text{Fee} = 40 \text{ bps} \times \text{USD } 3.200.000.000$$

$$= \text{USD } 12.800.000$$

* Additional discount could be applied to the fee depending on impact to the tariff.

** XYZ is a State Owned Enterprise in electricity sector



Application of Risk Measurement

Budget Allocation and Reserve Account:

❑ Budget allocation = expected losses (with 100% LGD)

$$= PD \times EAD \times LGD$$

$$= 0,674\% \times 3.200.000.000 \times 100\%$$

$$= \text{USD } 21.568.000$$

❑ Reserve account

- MoF established a Guarantee Fund Reserve Account
- Only for guarantee payments / restricted cash
- Unused budget allocation will be accumulated in the Reserve Account, until its balance reaches a certain amount

❑ Purposes :

- To make sure Government has sufficient amount to pay guarantee claims in a timely manner
- To avoid the need for allocating a huge amount of fund in the state budget

