CREDIT RISK

MANAGEMENT OF CONTINGENT LIABILITIES

Presenter: Credit Risk I Strategy and Risk Management I Division: Asset and Liability Management | 04 November 2016

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Department:
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CREDIT RISK POLICY

- The Directorate derives its mandate from the Credit Risk Policy, which is approved by the DDG-ALM
- The Policy provides guidelines for the management of credit risks arising from the different operations and transactions of the National Treasury
- The policy also prescribes credit risk assessment methodologies (SOCs, DFIs and Implicit)
- These methodologies guide the assessment of the credit quality of the different institutions to which government is exposed

KEY DEFINITIONS

- A **contingent liability** is a potential liability (*charge to the fiscus*) that may occur, depending on the outcome of an uncertain future event (*default by entity*)
- **Explicit CLs** emanate from guarantees granted to SOCs, IPPs and PPPs
- **Implicit CLs** emanate from exposure to Social Security Funds and government related insurance companies
- Disclosed vs. Undisclosed implicits
- Issued guarantees vs. guarantee exposure

ASSESSMENT METHODOLOGIES

- Methodologies prescribe the criteria (risk indicators) to be used in analyzing SOCs to determine their ability and willingness to service their government guaranteed debt

- An analyst will be guided by the methodology in assigning an internal credit risk rating to an entity (1 to 9)

- Separate methodologies for each category of contingent liability as well as each sector (guarantees)

ASSESSMENT METHODOLOGIES (cont.)

Risk ratings	Extent of risk exposure	Likelihood of materialization
1	Extremely low risk	Remote
2	Low risk	
3	Moderate risk	
4	Marginal risk	
5	Special attention	Possible
6	Substandard	
7	High risk	Probable
8	Very high risk	
9	Eminent default/ In default	

ASSESSMENT METHODOLOGIES (cont.)

- ***The methodologies are used mainly for:***
  - Conducting annual credit risk reviews on the counterparties in order to determine the quality of government's risk exposure;
  - Conducting credit risk reviews on SOCs in order to make recommendations about whether or not to approve the SOCs' applications for government guarantees;
  - Conducting credit risk reviews on the SOCs based on their planned financial performance in order to determine the credit risk exposure outlook of government in relation to the SOCs; and
  - Assisting the Directorate in determining risk mitigation strategies to recommend to the relevant stakeholders

ASSESSMENT METHODOLOGIES (cont.)

- The indicators prescribed are divided into business risk and financial risk indicators

- Business risk indicators are primarily driven by the macroeconomic factors, industry specific microeconomic factors as well as other qualitative information that affects the SOC's operations, while the financial risk indicators are driven by the financial performance and financial strength of the SOC

ASSESSMENT METHODOLOGIES (SOCs)

Business risk indicators	Financial risk indicators
• **Industry Prospects** o Operating Environment o Regulatory Framework • **Corporate Governance** o Adherence to applicable legislation o Management Quality • **Market Position** o Diversification o Size (capacity)	• **Profitability** o Operating margin o Net profit margin o Revenue growth • **Debt capacity** o Debt to assets ratio o Debt to equity ratio o Interest cover ratio • **Efficiency** o Cost to income ratio • **Cash flow adequacy** o Funds from operations to total debt ratio • **Liquidity** o Cash ratio o Quick ratio o Current ratio

ASSESSMENT METHODOLOGIES (Implicit)

Financial Risk Indicators	Business Risk Indicators
Financial performance	**Industry risks**
Total Assets (R'm)	Operating environment
Total Equity (R'm)	Regulatory framework
Total Liabilities (R'm)	Growth potential
Profit for the period(R'm)	Size and entry barriers
Leverage	**Business indicators can be analysed as follows:**
Debt Ratio (%)	Challenges for the SOC
Debt to Equity (times)	Successes of a SOC
Solvency Ratio (times)	Future Developments
Profitability	**Management Quality Risk Indicators**
Return on Revenue (%)	Competence
Return on Assets (%)	Risk appetite/ Risk propensity
Return on Equity (%)	Stability of management
	Integrity
Underwriting Margins	Audit Opinion
Expense Ratio (%)	
Combined Ratio (%)	
Investment Yield Ratio (%)	
Loss Ratio (%)	
Liquidity	
Cash Ratio (times)	
Current Ratio (times)	

ASSESSMENT METHODOLOGIES (DFIs)

Financial Risk Indicators	Business Risk indicators
Size of the entity:	**- Industry prospects**
Total assets (R'm)	- Operating environment
Total equity (R'm)	- Regulatory framework
Total liabilities (R'm)	**- Corporate governance**
Profit for the period (R'm)	- Adherence to applicable legislation
Net interest income (R'm)	- Management quality
Leverage ratios:	**- Market position**
Debt ratio (%)	- Diversification
Debt to equity (times)	- Size (Capacity)
Profitability ratios:	
Return on assets (%)	
Return on equity (%)	
Net profit margin (%)	
Efficiency ratios:	
Cost to income (%)	
Net interest margin (%)	
Non-interest income/Total Income (%)	
Liquidity ratio:	
Current ratio (times)	
Cash flow adequacy ratio:	
Funds from operations/Total debt (%)	
Asset quality:	
Non-performing loans/Gross loans (%)	
Credit loss ratio (times)	
Credit Rating	

ASSESSMENT METHODOLOGIES (cont.)

- The overall risk rating of the entity should be equal to the aggregate of all the weighted risk ratings of the individual risk indicators

- All risk indicators should be rated using a scale of 1 to 9

- The assignment of risk ratings to business risk indicators is subjective and therefore should be based on the analyst's assessment of the indicator

- The assignment of risk ratings to financial risk indicators should be in accordance with the risk rating table

ASSESSMENT METHODOLOGIES (IRR Table)

Risk Rating	1	2	3	4	5	6	7	8	9
Extent of exposure	Extremely low risk	Low risk	Moderate risk	Marginal risk	Special attention	Substandard	High risk	Very high risk	Eminent default or in default
Likelihood of materialisation	Remote				Possible		Probable		
Credit Rating	AAA	AA	A	BBB	BB	B	CCC	CC	C
Efficiency ratio									
Cost to Income	<= 16%			49%	50%	80%	81%		>= 100%
Profitability ratios									
Net profit margin	> 40%			11%	10%	5%	4%		<= 1%
Operating profit margin	> 42%			26%	25%	12%	11%		<= 5%
Revenue growth	>40%			12%	11%	5%	4%		<1%
Debt capacity ratios									
Debt to equity	<= 0.4 x			1 x	1.1	2	3.0		>= 4.0
Debt ratio (Debt/Asset)	<= 15%			28%	29%	58%	59%		>= 80%
Interest cover ratio	>= 20 x			16 x	15 x	3 x	2 x		<= 1 x
Cash flow adequacy ratio									
Net operating cash flow/Total debt	>= 40%			20%	19%	12%	11%		<= 1%
Liquidity Ratios									
Cash/Current liabilities	>= 1.0 x			0.8 x	0.7 x	0.4 x	0.3 x		<= 0.1 x
Quick ratio	>= 5.0 x			2 x	1 x	0.5 x	0.4 x		<= 0.1 x
Current ratio	>=5.0 x			3 x	2.0 x	1.0 x	0.9 x		<= 0.1 x

ASSESSMENT METHODOLOGIES (Scorecard)

Application of Risk Rating Methodology					
Criteria	Weight	Entity (Prior year) rating	R X W	Entity (Current year) rating	R X W
Business Risk Profile					
Industry prospects					
i) Operating Environment	10%	0	0	0	0
ii) Regulatory Framework	10%	0	0	0	0
Corporate governance					
i) Adherence to applicable legislation	1%	0	0	0	0
ii) Management quality	5%	0	0	0	0
Market Position indicators					
i) Diversification	3%	0	0	0	0
ii) Size (capacity)	1%	0	0	0	0
Financial Risk Profile					
Efficiency ratio					
Cost to income	5%	0	0	0	0
Profitability indicators					
Net profit margin	2.5%	0	0	0	0
Operating margin	2.5%	0	0	0	0
Revenue growth	5%	0	0	0	0
Debt capacity ratios					
Debt ratio (Debt/Assets)	10%	0	0	0	0
Debt to equity (gearing)	10%	0	0	0	0
Interest cover ratio	10%	0	0	0	0
Cash flow adequacy indicators					
Funds from operations/total debt	7.5%	0	0	0	0
Liquidity Indicators					
Cash/Current liabilities	7.5%	0	0	0	0
Quick ratio	7.5%	0	0	0	0
Current ratio	2.5%	0	0	0	0
Total with credit rating	100%				
Weighted risk rating			**0**		**0**
Exposure figures in millions			-		-
Proportional exposure			-		-
Weighted risk rating in proportion to exposure			-		-

ASSESSMENT METHODOLOGIES (cont.)

- The overall risk ratings that will be assigned to the entities in accordance with the methodology are aligned to Moody's risk ratings

- The Moody's ratings mentioned above to which the internal risk ratings are aligned translates to probabilities of default (PDs) by the entities during specified time periods

ASSESSMENT METHODOLOGIES (cont.)

INTERNAL RISK RATINGS	MOODY'S RATINGS	MEANING OF RATING
1	Aaa	Highest credit quality, with the smallest degree of risk
2	Aa2	High credit quality and are subject to low credit risk
3	A2	Upper-medium grade and are subject to moderate credit risk
4	Baa2	Medium grade and are subject to moderate credit risk
5	Ba2	Obligations have questionable credit quality
6	B2	Obligations are speculative and subject to high credit risk
7	Caa2	Obligations are of poor standing and are subject to very high credit risk
8	Ca	Obligations are highly speculative and are usually in default on their obligations
9	C	Obligations are lowest rated class and are in default

ASSESSMENT METHODOLOGIES (cont.)

	Moody's rating	Internal rating	Year 1 (%)	Year 2 (%)	Year 3 (%)	Year 4 (%)	Year 5 (%)	Year 6 (%)	Year 7 (%)	Year 8 (%)	Year 9 (%)	Year 10 (%)
Investment Grade	Aaa	1	0.00	0.01	0.02	0.05	0.08	0.14	0.22	0.31	0.41	0.52
	Aa2	2	0.02	0.07	0.14	0.25	0.39	0.54	0.69	0.83	0.96	1.08
	A2	3	0.06	0.21	0.40	0.65	0.97	1.32	1.68	2.04	2.39	2.72
	Baa2	4	0.17	0.53	0.88	1.32	1.83	2.38	2.94	3.51	4.07	4.64
Sub-investment grade	Ba2	5	1.11	3.22	5.17	7.47	9.89	12.23	14.37	16.25	17.93	19.47
	B2	6	3.90	9.63	14.10	18.99	23.86	28.37	32.30	35.59	38.29	40.55
	Caa2	7	15.89	27.65	34.99	42.01	48.31	53.66	58.00	61.41	64.06	66.13
	Ca	8	54.15	65.12	70.44	74.86	78.43	81.23	83.36	84.96	86.16	87.08
	C	9	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

MONITORING OF EXPOSURES

- Credit risk exposure from individual SOCs are assessed and reported semi-annually in accordance with the credit risk assessment methodology while the overall portfolio is monitored on a quarterly basis

- Credit risk opinions on guarantee applications from SOCs (PFMA s66)

  'The Minister of Finance has to concur with the issuance of guarantees, indemnities and/or securities'

- Fiscal Liabilities Committee mandated to assist the Minister in optimally managing contingent liabilities

- Credit spread reports (monthly)

- Current project with the World Bank (EL, PD, LGD)

REPORTING OF CONTINGENT LIABILITIES

- Quarterly submissions of guarantee usage by SOCs to departments, who submits to the National Treasury

- All departments record guarantees in their various Annual Financial Statements

- OAG consolidates guarantee figures in the consolidated Annual Financial Statements of Government

- Audited Annual Financial Statements of Departments presented to parliament Annually

- Contingent liabilities are reported in the Budget review annually

CONCLUSION

- Guarantees are monitored quarterly and recorded in the guarantee register
- Quarterly reporting on volume and quality of all exposures to the FLC
- Provide credit risk opinions on requests and the portfolio and recommends action to the FLC
- Currently reviewing the SOC methodology in conjunction with the World Bank

THANK YOU