The Swedish Model for Managing Contingent Liabilities

Presentation by the Swedish National Debt Office

February 24, 2016

Agenda

- The Swedish model for government guarantees and loans
  - Background
  - Institutional set-up
  - Guiding rules and principles

- Characteristics of the portfolio

- Methods for measuring and managing credit risk

- Key lessons learned

The Swedish Model For Guarantees and Loans

- Central government guarantees first regulated in Budget Act of 1996.

- Budget Act revision in 2011. On-lending regulated in the same way as credit guarantees.

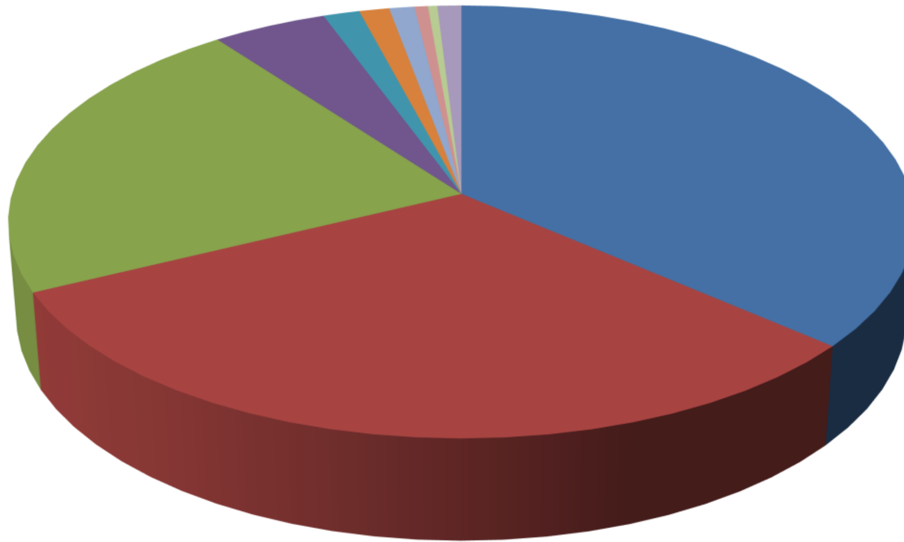
- Guiding principles
  - *Transparency*
  - *Cost coverage*
  - *Risk management*

”The proof of the pudding is in the eating”

Swedish Regulatory and Institutional Framework

- Guarantees and loans approved by Parliament and commissioned by the government.
- Parliament decides on amount, purpose and instrument.
- Annual limit approved for programs, eg. student loans and export credit guarantees.
- A fee must cover at least total expected cost (expected loss and administration).
- An amount corresponding to expected loss is transferred to notional reserve account.
- Losses on guarantees and loans covered by reserves. Any shortfall is financed via an unlimited credit facility.
- When EU state aid rules apply a market based fee must be charged.
- Fee exceeding expected loss (market risk premium related to unexpected losses, liquidity premium etc.) is transferred back to the central government budget.

Composition of Portfolio



- Student loans (36,4%)
- Export credit guarantees (31,4%)
- Guarantees to Multilateral Development Banks (22%)
- Infrastructure loans and guarantees (4,6%)
- Pension guarantees (1,5%)
- Credit guarantees - international undertakings (1,2%)
- Loans to sovereigns (1,0%)
- Development aid (0,5%)
- Housing credit (0,4%)
- Other

Share of GDP (ex deposit guarantee) = 14 %

Ensuring Adequate Credit Risk Profile

- To estimate a correct fee the credit risk must be *identifiable*, *manageable* and *measurable.*
- Ensure that the beneficiary is not in financial distress.
- Guarantees should have finite amount and maturity.
- Risk sharing aligns the incentives of the lender and the guarantor.
- Risk mitigation via legal covenants
- Collateral may be used to reduce the credit risk, especially if the credit profile of the beneficiary is weak.

Overview of Credit Risk Assessment and Pricing

- The Guarantee and Loan department at the SNDO is responsible for managing a portfolio of non-standardized guarantees and on-lending.

- Mainly corporate credit risk (single beneficiary), but some guarantees where the credit risk is on a portfolio of beneficiaries, requiring a more structured finance type approach.
- The SNDO strives for best practice in methods used.
- A rating based approach is preferred method for credit risk assessment.
- When a ratings based approach is not appropriate then simulation models, such as Monte-Carlo, are used for calculating expected loss

Credit Rating Analysis by the SNDO

- A rating is a relative measure of credit risk, comparable across industries and regions.
- A rating analysis involves determining an *issuer rating* and as an *issue specific rating*.
- *The issuer rating* measures probability of default of the beneficiary, factoring in willingness and ability to meet obligations.
- The *issuer rating* takes into account business risk, financial risk, and potential external support, as well as any effect that the country ceiling may have on the rating.
- In order to arrive at the *issue rating* for the specific transaction, the expected loss given default must be factored. The priority of claim is analyzed, notching up for security or down for subordination.
- For a senior unsecured transaction, the issue rating is the same as the issuer rating, factoring average recovery prospects.

Example of Rating Grid Factors

FIGURE 2

Government Owned Toll Roads

Broad Rating Factors	Factor Weighting	Rating Sub-Factors	Sub-Factor Weighting
Market Position	40%	Asset Type	10%
		Operating History	10%
		Competition	10%
		Service Area Characteristics	10%
Performance Trends	30%	Annual Traffic	5%
		Traffic Profile	5%
		5-Year Traffic CAGR	5%
		Ability and Willingness to Raise Rates	15%
Financial Metrics	20%	Debt Service Coverage Ratio Debt to Operating Revenue	10% 10%
Capacity, Capital Plan and Leverage	10%	Capital Needs Limitations to Growth/Operational Restrictions	5% 5%
Total	**100%**	**Total**	**100%**

Source: Moody's Rating Methodology - Government Owned Toll Roads, October 3, 2012.

Pricing of Guarantees and Loans (continued)

- Expected loss
  - Rating - Default and recovery databases from credit rating agencies.
  - Simulation model – expected loss calculated output of the model

- Market price
  - CDS quotes or bond yields for same credit rating (ensuring comparable characteristics).
  - If a bond yield is used, then a reference rate must be chosen and deducted from the bond yield to arrive at a credit spread.

Key Lessons Learned

- Guarantees and on-lending give rise to the same credit risk
- Documentation is part of risk assessment and risk management
- Pay attention to priority of claim