PML Study for Credit Insurance
Sponsored by PASA

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PML Presentation

1. PASA
2. PML – definition for credit insurance
3. The importance of the PML
4. The project
5. The model
6. Results
7. Implications
8. Next steps

PASA represents, more than any other organization, the world private sector surety and credit insurance industry. This places us in a privileged position to, on the one hand, promote the international acceptance of sound principles in the surety and credit sectors and, on the other hand, to act at international and local forums to increase public awareness and interest in surety and credit products. Likewise, PASA works with kindred associations towards improving the legal environment under which our industries operate. PASA's overall public policy goal is to advocate at all governmental levels public policies that are favorable to members' interests, and, in general, to serve its members by amplifying the voices of individual companies in matters of industry concern.
What Is PML?

- PML stands for probable maximum loss, i.e. what one is likely to lose when a healthy commitment of a certain magnitude turns sour.
- PML estimates are usually based on conventional wisdom
- PML can be used in any line of business
The Importance of the PML

- Portfolio management considerations: first step towards risk modeling
- Capital considerations: a management issue
- Rating agencies
  - From premium to risk-based capital
  - Storyline: we are being compared to corporate debentures!
The Project

- Started in PASA’s credit committee. It has now grown far beyond

- The participants include approximately 90% of the world primary insurance market and 90% of the world reinsurance market for credit insurance

- The process is geared towards objectivity:
  - Sufficient cases
  - Impartial calculations
  - Anonymized and non-competitive
The Model (1)

Default occurs at some time $T_D$

1 yr before Default $\quad$ After Default, till Settlement

$T_{D-1yr} \quad T_D \quad T_S \quad$ time
The Model (2)

\[ a = \frac{\text{U-Limits}(T_D)}{\text{G-Limits}(T_D-1\text{yr})} \]
ability to work down the exposure before the default

\[ w = \frac{\text{Ult-Loss}(T_s)}{\text{U-Limits}(T_D)} \]
ability for claims handling

\[ \frac{w}{a} = \frac{\text{Ult-Loss}(T_s)}{\text{G-Limits}(T_D-1\text{yr})} \]
Preliminary Results

- The PML is calculated at approximately 15%.
- More work has to be done to arrive at a figure on which a certain confidence interval can be fixed.
- Respondents include the broad cross-section of the credit insurance market: all major companies, a lot of smaller players.
- Number of cases are statistically viable. We did some 2000 cases.
Implications

• When the results are final (and only then!)
• Communicate this result to a wide audience
• It could have reinsurance implications (each company takes its own decisions)
• It could have rating implications
• IT WILL HAVE RISK MANAGEMENT IMPLICATIONS!
Next Steps

• Finalize results

• Surety bond should be the next line of business, other lines of business might include political risk