Primary and Secondary Mortgage Markets - Overview

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RMBS Growth in EMEA



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EMEA Securitisation 2005 Volume – by Asset Class





RMBS Distribution by Country – EMEA 2005





New Markets

- Russia & CIS (MBS, ABS)
- Poland, Czech, Hungary (ABS; CBs)
- Baltics (MBS)
- Nordic Region (CBs)
- Romania, Bulgaria, Croatia
- Turkey (FF ABS; MBS; CBs)
- Israel (ABS; CMBS; MBS)
- Persian Gulf (ABS; MBS)
- Africa







Moody's Rating Methodology



Moody's Rating Scale



Moody's Rating – Expected Loss

- Ratings measure credit risk
 - Probability of a default
 - Severity of a loss

Expected loss = Probability of default x Severity

• Example:

- **Prob**. Def. = 5%
- Severity of Loss = 20% (recovery rate = 80%)

<u>– EL = 5% x 20% = 1%</u>



- And, if the average life of the security is 6 years...

Moody's Idealised Expected Loss Table

					Veen					
Rating	1	2	3	4	rear 5	6	7	8	9	10
Aaa	0.00003%	0.00011%	0.00039%	0.00099%	0.00160%	0.00220%	0.00286%	0.00363%	0.00451%	0.00550%
Aa1	0.00031%	0.00165%	0.00550%	0.01155%	0.01705%	0.02310%	0.02970%	0.03685%	0.04510%	0.05500%
Aa2	0.00075%	0.00440%	0.01430%	0.02585%	0.03740%	0.04895%	0.06105%	0.07425%	0.09020%	0.11000%
Aa3	0.00166%	0.01045%	0.03245%	0.05555%	0.07810%	0.10065%	0.12485%	0.14960%	0.17985%	0.22000%
A1	0.00320%	0.02035%	0.06435%	0.10395%	0.14355%	0.18150%	0.22330%	0.26400%	0.31515%	0.38500%
A2	0.00598%	0.03850%	0.12210%	0.18975%	0.25685%	0.32065%	0.39050%	0.45595%	0.54010%	0.66000%
A3	0.02137%	0.08250%	0.19800%	0.29700%	0.40150%	0.50050%	0.61050%	0.71500%	0.83600%	0.99000%
Baa1	0.04950%	0.15400%	0.30800%	0.45650%	0.60500%	0.75350%	0.91850%	1.08350%	1.24850%	1.43000%
Baa2	0.09350%	0.25850%	0.45650%	0.66000%	0.86900%	1.08350%	1.32550%	1.56750%	1.78200%	1.98000%
Baa3	0.23100%	0.57750%	0.94050%	1.30900%	1.67750%	2.03500%	2.38150%	2.73350%	3.06350%	3.35500%
Ba1	0.47850%	1.11100%	1.72150%	2.31000%	2.90400%	3.43750%	3.88300%	4.33950%	4.77950%	5.17000%
Ba2	0.85800%	1.90850%	2.84900%	3.74000%	4.62550%	5.37350%	5.88500%	6.41300%	6.95750%	7.42500%
Ba3	1.54550%	3.03050%	4.32850%	5.38450%	6.52300%	7.41950%	8.04100%	8.64050%	9.1905%	9.7130%
B1	2.57400%	4.60900%	6.36900%	7.61750%	8.86600%	9.8395%	10.5215%	11.1265%	11.6820%	12.2100%
B2	3.93800%	6.41850%	8.55250%	9.9715%	11.3905%	12.4575%	13.2055%	13.8325%	14.4210%	14.9600%
B3	6.39100%	9.13550%	11.5665%	13.2220%	14.8775%	16.0600%	17.0500%	17.9190%	18.5790%	19.1950%
Caa	14.3000%	17.8750%	21.4500%	24.1340%	26.8125%	28.6000%	30.3875%	32.1750%	33.9625%	35.7500%



Rating Process: Qualitative and Quantitative





MILAN – Standardised Scoring Model

- MILAN is the result of an in depth analysis and comparison of major EMEA RMBS markets
- Although being a standardised model, each MILAN version addresses specific features for each country
- MILAN is a Scoring Model, which scores each single loan compared to a benchmark loan and the total portfolio to a benchmark portfolio
- Defines "Adjusted MILAN CE" the committeed credit enhancement level that is necessary in a simple pass-through transaction to get to target rating



Overview of MILAN

MILAN at a Glance - Steps 1 to 4



MILAN at a Glance (2)

MILAN at a Glance - Steps 5 to 12





Benchmark Credit Enhancement

Definition and Basis

 Benchmark credit enhancement ("CE Bench") is the expected loss of a benchmark loan in a recessive scenario



LTV/Default Curve Example





Loss severity





MILAN Aaa CE – Example

CE Bench	7.06%
1. Property Adjustments	3.53%
2. Loan Adjustments	1.06%
3. Borrower Adjustments	3.53%
4. Performance Adjust.	0.00%
5. Originator/Servicer	0.76%
Min Aaa CE	4.00%
MILAN Aaa CE each Ioan	15.94%
6. Portfolio Adjustments	1.40%
MILAN Aaa CE for Portfolio	17.34%
Adjusted MILAN Aaa CE	17.50%



Example - Borrower Adjustment

Borrower Type	Adjustment Factor
Employed with subsidy	10%
Civil Servant	- 30%
Unemployed	30%
Self employed	25%
Company	40%
Student	30%
Pensioner	30%*
Other/ No Data	40%



*This can vary on a case-by-case basis, depending on the transaction

Risk Layers and Typical Issues In New Markets



Piercing the Sovereign Ceiling – How?

A rating can exceed the LCG only by an external guarantee, or insurance "wrap"

1) Due to joint default method, sovereign ceiling may be pierced based on highly rated LC obligation combined with low moratorium risk.

2) Otherwise through liquidity facility or political risk insurance





Suggestions – Early Preparation For a Transaction

- Discuss legal issues with lawyers and rating agency
- Decide and discuss rating target
 - See what enhancement/structure may be needed
- Prepare portfolio data, including data format
- Prepare historical performance data
- Consider back-up servicer
- Determine structure
 - External support? (PRI, wrap, guaranty)



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