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Approach to Rating SMEs Securitisation

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Agenda

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2. Understanding Asset Composition
3. Modelling Asset Parameters
4. Structural Elements
5. Outstanding Volume
6. Performance Trends
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8. Conclusion
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1 Introduction

Introduction to Rating Methodology for SME Securitisation

» Our rating analysis of SME-backed securitisations includes both quantitative and qualitative elements

» The main drivers of our quantitative analysis - projections of future losses on underlying assets

» Typically, we project the probabilities of various pool default rates over the life of the transaction, summarised in a “probability distribution” of asset default rates, with a separate analysis of recoveries

» Using a model of the transaction’s structure, we calculate the cash flows that investors would receive in the different scenarios

» In determining our final rating, we combine the quantitative analysis with our assessments of numerous qualitative factors

Our Analysis Addresses Quantitative and Qualitative Factors

Classification of the Structured Finance Transactions

Borrower type	Classification	Asset types	Issuer	Reinvestment period	Tranching
Individuals	RMBS	Residential mortgages	SPV	No	Yes
		Commercial mortgages		Sometimes	
	ABS	Auto loans		Yes	
		Unsecured consumer loans			
		Credit card debt			
		Loans to SME			
Companies	CLO	Syndicated loans to large corporates			
		Project Fianance and PPP/PFI			
	Repackaging - CLN, LPN	Corporate debt		No	No
Mainly ABS entities	Covered bonds	Mainly residential mortgages (also SME and PF)	Mainly bank	Yes	Yes

SME Securitisation is an Integral Part of Structured Finance

SME Definition in EMEA SME Securities

- » Borrowers: Microenterprises, small and medium-sized enterprises (SMEs), self-employed individuals and, to a certain extent, larger corporates in the course of the originator's (i.e., bank's) usual business activities
- » SME: Typically defined based on the guidelines of the European Commission (2003/361/CE and its updates) (i.e., companies with less than 250 employees and a yearly turnover below EUR50 million or total assets below EUR43 million)
- » Type of loans: Medium- to long-term secured and/or short- to medium-term unsecured loans to SMEs for working capital or investment purposes
- » Structuring parties normally exclude some assets to comply with EU regulations (e.g., loans to multi-national corporates, public or non-profit organizations, start-up companies, subordinated loans, preferred stock, etc.)

SME Pools may Contain a Broad Range of Assets

Profile of a Typical Transaction

» Typical SME balance sheet transactions have the following structural features:

- Risk transfer via true sale (or a synthetic transaction)
- Monthly, quarterly or semi-annually paying notes with fixed or variable interest rates
- Two distinct waterfalls (interest and principal) with sequential allocation of cash flows and the involvement of a spread capture mechanism or a combined interest and principal waterfall
- A cash reserve, to ensure a liquidity buffer and/or credit support
- A hedging mechanism to cover for potential interest rate (and seldom currency) mismatches
- Diversified pool with “Effective Number” >1000
- Sufficiency of historical performance data

SME-Backed Structures Exhibit Common Features

2 Understanding Asset Composition

Asset Characteristics That we Examine

- Secured/Unsecured assets – Nature of security collateral
- Repayment profiles – Bullet loans, contractual options and prepayment provisions
- Loan purpose – Refinancing, Refinancing investment projects
- Agricultural loans – Susceptibility to seasonal repayment dynamics
- Proportion of fixed/floating assets
- Additional factors (e.g., compulsory, insurance, etc.)
- Supported loans – Role of the local and federal government

Pool Profile Drives the Range of Questions

Portfolio Profile

» Number of obligors vs. number of loans – Template complexity

» Historical performance (by asset types in the pool)

- Level of defaults – Definition of default
- Levels of arrears – Originator monitoring guidelines
- Coefficient of variations – Causes of “spikes”
- Historical recovery data – “apples and apples”

» Weighted average (WA) seasoning – May depend on the originator’s business model

» WA life – Product-type dependency

Historical Performance Is Important Part of Portfolio Analysis

3 Modelling Asset Parameters

Top-Down Approach – EMEA Example

Roadmap for probability of default assumption in rating SME balance sheet securitisations	Potential impact of each step on single loan level	Average impact on standard EMEA portfolio
Step (1): Define Country-Specific Base Assumption for Standard SME	Ba2-Ba3 in EMEA	
Step (2): Portfolio Quality Adjustment	[-4 / +4] notches	[-2 / +1] notches
Step (2.1): Underwriting /origination quality adjustment		
Step (2.2): Portfolio borrower composition adjustment		
Step (2.3): Loan-specific adjustments		
Step (2.4): Past performance / seasoning adjustments		
Step (3): Outlook Adjustment	[-3 / +2] notches	[-2 / +1] notches
Step (3.1): Macro-cycle adjustment		
Step (3.2): Sector-specific cycle adjustment		

Top-down Approach Assumes a Country-Specific Through-the-Cycle Rating Proxy for Standard SMEs

Recovery Rate (RR) Analysis

» Collateral secures the majority of European SME loans

» To evaluate the collateralisation ratio of the securitised portfolio, we take into account any real estate collateral securing the assets, country-specific factors and originator's/servicer's past performance

» We either use our stressed recovery assumption as a fixed recovery rate in our modelling (more likely for Russian pools) or model stochastic recoveries

» To derive the recovery rate distribution using the expected recovery rate, we use estimates of the variability of RR and an assumption about the general shape of the distribution (typically a "normal" distribution)

» We typically assume a recovery lag of 18 months to three years

RR Analysis Incorporates Several key Elements

Integrating the Default Distribution and Other Asset Parameters

» Our main cash flow model for SME transactions is ABSROM

» It takes into account various characteristics that include:

– Timing of Default - In a standard mode our model normally assumes a timing of default curve that is either constant (i.e., equally distributed) over the life of the portfolio, or derived from historical data (if sufficient relevant data is available)

– Sensitivities - We usually also perform sensitivities with regards to different default timings, such as default timing curve

– Prepayment Rate and Asset Yield – We derive the constant prepayment rate (CPR) assumption from the originator’s data and/or a country-specific average SME prepayment rate based on a benchmarking approach

– Portfolio Yield Vector - Typically, we are provided with an initial portfolio yield vector based on the portfolio’s scheduled amortisation

Various Features Reflected in the Cash Flow Model

4 Structural Elements

Important Structural Features

» Excess spread

» Credit enhancements/reserves

» Form of liquidity – Number of interest payments covered by liquidity

» Interest payments/ principal payments - Rated promise

» Payment dates – Frequency switch event

» Hedging arrangements and smoothing mechanisms

» Revolving period – Some SME transactions are non-static

Various Structural Features may Have Material Impact on Rating

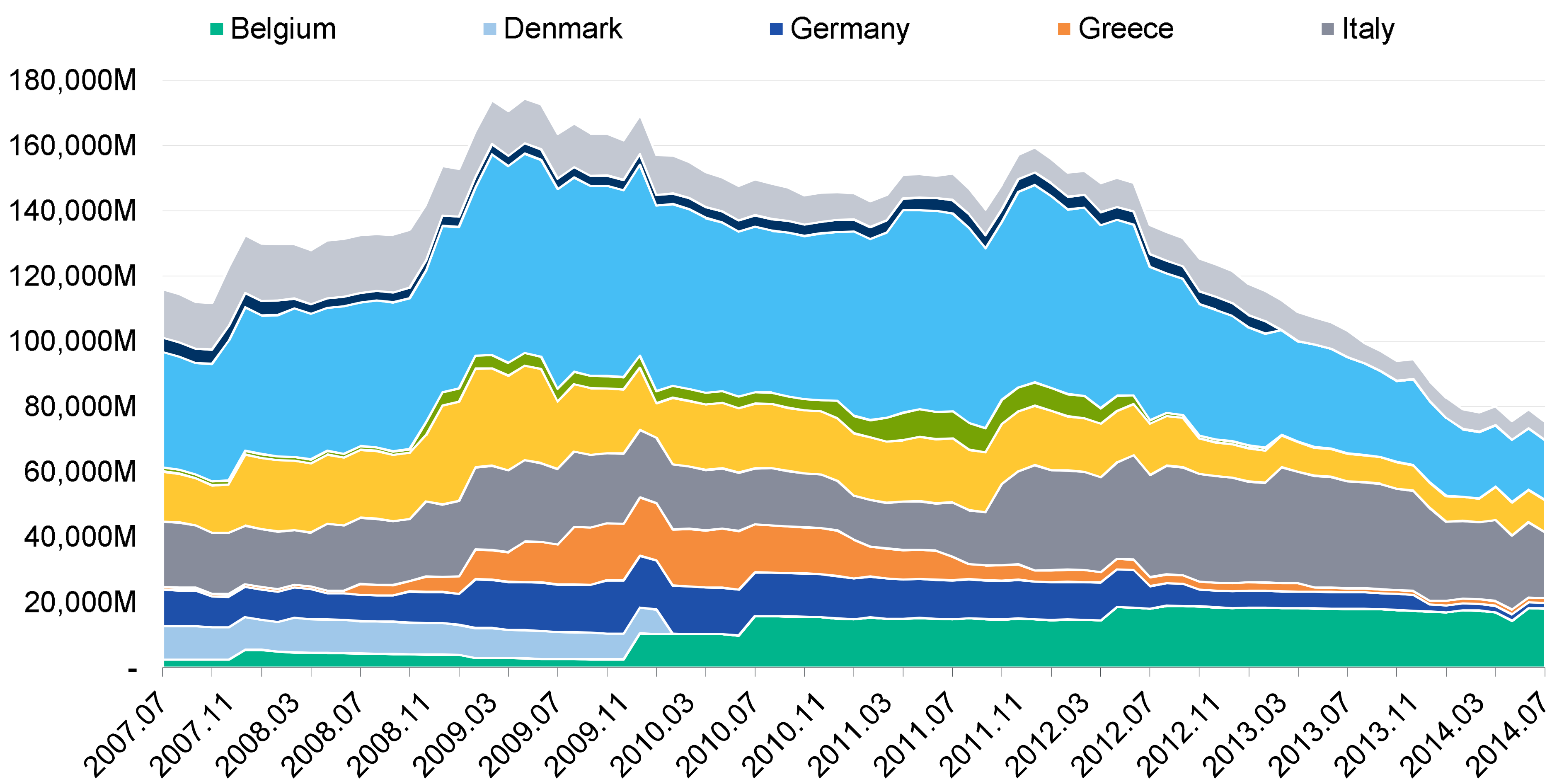
Overview of Spanish and Italian SME Securitisations

	SPAIN	ITALY
Number of outstanding transactions rated by us	75	17
Median default probability assumption	13.2%	19.1%
Median recovery rate assumption	45.0%	50.0%
A-rated notes average credit enhancement	67.8%	54.2%
Baa-rated notes average credit enhancement	34.8%	28.2%
Ba-rated notes average credit enhancement	23.1%	NA

Parameters of SME Transactions Vary

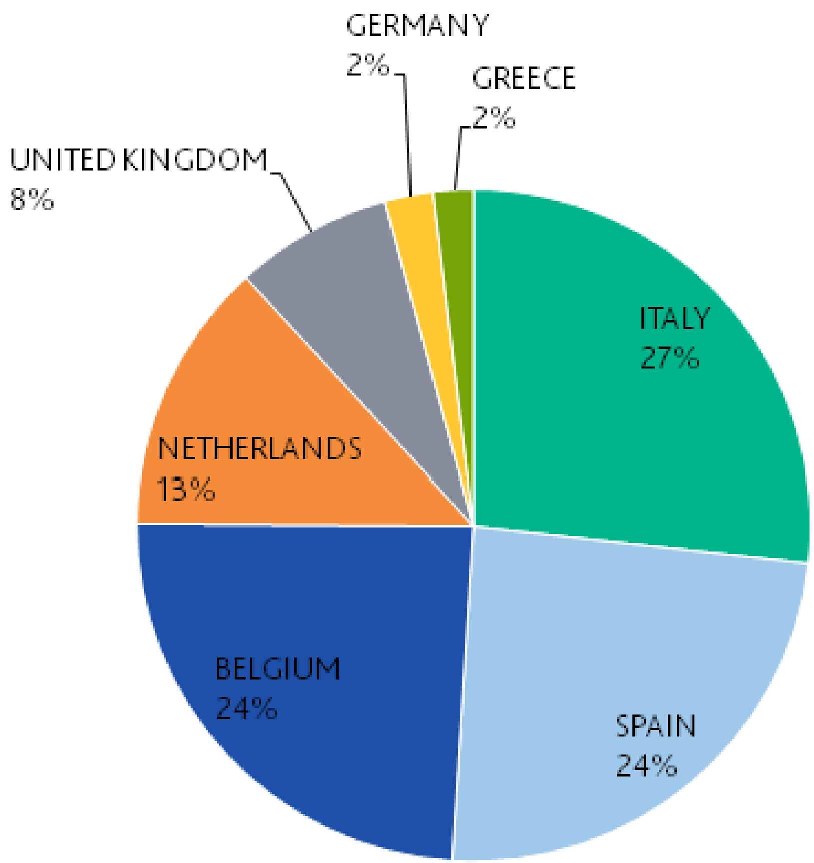
5 Outstanding Volume

Outstanding Volume by Country (up to July 2014)



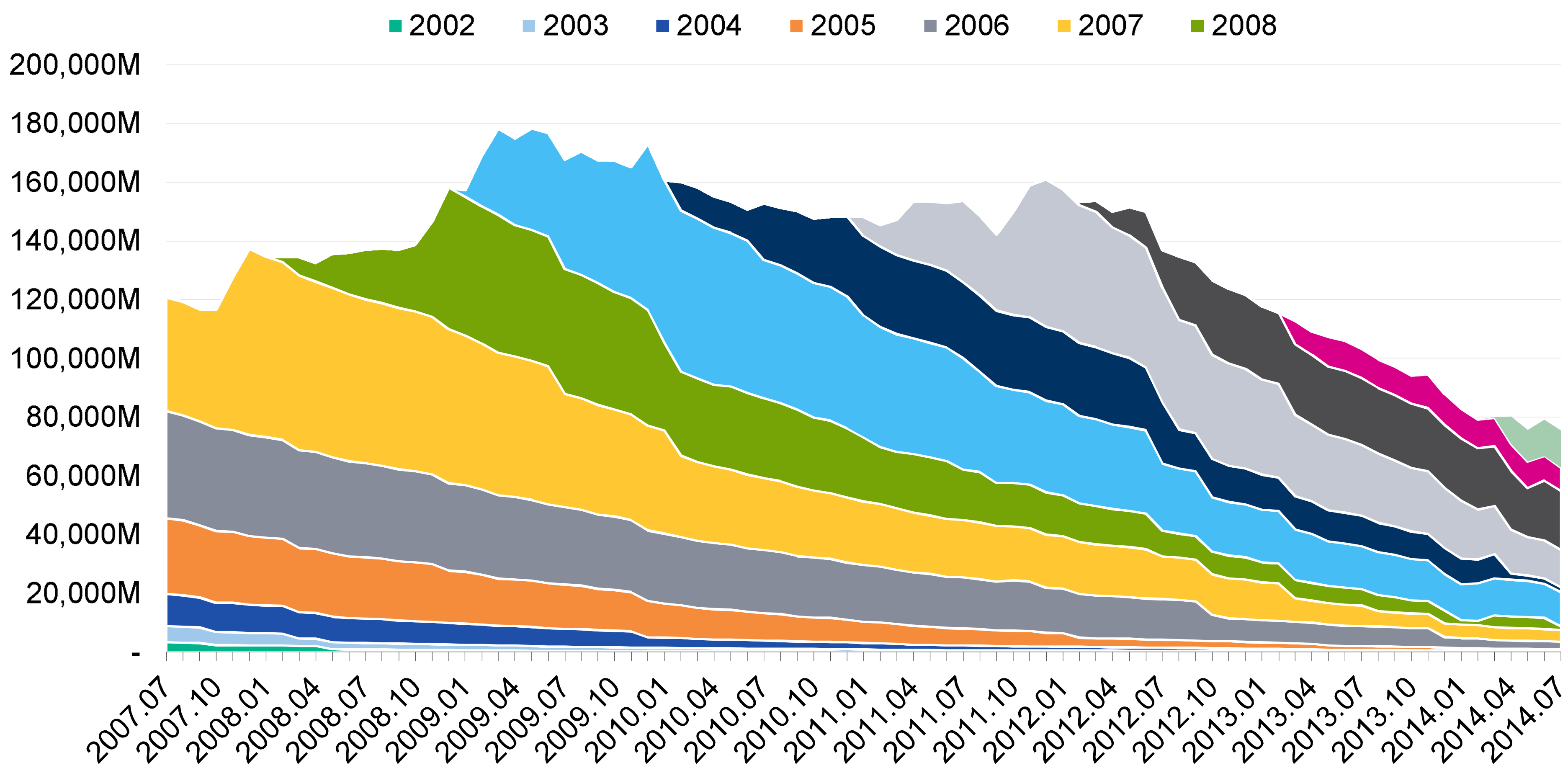
Source: Moody's Investors Service

Outstanding Volume by Country (as of July 2014)



Source: Moody's Investors Service

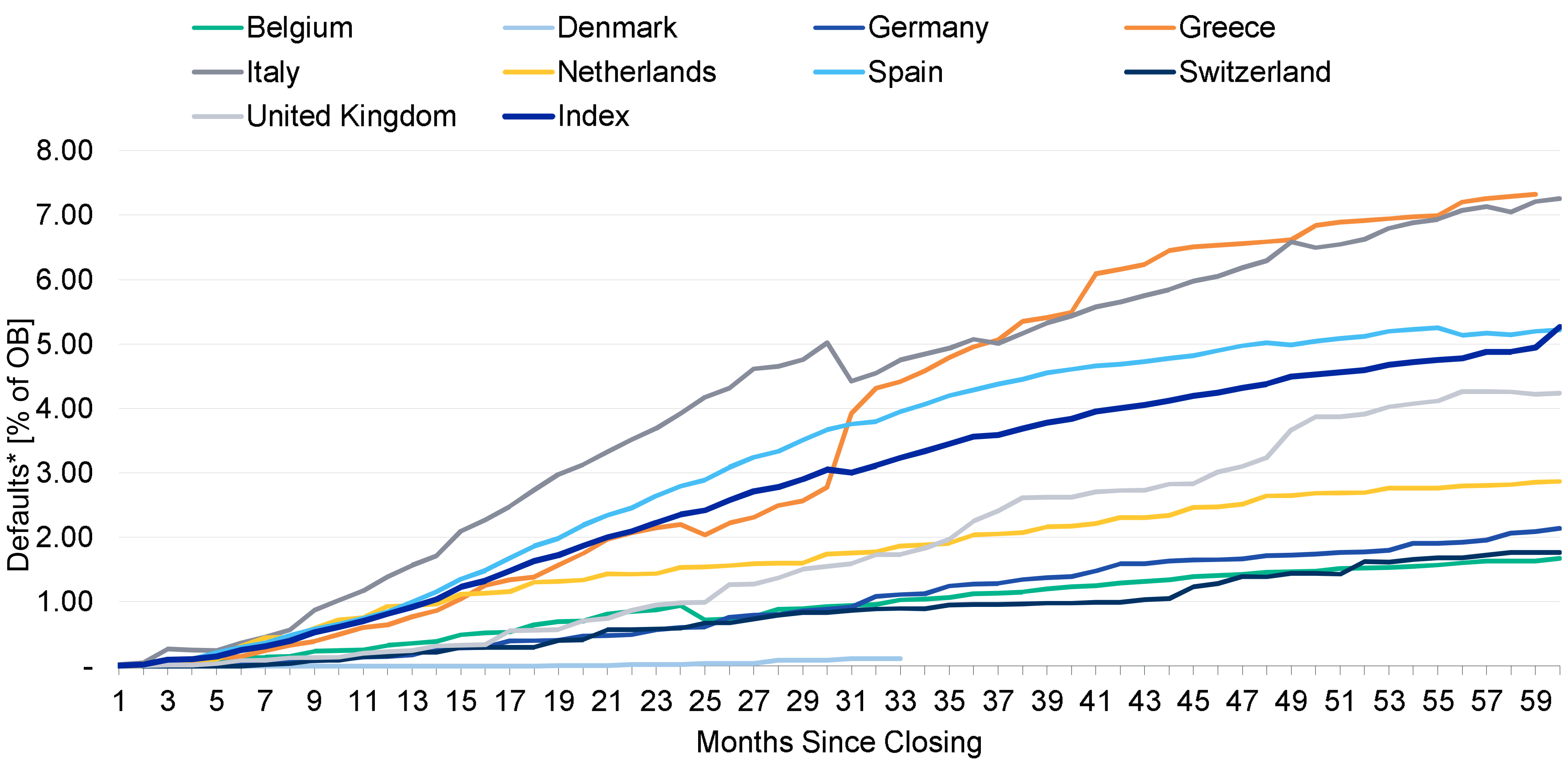
Outstanding Volume by Vintage



Source: Moody's Investors Service

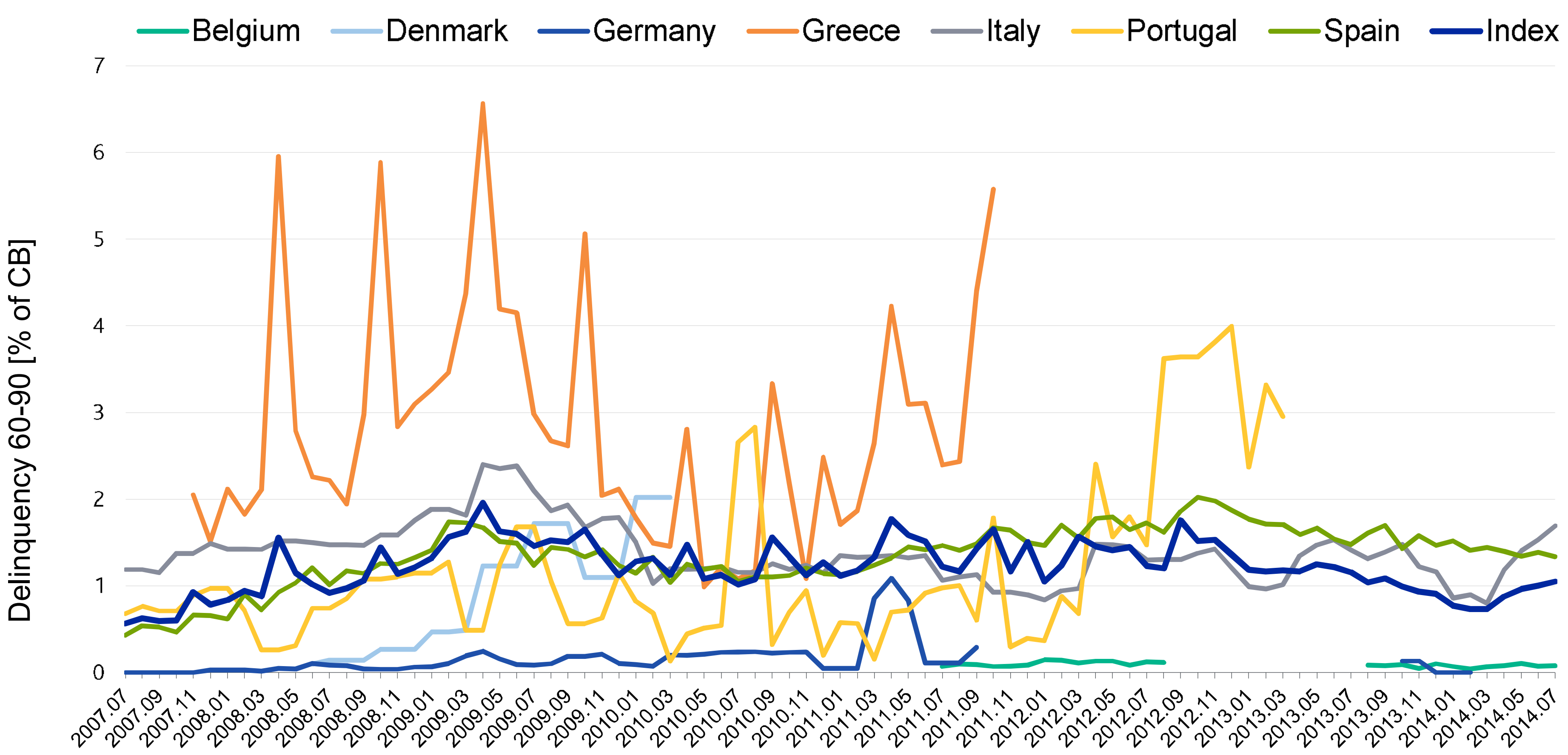
6 Performance Trends

Cumulative Defaults on Original Pool Balance – Seasoning by Country



Source: Moody's Investors Service

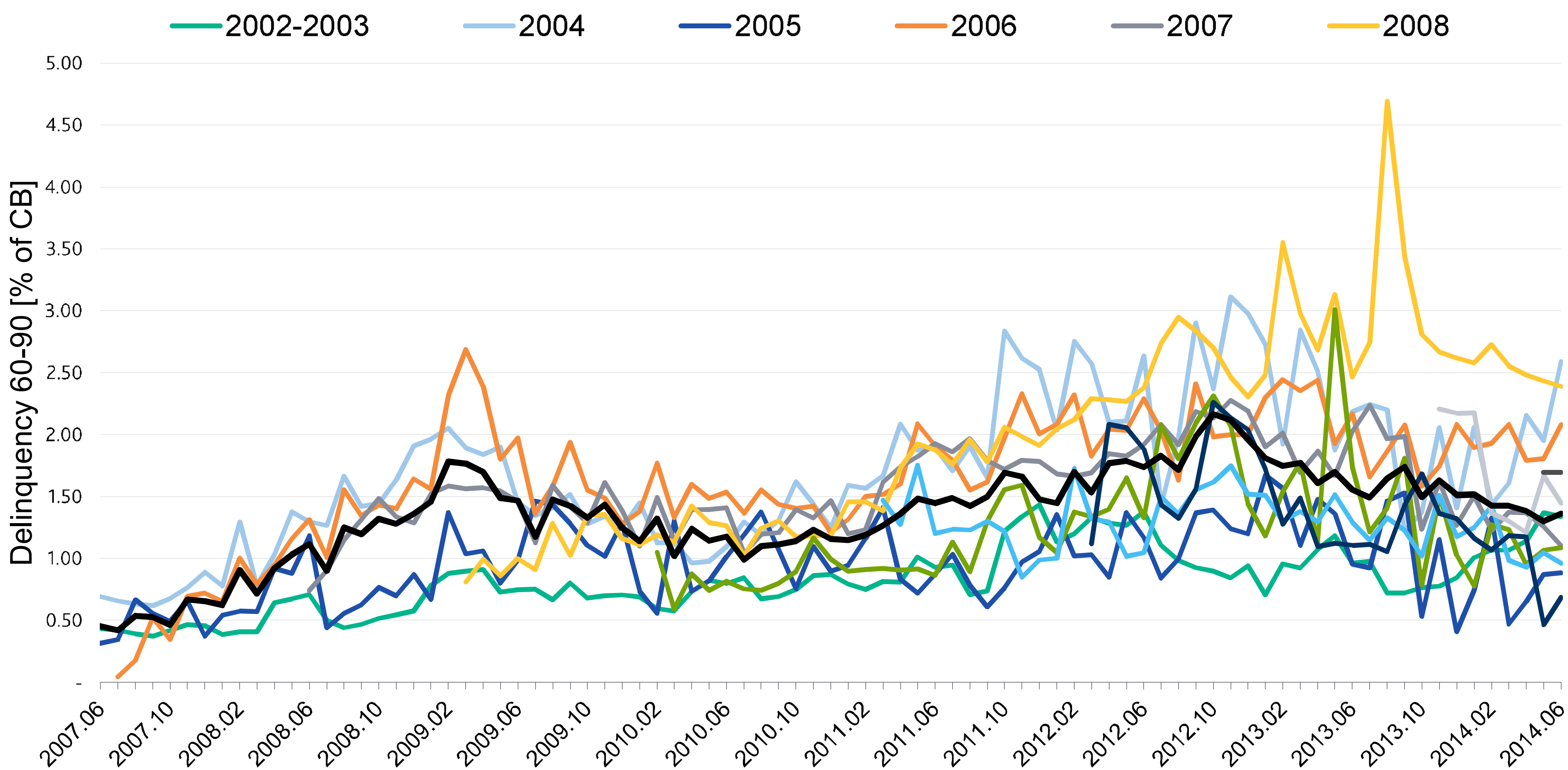
CB 60-90 Day Delinquencies - Trend by Country



Source: Moody's Investors Service

90+ Day Delinquencies Have Steadily Decreased Since 2012

Spanish CB 60-90 Day Delinquencies – Trend by Vintage



Source: Moody's Investors Service

7 EMEA ABS SME Rating Transition

Rating Transition Matrix – January 2007 to September 2014

SME									
	Total	Aaa	Aa	A	Baa	Ba	B	Caa	Ca-C
Aaa	359	50.14%	4.74%	41.23%	2.79%	0.28%	0.56%	0.28%	
Aa	103	2.91%	49.51%	35.92%	6.80%	2.91%	1.94%		
A	160	0.63%	2.50%	60.00%	20.00%	10.63%	3.75%	1.88%	0.63%
Baa	142			6.34%	50.00%	16.20%	12.68%	8.45%	6.34%
Ba	84			1.19%	7.14%	53.57%	11.90%	21.43%	4.76%
B	30			6.67%	3.33%	10.00%	60.00%	10.00%	10.00%
Caa	11				27.27%			63.64%	9.09%
Ca-C	40						2.50%		97.50%

Source: Moody's Investors Service

Loss Rates for SME Transactions in EMEA

Cumulative Loss Rates for SME Transactions Over 1-Yr to 5-Yr Horizons – Jan. 2007 to Mar. 2014

Rtg Cat. \ Horizon	Avg. Counts	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr
Aaa	175	0.00%	0.00%	0.00%	0.00%	0.00%
Aa	75	0.00%	0.00%	0.00%	0.00%	0.00%
A	115	0.14%	0.35%	0.53%	0.53%	0.53%
Baa	93	0.70%	1.56%	2.14%	2.60%	3.77%
Ba	58	0.54%	1.25%	1.53%	1.53%	1.91%
B	31	0.53%	1.33%	1.81%	1.81%	1.81%
Caa	24	2.18%	5.12%	8.91%	13.68%	20.72%
Ca_C	16	13.04%	24.44%	32.87%	36.19%	39.79%

Source: Moody's Investors Service

8 Conclusion

Conclusion

» We base our methodology on the Expected Loss approach

» In our analysis, we consider quantitative and qualitative elements

» The main elements of our quantitative approach are probabilities of default and recovery rates

» We can supplement historical performance data with top-down approach

» Our final assessment also depends on qualitative factors including macroeconomic, operational, legal and other analytical considerations

» SME transactions performance varies by country and vintage

» 90+ day delinquencies have steadily decreased since 2012

9 Questions?