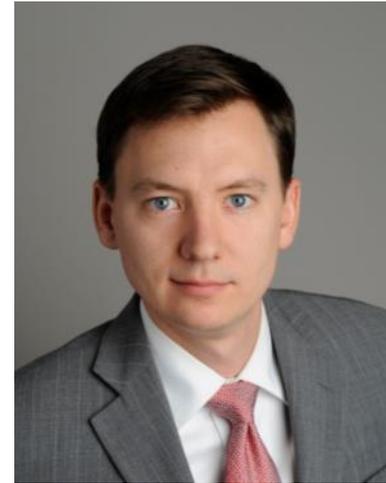


# Protecting Your Corporation from Counterparty Loss

# Featured Speakers



**Mehna Raissi**  
Senior Director  
Enterprise Risk Solutions  
*Moody's Analytics*



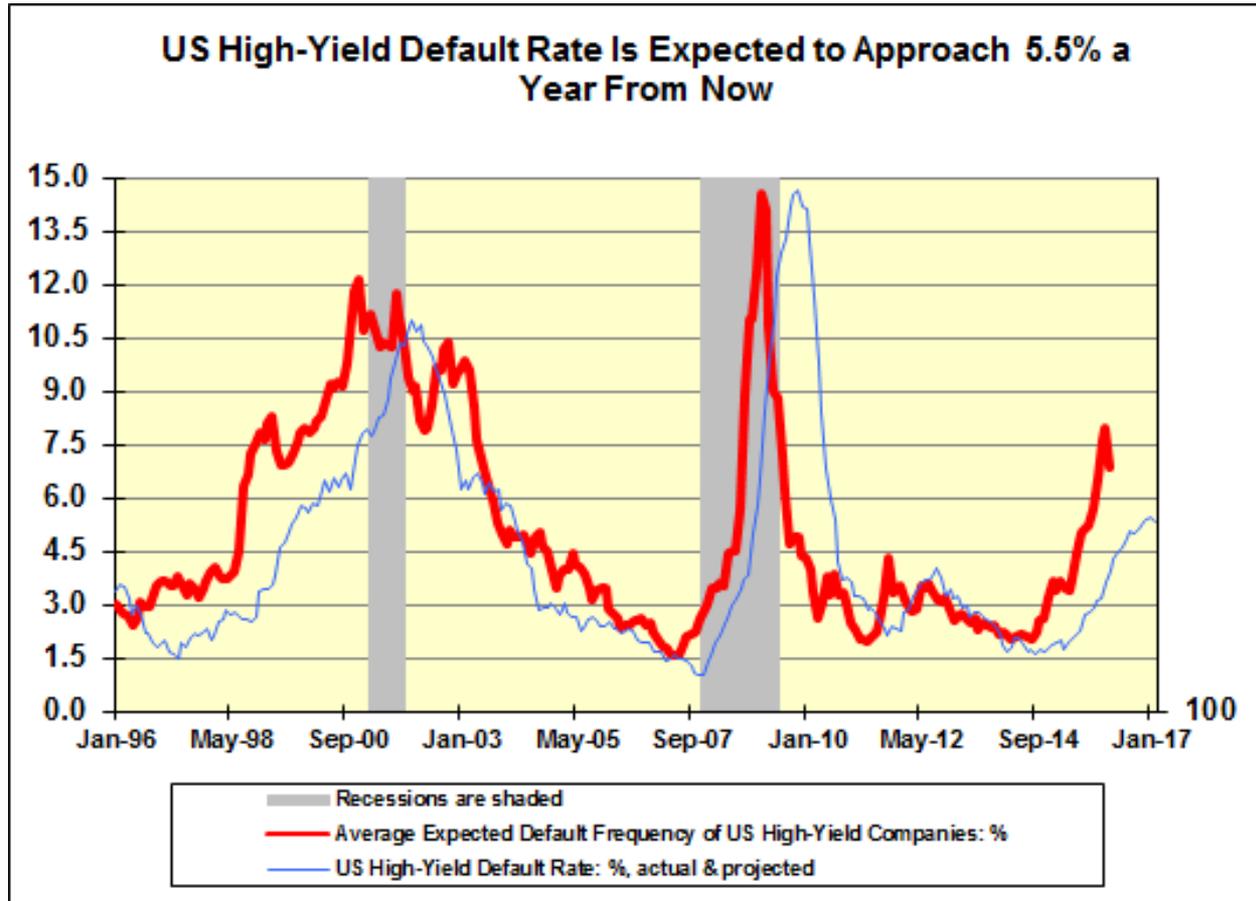
**Charles Dafler**  
Assistant Director  
Credit Solutions Specialist  
*Moody's Analytics*

# Agenda

- » Market Outlook & Trends
- » Identifying Common Challenges in Credit Risk Management
- » Bridging the Credit Risk Gap in Your Organization
- » Applying Effective Credit Models and Examples
- » Q&A

# Market Outlook & Trends

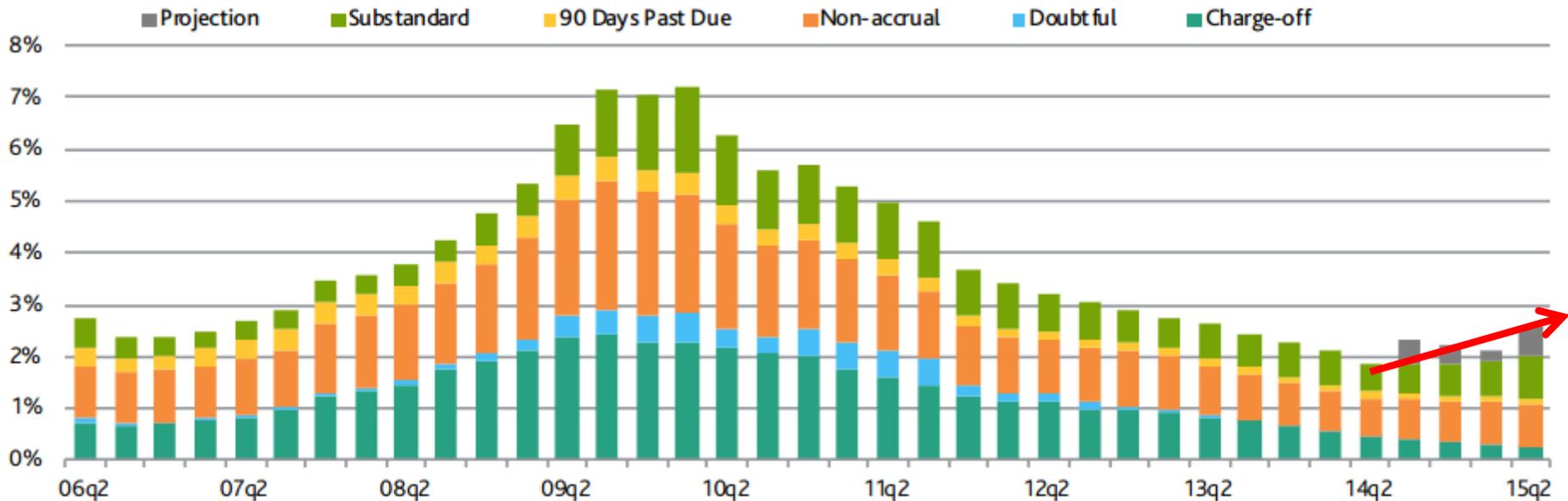
# Economic Volatility



- » Actual corporate default rate (blue series) is at its highest level since 2010
- » Predicted default rate (Moody's Analytics Public Firm Expected Default Frequency) showing continued deterioration

## Banks are tightening their credit

Rolling 12-month private firm default rate by type including near-defaults



- » Moody's Analytics proprietary Credit Research Database (CRD™) shows that banks' commercial lending default have begun to rise in U.S.
- » Banks will respond by tightening credit
- » Firms will have a harder time borrowing and their risk will permeate to their counterparties

# Common Challenges in Credit Risk Management

# What credit risk challenge(s) keeps you up at night?

Data  
Quality &  
Availability

Technology

Unforeseen Issues

Different  
Approaches

Comprehensive  
Assessment

Systematic  
Framework

Standardized  
Process

Strong  
Model

Organization  
Challenges or  
Changes

Ongoing  
Monitoring

Industry  
Challenges

Global Risk

# Polling Question #1

# Where are the risks associated with counterparties?



# What are the consequences of credit risk?



**Bad Debt &  
Loss of Income**



**Disruption to  
Supply Chain**



**Miscalculation of  
Capital Reserves**



**Unforeseen  
Damages**

# The Process: Assessing Counterparty Credit Risk

## Ideal Analysis



# Common Challenges in Corporate Credit Risk Management

## Data Quality & Availability



**What is the data quality?**

**How is the data captured?**

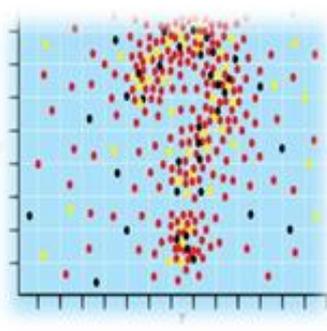
## Standardized Processes



**How to minimize errors?**

**Are credit policies systematic and consistent?**

## Credit Risk Models



**What are the most effective credit risk tools?**

**Are you using the best model?**

## Ongoing Monitoring



**How to manage potential counterparty risk?**

**What early warning indicators highlight risk deterioration?**

## Other Risk Drivers



**What other factors should be taken into consideration?**

**What represents a comprehensive analysis?**



# Bridging the Gap in Your Organization

# Is there disconnect between Sales and Credit Risk?

## Potential Challenges:

- What is the point of this?
- This is a roadblock! We are going to lose this sale!
- Why didn't this get approved?
- I know this customer - override!
- I have been doing this for a longtime- I don't need a model!

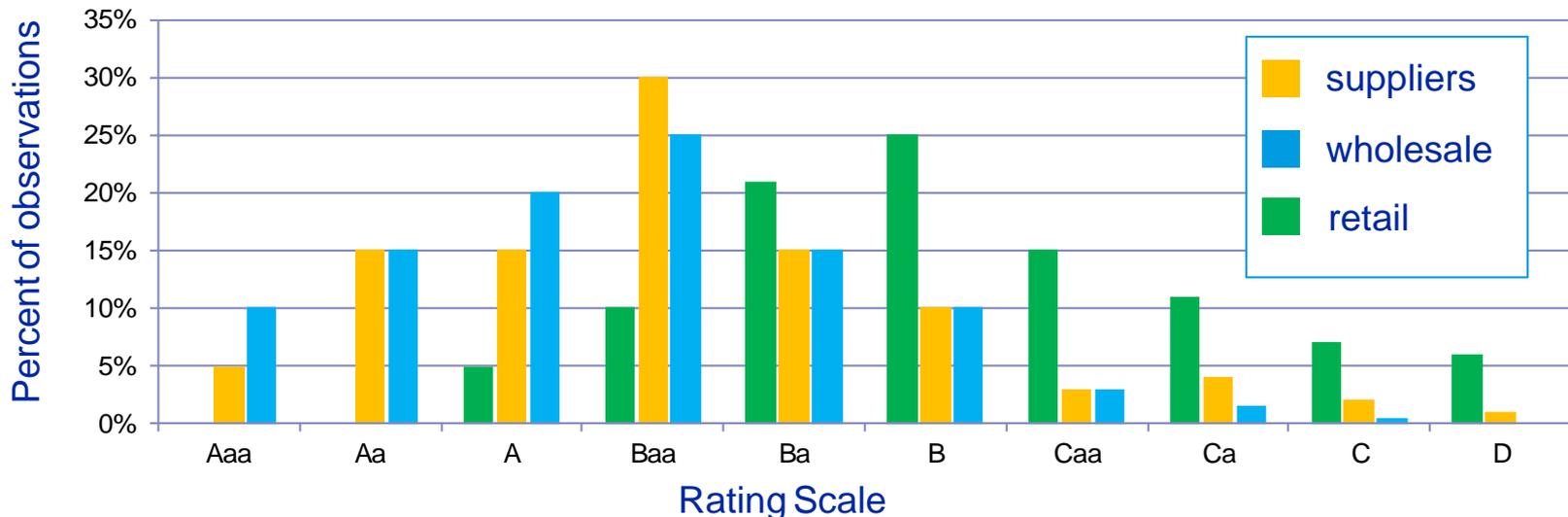
## Establishing a Common Language:

- **Accuracy** – education on purpose of the model and scoring tool – no black boxes!
- **Efficiency** - Collective knowledge of process and the common goal of minimizing potential losses
- **Transparency** - Understanding key risk factors that drive business and the approval process
- **Consistency** - Gathering the qualitative and quantitative factors upfront as part of the pre-qualification process



## The purpose of credit scores

They are used in a common and consistent language across the firm – a Master Rating Scale

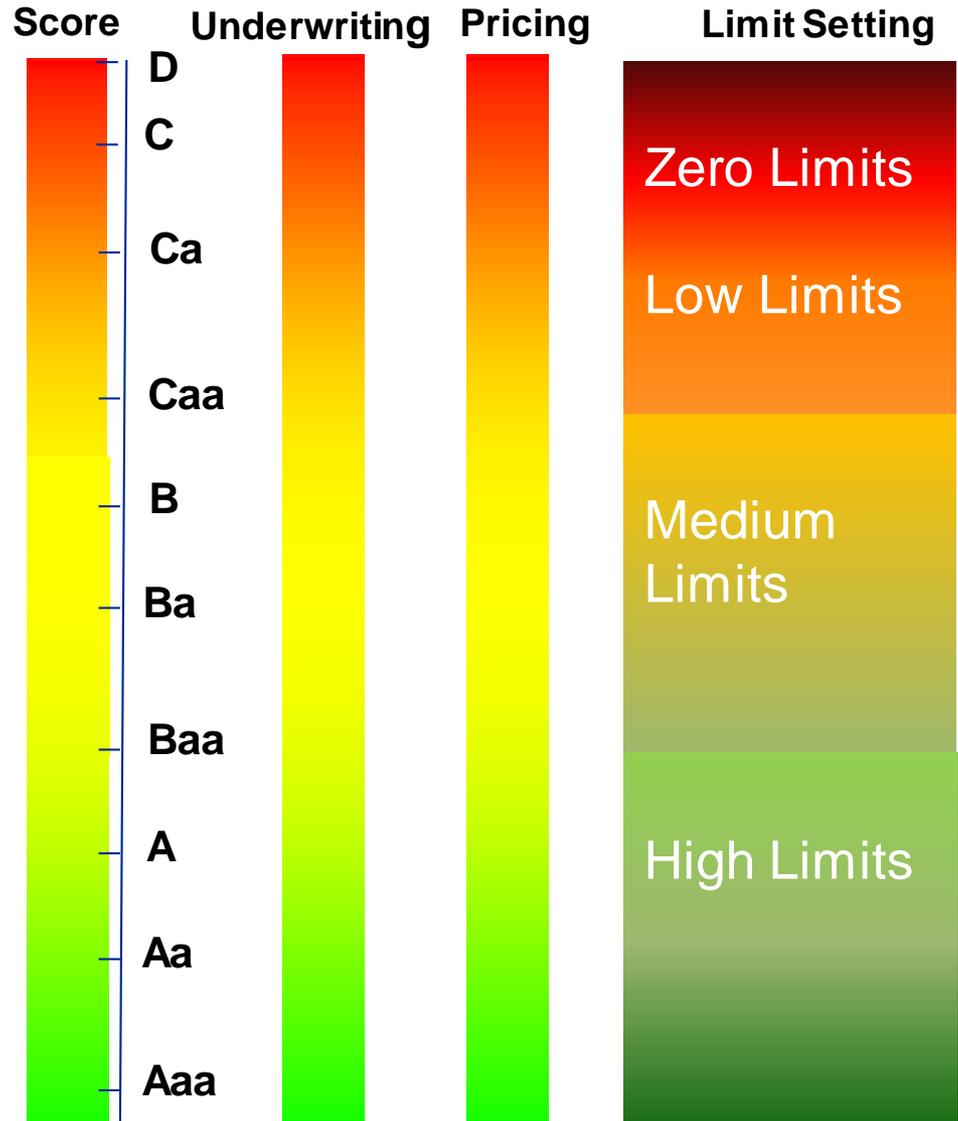


A Master Rating Scale helps ensure the interpretation of risk is consistent

- » Across the firm (front to back office) globally
- » Across segments (portfolios)
- » Over time as underwriters and analysts change
- » Provides a good distribution for credit risk

# Maximizing the value of credit scores

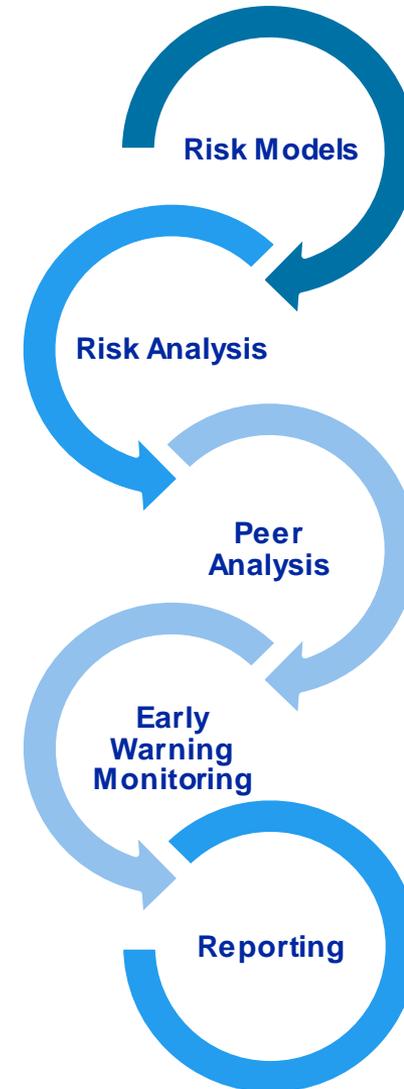
- » Pre-qualification
- » Deal approval
- » Exposure Loss Estimation
- » Risk Monitoring
- » Risk-based pricing
- » Limit Setting
- » Reserve Estimation
- » Benchmarking
- » Peer Comparison



# Attributes of an Effective Credit Framework

# Key Requirements for an Effective Credit Risk Framework

- » Consistency
- » Efficiency
- » Transparency
- » Accuracy

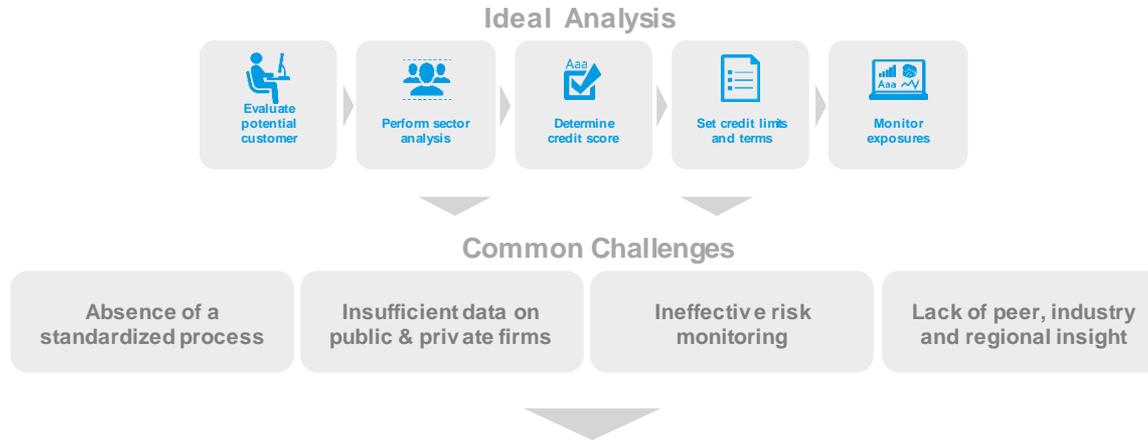


# Checking the boxes for a good Credit Risk Model

## Characteristics of Good Candidate Risk Factors

- Able to **distinguish defaulters from non-defaulters** (i.e., “action” in the underlying data sample)
- Clear, objective, and **uniformly understood**
- Capable of being assessed in a **reasonable timeframe** using accessible, **consistently available data**
- Possessing **unique information value** (i.e., non-duplicative, non-correlated)
- Supported by intuition and general **business sense**
- Measurable and **verifiable** (using historical data at some point in future)

# Common types of credit risk models available



## Counterparty Credit Risk Models

### Credit Agency Ratings (through the cycle)

**PROS:**

- thorough
- widely understood
- long track record

**CONS:**

- lagging indicator
- labor intensive
- subjective

### Financial statement-driven

**PROS:**

- transparent
- consistent
- intuitive

**CONS:**

- backward looking
- updated only with new statements

### Market-driven (point in time)

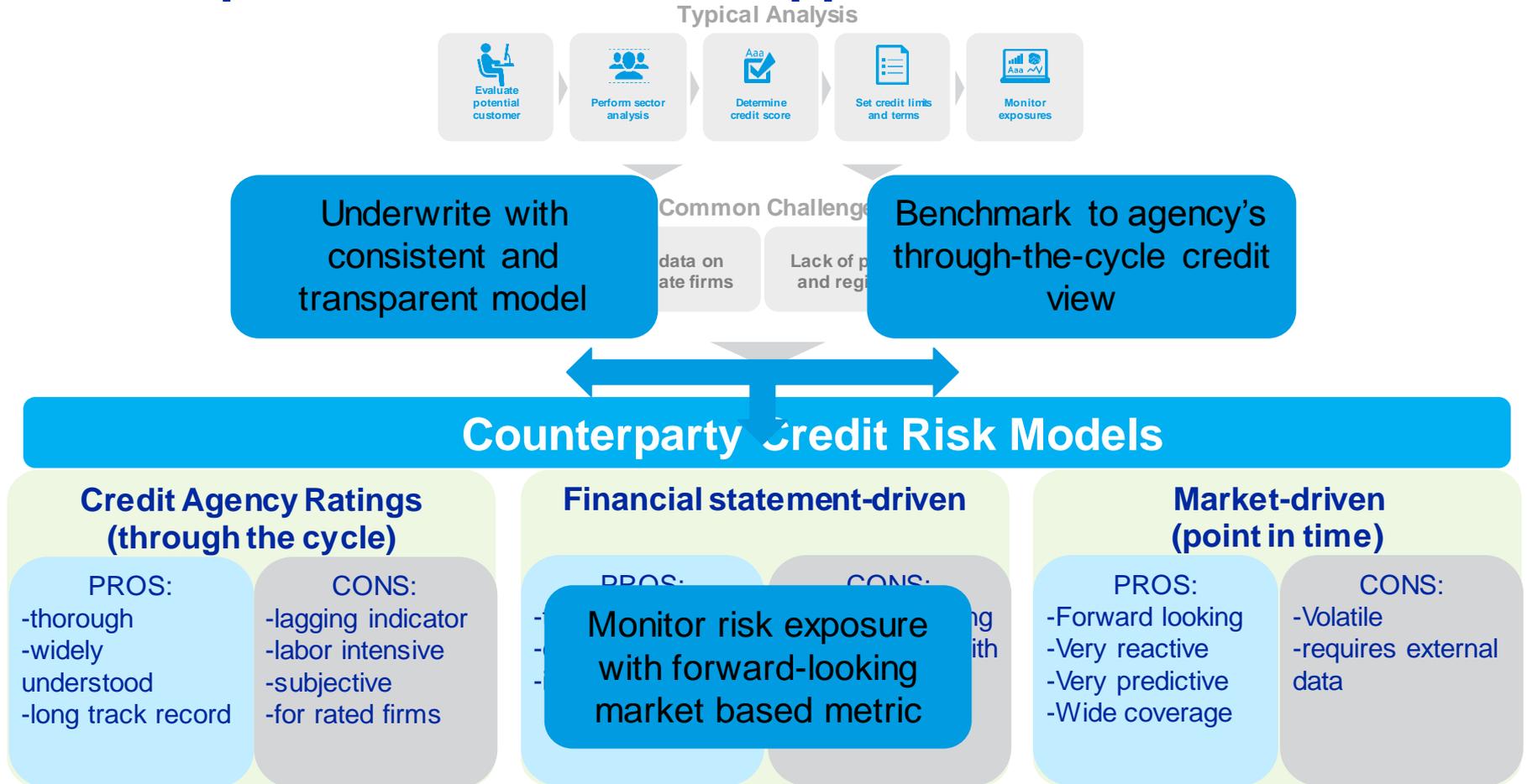
**PROS:**

- Forward looking
- Very reactive
- Very predictive
- Wide coverage

**CONS:**

- Volatile
- requires external data

# A good counterparty credit risk solutions utilizes the best aspects of all available approaches



# Case Study

# Case Study: Sabine and Forest Oil merger



## What we knew in 2014...

### Sabine Oil and Gas

- » Privately held (market-driven model won't work)

### Forest Oil

- » Publically traded [NYSE:FST] (market-based model available)

### Merger announced in May 2014

- » Sabine announced plans to acquire Forest Oil in mid 2014

## Then...

Sabine Oil & Gas Corp files for bankruptcy in July 2015

# Sabine Oil financial statement assessment benchmark to agency rating

SABINE OIL & GAS CORP (Sector mining)	
Statement Date	12/01/2013
Current Date	03/01/2014
EDF Mode	FSO
▼ EDF	
	<b>1-Year</b>
Expected Default Frequency (EDF)	8.46%
Bond Default Rate Mapping	Ca.dyn
Percentile	92.86%

SABINE OIL & GAS CORP (Sector mining)	
Statement Date	12/01/2014
Current Date	03/01/2015
EDF Mode	FSO
▼ EDF	
	<b>1-Year</b>
Expected Default Frequency (EDF)	11.32%
Bond Default Rate Mapping	C.dyn
Percentile	95.75%

Using RiskCalc econometric model and YE2013 financials we calculate Sabine has 8.46% default probability

YE2014 financials show 11.32% default probability, implied rating in C category

## Credit Opinion: Sabine Oil & Gas LLC

Global Credit Research - 13 May 2014

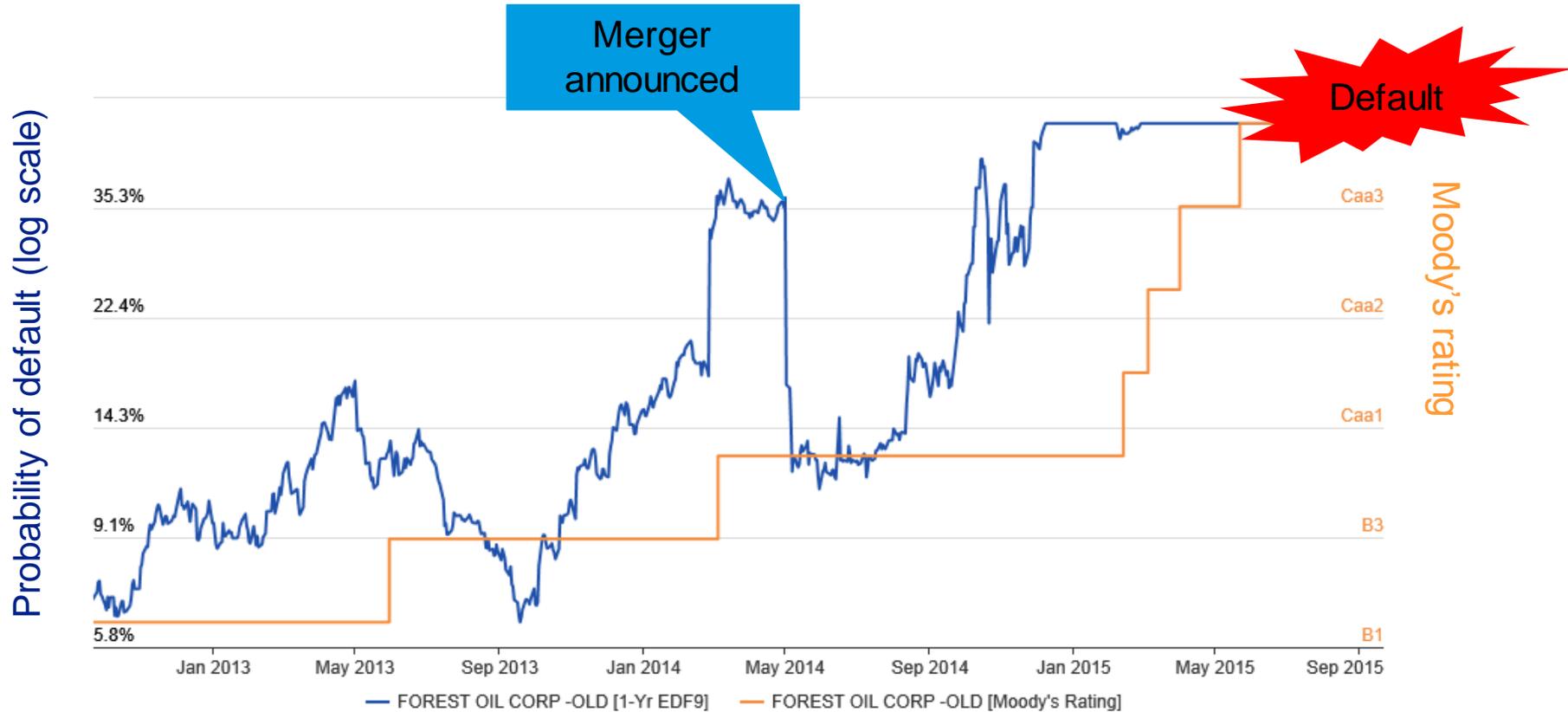
Houston, Texas, United States

### Ratings

Category	Moody's Rating
Outlook	Rating(s) Under Review
Corporate Family Rating	*B3
Sr Sec Bank Credit Facility	*Caa1/LGD4
Senior Unsecured	*Caa2/LGD6
Speculative Grade Liquidity	SGL-3

\* Placed under review for possible upgrade on May 6, 2014

# Forest Oil market-based model has quick reaction to credit risk a leading indicator of downgrades and default



Source: CreditEdge

## Polling Question Two

What type of credit model do you use?

- External model – rating agency
- External model – market based
- External model – econometric-based
- Internal model – expert judgment driven model
- Internal model – quantitative model
- More than one answer above
- Other

# Polling Question #2

# Putting a Credit Model into Practice

# What does a comprehensive credit risk model do?

It helps measure what you stand to lose with default and recovery risk measures.

$$EL = PD \times LGD \times EAD$$

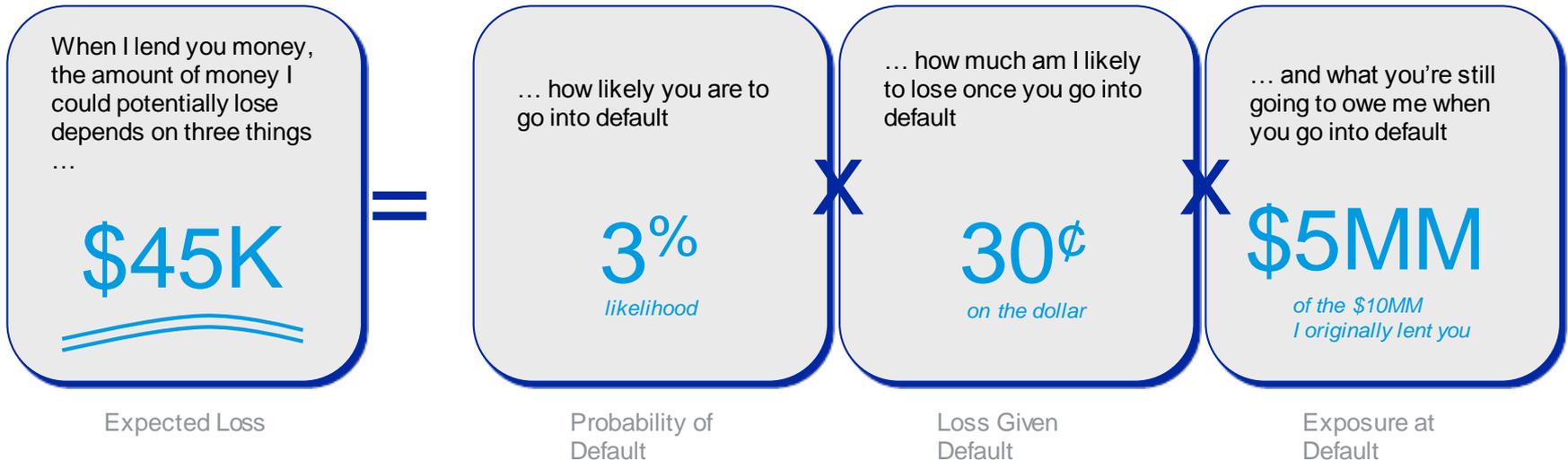
Expected Loss

Probability of Default

Loss Given Default

Exposure at Default

*which means:*



# What's the right scorecard balance for your organization?

## 1. How many scorecards?

**MORE**

Accuracy,  
Stability and  
Consistency

**LESS**

Efficiency/  
Maintenance

Flexible, Easy to  
Manage, Cost Effective

## 2. How customized?

High

Degree of  
Customization

Low

Cost Effective, Quick  
Delivery, Easy to Deploy

Standardized,  
Off the Shelf

Leveraged  
and Tailored

Fully  
Customized

## 3. Modeling Approach?

Purely Judgmental

Statistically driven  
Expert opinion input

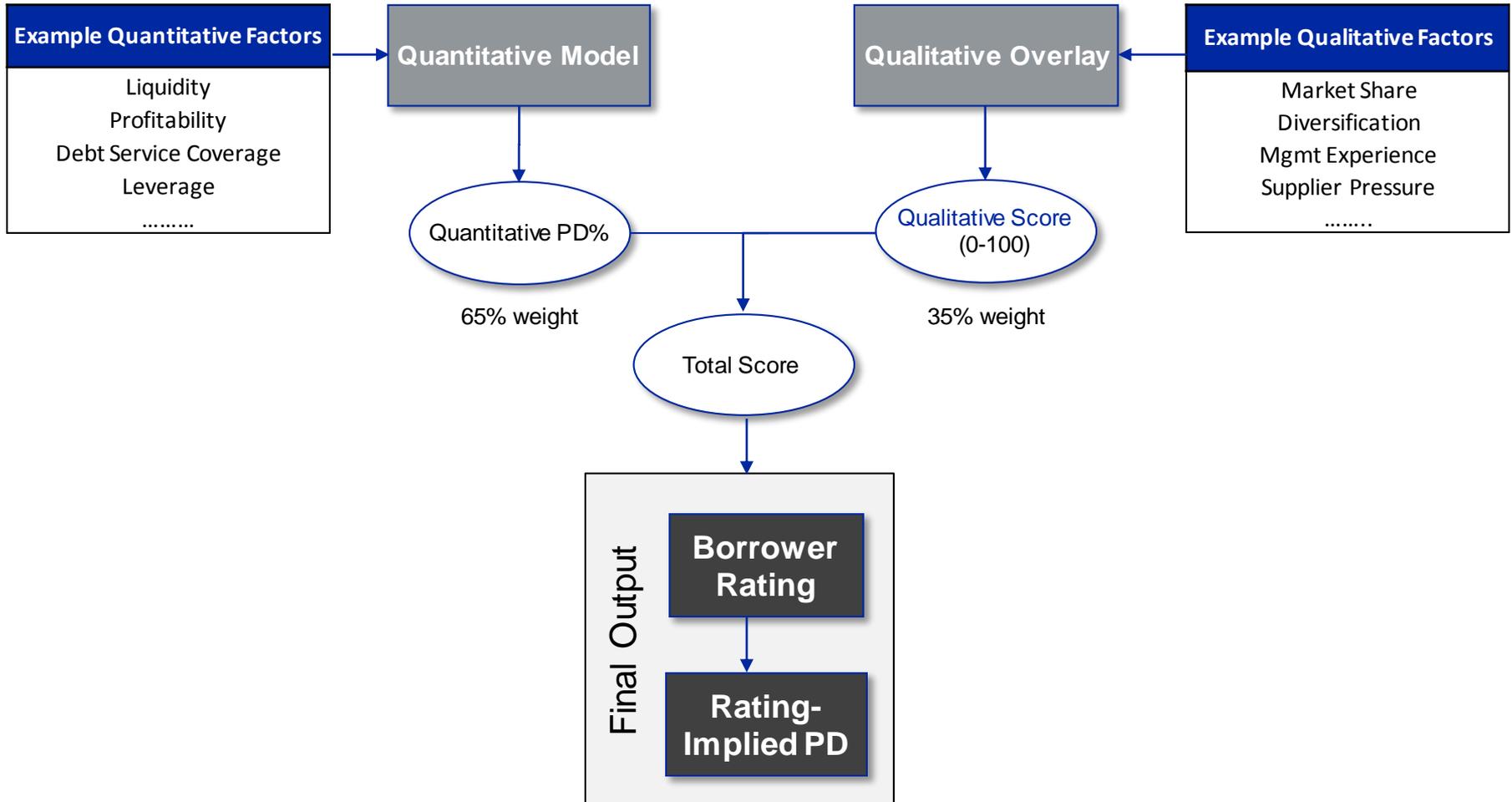
Purely Empirical

**EXPERT**

**HYBRID**

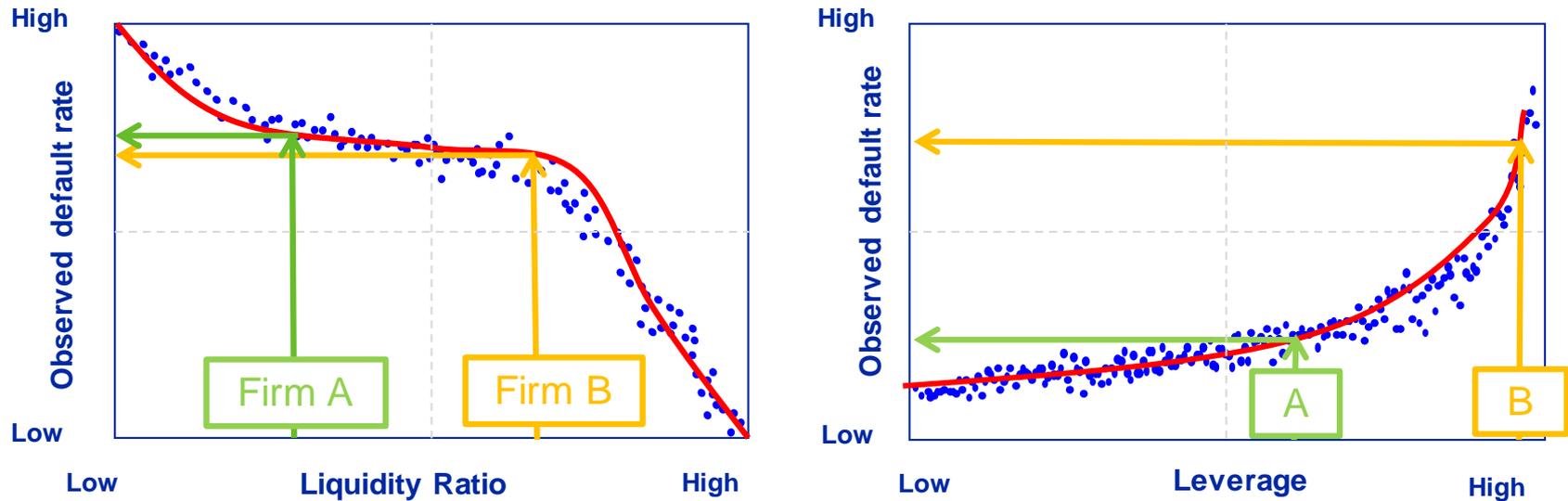
**QUANTITATIVE**

# Desired end-state: a scorecard which blends empirically-derived risk measures with expert judgment



# Quantitative modeling explained

Our human intuition can be misled – empirical evidence can overcome this issue



**Each level of a ratio is associated with a different default rate, and their weights are chosen to maximize the fit between predicted default rate and observed default rate in the database**

Liquidity Example: **Firm A's** liquidity is worse than **Firm B's**, below the median and above the median, respectively. However, the empirical evidence shows **both** firms have above-median default risk based on liquidity alone.

Another example: **Firm A** and **Firm B** have above-median leverage, but both map to much different default risk based on leverage alone

**All relevant ratios must be weighed together in the final model construction**

# It is important to test the model's accuracy and stability through validation

## What does validation involve?

- » Validation is the process of rendering a statistically derived conclusion about the usefulness and reliability of a scorecard
- » Validation makes use of historical data to determine whether or not the scorecard is robust
- » Validation answers important questions about the accuracy and stability of the scorecard as a decision making tool

## Why is validation important?

- » Validation ensures that the scorecards are at least as good as an industry benchmark
- » Regulators increasingly expect it – this trend is expected to continue and expand to more and more industries
- » Validation can also help ensure that strong borrowers are not turned away – and weak borrowers are not extended credit

# Model Accuracy Explained

- » Assume you have a portfolio of 100 counterparties
- » All were rated 1 year ago
- » Since then 10 of them **defaulted**
- » How did the model **rank-order** the counterparties?

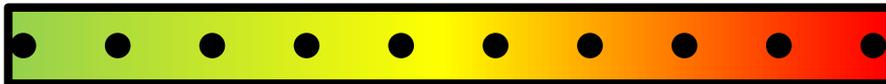
## Perfect Model - Unattainable



## Good Model

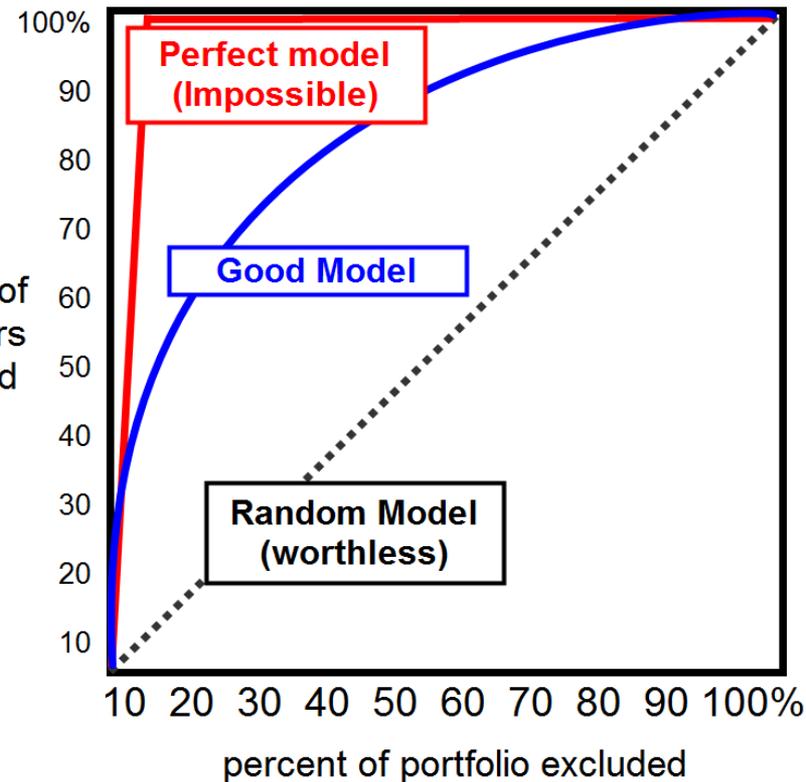


## Random Model - Worthless



percent of defaulters excluded

## Accuracy Curve



## Polling Question Three

What topics discussed today resonated the most and will be your top area of focus?

- Improving the credit scoring models being used
- Enhancing your overall credit risk framework
- Educating your internal stakeholders on the importance of credit scoring
- More than one answer above
- Other

# Polling Question #3

# Recap: Credit Risk Management Best Practices

## ▶ **Granularity**

Increases the power to diversify the risk between similar credits

## ▶ **Ongoing Monitoring & Early Warning Signal**

Detects credit deterioration by combining relevant data and rank orders risk well

## ▶ **Assessment of Risk Drivers**

Relative contributions and sensitivity measures provide an understanding of the risk drivers by providing transparency

## ▶ **Benchmarking**

Benchmark an obligor to the sample pool and/or other firms in the portfolio or peer groups by industry and asset size

## ▶ **Comprehensiveness**

All encompassing qualitative, probability of default, recovery analytics solution that can be accessed across your organization

## ▶ **Extensive sample pool of data**

Comprehensive asset class data including financial statements and defaults from Moody's Analytics Credit Research Database

## ▶ **Transparency**

Documented approach, clear methodology, consistent inputs and outputs

## ▶ **Empirically Validated**

Sufficient data to separate development, validation samples and ongoing model performance

## ▶ **Accuracy Importance**

Model has good "power", high quality of credit ratings differentiation

## ▶ **Forward Looking**

Accounts for effects of Credit Cycle by Industry and Market Performance

# Questions?

*Slides from today's presentation and supplemental material can be downloaded from the "Resources" tab of this presentation console.*

*The recording will also be sent following this webinar.*

**Charles Dafler**

Assistant Director, Credit Solution Specialist  
[Charles.Dafler@moodys.com](mailto:Charles.Dafler@moodys.com)

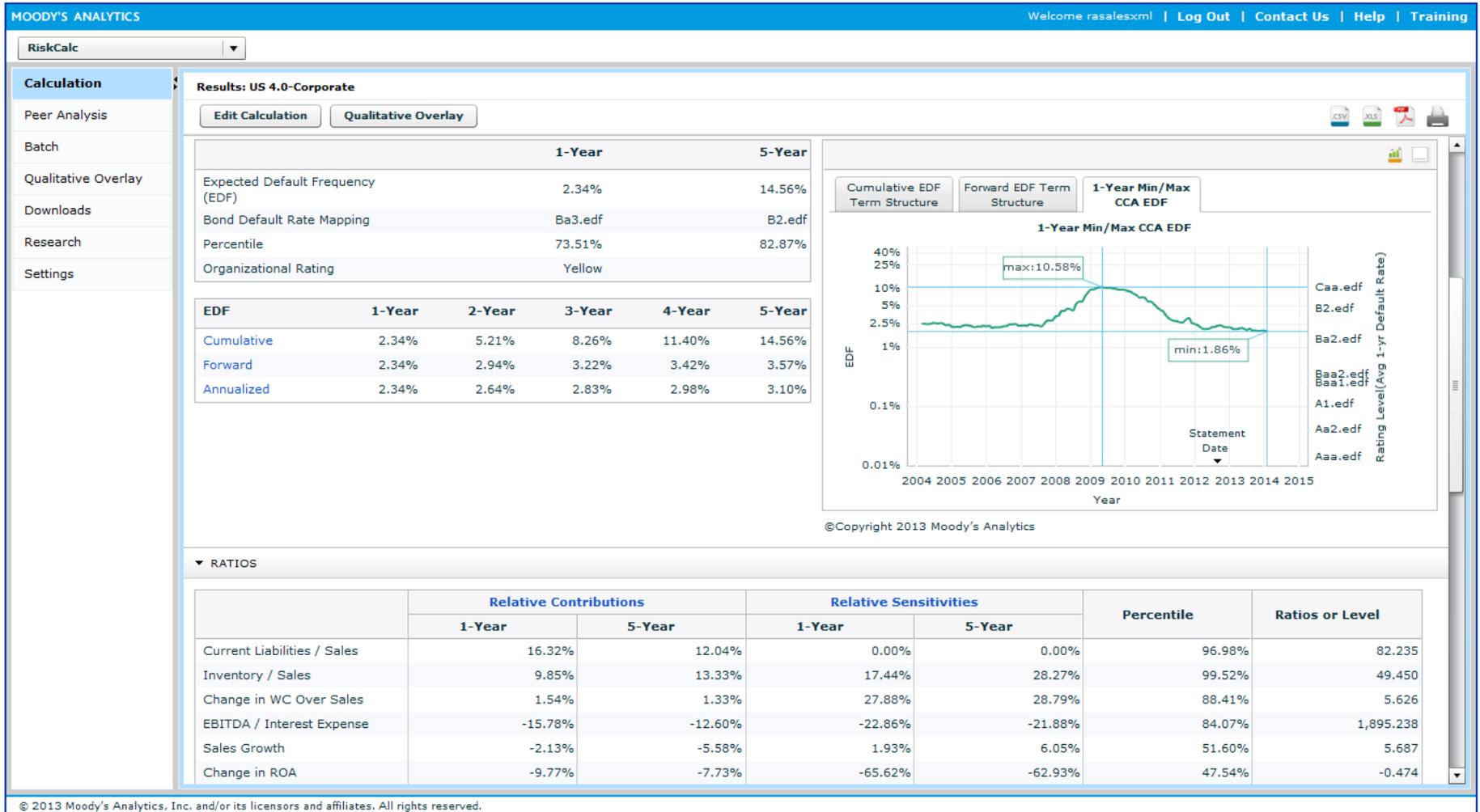
**Mehna Raissi**

Senior Director, Product Management  
[Mehna.Raissi@moodys.com](mailto:Mehna.Raissi@moodys.com)

# APPENDIX

## Examples of Risk Rating Models

# RiskCalc – Financial Statement Driven Model with Forward Looking Credit Cycle Adjustment



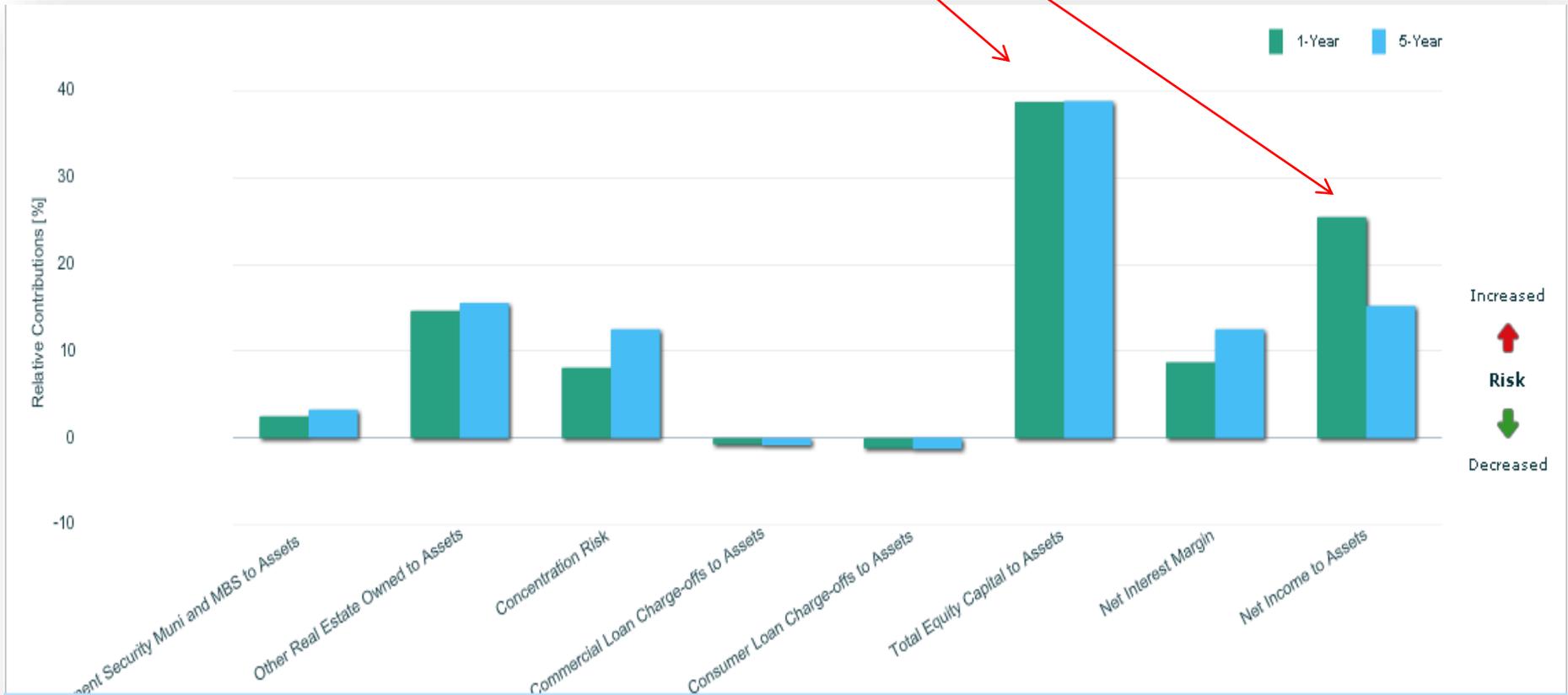
# RiskCalc data source: the Credit Research Database

Country	Last Updated	Borrowers	Defaults	Default Range	Statements	Range	Range
South Africa	9-2015	111,949	5,749	1989-2014	375,144	1983-2015	1989-2015
Africa		111,949	5,749		375,144		
Australia	4-2006	31,577	2,715	1987-2002	102,276	1980-2002	1986-2002
China	7-2015	889,151	4,852	2003-2015	2,452,213	2000-2014	2003-2014
India	12-2014	20,390	-	-	65,315	1990-2013	-
Japan	4-2013	320,164	25,503	1990-2012	1,762,130	1982-2012	1983-2012
Malaysia	6-2012	16,666	222	2002-2011	58,262	1930-2014	1999-2010
Singapore	9-2015	5,844	127	2003-2015	37,616	1992-2014	1998-2014
South Korea	2-2007	145,237	25,883	1982-2005	541,388	1994-2005	1994-2005
Asia Pacific		1,429,029	59,302		5,019,200		
Austria	4-2015	75,945	10,025	1980-2014	292,509	1989-2014	1989-2014
Belgium	6-2015	568,067	91,096	1942-2015	5,275,625	1991-2015	1991-2014
Denmark	1-2015	318,705	88,797	1971-2014	1,836,168	1996-2014	1996-2014
Estonia	1-2015	113,488	7,240	2006-2014	463,217	2001-2014	2006-2014
Finland	1-2015	196,499	30,569	1994-2015	1,010,128	1996-2014	1996-2014
France	11-2015	2,315,034	229,666	1986-2015	13,854,858	1989-2015	1990-2015
Germany	12-2015	346,774	22,468	1995-2015	1,267,057	1987-2015	1987-2014
Iceland	1-2015	29,579	1,624	2011-2014	111,137	2004-2013	2007-2013
Italy	9-2015	1,296,840	212,017	1951-2015	6,300,954	1990-2014	1990-2014
Latvia	4-2015	109,129	6,803	2011-2015	316,099	1997-2014	1998-2014
Lithuania	1-2015	14,696	1,071	2010-2014	43,763	2002-2014	2004-2013
Netherlands	11-2015	1,164,242	61,109	1901-2015	6,773,207	1990-2015	1990-2015
Norway	1-2015	357,770	96,799	1920-2014	2,317,770	1994-2014	1994-2014
Poland	12-2014	146,109	-	-	611,967	1994-2013	-
Portugal	10-2015	637,525	134,483	1990-2015	3,485,375	1993-2014	1993-2014
Russia	7-2015	2,250,468	199,882	2001-2015	6,984,817	1999-2014	1999-2014
Spain	10-2015	2,104,044	203,609	1953-2015	13,350,565	1987-2014	1987-2014
Sweden	12-2014	493,203	108,477	1988-2014	3,220,963	1992-2014	1992-2014
Switzerland	4-2009	37,845	4,495	1996-2008	227,737	1996-2008	1996-2008
Ukraine	5-2015	563,396	33,836	1997-2014	2,489,553	1999-2013	1999-2013
United Kingdom	12-2015	2,448,284	139,261	1959-2015	7,427,198	1980-2015	1980-2015
Europe		15,587,642	1,683,327		77,660,667		
Brazil	3-2014	22,997	-	-	60,749	1993-2012	-
Canada	8-2015	61,270	4,950	1993-2015	399,096	1986-2015	1991-2015
Mexico	6-2008	5,686	1,869	1994-2005	16,993	1980-2007	1980-2007
United States	8-2015	345,516	59,265	1980-2015	1,995,515	1980-2015	1980-2015
Americas		435,469	66,084		2,472,353		
World		17,564,089	1,814,462		85,527,364		

*Includes all records found in the "core CRD database" as of 12/01/15. The defaults counts are based on the most inclusive definition of default. The full range of statement and default years is presented above. Only the last 10 years of history are presented in the "Statements & Defaults by Year" graphs below.*

# RiskCalc Determines PD from Credit Ratios and Credit Cycle

Ratio drivers point out many weaknesses in firm's financials



# Compares borrowers against peer group for additional transparency

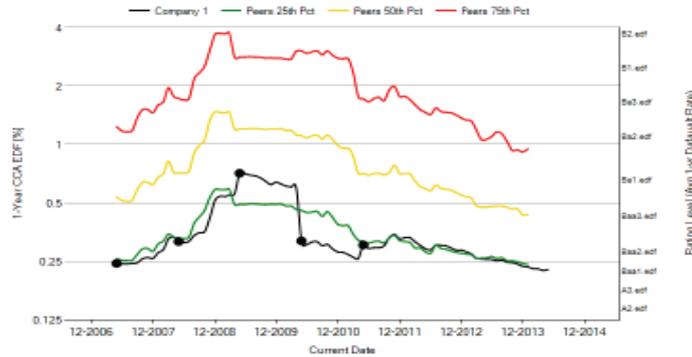
## Peer Analysis Summary - EDF Mode: Credit Cycle Adjusted (CCA)

RiskCalc Model: Germany 3.2  
Peer Benchmark Group: Sector: MiningTransUtility

Firm Name: Company 1  
Firm Sector: Unassigned

### EDF Summary: Firm vs. Peer Group

The EDF percentiles show the 25th, median and 75th 1-Year CCA EDF percentiles for the peer benchmark and the median CCA EDF for the borrower. The percentiles are shown by month, which corresponds to each current date observation output from the CCA mode of RiskCalc Germany-Complex.



	2-2007			2-2008			2-2009			2-2010			2-2011							
	Firm	25th	Peer	50th	Peer	75th	Firm	25th	Peer	50th	Peer	75th	Firm	25th	Peer	50th	Peer	75th		
1-yr CCA EDF (%)	0.24	0.26	0.54	1.23	0.32	0.33	0.71	1.72	0.71	0.49	1.20	2.81	0.32	0.49	1.11	3.02	0.30	0.32	0.71	1.71
5-yr CCA EDF (%)	2.16	2.36	4.59	8.08	2.27	2.49	4.82	8.09	3.40	2.37	4.57	7.83	1.71	2.30	4.48	8.56	2.10	1.79	3.83	8.68

Credit Cycle Adjusted (CCA) mode captures the current credit quality of a firm in a particular sector in each country model. We incorporate information from public firms on an aggregate level and create a factor that captures economic changes, which are normally not reflected in financial statements alone. Using the public firm's market information and financial statements, we compare the current and historical credit quality of the firm's sector, and adjust the firm's EDF value accordingly.

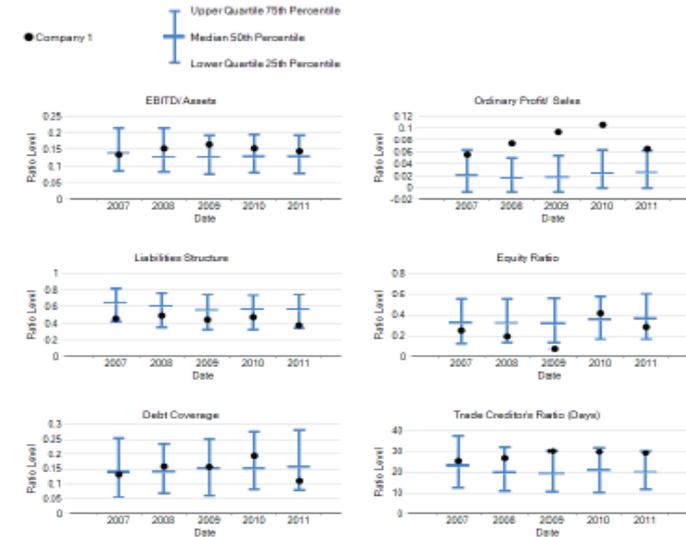
Data source for the peer analysis benchmark group  
Peer Benchmark Group: Sector: MiningTransUtility  
Number of Financial Statements: 91,230

## EDF Driver Summary (1 of 2)

	2-2007		2-2008		2-2009		2-2010		2-2011	
	Firm	Peer								
EBITDA/Assets	0.12	0.14	0.15	0.13	0.16	0.13	0.15	0.13	0.16	0.13
Ordinary Profit/Sales	0.08	0.02	0.07	0.02	0.09	0.02	0.11	0.02	0.07	0.03
Liabilities Structure	0.48	0.64	0.49	0.60	0.45	0.55	0.48	0.57	0.38	0.57
Equity Ratio	0.38	0.22	0.20	0.22	0.36	0.22	0.42	0.26	0.29	0.26
Debt Coverage	0.12	0.14	0.18	0.14	0.19	0.15	0.19	0.15	0.11	0.16
Trade Creditors Ratio (Days)	25.34	22.89	26.82	19.76	26.11	19.23	29.75	25.79	28.25	19.86

### EDF Driver Ratio Graphs

The EDF Driver Ratio Graphs display the firm (in black) compared to the peer group (in blue). The peer group range includes the Upper Quartile (75th percentile), Median (50th percentile) and Lower Quartile (25th percentile). There is one graph per ratio in Germany.



# Incorporates qualitative factors in credit assessment

The screenshot displays the Moody's Analytics RiskCalc interface. A 'Qualitative Overlay' window is open, showing a 'Customer Power' question. The main interface shows a 'Final Score Summary' table with the following data:

	Value	Standardized Score	Organization Rating
<b>Quantitative</b>			
EDF	1.00%	-0.12	Ba1
<b>Qualitative</b>			
Industry/Market	17.00		
Company	38.00		
Management	62.50		
Balance Sheet Factors	61.40		
<b>Qualitative Score</b>	<b>46.32</b>	<b>0.72</b>	
<b>Combined PD</b>		<b>Combined Score</b>	<b>Organization Rating</b>
<b>Combined Measure</b>	1.73%	0.21	Ba3

Qualitative factors focused on industry/market (customer power), management (experience in industry), company (years in relationship) and balance sheet factors (audit method)

# CreditEdge – Public Firm PD Model

MOODY'S ANALYTICS | CreditEdge Name, PID, Ticker, CUSIP or ISIN

My Portfolios | Chart Builder | Screener | Report Builder | Movers | Alerts **100+** | Help | My Account ▼

## AT&T INC

Add To Portfolio

PDF Report

Export Data

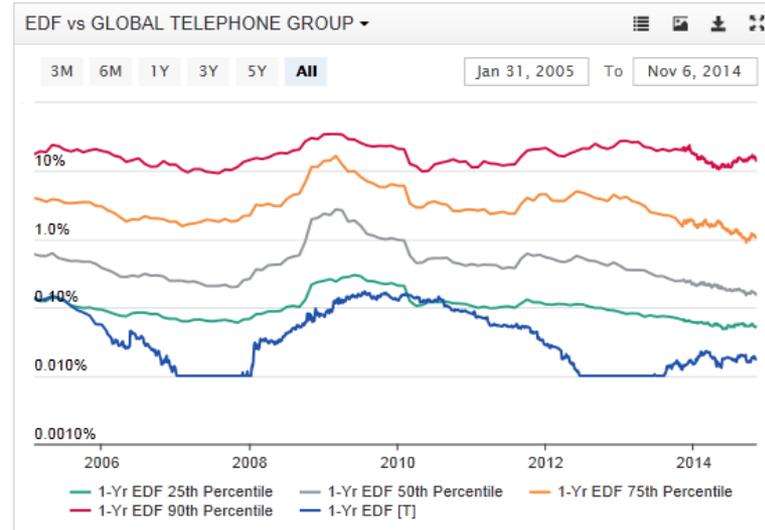


Company PID: 845333 - NYS: T - UNITED STATES - TELEPHONE

Overview | EDF | CDS | Bonds | Financials | Peer Analysis | What-if | Profile | News & Research

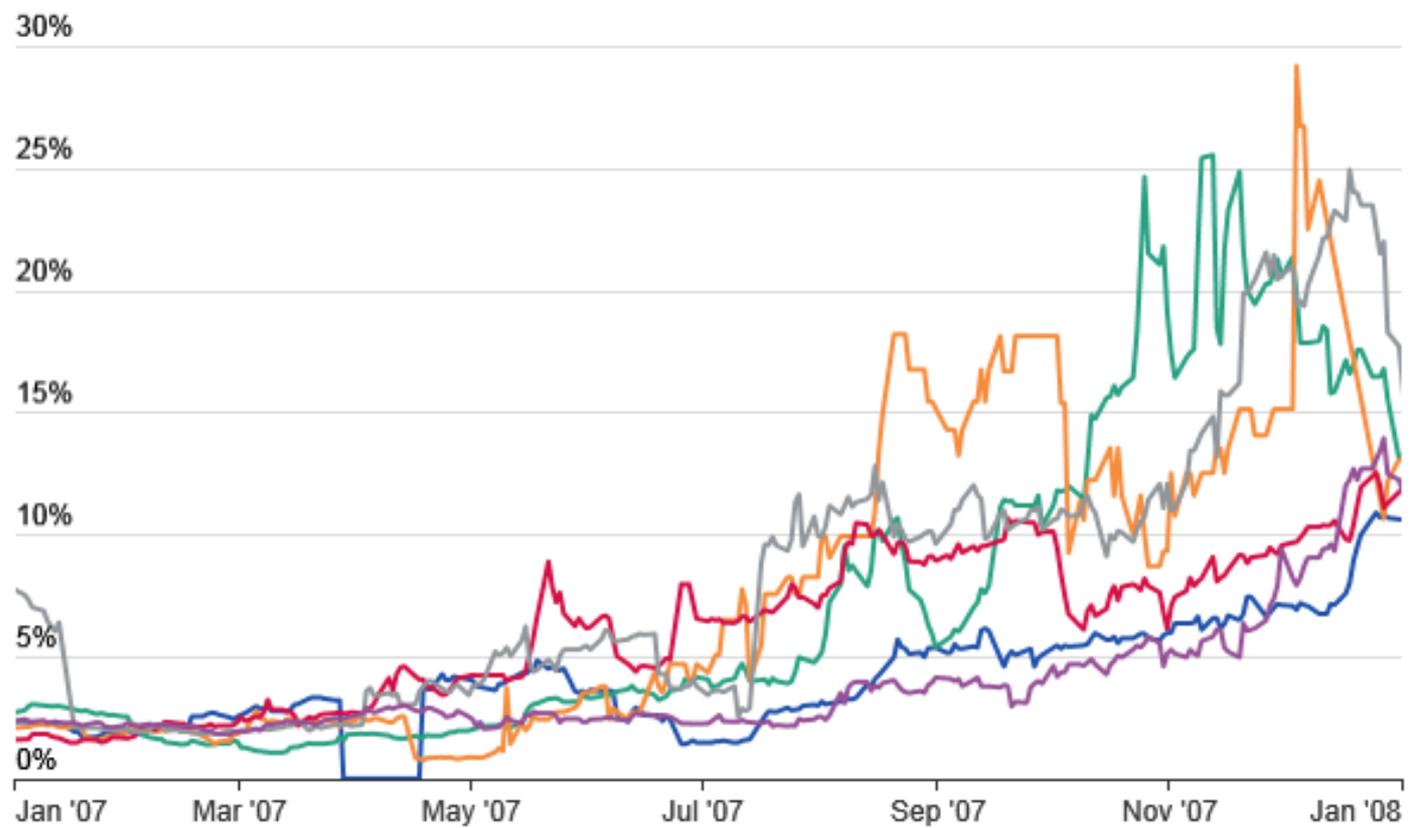
<p><b>0.02%</b></p> <p>As of Nov 06, 2014</p> <p>1-Yr EDF</p>	<p><b>0.00%</b></p> <p>3 Month Change</p> <p>Change</p>	<p><b>Aa1</b></p> <p>As of Nov 06, 2014</p> <p>Implied Rating</p>	<p><b>+1 Notch</b></p> <p>3 Month Change</p> <p>Change</p>	<p><b>A3</b></p> <p>As of Jan 29, 2013</p> <p>Moody's Rating</p>	<p><b>A-</b></p> <p>As of Dec 06, 2010</p> <p>S&amp;P Rating</p>	<p><b>0.06%</b></p> <p>As of Nov 05, 2014</p> <p>1-Yr TTC EDF</p>	<p><b>0.02%</b></p> <p>As of Nov 05, 2014</p> <p>1-Yr CDS-I EDF</p>
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### EDF Summary



# CreditEdge determines PD Based on Forward-Looking Market Valuations

One-Year Expected Default Frequency (EDF™) Measures



# CreditEdge Excel Add-in – Risk Dashboard

Moody's ANALYTICS		CreditEdge						
<p>Calculate the change in value for the "EDF - 1 Year (Annualized)" data point and compare the company "EDF - 1 Year (Annualized)" to industry group statistics.</p> <p>1. Enter up to 500 company identifiers in cells B14 to B514.                      2. Enter a date for which to view current values in cell B8.                      3. Enter a prior date to compare current values to in cell B9.</p>								
Current Date:	7/9/2014	Previous Date	6/9/2014					
Month	<- choose previous period							
Enter Identifiers Below:	Company Name	Current EDF		EDF Change		CreditEdge Primary Industry	CURRENT RANK	RANK MOMENTUM
		EDF	Implied Rating	Prev EDF	ΔEDF (bps)			since last period
company_name	ann_edf_1yr	edf_1yr_ir_mdy	ann_edf_1yr	ce_primary_industry				
ma_id-346091	FOREST OIL CORP	24.56%	Ca	24.44%	13	OIL, GAS & COAL EXPL/PROD	4TH QRTL	Improvement
ma_id-89614J	DYNEGUY INC	7.52%	Ca	8.65%	-113	OIL, GAS & COAL EXPL/PROD	4TH QRTL	no change
ma_id-N05717	QUICKSILVER RESOURCES INC	21.92%	Ca	19.69%	223	OIL, GAS & COAL EXPL/PROD	4TH QRTL	no change
ma_id-985515	YRC WORLDWIDE INC	0.40%	B3	1.12%	-72	TRUCKING	3RD QRTL	Improvement
ma_id-579489	MCLATCHY CO -CL A	7.97%	Ca	8.29%	-32	PUBLISHING	4TH QRTL	no change
ma_id-09776J	BON-TON STORES INC	9.21%	Ca	7.24%	197	CONSUMER PRODUCTS RETL/WHSL	90TH PCTL	no change
ma_id-708160	PENNEY (J C) CO	4.77%	Caa3	5.36%	-59	CONSUMER PRODUCTS RETL/WHSL	4TH QRTL	no change
ma_id-N01561	CENVEO INC	8.83%	Ca	10.66%	-183	PRINTING	90TH PCTL	no change
ma_id-875382	RADIOSHACK CORP	26.18%	Ca	16.35%	983	CONSUMER DURABLES RETL/WHSL	90TH PCTL	no change
ma_id-868035	SUPERVALU INC	2.10%	Caa2	2.39%	-28	FOOD & BEVERAGE RETL/WHSL	4TH QRTL	no change
ma_id-482584	SEARS HOLDINGS CORP	6.54%	Ca	5.69%	85	CONSUMER PRODUCTS RETL/WHSL	90TH PCTL	Deterioration
ma_id-253003	ALLIANCE ONE INTL INC	6.45%	Ca	5.58%	87	BUSINESS PRODUCTS WHSL	4TH QRTL	no change
ma_id-N08494	ACCURIDE CORP	5.50%	Ca	4.75%	75	AUTOMOTIVE	90TH PCTL	Deterioration
ma_id-171870	CINCINNATI BELL INC	3.52%	Caa3	3.41%	10	TELEPHONE	4TH QRTL	no change
ma_id-103304	BOYD GAMING CORP	3.79%	Caa3	4.26%	-47	ENTERTAINMENT & LEISURE	4TH QRTL	no change
ma_id-N00101	BEAZER HOMES USA INC	3.85%	Caa3	3.74%	11	CONSTRUCTION	4TH QRTL	no change
ma_id-147575	ISLE OF CAPRI CASINOS INC	1.60%	Caa2	3.50%	-190	ENTERTAINMENT & LEISURE	3RD QRTL	Improvement
ma_id-18605								
ma_id-90337T	UNITED STATES STEEL CORP	0.75%	Caa1	1.05%	-30	STEEL & METAL PRODUCTS	3RD QRTL	no change
ma_id-N03907	MERITOR INC	1.01%	Caa1	0.74%	28	AUTOMOTIVE	3RD QRTL	no change
ma_id-N07384	PEABODY ENERGY CORP	1.92%	Caa2	1.74%	18	OIL, GAS & COAL EXPL/PROD	3RD QRTL	no change
ma_id-442487	HOVNANIAN ENTRPRS INC -CL A	3.13%	Caa3	3.12%	1	CONSTRUCTION	3RD QRTL	no change
ma_id-N11286	ACCO BRANDS CORP	1.01%	Caa1	1.13%	-11	PRINTING	3RD QRTL	no change
ma_id-63890A	NAVISTAR INTERNATIONAL CORP	1.23%	Caa1	1.16%	7	AUTOMOTIVE	4TH QRTL	Deterioration
ma_id-N13900	SANDRIDGE ENERGY INC	0.45%	B3	0.73%	-28	OIL, GAS & COAL EXPL/PROD	2ND QRTL	Improvement
ma_id-466313	JABIL CIRCUIT INC	0.54%	B3	0.61%	-7	ELECTRONIC EQUIPMENT	3RD QRTL	no change
ma_id-N10790	BILL BARRETT CORP	0.93%	Caa1	0.78%	15	OIL, GAS & COAL EXPL/PROD	3RD QRTL	no change
ma_id-651290	NEWFIELD EXPLORATION CO	0.20%	B1	0.26%	-6	OIL, GAS & COAL EXPL/PROD	2ND QRTL	no change

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