

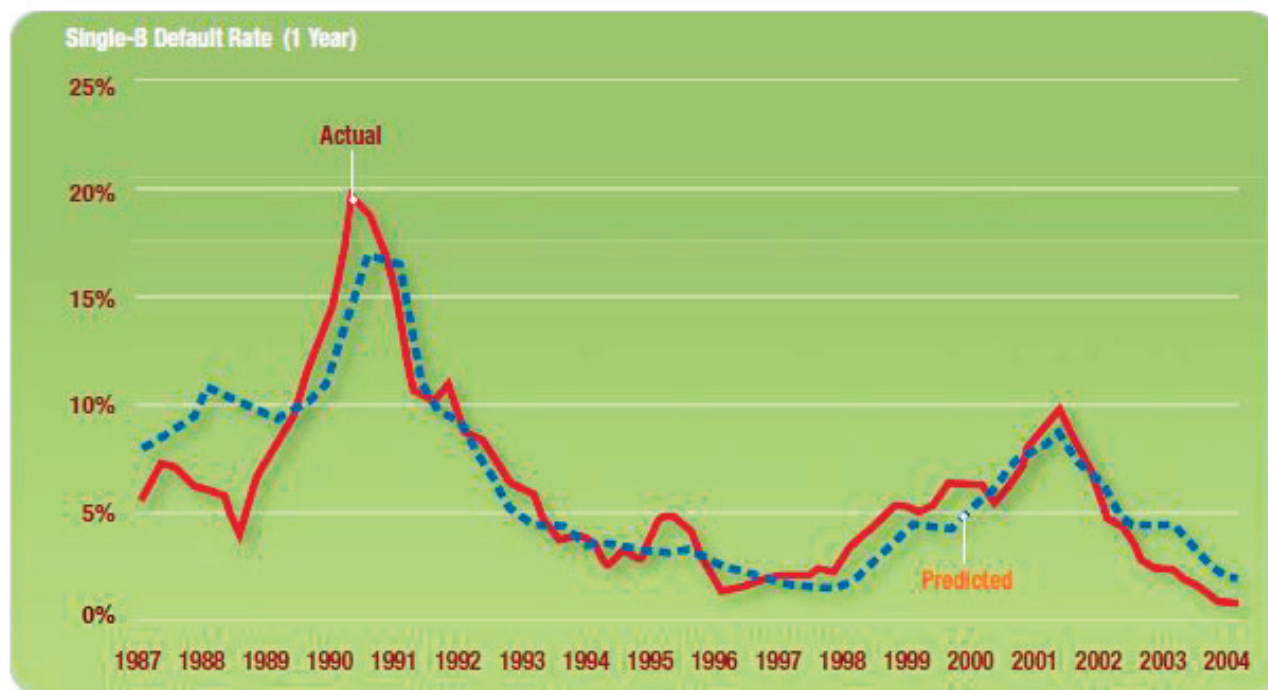
## Credit Transition Model

### Why use Moody's Credit Transition Model to predict default probabilities and rating transitions?

It's well understood that economic cycles can impact rating performance over time. The challenge is understanding how to adjust ratings transition and default rate forecasts to reflect potential future economic conditions.

Moody's Credit Transition Model (CTM) allows clients to easily incorporate a variety of economic assumptions into rating transition and default rate forecasts, facilitating both stress testing and the communication of results to senior management. The model is informed by Moody's vast history of ratings information, which allows CTM to look at historical ratings transition patterns (including momentum) and project them forward based on economic assumptions to create sophisticated, accurate forecasts.

### Evidence that Cyclical Default Rates Can Be Predicted - Even For a Single Rating Category



By incorporating macroeconomic factors that reflect estimates regarding the health of the economy and the market's perception of credit quality and availability, Moody's Credit Transition Model can predict the cyclical nature of default rates and rating transitions

# Credit Transition Model

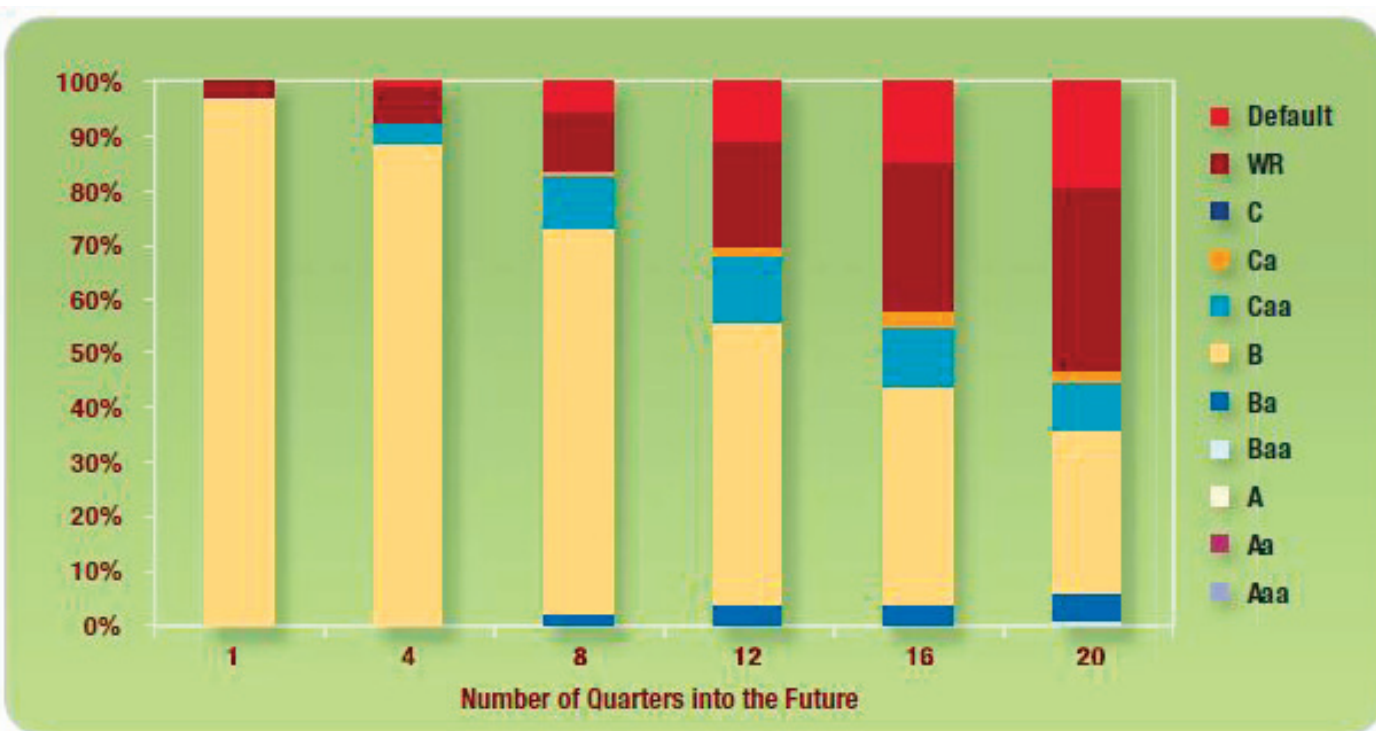
## What is Moody's Credit Transition Model?

### First Model to Include the Impact of Macro-Economy on Transition Paths

Knowing that our clients take into account macro-economic factors when making decisions regarding the risk of their portfolio, Moody's has developed a model that allows these factors to be incorporated into credit risk modeling in a systematic manner.

- » The affect of the macro-economy on default risk is modeled parsimoniously with just two drivers: the unemployment rate and the high yield spread over Treasuries.
- » Five Moody's Economy.com's forecasts are built in: a baseline scenario, one upside scenario, and three downside scenarios, offering clients the ability to read qualitative descriptions of each scenario and select those most appropriate for stress testing their portfolios.
- » Clients may also input their own forecast or pull in historical economic scenarios.

### Migration Probabilities for a Newly Issued B2 Rating Over Time



### A Model That Produces Actionable Results

Recognizing that more granular data allows our clients to perform a greater variety of analyses, Moody's has developed a model that offers complete company-specific rating transition matrices, including:

- » Company-specific default probability
- » Company-specific expected transition rates anywhere over the entire credit rating scale
- » Probability of rating withdrawal
- » In short...probabilities assigned to the complete future path of a credit rating.

### A Model That Uses Accessible Information

Understanding that every variable introduced into a model both represents a potential cost for our customers and introduces the possibility for error, Moody's has created an accurate model that utilizes a limited number of inputs.

In addition to the two macro-economic inputs mentioned above, the model incorporates company-specific rating information that Moody's can easily offer its customers:

- » Current rating.
- » Whether the company was upgraded or downgraded into its current rating category.
- » How long the company has maintained its current rating.
- » How long the company has consecutively maintained any credit ratings.
- » The company's outlook or watch-list status.

## Why is Moody's Credit Transition Model the best tool for predicting default probabilities and rating transitions?

**A.** Moody's takes pride in staying at the leading edge of credit risk research and has worked to develop a model that offers clients a competitive advantage.

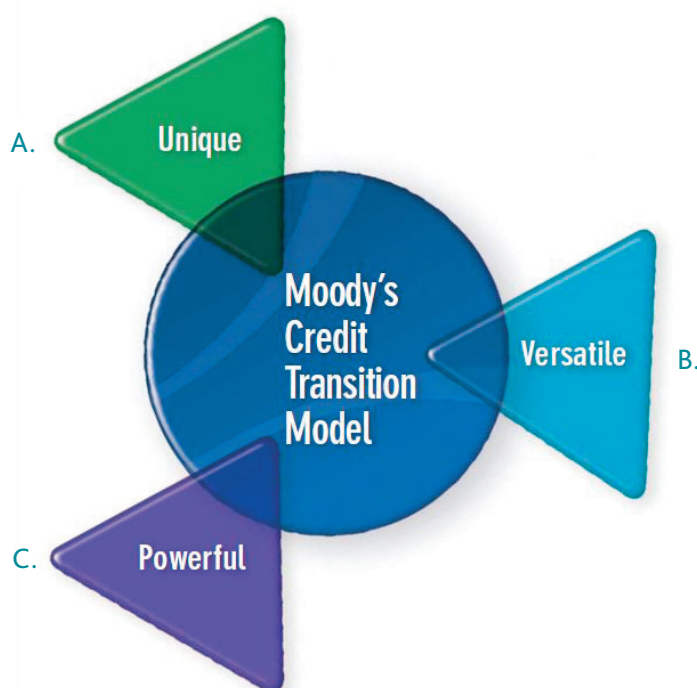
- » **Forward-Looking:** By utilizing a model that incorporates forecasts regarding macro-economic conditions, you can quantify how your perceptions regarding upcoming market trends may impact the credit risk of your portfolio.
- » **Multiple Horizons:** By using a single model to calculate default rates across multiple horizons, you can avoid the contradictory forecasts often produced by multiple models and understand how your risk changes through time.

**B.** By providing company-specific transition matrices of the complete future path of a credit rating, Moody's Credit Transition Model offers a variety of applications.

- » Supports pricing of specific CDS, bonds, and loans.
- » Supports pricing of CDOs by calculating the expected distribution of portfolio or tranche losses either due to just default or due to all rating transitions.
- » Allows clients to pin-point the probability that any specific credit will pre-defined threshold by a particular date.
- » Associates an expected time profile of default rates for an entire rating category or any particular pool of credits.

**C.** Knowing that sophisticated models often require expensive hardware and extensive time for implementation, Moody's has worked to make using its model as simple as possible. Complete rating history data at the instrument level.

- » The complex calculations employed by Moody's Credit Transition Model are performed on Moody's infrastructure and servers, allowing you to reserve processing power and resources for other internal needs.
- » The Credit Transition Model is part of the Credit Transitions platform, which offers an easy-to-use web interface as well as integration with other analytics and forecasts.



## Credit Transition Model

### May I see the Credit Transition Model at work?

Definitely. Please contact your sales representative to arrange a personal demonstration and learn more about how this model can help you achieve your objectives.

### Does the Credit Transition Model work well with other tools?

Moody's Credit Transition Model complements several related offerings:

YOUR GOAL	PRODUCT
Generate customized economic forecasts.	Economy.com's Macro Model
Perform detailed ad-hoc research on Moody's expansive set of corporate and structured rating history and default data.	Default Risk Service (DRS)
Utilize accurate historical recovery data on over 3,500 different instruments to develop predictive loss given default models.	Ultimate Recovery Database (URD)
Analyze sector- and geographic-specific historical rating migrations and default rates.	Credit Risk Calculator
Forecast ultimate recovery for speculative grade debt by inputting detailed capital structure information.	Moody's LGD Waterfall Pro
Forecast 30-day post default trading prices quickly using an easy-to-use web-based tool.	MKMV's LossCalc
Leverage market-based factors to anticipate rating changes and defaults.	Market-Implied Ratings (MIR)
Understand the impact of rating, recovery, term, industry, size and other drivers of portfolio risk.	MKMV's RiskFrontier

### Is Moody's currently developing or enhancing other products?

Moody's product management group has a pipeline of products in various stages of development. We encourage you to contact us and tell us what is most important to you.

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