

MOODY'S
ANALYTICS

*Better
Faster
Decisions*



City, University of London and Moody's Analytics Data Alliance

Nov 2020

Welcome

The City, Moody's Analytics Team

Agenda:

1. Collaboration
2. Benefits
3. Data Alliance Introduction
4. Q&A



Nicole Lux

City, University of London Business School



London



Jamie Stark

Moody's Analytics



Edinburgh



1

Collaboration

Collaboration for better data

Moody's Analytics and City University of London join forces

Moody's Analytics and City, University of London (City) announce a new initiative to build [a database of loan-level commercial real estate \(CRE\) information covering the UK and Europe](#).

By participating in the project, lenders and other market participants will be able to:



Access aggregate industry data



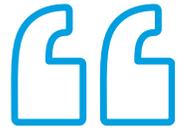
Use robust analytics for benchmarking amid the disruption brought by COVID-19



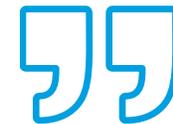
Improve internal and external reporting

Collaboration for better data

Benefits shared by all



The Moody's Analytics-City alliance offers the exciting prospect of granular data pooling across the commercial real estate finance market, improving market transparency, allowing for more robust data-driven analysis, and thus strengthening 'informed' credit flows. Both industry leaders and the Bank of England have previously recognized the importance of loan-level data pooling – this market-led initiative could be an important step towards achieving it.



Peter Cosmetatos,
CEO of the Commercial Real Estate Council Europe

The Commercial Real Estate Lending Survey

Building a bridge between theory and practice

The [UK Commercial Real Estate Lending Report](#) is published by City university of London on the back of the the Commercial Real Estate Lending Survey.

Commercial Real Estate (CRE) Lending Survey:

- » Is a unique and comprehensive record of CRE lending, that collects the data directly from 80 banks, insurance lenders and debt funds twice each year.
- » The survey originated in 1997 and over the 20 years it has been established as an industry-standard source of information.
- » The survey's results offer unrivalled depth and breadth of market and data coverage, and are regularly referenced in the national financial press and trade publications.

Moody's Analytics

Long standing expertise in credit risk and data consortia

- » **Long standing expertise in data.** Moody's Analytics have been partnering with the leading global financial institutions to create excellent industry data consortiums since 1996.
- » **Award-winning technology and credit risk capabilities.** Moody's Analytics have won numerous awards and earned industry recognition for its credit risk solutions and the technology that powers them.





2

Benefits

Benefits of joining the scheme



Understand what is happening across your real estate mortgage portfolio.

Regional benchmarks, property type analysis, ratio analysis, default rates, recovery rates. Stress scenarios (EDF, recovery rates, yields).



See differences between market risk idiosyncratic risk in your portfolio.

Lender type specific default, EDF benchmarks (banks, insurance, investment managers). Benchmarking with further key indicators: debt yield, concentration risks.



Compare your mortgage portfolio with other asset types.

Measures commercial mortgage performance in a manner that is consistent with fixed-income standards, specifically, a total rate of return that incorporates marked-to-market prices and credit impacts.



Improve your Internal & external reporting

Mark-to-market return calculation – impairment calculation. Probability of default and loss data for each standard loan category based on historic loan loss collection. Credit loss calibration for internal banking models.



Internal and external uses.

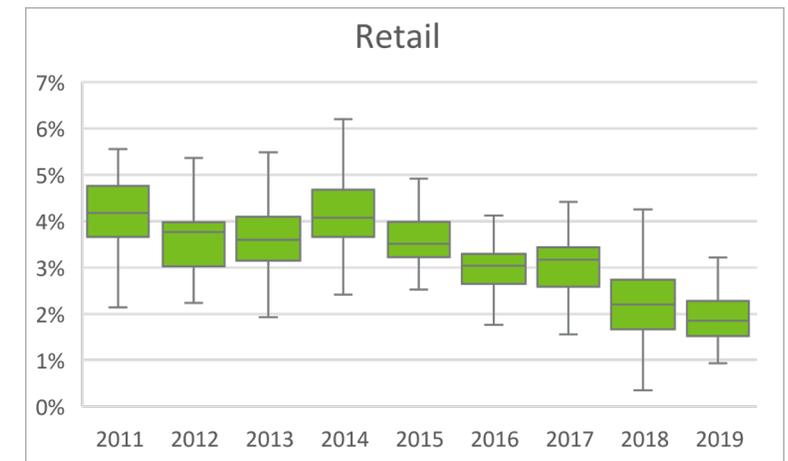
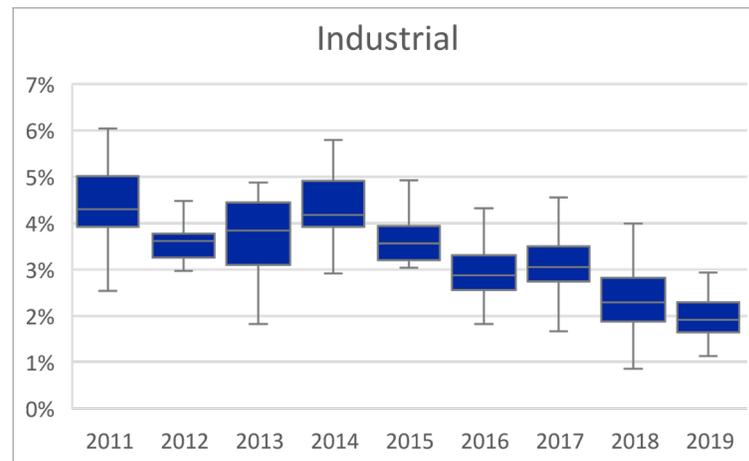
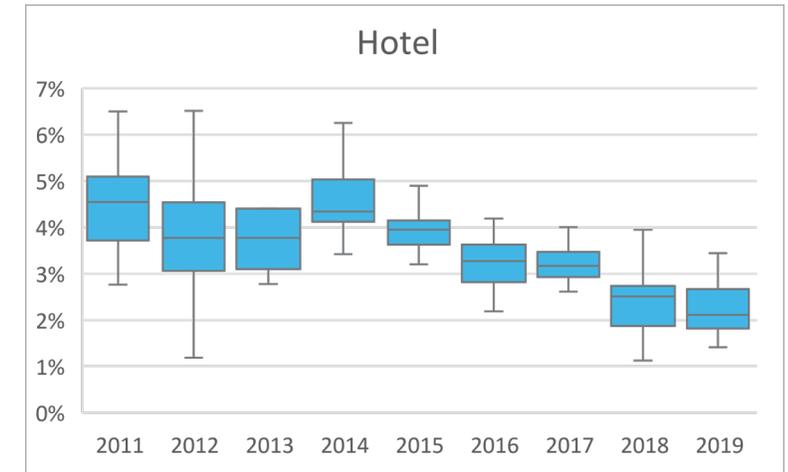
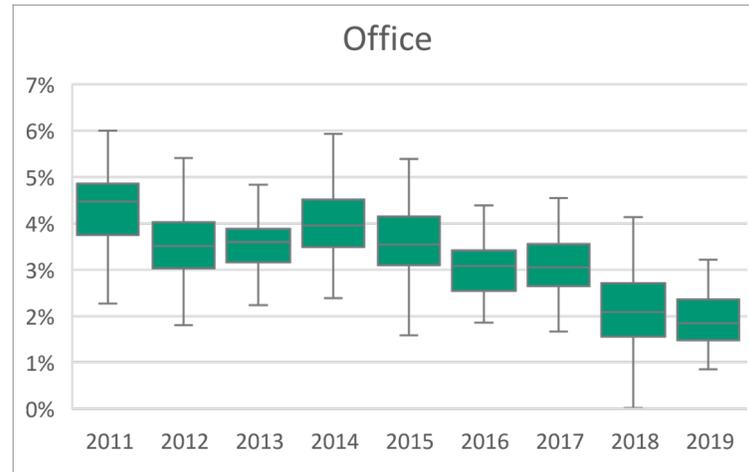
Portfolio management, Co-investors, Portfolio buyers, Consultants, Incentive compensation

Portfolio Benchmark Example – by Property Type

Distribution of spread over LIBOR by origination date for fixed-rate senior loans to existing properties

US data

Source: Moody's Analytics Data Alliance

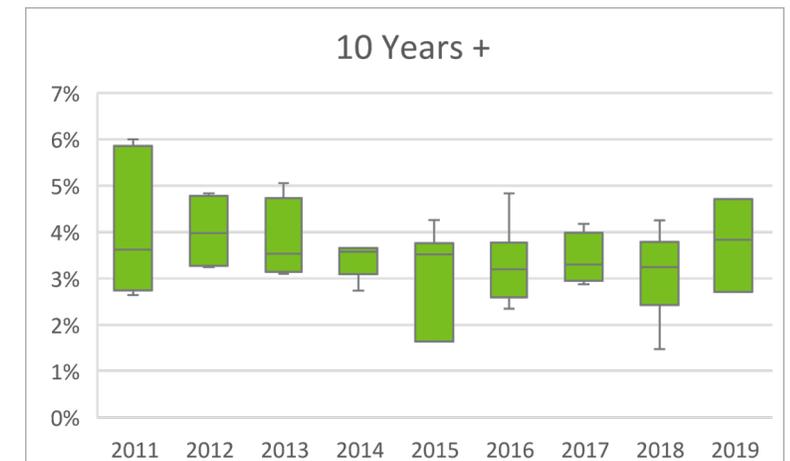
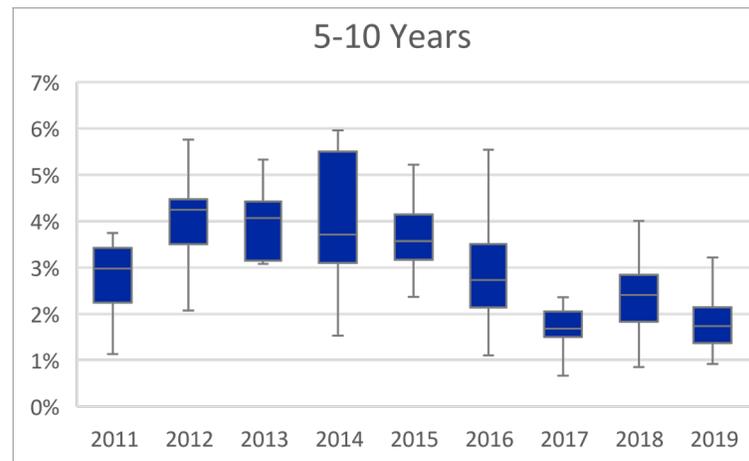
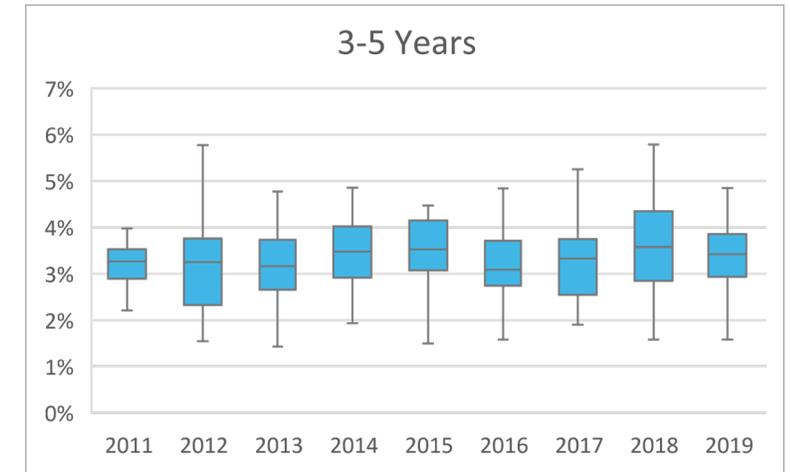
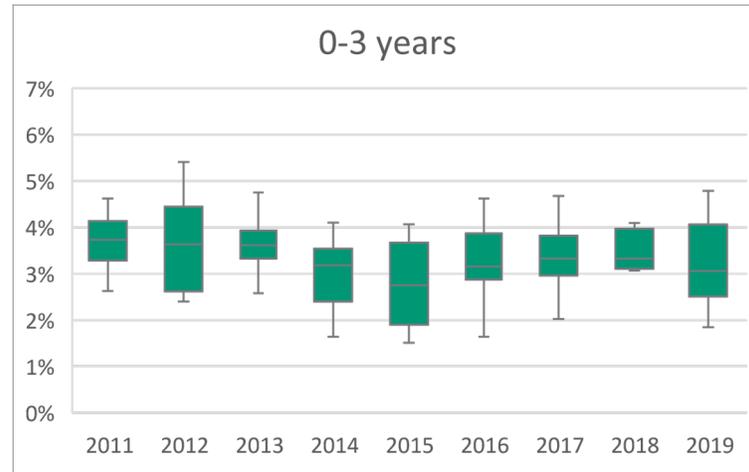


Portfolio Benchmark Example – by Term

Distribution of spread over LIBOR by origination date for fixed-rate senior loans to existing offices

US data

Source: Moody's Analytics Data Alliance



Advanced Loan Analysis:

COVID-19 impact on Probabilities of Default

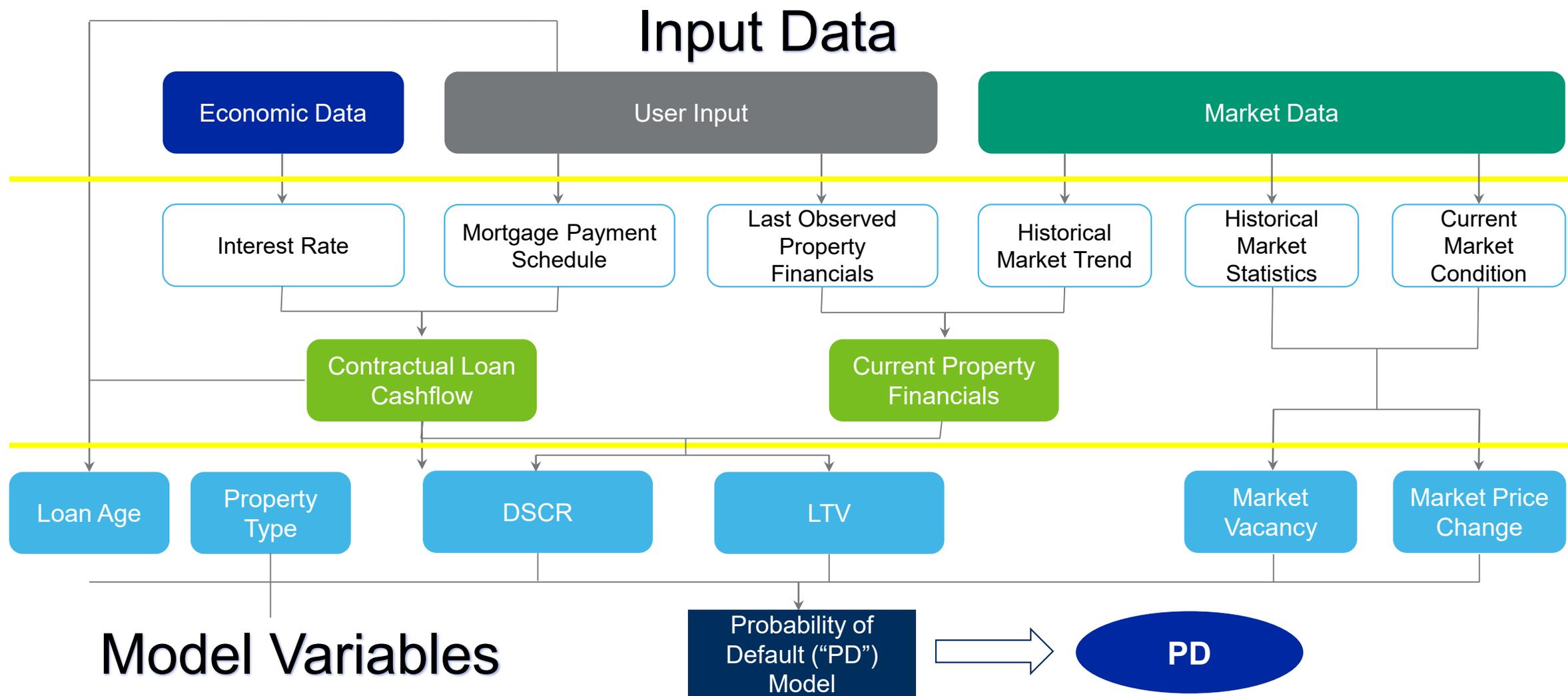
Spring 2020 versus Autumn 2019 Forecasts

- » Moody's Analytics analysed two hypothetical loans to examine the impact of COVID-19 on the latest forecasts:
 - **Loan I:** LTV of 60% and DSCR of 1.7x
 - **Loan II:** LTV of 80% and DSCR of 1.2x

Assumptions:

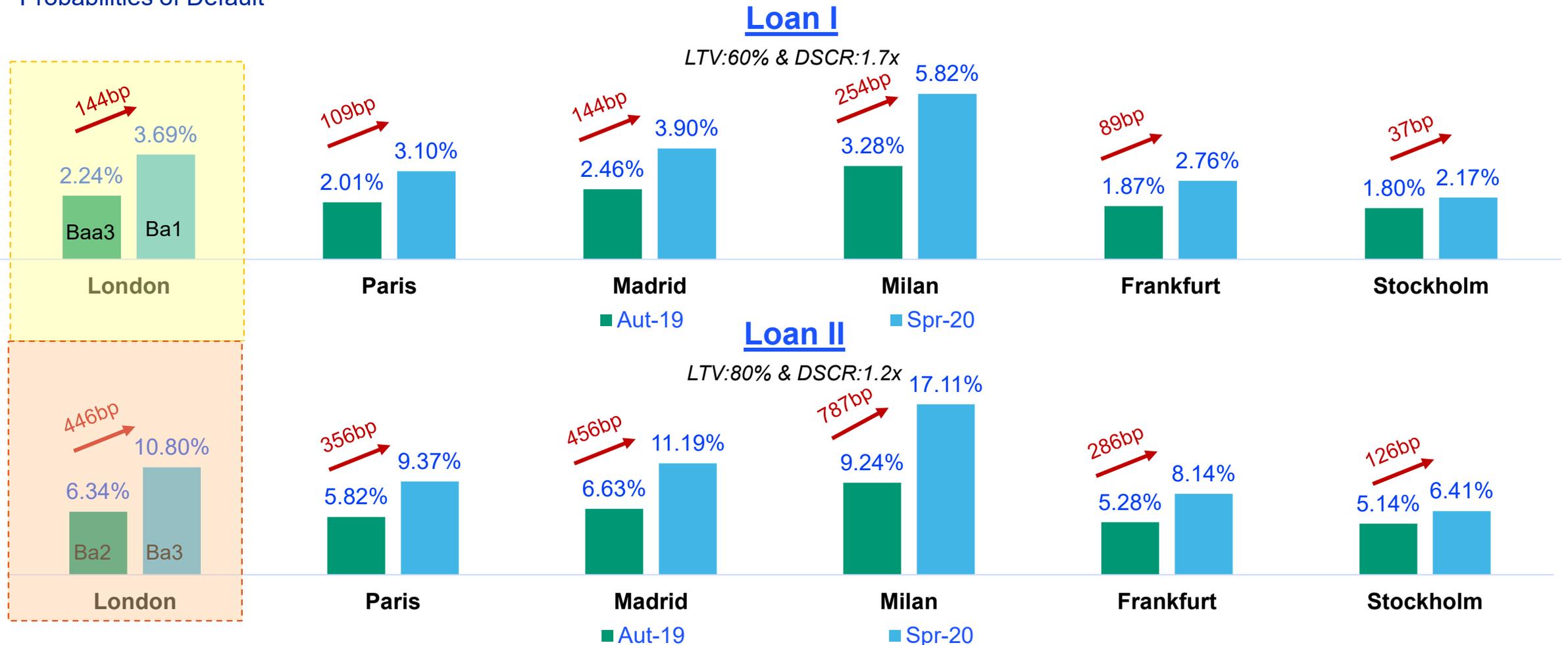
- Initial loan: £50,000,000
- Fixed interest rate on office building financing: 1.5%
- Maturity: 5 years
- Amortisation: 25 years (300 months)
- Scenario: *Mean Reverting*

Credit Risk Modeling – Framework



Office Market Analysis

Probabilities of Default





3

Data Alliance Introduction

Data Alliance Overview



Data Alliance.

A **collaborative effort** of leading financial institutions and Moody's Analytics to provide high quality **credit risk insights** for portfolio-level benchmarking and data augmentation.



Industry collaboration. Over 120 of the world's leading global financial institutions contribute to and use the Data Alliance portal.



Comprehensive coverage. Data includes: Commercial & Industrial; Commercial Real Estate, Project Finance, Asset Finance and Agriculture.



Highlights. Database contains:



111M

global C&I private firm financial statements



361

US metropolitan statistical areas (MSA) covered by CRE



68%

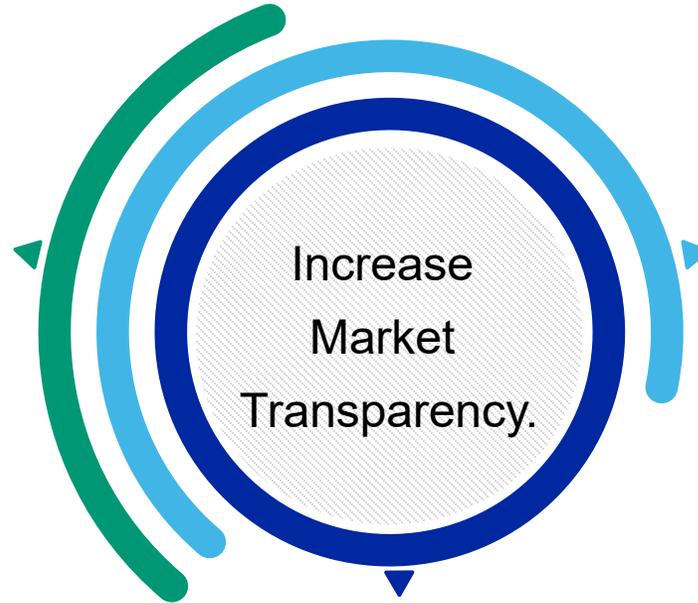
of all Project Finance loans originated since 1983

Benefits of Pooling Data



Promote industry models

Address regulatory reporting needs by submitting data to calibrate, validate, and develop models such as RiskCalc™, LossCalc™, CMM™. Receive regular model performance evaluations.



Gather insight

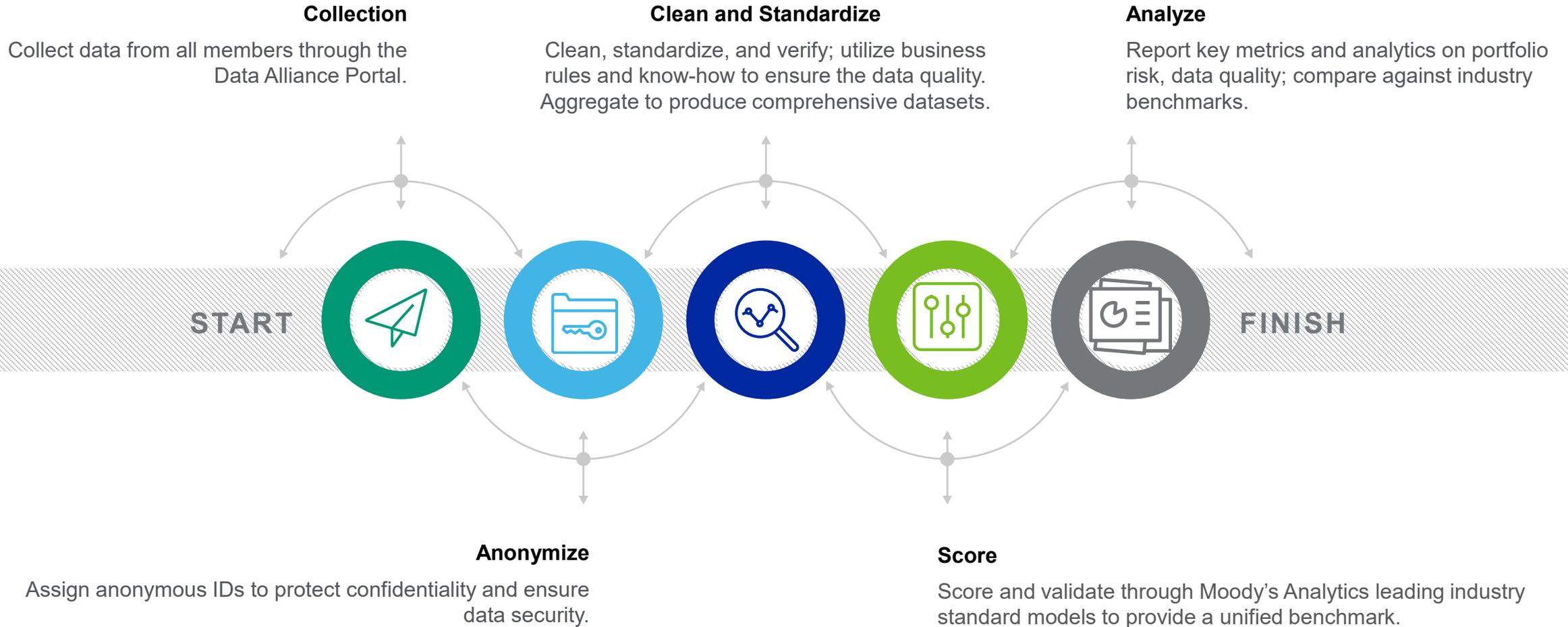
Access insights into regions or markets where internal data is limited. Compare portfolio characteristics and lending practices against peers and consortium benchmarks.

Expand data coverage and quality

Moody's Analytics excels at collecting, matching, cleaning, and extracting value from data; use this expertise to improve data quality. Regulators generally approve the use of external pooled data to substitute for or complement internal data.



Data Alliance Process



Data Requirements



Loan Data

Type, Amount, Term,
Margin, Amortisation,
etc

+



Property Data

Type, Location, Value,
Number of tenants,
Status, etc

=



Submission

Standard template
2 x yearly
Historic data welcome

The Data Alliance Portal

<https://dataalliance.moodyanalytics.com/>

Centralized, Secured

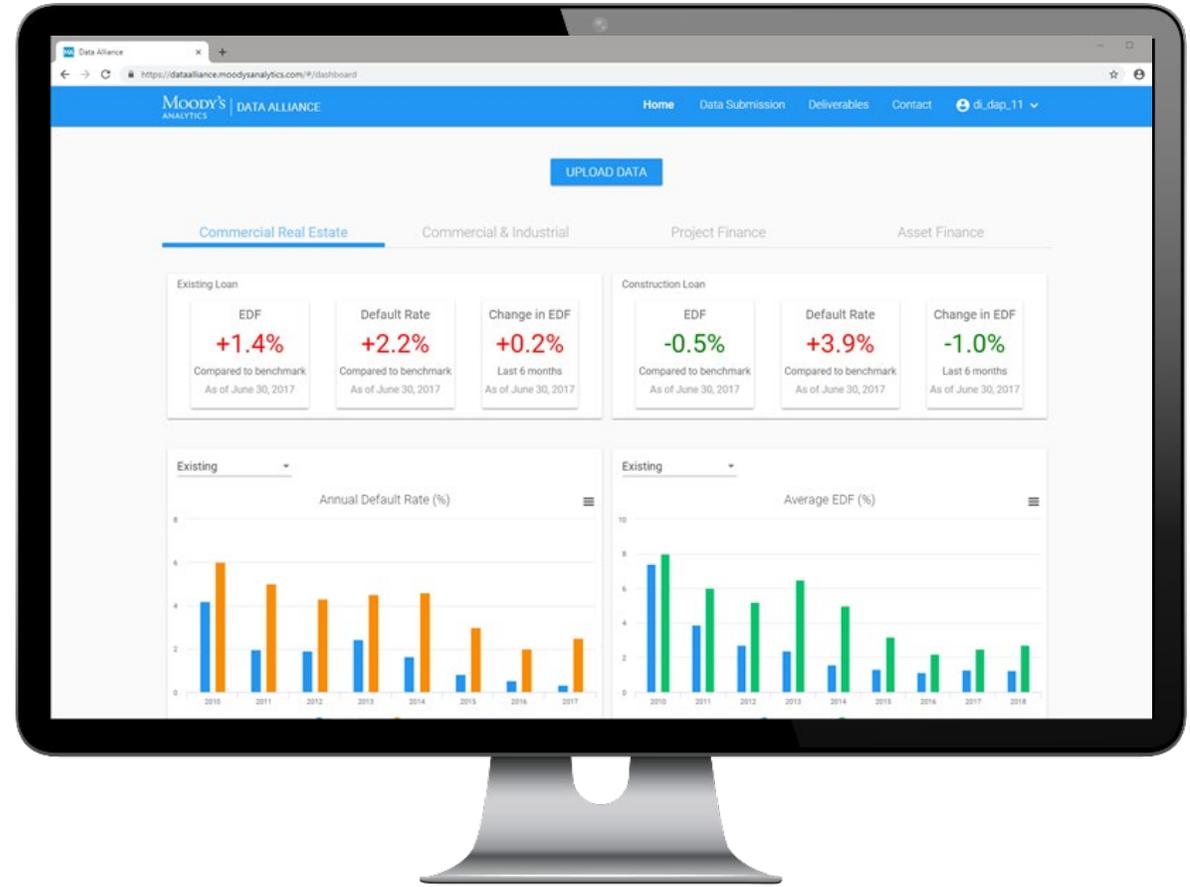
Provides one centralized location for all Data Alliance activities providing a secure, seamless membership experience

Immediate Feedback

Data is validated against template and business rules immediately after upload providing information to take action on before submission

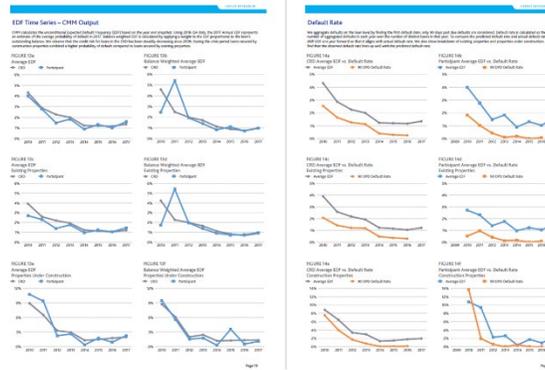
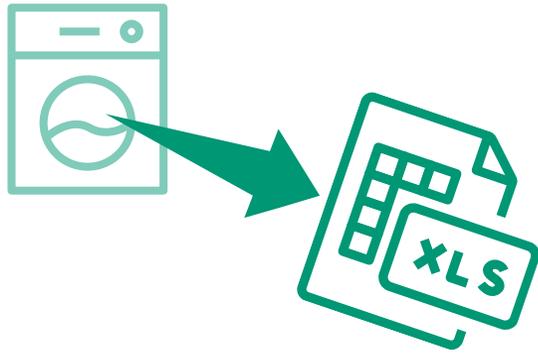
Meaningful Insights

Interactive dashboards as well as significant findings from the Data Alliance will be accessible through the Portal



Key Deliverables

Delivered to all members after each submission



Cleansed Data



Submitted data is subject to a rigorous cleaning process to standardize and normalize it

Data returned in a format ready for modeling, analysis, internal and regulatory reporting



A comprehensive analysis of submitted data, comparing portfolio characteristics and lending practices against consortium benchmarks



Review of submitted data quality and benchmark to quality standards of consortium and identification of data anomalies and errors

Join the Data Alliance



Step 1

Agreement in Principal

We work with each institution to help them understand the benefits and persuade others internally.



Step 2

Sign Contracts

All participants are required to sign a Data Alliance contract. We can share this with interested parties.



Step 3

Prepare Data

We work with each institution to guide them with data collection, making this as easy as possible.

Contact us to discuss:

Moody's Analytics:

DataAlliance@moodys.com

Nicole Lux:

Nicole.Lux@city.ac.uk

4

Q&A



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