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People Risk: Improving Decision Making in Commercial Lending

IDENTIFYING AND REMEDIATING RISK ASSOCIATED WITH INADEQUATE SKILLS

by Ari Lehari

Credit practitioners continue to encounter a dizzying array of industry, regulatory, and business demands, requiring them to improve their skills. This report provides insight into the proficiency levels of the global banking industry based on a review of how well credit professionals perform on the Moody's Analytics commercial lending pre-course assessment.

ASSESSING BANKING INDUSTRY SKILLS

Every day, new customers knock on a bank's door seeking to borrow funds. A bank's credit professionals must be sharp and vigilant as they approve and monitor loans. A lapse in judgment – especially when consistently made across multiple employees – could harm the asset quality of a bank's balance sheet.

Skills that may have been considered sufficient before the financial crisis are no longer adequate. If the day-to-day decisions of a bank's credit professionals are systematically undermined by knowledge gaps and/or errors in judgment resulting from inadequate skills and knowledge, a bank is exposed to greater risk.

To determine the extent of this "people risk," Moody's Analytics has analyzed the scores earned on the pre-course assessment given to enrollees in its flagship commercial lending course. Rather than focusing on the average score, we look at the percentage of people who score below the 70% passing threshold. Average scores may provide a high-level view of skills proficiency, but they often mask deeper issues – reflected in the divergence in performance across the entire population of students in

the course. By using a metric that measures score distribution, financial institutions can better focus on improving the specific areas of underperforming employee segments.

Moody's Analytics has created the simple but powerful metric called MPAIR, which stands for Moody's Performance Assessment Indicates Risk. It reflects the percentage of people who did not pass the pre-course assessment. Measuring this percentage establishes that the higher the MPAIR score, the more inadequate the skills.

ABOUT THIS REPORT

Based on a unique set of quantitative results, this report provides insights into the skill levels of banking practitioners. Our data comprises five years of pre-course assessments that diagnose the capabilities of test-takers before undergoing the commercial lending training program of Moody's Analytics.

Starting with a broad survey of the current state of credit competence in the global banking industry, the report then reviews institutional-level performance. It next draws a link between the quality of an institution's credit skill sets and its overall financial health, concluding with recommendations for improvements.

Key findings:

- » **Average test scores were just above passing:** The average test score across subjects in the pre-course assessment exceeded the minimum passing threshold by 2%.
- » **Financial Risk has the weakest relative score:** Some 42% of people answered fewer than 70% of the questions correctly in this critical subject area.
- » **Scores indicate pockets of inadequate skill sets in firms:** Major banks around the world show a wide disparity in test performance across all areas of risk.
- » **An institution's MPAIR score is highly correlated with its relative default risk:** Although there may be other contributing factors, the higher the MPAIR score, the higher a bank's relative default risk (as measured by the Moody's Baseline Credit Assessment rating).

Overall Survey Performance Results

Moody's Analytics aggregated pre-course assessment data from the last five years from our flagship Commercial Lending eLearning Course exam, which focuses on the four primary areas of risk associated with extending a loan:

- » Financial Risk
- » Management Risk
- » External Market/Industry Risk
- » Risk Mitigation Techniques

AVERAGE TEST SCORES JUST ABOVE PASSING

Chart 1 shows that the average test score (based on pre-course assessments) is 72 out of 100, which falls just above the minimum passing score of 70. The Financial Risk section stands out as substantially behind the other subject areas. Financial institutions should clearly note such relative weaknesses as they consider training interventions.

Although the average score on the exam exceeds the minimum threshold, 31% of people tested answered fewer than 70% of the questions correctly (see Chart 2). These individuals display weaker skill sets that could impact the quality of their credit decisions.

Extrapolating beyond the data, the number of people in the industry with less-than-optimal judgment could be substantial. Therefore, this analysis tracks the percentage of people who score below 70 on the exam, referred to as MPAIR – the threshold where the Moody's Performance Assessment Indicates Risk. The goal is to provide a targeted metric that highlights those critical credit skills requiring immediate training intervention.

Chart 1: Five-Year Average Score

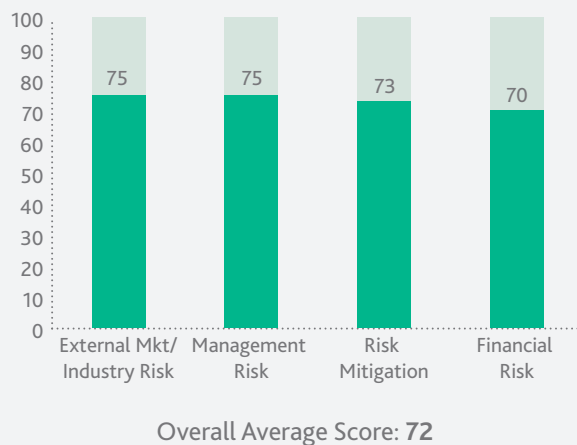


Chart 2: Performance of Test Takers

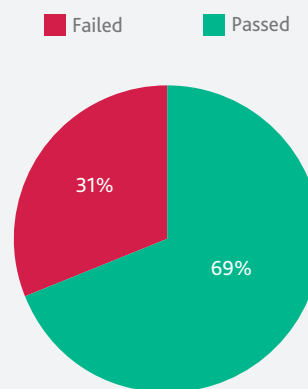
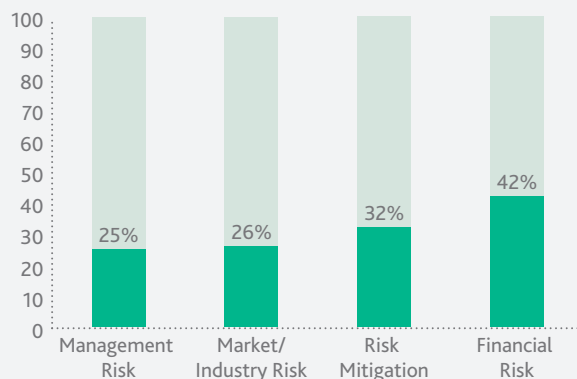
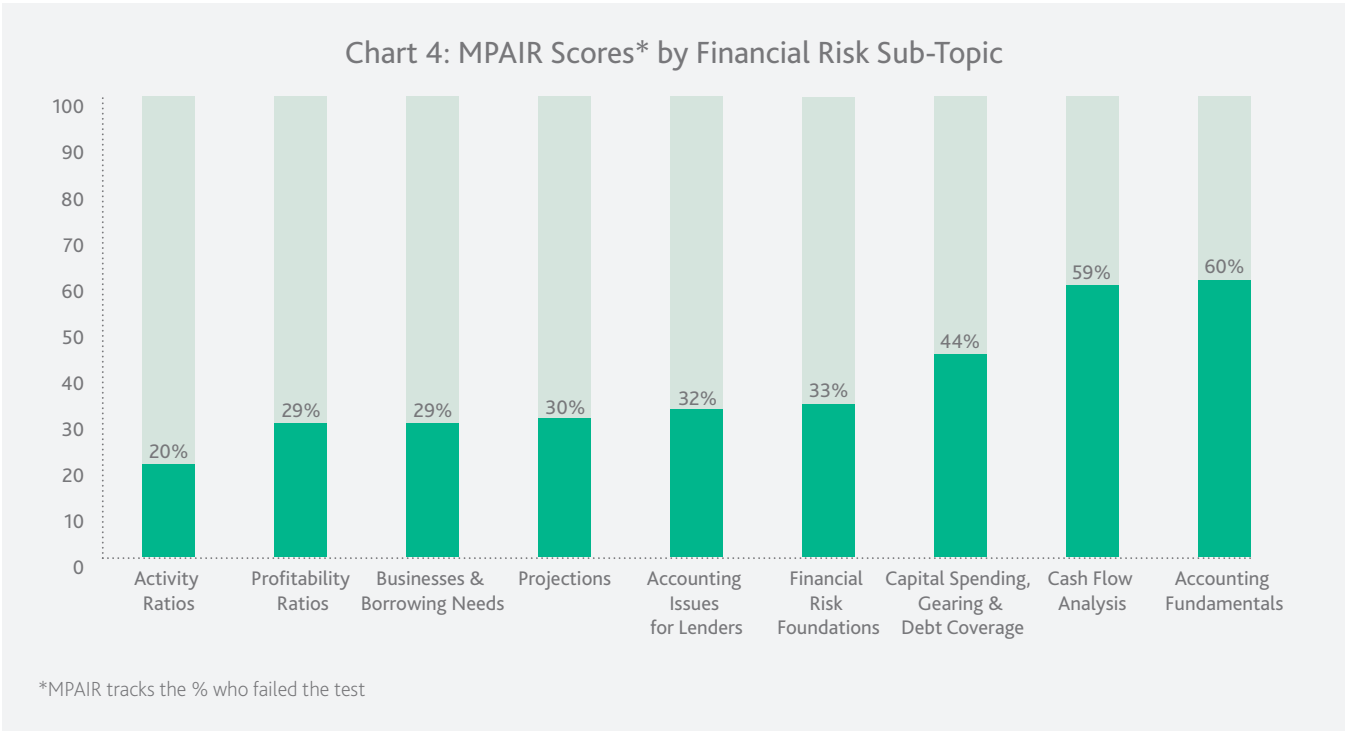


Chart 3: MPAIR Scores* by Major Subject Area



*MPAIR tracks the % who failed the test



Performance Drivers

Analyzing the drivers of the test performance helps guide the prioritization of remediation efforts. Chart 3 illustrates the performance of the four major subject areas according to their MPAIR levels.

Chart 4 focuses on the subtopics of Financial Risk, as it exhibits the weakest relative performance.

Even though some subject areas (on the right side of Chart 4) may need more urgent training intervention, banks should

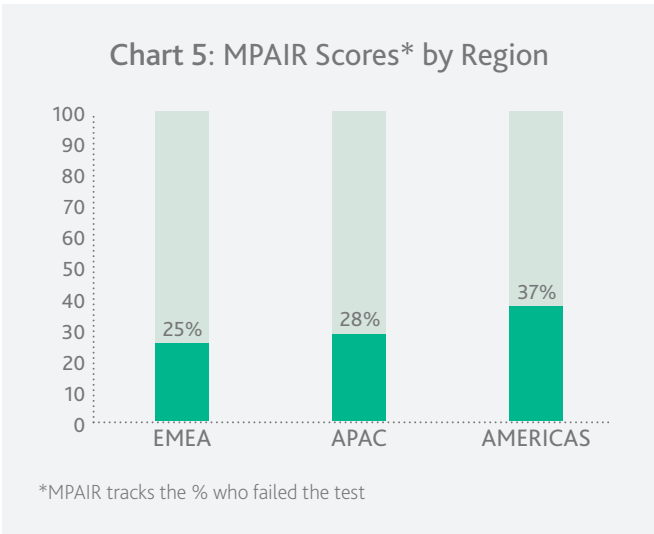
conclude that every area will need targeted remediation. For example, one-third of test-takers did not pass the Financial Risk Foundations topic.

PERFORMANCE BY REGION

Chart 5 shows the MPAIR scores for each of the major regional markets in which the Commercial Lending eLearning pre-course assessment has been administered. The data show higher levels of risk and vulnerability in the Americas relative to other regions.¹ This variance may reflect differences in the skill sets, culture, or experience level of the test-takers. The regions in which a larger proportion of people had a higher MPAIR score should be more cognizant of leveraging training to address those gaps.

PERFORMANCE BY INSTITUTION

The competency challenges facing the broader industry ultimately emanate from how much individual firms focus on proficiency standards for their hiring, training and education practices. With 66 institutions represented in the Moody's Analytics database, further insights can be gleaned about the level of skills of specific firms.

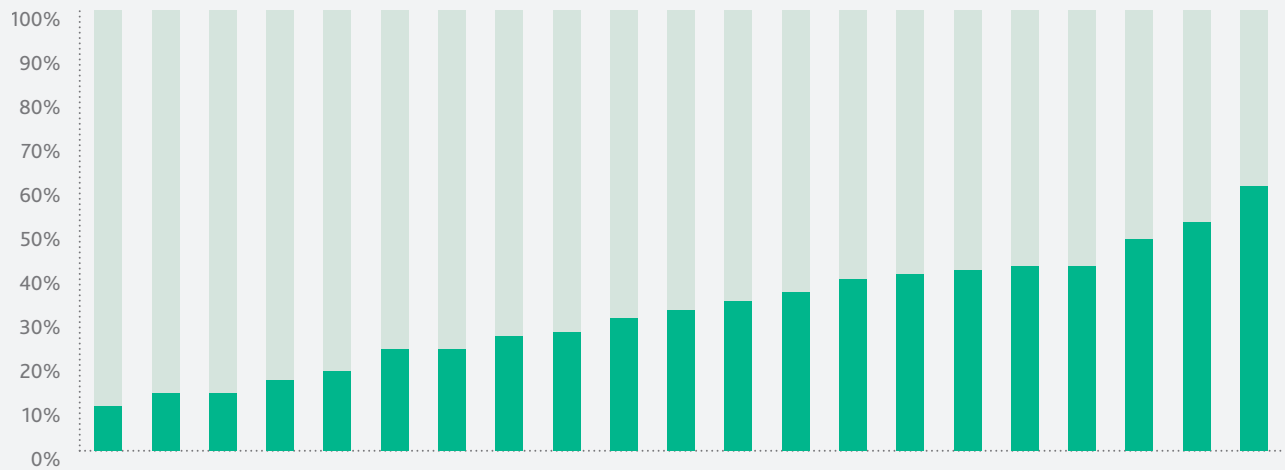


¹ The Americas region consists of countries in North, Central, and South America and the Caribbean. The EMEA region encompasses countries in Europe, the Middle East and Africa. The APAC region comprises countries in East Asia, South Asia, Southeast Asia and Oceania.

Chart 6 shows MPAIR scores by institution, with the highest failure rate on the right (Moody's Analytics selected the 21 global banks with the largest number of test-takers). The banks' names are omitted, as the intent is to highlight the lessons learned by viewing all firms – rather than criticize the capabilities and practices of any particular company. The striking insight from this chart is the high degree of variability

in MPAIR scores across firms. These differences may reflect the standards of the region where each institution is located. Given the global nature of financial markets, however, the significant disparity in the performance of major banks around the world points to varying degrees of focus and priority around training and education.

Chart 6: MPAIR Scores* by Institution

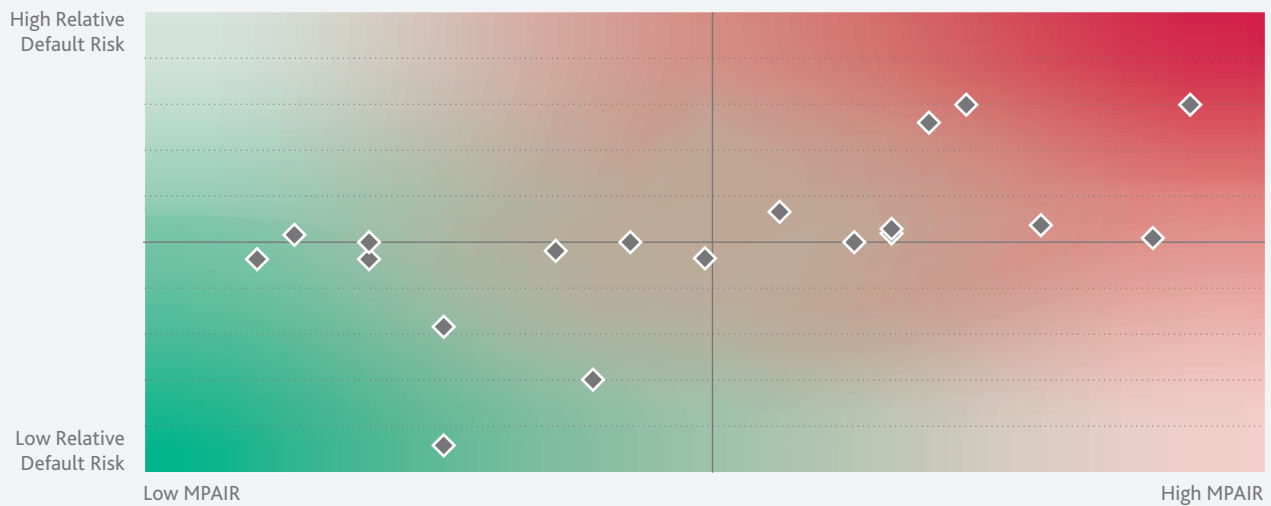


*MPAIR tracks the % who failed the test

Chart 7: The Link Between MPAIR Scores* and Relative Default Risk

Maps institutions according to their relative default risk and MPAIR score.

◆ Individual Institutions



*MPAIR tracks the % who failed the test

THE LINK BETWEEN AN INSTITUTION'S MPAIR SCORE AND ITS RELATIVE DEFAULT RISK

The financial health of an institution largely depends on the day-to-day decisions made by its credit staff. By extending this observation, it could be reasonably surmised that firms with a larger portion of people who did not pass the test would also exhibit weaker financial performance.

Chart 7 maps the MPAIR performance of institutions² to their relative default risk.³ The chart indeed indicates the higher the MPAIR score, the higher the bank's relative default risk. Although there are no doubt other contributing factors, the implications of this insight are powerful – institutions that invest in training and education also tend to have business characteristics that result in a less risky financial profile.

IMPROVING COMMERCIAL LENDING SKILLS

Market participants at all levels should take note. Regulators and policymakers need to consider the implications for their respective jurisdictions. Heads of financial institutions, as well as business line managers and learning and development professionals, may consider the insights from this report as a call to action. It can justify their drive to raise the standards of proficiency for their banks and can function as a mechanism to improve the financial health and competitive position of their banks.

Ultimately, this report is designed to encourage banks to reassess the level of proficiency in the commercial lending industry and pay more attention to the training of practitioners to ensure their decisions are based on rigorous and competent

analysis. Banks will need to invest in their people to equip them with the knowledge and sophistication required to be successful in today's complex and fast-moving markets.

So how can banks prepare their people? First and foremost, Moody's Analytics urges institutions to go through a diagnostic assessment; they must understand where they have gaps before they can take steps to remedy those gaps. The next step is to set an objective. Banks must determine whether their aspiration is simply to close immediate gaps or to raise their overall standard relative to the industry. Whatever their goal, financial institutions must design a plan to achieve it, one that will invariably involve a targeted program to upgrade their staffs' skill sets.

The good news is that well-designed training programs can help dramatically improve credit proficiency. In the experience of Moody's Analytics, for example, people showed an average relative improvement of close to 15% following training.

Institutions that commit to enhancing staff skills, develop a well-thought-out plan, and follow through with proper execution will reap important benefits from their efforts.

2 Chart 7 reflects data from a sample of 19 institutions selected for their large number of associated data points. One major institution was excluded from this analysis, even though they had a large number of associated data points. Including this institution would have added to the strength of our conclusion, increasing the R-squared. However, as the remaining sample of 19 institutions does not display a similar correlation, this company was removed from the sample.

3 *Relative default risk* is defined as the institution's default risk compared to the default risk of its country peers. *Default risk* is defined as the institution's default rate implied by its Baseline Credit Assessment (BCA) as determined by Moody's Investors Service. BCAs are opinions of the bank's standalone intrinsic strength, absent any extraordinary support from an affiliate or a government.

About the Methodology

This report is based on five years of data and 55,000-plus test results from the Moody's Analytics pre-course assessment, which diagnoses the capabilities of test-takers before they receive training from Moody's Analytics. The Moody's Analytics flagship Commercial Lending eLearning Course (CLEC) was used as a standard for assessing proficiency for Moody's Performance Assessment Indicates Risk, or MPAIR.

CLEC focuses on the three primary areas of risk associated with extending a loan: Financial Risk, Management Risk, and External Market/Industry Risk. Rounding out the course is a section on Risk Mitigation techniques. The overall framework is grounded in applied methodology and real-life scenarios. As such, the insights garnered from the pre-course exam data reflect a realistic view of the judgment quality of credit practitioners.

Pre-course assessments reflect the learner's level of knowledge prior to taking the CLEC. These assessments are built around a set of knowledge areas and learning objectives derived from our courses. Test questions are randomly selected from a pool of questions, thus ensuring that each learner receives a test that is different from other learners but addresses the same content areas. Each test has more than 280 questions and typically covers three lessons/topics. The questions are structured as multiple choice or true/false.

Tests are frequently administered in the local language, with feedback about terminology and content from banks taken into consideration.

Four types of learning are tested through these assessments:

1. **Knowledge** is defined as the recall of previously learned material and represents the lowest level of learning outcomes in the cognitive domain.
2. **Comprehension** is defined as the ability to grasp the meaning of material by translating material from one form to another, by interpreting material, and by estimating future trends.
3. **Application** refers to the ability to use learned material in the application of rules, methods, concepts, principles, laws, and theories.
4. **Evaluation** is concerned with the ability to judge the value of material for a given purpose and is the highest in the cognitive hierarchy.

These tests have been developed and refined numerous times by highly experienced credit practitioners and are built on a firm foundation of widely-adopted practices.

Over the past 30 years, Moody's Analytics has trained thousands of financial professionals in the principles of sound credit assessment. During this time, Moody's has offered both traditional classroom instruction as well as state-of-the-art e-learning tools.

Learn more about people risk and improving credit skill sets at www.moodyanalytics.com/peoplerisk

About Moody's Analytics

Moody's Analytics helps capital markets and risk management professionals worldwide respond to an evolving marketplace with confidence. The company offers unique tools and best practices for measuring and managing risk through expertise and experience in credit analysis, economic research and financial risk management. By providing leading-edge software, advisory services, and research, including the proprietary analysis of Moody's Investors Service, Moody's Analytics integrates and customizes its offerings to address specific business challenges. Further information is available at www.moodyanalytics.com.

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