

MOODY'S

**Resilient Supply Chains in an Era of Exponential Risk:
Navigating New Challenges and Regulations**

Vitaliano Tobruk
Enrico Aresu

Director, Supplier Risk Practice Lead
Director, Compliance Industry Practice Lead DACH, BeNeLux & CEE

Agenda

- **Welcome and Introduction to Moody's**
- **Insights into Supply Chain Risk Management and Regulatory Impact regulations**
- **Round-table: Navigating Global Supply Chain Challenges**
- **Q&A / Conclusions**

Navigating the Current Landscape: recent trends in supplier risk management

- **Digital Transformation** in supplier risk management: digital tools and platforms are revolutionizing supplier risk management, enhancing visibility and enabling more proactive risk identification and mitigation strategies
- **Cybersecurity in Supply Chain:** Emphasizing the need for strong protective strategies against rising cybersecurity risks
- **Resilience and Agility:** building more resilient and agile supply chains in response to recent global disruptions with a need for flexibility and adaptability
- **Collaboration and Transparency:** deeper collaboration and transparency between businesses and their suppliers, facilitated by technology, to manage risks more effectively
- Increased focus on **ESG and Sustainability:** growing importance of environmental, social and governance factors in supplier selection and management, driven by regulatory changes and consumer demand for sustainable practices



Building Resilient and Sustainable Supply Chains: Why It Matters



Navigating Global Disruptions: The New Normal for Supply Chains

- Increasing frequency of disruptions
- Impact on global trade and logistics
- Need for agile response strategies



The Dual Pillars: Resilience for Stability and Sustainability for Growth

- Resilience as a buffer against shocks
- Sustainability as a driver for innovation and efficiency
- Balancing short-term adaptability with long-term vision



From Concept to Action: Crafting Agile, Ethical, and Sustainable Supply Networks

- Integrating technology and innovation for agility
- Ethical sourcing and social responsibility
- Implementing sustainable practices across the supply chain



Corporate Sustainability Reporting Directive (CSRD)

- Builds on **existing**, but **more limited corporate non-financial company disclosure** EU regulation (NFRD)
- Aims to **standardize sustainability disclosures**, increase capital flows towards sustainable companies.
- Requires **detailed company disclosures** on **nature**, **social** factors, and **climate** impacts.
- **Double materiality assessment** analyzes ESG impact on company bottom-line and environment/stakeholders.
- Includes company **own operations** and **value chain** in scope.



Corporate Sustainability Due Diligence Directive

Scope:

- The company criteria have been adjusted to **1,000 employees** (previously 500) and **EUR 450 million turnover** (previously EUR 150 million).
- The approach of targeting **high-risk sectors has been eliminated**, although it may be reconsidered later.
- Under its current form, the CS3D is expected to **affect around 5,000 companies** across the EU.

Definition & Transition Plans:

- **Indirect business partners** have been **excluded from the downstream** chain of activities definition.
- **Climate transition plans remain** a part of the Directive, but the requirement to align financial incentives for directors has been removed.

Timeline:

- **2024** - The final draft of the Corporate Sustainability Due Diligence Directive (CS3D) must be voted on members of EU Parliament in April, then passed into EU law
- **2026** - The CS3D will be transposed into national law by the Member States by 2026
- **2027** - Group 1 (over 5k employees) will need to comply with the law, including its reporting and disclosure standards
- **2028** - Group 2 (3k employees)
- **2029** - Group 3 & 4 (International, Non-EU) companies must begin reporting, disclosure, and compliance under CS3D

Integrated Risk Assessment – Data, Analytics, Insights



Financial and Supplier Performance Risk

We offer a proprietary Supplier Performance Risk score as a predictive indicator of operational strengths and weaknesses, along with targeted, efficient mitigation options for various risk levels.

- Supplier's financial health
- Payment patterns towards their suppliers



Geopolitical Risk

We offer risk assessments for 188 countries with the ability to assign the weight (importance) to geopolitical risk

- Country risk ratings



Regulatory & Compliance Risk

Our curated risk intelligence covers sanctions and enforcement for precise screening on modern slavery, environmental crime, human rights etc.

- Compliance Assessment
- Know Your Customer / Anti-Money Laundering
- Portfolio Stress Testing



Reputational Risk

Leading provider of global beneficial and corporate hierarchy data which is integrated with the largest risk dataset to address reputational and regulatory risks.

- Know Your Customer / Anti-Money Laundering
- Master Data Management



ESG & Sustainability Risk

Our ESG assessment & datasets enable companies to evaluate their ESG performance and enable compliance with emerging ESG reporting requirements.

- ESG / Climate Risk Disclosures
- ESG Index Data Supply
- ESG Investment / Asset Research



Cyber Risk

We offer cybersecurity ratings that reflect the probability of a company experiencing a cyber incident.

- Cyber Risk Assessment

Navigating these challenges



Reduce silos

- A key risk for businesses lies in treating each source of risk as a silo.
- Organizations must look at risks holistically, considering how they interrelate with one another.
- The integrated view of risk helps to decode risk and unlock new opportunities.



Data enrichment and analytics

- Collecting, sharing and analyzing data provides greater visibility and agility.
- Trusted third-party data enhances the organization's proprietary data.
- Users gain a much clearer understanding of the myriad risks embedded within the supplier portfolio.



Pro-active mitigation

- Given their importance, complexity, and vulnerability, supply chain risks are now mainstays on boardroom agendas.
- Proactive risk assessment is the new normal, replacing the old model of reactive management that becomes a priority only when disruption strikes.

Round Table

Challenges across global Supply Chains

- **Evolving Risk Landscape:** In the face of the modern global marketplace, organizations encounter an evolving array of risks, from geopolitical shifts and economic volatilities to technological and environmental changes. This complex risk landscape necessitates not only recognition but also a dynamic approach to risk management.
- **Cultural Integration of Risk Management:** as we delve deeper, the integration of risk management into the organizational culture emerges as a pivotal element. It's about creating an environment where every stakeholder is proactive in identifying and addressing risks.
- **Supplier Risk Assessment Process:** Central to enhancing supply chain resilience is a thorough supplier risk assessment process. By systematically evaluating potential risks associated with suppliers, organizations can mitigate vulnerabilities before they impact operations.
- How has Mahle successfully implemented these risk management strategies, and what have been the tangible outcomes in terms of resilience, efficiency and sustainability?



MMQ

Q&A

MOODY'S

MOODY'S

Thank you

Vitaliano Tobruk
vitaliano.tobruk@moodys.com

Enrico Aresu
enrico.Aresu@moodys.com

© 2024 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Charter Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Clasificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.