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Current Situation and Future of Asset Management Utilizing Leading Digital Technology

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The global asset management industry has been suffering from a structural decline in its profitability since the late 2000s and, to address this, has been focusing on pursuing operational efficiency through outsourcing non-core operations. However, leading asset managers have moved beyond this phase and have already started to work on enhancing the value added of core operations through digitalization. Leading asset managers have been working not only on enhancing the value added of individual operations, but also transforming the way asset managers add value as an entire organization. As a foundation for such efforts, it is important to augment human abilities with those of machines as well as to establish a company-wide data management capability.

Network Structure in ESG Ratings Suggests New Corporate Strategies: —Evolving AI Technology to Quantify Qualitative Data

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Based on environment, social, and governance (ESG) criteria, corporations are evaluated and receive ESG ratings which are largely based on analyst assessments of qualitative data. Therefore, it is considered rather implausible to quantitatively deduce the assessment criteria and the action areas that corporations should focus on in order to improve their ESG ratings. We have developed a quantitative model to predict a company's ESG ratings assigned by FTSE and MSCI, by systematically collecting corporate disclosure reports and processing them using AI technology. From the wide-ranging disclosure items related to ESG, our model allows us to quantitatively identify areas that each company should strategically prioritize and the information it should disclose. Our goal is that our continuing research will encourage companies to engage in more concrete actions and appropriate information disclosure with regard to ESG.

Examining Financial Market Regulations / rules Using Artificial Market Simulation	<i>Takanobu Mizuta, CMA</i>	26
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In this paper, I first explain the importance and difficulty of constructing rules for financial markets, and note that agent-based models that can treat a complex system are frequently used for other social systems than financial markets. Then, I show that artificial market models, an agent-based model for financial markets, recently began to be used for examining financial market rules, and introduce previous studies investigating tick sizes for one significant example.

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We model firm activities using the inter-firm trading network structure, and estimate firm activities in various situations through large-scale simulations. We construct the model for a time-dependent inter-firm trading network and for money flow on that network based on empirical studies. We demonstrate the results obtained from the simulations.

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