

FMA2022

Workshop on Financial Modeling and Analysis

Period September 7 – 9, 2022 Venue Doshisha University

Organizer Motoh Tsujimura, Doshisha University

Makoto Goto, Tokyo University of Science

September 7, Wednesday

• 12:55-13:00 Opening Address

Session 1 (Chair: Michi Nishihara, Osaka University)

 \bullet 13:00-13:40

A Dynamic Model of Repositioning with a Markov-Switching Regime Katsumasa Nishide* (Hitotsubashi University) and Takeshi Ebina (Meiji University)

 \bullet 13:40-14:20

An Optimal Policy of Lockdown Periods in Pandemic Based on the Stochastic SIR Model with Time Delay

Kimitoshi Sato* (Kanagawa University), Katsushige Sawaki

Session 2 (Chair: Katsumasa Nishide, Hitotsubashi University)

• 14:35-15:15

Optimal capital structure of a firm that receives earnings with a lower reflecting

Michi Nishihara* (Osaka University) and Takashi Shibata (Tokyo Metropolitan University)

 \bullet 15:15-15:55

Sustainable investments with agency conflicts Yuan Tian (Ryukoku University)

Session 3 (Chair: Yuan Tian, Ryukoku University)

 \bullet 16:10-16:50

A Note on ESG Multifactor Asset Pricing Models Hiroshi Ishijima* (Chuo University) and Akira Maeda (The University of Tokyo)

• 16:50-17:30

Non-standard jump processes arising in environmental project planning Hidekazu Yoshioka* (Shimane University) and Motoh Tsujimura (Doshisha University)

September 8, Thursday

Session 4 (Chair: Haejun Jeon, Tokyo University of Science)

 \bullet 10:00-10:40

Risk management of Commercial Banks caused by CBDC Uratani Tadashi (MIC.9 Co./Hosei University)

 \bullet 10:40-11:20

Analysis of credit cycle movement by credit event intensity model Jun Hironaka (Nomura Asset Management Co., Ltd./University of Tsukuba)

Session 5 (Chair: Jun Hironaka, Nomura Asset Management Co., Ltd./University of Tsukuba)

 \bullet 13:00-13:40

Labor flexibility and investment Haejun Jeon* (Tokyo University of Science), Chuanqian Zhang (William Paterson University), and Xue Cui (Shenzhen University)

• 13:40-14:20

Investment, financing, liquidation, and asymmetric information Takashi Shibata* (Tokyo Metropolitan University) and Michi Nishihara (Osaka University)

Session 6 (Chair: Takashi Shibata, Tokyo Metropolitan University)

 \bullet 14:35-15:15

Deep Learning Schemes for high-dimensional nonlinear PDEs with Wiener-Chaos Expansion and Application for Mean-Field type models in Finance Kangyong Liu* (Waseda University) and Hiroshi Toyoizumi (Waseda University)

• 15:15-15:55

Valuation of Performance-Vesting Employee Stock Options SiNan Lyu (KYOCERA Communication Systems Co., Ltd.), Masamitsu Ohnishi* (Yamato University/Osaka University), and Nene Tanaka (Ernst & Young Shinnihon LLC)

September 9, Friday

Session 7 (Makoto Goto, Tokyo University of Science)

 \bullet 10:00-10:40

Execution game in a Markovian environment Masamitsu Ohnishi (Yamato University) and Makoto Shimozhimizu* (Tokyo Metropolitan University)

 \bullet 10:40-11:20

Execution performance under specific price models Seiya kuno (Doshisha University)

Session 8 (Chair: Seiya kuno, Doshisha University)

 \bullet 13:00-13:40

Spillover effects between commodity markets, financial markets, and the real economy

Hiroyuki Okawa (Kobe University)

 \bullet 13:40-14:20

Assessing the value of a thermal power plant considering power market and capacity mechanism

Motoh Tsujimura *(Doshisha University), Makoto Goto (Tokyo University of Science), Ryuta Takashima (Tokyo University of Science), and Hidekazu Yoshioka (Shimane University)

• 14:20-14:25 Closing Address