The Korean Association

2023 Asia-Pacific Financial Engineering Conference

of Financial Engineering

KAFE 한국금융공학회
The Korean Association of Financial Engineering

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2023 Asia-Pacific Financial Engineering Conference

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Conference Date.
July 12(Wed.), 2023

Conference Venue.
Korea Exchange,
Busan International Finance Center(BIFC)

Host.
Korean Association of Financial Engineering

Sponsors

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한국금융공학회
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Welcome Message

On Wednesday, July 12, 2023, the Korean Association of Financial Engineering (KAFE) will host an international conference on ESG (Environmental, Social, and Governance), finance, and economic issues. It promises to be a gathering of brilliant minds–both passionate researchers and dedicated professionals from around the world–who will address important issues. As the president of KAFE, it is my pleasure and great honor to invite you to attend this esteemed academic conference.

Our conference serves as a unique platform for interdisciplinary collaborations, where experts from diverse fields come together to share their insights, discoveries, and ideas. This, in turn, promotes further advances. Indeed, the significance of such collaborations cannot be overstated. It is often through the interaction of researchers from diverse disciplines that significant breakthroughs occur, new perspectives emerge, and transformative discoveries are made.

We have an exciting lineup of keynote speeches, paper presentations, and panel discussions. We will delve into a wide array of topics, ranging from traditional finance and economics to the disruptive forces of technology and innovation. Our agenda is thoughtfully designed to address key issues such as Artificial Intelligence, Big Data, Cryptocurrency, Digital Transformation, Energy Economics, ESG, Financial Innovation, Machine Learning, and Sustainable Finance. This event provides a wonderful opportunity to engage in spirited discussions, challenge existing paradigms, and explore novel approaches to the most pressing issues in our respective fields.

Our keynote speakers are: Professors Robert Ivory Webb (Univ. of Virginia); Won Yong Kim (Augsburg Univ.); Hyeng Keun Koo (Ajou Univ.); Sooyoung Song (Chung-Ang Univ.); and Yuji Yamada (Univ. of Tsukuba), all of whom are world-class scholars in the fields of finance and economics. We gratefully acknowledge the generous financial support and other contributions to the conference from our co-sponsors. These include: the Korea Exchange (KRX); Korea Housing Finance Corporation; Korea Asset Management Corporation; Korea Securities Depository; KB Securities; Samsung Asset Management; Shinhan Securities; BNK Securities; Korea Investment Management; S&P Global (Market Intelligence) among others. We especially thank our long-standing academic partner, the Japanese Association of Financial Econometrics and Engineering (JAFEE) for their strong support and participation. We also welcome all members from our new academic partner, the Korea-America Finance Association (KAFA).

We sincerely appreciate the steadfast support and relentless participation of our KAFE members. Without their support, the Korean Association of Financial Engineering would not have achieved its current high status.

I look forward to welcoming you to the Asia-Pacific Financial Engineering Conference.

• Doojin Ryu, President, Korean Association of Financial Engineering

Program

Date
July 11-13

Location
Korea Exchange (Grand Conference Hall)
Busan International Finance Center (BIFC) 62nd floor, 40, Munhyeongeumyung-ro, Nam-gu, Busan, Korea
부산광역시 남구 문현금융로 40 부산국제금융센터 62층 한국거래소 대회의실

Day 1

July 11, Tue.

Time		Location
20:00~21:00	**KAFE Board Meeting**	AVANI Central Busan

Day 2

July 12, Wed.

Time	Session	Location
08:50~09:00	**Registration**	Grand Conference Hall, BIFC 62nd floor [62층 대회의실]
09:00~12:00	**Main Session**	
09:00~09:10	**Greeting** **Doojin Ryu** (President, KAFE) **Kyung Sik Lee** (President & CEO of Derivatives Market, KRX)	
09:10~11:50	**Keynote Speech** **Robert Webb** (University of Virginia) **Won Yong Kim** (Augsburg University) **Soo Young Song** (Chung-Ang University) **Hyeng Keun Koo** (Ajou University) **Yuji Yamada** (University of Tsukuba)	
13:00~15:00	**Academic Sessions**	
	Session 1 Top Financial Research	Grand Conference Hall, BIFC 62nd floor [62층 대회의실]
	Session 2 Tutorial Session A	Executive Meeting Room, BIFC 61st floor [61층 임원회의실]
	Session 3 New Finance	Video Teleconference Room, BIFC 61st floor [61층 영상회의실]
15:20~17:20	**Academic Sessions**	
	Session 4 Frontiers in Financial Research	Grand Conference Hall, BIFC 62nd floor [62층 대회의실]
	Session 5 Tutorial Session B	Executive Meeting Room, BIFC 61st floor [61층 임원회의실]
	Session 6 Young Scholar Consortium	Video Teleconference Room, BIFC 61st floor [61층 영상회의실]

Day 3

July 13, Thu.

Time		Location
10:00~11:00	**KAFE and ESG**	AVANI Central Busan

Main Session

Keynote Speech

Chair
Doojin Ryu, Sungkyunkwan Univ.

09:10~11:50	Grand Conference Hall, BIFC 62nd floor [62층 대회의실]

Risk, risk management, and due diligence
Robert Webb (Univ. of Virginia)

Finance education with artificial intelligence
Won Yong Kim (Augsburg Univ.)

Re-thinking on investment strategy: Alpha versus Beta a la CAPM
Soo Young Song (Chung-Ang Univ.)

Fully automated and personalized asset management
Hyeng Keun Koo (Ajou Univ.,)

Optimal design and formulation of financial frameworks for the efficient and sustainable trading of renewable energy resources
Yuji Yamada (Univ. of Tsukuba)

Session 1

Top Financial Research

Chair
Robert Webb, Univ. of Virginia

13:00~15:00	Grand Conference Hall, BIFC 62nd floor [62층 대회의실]

An algorithm to prevent being picked off by algorithms: An examination of IEX's D-limit order type
Seongkyu Gilbert Park (Willamette Univ.), Patrik Sandas (Univ. of Virginia)

Mandatory vs. voluntary ESG disclosure, efficiency, and real effects
Byeong-Je An (Nanyang Technological Univ.), Cyrus Aghamolla (Univ. of Minnesota)

ESG CAPM: A theory and application of asset pricing models for ESG investing
Hiroshi Ishijima (Chuo Univ.), Masato Yamamoto (Yale School of Management),
Akira Maeda (The Univ. of Tokyo)

Goodwill capital and corporate decoupling: An empirical study of the Russian invasion of Ukraine
Kam-Ming Wan (Hanken School of Economics, Finland), Siu Kai Choy (King's College London),
Tat-Kei Lai (IESEG School of Management, France)

Determinants of CDS spread changes revisited
Haerang Park (Korea Univ.)

Gold-mining stocks, risk factors, and tail patterns
Yiyi Qin (Southwestern Univ. of Finance and Economics), Jun Cai (City Univ. of Hong Kong),
Jim Wang (City Univ. of Hong Kong), Robert Webb (Univ. of Virginia)

Session 2
Tutorial Session A

Chair
Sang Gyung Jun, Hanyang Univ. [in Korean]

13:00~15:00	Executive Meeting Room, BIFC 61st floor [61층 임원회의실]

Influence of fear-of-missing-out on financial market volatility
Daehyeon Park (Sungkyunkwan Univ.)
Discussant: Prof. Jaeram Lee (Gachon Univ.)

The effects of option incentive compensation on corporate innovation: Evidence from China
Cheng Rui (Taiyuan Univ. of Technology, China), Bart Frijns (Open University, Netherlands), Hyeongjun Kim (Yeungnam Univ.)
Discussant: Prof. Jaesun Yun (Keimyung Univ.)

What is the best proxy for utility-based risk aversion? Testing the predictive power of time-varying risk-aversion measures
Jinhwan Kim (KAIST), Hoon Cho (KAIST)
Discussant: Prof. Kyu Ho Kang (Korea Univ.)

Impact of military alliances on energy trade
Sunjin Kim (Korea Energy Economics Institute), Songyi Paik (Univ. of Minnesota)
Discussant: Prof. Hankil Kang (Dankook Univ.)

Long-term investments in the rented space and insurance
Minsung Park (Sungkyunkwan Univ.)
Discussant: Prof. Hogyu Jhang (Chungnam National Univ.)

Session 3
New Finance

Chair
Jangwoo Lee, Pusan National Univ. [in Korean]

13:00~15:00	Video Teleconference Room, BIFC 61st floor [61층 영상회의실]

Employee stock ownership and stock price crash risk: Evidence from the Korean stock markets
Heejin Park (Pusan National Univ.), Hyejeong Shin (Pusan National Univ.)

Extensive networks would eliminate the demand for pricing formulas
Jeonggyu Huh (Chonnam National Univ.), Kyunghyun Park (Nanyang Technological Univ.), Jaegi Jeon (Chonnam National Univ.)

Is the sentiment priced? Evidence from the Korean stock market
Seungho Cho (Chung-Ang Univ.), Shiyong Yoo (Chung-Ang Univ.)

The issues of Blockchain application in real estate sector
Hong Bae Kim (Dongseo Univ.)

Hybrid securities and firm performance: Evidence from Korean small and medium-sized firms
Woo Sung Kim (Silla Univ.)

A study on the vitalization of economic education for multicultural families in Korea
Yeongsuk Cho (Mokpo National Univ.), Bo-Mi Jo (Mokpo National Univ.)

The impact on FDI of participating countries in one belt and on road policy of China
Pando Son (Dong-A Univ.), Xiao Zhao (Zhejiang Financial College), Tran Minh Quy (Van Lang Univ.)

Session 4

Frontiers in Financial Research

Chair
Seongju Moon, Gyeongsang National Univ.

15:20~17:20 Grand Conference Hall, BIFC 62nd floor [62층 대회의실]

Climate change and shareholder value: Evidence from textual analysis
Young Sang Kim (Northern Kentucky Univ.)

Trend-cycle decomposition of yield curve and term premia
Kyu Ho Kang (Korea Univ.), Byungsoo Koo (Bank of Korea)

Can we detect stock market crash? Fluctuations and synchronization in the parameters of the stable distribution before and after the stock market crash
Kohki Takeda (Kyoto University), Ken Umeno (Kyoto University)

Modeling central counterparty in determining optimal margin requirements
Kazuhiro Takino (NUCB Business School)

A principal agent theory approach to carbon contracts for difference
Jiwoong Lee (Pukyong National Univ.), Gyu Hyun Kim (Korea Energy Economics Institute), Sanglim LEE (Korea Energy Economics Institute)

Chaotic market hypothesis and characterization of financial markets by the characteristic function-based correlation functions
Natsuki Takenami (Kyoto University), Ken Umeno (Kyoto University)

Session 5

Tutorial Session B

Chair
Jonghae Park, Gyeongsang National Univ. [in Korean]

15:20~17:20 Executive Meeting Room, BIFC 61st floor [61층 임원회의실]

Protocol for loanable funds: Decentralization in banking
Jaemin Son (Sungkyunkwan Univ.)
Discussant: Prof. Seryoong Ahn (Pukyong National Univ.)

The explanatory power of controlled ESG risk factors
Jeongseok Bang (Sungkyunkwan Univ.)
Discussant: Prof. Byeong-Je An (Nanyang Technological Univ.)

ESG score, default risk, and performance: Evidence from banks in Korea
Seo Yun Choi (Kookmin Univ.)
Discussant: Dr. Hyeri Kim (National Pension Research Institute)

KOSPI market reaction according to seasoned equity offering methods
Minji Park (Korea Exchange)
Discussant: Prof. Ki Beom Binh (Myongji Univ.)

Analytic approach for models of optimal retirement with disability risk
Jiwon Chae (POSTECH), Bong-Gyu Jang (POSTECH), Seyoung Park (Univ. of Nottingham)
Discussant: Dr. Junghee Noh (National Pension Research Institute)

Session 6
Young Scholar Consortium

Chair
Moosung Kim, Pusan National Univ. [in Korean]

15:20~17:20 Video Teleconference Room, BIFC 61st floor [61층 영상회의실]

Portfolio selection based on anomaly detection using GANs
Yongjae Lee (UNIST), Seyoung Kim (UNIST), Joohwan Hong (UNIST)
Discussant: Hyejin Park (Korea Capital Market Institute)

Predicting the US stock market downside risk in the beginning hour of trading by using information in the after-market period
Jikhan Jeong (Missouri Univ. of Science and Technology)
Discussant: Prof. Hong Kee Sul (Chung-Ang Univ. Business School)

Carbon market efficiency under expected supply shortages and free allocation: The case of Korea emissions trading system
Beomseok Yoon (Korea Energy Economics Institute), Berna Karali (Univ. of Georgia)
Discussant: Dr. Young Cheul Ahn (Korean Institute for Climate, Economy, Society)

The impacts of group-wise coalition of carbon border adjustments on the global economy and greenhouse gas emissions: A general equilibrium approach
Gyu Hyun Kim (Korea Energy Economics Institute),
Jaekyu Lim (Korea Energy Economics Institute)
Discussant: Prof. Ji Hun Yoon (Pusan National Univ.)

Research on real estate market and network analysis
Hee-Un Ko (Korea Housing & Urban Guarantee Corporation), Dae Sung Jung (Gwangju Univ.)
Discussant: Dr. Kwanguk Kim (Housing Finance Research Institute)

Program Chair
Doojin Ryu (Sungkyunkwan University)

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