

The Precision Convergence Science and Innovation- FINANCE Webinar Series

A Capacity Building Collaborative for Inventing 'One-World' Investment and Policy Solutions for Lifelong Wellness and Sustainable Economic Growth

Challenges and Possibilities in Digital Financial Markets: Risk and Return



Patrick Augustin holds the Canada Research Chair in Macrofinance and Derivative and is an Associate Professor of Finance at the Desautels Faculty of Management at McGill University. He is also an Associate Fellow at the Canadian Derivatives Institute, and the 2022 recipient of the Bank of Canada Governor's Award. He holds a PhD degree in Finance from the Stockholm School of Economics and held visiting research positions at the New York University Stern School of Business, the University of California Los Angeles Anderson School of Management, the Stockholm School of Economics, the University of Sydney, and the Luxembourg School of Finance. He is certified as Financial Risk Manager by the Global Association of Risk Professionals and served as a Fellow at the Global Future Councils of the World Economic Forum. Before joining academia, he worked as a structured credit officer at Dexia and as attaché to the Luxembourg Ministry of Foreign Affairs. Patrick's research interests lie at the intersection of macroeconomics and financial markets with a focus on sovereign credit risk, firm fundamentals and credit risk with a focus on credit derivatives, and law and finance with a focus on insider trading. Most recently, he has become interested in the emergence of digital financial securities. His work has been published in the Journal of Finance, the Review of Financial Studies, the Journal of Financial Economics, the Journal of Monetary Economics, Management Science, and the Journal of Financial and Quantitative Analysis, among others. His work has been widely covered in the financial press, including The New York Times, The Wall Street Journal, The Washington Post, Fortune, and The Globe and Mail.

November 1 , 2023

2:00 pm EST

(2 hrs in length)

Click [Here](#) To Join

Chair: Laurette Dubé (Scientific Director of MCCHE)

Co-Chair Co-Chairs: David Schumacher (Scientific Director of Desmarais Global Finance Research Centre) & Dilip Soman (Scientific Director of BEAR)

ABSTRACT: The digital economy has resulted in a significant transformation of the finance sector. The research presented in this webinar focuses on the risk and return characteristics of yield farming investment strategies on PancakeSwap, which is one of the largest automated market makers within the emerging ecosystem of decentralized financial services. PancakeSwap offers various opportunities for earning passive income by pledging pairs of cryptocurrency tokens in liquidity pools and harvesting governance tokens in yield farms. This practice, also known as yield farming, generates performance through different components related to capital gains, trading fee revenue, and farm yields. However, it is exposed to impermanent losses that are non-linearly driven by differential return performance in the underlying cryptocurrency token pairs. The research reveals that yield farming provides positive Sharpe ratios comparable to other cryptocurrency investments and the S&P500 index. However, investment performance decreases significantly after accounting for transaction costs and price impact, which is most significant for farms with the highest headline yields. This can lead to negative risk-adjusted returns. Moreover, it is found that investors in high-yield farms tend to chase past performance and high yields, which leads to negative future returns. These patterns are similar to investment behavior and risk-return characteristics observed in traditional markets, despite the absence of financial intermediaries. Since yield farming is easily accessible to retail investors, this analysis has important implications for the current debate about the regulation of decentralized financial services. A panel discussion will follow to explore real-world solutions further

PANEL DISCUSSION: A panel comprising scientists, business leaders, and policy experts will discuss how scientific and technological advancements in finance. The panel will first discuss the keynote theoretical foundation from the finance discipline perspective. Then, it will explore real world solution and scale in the context of digital finance platforms in the agri-food sector. The discussion will fully acknowledge that the developed and developing worlds share the same planet with its resource constraints and possibilities

ABOUT THE SERIES: The Precision Convergence Science and Innovation FINANCE webinar series is a core capacity-building activity of a collaborative effort that utilizes the finance sector as an entry point to accelerate the design and long-term performance of platform ecosystems that combine digital and human capabilities. These ecosystems aim to target achievable and time-bound real-world solutions, with the ultimate goal of resetting the world from a 1st-industrial-revolution mode of economic convergence - where the Rest converged with the West - to a 4th-industrial-revolution convergence economy. In this new economy, the digital transformation of science and society, combined with human empathy, creativity, and entrepreneurship, will serve as a catalyst for the convergence of human and planetary health with sustained inclusive growth. The keynote speakers and panelists of this webinar series aim to advance behavioral, social, data, and complexity sciences, recognizing their centrality in the implementation of "hard science"-based solutions. By utilizing a computational approach, they facilitate the convergence of different fields around concrete real-world solutions instead of competing against each other. The approach is modular, as research and action at different scales employ various methods to build interoperable integrative application tools and data platforms that can communicate and connect based on standards and protocols



For more information or to subscribe, contact:

mcche.mgmt@mcgill.ca or visit us @MCCHE

CO-CHAIRS:



Laurette Dubé, initially trained as a nutritionist, also holds degrees in finances (MBA), marketing (MPS), and behavioral decision-making/consumer psychology (PhD). Dr. Dubé is Full Professor at the Desautels Faculty of Management, McGill University. Her research focuses on the study of affects, behavioral economics, and neurobehavioral processes underlying consumption, lifestyle, and health behavior. Her translational research examines how such knowledge can inspire effective interventions. She is also the founder and scientific director of the McGill Centre for the Convergence of Health and Economics, a unique initiative to push the boundaries of science to tackle societal and economic challenges and foster individual and collective health and wealth.



David Schumacher is an Associate Professor and Desautels Faculty Scholar in the Finance Area at the Desautels Faculty of Management and the Director of the Desmarais Global Finance Research Center. His research is primarily concerned with themes in global investment management, including, for example, the portfolio choice and performance of international institutional investors or the financial market implications of the rise of large asset management firms or the rise of passive investing. His research has been published in leading academic journals including the *Journal of Finance*, *The Review of Financial Studies*, and the *Journal of Financial and Quantitative Analysis* and covered by leading media outlets including *The Economist*. David's teaching is focussed on classes in Mergers & Corporate Reorganizations and prior to joining Desautels, he obtained a PhD in Finance from INSEAD.

PANELISTS:



Katya Malinova is an Associate Professor and holds the Mackenzie Investments Chair in Evidence-Based Investment Management at the DeGroote School of Business, McMaster University. Her research focuses on financial market structure and FinTech. She holds grants from the Social Sciences and Humanities Research Council of Canada, and her research has been published in top journals, including the *Journal of Finance* and the *Journal of Financial Economics*. Katya collaborated with the Canadian regulators on research, and she currently serves on the OSC Market Structure Advisory Committee. She is an Editor of the *Journal of Financial Technology* and an Associate Editor of the *Journal of Financial Markets* and the *Financial Management*. She teaches courses in corporate finance and FinTech.



Nicholas Biekpe is a Professor of Development Finance & Econometrics & Director: Development Finance Centre at the University of Cape Town Graduate School of Business. He is also the Executive Editor of the *African Finance Journal*; Executive Editor of *Review of Development Finance*; Managing Editor *Africagrowth Agenda Journal*; Editor of *Journal of African Trade* and Managing Editor of the *Development Finance Agenda*. Nicholas is a member of technical working group of the Africa Capacity Building Foundation (ACBF) and a Board Member of the South African Savings Institute. He is also President of Africagrowth Institute and Executive Chairman of the Chartered Institute of Development Finance. Prof Biekpe is a technical Advisor to the Governing Council of the African Academy of Science (AAS) and a member of the Membership Evaluation Committee of The World Academy of Sciences (TWAS).



Supriya Syal is a leading expert in research and evidence-based policy innovation in Canada. She is the Deputy Commissioner of Research, Policy, and Education at the Financial Consumer Agency of Canada, where she recently led the renewal of the National Financial Literacy Strategy, and is now guiding its implementation to help Canadians achieve positive financial outcomes. She is the former Chief Science Advisor to the Treasury Board Secretariat Talent Cloud, and the former Chief Behavioural Scientist of the Privy Council Office Innovation Hub. Prior to joining the public sector, Dr. Syal was VP Research and Innovation at BEworks Inc. She is also the founder and former President of Dulcimer Labs, a purpose-driven company that creates social impact through evidence-based decision making. Dr. Syal holds a PhD in psychology from Cornell University, as well as a master's degree in neuroscience and a bachelor's degree in biochemistry.



John G. Keogh is a strategist, C-level advisor and academic researcher with 25 years of executive leadership roles as Director, VP and SVP in global Supply Chain Management, Information Technology, Technology Consulting and global Supply Chain Standards. He advises the public and private sectors worldwide and is a regular subject matter expert on TV and Radio. Mr. Keogh is managing principal at Toronto-based, niche advisory and research firm Shantalla Inc. Mr. Keogh holds a PG diploma and an MBA in Management and an MSc in Business and Management Research in transparency and trust. He is currently completing doctoral research on transparency and trust in food chains at Henley School of Business, University of Reading.



Rajasekhar Vallabhaneni did his Masters in Technology and has decades of experience in working with blue chip companies as well as building companies from scratch. He started Andhra Engineering college (www.aecn.com) imparting education in grassroots in Atmakur, Nellore district. He also cofounded Vidcentum, a research & development company and built IOT platform for India (www.picominer.com). He is the founder of Kalgudi Digital (www.kalgudi.com) and previously managed large engineering teams in Google, Microsoft and Honeywell.



Ravinkumar Sivalingam possesses a varied experience in sales, customer relationship, strategy, and business development with over 20 years of experience. He has been associated Digital Food Initiatives for more than 5 years, where he is responsible for Technology & Business Model Innovations, Joint Ventures/Partnerships, Go to Market Strategy and Business Development. Avid technology evangelist and interested to explore technological innovations that disrupt existing service models in Agriculture and create new revenue streams. He Lead platform deployment for customers across multiple geographies – US, India, Europe, LATAM & Middle East. He developed Innovative business models (carbon banking, data marketplace in partnership with customers, conduct pilots to validate hypothesis. Ravin is a certified Design Thinking Expert, who can empathize with end users to identify problems and create innovative and effective solutions.



Srini Pappula is currently the Global Head of the Digital Farming Initiatives Group in Tata Consultancy Services, where he is responsible for driving the usage of Information and Communication Technologies (ICT) for improving farmer livelihoods across the world and creating “Smart Villages” or PRIDETMs (Progressive Rural Integrated Digital Enterprises) in the process. With over 25 years of experience, Srini is a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE) and the Association of Computing Machinery (ACM). He is also a Certified Information Systems Security Professional (CISSP) and holds advanced degrees in Computer Science and Management from the University of Texas and University of California respectively.