



THE ATHENS INSTITUTE FOR EDUCATION AND RESEARCH

# Abstract Book

18<sup>th</sup> Annual International Symposium on  
Economic Theory, Policy & Application  
26-29 June 2023 Athens, Greece

Edited by  
Henry Thompson & Olga Gkounta

2023



Abstracts  
18<sup>th</sup> Annual International  
Symposium on Economic  
Theory, Policy & Application  
26-29 June 2023, Athens, Greece

Edited by  
Henry Thompson & Olga Gkounta

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## Preface

This book includes the abstracts of all the papers presented at the 18<sup>th</sup> Annual International Symposium on Economic Theory, Policy & Application (26-29 June 2023), organized by the Athens Institute for Education and Research (ATINER).

A full conference program can be found before the relevant abstracts. In accordance with ATINER's Publication Policy, the papers presented during this conference will be considered for inclusion in one of ATINER's many publications only after a blind peer review process.

The purpose of this abstract book is to provide members of ATINER and other academics around the world with a resource through which they can discover colleagues and additional research relevant to their own work. This purpose is in congruence with the overall mission of the association. ATINER was established in 1995 as an independent academic organization with the mission to become a forum where academics and researchers from all over the world can meet to exchange ideas on their research and consider the future developments of their fields of study.

To facilitate the communication, a new references section includes all the abstract books published as part of this conference (Table 1). I invite the readers to access these abstract books –these are available for free– and compare how the themes of the conference have evolved over the years. According to ATINER's mission, the presenters in these conferences are coming from many different countries, presenting various topics.

**Table 1.** *Publication of Books of Abstracts of Proceedings, 2010-2023*

Year	Papers	Countries	References
2023	73	26	Thompson and Gkounta (2023)
2022	55	30	<a href="#">Thompson and Gkounta (2022)</a>
2021	38	19	<a href="#">Papanikos (2021)</a>
2020	44	25	<a href="#">Papanikos (2020)</a>
2019	93	33	<a href="#">Papanikos (2019)</a>
2018	83	33	<a href="#">Papanikos (2018)</a>
2017	18	17	<a href="#">Papanikos (2017)</a>
2016	22	17	<a href="#">Papanikos (2016)</a>
2015	30	18	<a href="#">Papanikos (2015)</a>
2014	25	16	<a href="#">Papanikos (2014)</a>
2013	54	33	<a href="#">Papanikos (2013)</a>
2012	52	29	<a href="#">Papanikos (2012)</a>
2011	84	30	<a href="#">Papanikos (2011)</a>
2010	82	30	<a href="#">Papanikos (2010)</a>

It is our hope that through ATINER's conferences and publications, Athens will become a place where academics and researchers from all over the world can regularly meet to discuss the developments of their disciplines and present their work. Since 1995, ATINER has organized more than 400 international conferences and has published over 200 books. Academically, the institute is organized into 6 divisions and 37 units. Each unit organizes at least one annual conference and undertakes various small and large research projects.

For each of these events, the involvement of multiple parties is crucial. I would like to thank all the participants, the members of the organizing and academic committees, and most importantly the administration staff of ATINER for putting this conference and its subsequent publications together.

**Gregory T. Papanikos**  
**President**

## **Editors' Note**

These abstracts provide a vital means to the dissemination of scholarly inquiry in the field of Economics. The breadth and depth of research approaches and topics represented in this book underscores the diversity of the symposium.

ATINER's mission is to bring together academics from all corners of the world in order to engage with each other, brainstorm, exchange ideas, be inspired by one another, and once they are back in their institutions and countries to implement what they have acquired. The *18th Annual International Symposium on Economic Theory, Policy & Application* accomplished this goal by bringing together academics and scholars from 26 different countries (Algeria, Australia, Canada, China, Colombia, Finland, France, Georgia, Germany, Hungary, India, Israel, Japan, Kenya, Kuwait, Pakistan, Poland, Portugal, Romania, Saudi Arabia, South Africa, Spain, Türkiye, UAE, UK, USA), which brought in the symposium the perspectives of many different country approaches and realities in the field.

Publishing this book can help that spirit of engaged scholarship continue into the future. With our joint efforts, the next editions of this symposium will be even better. We hope that this abstract book as a whole will be both of interest and of value to the reading audience. May it be a stimulus for further research and the progress of the discipline.

**Henry Thompson & Olga Gkounta**  
**Editors**

**18<sup>th</sup> Annual International Symposium on Economic Theory,  
Policy & Application, 26-29 June 2023, Athens, Greece**

**Organizing & Scientific Committee**

All ATINER's conferences are organized by the Academic Council. This conference has been organized with the assistance of the following academic members of ATINER, who contributed by reviewing the submitted abstracts and papers.

1. Gregory T. Papanikos, President, ATINER & Honorary Professor, University of Stirling, U.K.
2. Christos Sakellariou, Vice President of Finance, ATINER & Associate Professor of Economics, Nanyang Technological University, Singapore.
3. Henry Thompson, Head, Economics Unit, ATINER & Emeritus Professor, Auburn University, USA.

## FINAL CONFERENCE PROGRAM

**18<sup>th</sup> Annual International Symposium on Economic Theory, Policy & Application, 26-29 June 2023, Athens, Greece**

### PROGRAM

Monday 26 June 2023

08.30-09.30  
Registration

09:30-10:00  
Opening and Welcoming Remarks:

- Gregory T. Papanikos, President, ATINER.

10:00-11:30 Session 1

<p><b>Session 1a</b> <b>Moderator: Gregory T. Papanikos</b>, President of ATINER</p>	<p><b>Session 1b</b> <b>Moderator: Mehmet Gençer</b>, Professor, Izmir University of Economics, Turkiye.</p>	<p><b>Session 1c</b> <b>Moderator: Timothy M. Young</b>, Emeritus Professor, The University of Tennessee, USA &amp; CEO and President, T.M. Young Institute, LLC, USA.</p>
<ol style="list-style-type: none"> <li>1. <b>Ioannis Kallianiotis</b>, Professor, University of Scranton, USA. <i>Title: Exchange Rate Forecasting: The Fundamental Forecasting Model.</i></li> <li>2. <b>Mohsen Javdani</b>, Associate Professor, Simon Fraser University, Canada. <i>Title: Economics Students and Ideological Bias: Evidence from a Randomized Controlled Experiment.</i></li> <li>3. <b>Nafisa Vaz</b>, Research Associate, Goa Institute of Management, India. <i>Title: Social Media Marketing in Hospitals: Ethical Considerations during a Pandemic.</i></li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Mahmood Hussain</b>, Professor, San Francisco State University, USA. <i>Title: From Financial Socialization to Independent Decision: A Cross-Cultural Study of US Millennials' Financial Behavior.</i></li> <li>2. <b>Frédéric Jallat</b>, Professor, ESCP Business School, France. <i>Title: Evaluating Standardization of Marketing Operations &amp; Performance.</i></li> <li>3. <b>Mihai-Florin Bacila</b>, Associate professor, Babes-Bolyai University, Romania. <i>Title: Enhancing the RFM Based Segmentation for Telecommunications Companies.</i></li> <li>4. <b>Juan Carlos Chica Mesa</b>, Associate Professor, National University of Colombia, Colombia . <b>Manuela Salazar Garcia</b>, Student, National</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Codruta Stoica</b>, Professor, Aurel Vlaicu University of Arad, Romania. <i>Title: Advances in the Study of Integral Type Properties.</i></li> <li>2. <b>Victor Oxman</b>, Professor, Western Galilee College, Israel. <i>Title: Using Hint Buttons in GeoGebra applets when teaching Geometric Proofs.</i></li> <li>3. <b>Khalid Mohammed Alkhuzaim</b>, Professor, Imam Mohammad ibn Saud Islamic University (IMSIU), Saudi Arabia. <b>Thamer Ali Alwahbi</b>, Teacher, Riyadh, Kingdom of Saudi Arabia Ministry of Education, Saudi Arabia. <i>Title: The Availability Level of the Aesthetic Approach in Mathematics Textbooks for the Higher Grades at the Primary Stage in Saudi Arabia.</i></li> <li>4. <b>Barbara Barańska</b>, Associate Professor,</li> </ol>
<p><b>Discussion</b></p>		

	<p>University of Colombia, Colombia. <i>Title: Concentration and Attention in Games Applied to Education Project.</i></p> <p>5. <b>Paul Davidson</b>, Associate Professor, Queensland University of Technology, Australia. <i>Title: Managing Trust and New Technology: Lesons from the History of Military Decision Making.</i></p>	<p>Pedagogical University of Cracow, Poland. <b>Malgorzata Zambrowska</b>, Associate Professor, The Maria Grzegorzewska University of Warsaw, Poland. <i>Title: No Teacher (Should Be) Left Behind: Teaching Mathematics as a Second Subject – Educational Challenges for Teacher Training Programs.</i></p>
	<b>Discussion</b>	<b>Discussion</b>

11:30-13:00 Session 2

Session 2a Moderator: <b>Ioannis Kallianiotis</b> , Professor, University of Scranton, USA.	Session 2b Moderator: <b>Mahmood Hussain</b> , Professor, San Francisco State University, USA.	Session 2c Moderator: <b>Codruta Stoica</b> , Professor, Aurel Vlaicu University of Arad, Romania.
<p>1. <b>Seyit Mümin Cilasum</b>, Professor, TED University, Turkiye. <i>Title: Propagation of Immigration Shocks through Firm to Firm Trade Networks.</i></p> <p>2. <b>Jorg Jasper Dotsch</b>, Associate Professor, Andrassy University Budapest, Hungary &amp; Tamas Ginter, PhD Student, Andrassy University Budapest, Hungary. <i>Title: Increasing the Complexity of Currency Competition in the Digital Age. Considerations on the Extension of Money Functions.</i></p> <p>3. <b>Eylem Gevrek</b>, Assistant Professor, Catolica Porto Business School, Portugal. <i>Title: What Explains the Gender Gap in Gender Role Attitudes? Evidence on Intergenerational Transmission of Gender Social Norms among</i></p>	<p>1. <b>André Leroux</b>, Professor, University of Poitiers, France. <b>Thomas Stenger</b>, Full Professor, University of Poitiers, France. <i>Title: A Typology of Social Media: A Quantitative Approach Based on Consumers Use.</i></p> <p>2. <b>Tianjiao Qiu</b>, Professor, California State University, USA. <i>Title: Entrepreneurial Knowledge and Country Risks on Entrepreneurial Market Expansion.</i></p> <p>3. <b>Mehmet Gençer</b>, Professor, Izmir University of Economics, Turkiye. <i>Title: Data Literacy in Business Curriculum: A Case Study of Student Reception and Success Factors.</i></p> <p>4. <b>Jamal Maalouf</b>, Assistant Professor, American University of Sharjah, UAE. <i>Title: Perpetual Crisis and</i></p>	<p>1. <b>Timothy M. Young</b>, Emeritus Professor, The University of Tennessee, USA &amp; CEO and President, T.M. Young Institute, LLC, USA. <b>Ampalavanar Nanthakumar</b>, Professor, State University of New York at Oswego, USA. <i>Title: On the Use of Copula for Quality Control based on an AR(2) Model.</i></p> <p>2. <b>Ampalavanar Nanthakumar</b>, Professor, State University of New York at Oswego, USA. <i>Title: A Copula based Investigation about the Effect of the Sample Size on the Range Distribution.</i></p> <p>3. <b>Philippe Rychelynck</b>, Associate Professor, University of Littoral-Côte-d'Opale, France. <i>Title: On Regular Arrangements of Lines in the Plane.</i></p> <p>4. <b>Mihai Halic</b>, Associate Professor, Gulf University for Science</p>



<p><i>Immigrants.</i></p> <p>4. <b>Konstantinos Spanos</b>, Lecturer, Oxford Brookes University, UK. <i>Title: Dynamic Instability and Solvency Condition of Public Debt within a Panel of Euro Area Countries.</i></p> <hr/> <p><b>Discussion</b></p>	<p><i>Small Business Survival: SME Experiences and Strategies from Beirut, Lebanon..</i></p> <hr/> <p><b>Discussion</b></p>	<p>and Technology, Kuwait. <i>Title: Classical and modern applications of Linear Algebra in Mathematics and Science.</i></p> <hr/> <p><b>Discussion</b></p>
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13:00-15:00 Session 3

<p><b>Session 3a</b> <b>Moderator: Mohsen Javdani</b>, Associate Professor, Simon Fraser University, Canada.</p>	<p><b>Session 3b</b> <b>Moderator: Berna Bridge</b>, Lecturer, Oxford International Study Centre, UK.</p>
<ol style="list-style-type: none"> <li><b>Ainara Rodriguez-Sanchez</b>, Professor, UNED-National Distance Education University, Spain. <b>Román Salmeron-Gomez</b>, Professor, University of Granada, Spain. <b>Catalina Garcia-Garcia</b>, Professor, University of Granada, Spain. <i>Title: Multicollinearity Problem in Economic Models with Panel Data.</i></li> <li><b>Claudia Garcia-Garcia</b>, Assistant Professor, University of Madrid, Spain. <b>Catalina B. Garcia-Garcia</b>, Full Professor, University of Granada, Spain. <b>Román Salmeron-Gomez</b>, Full Professor, University of Granada, Spain. <i>Title: Interactions in Environmental Studies: A New Approach for Mitigating Potential Multicollinearity.</i></li> <li><b>Christina Anderl</b>, Senior Lecturer, London South Bank University, UK. <i>Title: Forecasting Inflation with a Zero Lower Bound and Negative Interest Rates: Evidence from Point and Density Forecasts.</i></li> <li><b>Leonard Grebe</b>, Research Assistant, Technical University of Darmstadt, Germany. <i>Title: Uncertainty Structure Hypothesis – Seasonal Patterns in</i></li> </ol>	<ol style="list-style-type: none"> <li><b>Simona Stan</b>, Professor, University of Montana, USA. <b>Liviu Rosca</b>, Professor, Lucian Blaga University of Sibiu, Romania. <i>Title: Effectiveness of High-Impact Study-Abroad Programs: A USA-Romania Case Study.</i></li> <li><b>Nadia Jimenez</b>, Associate Professor, University of Burgos, Spain&gt; <b>Sonia San Martín</b>, Full Professor, University of Burgos, Spain. <b>Paula Rodriguez-Torrico</b>, Assistant Professor, University of Burgos, Spain. <b>Francisco Liebana-Cabanillas</b>, Full Professor, University of Granada, Spain. <b>Cristina Torrego</b>, Student, University of Burgos, Spain. <i>Title: Consumer Perception of Metaverse Experience.</i></li> <li><b>Sami Kajalo</b>, Senior Lecturer, Aalto University, Finland. <i>Title: A Psychological Inquiry into Consumers’ Motivations to Participate in the Sharing Economy.</i></li> <li><b>Raluca Ciornea</b>, Lecturer, Babes-Bolyai University, Romania. <i>Title: Influence of Horizontal Downward Extension over the Luxury Parent Brands: Fragrances as Extensions of Luxury Fashion Brands</i></li> <li><b>Batuhan Cullu</b>, PhD Student, Dokuz Eylul University and Research Assistant, Aydın Adnan Menderes University, Tyrkey. <b>Gamze Arabelen</b>, Assistant Professor, Dokuz Eylul University, Turkiye. <i>Title: What Cruise Passengers Talk About? A Text Mining Approach to Explore Topics from Online Narratives.</i></li> </ol> <hr/> <p><b>Discussion</b></p>

<p><i>Uncertain Times at the Stock Market?</i></p> <hr/> <p><b>Discussion</b></p> <p><b>15:00-16:00 Discussion + Lunch</b></p>	
<p><b>16:00-18:00 Session 4</b>  <b>Moderator: Raluca Ciornea</b>, Lecturer, Babes-Bolyai University, Romania.</p>	
<ol style="list-style-type: none"> <li><b>Arthur Pantelides</b>, Associate Professor, Virginia Wesleyan University, USA. <i>Title: Utilization of the SOT Hierarchical Framework for Successful Strategic Implementation Management.</i></li> <li><b>Siphiwe Dlamini</b>, Senior Lecturer, University of Cape Town, South Africa. <i>Title: The Influence of Consumption Values on the Purchase Intention of Fast Fashion in South Africa.</i></li> <li><b>Berna Bridge</b>, Lecturer, Oxford International Study Centre, UK. <i>Title: Is Collegiality an Attainable Ideal in the Turkish Culture?</i></li> <li><b>Lihang Liu</b>, PhD Student, Shanghai International Studies University, China.  <b>Zheng Fan</b>, Professor, Shanghai International Studies University, China.  <b>Peihua Fan</b>, Associate Professor, Shanghai International Studies University, China.  <i>Title: How does Cultural Distance affect Chinese Companies' Outward Foreign Investment? Evidence from the Belt and Road.</i></li> <li><b>Ceren Koksal</b>, Master Student, Istanbul University-Cerrahpasa, Turkiye.  <b>Eda Yilmaz Alarcin</b>, Associate Professor, Istanbul University-Cerrahpasa, Turkiye.  <i>Title: The Effects of Cultural Values on Word-of-Mouth Marketing in Health Services.</i></li> </ol> <hr/> <p><b>Discussion</b></p>	
<p><b>18:00-20:00 Session 5</b>  <b>Moderator: Olga Gkounta</b>, Researcher, ATINER.</p>	
<ol style="list-style-type: none"> <li><b>Warveni Jap</b>, Assitant Professor, Thompson Rivers University, Canada. <i>Title: China's BRI: Modern Global Connectivity, Prosperity, and Harmony.</i></li> <li><b>Kenneth Chau</b>, Associate Professor, University of British Columbia, Canada.  <b>Bushra Usman</b>, Associate Professor, Forman Christian College (A Chartered University), Pakistan.  <i>Title: Green Venturing: What to Learn.</i></li> <li><b>Yohann Mauger</b>, Assistant Professor, Jing Liu, Assistant Professor, USA.  <b>Richard Gilson</b>, Associate Professor, Northern Kentucky University, USA.  <b>Denise Luethge</b>, Professor, Northern Kentucky University, USA.  <i>Title: A Minimum Viable Product Approach for Innovation and New Program Launch in Business Education.</i></li> </ol> <hr/> <p><b>Discussion</b></p>	
<p><b>20:00-22:00</b>  <b>Athenian Early Evening Symposium (includes in order of appearance: continuous academic discussions, dinner, wine/water, music and dance)</b></p>	
<p><b>Tuesday 27 June 2023</b></p>	
<p><b>Session 6</b></p>	
<p><b>09:30-11:30 Session 6a</b>  <b>Moderator: Mr. Kostas Spyropoulos</b> (ATINER Administration)</p>	<p><b>08:00-10:30 Session 6b</b>  <b>Old and New-An Educational Urban Walk</b></p>

<ol style="list-style-type: none"> <li>1. <b>Hiroshi Onishi</b>, Associate Professor, Chuo University, Japan. <i>Title: Does Deregulation of Health Claims on Functional Food Package Design Change Consumers' Purchase Behaviors?</i></li> <li>2. <b>Sergio Valdelomar-Munoz</b>, PhD Student, University of Jaen, Spain . <b>Elisa Garrido-Castro</b>, Assistant Professor, University of Jaen, Spain. <b>Eva María Murgado-Armenteros</b>, Associate Professor, University of Jaen, Spain. <i>Title: Biodiversity as a Term for Improving Environmental Awareness: An Exploratory Analysis.</i></li> <li>3. <b>Cansu Yildirim</b>, Assistant Professor, Dokuz Eylül University, Türkiye. <i>Title: The Effect of Failure and Stability on Satisfaction, Negative WOM and Repurchase Intention: Insights from an Online Retailer's Service Failure.</i></li> <li>4. <b>Florence Dzame</b>, Researcher, United States International University Africa, Kenya. <i>Title: A Study of Gender-based Institutional Barriers to Progression into Leadership Roles for Women Journalists in Kenya.</i></li> </ol>	<p>The urban walk ticket is not included as part of your registration fee. It includes transportation costs and the cost to enter the Parthenon and the other monuments on the Acropolis Hill. The urban walk tour includes the broader area of Athens. Among other sites, it includes: Zappion, Syntagma Square, Temple of Olympian Zeus, Ancient Roman Agora and on Acropolis Hill: the Propylaea, the Temple of Athena Nike, the Erechtheion, and the Parthenon. The program of the tour may be adjusted, if there is a need beyond our control. This is a private event organized by ATINER exclusively for the conference participants.</p>
<b>Discussion</b>	

<b>11:30-13:00 Session 7</b>	
<p><b>Session 7a</b> <b>Moderator: Laure Lavorata</b>, Professor, University of Reims Champagne Ardenne, France.</p>	<p><b>Session 7b</b> <b>Moderator: Philippe Rychelynck</b>, Associate Professor, University of Littoral-Côte-d'Opale, France.</p>
<ol style="list-style-type: none"> <li>1. <b>J. Stagliano</b>, Professor, Saint Joseph's University, USA. <i>Title: Did Firms with "Lean" Management Fare Better than Others in the COVID-19 Pandemic? Some Recent Empirical Evidence on Profitability.</i></li> <li>2. <b>Andreia Vitória</b>, Assistant Professor, University of Aveiro, Portugal. <b>Carolina Carlos</b>, PhD Student, University of Aveiro, Portugal. <i>Title: The Impact of Servant Leadership Perceptions on Employees' Job Burnout Levels.</i></li> <li>3. <b>Nanda Kumar</b>, Professor, The University of Texas, USA. <b>Parneet Pahwa</b>, Clinical Assistant Professor, The University of Texas at Dallas, USA. <b>B.P.S. Murthi</b>, Professor, The University of Texas at Dallas, USA. <i>Title: Modelling Heterogeneity in Choice Models, Household Level Heterogeneity in Reference Price Effects: Should National Brands Care?</i></li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Getachew Dagne</b>, Professor, University of South Florida, USA. <i>Title: Piecewise Regression Mixture Models with Skewness.</i></li> <li>2. <b>Sibel Atan</b>, Professor, Ankara Hacı Bayram Veli University, Türkiye. <b>Murat Atan</b>, Professor, Ankara Hacı Bayram Veli University, Türkiye. <b>Şahika Gökmen</b>, Assistant Professor, Ankara Hacı Bayram Veli University, Türkiye. <i>Title: Examination of Internal Migration in Turkey by Markov Method.</i></li> <li>3. <b>Sahika Gokmen</b>, Assistant Professor, Ankara Hacı Bayram Veli University, Türkiye. <i>Title: Ranking of Countries According to the Index of Economic Freedom with Multi-Criteria Decision-Making Methods.</i></li> <li>4. <b>Tea Shavadze</b>, Scientist, Ilia Vekua Institute of Applied Mathematics (VIAM) of Ivane Javakhishvili Tbilisi State University, Georgia.</li> </ol>
<b>Discussion</b>	

	<p><i>Title: On the representation of a solution for the Perturbed Quasi-Linear Controlled Neutral Functional Differential Equation.</i></p> <hr/> <p><b>Discussion</b></p>
<p><b>13:00-15:00 Session 8</b></p>	
<p><b>Session 8a</b> <b>Moderator: Mihai-Florin Bacila</b>, Associate professor, Babes-Bolyai University, Romania.</p>	<p><b>Session 8b</b> <b>Moderator: Getachew Dagne</b>, Professor, University of South Florida, USA.</p>
<ol style="list-style-type: none"> <li>1. <b>Laure Lavorata</b>, Professor, University of Reims Champagne Ardenne, France. <b>Yohan Gicquel</b>, Assistant Professor, University of Reims Champagne Ardenne, France. <i>Title: Champaign's Brands and CSR: What is the Consumer's Perception? What Issues?</i></li> <li>2. <b>Tatiana Zalan</b>, Associate Professor, American University in Dubai, UAE. <b>Elissar Toufaily</b>, Associate Professor, American University in Dubai, UAE. <i>Title: How Consumers Value NFTs in a Nascent Market.</i></li> <li>3. <b>Adel Sakr</b>, Assistant Professor, Webster University Athens, Greece. <i>Title: A Content Analysis of Visual Metaphor in Print Advertising.</i></li> <li>4. <b>Oksana Domina</b>, Researcher, University of Helsinki, Finland. <i>Title: Modern Stage of Marketing Development in Ukraine.</i></li> <li>5. <b>Adnane Alaoui</b>, Senior Lecturer, Liverpool John Moores University, UK. <b>Natalia Guilluy-Sulikashvili</b>, Associate Professor, Lille Catholic University, France. <i>Title: Does Word-Of-Mouth's Weight Differ between Countries? A Comparative Study of China, England and Russia.</i></li> <li>6. <b>Khaled Aboulnasr</b>, Chair &amp; Associate Professor, Florida Gulf Coast University, USA. <i>Title: Brand Activism Backlash: The Role of Social Identity Threat and Negative Emotions.</i></li> </ol> <hr/> <p><b>Discussion</b></p>	<ol style="list-style-type: none"> <li>1. <b>Norman Sedgley</b>, Professor, Loyola University Maryland, USA. <i>Title: The Skilled Worker Premium and Labor's Share of Income: Recent Trends in US Manufacturing.</i></li> <li>2. <b>Xinyu Hou</b>, Researcher, University of Cambridge, UK. <b>Philip Dybvig</b>, Professor, Washington University in St. Louis, USA. <i>Title: Gambling for Redemption or Ripoff, and the Impact of Superpriority.</i></li> <li>3. <b>Masayuki Yao</b>, Lecturer, Hakuoh University, Japan. <i>Title: The Envelope Theorem for Optimization Problems with Composite Modeling Structure.</i></li> <li>4. <b>Alessandro Ganoulis</b>, PhD Student, The University of Law, UK. <i>Title: Decoy Effects from memory and Loss Aversion.</i></li> <li>5. <b>Jan Peter Wogart</b>, Research Fellow, German Institute For Global And Area Studies, Germany. <i>Title: Highs and Lows of Brazilian Developmentalism in The 20th and 21st Centuries.</i></li> </ol> <hr/> <p><b>Discussion</b></p>
<p><b>15:00-16:00 Discussion + Lunch</b></p>	
<p><b>16:00-17:30 Session 8</b> <b>Moderator: Olga Gkounta</b>, Researcher, ATINER.</p>	
<ol style="list-style-type: none"> <li>1. <b>Akira Shimada</b>, Associate Professor, Nagasaki University, Japan. <i>Title: Study Migrants' Skilled Human Capital Formation under Deregulated Immigration Policies</i></li> </ol>	

*in an Overlapping Generations Economy.*

2. **Lina Vyas**, Associate Professor, The Education University of Hong Kong, China.  
*Title: Hong Kong Civil Service Work from Home Arrangement and Work-Life Balance: The Policy Responses to the Pandemic.*
3. **Demetra Arsalidou**, Associate Professor, Cardiff University, UK.  
*Title: Bonus Caps, Deferrals and Clawbacks: A Banking Regulation Quandary.*
4. **Dihya Hesas**, PhD Student, University of Mouloud Mammeri, Algeria.  
*Title: Change Management in the Face of ICT Integration within Organizations.*
5. **Ryszard Wojnar**, Researcher, Institute of Fundamental Technological Research PAS, Poland.  
**Jolanta Wołowicz**, Researcher, Institute of Fundamental Technological Research PAS, Poland.  
**Andrzej Lissowski**, Researcher, Institute of Fundamental Technological Research PAS, Poland.  
*Title: Why Colouring? Voronoi Tessalation and Crystallization.*

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**Discussion**

**17:30-19:00 Session 9**

**Moderator: Olga Gkounta**, Researcher, ATINER.

1. **Jorge Cerdeira**, Assistant Professor, University of Porto, Portugal.  
*Title: FDI Determinants in Developing Countries: A Firm-Level Analysis.*
2. **José-Manuel Giménez-Gómez**, Professor, University of Rovira i Virgili, Spain.  
*Title: Allocating Remaining Carbon Budgets and Mitigation Costs.*
3. **Daniel Gomez Abella**, Lecturer, University of La Sabana, Colombia.  
*Title: Ex-post Evaluation of RTAs of Colombia: A Partial Analysis with Structural Gravity Model.*
4. **Xiao Han**, Lecturer, University of Toronto, Canada.  
**Dusiyang Jin**, Student, White Oaks Secondary School, Canada.  
*Title: Contamination in Drinking Water Environment and the Associated Public Health Risk from Mining Discharge Pollution: A Comparative Study Chile, China and US.*
5. **Konstantinos Giannakas**, Professor, University of Nebraska-Lincoln, USA.  
**Ahmed Chennak**, Researcher, University of Nebraska-Lincoln, USA.  
*Title: The Role of Cooperatives in Innovation Licensing.*

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**Discussion**

**19:00-20:30**

**Ancient Athenian Dinner** (includes in order of appearance: continuous academic discussions, dinner with recipes from ancient Athens, wine/water)

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**Wednesday 28 June 2023**  
**An Educational Visit to Selected Islands**  
or  
**Mycenae Visit**

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**Thursday 29 June 2023**  
**Visiting the Oracle of Delphi**

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**Friday 30 June 2023**  
**Visiting the Ancient Corinth and Cape Sounio**

**Khaled Aboulnasr**

Chair & Associate Professor, Florida Gulf Coast University, USA

&

**Gina Tran**

Associate Professor, Florida Gulf Coast University, USA

## **Brand Activism Backlash: The Role of Social Identity Threat and Negative Emotions**

Brand activism is an increasingly popular approach for companies to signal their commitment to specific causes often through aligning themselves with partisan social and political issues (Bhagwat et al. 2020; Kotler & Sarkar, 2017). Brand activism is distinct from corporate social responsibility or cause related marketing because it often deals with controversial and polarizing social issues (Mukherjee & Althuizen, 2020). This description aligns with Bhagwat et al.'s (2020) characterization of "sociopolitical activism" as one that will involve stakeholders such as consumers who support preserving the current state of affairs as well as those who seek to bring about change (Moorman, 2020). While brand activism may foster deeper ties with customers who hold similar beliefs and values, it can also result in pushback and draw criticism from those who hold opposing views or disagree with the brand's stance. We refer to this phenomenon as brand activism backlash (Mirzaei, Wilkie & Siuki, 2022).

Despite the growing importance of brand activism in modern day marketing, there is a dearth of research on how this process works and the underlying mechanism behind it. Specifically, there is a lack of understanding about how brand activism impacts consumer response including its impact on consumer attitudes, emotions and behavior. In order to gain a better understanding of the potential advantages and drawbacks of brand activism, it is crucial to explore the underlying mechanism with which it influence how consumers react to these types of brand initiatives. In the present study, we use a social identity framework to explore the negative consequences of brand activism and how it can lead to backlash. Social identity theory proposes that an individual's sense of self is determined by their belonging to social groups or categories, which may include nationality, religious, social or political affiliations, and other similar associations (Nason, Bacq & Gras, 2018). The authors posit that brand activism could be interpreted as a form of hostility toward consumers holding opposing social and political views, which in turn gives rise to a social identity threat. This perceived threat leads to the generation of negative emotions including

anger, fear and resentment which can ultimately shape consumers' retaliatory behavior in the form of brand boycotts and negative word of mouth.

**Adnane Alaoui**

Senior Lecturer, Liverpool John Moores University, UK

&

**Natalia Guilluy-Sulikashvili**

Associate Professor, Lille Catholic University, France

## **Does Word-of-Mouth's Weight Differ between Countries? A Comparative Study of China, England and Russia**

**Purpose** - The aim of this paper is to investigate whether certain Word-Of-Mouth (WOM) actions and beliefs would vary among consumers from different countries, namely with respect to the *Frequency* and *likelihood* of *sharing* a shopping experience via WOM, with respect to *Word-of-Mouth's effect* on consumer choices, and with respect to *Credibility* of different sources of information relative to WOM. To help locate and illustrate the potential differences set forth, China, England and Russia were selected given their distance from each other and/or for their cultural divergence.

**Design/methodology/approach** - The hypotheses to be investigated were generated from the literature, and then were used to define the fourteen independent variables considered in this study, which will be simmered down to the following three factors, through *Factor Analysis*: 1) *Frequency* and *likelihood* of *sharing* a shopping experience via WOM (when satisfied, dissatisfied, or delighted); 2) *Credibility* of different sources of information (WOM, Advertising, and the News); and 3) *Word-of-Mouth's effect* on consumer choices (*Where*, *What*, and *How Much* to buy of a product/brand). To examine the potential effect a "Consumer's Background" (represented by the respondent's country of origin) may have on these constructs, a Structural Equations Modelling (SEM) was conducted, and these same factors were used as latent variables to build a Structural Model. Finally, and in order to go into more depth, all fourteen independent variables that fall under each of the factors stated above were integrated into a *Discriminant-Analysis*, to help scrutinize how WOM-related practices and beliefs depicted by each of these independent variables, could differ between countries.

**Findings** -The results revealed that "Consumer's Background" had a significance relationship with each of the constructs stated above, namely 1) The *frequency* and *likelihood* of *sharing* a shopping experience via WOM; 2) The *credibility* of different sources of information; and 3) *Word-of-Mouth's effect* on consumer choices. These results are confirmed more specifically through the results of the *Discriminant-Analysis* that



points to how WOM related practices and believes, measured by each of the fourteen independent variables, differed between countries, namely China, England and Russia.

**Research Implications** - The findings of this paper advise marketers on whether to standardize their reliance on WOM to support their brands in different countries, or to adapt the extent and manner of WOM usage to each specific country.

**Originality/value** - This paper not only investigates the effect of WOM on different consumer choices, but also inspects the likelihood of using WOM following different levels of shopping experiences' satisfaction, and how these actions could diverge between consumers from diverse countries.

**Christina Anderl**

Senior Lecturer, London South Bank University, UK

## **Forecasting Inflation with a Zero Lower Bound and Negative Interest Rates: Evidence from Point and Density Forecasts**

This paper investigates the predictive power of the shadow rate for the inflation rate in countries with a zero lower bound (the US, the UK and Canada) and in those with negative rates (Japan, the Euro Area and Switzerland). Using shadow rates obtained from two different models (the Wu-Xia (2016) and the Krippner (2015a) ones) and for different lower bound parameters we compare the out-of-sample forecasting performance of an inflation model including a shadow rate with a benchmark one excluding it. Both specifications are estimated by OLS (Ordinary Least Squares) and includes a range of macroeconomic factors computed by means of principal component analysis. Both point and density forecasts of the inflation rate are evaluated. The models including the shadow rate are found to outperform the benchmark ones according to both sets of criteria except in countries operating an official inflation targeting regime. Both types of shadow rates appear to produce equally accurate out-of-sample inflation forecasts.

**Demetra Arsalidou**

Associate Professor, Cardiff University, UK

## **Bonus Caps, Deferrals and Clawbacks: A Banking Regulation Quandary**

The way bankers are remunerated has been a controversial subject for some time, made worse since the Global Financial Crisis of 2007-08. A direct consequence of the financial crisis of 2008, the Capital Requirements Directive (EU Directive 2013/36/EU) (“CRD”) was adopted in 2013 (following a subsequently withdrawn legal challenge from the UK Government). The UK implemented the bonus cap rules in the ‘Remuneration’ and ‘Remuneration Code’ parts of the PRA Rulebook and FCA Handbook, respectively. The bonus cap (more accurately described as a limit on the ratio of a bonus to fixed pay) applies to UK banks, building societies and designated investment firms, and is set out in PRA and FCA rules. Its effect is to limit an employee’s bonus so that it does not exceed 100% of their fixed annual pay or, provided there is shareholder approval, 200%. Nonetheless, the UK government plans step toward more financial deregulation by removing the cap on bankers' bonuses. It is believed that this will entice global banks to create jobs, invest and pay taxes in London (rather than show a preference for other strong markets such as New York, Frankfurt and Paris). Pay in bonuses, the PRA suggests, brings into line the incentives of individuals with those of the bank; this, in turn, helps the UK economy to grow. The Bank of England, which also supports the removal the bonus cap, supports the use of other, more effective tools for ensuring bankers take proper account of risks (such as the Senior Managers Regime and remuneration rules requiring deferral of bonus payments). For others however, bonus restrictions make a lot of sense. Bonuses, it is said, stimulate excessive risk-taking and focus on short-term profit; a cap on bonuses can augment financial stability.

There are a number of sticky issues that must be understood on the implementation of bonus restrictions. This paper considers whether constraints on bonus payments, such as bonus cap and malus, influence executives’ choices of risk and make a positive contribution to the remuneration debate. We will look at the debate around this issue. The analysis aims to answer two questions. First, is the bonus cap the right policy or is the idea underpinning it, misguided? Second, in considering bonus restrictions, are there other, more efficient means of controlling risk-taking?

**Sibel Atan**

Professor, Ankara Hacı Bayram Veli University, Türkiye

**Murat Atan**

Professor, Ankara Hacı Bayram Veli University, Türkiye

&

**Şahika Gökmen**

Assistant Professor, Ankara Hacı Bayram Veli University, Türkiye

## **Examination of Internal Migration in Turkey by Markov Method**

There are economic, social differences and development between different geographical regions within the country. In the simplest way, migration can be defined as the displacement of the population between geographical regions. However, due to the consequences of migration, the society's social, economic, cultural, psychological, political and so on. It is an important concept that affects its structure. Migration movements are examined in two parts as internal and external migration. Internal migration is the movement of people living within the borders of the country from one part of the country to another for the purpose of working and settling. In other words, the difference between the place of birth of any population and the place of last residence indicates the "domestic" migration of this population. It will be possible to minimize the negative effects that may occur on the society by analyzing the causes of internal migration within the country and creating measures to prevent migration accordingly. In this way, it will play an important role in minimizing all the negative effects of migration in both the internal migration and internal migration regions. In social studies on the causes of internal migration in Turkey, there are findings that men are in the majority in the migrating population and that migration is more towards regions with higher socio-advanced levels. In this study, using the 2021-2022 population information in the NUTS level 1 region classification in Turkey, how the internal migration will change on the basis of gender (female - male) and NUTS level 1 was calculated by the Markov method and policy recommendations were made in accordance with the results.

**Mihai-Florin Bacila**

Associate Professor, Babes-Bolyai University of Cluj Napoca, Romania

**Raluca Ciornea**

Lecturer, Babes-Bolyai University of Cluj Napoca, Romania

**Alexandra Maria Drule**

Associate Professor, Babes-Bolyai University of Cluj Napoca, Romania

&

**Luiza Maria Souca**

Lecturer, Babes-Bolyai University of Cluj Napoca, Romania

## **Enhancing the RFM Based Segmentation for Telecommunications Companies**

Relationship marketing is important in case of telecommunication companies to increase customer satisfaction, retention, and loyalty, to build strong and long-term relationships with their customers, to increase revenue, to gain competitive advantage and ultimately drive business growth. To achieve these objectives, companies must segment the market into customer groups, providing subscribers with personalized communications and services that closely match their needs. Segmentation has gained greater importance in relational marketing as its efficacy has increased with the advancement of marketing techniques through databases. The use of data-mining techniques has provided marketers with better tools to segment subscribers and develop personalized strategies. This article's novelty lies in the incorporation of a new variable, namely customer migration, into the RFM analysis resulting in an extension of the classic model. The addition of customer migration as a variable provided an opportunity to overcome some of the limitations of the RFM analysis and enhance the results. This variable enabled the identification of problematic clients within clusters exhibiting a favorable behavioral pattern, as well as identifying interesting customers within clusters displaying a less favorable behavioral pattern. In order to determine the behavioural patterns of prepaid customers, the segmentation used variables such as time elapsed between the most recent purchase and the present time (recency), the number of transactions that occurred within four months (frequency), the amount spent on recharging within four months (monetary value), and the increase or the decrease of total transaction value (customer migration). Mechanical observation was used to collect data from 1,319,029 mobile phone operator subscribers, k-means cluster analysis was utilized to identify user segments and the average sum of squares error was used to evaluate the internal cohesion of the clusters.

By utilizing the recency, frequency, monetary value and customer migration, the analysis classified the company's subscribers into different groups, revealing several distinct behavioural patterns. As a result, customers within these segments exhibit varying levels of loyalty towards the company, and it is recommended that different strategies be employed to engage them effectively.

**Barbara Barańska**

Associate Professor, Pedagogical University of Cracow, Poland

&

**Małgorzata Zambrowska**

Associate Professor, The Maria Grzegorzewska University of Warsaw,  
Poland

## **No Teacher (Should Be) Left Behind: Teaching Mathematics as a Second Subject – Educational Challenges for Teacher Training Programs**

The phenomenon known as ‘teaching-out-of-field’ refers to a situation when teachers are assigned subjects that they are not qualified to teach. The most common reason for such practices are shortages of adequately qualified teachers. In Poland, where there is a growing problem of teachers dropping their positions and graduates qualified as teachers choosing different career paths, a partial solution to this problem has been adopted. Various universities and educational centers collaborating with universities in Poland offer post-graduate studies for teachers that last at least three semesters and provide qualifications one needs to teach another subject. In the last decades it was not uncommon to meet teachers trained in one field who began teaching subjects from rather distant disciplines, e.g. physical education teachers or catechists who began teaching mathematics as a second subject. Since such teachers have received some training in mathematics, one can hardly say they are teaching out-of-field. On the other hand, however, it cannot be said that the preparation they obtained is the same as that of students taking full-cycle studies in mathematics, with specialization in mathematics teaching. We consider the teachers who complete post-graduate pedagogical studies qualifying for teaching mathematics as a second subject to be neither fully ‘in’, nor completely ‘out’ of the field.

In our talk we will present data collected among 185 teachers who completed post-graduate pedagogical studies giving them qualifications to teach mathematics as a second subject. Respondents were asked to evaluate the quality of the training at their studies, to indicate what knowledge and skills they had acquired during the studies, and also to provide examples showing what specific knowledge and competences, important in the course of teaching mathematics, they had still been lacking.

The collected data reveal some challenges of contemporary teacher education. There is an urgent need of crafting the teacher education

programs in such a way, that they could adequately address the real needs of teachers and provide them with substantive and pedagogical preparation that would leave no teacher behind.

*This work has been funded by the National Science Centre, Poland - grant number: 2018/31/N/HS6/03976.*



**Berna Bridge**

Lecturer, Oxford International Study Centre, UK

**Is Collegiality an Attainable Ideal in the Turkish Culture?**

A *Collegial approach* to leadership and management is increasingly being accepted as a desirable way in the management of universities and other organisations in the West, it can briefly be described as, 'Collegium designates a structure or structures in which members have equal authority to participate in decisions which are binding on each of them.' (Becher and Kogan)

This study attempts to investigate the extent to which the collegial/democratic model of leadership and management in Turkish organisations is used, and whether collegiality is suitable to the Turkish culture or not. In other words, the main question posed is: *is collegiality an attainable ideal in the Turkish culture?* It also hopes to bring collegiality into discussion among educational academics in Turkey, a country, which is changing rapidly.

While collegiality is advocated as a good model of leadership and management in the West, is it a good model of management throughout the world, in all cultures? This study examines elements of collegiality and culture together with a special regard to a culture's impact on leadership and management, to answer this question. With this aim, the study explores the extent to which collegiality is used in educational organisations in Western Turkey, in Izmir and Istanbul. It probes into the details of the question, 'How suitable is collegiality to the Turkish culture?' in these organisations. It also looks into the limitations/difficulties/imperfections of collegiality, gender, pure/restricted/contrived collegiality, notions related to collegiality such as distributed leadership and emotional intelligence. It analyses the key cultural dimensions originally put forth by Hofstede and improved upon by Dimmock and Walker.

The notion of collegiality in detail examines the following themes:

- Bureaucratic theories
- Collegial theories
- The main limitations/difficulties/imperfections of collegial theories
- Collegiality and gender
- Distributed leadership
- International perspectives on collegiality
- Collegiality, emotional intelligence and the intelligent school

- Pure versus restricted collegiality
- Contrived collegiality
- Conclusion: Is collegiality an attainable idea?

The notion of culture in detail examines the following themes:

- Hofstede's power distance dimension
- Hofstede's individualism and collectivism dimension
- Hofstede's masculinity and femininity dimension
- Hofstede's uncertainty avoidance dimension
- Hofstede's long term versus short term orientation dimension
- Dimmock and Walker's generative / replicative dimension
- Dimmock and Walker's limited relationship / holistic relationship dimension
- The GLOBE project
- Culture and Management
- Conclusion: Is Collegiality in the Turkish culture an attainable idea?

**Jorge Cerdeira**

Assistant Professor, University of Porto, Portugal

## **FDI Determinants in Developing Countries: A Firm-Level Analysis**

Foreign direct investment (FDI) has been an important driver of economic growth in developing countries. Between 2005 and 2017, FDI grew significantly in developing countries as the corresponding global growth rate of FDI inflows is around 32 percentage points higher than the world growth rate. The purpose of this paper is to analyze FDI determinants at the firm level in developing countries.

Using a sample of 96,826 firms from 125 countries between 2005 and 2017, we adopt a fractional probit regression with endogenous covariates, a more suitable estimation method for addressing the FDI variable. The micro-level results show that exports, investment, and human capital have a statistically positive impact on FDI inflows, while credit barriers and taxes have a negative effect. Also, market size and resources foster FDI, whereas inflation and environmental emissions lower foreign investment levels.

This study demonstrates that governments wishing to attract FDI should adopt a variety of policies, including the promotion of international trade and measures that boost investment and human capital in firms and ease the access to credit.

**Kenneth Chau**

Associate Professor, University of British Columbia, Canada  
&

**Bushra Usman**

Associate Professor, Forman Christian College (A Chartered  
University), Pakistan

## **Green Venturing: What to Learn**

Planet earth being our sole resort of existence, known till date, needs green sustainable ventures which, along with generating economic activities, may take care of this mother earth that feeds us, shelters us and offers us extensive but not endless resources. However, this is possible only if entrepreneurs and emerging entrepreneurs intend to adopt green venturing which in one way can be sprout from the entrepreneurship orientations offered through academic and training programs. Sustainability and green venturing are areas of interest for many researchers across the globe and it's interesting to know the impact of psychological capital, sustainability orientation, sustainability knowingness on building sustainable entrepreneurial attitude, recognizing sustainable entrepreneurial opportunity and developing the intentions for green ventures. The study will be conducted following pretest-post-test quasi experimental design. Data will be collected from students before and after the entrepreneurial education and training interventions. The study may have a contribution in the existing body of knowledge on the related aspects and on theory of planned behavior along with the implications for the entrepreneurial students' programs in sustainable development. This can prepare the responsible entrepreneurs who may help to heal planet earth rather than focusing on "green washing" and save it for the generations to come. Better equipped prospect entrepreneurs with greater green entrepreneurial intentions are sought by the era to resolve the problems faced by planet earth and address the socio-enviro-economic challenges. These conscious sustainable entrepreneurs will go beyond the enterprises limits and make positive contributions to social and ecological systems through examining the opportunities to bring into existence meet the needs of the present without compromising the needs of the future. The study has its contextual, social, economic, educational and environmental importance and relevance for the stakeholders

**Juan Carlos Chica Mesa**

Associate Professor, National University of Colombia, Colombia

**Juan Manuel Castano Molano**

Associate Professor, National University of Colombia, Colombia

**Manuela Salazar Garcia**

Student, National University of Colombia, Colombia

&

**Jacobo Rojas Londono**

Student, National University of Colombia, Colombia

## **Concentration and Attention in Games Applied to Education Project**

Video games have been present in the training and education of young people for at least the last 50 years, from its beginnings in arcade games such as Pacman, Bomberman, Pepsiman, Battlezone, Donkey Kong, Mario Kart, Space in vaders among others, through adventure games such as The Legend of Zelda, King`s Quest, Indiana Jones, Uncharted or Assassin`s Creed, to name a few.

The common denominator among all the video games mentioned above is that they have an immersive role in the person who uses them, since the player changes his daily reality for a fictitious reality presented in video game mode; it is then at this point when the C.A.G.E. for Education project raises the possibility of investigating, from the experiences of young players of Arcade type video games, their specific skills to maintain attention and concentration in various tasks of an educational nature.

The methodology of the project is experimental, where, thanks to the electroencephalography (E.E.G) equipment owned by the National University of Colombia, Manizales branch, and through the research group in Finance and Marketing, an investigation is proposed in which the subjects of study will be subjected to a stimulus with arcade video games in a controlled environment (soundproof chamber) and will undergo a series of tests of agility and mental dexterity while being monitored with the E.E.G Mindwave, through the Neuroexperimenter© version 6 software, which records and stores data of the brain activity of the group of students exposed in the framework of the present project.

We start from the hypothesis that video games do not contribute to develop better mental skills in young people who use them, showing low performance in educational processes, affecting attention and concentration.

The study should demonstrate how valid the hypothesis described above is and try to visualize what will be the performance trend in the test of the subjects under study, through statistical regression analysis.

In conclusion, this project is intended to obtain important findings with possible application in the educational environment of young people and it is expected to use these results as tools to help improve performance in activities that require attention and concentration.

**Seyit Mümin Cilasum**  
Professor, TED University, Türkiye

## **Propagation of Immigration Shocks through Firm to Firm Trade Networks**

This paper investigates the degree to which immigration shock to a region propagates through supply chains. This is the first paper that studies the propagation of labour supply shocks across regions through firm-to-firm trade. Using the unexpected arrival Syrian refugees densely concentrated in border regions of Turkey, we estimate how firms throughout the country are affected in terms of their sales, employment and productivity. We also estimate the effect of the shock on interprovincial trade focusing on trade volume and network formation. The results point to positive spillover effects of immigration for firms with pre-existing links to Syrian refugee hosting regions through upstream and downstream linkages. We also find evidence for increased trade volume and network expansion through new trade linkage.

**Raluca Ciornea**

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**Luiza Maria Souca**

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&

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**Influence of Horizontal Downward Extension over the  
Luxury Parent Brands: Fragrances as Extensions of Luxury  
Fashion Brands**

Seeking to increase their profits and brand equity, broaden their influence and ensure faster expansion, most luxury fashion houses have launched multiple brand extensions. These growth strategies rely their success on the transfer of favorable associations from the luxury parent brand to the extensions. However, the customers' complex judgement may lead to different outcomes, especially with downward extensions. By introducing lower-priced lower-quality products, downward extensions are more susceptible than upward extensions to eliciting negative effects on the parent brands, thus require a more cautious approach. Owning accessible extensions in their portfolio such as fragrances, make-up, cosmetics, small leather accessories, sunglasses, etc., the luxury fashion brands are targeting a wider range of consumers, especially the 400+ million individuals from the middle-class who engage in occasional luxury purchase. Extant literature emphasizes that the luxury value of brands derives from physical and symbolic features such as superior quality and price, prestige, status, rarity, conspicuousness, materialism. Overextension, particularly downscale, alters these exceptional traits, hence it might dilute the brands' luxury value and dissipate the dream of privilege. In the long run, it can affect consumers' attachment to the luxury parent brand, their preferences and acquisitions, starting with the upper-class segment comprised of 'real' luxury consumers. Consequently, by chasing middle-class customers, luxury brands can lose the upper-class ones. Given the scarce academic insights on luxury fashion brand extensions, the current article aims to explore the influence mechanism of horizontal downward extensions (as fragrances) over the luxury fashion parent brands, by proposing and testing a conceptual model. The study relies on quantitative research carried out among 246 Romanian consumers of fragrances owned by luxury fashion brands. Based on the consumption pattern, the respondents fall in the category



of consumers who rarely indulge in accessible luxury, hence the primary target of downward luxury extensions. Data analysis was performed using the PLS-SEM technique and SmartPLS 3 program. Findings revealed that the attitude towards fragrances extension (of fashion luxury brands) is one of the key drivers that can explain the attitude towards luxury parent brands (owning fragrance extensions), and which in turn has a positive effect on the purchase intention of luxury parent brands; this is a consequence of the desire arising from fragrance extension ownership. Both attitudes can be influenced by the perceived luxury value of fragrance extension, however, only the attitude towards fragrance extension can be explained by the overall attitude towards luxury brands extensions. Additional results point out that the overall attitude towards luxury brands extensions is a significant predictor of the perception of parent brand dilution (through extension), yet, intriguingly, not the attitude towards fragrance extension and the attitude towards luxury parent brands. Finally, the perceived fit between the fragrance extension and the luxury parent brand is an antecedent for the attitude towards luxury parent brands and the overall attitude towards luxury brands extensions, but has no effects on the attitude towards fragrance extension. The findings may assist management and marketing decision makers in the challenging task of protecting the luxury value of parent brands while exploiting the benefits carried by downward extensions.

**Batuhan Cullu**

Research Assistant, Dokuz Eylul University, Turkey

&

**Gamze Arabelen**

Assistant Professor, Dokuz Eylul University, Turkey

## **What Cruise Passengers Talk About? A Text Mining Approach to Explore Topics from Online Narratives**

In the era of digital communication, online reviews have emerged as a rich and influential source of information for potential customers, making it essential for marketers to understand the preferences, experiences, and expectations of consumers in various industries. The cruise industry has experienced rapid growth, leading to a need for in-depth analysis of cruise passengers' opinions. This study aims to explore the topics discussed by cruise passengers in their online reviews using text mining techniques, providing valuable insights for the industry to enhance customer satisfaction and target marketing efforts more effectively. We employ Latent Dirichlet Allocation (LDA) which is a powerful text mining technique, to analyze a large dataset of more than 78,000 online reviews, identifying the most prevalent topics in passengers' narratives.

LDA, a generative probabilistic model, enables us to uncover hidden thematic structures within the dataset, offering a comprehensive understanding of the key topics discussed by cruise passengers. By emphasizing the text mining aspect, this study highlights the potential of LDA as an efficient and effective method for processing and analyzing large-scale, unstructured data sources, such as online reviews. The use of LDA in this context also demonstrates its applicability to various sectors within the tourism and hospitality industries, allowing marketers to better understand consumer preferences and ultimately their decision-making processes.

Our results reveal several key topics that passengers frequently discuss, including on-board amenities, dining experiences, and excursions. On-board amenities encompass various aspects, such as cabin comfort, entertainment options, and recreational facilities. By understanding the concerns and preferences of cruise passengers through the application of text mining techniques, marketers can tailor their strategies to address these issues and capitalize on opportunities for growth.

This study contributes to the marketing literature by showcasing the utility of LDA and text mining techniques in exploring consumer

preferences within the cruise industry. The findings from this research have important implications for cruise industry practitioners, as well as academics and policymakers interested in the role of online narratives and text mining in shaping consumer behavior. By leveraging these insights, industry stakeholders can develop targeted marketing campaigns, improve service offerings, and ultimately, gain a competitive edge in the thriving cruise market.

**Getachew Dagne**

Professor, University of South Florida, USA

## **Piecewise Regression Mixture Models with Skewness**

This presentation focuses on mixture regression models with piecewise growth curves for assessing longitudinal data that exhibit multiphasic features. Some longitudinal data may have features that include skewness, measurement errors in covariates, and heterogeneous population. Within a heterogeneous population, there is a desire to identify differential effects of covariates on a response variable in the context of a mixture of subpopulations. Regression mixture models are key methods for assessing differential effects of covariates. In this presentation, we will discuss the findings of extending regression mixture models to incorporate skew-normal distribution, measurement errors, and piecewise growth mixture modeling for describing multiphasic trajectories over time and analyzing real data from an AIDS clinical study.

**Paul Davidson**

Associate Professor, Queensland University of Technology, Australia

**Managing Trust and New Technology:  
Lessons from the History of Military Decision Making**

This is a paper about that most fundamental of military competencies: decision making. In drawing conclusions, it relies on leaders' fatal over-reliance on technology and misplaced trust. The examples cited are not just on-off isolated mistakes. They point to an inconvenient truth, that narcissistic and misplaced faith in one's own technology is a recurring failing in our decision making. We know this from countless horrific episodes, but we willfully refuse to acknowledge the lesson that we should have learned. In retrospect, we can only wonder about our own stupidity and irrational intransigence. This paper attempts to examine the reasons why, and what we might do in future, to avoid repeating our tragedies, along with the inevitable harsh judgment of history.

**Siphiwe Dlamini**

Senior Lecturer, University of Cape Town, South Africa

## **The Influence of Consumption Values on the Purchase Intention of Fast Fashion in South Africa**

The fashion and apparel industry has evolved significantly in the past two decades. As globalization and the influence of the media have grown, along with easy access to an abundance of information, consumers are increasingly up to date with the latest international trends in fashion, thus creating a demand for new, 'in-season' fashion products. Large fashion retailers have grown and adapted their business models to these changes, giving rise to a phenomenon known today as fast fashion, characterized by the frequent changes in stocks of inexpensive clothes in response to fast-changing trends. Fast fashion is an effective strategy/business model now being employed by some of the most well-known and established fashion retailers such as ZARA, H&M, Top Shop, etc. Although the fast fashion phenomenon has proven to be greatly successful, consumers continue to change their behaviors, attitudes, and consumption practices. Recent changes have seen an increase in consumers' awareness and willingness to protect the environment, a rising demand for sustainable and ethically sound fashion products, and an increasing emphasis on quality and style as opposed to style alone. These changes and new trends in conscious consumerism pose a threat to the success of fast fashion, as the industry is notorious for its negative environmental impact and unethical production methods. This study's purpose was to examine and analyze the influences that Cape Town millennial consumers' consumption values had on their attitudes toward purchasing fast fashion products. From the 172 respondents, the study used Structural Equation Modelling to investigate the influences of each consumption value on consumers' attitudes towards purchasing fast fashion products. Results from the statistical tests revealed that the emotional consumption value of millennials in Cape Town had the most significant (positive) influence on their attitudes towards purchasing fast fashion products. Additionally, eco-value, consistency value and social value had small positive influences on attitudes towards purchasing fast fashion, although these influences may be greater among consumers in other contexts. The study aimed to add to the relatively under-researched consumer side of the fast fashion phenomenon and to provide insights into the current state of millennial consumers' consumption values and their attitudes towards purchasing fast fashion products. As there was

no available research into this phenomenon at the time of writing, this study now provides fast fashion retailers in the country valuable insights into the consumer landscape. Marketing managers should consider all possible ways to make their company's fast fashion business model more environmentally friendly with more sustainable offerings or product designs - and communicating this appropriately. For example, Adidas has created running shoes from 100% recycled ocean waste; fast fashion retailers should consider implementing options like this.

**Oksana Domina**

Post-Doctoral Researcher, University of Helsinki, Finland & Assistant  
Professor, Taras Shevchenko National University of Kyiv, Ukraine

**Modern Stage of Marketing Development in Ukraine**

In Ukraine and other post-socialist countries, the development of marketing theory and practice followed a different model. The specifics of this development are associated with the transformation of the socio-economic system, the lack of real marketing practice at the micro level, and the lack of national marketing staff in the country's universities despite the high degree development of marketing theory and practice in the world at large.

The modern stage of development (2017 - till now) is related to strengthening the competitive position of Ukrainian national and regional schools of marketing in the face of today's complex challenges.

Characteristic features of this stage are the approval of higher education standards in marketing, the launch of a new system of education quality assessment, the strengthening of a student-centered approach to the educational process, the implementation of new forms of interaction with real business, the strengthening of the transparency of educational activities, and the introduction of new courses and innovative interactive technologies to the educational process.

In response to current challenges and the real level of development of marketing theory and practice, a new NGO, the Ukrainian Union of Marketing Experts, was founded in November 2019. The Union, which covers 14 regions of Ukraine, aims to promote the development of marketing in the country and unite the efforts of Union members to protect professional, socio-economic, academic, and other interests. By combining the efforts of professional practicing marketers and the professional academic community, the Union seeks to form long-term partnerships and promote the quality development of marketing theory and practice in Ukraine.

The modern stage of marketing development in Ukraine has been influenced by one of the most horrific 'factors' – war – which dramatically changed the vector of Ukrainian marketing and shifted the focus to survival and personal contribution to victory. The negative influence of the conflict is manifested in the destruction of human capital, higher educational institutions, and subjects of economic activity throughout the entire country and the strengthening of the hybrid information war.



The development of marketing in Ukraine is characterized by the following features:

- The more rapid completion of developmental stages - with the time factor playing a key role.
- The turbulence of the environment, thereby requiring new analytical approaches.
- The unpredictability of the change in environmental factors.

In fact, in the Ukraine, the transition to market economy principles of management and decision-making has occurred under emergency conditions. Moreover, after decades of strategic management, this trend is spreading throughout the world. Market environment diagnostics are even more up to date, the most important being definition of the management problem, rapid decision-making, and extremely swift reactions. Further research should be aimed at finding new approaches to combining strategic marketing with flexible emergency solutions.

**Jorg Jasper Dotsch**

Associate Professor, Andrásy University Budapest, Hungary  
&

**Tamas Ginter**

PhD Student, Andrásy University Budapest, Hungary

## **Increasing the Complexity of Currency Competition in the Digital Age: Considerations on the Extension of Money Functions**

Interest in digital currencies has widely emerged in economic research throughout the past decade. Little focus has been directed onto the extension of money functions they provide. This is all the more remarkable as the introduction of central bank digital currencies (CBDCs) is currently one of the most vital issues in monetary policy worldwide. However, an adequate assessment of the role of CBDCs is only possible if one takes into account the increased complexity in the context of currency competition.

We will first treat the most important characteristics of money, the role of the monetary system's architecture and technology and discuss the role of the money functions against this background. In a second step, we provide a short description of the key characteristics of digital money and tackle the most relevant aspects of the recent technological advancements. Then, in a third step, we provide a theoretical framework for the description of the extension of money functions and what it means in the context of the emergence of central bank digital currencies.

In this novel perspective of ours, we claim that by the development of and the emerging competition between (central bank) digital currencies, the list of money functions has to be complemented by that of technological competition. We provide a valuable contribution not only to the pertinent body of research, but also offer a unique perspective to stakeholders interested in the development of (central bank) digital currencies. If one wants to discuss the design of an appropriate framework for the challenge of stable currencies in the digital age, this will definitely have to be taken into consideration.

**Florence Dzame**

United States International University Africa, Kenya

## **A Study of Gender-based Institutional Barriers to Progression into Leadership Roles for Women Journalists in Kenya**

In Africa, media companies have been described as “governed by the traditional norms of masculinity and femininity found in African societies” (Opoku- Mensah, 2001), and women are struggling for their status in journalism (Kaija, 2013). Seeing men as the human default is fundamental to the structure of human society. It’s an old habit, and it runs deep – as deep as theories of human evolution itself (Criado Perez, 2019).

While the media has highlighted a widening gender imbalance, the sector itself has proved to not be different in the way it treats women, both in terms of distributing leadership positions and in allocating space for coverage.

A woman on the top management team could, through her demonstrations of competent leadership, engender a more positive attitude toward the competency of women in general; this would lessen statistical discrimination against women due to uncertainty about their skills again lowering the barriers to advancement by other women in the same organization, whether at the same level or below. Looking at all perspectives, there is a greater need to protect the place of women in society.

**Study Significance:** It is important to study the area of gender in Kenyan media to create a holistic understanding of media and the role of gender in order to move beyond simplistic narratives of women as victims and bystanders.

These benchmarks could then be used by news providers globally to drive gender Lab equality within their institutions at the level of organizational resources, newsgathering and news coverage.

**Theoretical Framework:** The tokenism theory proposed by Kanter (1977), has been used widely to explain many of the difficulties women face as they enter traditionally male occupations. Tokenism explains women's occupational experiences and their behavioral responses to those experiences in terms of their numerical proportion, suggesting that barriers to women's full occupational equality can be lowered by the hiring of more women in organizations that are highly-skewed male. Many of women’s negative experiences on the job and in particular their inability to experience equality have been attributed to

their token status- their low proportion in a workplace dominated by men (Zimmer, 1988). According to Kanter, token representation of minorities results in token individuals being isolated and facing greater scrutiny, pressure to perform, and accountability for their group's performance. This can result in a lack of real power, influence, and opportunities for advancement for tokens, as well as perpetuating stereotypes and maintaining a dominant group culture. The theory highlights the limitations of token representation as a means of promoting diversity and inclusion in organizations and the need for more substantive changes in the power structures, norms, and culture of organizations.

**Research Questions:** RQ1: Are there organizational efforts to recruit, train, and promote women to top management positions within the media? RQ2: What are the barriers to female journalists' progression into leadership positions in the media in Kenya?

**Methods:** The study will use a descriptive quantitative research design to collect and analyze data. A survey employing UNESCO's Gender-Sensitive Indicators (UNESCO, 2012) will be used to collect data from women between 25-60 working in the media industry who have well-established careers and have been in the industry for more than five years.

**Alessandro Ganoulis**

PhD Student, The University of Law, UK

## **Decoy Effects from memory and Loss Aversion**

We present a decision making model and new supporting experimental evidence that contextual factors can affect loss aversion. The model presented here allows for the possibility that a person perceives and evaluates an external stimulus *relatively* to other comparative information that person was exposed to, even if this information is in principle irrelevant for the decision under question. The model is based and extends the standard models of Cumulative Prospect Theory drawing also from the range-frequency models from cognitive psychology.

To test the predictions of the model that contextual information may be of relevance in decision making, participants in an experiment were asked to accept or reject a number of 50/50 lotteries. Of these lotteries,  $\frac{1}{4}$  were common for all participants while the rest  $\frac{3}{4}$  were decoy gambles that varied in skewness between two groups of participants. The empirical results suggest that the (experimentally manipulated) decoy gambles affected the choices and the estimated loss sensitivity of participants revealed in the common gambles. The participants' choices seem to have changed after they had experienced the first few (decoy) gambles.

Additionally, all results are also confirmed by non-parametric tests using the (model free) experimental choice data and are therefore not subject to a critique of possible model misspecification. Different econometric methods are used for robustness.

**Claudia Garcia-Garcia**

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**Catalina B. Garcia-Garcia**

Full Professor, University of Granada, Spain

&

**Román Salmeron-Gomez**

Full Professor, University of Granada, Spain

## **Interactions in Environmental Studies: A New Approach for Mitigating Potential Multicollinearity**

Moderated Regression Analysis (MRA) is a specific application of multiple linear regression analysis, in which the regression equation contains an “interaction term”. This methodology allows analyzing how the effect of one of the independent variables is moderated by a second independent variable by adding a cross product term between them as an additional explanatory variable, the moderated factor.

In this type of studies, the inclusion of an interaction term between two explanatory variables of a model makes strong multicollinearity problems arise. The appearance of strong multicollinearity in a model has important consequences such as inflated variances of the estimators, tendency to consider non-significant some regressors, incorrect signs of the coefficients, high sensibility of the results to small changes in the dataset and difficulties in fixing the individual effects of the explanatory variables to the model in general. These consequences shifted to the moderated analysis may imply that is not worth including an interaction term that may be distorting the model.

Many economic sustainability research include the analysis of possible interactions by using moderated multiple regression. After a review of those works that applied the MRA among the ten top journals of the field, with an amount of 268 reviewed studies in total, this work concludes that multicollinearity is mostly disregarded. Only in 5 of the 10 journals there are some works that investigate the collinearity issue, meaning that, from all reviewed works, only at around 14% of them take into account possible multicollinearity problems (38 papers). From that few works, the most usual methodology for mitigating strong collinearity problems is centering variables.

To overcome the issue, this work analyzes the possible application of the residualization procedure. This method mitigates collinearity from an interpretative point of view maintaining the relevant available information. The collinearity problem arises because the variables are sharing information, so the solution is to delete from one of them the

“joint” or repeated information. Additionally, the global characteristics of the initial model are maintained (sum of squared residuals, estimated variance, coefficient of determination, global significance test and prediction).

The application of this method is implemented to data from countries of the European Union during the last year available regarding: greenhouse gas emissions, per capita GDP and a dummy variable that represents the topography of the country.

The main conclusion of this work is that applying residualization to MRA mitigates strong multicollinearity problems, so the researcher is able to rely on the interaction term when interpreting the results of a particular study.

**Mehmet Gençer**

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**Esin Çağlayan**

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**Gül Ertan Özgüzer**

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&

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**Data Literacy in Business Curriculum:  
A Case Study of Student Reception and Success Factors**

Despite the assertion that data literacy is considered to be a life skill in 21st century society, however, there are not many courses and/or programs offered especially in social sciences and business schools and research into data literacy in social sciences or business education is scarce. With relatively few experiences, data literacy education in social science fields remains mostly uncharted territory. In order to contribute to closing this gap, this paper describes the development, design and implementation of a compulsory “Data Literacy for Business and Social Sciences” course added to curricula of all undergraduate programs of a Business Faculty and presents (1) an analysis of student response and performance, and (2) implications of our findings for improving course design for business students.

A blended flipped-classroom model was adopted in course design where the students were provided with videos, slides and other course materials to study on their own and attended face-to-face lab sessions where they practiced with instructors. During course implementation, we collected data on the learning management system about student effort, student performance data, and also conducted a self reflection survey at the beginning and the end of semester. We have then analyzed performance variations and clusters on the one hand, and factors affecting student performance on the other.

The course design was a modular one and consisted of three consecutive modules: “data essentials”, “data management”, and “data storytelling”. Our cluster analysis uncovered a large cluster of students who stumbled upon the second module, and consequently became demotivated and dissociated from the course. This is an important



implication for course design and therefore we agreed to swap modules two and three in the following semester.

The self reflection survey included questions to measure students' self confidence on various data literacy topics. Analysis of responses has shown a considerable improvement in student performance at the end of the semester. More importantly, at the beginning of the semester, female students exhibited lower levels of confidence compared to their male counterparts in most subjects; however, at the end of the semester, their confidence surpassed that of male students.

This is a significant result indicating that inclusion of such courses in the curriculum contributes not only to data skill development but also to abridging the infamous gender gap in this area.

On the other hand, our analysis of the factors affecting student performance has shown no effect of demographic factors such as sex, age, and department. The results show that students' effort, i.e. watching videos and using online materials and their overall GPA are the only statistically significant factors on student performance in the course. Combined with the previous findings, these results highlight that female students have no disadvantage in these subjects, and their relatively low confidence is remedied by taking a course on data literacy.

Overall, the experience reported in this study explores the pathways to include data literacy subjects in social science and business curriculum, showcases the utilization of learning analytics in course evaluation and provides important clues for improving course design in this relatively new field.

**Eylem Gevrek**

Assistant Professor, Catolica Porto Business School, Portugal

**What Explains the Gender Gap in Gender Role Attitudes?  
Evidence on Intergenerational Transmission of Gender  
Social Norms among Immigrants**

Using data from the European Social Survey on second-generation immigrants from 46 different countries of ancestry who reside in 18 host countries, this paper investigates the role of intergenerational transmission of gender social norms in explaining the gender gap in gender role attitudes. The results reveal that greater gender equality in the country of ancestry is associated with more egalitarian gender role attitudes among second-generation immigrants, providing evidence on the transmission of gender social norms from parents to children. Moreover, this intergenerational transformation has a differential impact on the gender role attitudes of male and female second-generation immigrants while the impact is stronger for the former. We find that the higher the level of gender equality in the country of ancestry, the smaller the gender gap in gender role attitudes of second-generation immigrants.

**Konstantinos Giannakas**

Professor, University of Nebraska-Lincoln, USA

&

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## **The Role of Cooperatives in Innovation Licensing**

Research and development of new innovations is a major driver of productivity and economic growth. Patent licensing is a key channel of technology/innovation diffusion, and it is the most frequently observed contractual agreement between firms. It encourages and facilitates the transfer of superior technology from the innovator to other firms in the market and can also mitigate patent infringement issues. In this context, patent licensing can improve firm profitability, economic efficiency, the incentive to innovate, productivity growth, and social welfare.

Despite the prevalence of mixed markets in which cooperatives compete alongside investor-owned firms (IOFs), the involvement of cooperatives in innovation activity, and the importance of firms' organizational structure for the formation of their strategy, the impact of cooperative involvement in licensing of innovations has not been considered by the relevant literature. With the exception of few studies on the involvement of public firms in licensing, the literature has focused, instead, on the optimal patent licensing mechanisms in pure oligopolies (i.e., a small number of profit-maximizing IOFs). This paper extends the literature on technology licensing by considering the impact of organizational structure on firms' licensing behavior.

Specifically, the objective of this paper is to examine the effect of cooperative involvement in the licensing of process innovations. By considering the role of cooperatives in technology licensing, our study contributes to the literature on the design of optimal contracts by heterogeneous principals, the interaction between firms' structure and strategic behavior, and the literature on technology licensing in mixed oligopolies.

To determine the impact of cooperative involvement in technology licensing, we develop, compare and contrast sequential game-theoretic models of technology licensing in pure and mixed oligopoly settings that explicitly account for the empirically relevant pre-innovation cost differences between firms and heterogeneity of consumers and producers; members and non-members of the cooperative. Unlike the representative agent approach, the explicit consideration of this heterogeneity allows for a disaggregation of the welfare impacts of

patent licensing on different consumers and producers, and facilitates our ability to examine cooperatives' licensing behavior in the transfer of process innovations.

Analytical results show that the organizational form does matter in technology licensing; cooperative behavior differs from that of its investor-owned counterparts yielding *significantly* different equilibrium outcomes in mixed oligopolies where the cooperative is either the licensor or the licensee of the process innovation involved.

**José-Manuel Giménez-Gómez**  
Professor, University of Rovira i Virgili, Spain

## **Allocating Remaining Carbon Budgets and Mitigation Costs**

The concept of carbon budgets has become a key and effective tool in terms of communicating the existing environmental challenge and monitoring environmental policy, in the context of the Paris agreement. In this sense, the literature has addressed different mechanisms to distribute them by countries/groups according to reasonable distribution principles, among which fairness and efficiency play an essential role. Given the problem of agreeing on indicators by countries, the paper proposes the use of claims models as a basis for this distribution, which avoid using indicators and only must agree on elements defining the distribution rules. In this sense and based on a reference of the available global Carbon Budget (Mercator) for 2018-2050, and the CO<sub>2</sub> forecasts taken from the intermediate scenario SSP2-45 (Middle of the road) considered by the IPCC (2021), different distribution rules are addressed proposed by the literature (equality, proportional, and alpha-min) and are evaluated for the available groups of countries. Two relevant exercises are proposed beyond the initial distribution based on the previous theoretical rules: first, evaluate the cost of these distributions in terms of the welfare of each group (in particular, in terms of GDP); and two, use the GDP costs themselves to propose new distribution rules that are cost-efficient. The results imply having not only a global cost-efficient distribution proposal but also an annual path. We understand that the work is useful not only in terms of its methodological proposal but also as an alternative guide that structures future distribution policies.

**Şahika Gökmen**

Assistant Professor, Ankara Hacı Bayram Veli University, Türkiye

**Murat Atan**

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&

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Professor, Ankara Hacı Bayram Veli University, Türkiye

## **Ranking of Countries According to the Index of Economic Freedom with Multi-Criteria Decision-Making Methods**

All investors want to carry out their economic or commercial activities comfortably for each country. The public restrictions that individual or institutional investors face while continuing their economic or commercial activities are called economic freedom. In countries with a high level of economic freedom, individual or institutional investors are provided with the opportunity to produce, consume and invest more. A high level of economic freedom for a country indicates that the economy operates in accordance with free market conditions and that institutions and rules are based. The public authority protects individual or institutional investors and secures legal rights. In this study, the level of tariffs in the country, the existence of restrictions on foreign capital and investments, the black-market situation, the taxation process in the country, the presence and weight of the public authority in the economy, the inflation in the country, the country's inflation, the country's level of tariffs, published by the Heritage Foundation, which has been headquartered in the USA since 1996, on the basis of countries. independence of the financial sector and banking sector, wage policies for employees and controls on prices of goods and services, regulation and regulation, property rights of investors, etc. 2019 and 2020 data of the "Economic Freedom Index", which consists of two basic criteria including all stages, has been examined. This index consists of ten and includes these criteria. In this study, multi-criteria decision-making methods are used for the methods and weights determined in the index calculated by the Heritage Foundation. It was aimed to bring a new alternative. Alternative ranking was made for the "Economic Freedom Index" for all countries included in the study.

**Daniel Gomez Abella**

Lecturer, University of La Sabana, Colombia

**Ex-post Evaluation of RTAs of Colombia:  
A Partial Analysis with Structural Gravity Model**

This research presents an ex-post evaluation of the effects of eleven selected Regional Trade Agreements (RTAs) of Colombia that entered into force between the mid-1990s and the 2010s. This evaluation corresponds to a partial equilibrium gravity analysis implemented using the structural gravity model with panel data of 143 countries for the period 1991-2018. Different econometric specifications of the structural gravity model are estimated. However, the analysis of the results is focused on the specification that controls Multilateral Resistance Terms (MRTs) and addresses the potential endogeneity of RTAs. The results suggest that the RTAs with the Andean Community, Mexico have had positives and significant effects on bilateral trade among its members. If trade direction is considered, the RTAs with the Andean Community and Chile have had positives and significant effects on exports of Colombia. Regarding the effect on imports of Colombia, the RTAs with the Andean Community and Mexico have had positive and significant effects while the RTA with the EFTA has had a negative and significant effect. The author is a Ph.D. in Economics at the University of Auckland (New Zealand). He received his *BS* and *MS* in Economics from the Universidad de Los Andes (Colombia).

**Leonard Grebe**

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## **Uncertainty Structure Hypothesis – Seasonal Patterns in Uncertain Times at the Stock Market?**

Since 1973 researchers discuss the day-of-the-week effect on stock markets (Cross, 1973). Scientists still discuss about the characteristics of the day-of-the-week effect. On one hand, authors highlight the “Weekend-effect”, the “Friday-effect” or the “Tuesday blues”, on the other hand, others deny the existence of this anomaly (Berument, 2001; Banpinas et al., 2016; Plastun et al., 2019; Chiah and Zhong, 2021). This paper adds a meta-perspective to summarize and generalize results. 94 primary studies from 61 countries are analyzed. Meta-analysis tests geographical, cultural, empirical, time-dependent, and data-dependent moderators. In total, 4085 individual observations are used to run multivariate regressions for the strength and the magnitude of the day-of-the-week effect.

Regarding the magnitude, Mondays and Tuesdays have a significant negative return, while Wednesdays and Fridays show a positive return. Geographical and cultural differences have a weak impact. Moreover, there is no time dependency. Although outliers play a significant role, the choice of empirical methods (OLS or GARCH) does not impact the magnitude of the day-of-the-week effect. In addition, the multivariate regression for the strength of the effect supports a negative correlation on Mondays and positive correlation on Fridays. Time dependency, geographical and cultural differences are non-significant except a significant positive correlation between daily return and African countries.



**Mihai Halic**

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Kuwait

## **Classical and Modern Applications of Linear Algebra in Mathematics and Science**

Nowadays, attracting students towards scientific research turns out to be a challenging task because that students expect working on accessible topics, or at least accessible at the first sight. Yet, proposed projects should have the potential to leading towards genuine work, which is interesting to the scientific community.

Linear Algebra is an ubiquitous subject, belonging to the curriculum of a wide range of students. It is indeed one of the basic, service courses, offered to students enrolled in mathematics, science, or engineering majors. In spite of this fact, basic Linear Algebra has numerous every-day life applications, and quickly leads to important current, open problems in mathematics and even high-energy physics. In my talk, I intend to present my view on these issues and to discuss some of my works in this area.

**Xiao Han**

Lecturer, University of Toronto, Canada

&

**Dusiying Jin**

Student, White Oaks Secondary School, Canada

## **Contamination in Drinking Water Environment and the Associated Public Health Risk from Mining Discharge Pollution: A Comparative Study Chile, China and US**

With the development of industrial technology in modern society, more and more countries rely on mining to obtain resources. While there have been improvements to mining practices in recent years, significant environmental and health risks remain. The impact of mineral pollution on human health from drinking water is significant, although there may be regional, age, gender, and other differences in degree. And public health presents a series of difficult and important but elusive problems that overlaps political, economic, and technical areas.

This paper conducts a comparative investigation of the contamination level, source identification and health risk assessment of mining wastewater discharges in Chile, China and US, and points out the health hazards of drinking water pollution according to different types of discharge. In addition, we explore various water treatment technology and public intervention polices in three countries, and the paper puts forward suggestions for strategies which protect and improve drinking water quality but allows the needed flexibility and cost effectiveness.

In order to protect the drinking water sources of the study areas from further contamination, management techniques and policy for mining operations need to be implemented. Governments should strengthen water intervention management and carry out intervention measures to improve water quality and reduce water pollution's impact on human health.

**Dihya Hesas**

PhD Student, University of Mouloud Mammeri, Algeria

## **Change Management in the Face of ICT Integration within Organizations**

Change is undoubtedly one of the major challenges facing companies today. It could be considered as a constant in the life of organizations. This phenomenon has been the subject of numerous studies and publications in administrative sciences, and has become a star product of firms, consultants and a constant preoccupation of practitioners. In fact, many changes can shape the business environment, especially those that have become faster and more chaotic than ever. Among these changes, we find economic, political, social and technological changes most often mentioned in the literature. These organizational changes constantly challenge the way organizations operate and often require finding new ways to adjust.

Following these transformations in the environment, change has become a necessity, an irreversible alternative, an obligation of survival for any organization, hence the introduction of ICTs, which constitute an unavoidable and considerable change. The latter radically or partially transform the functioning of organizations.

Managers have understood that the impact of ICT on the evolution of the organization is becoming more and more remarkable, since the use of ICT is perceived as a key success factor and the best way to improve the level of competitiveness. Sophisticated and indispensable to the functioning of companies, they are increasingly incorporated into ambitious organizational change projects. The construction of an ICT-based system that allows for real-time data availability, data exchange, integration of procedures, etc., has become a key issue (Liao, 2005). In fact, they hold out the promise of profitable changes for organizations in all sectors of activity. The organization no longer has a choice but to be responsive to environmental change. It is therefore impossible to escape technological changes, particularly with regard to ICT, as they affect all areas of the organization. However, there is a lot of resistance on the part of the players following the implementation of this change.

In order to reach their new objective, organizations must focus on the actor as a determining factor in their transformation. Indeed, it is this intangible dimension, the human dimension, that is the key to the success or failure of organizational change.

However, despite the key role of individuals in organizational change (Bareil, 2004), organizations have been more concerned with how to introduce change than how to manage it.

Moreover, organizational changes have multiplied reorganizations, job cuts and increased the erosion of working conditions, which has jeopardized workers' health, particularly their moral health (Vinet et al., 2003).

**Xinyu Hou**

Researcher, University of Cambridge, UK

&

**Philip Dybvig**

Professor, Washington University in St. Louis, USA

## **Gambling for Redemption or Ripoff, and the Impact of Superpriority**

Myers (1977) described how firms can gamble using asset substitution, which is switching to a less efficient and more volatile project. Gambling using derivatives is a sharper instrument, allowing the owners to gamble just to what is needed, and with negligible efficiency loss. In our model, “gambling for redemption” operates at small scale and is socially beneficial, while “gambling for ripoff” operates at large scale and is socially inefficient but benefits firm owners at the expense of bondholders. Superpriority laws grant exemptions of derivatives for bankruptcy law, which makes more funds available for gambling. This reduces firm value due to difficulty borrowing in the face of more gambling for ripoff.

**Mahmood Hussain**

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**From Financial Socialization to Independent Decision:  
A Cross-Cultural Study of US Millennials' Financial Behavior**

*Introduction and Objectives*

This study examines the issue of financial socialization and risk attitude among US Millennials, as they relate to banking and financial decisions. Specifically, this study aims to understand and identify cross-cultural differences that might exist among US Millennials. Millennial population – born between 1981 and 1996 – eclipsed the Baby Boomer population. 2014 United States (US) census counted approximately 83.1 million Millennials, compared with 75.4 million Boomers (CNN, 2019). Interestingly, immigration played a part in helping Millennials becoming the largest adult population group (The Washington Post, 2019). Notably, 42% of US Millennials are of African-American, Asian-American and Hispanic origins. And they are influencing the mainstream America (Nielsen, 2017).

There is no paucity of research and newspaper articles on the Millennials, focusing on their cultural diversity, family structure, core values, narrowing gender gap among Millennials when it comes to purchase of consumer goods, and marketing to the Millennials (Parment, 2013; Rodriguez, 2015; Brown, 2016; Jones, 2017; Tulp, 2017; West and Friedline, 2016). Despite plethora of research on the Millennials, our understanding of how Millennials' ethnicity or culture influences their banking and financial decisions is still limited (Hussain and Linden, 2013).

*Design/Methodology/Approach*

The data for this study were collected through a large-scale, web-based survey of freshman and sophomore undergraduate students from a university located in the Western United States. These students were offered extra credit for their participation in the survey. In total, we received responses from 862 students, resulting in about 67% response rate. After 44 surveys were excluded because of incomplete responses, a total of 818 responses remained for further analysis.

### *Findings*

Ethnicity, financial socialization, and independence in banking and financial decisions do appear to be correlated. Financially, their dependence on their parents does correlate with culture/ethnicity. Parents' and others' involvement or influence in their financial decisions are not same for all cultures. For example, White millennials feel relatively more comfortable in communicating their financial decisions with their parents or relatives. Millennials from different ethnicity do exhibit different level of independence and risk attitude in their banking and investment decision. Asians seem financially more dependent on their parents. Their perceived confidence levels are different as well. Their risk attitudes are also different. Black Millennials appeared to be more risk loving when it comes to investment decisions. Finally, they are not equally active in monitoring their financial or banking behavior.

### *Research Implications*

Understanding the dimensions of financial socialization among US millennials is important. The findings from this study suggest that Millennials' ethnicity plays some role in their banking and financial behavior. One-size-fits-all marketing strategy and tactics cannot be equally successful for US Millennials, who are culturally most diverse generation. There is need for banking and financial sectors to address different levels of financial socialization and risk attitude of US Millennials if they would like to win businesses from future households.

### *Concluding Remarks*

The study constitutes possibility the first set of analysis investigating the relationship between US millennials' financial socialization and ethnicity. We presented a cross-cultural comparison picture of the US Millennials' financial socialization and risk attitude. It raised some very important questions by showing although the Millennials do feel comfortable with diversity they do show significant differences in their financial and banking behavior. While these findings should draw financial marketers' attention to these differences, the findings need further validation. The future revision and augmentation should entail: (1) More in-depth statistical analysis; (2)

Corroboration of findings through a more rigorous review extant academic literature.



**Frédéric Jallat**

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## **Evaluating Standardization of Marketing Operations & Performance**

In today's business world, international companies need to address one key question when launching a global branded service activity in a new country: where should their marketing strategy and operations take place in the vast continuum between a global standardization and a local adaptation?

By providing global standardized offerings at the same quality level across borders, MNCs increase brand awareness, perceived quality and brand loyalty, leading to improving brand equity. However, most of MNCs know that uniformity in service offerings and marketing communications cannot ensure a winning response in consumer behaviors and their buying decision process. Among many other factors, cultural differences, the sophistication of the country environment and the level of competition usually force international companies to adapt, even marginally, their global marketing programs to meet local needs.

The past research on standardization and adaptation in international services marketing remains indeed small in scope, scale and disjointed ((Tripp, C, 1997); (Theodosiou, M. and Leonidou, L.C., 2003) (Stafford, M.L. and Day, E., 1995)). The prospect for further research in services industry is, therefore, widely open and this area needs further in-depth and thorough studies. With the genuine interest in discovering the correlation between standardization in marketing operations and performance in services, our research aims to analyze the peculiarities in defining standardization-adaptation marketing strategies and marketing operations elements for services, and to evaluate the relationship between standardization in the 7Ps mix and financial performance.

**Warveni Jap**

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## **China's BRI: Modern Global Connectivity, Prosperity, and Harmony**

In 2013, China President Xi Jinping proposed and announced the Belt and Road Initiative (BRI) which is an open-ended and inclusive regional cooperation initiative aiming to improve and build a new platform for international cooperation, to allocate resources efficiently by strengthening exchanges and cooperation among BRI countries and regions, to solidify the China's commercial distribution enterprises (CDEs), to accelerate the pace of going global, and to create new drivers of shared development among BRI countries. BRI which has attracted numerous countries' attention and participation is a well-acknowledged both central economic and diplomatic policy of the Chinese government. Although research on BRI has been published plentifully, they did not sufficiently cover the significance of how BRI embraces and contributes to modern global connectivity, prosperity, and harmony among BRI participating countries, especially for developing countries, to "going global." Meanwhile, it is another efficient and effective way to shift China's "internationalization" to "globalization" unlike enjoyed by Washington Consensus. This paper analyzes and explores the economic development, social/cultural exchanges and enhancement, and political implications to the China's BRI countries. The purpose of this paper is to provide theoretical guidance for China and its BRI countries as well as the prospective BRI countries not only to have correct and proper understandings and trust in China's BRI for mutual benefits, cooperation, and advancement, but also to encourage BRI countries and prospective BRI countries in participating more intensively and extensively in China's BRI for further shared development, prosperity, and harmony in order to accomplish Confucius' "Universal Harmony in the World (世界大同)" and the Chinese President Xi Jinping's vision of "Community of Shared Future for Mankind (CSFM; 人類命運共同體)."

**Mohsen Javdani**

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## **Economics Students and Ideological Bias: Evidence from a Randomized Controlled Experiment**

There exists a long-standing debate about the influence of ideology in economics. Some have argued that views among mainstream economists, which are shaped by a dominant Neoclassical discourse, are influenced by strong yet obfuscated ideological underpinnings of the discourse. It is also well-understood that our ideologies and biases they could generate are knowledge-based. Mainstream economics, as the dominant and most influential strand in economics, plays a major role in producing discourses which constitutes knowledge among economists. It can therefore shape ideological views among economists via channels through which it produces and disseminates economic discourses. One of these important channels is economics education, through which economic discourses are disseminated to students. It affects the way students process information, identify problems, and approach these problems in their research. Not surprisingly, this training may also affect the views and policies they favor and the ideologies they adhere to. Using an online randomized controlled experiment involving 2735 undergraduate and graduate economics students in 8 different countries, we examine the effect of ideological bias on views among students in economics. Participants were asked to evaluate 15 statements from prominent economists on different topics, while source attribution for each statement was randomized without participants' knowledge. For each statement, participants either received a mainstream source, an ideologically different less-/non-mainstream source (Treatment 1), or no source (Treatment 2). We find that changing source attributions from mainstream to less-/non-mainstream, or removing them, significantly reduces students' reported agreement with statements. This contradicts the image economics students have of themselves, with 67% of participants reporting that in evaluating a statement one should only pay attention to its content. Our results also suggest that changing/removing sources has substantially different impacts on students with different self-reported political orientations, with those more strongly oriented towards right exhibiting stronger patterns of ideological bias. Female students are also found to exhibit less ideological bias relative to their male counterparts. We also find that our estimated measure of ideological bias is significantly larger for students who have spent more time

studying economics, which suggests our findings are at least partly due to the effect of economics training as opposed to a self-selection mechanism whereby students with stronger ideological biases sort into economics.

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**Sonia San Martín**

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&

**Cristina Torrego**

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## **Consumer Perception of Metaverse Experience**

Recent literature finds consensus that Metaverse is “a technology-mediated network of scalable and potentially interoperable extended reality environments merging the physical and virtual realities to provide experiences characterized by their level of immersiveness, environmental fidelity, and sociability” (Barrera and Shah, 2023 p. 5). Metaverse market value could not be unnoticed since it is expected to surpass \$47 billion by the end of this year 2022, and at least half of its users (51%) have an average age of 13 years old, becoming soon the future population of consumers (Nikolovska, 2022). Metaverse virtues as a business platform are (1) creating new schemas for communication, collaboration, contact, and acting in a metaphoric 3D world where virtuality and reality are blended; (2) inspiring business applications to work in a decentralized environment (e.g., blockchain); (3) transferring or obtaining value through digital assets (e.g., NFT) and (4) pushing digitalization and virtualization inside the firms. A literature review conducted in the online database Web of Science returns 16 papers with the keywords "brand" and "metaverse" in the title or abstract. It is relevant to mention some implications of involving Metaverse experience in brand management and purchase experience. Jeong et al. (2022) suggest that: it is possible to provide a seamless purchase experience to consumers by adapting and decorating the metaverse space according to the brand or product concept. Also, Chen and Yao (2022) propose that through virtual reality, brands can mimic the offline shopping experience, thereby reducing the information ambiguity of online shopping or increasing the seamless shopping experience for consumers. However, the Metaverse as a new marketing paradigm is still unfamiliar to consumers. In this sense, the proposed research aims to determine the potential that the Metaverse experience offers

consumers. For this purpose, a quantitative analysis will be conducted with the help of a survey with current or potential metaverse users. We expect this research will contribute to exploring consumers' perceptions of the marketing implications of Metaverse use.

**Sami Kajalo**

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&

**Jia Song**

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## **A Psychological Inquiry into Consumers' Motivations to Participate in the Sharing Economy**

Previous research has found that, for example, financial benefits and positive attitudes toward sustainable consumption serve as major motivations to participate in sustainable consumption practices. One form of sustainable consumption practices relates to sharing economy, where individuals rent or share things like their cars and homes with other individuals in a peer-to-peer fashion. Part of the sharing economy is collaborative consumption. Collaborative consumption is a term referring to the peer-to-peer-based activity of obtaining, giving, or sharing access to goods and services. This sharing is then made possible and is coordinated through community-based online services. Companies and services such as Airbnb, Couchsurfing, and Uber are examples of this form of consumption. It is widely recognized that collaborative consumption can serve as a tool for more sustainable consumption practices, even though there is also wide criticism of this view. Current literature on sustainable consumption is becoming vast but still lacks the understanding of why consumers' views on the topic differ so much. The present paper is an attempt to fill this research gap by analyzing how a certain psychological theory can be applied to understand the reasons why consumers' views differ so much. The present paper investigates whether the Reinforcement Sensitivity Theory (RST) can help us to understand consumers' motivations to participate in sustainable consumption practices such as collaborative consumption. Reinforcement Sensitivity Theory is a psychological theory that states that two underlying neurobiological systems shape our behavior. These systems are called Behavioral Activation Systems (BAS) and Behavioral Inhibition Systems (BIS). BAS is about sensitivity toward rewards and positive goals. On the other hand, BIS focuses on sensitivity toward punishments and avoiding negative outcomes. The present paper investigates how these two sides of the RST can explain attitudes toward sustainable consumption practices. First, the paper presents a theoretical model of how we could use the Reinforcement Sensitivity Theory to understand consumers' motivations toward sustainability. Second, the paper presents the results of an empirical

survey among consumers where consumers' willingness to engage in sustainable consumption was explained by RST. The data is analyzed using Structural Equation Modelling (SEM). The results of the SEM analysis provide several interesting findings. First, the results demonstrate how different the effects of BAS and BIS are on the willingness to participate in sustainable consumption, Second, the results show that RST can help us to understand attitudes towards sustainable consumption. Third, there are several interesting new research avenues based on our findings.



**Ioannis Kallianiotis**

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## **Exchange Rate Forecasting: The Fundamental Forecasting Model**

This paper deals with the Fundamental Forecasting, which is based on fundamental relationships between economic variables and exchange rates. Then, all the theories of exchange rate determination, Monetary Approach (Monetarist and Overshooting Model), the Portfolio Balance Approach, and others, can be used to forecast the value of the exchange rate next period. This type of analysis is called fundamental analysis, due to the economic fundamentals that are used in the forecasting process. Thus, fundamental forecasting is the practice of using fundamental analysis to predict future exchange rates. This involves looking at all quantitative and qualitative aspects that might affect exchange rates, including macroeconomic data and political factors. Critics contend that fundamental forecasting is limited as some of the data it includes is difficult to quantify and it may miss some data that have an immediate effect of exchange rates. But in this case, we can use dummy variables to measure the effects of political or other external events (crises, pandemics, wars, etc.). Investors, traders, and speculators need to forecast the exchange rate of their domestic currency with respect to the currencies of the countries that they make business with them.

**Ceren Koksal**

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&

**Eda Yilmaz Alarcin**

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## **The Effects of Cultural Values on Word-of-Mouth Marketing in Health Services**

Globalization and information technologies have been developed in the last few years. This situation causes to increase in message intensity. The increase in message intensity reveals the need to reach the right information, which has increased the impact and importance of word-of-mouth marketing in health services. Individuals reach the right information by word of mouth, which decreases bad service probability. Especially in recent years, with an increase in international marketing activities in health services; hospitals have started to expand abroad, people from different cultures prefer Turkey to get health services and/or apply to Turkish hospitals in their respective countries and share experiences with their inner circle after receiving health care has made it important to research the effect of culture on word-of-mouth marketing. There has been no detailed research on the effect of culture on word-of-mouth marketing, correspondingly the preference for health services. The aim of this research is to guide health service providers to determine their word-of-mouth marketing strategies depending on the cultural characteristics of consumers. In research, word-of-mouth marketing effects will be based on Hofstede's four basic cultural dimensions of individualism, masculinity, uncertainty avoidance, and power distance. The participants in this study will be people from different nationalities who have received health services in Turkey. The limitations of the study are the inaccessibility of people in distant countries. In spite of its limitations, the study will certainly add to our understanding of the cultural effects of word of mouth. We think that people from different cultures will evaluate health services differently, and in this context, they will spread word-of-mouth differently.

**Nanda Kumar**

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**Parneet Pahwa**

Clinical Assistant Professor, The University of Texas at Dallas, USA

&

**B.P.S. Murthi**

Professor, The University of Texas at Dallas, USA

## **Modelling Heterogeneity in Choice Models, Household Level Heterogeneity in Reference Price Effects: Should National Brands Care?**

Much of the extant empirical work on consumers' grocery purchases employ models that are estimated on household scanner panel data. A known limitation of these models is that households may have multiple decision makers, and a decision maker may have brand preferences and marketing mix sensitivities that are distinct from other decision makers in the household. We seek to study whether models using individual customer data provide substantially different insights and managerial implications relative to models that use household data. With the exception of a few studies (Bruno et.al. 2019, Pahwa et.al. 2023) this important issue has not been addressed in the literature, possibly due to limitations of scanner panel data. Using a unique data set that identifies choices made by individual customers within a household, we estimate multinomial choice models at the household level with and without incorporating intra-household heterogeneity using Markov Chain Monte Carlo (MCMC) procedures. We incorporate controls for unobserved heterogeneity by estimating random coefficients models which allows the brand preferences and the price sensitivity parameters to vary across households as well as members within the household. In addition, to accounting for state dependence, that is the effect of past brand choice on current choice, we also include reference price as a covariate. We find that in each product category the estimates obtained at the customer level are significantly different from those obtained at the household level. This suggests that treating the multi-member households as a single decision-making unit and ignoring intra-household heterogeneity could have serious ramifications for a brand's targeting and promotional strategy. We show that targeting households with promotions based on customer level estimates will result in outcomes that are significantly more profitable relative to targeting based on household level estimates.

**Laure Lavorata**

Professor, University of Reims Champagne Ardenne, France

&

**Yohan Gicquel**

Assistant Professor, University of Reims Champagne Ardenne, France

## **Champaign's Brands and CSR: What is the Consumer's Perception? What Issues?**

Environmental, societal and economic issues are increasingly forcing brands to act. They implement CSR actions more by legal constraint, by conviction, to meet consumer expectations, to acquire a competitive advantage (Swaen and Chumpitaz, 2008), to retain their customers (Louis et al., 2021), and/ or to build a more responsible image (Lavorata, 2014) even if they consciously maintain problematic situations (Gicquel, 2022). However responsible practices have a significant impact on brand image and equity (Cowan and Guzman, 2020), and the CSR helps build a strong brand (Maon et al., 2021). CSR has been defined as the obligation of business to take steps to protect and improve the welfare of society and business (Sen and Bhattacharya, 2001) and it's an important strategic axis of differentiation for brands (Hildebrand et al., 2011).

This research focuses on the perception that consumers have of the CSR strategies of champagne brands which is important because champagne brands face strong international competition (notably from imported sparkling wines which are less expensive) and consumer interest in more responsible brands is growing. Moreover, the CSR is often synonymous with sobriety for the consumers even though the champagne is associated with the image of luxury. However, consumers are not always aware of the actions taken by brands and there is often a dissonance between the real image and the perceived image. According to Lambin and Moerloose (2021: 412), the brand is "the set of cognitive and emotional mental representations" of an individual or a group toward a brand and is analyzed through three levels: the perceived image (how the target segment sees the brand), the real image (the actual internal perception of strengths and weaknesses) and the desired image (the positioning sought by the company).

To understand the perception that consumers have of the CSR actions of champagne brands, we conducted a qualitative study with 30 consumers in January-February 2022 and carried out a first manual thematic analysis and a second with the N'Vivo software. The results show that while consumers are sensitive to the environmental actions

of brands in general, they are often unaware of the environmental commitments of champagne brands and may even be suspicious and skeptical. The only visible action, according to the interviewees, are organic products even though they mention the importance of eco packaging (reducing its weight and creating more sober boxes). It appears that the main problem is the lack of communication of champagne brands on their CSR policy but to avoid greenwashing, brands need to demonstrate their CSR actions in practice. Consumers do not take CSR actions seriously because brands most often communicate about their commitment to the cultural field. To this end, we propose various recommendations, notably in terms of product development, point-of-sale promotion and brand management.

**André Le Roux**

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&

**Thomas Stenger**

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## **A Typology of Social Media: A Quantitative Approach Based on Consumers Use**

Social media are a major facet of consumers' life. They are also very diverse in terms of consumers' use. Representing this diversity through a typology of use is therefore a relevant topic for academics as well as managers. This research attempts to contribute to this classifying and organizing effort as new platforms appear every year.

Research on social media focuses on technical characteristics. In addition, most classifying efforts fail to account for the diversity of social media platforms and for the types of content generated by users or on the types of users' participation.

Based on a socio-technical approach, this research elaborates on a taxonomy of social media platforms developed using a qualitative approach (Stenger and Coutant, 2011, 2013) that proposes to position social media along to four dimensions: friendship versus interest, and self-presentation versus content-presentation. This research attempts to test the proposed taxonomy of social media using a quantitative approach. It aims at operationalizing this typology, thanks to a survey on declared use of eight major platforms based on a sample of 514 respondents representative of the French population in terms of sex, age and occupation.

This research allows exploring the structure of the proposed axes of the developed measurement scale. Results show that the global structure of the dimensions i.e.: friendship, interest, self-presentation and content-presentation, is confirmed. However, one of the dimensions, interest, seems to be multi-dimensional as it splits into two sub dimensions: a utilitarian-oriented/professional dimension and a more hedonic-oriented dimension. The relation among dimensions is discussed as well as the reliability and validity of the proposed scale. This research contributes to the effort of classification of social media. It proposes a framework that allows positioning the wide diversity of social media platforms. In addition, it proposes a scale that operationalizes the proposed typology of social media. This typology as well as the proposed scale can be used as a tool to explore, characterize,

and typify the profile of various social media platforms. It also allows comparing platforms in terms of use as well as users profile.

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**Zheng Fan**

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&

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## **How Does Cultural Distance Affect Chinese Companies' Outward Foreign Investment? Evidence from the Belt and Road**

Being proposed from 2013, the Belt and Road Initiative highlights five focuses, which are policy coordination, unimpeded trade, financial integration, facilities connectivity and people-to-people bond respectively. However, we propose that the implementation of people-to-people bond could be hampered by cultural distance between different countries and thus negatively affecting the fulfillment of other focuses such as unimpeded trade or financial integration. Hence, it's an essential prerequisite to verify the impact of cultural distance so as to better promote the connectivity between the Belt and Road partners. In this study, we conduct an empirical study on the causal relationship between cultural distance and Chinese companies' outward foreign investment using a panel data set of 40 countries along the Belt and Road over the period 2014-2020. Results have confirmed the negative impact of cultural distance on outward foreign investment of Chinese companies. What's more, it's found that based on the Hofstede model of national culture, Chinese companies pay more attention to the similarity in the cultural dimension of masculinity with host countries when making outbound investment. Therefore, it's suggested that the impact of cultural distance should be taken into account in the Belt and Road partnership between China and the host countries. When making outbound investment, Chinese companies need to better understand the local culture of host country, cultivate more cross-cultural management personnel and strengthen cultural communication and integration with people from host country, thus weakening the negative impact of cultural distance. Our study has both practical and theoretical implications for related policy makers, companies and researchers.



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**Jason Miklian**

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&

**Kristian Hoelscher**

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## **Perpetual Crisis and Small Business Survival: SME Experiences and Strategies from Beirut, Lebanon**

Most existing literature on business and crisis frames crisis as a singular event that a business must navigate to survive through or thrive after. How do Small and Medium Enterprises (SMEs) survive through intersecting crises, and how do their strategies differ when operating through an environment of perpetual crisis? In Lebanon, concurrent overlapping crises grounded in weak political institutions, economic instability and disasters have seen SMEs profoundly and existentially impacted. In addition, Beirut SMEs already operate in a complex urban environment, where neighboring conflicts, urban insecurity and sectarian divisions impact business operations. Yet despite this fragility, these same firms are often held up in economic development discourses as the engines of local development and livelihood creation; and for their ability to contribute as peace actors in their communities. How do SMEs negotiate these conditions, for example when facing pressures to undertake illegal strategies, practices or relationships for survival; or an explicit embrace of these to grow? Moreover, is the 'perpetual crisis operating mentality' consistent with SMEs being willing or able to deliver positive societal dividends? This paper addresses these questions by developing a framework conceptualizing SME strategies to perpetual crises, drawing on thirty in-depth qualitative interviews with SME owners and business associations during fieldwork in Beirut. We find that SMEs use nuanced strategies and networks to contend with multidimensional crises that are distinct from 'business as usual' approaches, and discuss how 'urban crisis as condition' may shape our understandings of SMEs as peace and development actors. We use these findings to build theory on the role of small business in perpetual crisis and on how survival strategies in such settings can themselves be existential threats to business resilience.

**Yohann Mauger**

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**Richard Gilson**

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&

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## **A Minimum Viable Product Approach for Innovation and New Program Launch in Business Education**

Business schools face increasing pressure to be innovative in developing their curriculum and launching new programs. However, innovation is risky and full of uncertainty, and many business schools face resource constraints in a variety of forms. As a result, managing the innovation process in business education in a resource-efficient and time efficient way is a challenge facing business schools.

In this article, we share our experience and insights about using the MVP (minimum viable product) approach to promote innovation and launch a new product (program) with both limited resources and time in our business school. We hope what we learned in this process will be inspiring to other business schools facing the same situation. We first introduce the MVP process, its application to the development of our new program, the steps we undertook, and the challenges we continue to face. Finally, we conclude with directions for future development of programs and applications to other business schools.

### *The MVP Process*

*What is it?* The MVP approach is a means by which organizations offer a minimal version of a product (or service) to the consumer with the intention of attaining as much feedback as possible to improve the offering in an iterative process. The purpose is to provide the product quickly and at minimal cost to obtain customer validation and feedback in order to enhance the product and increase its value (Babych, 2021, Kumar 2023). This approach is very common in startup firms where there are significant resource constraints.

*What are the advantages?* The ability to be first to market is a big advantage. In addition, the iterative process allows the organization to obtain feedback from actual users, then quickly apply that feedback to

changes in the product offering to better meet customer needs and add value. By offering the minimum value of the product rather than a fully developed, optimal product, investment is kept low, and improvement costs can be spread out as well as be targeted to those aspects that are highly valued by customers (Parker, 2023).

*Why is it relevant to business schools?* MVP is considered to be appropriate when three criteria are met: when you 1) want to launch quickly, 2) are unsure of the potential or acceptance of an idea, and 3) have resource constraints. In our case, we met all three of the criteria. This entire section is developed further in the full paper.

#### *Using MVP to Develop the Strategic Case Competition*

This section delineates how we used the MVP approach to launch a strategic case competition, and the feedback received from our stakeholders (students, faculty, business community, administration). Space constraints do not allow us to provide details here, but the full paper more closely examines the MVP literature as well as provides application to our new program and a step-by-step delineation of the development, marketing, launch, feedback process, and iterative improvements over the course of one semester under resource constraints.

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&

**Thamer Ali Alwahbi**

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**The Availability Level of the Aesthetic Approach in  
Mathematics Textbooks for the Higher Grades at the  
Primary Stage in Saudi Arabia**

This study aims to establish the presence of aesthetic underpinnings in Saudi mathematics textbooks. For this, the researchers used descriptive-analytical methods. We looked at fourth, fifth, and sixth grade math textbooks. The arbitrated aesthetic method divides 27 signals into seven basic domains. The content availability of each main aesthetic approach area was found to be constant across all books in the elementary stage's upper grades. Aesthetic strategies were used in primary mathematics textbooks at a rate of 34%. The average percentages for the major domains were: 76.9% major themes, 57.7% mental level, 52.8% science framework, 35.4% mathematics and arts, 10.7% mathematics and emotional components, and 2.2% athletic aesthetic criteria. The researchers suggested designing mathematics courses and texts artistically.

18<sup>th</sup> Annual International Symposium on Economic Theory, Policy & Application,  
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**Ampalavanar Nanthakumar**

Professor, State University of New York at Oswego, USA

**A Copula based Investigation about the Effect of the  
Sample Size on the Range Distribution**

*NOT AVAILABLE*

**Hiroshi Onishi**

Associate Professor, Chuo University, Japan

## **Does Deregulation of Health Claims on Functional Food Package Design Change Consumers' Purchase Behaviors?**

Japanese government deregulated health claim legislation for functional food products in April 2015. A new healthy food category, called "Kinousei (Functional-food)" brands, was introduced in addition to the incumbent category of "Tokuho (Special-health)" brands which requires more rigid scientific evidences of health effects for an official approval. This research investigates the effects of the health claim deregulation for the functional food products to consumers' purchase behaviors, for example, whether people have bought more volumes and switched to the healthy claimed products, or they have not changed their purchase behaviors, and which types of consumers are vulnerable to the health claims of food products. In addition, this study also examines what kinds of product package designs are perceived as healthy image by consumers.

We use a purchase panel dataset of functional yogurt products in Japanese market to investigate our research questions. We apply the deep learning framework of the BrandImageNet model (Liu et al. 2020) in order to evaluate the health image of product packages among more than one thousand of the yogurt items. Then, we estimate the difference-in-difference regression with cluster-robust inference by Cameron & Miller (2010) to investigate the effect of the health claim deregulation for the Kinousei brands and the consumers' healthy image perception to the product package designs on consumers' functional yogurt purchase behaviors by comparing the Tokuho brands as a control group between pre and post periods when the deregulation was in force in Japanese market.

We find the positive impacts of the health claim deregulation and healthy package design images among only consumers whose wellness consciousness is low, which results in switching their purchase products from normal brands to health claimed the Kinousei brands. Whereas, consumers with high wellness consciousness have not changed their purchase behaviors to keep buying the Tokuho brands. We then also discuss managerial implications for functional food manufacturers.

**Victor Oxman**

Professor, Western Galilee College, Israel

## **Using Hint Buttons in GeoGebra Applets when Teaching Geometric Proofs**

One of the main tasks in teaching geometry is the development of proof skills. Many students find it difficult not only to complete the proofs on their own, but also to understand the proofs presented to them in completed form (for example, in a textbook). It often takes a lot of effort on the part of the teacher to help the student understand this or that proof, even when it is detailed in the textbook.

Dynamic geometry software such as GeoGebra allows you to create HINT buttons that can help students to prove a geometric theorem on their own or understand a proof suggested to them by a teacher or given in a textbook. The purpose of the HINT buttons is to provide a step-by-step guide to the progress of the proof. When a student has difficulties at some stage of the proof, he can use the appropriate HINT button. The help provided by the HINT buttons is mainly through the use of the following tools: a) dynamic graphics, b) colors, c) mathematical symbols and notations including formulas. Naturally, when working with the HINT buttons while doing proof, the student should be able to contact the teacher for additional help. Applets with HINT buttons can be developed both by the teacher himself, who has the appropriate knowledge and skills in using GeoGebra (this highlights the importance of proper teaching in teacher training at universities and colleges), or by an outside specialist involved for this.

In our presentation, we give several examples of using the HINT buttons in the process of proving various geometric theorems, accompanied by a demonstration of the corresponding GeoGebra applets. The relation of such proofs to proofs without words (PWW) will also be discussed.

**Arthur Pantelides**

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## **Utilization of the SOT Hierarchical Framework for Successful Strategic Implementation Management**

Both significant research into, and practical application of, strategy and strategic management and how these relate particularly in the field of business, delineates three fundamental levels of decision-making and action that define an organizations evolution: corporate strategy, operational control, and tactical work. This paper extends this conceptual approach of SOT: Strategy, Operations, Tactics framework, which has been used in such diverse areas as military operations, systems engineering, operations management, as well as overall business development; and pursues a practical application within a multi-operational strategic business unit structure. We establish and clearly define a methodology for strategic alignment starting from the SOT Model foundation and then construct a set of integrated practical management tools and processes that can be effectively utilized by a multitude of organizations in their strategic alignment efforts. The framework and subsequent management model that we establish is then shown to be successfully prototyped and implemented within the regional US headquarters of a larger international organization with global headquarters in Japan. Our paper presents the conceptual framework, construction, and implementation of this strategic alignment management system from its inception in 2015 thru 2022 operations. System performance data is documented and evaluated.



**Tianjiao Qiu**

Professor, California State University, USA

## **Entrepreneurial Knowledge and Country Risks on Entrepreneurial Market Expansion**

The recent decades have witnessed accelerating advances in technological development such as wireless communication and artificial intelligence, which significantly influence entrepreneurial growth. Entrepreneurial market expansion through new technology adoption can benefit from market offerings such as new products, dynamic pricing, effective communication, and new market channels. However, while adopting new technology in market expansion promises entrepreneurs a competitive advantage, there are considerable risks involved in entrepreneurs' decisions on whether they should rely on new technology to expand the market and how extensive the market expansion should be.

Research shows that risk perceptions inhibit market expansion through innovation and new technology adoption such as e-commerce platforms (Belkhamzal and Wafa, 2014) and information and communication technology (Saldanha et al., 2021). However, little is known about how education and entrepreneurial knowledge impact entrepreneurial market expansion under different levels of country risks. The paper empirically examines how entrepreneurial knowledge and education impact market expansion through new technology adoption in countries with different macroeconomic risks and uncertainty avoidance cultures. Empirical findings from generalized linear mixed models on data from 174,128 entrepreneurs across 230 countries show the significant effects of entrepreneurial knowledge, education, country macroeconomic risks, and uncertainty avoidance cultures on market expansion through new technology adoption. Entrepreneurs with higher levels of knowledge and education are more likely to engage in market expansion through new technology adoption. Higher levels of country macroeconomic risks and uncertainty avoidance cultures inhibit entrepreneurs' market expansion through new technology adoption. Further moderation tests show that the positive effects of entrepreneurial knowledge and education on market expansion are more evident in countries with higher levels of country macroeconomic risks. The results show that education and entrepreneurial knowledge can enable entrepreneurs to pursue risky market expansion through new technology while minimizing negative impacts on their venture growth caused by the country's vulnerability

to external shocks due to high inflation rates and government debts. Furthermore, uncertainty avoidance culture moderates the effect of education on entrepreneurial market expansion, where the positive effect of education on market expansion is more significant in countries with higher uncertainty avoidance cultures. While an uncertainty avoidance culture is hard to change in society, the result shows that better-educated entrepreneurs have higher chances of overcoming risk aversion in high uncertainty avoidance cultures to pursue market expansion through new technology adoption.

The paper calls on governments and society to empower entrepreneurs with ongoing learning opportunities so that entrepreneurs can overcome the limitations caused by risk aversion for market exploration. An entrepreneurial ecosystem that provides a supportive environment that improves entrepreneurial knowledge and education, and reduces macroeconomic risks with social capital and financial resource access can effectively promote entrepreneurial market expansion through new technology adoption.

**Ainara Rodriguez-Sanchez**

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**Román Salmeron-Gomez**

Professor, University of Granada, Spain

&

**Catalina Garcia-Garcia**

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## **Multicollinearity Problem in Economic Models with Panel Data**

The estimation of panel data models with fixed or random effects consists of modifying the original observation matrix and the estimation of the transformed model by Ordinary Least Squares (OLS). Since OLS estimation is finally applied, the numerical and statistical analysis performed may be affected by the presence of worrying multicollinearity if there is high linear relationship between the independent variables of the transformed model. Among others, the main problems that may appear are: impossibility of isolating the effect of an independent variable on the dependent (non-compliance with *ceteris paribus*), instability in the estimates of the coefficients with the obtaining unexpected signs or estimators with inflated variances that affect to individual significance test.

First of all, this paper establishes that the analysis of the approximate multicollinearity on the original data should only be carried out if pooled OLS is the selected methodology. While if this methodology is discarded, then the detection of this problem has to be focused on the transformed observation matrix and not on the one with the original data.

Secondly, and focusing on the fixed effects approach, this paper analyzes the consequences of the transformation of the original model (by using dummy variables or entity-demeaned OLS) on the degree of approximate multicollinearity that initially existed, and the application of raised regression is proposed as an alternative estimation technique to OLS to mitigate this problem if the approximate multicollinearity detected is considered worrying.

Finally, the study of the random effects approach remains as a future research line.

**Philippe Rycelynck**

Associate Professor, University of Littoral-Côte-d'Opale, France

## **On Regular Arrangements of Lines in the Plane**

In this work, we address the problem of enumerating connected components (also called chambers), with specific properties, of complements of arrangements of lines in the plane. The study of arrangements is quite old and was initiated by J. Steiner, and has recently been revived, notably with the work of Poonen and Rubinstein. We consider particular regular arrangements, for which the description of the chambers according to their compactness properties or their shape can be treated. The first one is defined using a regular  $n$ -gon and gives rise to sequences of bounded length of cardinalities of chambers according to their shapes. The second is defined as the minimal arrangement containing an  $n$ -clique and results in sequences of irregular and unbounded cardinalities. Characterizing the connected components among all polygons with vertices in the underlying geometric graph is a complex task, which relies on a transformation of this geometric graph into a non-planar diamond lattice. We also give the adjacency matrices of all geometric arrangement graphs and display them as block matrices by choosing a convenient order of vertices. Finally, the area distribution of the connected compact components in these arrangements gives rise to new challenging summation formulas. We also address the problem of reconstructing arrangements with a prescribed sequence of part cardinalities. Finally, we emphasize the interaction between experimental mathematics (using Matlab and Maple) and Euclidean geometry or topology.

**Adel Sakr**

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## **A Content Analysis of Visual Metaphor in Print Advertising**

The goal of employing visual metaphor in advertising is to enhance the possibilities of persuasion. Indeed, there is a fair understanding of the nature of visual metaphor as a concept. However, is this relevant to real world print advertising? Is visual metaphor actually present in modern print ads? Is this presence limited to specific print media categories? To answer the above-mentioned questions this research provides a comprehensive assessment of the use of visual metaphor in print advertising. This research paper starts by firstly defining the concept of visual metaphor specifically as related to advertising as well as the different types of visual metaphor proposed by Forceville (1996) in his typology of visual metaphor in advertising. Secondly it presents the results of a content analysis study conducted on 320 print advertisements. Results of this study showed that visual metaphor is strongly present in modern print advertising. Furthermore, this presence is showing an increasing trend over time. The results also validated the Forceville (1996) typology of visual metaphor in advertising and indicated that these types of visual metaphor proposed by Forceville are actually present and employed in modern print ads. Certain types are generally more strongly present in print advertising (e.g., replacement metaphor, verbo-pictorial metaphor). However, this presence is slightly decreasing over time compared to the presence of other more 'novel' types (e.g., verbo-pictorial indirect effect metaphor), which show an increasing trend over the time period covered in this study. This also indicates that visual metaphor is not only an existing advertising phenomenon but also a continuously evolving one. Another important finding is related to the development of print ad design, with the visual element playing definitely the predominant role. This content analysis study provides an important contribution by showing that the different types of visual metaphor proposed by Forceville's (1996) actually correspond to how visual metaphors are encoded in modern print ads across five different print media categories/outlets. These categories are magazine, outdoor/out of home, billboard, and posters. In addition to award winning ads. It further identifies two 'new' additional types that represent extensions to the same typology of visual metaphor (e.g., verbo-pictorial indirect effect metaphor, total replacement metaphor). This research further brings to light the variety

of ad design elements (including visual metaphor) employed in print advertising. Moreover, it also offers an important rationale for future empirical research comparing these different elements, for example the different types of visuals, or text elements. This research also has practical and managerial implications. It provides valuable knowledge to advertising practitioners with regards to which types of visual metaphor are mostly employed in print advertising across the different media categories, what are the established types as well as the more emerging (new) types that contribute to the development of this phenomenon of visual metaphor in advertising as an advertising strategy. This in turn leads to more effective encoding strategies to be employed by advertising practitioners which will positively contribute to the overall advertising effectiveness.

**Norman Sedgley**

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## **The Skilled Worker Premium and Labor's Share of Income: Recent Trends in US Manufacturing**

A well-established literature documents the role of outsourcing and technological change in explaining the growing skills premium in US manufacturing from the 1970s through the 1990s. In the 1980s labor's share of income relative to capital also begins to decline. These two trends continue through the great recession and beyond. Separate literatures identify different reasons for the change in the skills premium and the decline in labor's share. This paper considers the explanations for these two phenomena in a unified framework. The analysis is based on US manufacturing data from 2002 through 2017, a time period when there were significant shifts in the nature of outsourcing and market concentration. The results are quantitatively and qualitatively different from results reported for earlier time periods. For example, outsourcing now plays a limited role in changing shares. To the degree that outsourcing redistributes factor shares, it favors production workers at the expense of management.

**Tea Shavadze**

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&

**Tamaz Tadumadze**

Professor, Ivane Javakhishvili Tbilisi State University, Georgia

## **On the Representation of a Solution for the Perturbed Quasi-Linear Controlled Neutral Functional Differential Equation**

The neutral functional differential equation is a mathematical model of such system whose behavior at a given moment depends on the velocity and state of the system in the past. Many real processes are described by neutral functional differential equations and the theory of such equations is presented in [1-3]. In this work, for the controlled neutral functional differential equation

$$\dot{x}(t) = A(t, x(t), x(t-h))\dot{x}(t-\sigma) + f(t, x(t), x(t-\tau), u(t)), \quad t \in [t_0, t_1]$$

with the initial condition

$$x(t) = \varphi(t), \quad t < t_0, \quad x(t_0) = x_0$$

we prove the analytic representation formula of a solution - Variation formula of solution, which is obtained in the left neighborhood of the endpoint of the main interval. In the formula, the effects of perturbations of the delay parameters  $h, \sigma, \tau$ , the initial vector  $x_0$ , the initial  $\varphi(t)$  and control  $u(t)$  functions are detected.

In the particular case, when the matrix function  $A(\cdot) \equiv 0$ , Variation formulas of solutions for different type of delay functional differential equations are proved in [4, 5].

Theorems of such a type play an important role in studying optimal control problems, proving of the necessary conditions of optimality.



**Akira Shimada**

Associate Professor, Nagasaki University, Japan

## **Study Migrants' Skilled Human Capital Formation under Deregulated Immigration Policies in an Overlapping Generations Economy**

This study deals with the problem of study migrants' skilled human capital formation under deregulated immigration policies in a dynamic context. Due to globalisation, workers have become mobile. As a result, skilled workers tended to leave their home countries, and the brain drain happened. To overcome this problem, countries attempted to accept skilled workers from abroad. They also attempted to accept study migrants to complement the skilled labour migrants' acceptance policy. By conducting the study migrants' acceptance policy, they provide study migrants with education and induce them to remain in the host country to work as skilled workers. However, at the same time, countries, especially developed countries, suffered from a shortage of unskilled labour. Although accepting unskilled non-native workers is a contentious issue, these countries had to turn to non-natives to fill the vacancy of unskilled jobs, and for this purpose, they deregulated immigration policies and allowed non-natives to skilled and unskilled jobs. The problem with the study migrants' acceptance policy and the deregulated immigration policy is whether countries can conduct these two policies consistently, i.e. encouraging study migrants to build skilled human capital while increasing opportunities for non-natives to take unskilled jobs. Even if it is possible to increase the acceptance of skilled and unskilled labour migrants simultaneously, study migrants may lose an incentive to build skilled human capital. This study addresses the issue of study migrants' skilled human capital formation under the increased deregulation of immigration policies. This study analytically investigates how increasing deregulation of immigration policies affects study migrants' skilled human capital formation. This study shows that if host countries deregulate immigration policies further to make more unskilled jobs available to non-natives, study migrants reduce the formation of skilled human capital in the short run and in steady state. This is because although unskilled job wages decrease with increases in opportunities for non-natives to take an unskilled job, increased opportunities make an unskilled job more attractive to some study migrants with low innate ability. Due to increased opportunities, they switch from skilled to unskilled human capital formation. Accordingly, ensuring unskilled

labour by non-natives and increasing skilled human capital by accepting study migrants cannot be attained simultaneously. These two policies are incompatible in a dynamic context. However, this study also shows that host countries can partly alleviate the incompatibility by inducing firms to raise skilled job wages and motivating study migrants to build skilled human capital. This study suggests that additional policies that include raising skilled job wages will be effective in accomplishing these two objectives simultaneously. This study contributes to study and labour migrations research by clarifying that host countries' governments cannot manipulate immigration policies and study migrants' acceptance policies independently although they are usually manipulated without noticing incompatibility between them. This study also contributes by showing additional policies that can alleviate their incompatibility.

**Konstantinos Spanos**

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## **Dynamic Instability and Solvency Condition of Public Debt within a Panel of Euro Area Countries**

In this study we use a Keynesian theoretical model proposed by Philippopoulos et al. (2016), to investigate how dynamic stability/instability of public debt affects the solvency condition on the face of crisis periods. It is examined a sample of 11-euro area countries and the overall sample period is from 1980 to 2021, broken down in a subperiod before the global financial crisis (GFC)-period 1980-2007, two crisis subperiods; the GFC (2008-2009) and pandemic (2020-2021), and a subperiod starting after the GFC to the onset of pandemic (2010-2019).

The focus is on the feedback loop between dynamic stability of public debt and borrowing cost, discounted by the economic growth and inflation rate, in conjunction with budget deficits in view of crisis periods. Employing GMM panel dynamic model for all subperiods, the preliminary results show that dynamic stability was the case before the GFC, thus not violating the solvency condition and only budget deficits significantly affected public debt evolution. However, after the GFC up to pandemic period as well as during both crisis periods; GFC and pandemic, dynamic instability prevailed against fiscal solvency on the evolution of public debt. Also, the findings suggest that after the global financial crisis up to pandemic, dynamic instability shows a highly persistent effect on the evolution of public debt.

A further investigation of dynamic effects through panel threshold estimates, show that dynamic instability of debt starts violating the solvency condition when borrowing cost is above 3.29%, and becomes even stronger when it is above 4.39%. The borrowing cost starts pushing to higher debt levels when public debt is 69% and exerts even more pressure when the level of public debt becomes greater than 91%, thus indicating that above this point solvency condition is heavily violated. However, solvency condition recovers when economic only economic growth is higher than 3.4%, which in turn must be higher from borrowing cost as well. The policy implication drawn from the initial results is that low interest rates can create a self-reinforcing loop of high debt, which is the issue for further research.

**A. J. Stagliano**

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## **Did Firms with “Lean” Management Fare Better than Others in the COVID-19 Pandemic? Some Recent Empirical Evidence on Profitability**

Much has been written about the benefits that can flow from implementation of a “lean” management system. It is not merely the modern “Toyota Way” that signals efficiency in business operations, since good evidence exists showing rigorous process thinking in ship building dating as far back as the Arsenal in Venice during the 1450s. Proponents of “lean” (as against “asset light” companies) cite the efficiencies of rapid adjustment to consumer taste changes and reduction of production waste; critics, on the other hand, bemoan the lengthy implementation process and significant up-front costs of adoption. If lean systems really do make it possible to obtain low cost, high variety, superior quality, and rapid throughput times in response to variable customer desires, what happens when the uncontrollable externality of a worldwide pandemic is visited upon the global economic engine? This research addresses that very issue.

The purpose of this study is to investigate the financial performance of firms that have adopted a lean philosophy in the management of business resources and operations. It is focused, though, not on additional examination of the traditional thesis regarding the benefits of an overall lean philosophy, but on the comparative and differential impact of the uncontrollable intervention of a worldwide health emergency. In particular, the question is posed as to whether lean companies fared relatively better – in this case, were less traumatized – than those similarly situated firms that did not function under this particular method of operations.

To create a crucial test of the proposed strength of the lean management of operations philosophy, 15 mature multi-national companies that use lean manufacturing were selected for analysis. This non-scientific sample was matched with firms that did not apply the lean philosophy. Matching was accomplished on the basis of sameness of major industry group and similarity of total asset size as of January 1, 2018. The study was directed at value creation for owners, using the best overall measure of profitability outcomes from the resources placed in management’s control – return on total assets. The years 2018 and 2019 are selected as the pre-pandemic comparison periods and the COVID-19 impacted years of 2020 and 2021 are used as the comparison

fiscal years. The obvious intervener between these two sets of years is the pandemic. The variable differentiating the sample companies and their matches is existence of a lean management philosophy.

The outcomes of this research make a significant contribution to the extensive extant literature about the advantages that might be derived from implementing lean management. There is scant, and somewhat conflicting, evidence developed in systematic and rigorous research investigating financial benefits from adopting lean management as a guiding principle. This project's empirical outcomes will greatly assist our understanding of resiliency in lean production systems that are challenged by a serious uncontrollable external shock.

**Simona Stan**

Professor, University of Montana, USA

&

**Liviu Rosca**

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## **Effectiveness of High-Impact Study-Abroad Programs: A USA-Romania Case Study**

US universities have made global citizenship a priority in student learning outcomes and mission statements, and study abroad programming is often considered to be a primary means for achieving this goal. In turn, Study abroad opportunities continue to be a popular choice for US college students looking to expand their undergraduate or graduate education to enhance their resumes and gain recruiter appeal. Particularly attractive are high-impact educational practices, such as active work/ internships or community service within the host cultures, that foster student development via deeper engagement and reflection. Given time and cost constraints, most students choose to engage in global education through short term summer programs. They also tend to frequently choose English speaking developed countries, which are perceived as easier, friendlier and safer destinations. Given the highly competitive study abroad landscape, what does it take to develop and deliver effective high-impact programs in “off-the-beaten path” destinations for US college students, such as in the non-English, less developed countries of Eastern Europe?

This paper reports on a case study concerning the development of a 10-year long partnership program between the University of Montana (UM), USA, and Lucian Blaga University of Sibiu (LBUS), Romania. Both universities are midsized and mid-ranked academically but both have strong student-centric cultures promoting high impact practices to support students’ learning and internationalization. The key component of this partnership is a summer study abroad program that brings between 10 and 15 students from UM to conduct customized internships in a wide range of organizations (from multi-national manufacturers to local NGOs) in Sibiu Romania. The paper reports on the experiences of the 60+ students who have participated in this program (as of June 2023). The study abroad program presented includes the factors considered in the recruitment of participating organizations, selection of supervisors, placement and mentoring of students throughout their internship practice and project work, and the outcomes for both the students and the host organizations. The paper

concludes with a set of best practices and pitfalls to be avoided in the design and implementation of such programs.

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## **Advances in the Study of Integral Type Properties**

In this study, we investigate a wider and more comprehensive idea that generalizes dichotomous and trichotomous behaviours, which assume a splitting into invariant subspaces where the norms of trajectories are bound by certain functions that rely on the initial and ending times of the considered evolution equation. Additional conditions are given by the compatible projector families and the exponential growth of the skew-evolution semiflow.

Due to the fact that the characterizations in this case do not impose limits on the matrix that defines a system of differential equations, or on the solutions, such as bounded growth or decay, the approach of the dichotomy and trichotomy in the integral sense is of general interest. By using the dual of the Banach space, we also seek to characterize the Barbashin properties for the integral type classes of dichotomy and trichotomy.

A few associations with the classic notions of asymptotic behaviours are also provided and specific examples are used to highlight the approach.

A non-trivial aspect refers to analytical tools from the theory of evolution equations, such as the cocycles approach, in order to study the existence problem and the long-time evolution for differential/difference equations.

The need for a new approach arose from extending the uniform setting to a more general nonuniform framework.



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## **Biodiversity as a Term for Improving Environmental Awareness: An Exploratory Analysis**

Nowadays, society is more and more concerned about environmental protection and nature conservation. This increased environmental awareness has also consequences in the market, where consumers are increasingly interested in purchasing pro-environmental or organic products. However, the literature on organic products has shown that there is widespread confusion about the term "organic", which is seen as a quality heuristic rather than an indicator of environmental contribution. Thus, it may not be the most appropriate term for raising environmental awareness. In this context, biodiversity could become a core term to achieve pro-environmental behavioural change, considering its importance as an indicator of the health of the planet and as one of the main environmental dimensions of sustainability. Some studies highlight that biodiversity could be a term with greater evocative power with respect to the environment, generating less confusion and being easier to interpret and associate with the environmental dimension. In this study, we set out to analyze the degree of knowledge that consumers have about the term biodiversity. For this purpose, qualitative research was carried out through focus groups in four countries with different levels of environmental sensitivity (Spain, the United Kingdom, Denmark and Germany). The results show that there are differences in the degree of knowledge that consumers have about biodiversity, according to different variables such as the country, the level of environmental awareness and the family life cycle. This study is a starting point for further exploring this term and improving consumer knowledge, which is a key aspect to achieving greater environmental awareness.

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## **Social Media Marketing in Hospitals: Ethical Considerations during a Pandemic**

The use of social media in healthcare is growing in popularity, particularly during the COVID-19 pandemic. Hospitals have utilized social media platforms to disseminate vital information, provide updates on COVID-19 cases, and market their services. Nonetheless, hospital social media marketing raises ethical concerns that must be addressed. During a pandemic, this study seeks to identify the ethical considerations hospitals must keep in mind when using social media for marketing purposes.

A qualitative research design will be employed, using semi-structured interviews with hospital marketing managers and social media experts. The data collected will be analyzed using thematic analysis. The study will investigate ethical considerations pertaining to privacy, confidentiality, informed consent, transparency, and veracity. It will examine the challenges hospitals face when using social media for marketing purposes during a pandemic, such as the potential for misinformation dissemination and patient privacy violations.

The sample for this study will consist of hospital marketing managers and social media experts who are actively involved in social media marketing in the hospital industry during the COVID-19 pandemic. The sample will be selected using purposive sampling, which is a non-probability sampling method that allows the researcher to select participants who are most likely to provide rich and meaningful data for the research question. The semi-structured interviews will be conducted via online video conferencing platforms such as Zoom or Skype. The interviews will be audio-recorded, with the participants' consent, and transcribed for analysis. The interviews will be conducted until data saturation is achieved, which means that no new themes or insights are emerging from the interviews. The analysis will involve coding the data, identifying patterns and themes, and interpreting the data to draw conclusions.

This study's findings will contribute to the creation of guidelines for hospitals using social media for marketing purposes during a pandemic. The guidelines will provide hospitals with a framework for ensuring that their social media marketing activities adhere to ethical principles, foster patient trust and confidence, and safeguard patient privacy and confidentiality. This research will also contribute to a

broader discussion on the ethical implications of social media use in healthcare and provide direction for future studies.

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## **The Impact of Servant Leadership Perceptions on Employees' Job Burnout Levels**

In the current work context, constantly changing and increasingly demanding, in which employees' well-being is often at risk, the role of leaders have become highly important. In this context, a positive leadership style, such as servant leadership, which postulates that the leader is a source of resources and support, and that the main priority are employees' needs, might contribute to decreasing the negative effects of job burnout(physical illnesses, anxiety disorders, turnover intentions) both on the individual and organisational levels.

Understanding the relationship between servant leadership and job burnout may contribute to improve working outcomes at a practical level, as employees' well-being is determinant for their performance, job satisfaction and a good work environment. Therefore, this research aims at studying the impact that servant leadership perceptions have on employees' job burnout levels. The sample is composed of 79 participants from different organisations and sectors. The results show that servant leadership perceptions have a negative impact on employees' job burnout levels, being that impact stronger when the leader is male. The results not only confirm the importance of this kind of behavior convened with this leadership approach within the organisational environment and to employees' well-being, but also add to the literature about the impact of servant leadership on employees' well-being and the influence of the gender of the leader in such relationship.

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## **Hong Kong Civil Service Work from Home Arrangement and Work-Life Balance: The Policy Responses to the Pandemic**

Governments worldwide implemented several measures to curb the spread of the COVID-19 epidemic. As a response, work from home (WFH) has been one of the government's measures to respond to the outbreak. It has been widely seen that both the private and public sector employees have shifted to WFH during the pandemic. Similarly, many public sector employees in Hong Kong were compelled to adopt such work arrangements during the city's COVID-19 outbreak. This is a rare occurrence in Hong Kong, where public servants were required to work from home. In addition, Hong Kong employees working from home may face more challenges due to their limited home living space. This study, thus, aims to assess how the government provided WFH support to its employees and whether there was an association between WFH support and different aspects of employees' work and work-life balance. The effects of organizational trust and individual working style are also considered since they have been considered related to employees' work and work-life balance. The data was collected through an online survey distributed to Hong Kong government employees. Only 469 respondents experienced work from home during the pandemic, out of a total of five-hundred and seven responses. Multivariate regression analyses were employed to estimate the effects of WFH support and other factors on employees' work and work-life balance. The results showed that 25% of respondents always worked from home during the pandemic. It was found that WFH support, organizational trust and individual working style are significant. Support provided by the government improved its employees' work and work-life balance. Implementing WFH policies or procedures in government organizations could not make an impact except an unexpectedly negative impact on job satisfaction. Compared with specific WFH support provided, the impact of WFH policies or procedures was much more neutral. The result would be the basis for future HR-related policy development for flexible workplaces or work from home for government employees.

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## **Highs and Lows of Brazilian Developmentalism in the 20<sup>th</sup> and 21<sup>st</sup> Centuries**

This essay attempts to evaluate to what extent Brazil's economic strategies and policies of developmentalism have contributed to an uneven development process in the context of analyzing the benefits and costs of those policies and reviewing the major contributions both Brazilians and foreigners have made to not only analyze the basic economic variables and results deciding the path of development, but also look at the social and particularly political variables, which played an important role in the outcomes. The most recent developments have led critics to point at the ineffectiveness that this strategy had on moving the economy on to a stable growth path. This essay attempts to point towards the link between that strategy and corruption, which increasingly took place in the first two decades of the 21st century. The New Developmentalism would seem to be more pragmatic, as it has accepted rather orthodox paradigms practiced in the more successful emerging countries of East Asia. However, the proposed policies would seem to be difficult to be undertaken in a country which has become reform fatigued.

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## **Why Colouring? Voronoi Tessellation and Crystallization**

The importance of the mathematical Voronoi algorithm was first presented at the Symposium on Computer Films, Boulders Colorado 1970.

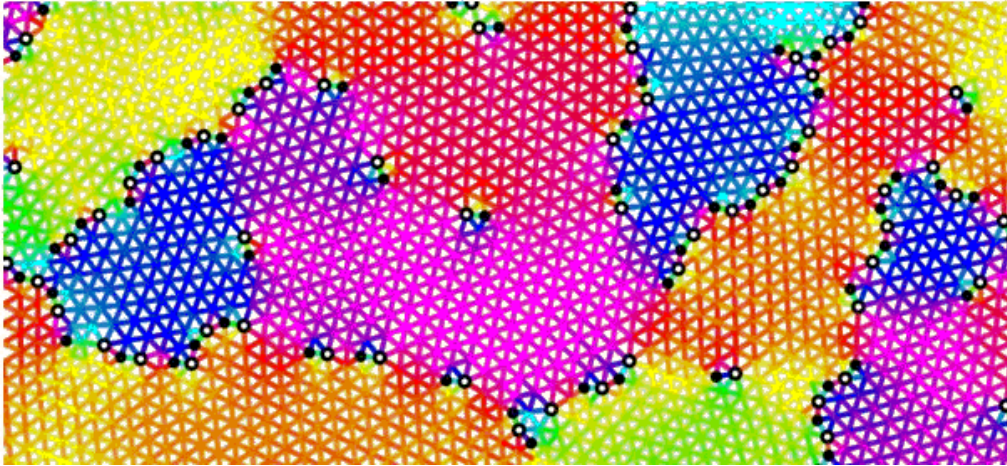
The Voronoi polygon consists of all points of the plane closer to given center (e.g. atom) than to any other center (e.g. atom). Dual to the Voronoi polygons is the Delaunay triangulation, where sides of triangles join the nearest neighbouring Voronoi polygon centers. Centroidal Voronoi Tessellations (CVT) is an iterative algorithm: 1.  $V$  = polygons containing all points closest to centers; 2.  $C$  = chose centroids of  $V$  as the new centers; 3. go to 1.

Starting from random uniform distribution, CVT iterations give highly coordinated flips (exchanges of contacts) leading towards more regular 2d polycrystal with diminishing fraction of pentagon-heptagon pairs (5/7 dislocations).

An important novelty in CVT to be presented at the Conference is the introduction of colouring. The colours are assigned to the sides of the triangles. The full color scale is contained in an angle of 60 degrees, modulo. This ensures that all sides of an equilateral triangle are the same color, depending on the orientation of the triangle, and deviations from equilaterality are indicated by a color change of sides. Grain boundaries play an exceptionally important role in the physics of crystallization. They are created by lines formed by 5/7 dislocations pairs. Each pair of 5/7 forms two spirals colored in opposite directions, that is, coloring 5 runs opposite to coloring 7.

One can observe various situations, sometimes dislocations are arranged densely, one after the other; then the grain boundary is well defined. It happens, however, that dislocations with the same direction are spaced sparsely, then grain boundaries are not well distinguishable, a grain with a given orientation smoothly passes into a grain with a different orientation.

*A. Lissowski, R.Wojnar, Computer simulation of Bragg-Nye model of crystallization, Structured Media - TRECOP '01 In memory of Professor Ekkehart Kröner, Poznań, Poland, September 16-21, 2001; Proceedings of the International Symposium, Editor B.T. Maruszewski, Poznań University of Technology, Poznań 2002, pp. 159-168.*





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## **The Envelope Theorem for Optimization Problems with Composite Modeling Structure**

Recently, Marimon and Werner (2022) introduced the envelope theorem for optimization problems with inequality constraints. They used it to show that the Bellman equation and the Euler equation are linked even if the value function is non-differentiable. In this paper, we consider the optimization problem with more abstract constraints, including the problem dealt with in Marimon and Werner (2022). We show the envelope theorem for the problem with the terms of the composite function expressing the abstract constraints.

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## **The Effect of Failure and Stability on Satisfaction, Negative WOM and Repurchase Intention: Insights from an Online Retailer's Service Failure**

With the developments in technology, the traditional marketing channels have been altered which directly reformed retailing industry and led the generation of e-retailers. Accordingly, e-retailers require the services of small package carriers (SPC) for the delivery of their product. Due to this relationship, a triadic one between consumers, e-retailers, and SPCs, small package carriers (SPC) become significant partners for e-retailers. However, this triadic relationship increased the possibility of service failures which are not welcomed by companies as they lead to negative behavioural outcomes such as consumer dissatisfaction, negative word-of-mouth (WOM), and reduced repurchase intentions. Moreover, as previous research states one party's failure may create a domino effect on the other, which further creates negative consequences for both parties in the channel (i.e. e-retailer and SPC). With this study, we aim to investigate the effect of different service failures and stability on customer satisfaction, negative WOM, and repurchase intention of both parties (i.e., e-retailer and SPC) in marketing channels. Accordingly, the study employs a 2x2 between-subjects factorial design that manipulates two independent variables [Service Failure (either late delivery or damaged product) and stability (temporary/permanent)] to test their effects on customer satisfaction, negative WOM, repurchase intention for different parties involved. The results demonstrate that for SPCs, consumers perceive late delivery as a more serious failure, whereas damaged goods as a failure is more critical for e-retailers. For instance, when consumers experience a late delivery, they demonstrate lower levels of satisfaction and repurchase intention, and higher levels of negative WOM for SPCs. However, their repurchase intention decreases, and negative WOM increases for e-retailers if they purchase a damaged good. Moreover, as expected, if consumers perceive that the failure is temporary, their satisfaction and repurchase intention increases, whereas their negative WOM decreases for both parties involved in the channel. The results also showed an interaction effect between stability and service failure on customer satisfaction. The results emphasize that for SPCs if the failure is damaged good and if it is temporary, customer satisfaction is higher. However, if failure is late delivery and permanent, then satisfaction

levels for SPCs decrease. However, customer satisfaction for e-retailers decreases if the failure is damaged good and if it is permanent. Since compared to late delivery, the failure of damaged goods is a more critical one for e-retailers, a permanent failure increases its negative outcomes. Similarly, as late delivery is a more fundamental failure for SPCs, negative outcomes increase with a permanent one. This means that to improve behavioural outcomes, SPCs should aim to decrease the number of late delivery failures since this affects their reliability for customers. On the contrary, e-retailers should work on their delivery processes for decreasing the number of damaged goods delivered in order to benefit from positive behavioural outcomes.

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&

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## **On the Use of Copula for Quality Control based on an AR(2) Model**

Manufacturing for a multitude of continuous processing applications in the era of automation and 'Industry 4.0' is focused on successful application of statistical process control (SPC). This study addresses the significant problem of positive autocorrelation in data collected from online sensors which may impair SPC in real-time settings. This paper expands upon a previous paper investigating the performance of 'Copula' based control charts by assessing the average run length (ARL) when the subsequent observations are correlated and follow the AR(1) model. Control Limits using the copulas and the AR(2) model were developed with two criteria for the comparison; Coverage Probability and the Average Run Length (ARL). The following copulas were used in the study; Gaussian Copula, Clayton Copula, Frank Copula, and Gumbel Copula. The Gumbel Copula failed the Coverage Probability criteria. Other copulas passed this coverage probability criteria at the 95% for the nominal coverage level. Only the Gaussian Copula passed this ARL criteria. Clayton Copula and Frank Copula failed this ARL criteria. The Gaussian Copula seems appropriate if the copulas are to be considered in Quality Control, especially in an AR(2) situation.

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&

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## **How Consumers Value NFTs in a Nascent Market**

Non-fungible tokens (NFTs), a tradeable right to digital assets where ownership is recorded in smart contracts on a blockchain, may turn out to be a breakthrough innovation and one of the first, if not *the* first, big consumer use cases for blockchain technologies (Evans, 2019). This nascent market has seen strong moves from legacy brands and non-crypto tech companies looking to integrate NFTs into their platforms and is expected to grow to tens of trillions of dollars' worth of assets in the coming years (Messari, 2023).

The market interest notwithstanding, little is known about how consumers are actively shaping the NFT markets, even though consumers' perceptions, feedback and actions play a central role in how value is created and perceived (Breibach & Tana, 2021). Hofstetter et al. (2022) invite researchers to investigate what will drive the perceived value of and willingness to pay for NFTs over time, contexts, and consumers, while Kapoor et al. (2022) argue that the value of NFTs is more of a social phenomenon influenced by marketing strategies and the NFTs' acceptance.

In this study we investigate NFT value perceptions of market participants: Why do people collect, trade or create NFTs? What value do they derive from NFTs? What is the role of online communities in co-creating the value of NFTs? Our analysis is grounded in a combination of theoretical perspectives, including consumer value, social capital theory and behavioral/social finance. We use an exploratory approach and conduct semi-structured interviews with thirty-eight collectors and creators of NFTs in two rounds, during the bull and bear periods for cryptocurrencies and NFT markets in 2022.

Our research provides novel insights into how NFT collectors perceive the value of NFTs. We argue, based on our empirical results, that engaging with NFTs is the new form of day trading for the digital natives, reflecting financialization of everyday life, where individuals more readily think about their lives, interactions and behaviors through the lens of an investor (Zaucha & Agyr, 2022). We show that the value of NFTs, as a new asset class, is mainly speculative and utilitarian, and NFTs themselves are best thought of as derivatives. Value co-creation

in NFT project communities is largely centered on gaining superior information about the project, be it through sharing knowledge and ideas, helping others to learn about the technology, socializing to conduct due diligence and discussing collections.

This study – the first to consider consumers’ value perceptions of NFTs – contributes to the crypto-marketing and web3 literature by advancing a novel model of NFT consumer value which extends Holbrook’s (1999) typology of value. We identify the risks associated with NFTs from the consumer’s perspective and enrich existing literature by offering fresh insights into the roles communities play in an unusual context – a nascent, illiquid, speculative, informationally opaque market for digital assets. From a managerial perspective, our paper helps creators and brand managers to design effective NFT strategies, based on a deeper understanding of both sides of consumer value perception of NFTs.

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