

Volume 34 Number 2 • JANUARY 2025

The DLSU Business & Economics Review (DLSUBER) publishes high quality theoretical, empirical, and methodological research in the fields of accounting, business management, commercial law, economics, finance, and marketing. The DLSUBER aims to reach an audience in these six fields and is published twice a year. Unless otherwise noted, the ideas, opinions, and conclusions expressed in the DLSUBER are those of the authors and not necessarily those of the Editorial Board of the journal or the management and staff of De La Salle University. It is listed in SciVerse Scopus since 2011, abstracted and Indexed in EBSCO since 2009, and listed in the ASEAN Citation Index. It is also an awardee of the Journal Challenge Grant of the Philippine Commission of Higher Education (CHED).

Copyright © 2025 by De La Salle University

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording, or otherwise without written permission from the copyright owner.

ISSN 0116-7111

Published and distributed by De La Salle University Publishing House 2401 Taft Avenue, 0922 Manila, Philippines Telefax No. (+63 2) 8523-4281 Website: https://www.dlsu.edu.ph/research/publishing-house/journals/ber/

The De La Salle University Publishing House is the publications office of De La Salle University, Manila, Philippines.

Annual Subscription Rates: Foreign libraries and institutions: US\$60 (airmail). Individuals: US\$50 (airmail). Philippine domestic subscription rates for libraries and institutions: Php1,800, individuals: Php1,500. For inquiries, please email Ms. Joanne Castañares at joanne.castanares@dlsu.edu.ph

### **Editorial Board**

Tereso S. Tullao, Jr. Honorary Editor De La Salle University, Manila, Philippines

Marites M. Tiongco Editor-in-Chief De La Salle University, Manila, Philippines

Arnel Onesimo Uy

Associate Editor De La Salle University, Manila, Philippines

Jahm Mae Guinto

#### Associate Editor De La Salle University, Manila, Philippines

**Christopher James Cabuay** 

Managing Editor De La Salle University, Manila, Philippines

Daisy R. Mojares Editorial Assistant De La Salle University, Manila, Philippines

### International Advisory Board

Mary P. Arends-Kuenning University of Illinois at Urbana-Champaign, Urbana, Illinois, USA

Wakhid Slamet Ciptono Universitas Gadjah Mada, Yogyakarta, Indonesia

Erwin L. Corong Purdue University, United States of America

Michael Angelo A. Cortez Ritsumeikan Asia Pacific University, Beppu, Oita, Japan

Jesus C. Dumagan De La Salle University Manila, Philippines

Divina M. Edralin De La Salle University, Manila, Philippines

Jesus Felipe De La Salle University Manila, Philippines

Regina A. Greenwood H. Wayne Huizenga College of Businesses and Entrepreneurship

Sandeep Gopalan Deakin University, Australia

Sirada Jarutakanont Burapha, University, Chonburi, Thailand

Awang Hazri bin Haji Kifle Deputy Permanent Secretary, Ministry of Health, Brunei Darussalam

Mari Lizuka (Mari Kondo) Doshisha University, Kyoto, Japan

Masayuki Kondo Tokyo Denki University

Kong-Rae Lee Daegu Gyeongbuk Institute of Science and Technology, Daegu, South Korea

Tai Wei Lim SIM University (UniSIM), Singapore

Joriah Muhammad Universiti Sains Malaysia, Penang, Malaysia

Stephen Robert Nagy International Christian University, Tokyo, Japan

Epictetus E. Patalinghug University of the Philippines, Diliman, *Ouezon City, Philippines* 

Alfredo Paloyo University of Wollongong, New South Wales, Australia

Cesar C. Rufino De La Salle University, Manila, Philippines

Changrok Soh Korea University, Seoul, Korea

Maria Claret M. Ruane University of Guam. Guam. USA

Michael J. Sullivan University of Nevada, Las Vegas, Nevada, USA

Benito L. Teehankee De La Salle University, Manila, Philippines

Angelo A. Unite De La Salle University, Manila, Philippines

Shujiro Urata Waseda University, Tokyo, Japan

Maria Estela Varua University of Western Sydney, Sydney, Australia

Delano Villanueva Former Visiting Professor, De La Salle University, Manila

Renato Villano University of New England

Yongqin Wang Fudan University, Shanghai, China

Futoshi Yamauchi International Food Policy Research Institute (IFPRI) Washington D.C., USA



# DLSU BUSINESS & ECONOMICS REVIEW

## Table of Contents

FROM THE EDITOR	
Marites M. Tiongco	vii
RESEARCH ARTICLES Determinants of Corporate Capital Structure and the Emerging Role of Intangibles and Innovation: The Case of Japanese Corporations <i>Michael Angelo A. Cortez</i>	1
The Global Value Chain Effects of RCEP: Estimating the Impact on the Philippines <i>Caesar B. Cororaton</i>	14
Impact of International Trade Competitiveness on Unemployment and Poverty Reduction in ECOWAS Region Ikubor Ofili Jude, Yahaya U. Isah, Ojih U. Abraham, Mazeli O. Mark, and Abdul Y. Mary	31
Effect of Trade Openness on Food Security in the Economic Community of West African States Region <i>Yahaya Umar Isah, Ikubor, Ofili Jude, Bernard O. A., Zakari, Saheed S., and Ayodeji, S.</i>	41
Assessing the Impact Of Shifting to Non-Combusted Alternatives to Reduce Economic Cost of Tobacco-Related Illnesses in the Philippine Case <i>Christopher James Cabuay</i>	53
Bed Allocation Model for Infection Control During a Pandemic Rosemary R. Seva, Dennis E. Cruz, and Lourdes Marie Tejero	64
Vocational Education and Training (TVET) and Its Impact on the Employment Prospects of the ALS Graduates <i>Martha Joy J. Abing and Mitzie Irene P. Conchada</i>	77
The Follower Fallacy: Revisiting Engagement Hypothesis by Evidencing Nonlinear Dynamics in Influencer Marketing <i>Pranjal Jain, Pooja Jain and Anju Jain</i>	88

EVIEW ARTICLE A Review of Climate Change and Its Financial Impact on the Transportation Sector	
	99
Ray Anthony L. Almonares	
THE CONTRIBUTORS	121
GUIDELINES FOR AUTHORS	123

## From the Editor

As we step into this promising year, it is with great enthusiasm that we present this issue, featuring a diverse collection of research studies that delve into some of the most pressing topics in economics, business, healthcare, and public policy. This edition brings together eight insightful research articles and one comprehensive review paper, each making a significant contribution to intellectual discourse and offering fresh perspectives through rigorous methodologies. To provide a clearer view of the themes explored, we have grouped the papers into three key areas: **Corporate Finance and Trade Competitiveness, Public Health and Social Development, and Environmental and Technological Challenges.** 

The first set of articles focuses on the evolving landscape of corporate finance and the role of international trade in shaping economic opportunities. These studies shed light on how businesses and economies can adapt to changing financial dynamics and market conditions, using advanced economic models and empirical analysis to inform policy and strategy.

The first article on **Determinants of Corporate Capital Structure and the Emerging Role of Intangibles and Innovation: The Case of Japanese Corporations by Michael Angel A. Cortez** investigates the shifting determinants of corporate capital structure in the context of Japan, where intangible assets and innovation are playing an increasingly important role. Using panel data regression method, the study examines how traditional financial factors such as tangibility and profitability interact with emerging drivers like intellectual property and R&D investments. The findings contribute to a broader understanding of how firms in innovation-driven economies can optimize their financial strategies and decisions. The author calls for further investigation of the dynamic effects of innovation on financial performance and industry-specific capital structure analyses.

The second article by **Caesar B. Cororaton** titled **The Global Value Chain Effects of RCEP: Estimating the Impact on the Philippines** provides a comprehensive assessment of the potential impacts of the Regional Comprehensive Economic Partnership (RCEP) on the Philippine economy. Leveraging a global computable general equilibrium (CGE) model, the study analyzes how the trade agreement could influence domestic and foreign value-added in Philippine exports, and identifies the implications for key industries such as electronic products and agri-food products. The paper concludes that the Philippines stands to gain significantly from RCEP in terms of increased exports, higher domestic value-added, and improved poverty and welfare indicators.

The third article on Impact of International Trade Competitiveness on Unemployment and Poverty Reduction in ECOWAS Region by Ikubor Ofili Jude, Yahaya U. Isah, Ojih U. Abraham, Mazeli O.Mark, and Abdul Y. Mary explores the relationship between trade competitiveness, unemployment, and poverty reduction in the Economic Community of West African States (ECOWAS) region. Utilizing panel data analysis and econometric techniques such as fixed-effects and random-effects modeling, the paper offers policy insights into how trade openness can drive employment opportunities and economic inclusion in ECOWAS countries. The authors recommend that ECOWAS member states should harmonize trade regulations, enhance industrial and agricultural productivity, promote manufacturing and service sectors, and strengthen intra-regional trade to create economies of scale and competitive market structure, and ensure sustained economic benefits.

An extension of the third article titled Effect of Trade Openness on Food Security in Economic Community of West African States Region is authored by Yahaya Umar Isah, Ikubor, Ofili Jude, Bernard, O. A., Zakari, Saheed S., and Ayodeji, S. This paper employs the Generalized Method of Moments (GMM) approach to investigate the nexus between trade openness and food security in West Africa. It provides empirical evidence on how trade policies can influence food availability and access, contributing to the growing literature on food security challenges in the ECOWAS region. The authors suggest that while trade liberalization may enhance overall food security, it does not directly translate into greater access to or availability of food for ECOWAS populations, because of structural challenges such as weak infrastructure, trade restrictions, and market inefficiencies.

The second group of articles addresses critical health and social challenges, offering strategies and solutions aimed at improving well-being and social inclusion. These papers employ a mix of qualitative and quantitative methodologies to evaluate interventions and propose actionable recommendations. The article titled **Assessing the Impact of Shifting to Non-Combusted Alternatives to Reduce the Economic Cost of Tobacco-Related Illnesses: A Cost of Illness Approach in the Philippine Case** authored by **Christopher James Cabuay** estimates the potential economic savings associated with a shift from traditional smoking to non-combusted alternatives (NCAs), such as heated tobacco products and e-cigarettes, using a cost-of-illness approach. This paper provides valuable insights into the economic feasibility of adopting harm reduction strategies through NCAs. While complete cessation remains the ideal goal, for those unable to quit, NCAs present a viable alternative to minimize both health risks and economic costs. Reducing smoking-related illnesses can enhance labor productivity by preventing premature deaths and reducing disability, benefiting the country's workforce and economic development.

The next article titled **Bed Allocation Model for Infection Control During a Pandemic** authored by **Rosemarie Seva, Dennis E. Cruz, and Lourdes Marie Tejero** introduces a mathematical optimization model to improve hospital bed allocation and infection control during health crises. Utilizing the Quadratic Assignment Problem (QAP), the paper provides a strategic framework for hospital administrators, helping them respond to patient surges while maintaining health and safety standards. The model highlights the importance of spatial distancing and facility readiness in preventing nosocomial infections. It is noting that the model can be adapted to different hospital settings by incorporating specific facility constraints and operational considerations.

The next article on Vocational Education and Training (TVET) and Its Impact on the Employment Prospects of the ALS Graduates by Martha Joy J. Abing and Mitzie Irene P. Conchada contributes to the broader conversation on education as a tool for social mobility and economic empowerment. The authors examine the effects of vocational education on the employment prospects of graduates from the Philippine Alternative Learning System (ALS) by employing propensity score matching, coarsened exact matching, and fixed-effect regression models to compare the employment outcomes of ALS graduates who participated in TVET programs versus those who did not. The study finds that TVET has a significant positive effect on the employment of ALS graduates, suggesting that vocational training enhances their ability to secure jobs and improve their livelihoods.

The final section tackles the growing concerns of climate change and the evolving digital landscape, providing actionable insights for businesses and policymakers alike. These papers employ data-driven methodologies to assess trends and propose innovative solutions to contemporary challenges.

The article titled **The Follower Fallacy: Revisiting Engagement Hypothesis by Evidencing Nonlinear Dynamics in Influencer Marketing** authored by **Pranjal Jain, Pooja Jain and Anju Jain** challenges the conventional wisdom of liner trajectory and examines the nonlinear relationship between influencer follower count and audience engagement using social media analytics and regression analysis. Regression results confirm the presence of diminishing returns on engagement as follower count increases, thus providing critical insights for marketers looking to optimize influencer partnerships and digital engagement strategies in an era of social media saturation. The author encourages marketers to adopt data-driven strategies, focusing on influencer credibility, content quality, and audience connection rather than follower count alone. The comprehensive review of **Ray Anthony L. Almonares** titled **A Review of Climate Change and Its Financial Impact on the Transportation Sector** examines how climate change is affecting the financial stability of the transportation industry and highlights areas where further research is needed to address emerging challenges. The review paper identifies gaps in current literature and offers a conceptual framework for addressing financial risks associated with extreme climate events, regulatory changes, and sustainability transitions in transportation finance. The paper concludes that a better understanding of these risks will help stakeholders—including policymakers, investors, and industry leaders—make informed decisions to enhance resilience and sustainability within the sector.

We are truly grateful to the authors and reviewers who contributed to this issue. The studies featured in this issue not only deepen our understanding of key issues but also provide actionable insights and policy recommendations that can drive meaningful change.

As always, we remain committed to fostering knowledge-sharing and innovation. Thank you for your continued support, and we hope you find this issue both insightful and inspiring.

Marites M. Tiongco, Ph.D. *Editor-in-Chief*