

## **Contents**

	President	's message	5
	The 59th	PES Conference Program	7
	Session A1.	Better Governance for Economic Recovery: Enhancing Public Policy through Institution Building and Effective Legislation	10
	Session A2.	Digitalization, Mobility, and Inclusive Business post-COVID 19	11
	Session A3.	Building A Better Normal for Public Transport in the Philippines	12
	Session B1.	Ushering Towards a Brighter Post-Pandemic Economy	13
	Session B2.	A Rethinking of Human Resource and Health Issues	14
	Session B3.	Special Topics in Economics	15
	Opening Ple	enary.Building Back Better the Philippine Economy	16
	Plenary Sess	sion 1. Competition, Inclusion, and Growth in the Post-Pandemic Digital Era	17
	Session C1.	Build Back Better: Business and Human Rights	18
	Session C2.	Safeguarding the Path to Recovery	19
	Session C3.	Energy Economics: Natural Gas, Electric Vehicles, Forced Outages, and Forward Markets	20
	Plenary Sess	sion 1. Digital Transformation in the Philippines: Challenges and Opportunities	21
	Session D1.	Online Technologies to Shorten the Philippine Food and Agricultural Supply Chain: Prospects in the New Normal	22
	Session D2.	Bank Stability and Efficiency, Remittances and the Macroeconomy	23
	Session D3.	Enduring Issues in an Open Economy: Trade, Monetary and Fiscal Policy	24
LES SYTH	Session D4.	Looking into the Methodological Approaches in Addressing Issues for Sustainable Economic Development	25

Harr

sing Digitalization Towards a Transformed Philippines 11-12 NOVEMBER-2021

Session E1.	Economic Issues: Exchange Rates, Employment, Labor Protection, and COVID-19	26
Session E2.	Harnessing Digitalization Opportunities in Agricultural Value Chains	27
Session E3.	Can Digital G2P Payments be the Future of Cash Transfer Programming?	28
Session E4.	Global Value Chains: Beyond Production	
Plenary Sess	sion 3. Harnessing Digitalization for Economic and	
	Financial Literacy	30
Plenary Session 4. AmBisyon Natin 2040 in the New Normal		
Closing Plenary. Towards a Transformed Philippines 33		

## Session and Paper Abstracts

11-12-NOVEMBER-2021

Opening Plenary Session	34
Plenary Session I	
Plenary Session II	34
Plenary Session III	38
Plenary Session IV	39
Closing Plenary Session	39
Session A1	40
Session A2	43
Session A3	47
Session B1	52
Session B2	55
Session B3	59
Session C1	63
Session C2	64
Session C3	67
Res Syria Assign D1 Res Syria Assign D1 Addy Configuration	70
Session D2. Litter	71
Session D3	76
Session D4	80
Harnossing Digitalization	
Towards Amsformed Philippines	
LE Veve	

Session E1	83
Session E2	87
Session E3	90
Session E4	92
Conference Partners	95
Conference Program Committee	95
The Philippine Economic Society	96
The PES Board of Trustees 2021	99

## Building Back Better: Harnessing Digitalization Towards a Transformed Philippines

Already marking a year of the COVID-19 pandemic, but with brighter prospects owing to the development of a vaccine, the world faces two major challenges: (1) continuing to manage COVID-19 and its emerging mutations; and, (2) jumpstarting the global economy. Measures taken to control the spread of COVID-19 took its toll on market economies, while the necessary shift to a digital economy reshaped the way goods and services are provided and magnified the existent digital divide across income groups in society. This digital divide impacts social, economic and financial inclusion, causing scarring and affecting human capital and infrastructure development, investments necessary for inclusive growth. This year's PES Conference showcases these issues and aims to turnout ideas to pave the way for social, economic and financial inclusion, under a new fiscal and monetary consensus.

nessing Digitalization wards a Transformed Philippi 1=12:NOVEMBER=202

US SYIL

MELTING



### Faith Christian O. Cacnio

When the PES Board started planning for the 59th Annual Meeting and Conference, we easily arrived at a consensus on the conference theme. We want to focus on digitalization and on its potential for helping build better and more resilient economies in the post-pandemic era.

President's message

Digitalization has increasingly become an integral aspect of economies and of our daily lives. During the "Great Lockdown" last year, digital technologies enabled governments and businesses to continue their operations amid community guarantines and restrictions on mobility. Such innovations facilitated the shift to online learning by educational institutions and the adoption of alternative work arrangements in offices. Access to digital payment platforms and online banking facilities proved critical in ensuring that financial transactions continued to be carried out in the economy. Similarly, digital platforms acted as conduits for the prompt delivery of financial subsidies and support to sectors and households that were heavily affected by the global pandemic. Importantly, digital innovations allowed us to maintain our connection to family and friends the synthetic while practicing physical distancing and adhering to health safety protocols. Digital innovations have indeed become a key determinant of economic and social resilience.



BARETIKE

However, while digitalization holds promise in helping build stronger and resilient economies, we also must recognize that it could bring significant challenges. Instead of supporting inclusive growth, digitalization could lead to a divide between those with access and those without and contribute to greater inequality. Digitalization could also lead to what economist Joseph Schumpeter referred to as "creative destruction" – the process that "continuously revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one." These considerable changes could be beneficial for certain economic sectors but could adversely affect others.

These are some of the broad issues that we want to underscore in this conference. It is our hope that through the discussions, exchange of ideas and interactions, we can bring about actionable policies and strategies to harness the potential of digitalization while minimizing its attendant risks. It is quite fitting that we are exploring digitalization and its possibilities in a conference that utilizes online platforms and digital technologies.

On behalf of the PES Officers and Board of Trustees, let me express our sincerest gratitude to our distinguished keynote speakers, panelists, moderators, sessions organizers, and paper presenters for sharing their expertise and valuable time. We also would like to thank our conference partners who generously provided financial support for this conference. To our dear PES members and participants, thank you being part of the 59th PES Annual Meeting and Conference.

Mabuhay ang PES! Mabuhay ang Pilipinas!





## The 59th PES Conference Program

### 10 November 2021 (Wednesday)

LE

		SIMULTANEOUS SESSIONS A
	8:30	A1. Better Governance for Economic Recovery: Enhancing Public Policy through Institution Building and Effective Legislation
	10:00 am	A2. Digitalization, Mobility, and Inclusive Business Post-COVID 19
		A3. Building A Better Normal for Public Transport in the Philippines
	10:00	MORNING BREAK
SYTE		SIMULTANEOUS SESSIONS B
	10:30	B1. Ushering Towards a Brighter Post-Pandemic Economy
Enne	12:00	B2. A Rethinking of Human Resource and Health Issues
-U	pm	B3. Special Topics in Economics
amessing owards a 11-12	Digitalization Transformed Philip	Prines 21

## 11 November 2021 (Thursday)

-

	8:00 - 10:30 am	<b>OPENING PLENARY SESSION:</b> Building Back Better the Philippine Economy	
	10:30	MORNING BREAK	
	11:00 - 12:30	PLENARY SESSION I. Competition, Inclusion, and Growth in the Post-Pandemic Digital Era	
	12:30	LUNCH BREAK	
	1:30 - 3:30	<ul> <li>SIMULTANEOUS SESSIONS C</li> <li>C1. Build Back Better: Business and Human Rights</li> <li>C2. Safeguarding the Path to Recovery</li> <li>C3. Energy Economics: Natural Gas, Electric Vehicles, Forced Outages, and Forward Markets</li> </ul>	
	3:30 <b>PLENARY SESSION II.</b> - Digital Transformation in the Philippines: 5:00 Challenges and Opportunities		
	5:00	AFTERNOON BREAK	
		SIMULTANEOUS SESSIONS D	
	5:30 - 7:00	<ul> <li>D1. Online Technologies to Shorten the Philippine Food and Agricultural Supply Chain: Prospects in the New Normal</li> <li>D2. Bank Stability and Efficiency, Remittances and the Macroeconomy</li> <li>D3. Enduring Issues in an Open Economy: Trade, Monetary and Fiscal Policy</li> </ul>	
EES SYTH A	RECORPER	D4. Looking into the Methodological Approaches in Addressing Issues for Sustainable Economic Development	
Hamessing Towards a Tr	Digitalization Digitalization Parasformed Philippi OVEMBER-202		

٦

### 12 November 2021 (Friday)

8:30 - 10:00 am	SIMULTANEOUS SESSIONS E		
	E1. Economic Issues: Exchange Rates, Employment, Labor Protection, and COVID-19		
	E2. Harnessing Digitalization Opportunities in Agricultural Value Chains		
	E3. Can Digital G2P Payments be the Future of Cash Transfer Programming?		
	E4. Global Value Chains: Beyond Production		
10:00	MORNING BREAK		
10:30	PLENARY SESSION III.		
	Harnessing Digitalization for Economic and Financial Literacy in celebration of Economic and Financial Literacy Week 2021		
12:00	LUNCH BREAK		
1:00	PLENARY SESSION IV.		
	AmBisyon Natin 2040 in the New Normal		
2:30	GENERAL MEMBERSHIP MEETING		
3:00	CLOSING PLENARY SESSION:		
	Towards a Transformed Philippines		



## SESSION A1.

Better Governance for Economic Recovery: Enhancing Public Policy through Institution Building and Effective Legislation

https://ateneo-edu.zoom.us/j/83448900602?pwd=dFZ3VCtVT296akVYZVA2bENTdDVwdz09

Meeting ID: 834 4890 0602 Passcode: 370001

### Philippine Conglomerates and their Role in Promoting Inclusive Development

Mary Sofia J. Manalo (Ateneo Policy Center)

### Improving Customs Governance through Data Analytics: Evidenced-Bases Policy Making at the Bureau of Customs Paul Neilmer M. Feliciano (Ateneo Policy Center)

## Exploring Land Value Capture Potential in Metro Manila's MRT-3: A Simulation Exercise

Enrique J. Martinez (De La Salle University) Patricia Marcella A. Evita (Ateneo Policy Center)

## Moderator: Jean Rebecca Labios

Program Specialist, Southeast Asian Regional Center for Graduate Study and Research in Agriculture

es synt Annoal (vintoal) Allynds And Confedence

ormed p

PES SYTE ARRUAL (VII)

MEETING AND CONFERENCE

formed p

## **10 November 2021** 8:30 - 10:00 am

### SESSION A2.

## Digitalization, Mobility, and Inclusive Business post-COVID 19

https://aimedu.zoom.us/j/99747283791?pwd=OCtCMWxZUVFPVjJHMjVpNXJZWGQvUT09 Meeting ID: 997 4728 3791 Passcode: 270050

Journey to Recovery and the Next Normal for Philippine MSMEs

John Paul Flaminiano (AIM Rizalino S. Navarro Policy Center for Competitiveness)

### Decomposing the Role of Mobility Restrictions in Controlling COVID-19 Outcomes: A Regional Level Study of the Philippines

Ammielou Gaduena (AIM Rizalino S. Navarro Policy Center for Competitiveness)

## Inclusive Business and Post-Pandemic Recovery: A Survival Analysis

Maribel Daño-Luna (University of Sydney)

Moderator: **Regina Yvette Romero** Research Associate, AIM Rizalino S. Navarro Policy Center for Competitiveness

## SESSION A3.

## **Building A Better Normal for Public Transport** in the Philippines

https://us02web.zoom.us/j/84300781886?pwd=c1RwVzVHUmNDZGxRUGxtcHFSQ3B4Zz09

Meeting ID: 843 0078 1886 Passcode: moveasone

The Systemic Shortage in Philippine Public Transportation: The Impact of the Infrastructure Flagship Project Pipeline on the Mobility Needs of the Greater Capital Region and Recommendations to Bridge the Gap Katreena Chang (Move as One Coalition)

Move People, Not Just Cars: Correcting the Systemic Underfunding in National Road-based Public Transport in the Philippines (2010 - 2021) Zy-za Nadine Suzara (Institute for Leadership, Empowerment,

and Democracy)

Bivahenihan for a Better Normal: Investing in Philippine Public Transport in 2022 and Beyond

Robert Y. Siy, Jr. (Move as One Coalition)

Moderators: Kenneth Isaiah I. Abante Research Faculty, Department of Interdisciplinary Studies, Ateneo de Manila Universitv Hya Bendana Secretary General. Move as One Coalition

LE EVILI ARRUAL (VIR)

ALLTING AND CONFLICTION

formed Phili EMBER 2021

PES SYTE ARRUAL (VII)

MEETING AND CONFERENCE

formed Phil

## **10 November 2021** 10:30 - 12:00 pm

### SESSION B1.

### Ushering Towards a Brighter Post-Pandemic Economy

https://zoom.us/j/6070375906?pwd=N29sclc5L2ZRaFp4d1d0WWpBb0hqUT09

Meeting ID: 607 037 5906 Passcode: 9sivJS

## Rice Buffer Stock Maintenance Post-Rice Tariffication Law (RA11203): An Application of a Partial Equilibrium Model for Buffer Stock Level Optimization

Mary Gillian Santos (DLSU School of Economics)

Investigating Social Mobility Factors: The Case of Selected Barangays in Baguio City Jem Marie Nario (DLSU School of Economics)

### Theoretical Note on the Implication of Issuance of Central Bank Digital Currency (CBDC) Aris C. Zoleta (DLSU School of Economics)

Moderator: Mc Reynald II S. Banderlipe Candidate for PhD Economics. School of Economics. De La Salle University

14

es synt annoal (vintoal) Menne And Conference

med pr

10 November 2021 10:30 - 12:00 pm

### SESSION B2.

A Rethinking of Human Resource and Health Issues

https://up-edu.zoom.us/j/893-64773236

Meeting ID: 893 6477 3236 Passcode: 56677462

An Analysis of the Economics of Psychological Entitlement in the Workplace Glacer Vasquez (UP School of Economics)

Globalization and the Narrowing of the Gender Gap in Labor Markets Miguel Antonio Estrada (UP School of Economics)

Teaching Position and School Outcomes: Empirical Evidence in the Philippines Irene Arzadon (UP School of Economics)

Re-thinking the Hospital: An Analytic Model of Agent-led Production Miharu JM Kimwell (UP School of Economics)

> Moderator: Ma. Christina F. Epetia Assistant Professor, UP School of Economics

PES 59th Annual (Virtual) Meeting and Conference 10-12 November 2021

PES EVITI ARRUAL (VILITUAL) MEETING ARD CORPERENCE

formed pr

## 10 November 2021 10:30 - 12:00 pm

## **SESSION B3.**

## **Special Topics in Economics**

https://us02web.zoom.us/j/85712041288?pwd=SXh5RGxRdTV6U1QySWtyWmsvajViZz09

Meeting ID: 857 1204 1288 Passcode: 093203

Redistributive Policy Shocks and Monetary Policy with Heterogeneous Agents

Chetan Ghate (Indian Statistical Institute)

The COVID 19 Pandemic Response: The Challenges and Initiatives of Local Government Unit of Talisayan, Misamis Oriental Joann D. Lim (Bukidnon State University)

Coral Reef Status of the Two Marine Protected Areas (MPAs) in Jimenez and Panaon, Misamis Occidental Denmark S. Macalisang (Adventist Technological Institute)

Factors Affecting Fertility in the Philippines (1980-2020) Jemima C. Manatad (Mindanao State University-IIT)

> Moderator: Alice Joan G. Ferrer Professor and Dean, College of Arts and Sciences, University of the Philippines-Visayas

### **OPENING PLENARY SESSION:**

11 November 2021 8:00 - 10:30 am

## BUILDING BACK BETTER THE PHILIPPINE ECONOMY

EMCEE	MR. PAUL JOHN PEÑA
	De La Salle Universitv

### OPENING REMARKS DR. FAITH CHRISTIAN Q. CACNIO AND HONORING President, Philippine Economic Society SIXTO ROXAS

KEYNOTEDR. BENJAMIN E. DIOKNOADDRESSESGovernor, Bangko Sentral ng Pilipinas

DR. DEAN S. KARLAN Distinguished Professor of Economics and Finance, Northwestern University and President, Innovations for Poverty Action

PANEL DISCUSSION MS. CECILIA C. BORROMEO President and CEO, Land Bank of the Philippines

> MR. JOSE EMMANUEL HILADO Chief Financial Officer and Treasurer, Union Bank of the Philippines

DR. ELI REMOLONA Professor of Finance and Director of Central Banking, Asia School of Business

DR. SOULEYMANE COULIBALY Lead Economist, World Bank

> Moderator: Dr. Alvin P. Ang Professor, Department of Economics, Ateneo de Manila University

EVITI AUTOAL (VIIITO ETITIC AUTO COUPELLE

11 November 2021 11:00 – 12:30 pm

## COMPETITION, INCLUSION, AND GROWTH IN THE POST-PANDEMIC DIGITAL ERA

Session sponsor: Philippine Competition Commission

#### PRESENTER: DR. TETSUSHI SONOBE Dean, Asian Development Bank Institute

PANELISTS: MR. BENJAMIN AZADA Chief Strategy Officer, Converge ICT Solutions, Inc.

> DR. CHRISTOPHER MONTEROLA Executive Managing Director, ACCeSS@AIM, Asian Institute of Management

MS. NG EE KIA Assistant Chief Executive, Competition and Consumer Commission of Singapore

DR. ARSENIO BALISACAN Chairperson, Philippine Competition Commission

> Moderator: Dr. Sarah Lynne Daway-Ducanes

Associate Professor, UP School of Economics



## 11 November 2021 1:30 – 3:00 pm

### **SESSION C1.**

### **Build Back Better: Business and Human Rights**

Session sponsor: Friedrich Naumann Foundation Philippines

https://us02web.zoom.us/webinar/register/WN\_DEBzly70Sc2tWCfdkBOICQ

Webinar ID: 878 7253 1122 Passcode: FNFPH

Who Peels your Garlic?: Inside Manila's Informal Economy Geela Garcia

> Singapore: A Solution to Maid Abuse? Rachel Genevieve Chia

### Children of the Deep: Child Labor in the PH has Sunk Even Lower to Uncharted Depths Marielle Lucenio

New Law on Sexual Harassment in the Workplace in Vietnam:

### Significant but Insufficient

Tran Vu

Moderator: Ms. Vanessa Steinmetz Regional Project Coordinator, FNF Southeast and East Asia



EVERYTIK ARREVAL (VILLUAL) HELETIKU ARE CONTELLER ELETIKU ARE CONTELLER ELETIKU ARE CONTELLER ELETIKU Hamssing Disinitation Towards a Transformed Philippins

PES EVITI ARRUAL (VILLI VAL) MEETING ARD CORPERENCE

formed p

## 11 November 2021 1:30 – 3:00 pm

## **SESSION C2.**

## Safeguarding the Path to Recovery

Session sponsor: Bangko Sentral ng Pilipinas

https://bspevents.webex.com/bspevents/onstage/g.php?MTID=e595bb0286586fa3cbc0949371409e8db

### The BSP's Forecasting and Policy Analysis System

Zeno Ronald R. Abenoja, Sarah Jane T. Alarcon-Castañares, Jasmin E. Dacio, Jan Christopher G. Ocampo, Mark Rex R. Romaraog (Department of Economic Research, Bangko Sentral ng Pilipinas)

## Networks, Systemic Risks, and Macroprudential Policy: The Objective of Financial Stability

Johnny Noe E. Ravalo (Office of Systemic Risk Management, Bangko Sentral ng Pilipinas)

## What Drives Expectations in the Philippines? Insights from a Household Survey

Faith Cacnio & Joselito Basilio (BSP Research Academy, Bangko Sentral ng Pilipinas)

> Moderator: Jade T. Redoblado Monetary and Financial Policy Studies Group Department of Economic Research

## **SESSION C3.**

## Energy Economics: Natural Gas, Electric Vehicles, Forced Outages, and Forward Markets

https://us06web.zoom.us/meeting/register/tZYoc-ugpzkqGNljkyGfbpt4rbUVXU\_TIA2X

### Gauging the Market Potential for Natural Gas among Philippine Manufacturing Firms

Karl Robert L. Jandoc (UP School of Economics)

## Can Electric Vehicles Thrive in the Philippines?

Renzi G. Frias (University of the Philippines School of Statistics) J. Kathleen P. Magadia (Gas Policy and Development Project)

# Reliability and Forced Outages: Survival Analysis with Recurrent Events

Majah-Leah V. Ravago (ADMU Department of Economics)

## Competition with Forward Market for Electricity: A Laboratory Experiment in Aid of Improving Market Design in the Philippines Paolo Lorenzo Tejano (University of Oxford)



## Moderator: Majah-Leah V. Ravago

Associate Professor, Department of Economics, Ateneo de Manila University

## DIGITAL TRANSFORMATION IN THE PHILIPPINES: CHALLENGES AND OPPORTUNITIES

Session sponsor: DLSU School of Economics

### Transforming the Education Sector through Digitalization

Dr. Raymund Sison, University Fellow and Full Professor, De La Salle University

### Intellectual Property in the Knowledge-Based Economy

Atty. Christopher Cruz, Manager, Innovation and Technology Office & Director, Intellectual Property Office, De La Salle University

## How Can We Harness the Power of Digital Trade to the Benefit of Smallholder Farmers?

Dr. Maximo Torero, Chief Economist, Food and Agriculture Organization

### **Opportunities and Risks in Digital Services Trade**

Dr. Tereso S. Tullao, Jr., University Fellow, Professor Emeritus of Economics & Director, DLSU Angelo King Institute for Economic and Business Studies

## How Ready Are We? Measuring the Philippines' Readiness for Digital Trade Integration with the Asia Pacific

Dr. Francis Mark A. Quimba, Research Fellow, Philippine Institute for Development Studies



Moderator: Dr. Alellie B. Sobreviñas School of Economics, De La Salle University

## SESSION D1.

Online Technologies to Shorten the Philippine Food and Agricultural Supply Chain: Prospects in the New Normal

https://up-edu.zoom.us/webinar/register/WN\_UlhyHhakTy2BKMrLVBlz6Q

## Transforming Food and Agricultural Value Chains Through E-Commerce Revolution

Thomas Reardon (University of Michigan)

### Social Enterprises as Farmer's Bridges to the Digital Divide: The Case of GlowCorp

Bernie M. Berondo (Global Organic and Wellness Corporation)

### Moderator: Charis Mae T. Neric Assistant Professor Department of Agricultural and Applied Economics, University of the Philippines-Los Baños



E EVIR ARROAL (VIRTUAL) ELTRIC ARD CORDERERCE

ormed Phili

PES SYTE AURUAL (VILLO VAL) DEPUTING AUR CONFERENCE

nonsformed Philippi

## 11 November 2021 5:30 – 7:00 pm

### SESSION D2.

# Bank Stability and Efficiency, Remittances and the Macroeconomy

https://us02web.zoom.us/j/88314359686?pwd=MG5wTksvZk8rWHNpTkREcVI6RUVWQT09

Meeting ID: 883 1435 9686 Passcode: 163997

True or Spurious Long Memory: The Case of the Philippine Equities Market Geraldine B. Wambangco (University of Asia and the Pacific)

Macro Stress Testing of the Philippines' Top 10 UKBs: An Analysis of the Effect of Economic Distress on the Bank's Credit Quality Michaela Nicole Meriño (University of Asia and the Pacific)

Does Income Diversification Contribute to Achieving Bank Efficiency and Stability in Period of Increased Competition? Ella Mae O. Leonida (University of Asia and the Pacific)

Remittances, Financial and Governance Institutions and Income Inequality in Developing Economies

Sarah Lynne S. Daway-Ducanes (UP School of Economics) Romeo Matthew T. Balanquit (University of Asia and the Pacific)

OFW Remittances, Philippine Macroeconomy and COVID-19 Jovi C. Dacanay (University of Asia and the Pacific)

> Moderator: Peter Lee U Associate Professor and Vice Dean, School of Economics, University of Asia and the Pacific

sformed Philippi

11 November 2021 5:30 – 7:00 pm

### SESSION D3.

## Enduring Issues in an Open Economy: Trade, Monetary and Fiscal Policy

https://up-edu.zoom.us/j/84001154408

Meeting ID: 840 0115 4408 Passcode: 59PESMTG

Navigating Global Value Chains Amid Trade Wars and Pandemics: The Philippine Experience

Adrian Mendoza (UP School of Economics)

Measuring the Possible Effects of Large Trade Blocs Using a Quantitative Trade Model Anthony Sabarillo (UP School of Economics)

### Are Exchange Rates More Volatile with Greater Uncertainty?: Evidence from the PHP/USD Exchange Rate Using GARCH-MIDAS Models Marvin Kyle M. Abreu (UP School of Economics)

Assessing the Impacts of Inflation Targeting on Inflation Rates and Volatility: A Synthetic Control Method Approach Ludigil Garces (UP School of Economics)

A Combined Incidence Analysis of the Tax and Expenditure Policies in the Philippines: A Combined Incidence Analysis of the Tax and Expenditure Policies in the Philippines Mae Hyacinth Kiocho (UP School of Economics)

Moderator: Karl Robert L. Jandoc Assistant Professor, UP School of Economics

PES 59th Annual (Virtual) Meeting and Conference 10-12 November 2021

PRE EVILI ARRIVAL (VII

MEETING AND CONFERENCE

formed Phi

**11 November 2021** 5:30 - 7:00 pm

### SESSION D4.

## Looking into the Methodological Approaches in Addressing Issues for Sustainable Economic Development

https://zoom.us/j/6070375906?pwd=N29sclc5L2ZRaFp4d1d0WWpBb0hqUT09

Meeting ID: 607 037 5906 Passcode: 9siv.JS

**Evaluating Predictability of Vector Autoregressive Models:** A Study on the Relationship of Global Oil Prices and the Philippine Macroeconomy

Benette Louie E. Rivera (DLSU School of Economics)

The Economic Solutions to Legal Problems: A Peek into the Realm of Fair Use Daniel S. Hofileña (DLSU School of Economics)

Agribusiness Value Chain of Taro (Colocasia Esculenta) through Participatory Rural Appraisal, Crop Accounting, and Financial Analysis amidst COVID-19 Crisis in Partido District, Camarines Sur, Philippines Michael P. Vale (DLSU School of Economics/Partido State University)

> Moderator: Louie Jay Trapa Candidate for PhD Economics. School of Economics. De La Salle University

### SESSION E1.

## Economic Issues: Exchange Rates, Employment, Labor Protection, and COVID-19

Session sponsor: Ateneo Center for Economic Research and Development / ADMU Department of Economics

https://us06web.zoom.us/meeting/register/tZcsdeusrzgvHtYcJAeqXaAhUOx04Azbv6HD

# How do Exchange Rates Affect the Big One? An Empirical Analysis of the Effect of Exchange Rates on RCEP Exports using Gravity Model

Jose Adlai M. Tancangco (ADMU Department of Economics/ Bangko Sentral ng Pilipinas)

## The Employment of Women with Children During Hard Lockdowns: Evidence from the Philippines

Geoffrey M. Ducanes (ADMU Department of Economics) Vincent Jerald Ramos (Hertie School of Governance)

## Life After the Pandemic: Pursuing Economic Recovery Through Labor Protection

CJ Castillo (ADMU Department of Economics) Marjorie Muyrong (La Trobe University)

## Economic Losses from COVID-19 Cases in the Philippines:

### A Dynamic Model of Health and Economic Policy Trade-offs

Joselito Tan Sescon (Ateneo de Manila University) / Cymon Kayle Lubangco (Ateneo de Manila University)

## Moderator: Cielito Habito

Director, Ateneo Center for Economic Research and Development

> PES 59th Annual (Virtual) Meeting and Conference 10-12 November 2021

ies synt antical (vita cal) Liefnice and contrelence

ASIAN AND A CONTRACT OF A CONT

LETTICE AND COMPENDING

Transformed Philip NOVEMBER 2021

## 12 November 2021 8:30 - 10:00 am

## SESSION E2.

## Harnessing Digitalization Opportunities in **Agricultural Value Chains**

Session sponsor: Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development

https://dost-pcaarrd.zoom.us/i/93764070159?pwd=dWtNSlhlbGlKVWFpOWtFNm9wdGhRUT09

Meeting ID: 937 6407 0159 Passcode: 00059

Unravelling Traceability in the Cacao Supply Chain Management: Insights from Cacao Farmers in Davao Region Gilbert Gordo (University of Southeastern Philippines)

Leveraging Existing Gender Relations to Optimize the Gains from Value-Adding Opportunities: The Case of Cacao Value Chain in Davao Citv

Mitchiko A. Lopez (University of the Philippines-Mindanao)

Harnessing Digital Technologies for the Delivery of Market-related Services in the Agricultural Value Chain: The Case of DOSTPCAARRD's Agri-Agua Business Hub Meliza F. Abeleda (DOST-PCAANRRD)

Rapid Market Appraisal Towards Value Chain Development of Underutilized Fruits (Guava, Soursop, Sugar Apple and Tamarind) in the Philippines PES SYTERED (VILLERAL)

Tessa Lyrene DC. Lantican (DOST-PCAANRRD

Moderator: Princess Alma B. Ani DOST-PCAANRRD

12 November 2021 8:30 – 10:00 am

### SESSION E3.

## Can Digital G2P Payments be the Future of Cash Transfer Programming?

https://us02web.zoom.us/j/83462731540?pwd=RjNCem5UWVFBYXZrbklQVTM1M0NZQT09

Meeting ID: 834 6273 1540 Passcode: pes2021

Monitoring Digital Financial Payments of Cash Transfers in the Philippines

Cesi Cruz, Yoonyoung Cho, Julien Labonne, Rebecca Rouse, Kathryn Glynn-Broderick

COVID-19 G2P Cash-Transfer Payments Case Study: Philippines

Yoonyoung Cho, Yasuhiro Kawasoe, Ruth Rodriguez, Myra Valenzuela

Digitization of Government to People Cash Transfers: Understanding Beneficiaries' Experiences

Kathryn Glynn-Broderick (Innovations for Poverty Action)

Moderator: Nasserena Sampaco-Baddiri Country Director, Innovations for Poverty Action Philippines

EE EFTH ARROAL (VIRTUAL) REETHRE ARD CORDERENCE

ormed Phili

PES SYTE AUROAL (VILLOAL) MEETING ARD CORPERENCE

formed p

## 12 November 2021 8:30 – 10:00 am

### SESSION E4.

**Global Value Chains: Beyond Production** 

https://adb-org.zoom.us/j/94076044761 Meeting ID: 940 7604 4761 Passcode: ADBgvc#1

Global Value Chains in the Era of Slowbalization Christian Jabagat (Asian Development Bank)

Plugging into Global Value Chains of Service Industry: The Experience of the Philippines Laura Fermo (Bangko Sentral ng Pilipinas)

Nexus of Technology Adoption, Global Value Chains, and E-Commerce: The Case of Asia Jong Woo Kang (Asian Development Bank)

## Is Participation in Global Value Chains Driving Income Convergence in Developing Asia? A Task-based Accounting Approach

Elisabetta Gentile (Asian Development Bank)

Moderator: Abdul Abiad Director, Asian Development Bank

PES 59th Annual (Virtual) Meeting and Conference 10-12 November 2021

## PLENARY SESSION III.

## HARNESSING DIGITALIZATION FOR ECONOMIC AND FINANCIAL LITERACY

in celebration of Economic and Financial Literacy Week 2021

#### PANELISTS:

#### MS. EDNA VILLA

Assistant Governor Payments and Currency Development Sub-sector, Bangko Sentral ng Pilipinas

MR. HO SUU WEI APAC Public Policy and Economic Graph Director, LinkedIn

MR. JOHN JANUSZCZAK President and CEO, UBX Philippines

MS. SALVE DUPLITO TV Anchor, Managing Editor and Head Writer, ABS-CBN News Channel

> Moderator: Dr. Kevin C. Chua Senior Economist, World Bank



12 November 2021 1:00 – 2:30 pm

### AmBisyon Natin 2040 in the New Normal

Session sponsor: National Economic and Development Authority

OPENING AND INTRODUCTION OF SESSION OBJECTIVES NERRISA T. ESGUERRA Director IV, NEDA

SPEAKER ROSEMARIE G. EDILLON NEDA Undersecretary for Policy and Planning

REACTORS ARSENIO M. BALISACAN Chair, Philippine Competition Commission

> EMMANUEL F. ESGUERRA Former NEDA Secretary

PATRICIA MARCELLA EVITE Founder, EKonsepto and Researcher at the Ateneo Policy Center

MARIA CHARINA I. QUIWA Working Mom and Information Officer V, NEDA

> Moderators: Nerrisa T. Esguerra Director IV, NEDA Reynaldo R. Cancio Director IV, NEDA



## **GENERAL MEMBERSHIP MEETING**

(for PES members only)

12 November 2021 2:30 - 3:00 pm

PRESIDENT'S REPORT Dr. Faith Christian Q. Cacnio PES President TREASURER'S REPORT Dr. Kevin C. Chua PES Treasurer

MEMBERSHIP REPORT Dr. Sarah Lynne S. Daway-Ducanes PES Secretary

**CLOSING PLENARY SESSION:** 

12 November 2021 3:00 - 5:00 pm

VIRTUAL LAUNCH OF THE *PHILIPPINE REVIEW OF ECONOMICS* ISSUE IN HONOR OF DR. BENITO J LEGARDA

### TOWARDS A TRANSFORMED PHILIPPINES

PANELISTS:

Iransformed Philippi

USEC. RAFAELITA M. ALDABA Undersecretary for the Competitiveness and Innovation Group, Department of Trade and Industry

MR. VINCE YAMAT Managing Director, 917 Ventures

DR. JOSE V. CAMACHO, JR. Chancellor, University of the Philippines-Los Baños

OATH-TAKING OF YOUNG ECONOMISTS HONOR SOCIETY BATCH 2021

OATH-TAKING OF NEW MEMBERS

ANNOUNCEMENT OF ELECTION RESULTS

Closing Remarks: DR. CHARLOTTE JUSTINE DIOKNO-SICAT PES Vice President

# Session and Paper Abstracts

## **Plenary Sessions**

ormed or

## OPENING PLENARY SESSION: Building Back Better the Philippine Economy

With a year and a half into the pandemic, how have we managed building back the Philippine economy? What issues have emerged requiring a rethinking of how to build back better? How can we leverage digital innovations to build back better?

#### PLENARY SESSION I.

### Competition, Inclusion, and Growth in the Post-Pandemic Digital Era Session sponsor: Philippine Competition Commission

While the pandemic has accelerated digitalization, it has also exposed the digital divide between countries and within societies. This PCC session aims to explore competition issues in relation to the digital economy and the measures, especially competition policy, in ensuring greater digital inclusion to support economic recovery.

#### PLENARY SESSION II.

Digital Transformation in the Philippines: Challenges and Opportunities Session sponsor: DLSU School of Economics

The COVID-19 crisis has caused significant changes in the way people and firms do their business. With governments issuing orders to limit mobility, mass gatherings and in-person business operations and encouraging people to work from home, many businesses and schools had to resort to digital technologies to



continue their operations remotely. This session will discuss the transformation of the agriculture and education sectors through digitalization which can pose opportunities and challenges. Meanwhile, digitalization and the shift to digital media emphasize the important concerns on intellectual property rights. As such, this session will show how in particular intellectual property affects online learning and social media and discuss the challenges in innovating in the next normal. Moreover, this session will present the potential development implications and the accompanying risks involved in digital services trade not only in the various services subsectors but also in other economic sectors, including manufacturing and agriculture sector. In relation to this, there is an important question on the readiness of the Philippines for digital trade. Hence, the session will also involve a discussion on the country's policy environment for digital trade to determine if the Philippines is ready for digital trade integration within the Asia Pacific.

## How Can We Harness the Power of Digital Trade to the Benefit of Smallholder Farmers?

Dr. Maximo Torero Chief Economist, Food and Agriculture Organization

This video message presents the potential of new digital technologies in making food and agricultural trade more efficient, more equitable and less dependent on intermediaries. It shows how smallholder farmers (SHFs), who are currently often excluded from the benefits of trade, can harness these technologies to reap the potential of international commerce and decentralized finance (DeFi).

The vast number of new digital technologies makes it necessary to focus on just a few, highly promising options; special attention is placed on those technologies that promise widespread adoption. Blockchain as a platform technology takes center stage. One strand of blockchain based technologies



has arisen in the area of e-trade and e-commerce, with smart contracts making the domestic and international exchange of goods more cost-efficient, more traceable and more reliable. E-certificates such e-phyto and e-vet can be hooked up to these smart contracts and help reduce costs, time and, importantly, enhance food safety of international trade. Arguably the most promising options emerge from tokenization. Also based on blockchain technologies, tokenization allows to delink the physical commodity from its underlying financial value and use tokens to create collateral, improving access to finance and liquidity. Tokenization also allows to make intangible assets such as environmental or social goods tradable (e.g., low resource footprints or compliance with occupational health and safety standards), so that these properties can not only be passed on within the value chain, but also be remunerated. Tokenization and blockchains connect primary producers with final consumers, creating awareness of, and sensitivity to the problems of SHFs. The tokens can also be stored, accumulated in, and spent from dedicated "wallets", offering access to formal finance for the unbanked or underbanked, again a particular benefit for many SHFs.

### Transforming the Education Sector through Digitalization

Dr. Raymund Sison University Fellow and Full Professor, De La Salle University

The use of digital resources and technologies for teaching and learning has been going on in the country for decades, albeit sporadically, but it is only now, in the midst of long-term campus closures due to the pandemic, that everyone has come to realize the enormity of the divide between those who can access and effectively use these digital technologies and resources, and those who cannot. In this brief presentation, I outline three things that we need to do to move forward: flexible technology-assisted access, evidence-based digitalization of the teaching-learning process, and multi-stakeholder training in technologyenhanced learning.


#### Intellectual Property in the Knowledge-Based Economy: Issues in the Digitalization of Learning Materials and Social Media

Atty. Christopher Cruz Manager, Innovation and Technology Office & Director, Intellectual Property Office, De La Salle University

The presentation will be show the importance of intellectual property in the knowledge-based economy and how the shift to digital media has emphasized the importance of securing intellectual property rights. It will also show how in particular intellectual property affects online learning and social media and the challenges in innovating in the next normal.

#### Opportunities and Risks in Digital Services Trade

Dr. Tereso S. Tullao, Jr. University Fellow, Professor Emeritus of Economics & Director, DLSU Angelo King Institute for Economic and Business Studies

The corona virus pandemic has reinforced the influence of various factors that sparked in the rapid expansion of digital services within and outside the economy in recent years. The paper will highlight the potential development implications of digital services trade not only in the various services subsectors but also in other economic sectors including manufacturing and agriculture. However, these development potentials are tempered by risks emanating from digital services trade including breach of intellectual property and violation of privacy rights, among others. These transgressions are due to the realization and utilization of economic returns arising from the bundling of economic benefits beyond the initial transaction in digital trade. The paper concludes in order to harness the development opportunities from digital services trade there is a need to mitigate the accompanying risks. However, addressing these risks will involve national, regional and global cooperative initiatives.



wards a Transformed Philippin

How Ready Are We? Measuring the Philippines' Readiness for Digital Trade Integration with the Asia Pacific

Dr. Francis Mark A. Quimba, Research Fellow, Philippine Institute for Development Studies

The world has already entered a new era in which a series of innovations that leverage the internet (digitalization) could have a major impact on trade costs and international trade. Reaping the benefits of digitalization is in the interest of governments because digital trade actually drives sustained economic growth, so the government's role as a regulator and enabler of digital trade is important. Using the RDTII framework, the Philippines is reported to have an overall RDTII score of 0.342 in 2020, which rates the country as having only a slightly restrictive digital trade environment. The study finds that the Philippines generally has an open policy environment for digital trade, which suggests that it is ready for digital trade integration with the region.

#### PLENARY SESSION III.

Harnessing Digitalization for Economic and Financial Literacy in celebration of Economic and Financial Literacy Week 2021

How have institutions, sectors, and industries harnessed digitalization to promote economic and financial literacy? What challenges were encountered? What gaps still need to be addressed? This session is in celebration of Economic and Financial Literacy Week 2021.



## PLENARY SESSION IV. AmBisyon Natin 2040 in the New Normal

Session sponsor: National Economic and Development Authority

The devastating consequences of multiple crises that hit the country the COVID-19 pandemic, volcanic eruptions, and successive typhoons —is changing the Filipino people's vision of the future.

The pandemic, in particular, challenged and expanded our understanding of a matatag, maginhawa, at panatag na buhay. It is in this context that this year's Economic and Financial Literacy Week (EFLW) celebration focuses on the theme: A glimpse into AmBisyon Natin 2040: What to expect in the new normal.

The session aims to 1) to reinforce the focus and expand the conversation on AmBisyon Natin 2040, 2) To facilitate exchange of ideas among key stakeholders; and 3) To explore and discuss challenges, opportunities, and strategies that will inform the next Philippine Development Plan.

## CLOSING PLENARY SESSION: Towards a Transformed Philippines

What role do institutions and sectors play towards a transformed Philippines? What are the opportunities that digitalization offers for a transformed Philippines? What are the challenges and how can these be addressed?



## Simultaneous Sessions

#### SESSION A1.

## Better Governance for Economic Recovery: Enhancing Public Policy through Institution Building and Effective Legislation

As the country navigates towards economic recovery, the Philippine government continues to face strong economic headwinds brought about by a persisting COVID-19 pandemic, amidst the lack of health infrastructure and ineffective government response. Notwithstanding these difficulties, there remain opportunities for strategic reforms and stronger public-private collaboration for post-pandemic recovery. During this session, the Ateneo Policy Center (APC) will present its ongoing research and think pieces on evidencebased governance reforms promoting strong economic recovery and institutions.

- Public-private collaboration: The private sector has been an essential and reliable partner of the government in its programs to defeat the pandemic. As we move towards the post-pandemic period, we examine further opportunities for publicprivate collaboration that will support economic recovery and resiliency.
- Customs governance via data analytics: ASOG and the Bureau of Customs entered into a partnership to develop data-driven and reform-oriented governance tools which the latter may use in revenue forecasting, port performance monitoring, and commodity analysis, based on relevant domestic and global economic indicators.

 Land Value Capture: This study explores an innovative financing scheme which the government can use to raise funds for capital-heavy transport transference infrastructure. We simulate the application of a five percent (5%) windfall



tax for every property sale within a 1.5 km radius of three Metro Rail Transit stations. The additional tax revenues are intended to fund capital investments for future infrastructure projects or service debt of those already completed.

### Philippine Conglomerates and their Role in Promoting Inclusive Development

Wards a Transformed Philippin

Philamer C. Torio, Paul Neilmer M. Feliciano, Leonardo M. Jaminola II and Mary Sofia J. Manalo.\* (Ateneo Policy Center)

Like those in many developing countries, Philippine conglomerates have historically played an important role in national development. However, the extent to which Philippine conglomerates contribute to inclusive economic growth remains largely unmeasured and more so, unappreciated. It is in this context that our paper examines the performance and programs of fifteen large Philippine conglomerates whose value-added contribution to the economy was 6% of GDP in 2018. Note that these conglomerates are also the largest purchasers of intermediate goods and services, consuming 14.6% of the country's total intermediate inputs. While there is still much that need to be done, there are opportunities for conglomerates to expand or redesign existing "inclusive business models," particularly with respect to micro, small, and medium enterprises. Recognizing past efforts and their potential to do more, we show that conglomerates are vital partners of the government for the attainment of its economic and development agenda. However, the government needs to establish a national industrial policy for growth and innovation, to further encourage these conglomerates to implement programs that generate greater dividends for society while simultaneously achieving their own corporate PES SYTE ARRUAL (VIELUAL) MELTING ARD CORFERENCE objectives.



#### Improving Customs Governance through Data Analytics: Evidenced-Bases Policy Making at the Bureau of Customs

Philamer C. Torio and Paul Neilmer M. Feliciano\* (Ateneo Policy Center)

The paper discusses the governance tools developed by the Ateneo Policy Center for the Bureau of Customs (BOC) to help improve the bureau's collection efforts, particularly during this time of COVID. The study discusses the development of data-driven and reform-oriented governance tools which will aid BOC in revenue forecasting, port performance monitoring, and commodity analysis, based on relevant domestic and global economic indicators. In particular, this paper discusses the (i) revenue forecasting tool for BOC and test its estimates vis-a-vis actual revenues in 2020 and (ii) monitoring tools designed to improve operational visibility of transactions at the agency-, portand commodity-level. These tools are designed for the BOC's planning, scenario building, and monitoring purposes, particularly as regards revenue target setting, mitigating shocks from national and international events, improving port performance, and monitoring commodity performance. The project's documented research output will feed into sustained reform efforts and institutions-building for the agency. Results obtained and the lessons learned from this project to support operational improvement measures that the bureau may implement.



## Exploring Land Value Capture Potential in Metro Manila's MRT-3: A Simulation Exercise

Enrique J. Martinez\* (De La Salle University) Patricia Marcella A. Evita\* (Ateneo Policy Center) Paul Neilmer M. Feliciano (Ateneo Policy Center) Philamer C. Torio (Ateneo School of Governance)

The Philippine government's multi-year infrastructure program costs around Php 8 trillion. With the narrowing fiscal space of the government and continuous push for infrastructure development, this paper explores Land Value Capture (LVC) as an innovative means to finance the country's infrastructure development program. LVC is based on the economic reality that transportation infrastructure increases the value of its surrounding real estate properties. The study simulates the application of a five percent (5%) windfall tax for every sale of property within the 1.5km radius of three pre-selected Metro Rail Transit (MRT) stations, namely Ayala, Boni, and Cubao. The accumulated proceeds may then be used to reinvest in future projects or defray the debt servicing payments used for the construction of completed infrastructure. The study further posits that the proposed LVC instrument introduces a more equitable and efficient revenue generation method for the government

#### SESSION A2.

#### Digitalization, Mobility, and Inclusive Business post-COVID 19

The COVID-19 pandemic, which has been ongoing since the first quarter of 2020, has disrupted the lives of billions around the world. The highly contagious disease has forced governments to impose lockdowns to prevent the exponential transmission of the virus and prevent overburdening the health

a Transformed Phil

care system. These lockdowns, however, resulted in recessions and rising unemployment rates globally. Nevertheless, this pandemic has also prompted governments, businesses, and individuals to embrace digitalization faster. As digitalization becomes an ever-increasing part of our daily lives, our proposed session is a platform to share ideas on how digitalization can keep economic activity thriving despite ongoing mobility restrictions, and help micro, small and medium enterprises (MSMEs) recover and enable inclusive businesses to survive.

#### Journey to Recovery and the Next Normal for Philippine MSMEs

Jamil Paolo Francisco,\* Sunshine Therese Alcantara & Christopher Ed Caboverde (AIM Rizalino S. Navarro Policy Center for Competitiveness)

Using a panel of 700 micro, small, and medium enterprises (MSMEs) in the National Capital Region (NCR) and the neighboring Calabarzon region, this study analyzes the recovery journey of small businesses in the Philippines more than one year into the COVID-19 pandemic. We investigate firms' performance, strategies, and coping mechanisms from the beginning of the pandemic compared to April/May 2021 to assess how firm adaptations to the new market environment have evolved and how this may have affected performance. We focus on inclusive business activities, which is a critical solution to boost local economies and sustain post-pandemic recovery. We also uncover trends and patterns in the digitalization of MSMEs, including their increased use of digital finance, digital marketing strategies, and participation in e-commerce, which have played a significant role in the survival and transformation of small businesses during the pandemic. Finally, we present several policy options to help small businesses gear up for the next normal.



#### Decomposing the Role of Mobility Restrictions in Controlling COVID-19 Outcomes: A Regional Level Study of the Philippines

Ammielou Gaduena<sup>\*</sup>, John Paul Flaminiano & Christopher Ed Caboverde (AIM Rizalino S. Navarro Policy Center for Competitiveness)

The Philippines has been in varying degrees of mobility restrictions to prevent the spread of the virus since the first case was reported in the first quarter of 2020. The effects of imposition of quarantine measures by the Philippine government have left a mark in the country's economic performance. In the 2021 World Competitiveness Yearbook, the ranking of the Philippines slipped seven places from 45 to 52 out of 64 countries. The sharpest decline is in the Economic Performance factor, falling 13 places from 44th to 57th this year, mainly due to the negative growth rates for gross fixed capital formation growth, per capita real GDP, and aggregate real GDP.

Questions then arise whether the population's decreased mobility has resulted in the more successful containment of the pandemic; whether a pattern emerges on the relationship among non-pharmaceutical interventions, the timing of the implementation, and the economic indicators across regions; whether the legal restrictions substantially affected the volume of consumer traffic; and whether there was an observed shift of consumer activity across industries, particularly in the consumption of products by the creative industry.

Therefore, this paper aims to trace using a vector autoregression analysis (VAR) the effect/s of these restrictions on the volume of consumer traffic, how activities change across industries, and the response of increases in the teleworking population to macroeconomic outcomes. Our proposed study follows the approach made by Camehl and Rieth (2021), who used Bayesian panel structural vector autoregressions to analyze the dynamic interactions between the COVID-19 pandemic, economic mobility, and containment policy adoption can keep economic activity thriving despite ongoing mobility restrictions.

wards a Transformed Philipping

45

Inclusive Business and Post-Pandemic Recovery: A Survival Analysis Maribel Daño-Luna (University of Sydney)

This study examines the long-held debate on whether firms doing good can do well but specifically under the current context of post-pandemic recovery. While the role of the private sector in contributing to social welfare is well recognized both in theory and practice, an emerging literature in inclusive business or IB pushes the bar higher by looking at firms' core business operations which deliberately include the low-income sector as either consumers, employees, or supply chain partners. However, critics caution on the potential risks and pitfalls.

Using survival analysis of a panel survey data of 700 micro, small, and medium enterprises, inclusive firms (before and during the pandemic) were investigated on their necessary factors for survival where the event variable is measured in terms of changes in their performance. Extant case studies point to technological innovation, among other factors, as key driver in inclusive business scalability and thus will be specifically tested. This study answers the main research question: Are firms that are more inclusive more likely to survive the pandemic? It further probes on how technological innovation plays a part in IB firm survival.

In ASEAN, the Philippines is seen as a frontrunner in IB policymaking where an IB accreditation criteria for agribusiness and tourism were piloted in 2016. However, policy assessments point to lack of robust data (UNESCAP, 2019), unclear definition of genuine inclusive activities of firms from regular ones (Briones, 2016) and need for evaluation on their scalability (GIZ, 2018). This study hopes to contribute both to the theory and policymaking of inclusive business.



## SESSION A3. Building A Better Normal for Public Transport in the Philippines

The Philippines is plagued by a system-wide public transport shortage that has been made worse by the pandemic. More than 70% of Filipino workers who cannot work from home have found it harder to get to work since the COVID-19 crisis began (SWS). This shortage has raised costs for commuters in the past year as road transport prices have shot up by nearly 20%. Jeepney drivers, already hard-pressed to make ends meet after the government suspended their operations last year, were harmed by the checkpoints and then denied nearly P4 billion in service contracting funds they fought for, as the Duterte administration failed to extend Bayanihan 2 beyond June 30. Commuters are now forced to crowd into even fewer public transport trips. We argue that carcentric public budgeting is one of the reasons behind this system-wide transport shortage that has stifled our COVID-19 response. In this session, we will review the P2.8 trillion road program budget since 2010, the P2 trillion road transport infrastructure program through 2030, and propose "a better balance for a better normal" for a transport system that moves people, not just cars. We argue that we can build a better normal by pushing policymakers to fill a P150 billion investment gap in road-based public transport and active transport, starting with Bayanihan 3 and the 2022 National Budget



The Systemic Shortage in Philippine Public Transportation: The Impact of the Infrastructure Flagship Project Pipeline on the Mobility Needs of the Greater Capital Region and Recommendations to Bridge the Gap

Katreena Chang<sup>\*</sup> (Move As One Coalition) Kenneth Isaiah Ibasco Abante (Ateneo de Manila University) John P. Sevilla, Robert Y. Siy Jr., (Move As One Coalition) Jedd Carlo F. Ugay Patricia Mariano

The Philippines has a massive public transport shortage, made worse by the COVID-19 pandemic and the decision to tighten public transport supply in 2020. This shortage impeded efforts to curb the spread of the COVID-19 virus and contributed to the country's worst post-war recession, as non-home-based workers found it much harder to move and go to work (SWS, 2021). We find that even if the entire rail-heavy Php 2 trillion public transport infrastructure flagship project pipeline is completed on time over the next decade, the Greater Capital Region area will still experience a system-wide shortage in public transport supply, even with conservative demand growth assumptions. We estimate this using passenger trip survey data and publicly available reports on the passenger ridership of the flagship projects. In pursuit of a more efficient and sustainable use of public funds, we recommend a better balance for a better normal: a shift in the country's infrastructure pipeline to include more active transport infrastructure promoting walking and cycling, as well as expanding road-based public transport modes through public utility vehicle gross-cost service contracting, bus rapid transit investments, and other complementary infrastructure. These programs would contribute the largest impact to improving public transport supply in the short-term and the medium-term, require far less investment while enabling equal mobility capacity, and enhance PES SYTE the network effects of the public transport flagship project pipeline being the built. We recommend that future infrastructure projects be evaluated based on people- and nature-oriented metrics--how interventions improve the service



quality of and commuting experience in public transport. Such metrics include, but are not limited to, shorter waiting times, less crowding, faster travel from point A to point B, reduced generalized cost for commuters, adherence to health protocols, less carbon emissions, improved access for persons with disability, gender sensitivity, reduced transfers, and safer commutes.

### Move People, Not Just Cars: Correcting the Systemic Underfunding in National Road-based Public Transport in the Philippines (2010-2021)

Zy-za Nadine Suzara\* (Institute for Leadership, Empowerment &Democracy) Kenneth Isaiah Ibasco Abante (Ateneo de Manila University), Katreena Chang (Move As One Coalition), Alyssa Encarnacion, Giorgino Naval, Christian John Rojo; John Gabriel Daos, Jeriesa Osorio, Lexxel Tanganco

The Philippines faces a massive public transport shortage made worse by the COVID-19 pandemic. We studied Philippine government budget and audit documents over the past decade to understand how infrastructure and public transport budget priorities may have caused this shortage. We find that the national government has budgeted too much on roads and not enough on the people, plants, and animals who use our roads as public spaces. From 2010 to 2021, almost all (99%) of the P2.8 trillion road program budget was budgeted for road construction, widening, and maintenance. A measly 1% was budgeted to expand our road-based public transport supply and capacity. This car-centric approach to infrastructure development has had a deleterious effect on urban mobility. A case example is Metro Manila, where road-based public transport trips have collapsed. From 2012 to 2019, public bus and jeepney trips in Metro Manila's radial and circumferential roads plummeted by 14%, as private car and motorcycle trips surged by 46%. Despite trillions budgeted for road construction, commutes have become longer and harder for the majority of non-LEE EVILLE home-based workers who depend on public transport. As more people shifted to private vehicle trips, average vehicle travel times increased. Car-centric public budgeting has harmed not only commuters but car users, too.



ds a Transformed Philippine 11-12-NOVEMBER-2021

10-12 November 2021

We need to learn from the past decade's mistakes and work together to get out of this vicious cycle. This means the government cannot merely "Build, Build, Build" its way out of this public transport crisis. National and local governments must spend a greater share of their time and budget on improving road-based public transport supply and capacity and active transport infrastructure. A greater share of scarce road space must be allocated to pedestrians, cyclists, and commuters of road-based public transport. Local governments must be empowered to play a greater role in local transport planning and implementation, given the Supreme Court ruling increasing local government shares in national taxes, which takes effect in 2022. These shifts are needed to reduce greenhouse gas emissions, spur economic recovery, and improve the quality of life of transport workers and the commuting public in the time of a pandemic. We urge transport agencies to veer away from their current car-centered indicators, and move towards people- and nature-centered measures of success.

#### Biyahenihan for a Better Normal: Investing in Philippine Public Transport in 2022 and Beyond

Robert Y. Siy, Jr.\* (Move As One Coalition), Katreena Chang, (Move As One Coalition), Kenneth Isaiah Ibasco Abante (Ateneo de Manila University) Reycel Hyacenth Bendana, Toix Cerna, King Ocampo, and the Move as One Coalition Secretariat and Sectoral Convenors

The 2022 budget should be used to fill a Php150-billion gap in investments in road-based public transport, pedestrian, and cycling infrastructure. This shift will address the massive shortage in transport supply made worse by the pandemic. An overwhelming majority of Filipinos across age, sex, education, geography, and socioeconomic class support this shift: 87% of Filipinos believe that our roads "will be better off if public transport, bicycles, and pedestrians are given priority over private vehicles" (SWS, 2020). These investments will improve outcomes for our pandemic response, public health, a just and



green economic recovery, road safety, equity, accessibility, wellbeing, and the environment. A better normal requires a better spending mix. First, we should invest in moving people, not just cars, on our roads. Traffic congestion is still rife because over the past decade, 99% of the Php2.8 trillion in national road-based programs was used for road building, widening, and construction. Only 1% was invested in expanding road-based public transport supply and improving road efficiency and capacity for users. Compared with car-only lanes, PUV-only lanes enable roads to carry up to 29 times more people, cycling lanes up to 8 times more people, and walkways up to 10 times more people (TUMI, 2019). Second, we should invest in more immediate mobility demands by investing in road-based public transport: The immediate transport needs of millions of Filipinos who do not own private vehicles are not being met. 98% of the Php2trillion flagship project pipeline is for long-term rail projects, and only 2% is planned for road-based public transport. Even assuming project schedules are met, the current Build-Build pipeline will not be enough to meet mobility demand over the next decade. There is still time to meet immediate mobility demands by focusing on active transport and road-based public transport, and investing in these will ensure that the Build-Build-Build program's investments in rail and road infrastructure benefit more Filipinos than just the very few who own private vehicles and live or work near the rail lines being built. Third, we should invest in strengthening the project management units in our transport institutions and in the feedback mechanisms between government and civil society. There is enough fiscal space for the Coalition's proposed programs, but the capacity of our transport institutions to manage new challenges must be enhanced. Route rationalization, PUV modernization, service contracting, and incorporating active transport modes into transport planning are putting heavy demands on transport institutions and personnel, over and above the PUS SYTH A already well-known challenges of infrastructure planning and execution. We should ensure that transport institutions in both national and local governments are properly staffed, given sufficient budgets, and empowered to deliver the

ds a Transformed Philipping 11-12 NOVEMBER-2021

MELTING

needed outcomes, on a permanent basis. As the Mandanas ruling takes effect, local government units should be given a larger role in implementing and financing their local transport systems.

## SESSION B1. Ushering Towards a Brighter Post-Pandemic Economy

This session presents recent studies conducted by graduate students geared towards ushering an economy having accounted for the effects of the current pandemic. The papers in this session highlight theoretical and empirical issues on ensuring food security through rice tariffication and maintaining an optimal level of buffer rice stock to prepare for uncertain situations, analyzing the motivations for social mobility to improve one's socioeconomic status, and promoting financial inclusivity and exploring countless potentials of new technologies such as the issuance of digital currencies. This session aims to stimulate discussions in improving the quality of life of everyone as we navigate an uncertain post-pandemic future. This session hopes to contribute in laying the foundations for a resilient economy that is responsive towards facing similar challenges that might occur beyond the frontiers of our horizon.

## Rice Buffer Stock Maintenance Post-Rice Tariffication Law (RA11203): An Application of a Partial Equilibrium Model for Buffer Stock Level Optimization

Mary Gillian Santos, \* Marites Tiongco, Arlene Inocencio, Caesar Cororaton (DLSU School of Economics)

The Rice Tariffication Law or RA 11203 was created for the purpose of the true achieving food security, lowering prices at the consumer level, and making the rice industry more competitive. The opening up of the domestic rice market led



ransformed Phil

to the removal of the National Food Authority's (NFA) licensing & regulatory powers which shifted their mandate solely on maintaining an optimal level of buffer stock primarily for emergency situations. In order to fulfill this mandate, the NFA must anticipate and account for emergencies & uncertain events in their current operations. This paper presents an application of a Partial Equilibrium Rice Model to determine which regions NFA should purchase palay/rice to maintain the optimal level of buffer stock. Without additional imports, if a 20% disruption in palay production in Region 3 was introduced, the palay production is reduced by 5.5% relative to the base, amounting to 65.3 thousand MT in semester 1 and 62.8 MT in semester 2, and farmgate prices increased by Php 0.45/kg in semester 1 and Php 0.46/kg in semester 2. In this scenario, NFA had to procure palay from other surplus regions such as Region II in Sem 1, and Regions I and II in Sem 2 to maintain the buffer stock at its optimal level. In the event of a disruption in production during the year, the Model can guide policy makers where to procure depending on which region will be badly hit by any type of calamity.

### Investigating Social Mobility Factors: The Case of Selected Barangays in Baguio City

wards a Transformed Philippin

Jem Marie Nario,\* Fredeliz Villanueva,Mc Reynald S. Banderlipe II (DLSU School of Economics)

Ambisyon Natin 2040 survey found that all Filipinos want to achieve a strongly-rooted, comfortable and secure life; to achieve this life, Filipinos aspire to be socially mobile- they move from lower socioeconomic status to a higher socioeconomic status. This study analyzed how perceptions on education, employment, social development in Baguio City and individuals' motivations can affect individuals' decisions of staying in Baguio City. It also aimed at determining if these factors are significant in terms of the Filipinos' wanting to be socially mobile. Through random sampling, a total of 379 respondents



aged 20-50 years old in selected barangays Burnham-Legarda-Kisad, Dontogan, Liwanag-Loakan and Saint Joseph Village in Baguio City were selected as a sample size for the study. Factor analysis was used to create a perception index that served as an independent variable with other variables. Multinomial logistic regression was used to determine the significant factors that affect respondents' decisions. Perceptions of respondents show that they give more importance to social capital, particularly, the presence of family and friends to qualifications or their education and work. It was found that despite the quality education found in Baguio City, and employment is not guaranteed as evidenced by the number of unemployed and the perceptions of respondents. This research is helpful for policy makers in making better policies that is for the welfare of all residents in Baguio City. Furthermore, research in whether the motivations of individuals changed caused by the pandemic can be done.

#### Theoretical Note on the Implication of Issuance of Central Bank Digital Currency (CBDC)

Aris C. Zoleta (DLSU School of Economics)

The breath, depth, and severity of the pandemic change the way our economy works. However, one major effect of the pandemic that is hard not to notice is the acceleration of new payment technology adaptation. The migration from cash payments to contactless technology brings both new opportunities and the realization of the experience of many financially excluded members of society. The global trend towards issuance of tokenized private monies, its benefits, and risk resulted in many central banks exploring the issuance of their digital currencies. The Philippines is no exception to that pursuit. Recently, the BSP publish a working paper on the framework on how the central bank operates on the issuance of CBDC. The issuance of CBDC could contribute to the larger road map for a safer, low-cost, efficient, and financially inclusive National Retail Payment System. Hence, the note seeks to review and highlights the thinking



of many central banks on the issuance of digital currency. In addition, the note wishes to contribute to the literature by providing results on the implication of CBDC on the transmission mechanism of monetary policy. Under the interest rate corridor framework, monetary policy can influence market rates by adjusting the overnight reverse repurchase repo (RRP) rates. The RRP facility allows the BSP to manage liquidity in the banking system thereby influencing the interest rate charged on loans. Does the note seek to answer the following question: (1) Will there be a significant difference in the transmission mechanism of monetary policy after the issuance of the CDBC? (2) Will the interest rate channel of monetary policy to a lesser extent still be effective?

## SESSION B2. A Rethinking of Human Resource and Health Issues

Human resource and health are affected by internal and external factors: human psychology, global markets, financial incentives and incomplete information. The papers in this session offers a rethinking of these issues in light of the aforementioned factors. Paper 1 examines how psychological entitlement affects wage and effort in the workplace. Paper 2 looks at how globalization affected gender inequality in labor markets. Paper 3 explores the effect of increasing teacher pay on educational outcomes of students. Paper 4 delves into the effect of information asymmetries in patient-doctor relationships in a new way of modelling a "hospital."

## An Analysis of the Economics of Psychological Entitlement in the Workplace

Glacer Vasquez (UP School of Economics)

Transformed Philippi H-12 NOVEMBER 2021

Service Antiburge (Vinciple) of the service as the service and service as the Psychological entitlement in the workplace is briefly defined as the



in managerial psychology, human resource management, and organizational behavior literature have examined the nature and causes of psychological entitlement, have developed measures for it, and have investigated its relationship with outcomes in the workplace setting such as effort and wage. Drawing insights from the existing literature and employing the notion of psychological or mental accounting from behavioral economics, we characterize a psychologically entitled individual and construct an economic framework to analyze the consequences of psychological entitlement using utility maximization, principal-agent, screening, and signaling models. Results from the theoretical analysis indicate that psychologically entitled individuals are associated with lower effort levels and higher reservation wages relative to their non-entitled counterparts. We then identify measures of psychological entitlement, effort level, reservation wage, and contract choice, and develop a study design in accordance with ethical standards to test whether the predictions of our economic model hold in reality. Thereafter, we conduct a web-based study to obtain data on the key variables from working-age participants. After controlling for possible confounding factors in the empirical specifications and employing Poisson, probit, and logit estimation strategies, our results confirm the predictions of our economic model and are consistent with the findings from managerial and organizational psychology literature. Our results reveal a positive association between psychological entitlement and reservation wage, and an inverse relationship between psychological entitlement and effort level.

## Globalization and the Narrowing of the Gender Gap in Labor Markets Miguel Antonio Estrada (UP School of Economics)

Despite a general reduction in global gender inequality over the years, women continue to face discrimination in labor markets. Women's labor force participation in 2019 was only at 47.3% – substantially lower by 27 percentage points compared to men. Among factors that open economic opportunities to



rds a Transformed Philippine

PES 59th Annual (Virtual) Meeting and Conference 10-12 November 2021 women, globalization has been among the most widely examined. The classic argument is that increased economic flows create work opportunities, especially for low-skilled individuals who are mostly females. However, this idea tends to reduce globalization to just one area and misses out other important facets. Using the multi-faceted KOF globalization index and the economic, social, and political sub-indices, as well as de facto measures of openness, we examine the effect of globalization on gender equality, as measured by the (a) female-to-male labor force participation ratio (F-M LFPR) and (b) F-M ratio of wage and salaried workers-to-working age population, wherein an increase in either ratio signals a narrowing of the gender gap. Employing two-step system GMM on a panel of 160 countries for the period 1997-2015, we find evidence that certain aspects of globalization result in a narrowing of the gender gap. In particular, we find that trade openness has a robustly positive effect on the F-M LFPR ratio; while the KOF social globalization has a positive impact on the F-M ratio of wage and salaried workers-to-working age population. We also find that institutions play a more significant role in reducing the gender gap for wage and salaried workers than for workers in general. The results suggest differences in the nature of informal and formal sector work, in that the former tends to be less likely found among wage and salaried work, where rules on equal treatment and non-discrimination tend to be more binding.

# Teaching Position and School Outcomes: Empirical Evidence in the Philippines

Irene Arzadon (UP School of Economics)

Empirical evidence is still mixed regarding the effect of teacher pay and experience on the academic performance of students. One proxy for teacher pay and experience is the teaching position, or a schedule of teaching-track promotion prospects that corresponds to higher salaries with higher positions. In Philippine public schools, the jump in salary due to promotion to a 'Master



Teacher' has drastically increased in the past decade, notwithstanding the same procedure followed by teachers to apply for promotion. I investigate if the system of promotion not only grants monetary reward to teachers who pursue promotion, but also increases teaching quality based on the academic performance of students in standardized examinations. Using a school-level panel data from 2013 to 2017 of elementary and secondary public schools in seven regions in the Philippines, I find that a higher ratio of Teacher III over total students has a positive effect on test scores, but an increase in the ratio of Master Teacher I over total students has a negative effect on test scores. It is noteworthy that this result is consistent in both elementary and secondary schools, given that the test scores are from Grade 6 National Achievement Test (NAT), Grade 10 NAT, and the scholastic aptitude section of the National Career Assessment Examination (NCAE) taken by Grade 9 students. This indicates the importance of analyzing the dynamics of promotion from Teacher III to Master Teacher I in terms of incentives and constraints faced by teachers.

## Re-thinking the Hospital: An Analytic Model of Agent-led Production Miharu JM Kimwell (UP School of Economics)

In a perfectly competitive and perfectly informed market, and where consumer willingness-to-pay is at least as high as the marginal cost of production, the principles governing the supply of hospital services are no different from those determining the supply of any other private commodity under the same conditions. In particular, given the technology available, a) services will be provided at that level of quality where the ratio of the marginal products of inputs are equal to the ratio of their respective prices; and b) each unit of service will be sold at a price that just equals the health effect of the unit received. Yet, the patient-doctor relationship is characterized by multi-dimensional agency in hidden information compounded by hidden action. While agency in health care provision has long been recognized to exist, there has been little effort to



systematically incorporate agency in both theoretical and empirical economic studies of health care service production. In this paper, we present a review of hospital production theory in health economics, and propose an analytic model of agent-led production where input combinations are wholly subject to agent judgement, the agent himself providing at least one of the inputs, and subject to a set of behavioral rules. The main extension to the basic model is a demonstration of how the fundamental informational issues characterizing patient-doctor interactions may underlie historical and present institutional features of hospitals.

#### SESSION B3. Special Topics in Economics

## Redistributive Policy Shocks and Monetary Policy with Heterogeneous Agents

Ojasvita Bahl (Indian Statistical Institute) Chetan Ghate\* (Indian Statistical Institute) Debdulal Mallick (Deakin University)

ransformed Phil

Governments in EMDEs routinely intervene in agriculture markets to stabilize food prices in the wake of adverse domestic or external shocks. Such interventions unexpectedly involve a large increase in the procurement and redistribution of food, which we call a redistributive policy shock. What is the impact of a redistributive policy shock on the sectoral and aggregate dynamics of inflation, and the distribution of consumption amongst rich and poor households? To address this, we build a tractable two-sector (agriculture and manufacturing) two-agent (rich and poor) New Keynesian DSGE model with redistributive policy shocks. We calibrate the model to the Indian economy. We show that for an ináation targeting central bank, consumer heterogeneity



matters for whether monetary policy responses to a variety of shocks raises aggregate welfare or not. This result is robust to a variety of extensions of the model. Our paper contributes to a growing literature on understanding the role of consumer heterogeneity in monetary policy.

## The COVID 19 Pandemic Response: The Challenges and Initiatives of Local Government Unit of Talisayan, Misamis Oriental Joann D. Lim (Bukidnon State University Medina Campus)

The Local Government Unit (LGU) of Talisayan is a fourth-class municipality in Misamis Oriental (Mis Or), Northern Mindanao, Region X, Philippines. The LGU is greatly affected in the Coronavirus 19 Pandemic in twenty (20) months government situation. The LGU take an action in response to the national government calls of "Bayanihan" Spirit and observing the Inter-Agency Task Force (IATF) memorandum and guidelines.

The study utilized a descriptive and qualitative approach. It answered the following objectives: (1) What is the LGU response of COVID-19 pandemic; (2) What are the challenges do LGU encountered in terms of (a) implementation of IATF guidelines and memorandum, (b) implementation of National Action Plan (NAP) of the COVID-19 of the following phases: (b.1) NAP Phase 1, (b.2) NAP Phase II, (b.3) NAP Phase III?; and 3) What are the initiatives do LGU taken in facing the COVID-19 pandemic?

The study is conducted in the municipality of Talisayan, Misamis Oriental. The respondents of the study are the LGU officials, barangay officials, LGU departments heads, Rural Health Unit (RHU) Workers, and Municipal Disaster Risk Reduction and Management (MDRRM) Unit Workers. The findings showed that the LGU has challenges of the (1) financial resources of COVID-19 recovery (resolved to a realignment of funds), (2) increase of residents' unemployment, and (3) social and health challenges. The LGU has initiatives to fight challenges during a pandemic. These initiatives are (1) allotting budget for food supply



to the residents, (2) conducting a virtual radio program for the physical and mental health, (3) raising awareness to the Bayanihan spirit, (4) activation of the best practices of barangays, government sectors, private sectors and Non-Government Organizations (NGOs), (5) activation of DRRM in assisting the LGU of COVID-19 responses, and (6) activation of RHU activities to mitigate the spread of COVID-19.

The study concluded that the LGU Talisayan is doing its role in the implementation of IATF guidelines. The LGU is the front liner of implementation of the saving residents of Talisayan and maintaining good health and safety.

## Coral Reef Status of the Two Marine Protected Areas (MPAs) in Jimenez and Panaon, Misamis Occidental

Darwin S. Macalisang, Denmark S. Macalisang<sup>\*</sup> & Clemith Yting (Adventist Technological University)

This study aimed to assess the coral reefs and to determine the status of the Marine Protected Areas (MPAs) in Jimenez and Panaon, Misamis Occidental. This study utilized the descriptive-comparative method of research with the aid of the Manta Tow and Photo-transect method in collecting the data. The collected data process using the Coral Point Count with Excel extensions (CPCe) software to determine the average percent cover and diversity of the coral species, abiotic and biotic forms in a benthic area was performed in the study. Results depicted that Acropora cervicornis was found to the highest number of coral species in Panaon Reef Sanctuary while Acropora pulchra found most abundant in Kaieyoy Reef Jimenez Sanctuary, Jimenez, Misamis Occidental. The condition of Panaon Reef sanctuary is excellent while Ka-eyoy Reef Jimenez Sanctuary is fair based on the criteria set by Lincuana et.al. (in press). On the other hand, the condition of Panaon Reef sanctuary and Ka-eyoy Reef Jimenez Sanctuary in terms of diversity index are both poor. Hence, there was no significant difference in the percent cover of coral species between the two (2) Marine Protected Areas (MPAs) of Jimenez and Panaon, Misamis Occidental.

#### Factors Affecting Fertility in the Philippines (1980-2020)

Mohammad Jaafar C. Casanguan, Kimberly Claire C. Conejero, Jemima C. Manatad<sup>\*</sup>, Princess July J. Raro, Resa Mae Laygan, Lady Lou M. D'Lonsod, Maria Rizalia Y. Teves & Jerrold Ello (Mindanao State University-Iligan Institute of Technology)

Fertility is defined as the ability to conceive a child, which contributes to the population growth in the country. Hence, this research paper aimed to explain the factors affecting fertility in the Philippines from 1980 to 2020 using time series data at the national level. The Theory of Demographic Transition was adopted as a theoretical framework. This research paper used quantitative research design. Data were run through multiple regression analysis and the results revealed that GDP per capita, in its log form, and urban population are negatively related and statistically significant at a 1% level of significance to the two measures of fertility, the Crude Birth Rate (CBR) and Total Fertility Rate (TFR). This result is consistent with the adopted theory that as countries progress, fertility decreases. So, with an increase in GDP per capita and an increase in urban population, fertility should therefore decrease. Likewise, the unemployment rate and women out-migration are negatively related to fertility, which is logical since these variables lower the incidence of women being pregnant. Results suggest that as these factors are effective in alleviating poverty in the Philippines, these are also effective in reducing fertility in the country. Moreover, the government and its constituents should focus on factors mentioned as it helps in the country's development and monitor fertility behavior.



#### SESSION C1. Build Back Better: Business and Human Rights Session sponsor: Friedrich Naumann Foundation Philippines

As the ongoing Covid-19 pushed back most of the world economies, it also challenged our progress into ensuring a just recovery not only for business but also more importantly to the cause of human rights. The fallout of the crisis disproportionately affected the most vulnerable social groups.

In 2011, the United Nations adopted the Guiding Principles on Business and Human Rights. It reinforces the state's duty to protect human rights, and sets the standards for companies to ensure that human rights are respected throughout their operations. Ten years later, is the human rights situation in business worse or better? Moreover, how should businesses address the adverse human rights impacts of the pandemic?

In navigating our steps forward, let us discuss how businesses and government can work together in building back better from Covid-19 with people – human rights – at the center of the recovery plan.

In May 2021, Friedrich Naumann Foundation launched a Journalism Training Program to support freelance journalists in Southeast and East Asia on their research and publication of articles about "Business and Human Rights."

The parallel session aims to:

- Feature and discuss four stories that shed light on topics concerning business and human rights.
- Tackle how the government and business enterprise should recognize their obligation to respect, protect, and fulfill human rights and fundamental freedoms.
- Encourage business to adopt the United Nations Guiding Principles on Business and Human Rights, as they recover the companies from the Hatting Autopandemic.

Discuss how businesses and government can work together in creating a just recovery plan for businesses and human rights cause.



#### SESSION C2. Safeguarding the Path to Recovery Session sponsor: Bangko Sentral ng Pilipinas (BSP)

The proposed BSP session aims to inform the public of how the mandate of the BSP on price and financial stability will secure and promote the country's economic recovery.

Since the onset of the pandemic, the government has been implementing various measures to mitigate the spread of the virus and restore lost economic output. Although risks remain amid the discovery of new COVID variants, recent macroeconomic developments have shown encouraging signs that the Philippine economy is gradually recovering.

The BSP's actions and policy thrusts will continue to be anchored on its core mandates of promoting price and financial stability. The BSP will remain vigilant over the current inflation dynamics to ensure that the monetary policy stance continues to support economic recovery to the extent that the inflation outlook would allow. It will carefully scan the operating environment with a forward-looking perspective to move in a pre-emptive fashion to address any risks to our price stability mandate. The BSP will also intensify its monitoring and surveillance over the financial sector on emerging risks. Keeping a steady hand on the BSP's policy levers will allow the momentum of economic recovery to gain more traction by helping boost domestic demand and market confidence. Moving forward, the BSP affirms its support to the economy for as long as necessary to ensure the country's strong and sustainable recovery.



#### The BSP's Forecasting and Policy Analysis System

Zeno Ronald R. Abenoja, Sarah Jane T. Alarcon-Castañares, Jasmin E. Dacio, Jan Christopher G. Ocampo, Mark Rex R. Romaraog (BSP Department of Economic Research)

The BSP subscribes to the Forecasting and Policy Analysis System (FPAS), adopted by many inflation targeting central banks, as the framework for generating forecasts of macroeconomic variables and to support monetary policy decision-making. This paper summarizes the main features of the process involved in generating the baseline forecasts, alternative scenarios, and policy simulations. We highlight the complementary roles played by the BSP's suite of models and the expert judgement from the sector specialists as well as the importance in the communication of the outlook and risks for the transmission of monetary policy. Finally, we present a systematic evaluation of the forecasting performance of the BSP from 2010 to 2020 together with some of the lessons in forecasting during the Covid-19 pandemic and the recent efforts to improve the BSP's models.

## Networks, Systemic Risks, and Macroprudential Policy: The Objective of Financial Stability

Dr. Johnny Noe E. Ravalo, Senior Assistant Governor (BSP Office of Systemic Risk Management)

rds a Transformed Philippin

The policy concern over "financial stability" dates back to Bagehot (1873), but it became part of mainstream thinking only as a result of the 2007 Global Financial Crisis (GFC). Financial authorities recognize that the traditional approach prior to the GFC had been either to look at financial markets as driven by the macroeconomy (thus, policy for the later can manage the former), or by supervising individual institutions (in the context of, say, Basel 1 and Basel 2). The fact that the GFC occurred after the period of Great Moderation and despite



the Basel Accords suggested to many, in hindsight, that there was an element not fully considered that could turn seemingly functioning markets into disarray.

What was "missing" in the previous thought process was that risk behaviors in good times could themselves create the subsequent stress condition. This is no longer an issue of the LOLR that could be used under extraordinary market conditions. Instead, concepts such as the "Minsky Moment" (Minsky; 1992), "financial fragility (Allen and Gale; 2004), and "financial acceleration" (Bernanke, Gertler and Gilchrist; 1996) came back into focus and use by financial authorities.

At the heart of the issue is the realization that financial markets are better seen as a "complex system" that is defined by the feature of emergence. The endogenous behaviors of the agents in the network becomes a prime cause of system-level risks, separate from the exogenous shocks. This creates a separation between the effects on the system from what may be best for each individual agent.

The presentation presents an overview of why and where managing systemic risks matter as a distinct policy objective. This is relevant under the current conditions caused by Covid-19, but it should also matter even when times are more sanguine. Not all risks need to be systemic, just as systemic risks need not be about overheating economies or of failed financial institutions.

The effort invested in this policy field is in line with amended charter of the BSP where financial stability is one of its four prescribed mandates.

## What Drives Expectations in the Philippines? Insights from a Household Survey

ransformed Philippin

Faith Cacnio and Joselito Basilio (BSP Research Academy)

The paper looks at the results of the Consumer Expectations Survey (CES), a quarterly survey that the BPS conducts, to identify some of the key features of survey-based expectations in the Philippines. Moreover, the paper examines



how Filipino households form their expectations and determines the factors that affect this process. Households' expectations of future economic outcomes, like that for inflation, could affect their current consumption and investment decisions. These decisions as well as the other actions of the households could have a bearing on the price- and wage-setting in the economy. Such have important implications for monetary policy.

## SESSION C3. Energy Economics: Natural Gas, Electric Vehicles, Forced Outages, and Forward Markets

#### Gauging the Market Potential for Natural Gas among Philippine Manufacturing Firms

Majah-Leah V. Ravago (ADMU Department of Economics) Raul V. Fabella (UP School of Economics) Karl Robert L. Jandoc,\* (UP School of Economics) Renzi G. Frias, UP School of Statistics J. Kathleen P. Magadia, Gas Policy and Development Project

Securing energy supply and pursuing low-carbon economic growth have become doubly challenging for the Philippines as it faces depletion of its indigenous natural gas. Importing liquefied natural gas is seen as the immediate solution. Our objective is to gauge the extent of the potential demand for natural gas among manufacturing firms. Specifically, we aim to determine the likelihood of switching to natural gas among firms in manufacturing ecozones, which takes the lion share of 85% of total exports. Using logistical regression, we find that the extent of the firms' knowledge about natural gas and their production process are the primary determinants of the likelihood to switch. For firms with heating component and those that perceived natural gas to be more cost- competitive, the predictive probability to switch is higher by 39.4 percentage points compared



to their counter- parts. More knowledgeable firms have 19.1 percentage points higher predictive probability of switching than less knowledgeable firms. The study is important for low-income countries as it sheds light on the measures its manufacturing industry can take to become cleaner and more competitive and the obstacles to transitioning to relatively cleaner natural gas and renewable sources, ultimately replacing the more expensive diesel fuel.

#### Can Electric Vehicles Thrive in the Philippines?

Majah-Leah V. Ravago, (ADMU Department of Economics) Renzi G. Frias, (UP School of Statistics) J. Kathleen P. Magadia (Gas Policy and Development Project)

The data on the development and penetration of electric vehicles (EVs) across countries shows that EVs stock-to-population ratio is directly proportional to the per-capita income of a country. The higher the per-capita income, the higher the ratio. In the Philippines, only the high-income households will likely be able to afford EVs if policy is geared towards private use light-duty vehicle EVs. A good starting point would have been electric 2-wheelers which saw massive success in neighboring countries, Thailand and Vietnam. However, given the restrictions of e-bikes and e-trikes from main thoroughfares in Metro Manila, this is not the best option to promote EV adoption. As such, we recommend that EV policies focus on the adoption and popularization of e-jeepneys.

We compare the economic and social costs and benefits of adopting e-jeepney compared to owning a traditional diesel-fueled jeepney for a period of 10 years. The analysis is static in nature but cognizant with the dynamic nature of the development of the EV industry. We present the social costs and benefits in 4 different scenarios that consider future expectations. With the end goal towards e-mobility, a roadmap transition to EV starting with jeepney followed by other public transportation, i.e., buses and tricycle, and finally the 4-wheelers has the greater potential to successfully develop and nurture the EV industry.



#### Reliability and Forced Outages: Survival Analysis with Recurrent Events

Majah-Leah V. Ravago\* (ADMU Department of Economics) Karl Robert L. Jandoc (UP School of Economics) Mia Maye Pormon (UP Visayas)

This paper empirically investigates the contributory factors to the probability that a power plant declares a forced outage through a survival analysis model with recurring events. We find that higher reserve margins, higher share capacity (a measure of concentration) and the number of planned outages (an indicator of preventive maintenance) all reduce the risk of forced outages. On the other hand, the use rate (a measure of intensity of power plant utilization), and the technology of the plant matters in increasing the incidence of forced outages. However, we find no economic and statistical difference between the periods before and after the problem period (where incidence of forced outages was higher from July 25 to August 5, 2016). This points out to the absence of a systematic difference between the contributory factors of the outages during the problem period and all other incidence of forced outages. The paper then presents international best practices in reporting planned and forced outage to contrast present practices in the Philippines.

## Competition with Forward Market for Electricity: A Laboratory Experiment in Aid of Improving Market Design in the Philippines

Karl Robert L. Jandoc (UP School of Economics) Majah-Leah V. Ravago (ADMU Department of Economics) Benjamin Radoc (Philippine Competition Commission and ADMU Department of Economics) Paolo Lorenzo Tejano, University of Oxford (Presentor)

Wards a Transformed Philippine

In this study, we aim to examine whether the presence of an organized forward market improves competition in electricity market using laboratory experiment. The motivation and inspiration stem from the Philippine experience.



We assess the behavior of dominant firms and evaluate competition outcomes in an environment where organized forward markets exist in congruent with spot market. When incentive or market power is altered, we validate whether firms exercise their market power. Our findings help clarify the ambiguous results in past experiments on forward markets and are useful inputs to the Philippine Competition Commission in providing policy advice on the electricity sector.

#### SESSION D1.

## Online Technologies to Shorten the Philippine Food and Agricultural Supply Chain: Prospects in the New Normal

This session delves into the status and opportunities in using online technologies to shorten the Philippine food and agriculture supply chain. Perspectives from the farmers' organizations cum social enterprise/private sector, the academe, and the government research and development are presented and discussed through the selected paper presentations. From the point-of-view of the farmers, the challenges and opportunities posed by the current pandemic is presented through its social enterprise GlowCorp, while the opportunities to strengthen logistics to shorten the food and agricultural supply chain through technology is discussed by Dr. Thomas Reardon, an expert in e-commerce revolution. Lastly, the prospects of government support to farmers in terms of improving access and systems is presented by UPLB. The expertise of Dr. Flordeliza A. Lantican, a well-known value chain expert will be tapped for her comparative discussions on the recent past agricultural value chains and the current ones as presented by GlowCorp and Dr. Reardon.



## Transforming Food and Agricultural Value Chains Through E-Commerce Revolution

Thomas Reardon (University of Michigan)

Transformed Philippi

This presentation highlights the experiences and research outputs of the author related to transformation of value chains and how they are revolutionized using e-commerce and related technologies.

### Social Enterprises as Farmer's Bridges to the Digital Divide: The Case of GlowCorp

Bernie M. Berondo (Global Organic and Wellness Corporation)

The paper presents the case of Global Organic and Wellness Corporation (GlowCorp), a social enterprise created by a collection of farmers' organizations and NGOs, with the goal of empowering the organic rice and muscovado farmers to engage the market. With its somewhat new digital marketing platform, trade of GlowCorp products has been thriving during the pandemic. Elements of its indicative success are dissected and discussed in this paper.

## SESSION D2. Bank Stability and Efficiency, Remittances and the Macroeconomy

The financial and bank stability are manifested in times of crisis. The configuring the volatility of market returns and bank stress testing are exercises that help bank, equities managers and regulators to understand the fragility of banks, and the financial sector, as well as their coping mechanisms to maintain bank stability and efficiency. Remittances have also proven to be a cushion which contributes to the liquidity of banks as well as household consumption



smoothening during a pandemic. Empirical evidence from five presentations shall be shown in this session.

## True or Spurious Long Memory: The Case of the Philippine Equities Market

Geraldine B. Wambangco (University of Asia and the Pacific)

Investigating for the presence of dual long memory properties in stock market returns has been a growing topic in finance. Though there have been newer studies on the persistence in the returns and volatility of the Philippine Stock Exchange Index (PSEi), there is scant literature utilizing fractionally integrated models (ARFIMA-FIGARCH) as a measure to ascertain long memory or lack thereof. The study was undertaken in three different levels to rule out the confounding factors of structural breaks, cross-sectional aggregation and temporal aggregation. Using the daily returns of the PSEi and its constituent stocks from 2012-2019, the study found that the Philippine equities market does not exhibit dual long memory properties as the study finds strong evidence of long memory property in the volatility of stock returns only. At the level of the firm, the results of the joint ARFIMA-FIGARCH models also showed that 28 out of 37 firms indicated a long memory property in volatility alone. Overall, the long memory property of the stock market returns of the PSEi do not appear to be spurious, except under the presence of sudden changes or structural breaks due to political and financial events that alter its volatility persistence.

## Macro Stress Testing of the Philippines' Top 10 UKBs: An Analysis of the Effect of Economic Distress on the Bank's Credit Quality

Michaela Nicole Meriño (University of Asia and the Pacific)

it is imperative to determine the influence of adverse macroeconomic conditions on the asset-credit quality of banks - a key institution in fostering economic


growth. Hence, the paper aims to create a macroeconomic model in order to estimate the values of the macroeconomic variables under stress scenarios and then apply a satellite model of credit risk to each bank under the Top 10 Universal and Commercial Banks (UKBs) and the entire industry to evaluate asset-credit quality under adverse conditions. In the wake of continuing global economic uncertainty, it is necessary to understand the level of preparedness of banks required for managing risks in the financial system by conducting a macro stress test. Such understanding would require identifying the impact of macroeconomic factors on the banks' asset-credit quality historically and under unfavorable stress conditions. The analysis is against the backdrop of the industry's level of competition since the degree of market competition may also influence the risk behavior of banks and consequently, its credit quality. Therefore, the study seeks to answer the question: Does increased economic distress, in the context of lower bank competition, lead to lower credit quality? The study has the following objectives:

First, to review the historical influence of macroeconomic variables and bank competition on the credit quality of the Top 10 UKBs individually. Second, to estimate the relationship between macroeconomic variables namely output growth, interest rates, inflation, exchange rate and remittances. Third, to forecast the macroeconomic indicators under mild and moderate stress scenarios. Fourth, to quantify the effect of economic distress on the credit quality of the Top 10 UKBs and the entire industry. Empirical evidence showed that macroeconomic factors affect banks differently as seen in the signs and coefficients of the regression analysis. Our imperfectly competitive banking industry is known to be integrated, thus an exposure of one bank may pose risks to other banks and the entire financial system. By knowing the risks of other market participants, banks should collaborate in making sure the banking system is healthy and sound as it is beneficial in the long-run. Every economic agent must work all together to achieve economic growth, most especially now with the presence of an unprecedented crisis. To end, it is definitely a difficult time for the country as

GLETIKE

the COVID-19 crisis continues to test the strength of its macroeconomic policies and reforms. Hence, it is imperative that the stakeholders understand and assess the vulnerabilities of the banking system by running a macro stress test. The sooner the weaknesses are recognized, the quicker it is for policy makers and the banks' management to implement the right responses and to recover.

#### Does Income Diversification Contribute to Achieving Bank Efficiency and Stability in Period of Increased Competition?

Ella Mae O. Leonida (University of Asia and the Pacific)

Recent theoretical and empirical literatures have shed light to the importance of cost and profit efficiency to the assessment of a bank's performance. Also, recent trends in international and domestic banking industry show that banks are now becoming more engaged in a wide array of business activities aside from their traditional activities. However, empirical studies show ambiguous results regarding the effect of bank competition and income diversification on bank performance in terms of cost and profit efficiency and stability. This study aims to empirically verify if income diversification contributes to bank efficiency and stability of top 20 U/KBs in the Philippines in periods of increased competition. This study used Lerner index as a measure of bank market power and Stochastic Frontier Analysis to estimate bank cost and profit efficiency scores. Employing GMM panel estimation, it was found that competition is negatively related to cost and profit efficiency, as well as bank stability, which provides support for information generation hypothesis and competition-fragility view. However, the competition-stability view also exists among the dominant banks. The results also show that income diversification alone has a negative effect on bank efficiency and stability. However, when income diversification strategies are coupled with high level of market power, banks reap the expected benefit of having diverse income sources in terms of bank efficiency and stability. This is the reason why domestic banks, especially dominant banks, still thrive in an

rds a Transformed Philippin

imperfectly competitive market despite having diverse income sources. With this, it can be inferred that when market competition intensifies, i.e. market power erodes, the adverse effect on cost and profit efficiency, as well as bank stability, is also more evident on highly income diversified banks. These results imply that high income diversification can intensify the negative effect of market competition on cost and profit efficiency and bank stability.

#### Remittances, Financial and Governance Institutions and Income Inequality in Developing Economies

Sarah Lynne S. Daway-Ducanes (UP School of Economics) Romeo Matthew T. Balanquit (University of Asia and the Pacific)

The tremendous rise of cross-border remittances - both in magnitude and economic import - and the marked decline in income inequality in developing economies the last 25 years beg the question: How have remittances affected income inequality? Using two-step system generalized method of moments on a panel dataset of 123 economies from 1992 to 2016, we find evidence that higher remittance inflows worsen Gini income inequality in developing economies. This effect is, however, mitigated - and even overturned - in environments of favorable financial and governance institutions.

#### OFW Remittances, Philippine Macroeconomy and COVID-19 Jovi C. Dacanay (University of Asia and the Pacific)

ransformed Phi

The study evaluates the relationship between remittances and the country's GDP, as well as its effects on household consumption and national savings. Moreover, the COVID-19 pandemic served as the external shock which hampered the growth of economies around the world, therefore, this paper also hopes to shed light on the effects of the pandemic on remittances and its relationship with households and the GDP. To achieve these objectives, the authors formulated



a framework/model based on a study on the necessity of financial inclusion for enhancing the economic impacts of remittances. Using an exponential generalized autoregressive heteroskedastic (EGARCH) regression procedure, the study will be able to show how remittances act as a leverage during hard times. Based on the results of this study, as one of the largest countries with overseas workers, remittances cushion the Philippine economy during hard times, especially during the pandemic. The study hopes to shed light on the benefits remittances have on the GDP, household spending, national savings, and the COVID-19 pandemic. This paper aims to answer the following question: What is the impact of remittances on macroeconomy and households? The study aims to answer its main question by analyzing the following objectives: First, to identify the relationship between OFW remittances with macroeconomic variables, and second, to identify the impact of the COVID-19 pandemic on remittances. Despite the challenges brought about by the pandemic, remittances remained resilient. Based on the results from the model simulated for our first objective, it showed that remittances cushion GDP, household consumption, and national savings in hard times

#### SESSION D3. Enduring Issues in an Open Economy: Trade, Monetary and Fiscal Policy

Coherence in trade, monetary and fiscal policies are absolutely necessary for open economies to reap the benefits of globalization. This session highlights enduring issues in trade, monetary and fiscal policy that impinge on policies for economic stability and growth. Paper 1 examines global value chains and trade wars in a pandemic. Paper 2 highlights the mechanism of how large trade blocs affect domestic welfare. Paper 3 examines how policy-induced uncertainty

fransformed Phili

PES 59th Annual (Virtual) Meeting and Conference 10-12 November 2021 affects exchange rate volatility. Paper 4 examines how imposing an inflation targeting regime affects inflation rates and volatility. Paper 5 studies the incidence of several tax and expenditure policies in the Philippines and attempt to combine incidence for pairings of tax-expenditure policies.

#### Navigating Global Value Chains Amid Trade Wars and Pandemics: The Philippine Experience

Adrian Mendoza (UP School of Economics)

This paper analyzes the Philippines' recent GVC experience amid the ongoing trade wars and COVID-19 pandemic. In particular, this study traces the nature of the country's GVC participation to understand the country's potential vulnerability to trade conflicts, especially within the context of intricate web of GVC linkages in East and South East Asia. The purpose of the study is twofold: first, to assess the breadth and depth of the Philippines' actual exposure to trade and supply chain disruptions; and second, to identify strategies for policy actions at the domestic and regional levels.

#### Measuring the Possible Effects of Large Trade Blocs Using a Quantitative Trade Model

Anthony Sabarillo (UP School of Economics)

nds a Transformed Philippin

I modify the model of Carrère, Grujovic, and Robert-Nicoud (2020) to quantify the possible effects of large trade blocs (modelled as reductions in tariff barriers among coalition members) on relative gains between countries and domestic welfare (including unemployment). To be able to include many countries in the simulations and hence analyze effects on international inequality, I assume country-specific frictions in matching jobseekers with employers instead of country-sector-specific matching in the original model. Also taken into account are tariff revenues (unlike the original model) which allow the estimation of additional welfare and distributional effects at the country level.

#### Are Exchange Rates More Volatile with Greater Uncertainty?: Evidence from the PHP/USD Exchange Rate Using GARCH-MIDAS Models

Marvin Kyle M. Abreu (UP School of Economics)

This study explores the relationship between policy-related economic uncertainty and the volatility of the PHP/USD exchange rate returns. The study uses data constructed from Google Trends to measure uncertainty and employs GARCH-MIDAS models to differentiate the short-run and long-run components of exchange rate volatility. The results reveal that more policyrelated economic uncertainty leads to decreased volatility in the long run, with uncertainty in the US having a greater effect than uncertainty in the Philippines. The counterintuitive outcomes may spring from the fact that uncertainty relates to the search for more information, which may exhibit a long-memory process where economic agents form beliefs that lead them to risk aversion. This study also separates market-related uncertainty from policy-related uncertainty using a regression method, where results show that market-related uncertainty does not significantly affect exchange rate volatility in the long run.

#### Assessing the Impacts of Inflation Targeting on Inflation Rates and Volatility: A Synthetic Control Method Approach

Ludigil Garces\* Karl Jandoc, Sarah Daway-Ducanes (UP School of Economics)

Many emerging markets, usually facing rapidly rising price levels due to various macroeconomic crises, adopted inflation targeting to stabilize and achieve lower inflation rates. Most studies that assess the performance of inflation targeting regimes use methods in which the non-inflation targeters (non-ITers or control group) – against which the inflation targeters (ITers or treated group) are compared – are chosen in an ad hoc manner, raising issues on the validity of the comparisons made using the generated counterfactual outcome trajectories. This paper thus uses a data-driven approach to choosing a control group called synthetic control method (SCM). For each ITer, a synthetic control group (SCG) is created from a convex combination of non-ITers to closely mimic the ITers' outcome trajectory. We then compare the inflation level and volatility of the ITer to its relevant SCG. Overall, we find that inflation targeting has reduced the levels as well as the volatility of inflation rates. However, the overall results mask the heterogeneity of country-level effects. For instance, developing countries such as Colombia, Mexico and Turkey as well as transition economies such as Hungary saw lower inflation levels. On the other hand, countries that benefited from lower inflation volatility due to IT include Ghana, Mexico, Philippines and Turkey.

#### A Combined Incidence Analysis of the Tax and Expenditure Policies in the Philippines: A Combined Incidence Analysis of the Tax and Expenditure Policies in the Philippines

Mae Hyacinth Kiocho (UP School of Economics)

The study examines the incidence of several tax and expenditure policies in the Philippines and attempt to combine incidence for pairings of taxexpenditure policies. In analyzing incidence of individual fiscal policy, the concentration curve of taxes or benefits associated to the fiscal policy is created, and is compared to benchmarks to determine whether the fiscal policy is progressive or not. The dominance test of the concentration curve relative to the benchmarks are also employed to complement the comparison made using the graphs. It is found that VAT is progressive while excise taxes on alcohol and tobacco products are relatively regressive. As for the expenditure policies, the education spending is found to be not progressive while the social welfare spending specifically the Pantawid Pamilyang Pilipino Program (4Ps) relatively progressive. The incidence of health spending of the government based on



PhilHealth membership and usage of public health facilities is relatively progressive.

The combined incidence of pairings of tax-expenditure policies are investigated by applying the concept of tax redistribution (TR) progressivity (Davidson and Duclos 1997) to the concentration curves of the fiscal policies. The combined incidence of VAT, education and 4Ps is determined to be TR progressive since the three policies are observed to be TR progressive individually. As for the pairing of excise taxes on alcohol and tobacco products and PhilHealth, the combined incidence is not TR progressive given that separately, the excise taxes on these products are not TR progressive while PhilHealth's TR progressivity is not determined.

#### SESSION D4.

#### Looking into the Methodological Approaches in Addressing Issues for Sustainable Economic Development

This session presents recent studies that addresses some economic issues, putting the spotlight on the use of various methodological approaches. The papers employ techniques to measure the effects of changing global oil prices to the Philippine macroeconomy using vector autoregressive models, analyze the economic and legal rationale of the doctrine of fair use in copyrights using tools in microeconomic analysis, as well as introduce participatory rural appraisal and crop accounting techniques to better understand agricultural value chain processes towards meeting food security requirements. This session hopes to contribute discussions towards sustainable economic development in jumpstarting the economy again after this pandemic. By tackling both the economic and methodological dimensions of these studies, this session aims to share and exchange ideas in improving the use of scholarly approaches in purpose-driven economic research.



Transformed Philippine

#### Evaluating Predictability of Vector Autoregressive Models: A Study on the Relationship of Global Oil Prices and the Philippine Macroeconomy

Benette Louie E. Rivera (DLSU School of Economics)

Vector Autoregressive (VAR) models are the workhorses of empirical macroeconomics and policy with their threefold capabilities of prediction, causal analysis, and simulation via impulse response functions (IRFs). However, how can we determine if the simulation of one VAR model is more dependable than the other? There is no standard way of evaluating between models as existing methods are often arbitrary or evaluated by how well it conforms to economic theory. I compared the different VAR models by seeing how well they can predict key macroeconomic indicators on a test set comprising the last N-years on which the models were not estimated on. A VAR model with superior out of sample predictions has better approximation of the underlying data generating process and is more likely to generate reliable IRFs over models with inferior predictions. I then observed the case of the Philippines, an emerging Asian economy, with a quarterly dataset from 1981Q1 to 2019 Q4. I used and compared an unrestricted VAR, structural VAR, and sign restricted SVAR, to estimate the IRFs. For the structure of the VAR models, I used the framework of Taghazideh-Hesary & Yoshino (2015), Roach (2014), and Kilian (2009) which incorporates monetary variables to account for its significance in general pricing.

# The Economic Solutions to Legal Problems: A Peek into the Realm of Fair Use

Daniel S. Hofileña (DLSU School of Economics)

ds a Transformed Philippin

Intellectual property law has traditionally been viewed as a sub-category



author's consent that such work will form part of the public domain after the expiry of the term of protection. In essence, if a work is deemed to be worthy of protection in a manner that it meets certain levels of creativity or if it is beneficial to the people, the State does have an interest in protecting the said work. At a time when we welcome the digital age and embrace the dawn of content-creators, the doctrine of fair use challenges the scope of copyright law. This paper seeks to analyze the economic and legal rationale of the doctrine of fair use. Moreover, the paper will use microeconomic theory in order to propose solutions to the contemporary issues of fair use in copyright. The paper will analyze the necessity of compulsory licensing to counter-act externalities created by parodies or orphan works. It will also shed light on the meaning of "economic impact" and "normal exploitation" requirements of the doctrine of fair use and statutory fair use. Finally, it will aim to provide a modern framework on the incentive-based foundation of Copyright law.

#### Agribusiness Value Chain of Taro (*Colocasia Esculenta*) through Participatory Rural Appraisal, Crop Accounting, and Financial Analysis amidst COVID-19 Crisis in Partido District, Camarines Sur, Philippines

Michael P. Vale (DLSU School of Economics/Partido State University) Emmanuel A. Onsay, Jenivie S. Asia, Menchi E. Del Castillo, Ralyn, P. Valencia

This paper scrutinizes and evaluates the value chain of taro in Partido District, Camarines Sur, the Philippines from the second quarter of 2019 to the fourth quarter of 2020. Taro (Colocasia Esculenta), locally known as Natong or Linsa, is the most widely cultivated species of several plants in the Araceae family. It is thought to be a native to Southern India and Southeast Asia but is widely naturalized (Kolchaar, 2006). It is rich in carbohydrates and also a good replacement for wheat flour. However, it is well-known to farmers for its ability to produce a reasonable yield in poor soil conditions with less or no farm inputs. It is this reason why taro is often grown by resource-limited farmers and



Transformed Philippin

regarded as a good source of food security. To tap its full potentials, this study was conducted to understand and analyze the flow of taro in the Partido District, Camarines Sur, Philippines using Value Chain Analysis. This study employed participatory techniques, crop accounting, and financial analysis. The taro value chain has varied gender roles, according to this study. It also highlighted why, despite having a choice, farmers frequently chose the less profitable transaction path. It also solved the mystery of low productivity in this locale as compared with the national production. The results also showed the cost build-up of taro and the profitability of each player in the chain. Farmers usually end up at a 22% profit-to-cost ratio by selling the harvest to the middleman, while sellers usually end up at a 47% profit-to-cost ratio. The existing entry barriers in each chain were also identified with the researchers' recommendations on how to possibly eliminate or mitigate them. This extensive analysis can be valuable to stakeholders in the taro value chain in the area, as well as government entities and non-governmental organizations (NGOs) in developing initiatives or projects on behalf of the players.

#### SESSION E1. Economic Issues: Exchange Rates, Employment, Labor Protection, and COVID-19

Session sponsor: Ateneo Center for Economic Research and Development / ADMU Department of Economics

# How do Exchange Rates Affect the Big One? An Empirical Analysis of the Effect of Exchange Rates on RCEP Exports using Gravity Model

Jose Adlai M. Tancangco (ADMU Department of Economics/ Bangko Sentral ng Pilipinas)

Wards a Transformed Philippine

Bangko Senastros territoria and conflicting effects of exchange rate on bilateral exports reported by previous literatures necessitate a further study of the 83

relationship between monetary and trade variables. This study contributes to this stream of literature by analyzing monetary variables such as exchange rate volatility, exchange rate misalignment, exchange rate regimes, and real effective exchange rates with bilateral aggregate exports through a sample of 16 nations comprising the Regional Comprehensive Economic Partnership (RCEP) region for the years 1996 to 2017 through an Ordinary Least Squares and Poisson Pseudo-Maximum Likelihood panel fixed effects regression. Results indicate that a country's real effective exchange rate ratio and the exchange rate volatility for countries under a floating exchange rate regime reduce aggregate exports. Following the recommendations of previous studies that call for a sectoral approach, the gravity model was similarly estimated for the textile, clothing, and apparel sector. Results indicate that a country's level of exchange rate misalignment positively affect textile, clothing, and apparel exports; while a country's real effective exchange rate ratio and exchange rate volatility negatively affect textile, clothing, and apparel

#### The Employment of Women with Children During Hard Lockdowns: Evidence from the Philippines

Geoffrey M. Ducanes (ADMU Department of Economics) Vincent Jerald Ramos (Hertie School of Governance)

Using labor force survey (LFS) data collected before and during the COVID-19 pandemic in the Philippines, we show that hard lockdowns have a larger negative impact on the ability to work of women who have children who are minors compared to women who do not have children who are minors. Among Southeast Asian countries, the Philippines is among the hardest-hit by the Covid-19 pandemic, in terms of both the number of infected and its economic toll. A big reason for the relatively large negative economic impact of the pandemic in the country is the hard lockdown imposed at the beginning of the pandemic in the country's three most populous and economically-



important regions, namely Metro Manila, CALABARZON, and Central Luzon. Using logistic regression on pooled LFS data for these three regions, we show that female household heads or spouses with children were about 5 percentage points less likely to have work during the hard lockdown compared to female household heads or spouses without children, even after controlling for important covariates. Moreover, having more children who are minors increases the negative impact of a hard lockdown on their ability to work. A big part of the explanation is the increased domestic responsibility of women during hard lockdowns, given that children are forced to be at home and to do distance learning.

#### Life After the Pandemic: Pursuing Economic Recovery Through Labor Protection

CJ Castillo (ADMU Department of Economics) Marjorie Muyrong (La Trobe University)

The COVID-19 pandemic caused economic crisis and workers and their households are among the severely hit by the crisis. This paper explored the impacts of the pandemic on the economy and on workers. The impact of the pandemic on the economy is simulated using the a CGE model calibrated to a Philippine SAM with three sectors. This paper also discussed channels by which the pandemic affected the economy, and the mechanisms by which the crisis can be addressed by public policy. Various policy scenarios were formulated and their impact on the economy is simulated using the CGE model.



#### Economic Losses from COVID-19 Cases in the Philippines: A Dynamic Model of Health and Economic Policy Trade-offs

Elvira Pederes de Lara-Tuprio, Maria Regina Justina Esguerra Estuar, Joselito Tan Sescon,\* Cymon Kayle Lubangco,\* Rolly Czar Joseph Tindogan Castillo, Timothy Robin Yang Teng, Lenard Paulo Velasco Tamayo, Jay Michael Recto Macalalag, Gerome Magboo Vedeja, (Ateneo de Manila University)

The COVID-19 pandemic has forced governments globally to impose lockdown measures and mobility restrictions to curb the transmission of the virus. However, as economies reopen, governments face a trade-off between ensuring economic recovery and avoiding any losses in the gains from lockdown measures. To assess the trade-off policy space faced by the Philippine government, we develop a mathematical trade-off model on health and economic losses. The trade-off model extends the subnational SEIR model through two differential equations that capture economic losses due to COVID-19 infection and due to the lockdown measures imposed by the Philippine government. To capture the trade-off mechanism, we simulate the cumulative economic losses for 3 months in 8 scenarios across 5 regions in the country, including the National Capital Region (NCR). These scenarios capture the various combinations of retaining or easing lockdown policies in these regions. Per region, we minimize the 3-month cumulative economic losses subject to the constraint that the average healthcare utilization rate (HCUR) for three months fall below 70%. We find that in NCR, a policy trade-off exists where the minimum economic losses below the 70% average HCUR comprise 10.66% of its Gross Regional Domestic Product. Meanwhile, for regions that are non-adjacent to NCR, a policy that hinges on trade-off analysis does not apply. Nevertheless, for all simulated regions, we recommend the improvement of the health system capacity to broaden the PLE EVIL, policy space for the government in easing lockdown measures.



#### SESSION E2.

#### Harnessing Digitalization Opportunities in Agricultural Value Chains

Session sponsor: Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development

#### Unravelling Traceability in the Cacao Supply Chain Management: Insights from Cacao Farmers in Davao Region

Gilbert Gordo (University of Southeastern Philippines) Gilbert M. Gordo,\* Gilbert A. Importante, Rey A. Castillo & Karl P. Campos (University of Southeastern Philippines)

Traceability systems in food supply chains promise transparency, accountability, educating consumers, and efficiency in the chain. This does not come easy considering the challenges attributed to peculiarities in different industries. Cacao industry stands to gain from having a traceability system considering the value of trade worldwide. This research provides a preview of what may be expected if a traceability system is introduced that will involve industry players (cacao farmers, in this case) and the identified key data elements (KDEs). Desk research, KIIs, FGDs, survey, and descriptive analysis were used in this study. Findings show that majority of farmers do not keep KDE records. For those who keep records, most are willing to share important information in their farming activities. Preliminary results appear to be indicative of challenges, despite anticipated opportunities, if a traceability system has to be implemented. A follow-up study is needed to further understand farmers' perceived concerns/risks.



#### Leveraging Existing Gender Relations to Optimize the Gains from Value-Adding Opportunities: The Case of Cacao Value Chain in Davao Citv

Aileen V. Lapitan (University of the Philippines-Los Baños) Mitchiko A. Lopez\* (University of the Philippines-Mindanao) Mia Barbara D. Aranas (DOST-PCAARRD) Ma Rassel P. Faylon (Australian Centre for International Agricultural Research) Nico Jayson C. Anastacio (University of the Philippines-Los Baños) Canesio D. Predo (University of the Philippines-Los Baños)

Gender dimension has yet to be incorporated into the design of value chain development efforts for high-value commodities. Such limited considerations for the gender dimension can lead to interventions that are gender blind or not gender responsive, dampening potentials for growth and inclusive development. In the case of value chains, gender disparities are even more evident in terms of access to digital and marketing opportunities. This paper attempts to present a co-design approach to ensure that the gender dimension would be explicitly embedded in the development of marketing innovations in the selected cacao value chain in Davao City. The co-design framework also aims to provide a mechanism that actively engages value chain actors in the planning and development of interventions. The co-design process will be documented to contribute to the discourse on gender and agricultural commodity value chains, which can be used in facilitating participatory design of marketing innovations.

#### Harnessing Digital Technologies for the Delivery of Market-related Services in the Agricultural Value Chain: The Case of DOST-PCAARRD's Agri-Aqua Business Hub

Meliza F. Abeleda\*, Mell Jhazmin V. Cablayan, Polianne G. Tiamson, Monica Micaela N. Milano, Rebeka A. Paller & Colleene Ivie L. Lanzador LES SYTE ALL (VILLEARD)

METING AND COMPENSION

lalization sa Transformed Philipping 11-12-NOVEMBER 2021

The use of digital technologies can make a significant impact in developing smart agricultural value chain. With the right data, digitalization has the potential to provide better (near real-time) information about market demand and seasonal fluctuation to enable supply chain players to become smarter, more efficient, and to produce safer and more environmentally sustainable products. This brings with it an opportunity for shared progress. This study highlights the key initiatives of the DOST-PCAARRD's Agri-Aqua Business Hub to jumpstart institutional support for an inclusive digital agriculture. The aim is to connect the agricultural value chain players to minimize the risk and maximize the benefits of digital technologies. It presents opportunities to support agribusinesses and farmers through the development of supply chain management systems, digital traceability systems and digital marketing platforms, among others, to enable better access to markets.

#### Rapid Market Appraisal Towards Value Chain Development of Underutilized Fruits (Guava, Soursop, Sugar Apple and Tamarind) in the Philippines

Tessa Lyrene DC. Lantican<sup>\*</sup>. Ian Bernard M. Ines. Rocel Antonnete M. Peñamora, Princess Alma B. Ani & Annette M. Tobias (DOST-PCAARRD)

The study employed a rapid market appraisal (RMA) approach to determine the market potential of selected underutilized fruits mainly guava, soursop, sugar apple and tamarind. While the country has 300 edible fruit and nut species, only 20 are grown commercially. The study showed that there is high market potential for the four underutilized fruits, both fresh and processed products. However, such potential has not yet translated to significant market incentives in terms of better farm prices. As a result, farmers shift to alternative commodities and more viable use of their land. Through the market analysis employed, the various gaps were identified which include among others, low market incentive, lack of knowledge in post-harvest handling and inadequate these syntradirect farm-to-market linkages. These gaps press the need for programs that provide higher priority to these commodities which will also harness digitalization and the need to establish value chain-focused R&D projects.

MEETING

s a Transformed Philippin 11-12-NOVEMBER 2021

#### SESSION E3. Can Digital G2P Payments be the Future of Cash Transfer Programming?

As countries turn to cash transfer programs as a way to quickly provide economic relief to households affected by COVID-19, digital cash transfers, for example via mobile money payments, have emerged as an efficient and safe way to disburse funds at scale. In this session, IPA presents three studies that look into the beneficiaries' experience of government-to-person (G2P) cash transfers during the COVID-19 pandemic. Insights gained from these studies aim to help government ministries address bottlenecks in delivery of service and inform future programming of social protection programs using digital payments.

#### Monitoring Digital Financial Payments of Cash Transfers in the Philippines

Cesi Cruz, Yoonyoung Cho, Julien Labonne, Rebecca Rouse, Kathryn Glynn-Broderick

The Philippines Department of Social Welfare and Development (DSWD) implemented the Social Amelioration Program (SAP), an emergency subsidy and cash transfer program to provide immediate economic relief to low-income households affected by the COVID-19 quarantine measures. To understand the beneficiary experience with the digital government-to-person (G2P) transfers, the Innovations for Poverty Action partnered with the World Bank and the Department of Social Welfare and Development to conduct a survey of SAP beneficiaries that received their cash aid digitally during Tranche 2 of the emergency subsidy program. The research mapped the key challenges in the delivery of these services, specifically on the beneficiaries' wellbeing and financial health, program awareness and experience, and financial service use.



#### COVID-19 G2P Cash-Transfer Payments Case Study: Philippines

Yoonyoung Cho, Yasuhiro Kawasoe, Ruth Rodriguez, Myra Valenzuela

Abstract: This case study documents the lessons learned from the implementation of the SAP 2, specifically focusing on the digital G2P (government to persons) payment delivery. Digital delivery in SAP 2 was a significant departure from SAP 1 which almost entirely relied on manual processing and physical cash delivery except for the beneficiaries of the Pantawid Pamilyang Pilipino Program (4Ps), the country's flagship safety net program. It is also an important milestone where the government introduced large-scale G2P payments through multiple Financial Service Providers (FSPs) beyond the state-owned Land Bank of the Philippines (LBP). The experience is expected to provide great lessons for the country's digital G2P, toward greater financial inclusion and customer choice. The case study also discusses key recommendations and ways forward in digital G2P payment delivery.

#### Digitization of Government to People Cash Transfers: Understanding Beneficiaries' Experiences

Kathryn Glynn-Broderick (Innovations for Poverty Action)

wards a Transformed Philippined

Innovations for Poverty Action partnered with Aspire to Innovate (a2i), the government entity responsible for overseeing digital payments in Bangladesh, to conduct a multi-round monitoring survey to understand beneficiary experience of the digitized payment scheme. The government leveraged a mobile financial service (MFS) platform to transfer payments to beneficiaries' mobile money accounts. The study aimed to identify challenges and recommend possible interventions to improve the overall G2P process and experience. Results show that while beneficiary satisfaction with G2P programming was high, several challenges inhibited greater financial inclusion from digital transfers

#### SESSION E4. Global Value Chains: Beyond Production

A global value chain (GVC) consists of pre-production tasks (product design, R&D, and branding), production tasks, and post-production tasks (marketing, distribution and retailing). It is the firms specializing in pre- and post-production tasks that organize, manage, and operate GVCs. Intangible assets, not tangible ones, determine a firm's ability to lead and benefit from GVCs. GVCs of service industries have performed a significant role in economic development and globalization. For example, offshoring call centers and other services by MNCs has offered a golden opportunity for the Philippines to grow by participating service GVCs. Finally, the emergence of platform based virtual markets lowers the barriers for firms to join GVCs, especially for SMEs. It also changes the relations between platform leaders and participating firms. All of these organizational changes in GVCs are definitely beyond production.

#### Global Value Chains in the Era of Slowbalization

Mahinthan J. Mariasingham, Kristina V. Baris, Ma. Charmaine R. Crisostomo, Janine P. de Vera, Krizia V. Garay, Patricia B. Gonzales, Leila C. Rahnema, Kenneth S. Reyes\*, and Chenying Yang

Using several indicators, this paper documents the shift from "hyperglobalization" – a time when several extraordinary events fueled the rapid rise of GVCs – to "slowbalization" – the period from the 2008 financial crisis onward when integration began to falter. Key economies and sectors are pointed out. Two GVC-related issues that have been gaining in significance are then explored, namely, the turn towards regionalism and the question of domestic linkages. The regional concentration index and the localization and agglomeration indices, proposed and described in this paper, are used to examine these two issues. The primary data source used throughout are the ADB multi-regional input-output (MRIO) tables.



#### Plugging into Global Value Chains of Service Industry: The Experience of the Philippines

Laura Fermo (Bangko Sentral ng Pilipinas)

In the 2000s, the Philippines became a leading destination for business process outsourcing (BPO). BPO operations in the Philippines encompass call centers or voice services, and higher value non-voice BPO functions. As the industry evolved, the term BPO for the industry has been extended into information technology (IT)-BPO to encompass IT-related outsourcing services, and then later on to IT-business process management (BPM) to go beyond outsourcing and more into offshore management services. Technological advances such as cloud computing and automation, however, are now challenging traditional IT-BPM industries, as routine work and codified tasks have been replaced by robotic process automation. In this new environment, the industry appears to have matured, covering more and more complex work including taking responsibility for the outcomes of the services provided. The Philippines now has the opportunity to move up the GVCs of the IT-BPM industry by maintaining its advantages as well as building up on higher-level skills.

# Nexus of Technology Adoption, Global Value Chains, and E-Commerce: The Case of Asia

Jong Woo Kang,\* (Asian Development Bank) Marife Lou Bacate, and Dorothea Ramizo

This paper aims to fill the literature gap on empirical investigation of the nexus between technology adoption, GVCs, and B2C online sales, particularly internet retail sales, m-commerce sales, and domestic internet retail sales. A twostage least squares estimation technique is used to determine the relationship between GVC exports and B2C online sales. Several instruments on technology



Wards a Transformed Philippin

adoption and financial environment readiness are employed to control for the endogeneity of B2C online sales. The results indicate strong empirical evidence of the positive impact of B2C online commerce on GVC exports. The robust and positive impact of secure internet servers on B2C online commerce and the positive impact of internet bandwidth and B2C online commerce on GVC exports indicate empirical evidence of the inter-relationship of technology adoption, B2C online commerce, and GVC, further illustrating that these three phenomena cannot be treated as mutually exclusive trends and forces in Asia.

#### Is Participation in Global Value Chains Driving Income Convergence in Developing Asia? A Task-based Accounting Approach

Elisabetta Gentile\* (Asian Development Bank) and Gaaitzen J. de Vries

This paper studies income convergence by developing Asia from participating in global value chains. We measure jobs and income in the global value chains of final manufactured products. We combine new data on occupational tasks with multi-regional input-output tables to examine fifteen developing Asian economies from 2000 to 2018. The accounting framework conveys diversity in what drives convergence. Various economies, such as Bangladesh, Cambodia, Viet Nam and the PRC, achieved a rapid expansion in the scale of production activities. Several economies, including the PRC, Thailand and Viet Nam, increased productivity in knowledge-intensive activities suggesting full income convergence is underway.



## **Conference Partners**

95



PES SYTE ALTUCAL (VILLOAL) MEETING ALTO CONTENENCE

> Wards a Transformed Philippin 11–12-NOV(EMBER-2021

# **Conference Program Committee**

CHAIR Charlotte Justine Diokno-Sicat

MEMBERS Ruben Carlo O. Asuncion Agham C. Cuevas Jovi C. Dacanay Sarah Lynne S. Daway-Ducanes



# iCLP: Online Learning Hub on Competition Law and Policy

an on-demand learning platform on Competition Law and Policy

www.iclp.phcc.gov.ph



### THE LIFE OF ALL FILIPINOS BY 2040 Matatag, Maginhawa, at Panatag na Buhay

By 2040, we will all be enjoying a stable and comfortable lifestyle, secure in the knowledge that we have enough for our daily needs and unexpected expenses, that we can plan and prepare for our own and our children's future. Our family lives together in a place of our own, and we have the freedom to go where we desire, protected and enabled by a clean, efficient, and fair government. AmBisyon Natin 2040 represents the collective long-term vision and aspirations of the Filipino people for themselves and for the country. It describes the kind of life that people want to live, and how the country will be by 2040.

# **USAPANG**



Watch the Usapang Progreso series at https://www.youtube.com/NEDAhq

4 1 10 10

0."

'n

The Usapang Progreso Online Discussion series aims to educate Filipinos about the government's response to the 'new normal' through detailed chapter presentations on the Updated Philippine Development Plan (PDP) 2017-2022.

The Updated PDP report remains anchored on the government's zero to ten-point socioeconomic agenda and geared towards the achievement of our long-term vision: *Isang matatag, maginhawa, at panatag na buhay para sa lahat.* 

For more information and updates on the economy, follow us on Facebook, Twitter, and Youtube:

or visit the NEDA website: https://neda.gov.ph

### The Philippine Economic Society

#### THE SOCIETY

Founded in 1962, the Philippine Economic Society (PES) is a non-stock, nonprofit association of professional economists in the Philippines. As an association of professional economists, PES seeks to attain the following objectives: 1) to foster and encourage professional and social relations among economists in the Philippines; and 2) to improve the standards of economic research and instruction in the Philippines. Over the years, the Society has served as one of the strongest networks of economists in the academe, government, and business sector. The PES continuously provides a venue for open and free discussion of a wide variety of policy issues through its conferences and symposia.

#### HISTORY

formed Phili NOVEMBER 2021

ALETHE

Philippine Economic Society was founded in August 1962 through the efforts of young social scientists and business graduates who had just received their degrees from various schools in the United States. Among them are Amado Castro, Benito Legarda Jr., Quirico Camus Jr., Jose G. Fernandez Jr., and Armand Fabella, who were graduates of Cambridge, Massachusetts, U.S.A.

This small but influential group of like-minded people, including some foreign scholars, formed an informal association which they called the "Social Economy Association" where they discussed issues affecting the economy and the society. Aside from those already mentioned, Joachim Ahrensdorf, Thomas McHale, Sixto K. Roxas, Fr. Michael McPhelin of the Ateneo, Oscar Lopez, Felix de la Costa, Onofre Corpuz, and Juan Ponce Enrile also took part in some of the social economy discussions.

SETTLE ALLER. Were it not for certain incidents that occurred during this period, such informal discussions would not have led to the organization of the Philippine



Economic Society (PES). The two events that catalyzed the immediate organization of PES are the Columbia Research Project in 1958 and the visit by a group from the International Economic Association.

The PES core group was dominated by notable economists and a few professionals with business training. The Society's first three presidents were Armand Fabella, Amado Castro, and Benito Legarda, Jr.

(For the complete history of PES, read: The Early Years of the Philippine Economic Society by Gerardo Sicat (From the Philippine Economic Journal, Vol XII No. 1, 1974)

#### MEMBERSHIP

Transformed Phil

Membership to PES is individual or institutional. Individual members refer to individuals who have obtained a bachelor's degree or higher degree with a major in economics, or who, in the opinion of the Membership Committee, has shown sufficient familiarity and understanding of the science of economics to warrant admission to the Society. Individual membership is further categorized into Lifetime, Annual Regular and Student memberships.

Institutional members, on the other hand, include any academic, government, or corporate institution doing related work in economics and support the promotion of economic literacy in the country.

For more information on membership guidelines and procedures, please visit the PES website at https://economicsph.org/membership.

#### ECONOMICAND FINANCIAL LITERACY

The PES is mandated by law, under the Economic and Financial Literacy Act (Republic Act No. 10922), to coordinate with the National Economic and Development Authority (NEDA) in leading and encouraging the participation of the private sector and civil society during the Economic and Financial Literacy Week every second week



Throughout the year, the PES organizes fora, symposia, trainings, and workshops aimed at developing an economically and financially literate people who can help in realizing the country's potential for growth. These economic and financial literacy activities of the PES culminate in its annual meeting and conference in November.

#### NETWORKS

The PES is a member of the following associations:

Philippine Social Science Council (PSSC). The PSSC is a private, non-stock, not-for-profit organization of professional social science associations in the country. It aims to advance the Philippine social sciences and, at the same time, serve as a platform for interdisciplinary dialogue and activities.

Federation of ASEAN Economic Associations (FAEA). The FAEA is a union of economic societies and associations in Southeast Asia and currently comprises the respective economic societies of Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. It aims to promote the study of economics and its implications, and foster cooperation in research and intellectual discourse among member-countries.

Western Economic Association International (WEAI). Founded in 1922, the WEAI is a non-profit, educational organization dedicated to encouraging and communicating economic and research analysis. The Association's principal activities include publishing two refereed quarterly journals and staging scholarly conferences that serve as forums for current economic research.



### The PES Board of Trustees 2021

President	Faith Christian Q. Cacnio
	Bangko Sentral ng Pilipinas
Vice President	Charlotte Justine Diokno-Sicat
	University of the Philippines-Diliman/
	Philippine Institute for Development Studies
Secretary	Sarah Lynne S. Daway-Ducanes
	University of the Philippines-Diliman
Treasurer	Kevin C. Chua
	World Bank

#### **Board Members**

Ruben Carlo O. Asuncion (Union Bank of the Philippines) Agham C. Cuevas (University of the Philippines-Los Baños) Jovi C. Dacanay (University of Asia and the Pacific) Lawrence B. Dacuycuy (De La Salle University) Rosemarie G. Edillon (National Economic and Development Authority) Majah-Leah V. Ravago (Ateneo de Manila University) Philip Arnold P. Tuaño (Ateneo de Manila University)

Ex-officio Board Members **Emilio S. Neri, Jr.** (Bank of the Philippine Islands) Immediate Past President **Joseph J. Capuno** (University of the Philippines-Diliman) Editor-in-Chief, The Philippine Review of Economics

#### REGIONAL REPRESENTATIVES



Gladys M. Navarro (PHINMA-University of Pangasinan) Alice Joan G. Ferrer (University of the Philippines-Visayas) Catherine Roween C. Almaden (Northern Bukidnon State College)

