Publications Catalogue 2020
(April 2019 to March 2020)

ERIA
Economic Research Institute for ASEAN and East Asia
The Economic Research Institute for ASEAN and East Asia publishes books, research reports, discussion papers, and policy briefs to share and disseminate its research findings and policy recommendations.

These publications cover a wide range of subject matter on deepening economic integration, narrowing development gaps, and sustainable development – the three pillars under which ERIA conducts research. ERIA is also highly involved in energy-related research. ERIA also co-publishes with international academic and professional printing houses.

This fiscal year 2019, ERIA produced several key reports, which is Non-Tarrif Measure-An update on the side lines of the 51st ASEAN Economic Ministers’ Meeting in Bangkok, and the report on the Feasibility Study on the FTA between Kingdom of Cambodia and Eurasian Economic Union’ was launched by Minister of Commerce, at Ministry of Commerce, Phnom Penh, Cambodia was highly covered by various ASEAN media.

In The 41st ASEAN Ministerial Meeting on Agriculture and Forestry (AMAF) Plus Three Meeting, ERIA presented 3 Research Project Reports: Overview of Agri-food Industries in ASEAN: Basic Information on the Food Value Chain, Food Value Chain in ASEAN: Case Studies Focusing on Local Producers, and The Cold Chain for Agri-food Products in ASEAN.

ERIA also produced 10 books covering topics such as health and ageing society, non-tariff measure, disasters resilient and climate change adaptation. ERIA also published 23 research project reports, 41 discussion papers, and 8 policy briefs.

Please send inquiries to contactus@eria.org or call +6221-5797-4460.

©2020 Economic Research Institute for ASEAN and East Asia

All rights reserved.
Table of Contents

Agriculture and Disaster Management  p. 6
Connectivity  p. 12
Energy and Environment  p. 20
Industry and Manufacturing  p. 33
Innovation and Technology  p. 43
Regulatory Management and Governance  p. 48
Trade and Investment  p. 52
Co-publications  p. 61
Scan the QR Code
to download
ERIA Publications

Books

Discussion
Paper
Agriculture & Disaster Management
Climate change tends to increase the frequency and intensity of weather-related natural disasters, which put many people at risk. The Association of Southeast Asian Nations (ASEAN) is more vulnerable to these risks than any other region due to its dependence on natural resources. Economic and social impacts further increase the vulnerability of food value chains and isolated communities and tend to retard development and increase disparity nationally and regionwide. This book addresses the distributional effects of disasters and climate change on food systems, people, and places, introducing concepts of resilience and methods for analysis and illustrating the roadmaps for adaptation at the local, sectoral, national, and regional levels.

The chapters in the first volume set the stage by focusing on climate change and disasters and by broadly exploring their economic consequences. The detailed assessments and analyses embedded in the chapters cover a wide range of impact categories including agriculture, livestock, fisheries, and urban sectors and seek to identify the immediate actions that need to be taken by ASEAN.
Towards Resilient ASEAN Volume 2: Advancing Disaster Resilience and Climate Change Adaptation: Roadmap and Options for Implementation

Edited by Venkatachalam Anbumozhi, Jeremy Gross and Stefan Wesiak

Climate change tends to increase the frequency and intensity of weather-related natural disasters, which put many people at risk. The Association of Southeast Asian Nations (ASEAN) is more vulnerable to these risks than any other region due to its dependence on natural resources. Economic and social impacts further increase the vulnerability of food value chains and isolated communities and tend to retard development and increase disparity nationally and regionwide. This book addresses the distributional effects of disasters and climate change on food systems, people, and places, introducing concepts of resilience and methods for analysis and illustrating the roadmaps for adaptation at the local, sectoral, national, and regional levels.

The chapters in the second volume discuss response mechanisms to climate change and disaster resilience in terms of sectoral preparedness, information sharing, institution building, and financial resource mobilisation. Based on a review of country experiences, this volume also presents a mid- and long-term roadmap for climate change adaptation and contains guidelines for integrating climate change vulnerability, disaster risk reduction, and international targets into everyday planning and implementation processes.
Vulnerability of Agricultural Production Networks and Global Food Value Chains Due to Natural Disasters

Edited by Meinhard Breilling and Venkatachalam Anbumozhi

The threat of disasters and climate change to the global food supply is growing. In the developing countries of Asia more than one quarter of the total economic impact of disaster is on the agriculture sector. Little is known about the impact of natural disasters on global value chains and regional food production networks. While significant uncertainties remain about risk associated with natural disasters, a scientific consensus is emerging on certain key action areas. To understand the vulnerability of global food value chains and assesses their implications for policymaking, ERIA, in cooperation with the University of Technology Vienna and the Organisation for Economic Co-operation and Development (OECD) organized a workshop bringing together leading academics and policymakers to describe and discuss several resilience measures.

The papers in this volume cover the latest scientific and economic evidence on risk assessment methodologies, innovative supply chain logistics, and robust institutional frameworks for resilience, focusing on European and Asian experiences. The evidence is presented in a way that is widely useful to policy decision maker and makes a distinct contribution towards a greater science-policy interchange.
A key question for the bottom-up development of the food value chain (FVC) is how agri-food producers, mainly characterised by small-scale and unstable management, can improve their profitability by participating and utilising the chain. This study aims to contribute to economic development and poverty reduction in the agri-food sectors in countries of the Association of Southeast Asian Nations (ASEAN) by assessing the policy implications obtained from case studies of selected FVCs in Indonesia, Malaysia, Thailand, and Viet Nam. Each case study provides essential policy prescriptions: increase productivity and product quality; improve resilience against external shocks; enhance vertical collaboration amongst actors in the FVC; expand market channels particularly of small-scale producers; and improve distribution and production systems to fully utilise resources.

The agri-food market in Southeast Asia has been activated by the area’s steady economic and population growth, and by its deepening regional and international economic integration. This study aims to foster a deeper understanding of the food value chain (FVC) in eight ASEAN Member States – Cambodia, Indonesia, the Lao People’s Democratic Republic, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam. It seeks to do this by providing basic information mainly from two points of view: the vertical relationship amongst industries, and the competitiveness of each agri-food item produced by the ASEAN countries. The report reviews each of the eight countries, with each review composed of the following four parts: social and economic conditions, linkages amongst the FVC-related industries, the supply & demand balance of agri-food products, and the competitiveness of each product in the ASEAN region.
The Cold Chain for Agri-food Products in ASEAN

ERIA Research Project Report 2018 no. 11

Edited by Eiichi Kusano

The cold chain system is indispensable for Southeast Asian countries with their mostly tropical climates. This report aims to contribute to spreading the cold chain with modern systems by revealing the actual condition of the cold chain in selected ASEAN countries – Indonesia, the Lao People’s Democratic Republic, Myanmar, Thailand, and Viet Nam. We focus on three aspects to describe the actual condition of the cold chain: the demand for the cold chain; the activities of the main players in the cold chain; and government policies. The discussions in each chapter provide further insights that could help to improve the cold chain, emphasising the importance of hard assets, soft assets, and other issues such as the integrated management of the chain.
Connectivity
Asia-Europe Economic Connectivity: Global Value Chain Structures in ASEM Region

Edited by Rajesh Aggarwal, Qasim Chaudry, Anita Prakash, Mohammad Saeed, Eleonora Salluzzi

The Asia–Europe Meeting (ASEM) represents 62% of the global population, 57% of global gross domestic product, and 65% of global trade. Intraregional trade in goods and services, spurred by trade liberalisation and foreign direct investment, have proved to be a powerful engine for growth and participation in global value chains (GVCs). In the ASEM region GVCs have clustered around regional production hubs which are also top destinations for foreign direct investment (FDI). The key policy determinants of GVC trade in the ASEM region are deeper regional integration, trade liberalisation, improvements in the conduciveness of the business environment, and openness to FDI. Trade liberalisation has enabled Europe and Asia to participate in GVCs, significantly reducing tariff barriers to the trade of intermediate and final goods. Liberalisation of trade in services is a vital input for GVC production, adding value at each stage of the production process. The ASEM Economic Ministers’ Meeting (EMM) can recognise the different business realities in Asia and Europe and rethink a complementary policy agenda for an open, transparent, and predictable trade and investment regime to leverage inclusive engagement in GVCs.

The ASEM EMM has the mandate and opportunity to promote the institutionalisation of public–private dialogue mechanisms to gather the views of different stakeholders that are affected or likely to be affected by increased economic and institutional connectivity between Europe and Asia. Besides a coordinated policy response on the issues listed above, engagement of different economic actors – including traders, logistics services providers, trade support institutions, investors, and border agencies – in the policy dialogue will ensure that the ASEM EMM follows the whole-of-supply-chain approach. This approach will ensure the expansion, inclusiveness, and sustainability of the GVC structures in the ASEM region.
Improving Digital Connectivity For E-commerce: A Policy Framework and Empirical Note for ASEAN

ERIA Discussion Paper no. 327

by Lurong Chen

Global cross-border e-commerce has become increasingly important in the international economy. The next Asian miracle of growth could be born out of the region’s digital transformation. Digital connectivity is the cornerstone that will make change feasible and smoothen the transformation. Digital connectivity consists of not only physical connectivity that facilitates the movement of raw materials, intermediate goods, and goods, but also cyber connectivity to support free flows of data, information, and services.
This paper proposes a policy framework of promoting digital connectivity to support the development of e-commerce. Policy efforts to improve data connectivity, logistics, and online payment can help the Association of Southeast Asian Nations narrow the development gaps in information and communications technology infrastructure, both cross-border and within countries. Improving institutional connectivity and service development play a significant role. Digital connectivity is essential for the digital-friendly ecosystem that will facilitate digital transformation, which will affect not only e-commerce but also countries’ overall economic performance.

Sustainable Marine Development

ERIA Policy Brief 2019 no. 4

*by Fauziah Zen, Heru Santoso, Maxensius Sambodo, Michikazu Kojima*

Indonesia has the largest economic exclusive zone in Asia, and Japan the second largest. Marine resources are their main development assets. Indonesia and Japan rely on marine logistics and fisheries, of which infrastructure and connectivity are important aspects. Both countries are prone to disasters, including tsunamis, and should improve their disaster management. And both countries should improve their waste management to eliminate marine debris and pollution.

The Importance of Industrialisation and Trade Facilitation for Employment-Led Growth in the Digital Economy

ERIA Policy Brief 2019 no. 2

*by Anita Prakash*

The digital economy will affect the patterns and geographical locations of industries, employment, trade and economic growth. Structural transformation and employment generation policies in developing Asia and Africa must understand, prepare for, and respond to these changes. Investments
in industrialisation and manufacturing will continue to drive employment-led growth in Asia and Africa. Countries in different stages of development can address the opportunities and disruptions arising in the employment sector through development strategies that focus on technology-aided industrialisation, trade and investment facilitation, physical and institutional connectivity, and investment in human capital. Developing countries can support their efforts by creating an appropriate business, training, and trade facilitation ecology.

The Role of Industrialisation and ICT in Africa’s Growth and Integration into Global Value Chains

ERIA Policy Brief 2019 no. 1

by Anita Prakash

Industrialisation is important for Africa’s growth and sustainable development. Deepening the manufacturing sector and greater integration in global value chains will build more resilient economies. Industrialisation will harness Africa’s huge resources – in agriculture, mining, and maritime resources, as well as a youthful labour force. Suitable and focused policies can harness these resources. African countries can leverage digitalisation and information and communication technologies to further their goal of industrialisation. Industrial development will be the key to sustained and inclusive employment-led development.
Human Capital Development
Ageing and Health in The Philippines

Edited by Grace T. Cruz, Christian Joy P. Cruz, Yasuhiko Saito

The Longitudinal Study of Ageing and Health in the Philippines (LSAHP) is the first multi-actor longitudinal study on ageing in the Philippines with information coming from older Filipinos, their caregivers, and adult children. The 2018 baseline data provides comprehensive information on the health, economic status, and overall well-being of a nationally representative sample of older Filipinos aged 60 and older. These data will be a valuable resource for the crafting of evidence-based policies and programmes for this sector of the population.

LSAHP is designed to (1) investigate the health status and well-being, as well as their correlates, of Filipinos aged 60 years and over; and (2) assess the determinants of health status and transitions in health status and overall well-being. The study is part of a comparative study of the Philippines and Viet Nam. LSAHP is funded by the Economic Research Institute for ASEAN and East Asia and implemented by the Demographic Research and Development Foundation, Inc.
Demand and Supply of Long Term Care for Older Persons in Asia

Edited by Reiko Hayashi

In East and Southeast Asia, the numbers and proportions of older persons are increasing. The quickly increasing elderly population will create greater demand for long-term care. This report provides care demand estimates for the coming decades based on the care need statistics of several countries, as well as the increasing numbers of elderly people living alone, which significantly affects care demand. As for the supply of long-term care, this publication reports on the current status of the care workforce, which varies from country to country depending on the stage of development of the long-term care system. The situation of long-term care facilities is also briefly analysed.

Data comparison amongst countries highlights the existing challenges. Rapid increases in care need should be addressed through a system providing long-term care and policy dialogues should be encouraged.

Developing Human Capital by Supporting Parental Engagement in Indonesia

by Isabelle Nguyen, Rashesh Shrestha

Indonesia’s stagnating economic growth rate is largely attributed to human capital constraints. This is partly because Indonesia’s education system leaves students ill-prepared to enter the workforce. Studies from developing and developed countries reveal that encouraging parental engagement in the child’s early years and during schooling can improve student outcomes. The Government of Indonesia should implement policies that encourage parental engagement through a nurse home visit programme, frequent parent–teacher conferences, and democratically elected school committees. These initiatives build on programmes that are already implemented on a trial basis or small scale in some parts of Indonesia. The central government should allocate resources to roll out these policies on a wider scale.
Energy & Environment
Building the Banking Sector’s Capacity for Green Infrastructure Investments for a Low-Carbon Economy

by Takashi Hongo, Venkatachalam Anbumozhi

The construction of green infrastructure, using advanced technology and retiring inefficient technology, is essential for the low-carbon transition. Various green infrastructure programs are being implemented, and banks play an important role in facilitating these programs. Many lessons have been learned in improving finance for green infrastructure: (i) measurement, reporting, and verification is a useful tool for identifying green infrastructure investment; but just reduction is not enough for Green Infrastructure and three requirements – carbon dioxide emission reductions, improving energy access, and contributions to sustainable economic growth – connected with the Sustainable Development Goals are necessary; (ii) banks can contribute to realising a positive cycle of cost reduction and diffusion of advanced technology for reducing costs by scaling up markets; and (iii) carbon pricing is essential for removing carbon externalities and making green infrastructure commercially viable.

Banks are recommended to have long-term strategies, improve their capacity for scenario analysis, have more dialogue with industry, and develop innovative finance such as carbon markets. Governments are recommended to adopt carbon pricing to encourage finance for green infrastructure.
Cost Effectiveness of the Energy Efficiency and Conservation Policy in the Association of Southeast Asian Nations

ERIA Research Project Report 2018 no. 14

Edited by Mitsuru Motokura, Yohei Kato, Ichiro Kutani

This study aims to help promote energy efficiency and conservation (EE&C) investment in the Association of Southeast Asian Nations (ASEAN) region through two analyses, one of a possible financing method for EE&C investment, and one of its costs and benefits. The study concludes by presenting the positive effects of EE&C investment, the very high internal rate of return on investment, the secondary effect of avoiding investment in future power generation capacity, and the reduction of CO2 emission. The study recommends policy actions for realising the full benefits of EE&C in the region. They include improving the understanding of the benefits of EE&C in vestment and establishing a special agency to strengthen policy implementation. The study also proposes recommendations to debottleneck EE&C financing, which could help small and medium-sized enterprises in particular.

Energy Demand and Supply of Cambodia 2010-2018

ERIA Research Project Report 2018 no. 20

Prepared by Cambodia Ministry of Mines and Energy

This paper on the Energy Demand and Supply for Cambodia in 2010–2018 was prepared as an update of the Cambodia Energy Statistics 2018 publication. The paper was produced by the Ministry of Mines and Energy, Cambodia namely the Energy Development Department of the General Department of Energy and the Department of Petroleum Technology, Operation Supporting and Energy Security of the General Department of Petroleum through the energy internship programme held at the Economic Research Institute of ASEAN and East Asia (ERIA) office in Jakarta, Indonesia from 22 July to 16 August 2019.
Energy Demand and Supply of the Lao People’s Democratic Republic 2010-2018

ERIA Research Project Report 2018 no. 21

Prepared by Lao PDR Ministry of Energy and Mines, ERIA

This report on the Energy Demand and Supply of the Lao PDR in 2010–2018 was prepared as an update of the Lao PDR Energy Statistics 2019 publication that covered the 2010–2018 period. The paper was produced by the staff of the Department of Energy Policy and Planning and the Department of Planning and Cooperation, the Ministry of Energy and Mines, Lao PDR, through the energy internship programme held at the Economic Research Institute of ASEAN and East Asia (ERIA) office in Jakarta, Indonesia from 22 July to 16 August 2019.

Energy Demand and Supply of the Republic of the Union of Myanmar 2010-2017

ERIA Research Project Report 2018 no 22

Prepared by Myanmar Ministry of Electricity and Energy, ERIA

This report on the Energy Demand and Supply for Myanmar in 2010–2017 was prepared as an update of the Myanmar Energy Statistics 2017 publication, which covers the 2000–2016 period. The paper was produced by the staff of the Oil and Gas Planning Department of the Ministry of Electricity and Energy, Myanmar, through the energy internship programme held at the Economic Research Institute of ASEAN and East Asia (ERIA) office in Jakarta, Indonesia from 22 July to 16 August 2019.
Energy Pricing in India: A Study on Taxes and Subsidies

ERIA Research Project Report 2018 no 15

Edited by Han Phoumin, Shigeru Kimura and Renjith G

The Government of India has historically determined the prices of energy products and services in view of socio-economic considerations, such as providing universal energy access at affordable prices, meeting energy demand efficiently, ensuring greater sustainability, and supporting economic growth. Energy subsidies often act as policy tools to meet these objectives but do not always deliver. They therefore require scrutiny as otherwise they could have distortionary impacts on the energy industry and possibly on the economy. Distorted markets provide incorrect market signals, affect the level of competition, and lead to inefficient allocation of resources. This study brings out the efforts of the Government of India to progressively move away from energy subsidies and to rationalise energy pricing with a view to reducing the subsidies and their negative implications.

Evaluation of CO₂ Emissions Reduction Through Mobility Electrification

ERIA Discussion Paper no 297

by Makoto Toba, Atul Kumar, Nuwong Chollacoop, Soranan Nopponprasith, Andhika Widyaparaga, Ruby B DE Guzman

The introduction of electrified vehicles (xEVs) is expanding to reduce energy consumption and greenhouse gas (GHG) emissions in the transport sector. This study examined scenarios for India, Indonesia and Thailand; and simulated energy consumption reduction and GHG emissions quantitatively to elucidate effective methods for introducing electric vehicles that contribute to reducing GHG emissions. In countries with high GHG emissions from power generation, such as India and Indonesia, the introduction of xEVs alone cannot reduce emissions levels. A combination of alternative fuel promotion and the introduction of xEVs is effective for reducing energy consumption and GHG emissions in the transport sector.
Lao PDR Energy Outlook 2020

ERIA Research Project Report 2018 no. 19

Prepared by Lao Ministry of Energy and Mines and ERIA

The Economic Research Institute for ASEAN and East Asia (ERIA) has been assisting the Ministry of Energy and Mines (MEM), Lao PDR to produce Lao PDR Energy Statistics since 2017 with the analysis of the historical energy demand and supply situation. In response to MEM’s request to ERIA to provide an analysis of the future energy demand supply situation of Lao PDR, ERIA dispatched a technical team to support the Ministry in the development of the Lao PDR Energy Outlook 2019. The Energy Outlook adopts an econometric approach to estimating future energy demand in Lao PDR. The key results show that Total Final Energy Consumption (TFEC) in the Business-as-Usual (BAU) scenario increased at an average 4.7% per year from 2015 to 2040 under an annual GDP growth rate assumption of 6.2%. The industry sector grew fastest (8.3%), followed by the transport sector (6%), and others (1.3%). The forecast is for electricity to grow fastest at 8.1%, followed by coal at 7.7%, and oil at 6.1%. Electricity generation is expected to increase to 70 TWh by 2040 from 17 TWh in 2015, or at an average growth rate of 5.8% per year. Around 53% of the electricity generated will be exported to Thailand. The Total Primary Energy Supply (TPES) is forecast to reach 13 Mtoe in 2040, an increase of 4.4% on average per year from 2015. As demand for energy grows, carbon dioxide (CO2) emission in the BAU scenario is forecast to increase to four times the 2015 level by 2040 due to an increase in coal consumption for industry and power generation. Thus, energy policy measures such as those aimed at increasing energy efficiency in all sectors and the policy of increasing the share of renewable energy in the energy mix will be very important for Lao PDR to enable it to cope with rising energy demand and allowing it to reduce CO2 emission.
LCOE Analysis for Grid-Connected PV Systems of Utility Scale Across Selected ASEAN Countries

ERIA Discussion Paper no. 305

by Md Abdullah Al Matin, Shutaro Takeda, Yugo Tanaka, Shigeki Sakurai, Tetsuo Tezuka

Countries of the Association of Southeast Asian Nations (ASEAN) have been dependent on conventional energy resources because of their abundance, which explains the slow progress of renewable energy. The ASEAN Centre for Energy predicts that a 17% share of renewable energy can be achieved by 2025. Geothermal, hydro, and bioenergy are restricted by regional availability. With the declining cost of solar photovoltaic (PV) equipment, it is important to predict the future levelised cost of electricity (LCOE) for solar PV systems in this region. Hence, unlike earlier research articles, this paper focuses on evaluating the LCOE for PV technology (equal to 1 megawatt) across selected three ASEAN Member States --Indonesia, Malaysia, and Thailand-- until 2040, while considering the capital cost of subsystem components within a typical PV system – PV module, inverter, mounting structure, and balance of system distinctly – to generate unique learning curves for individual countries. Sensitivity analysis was conducted to identify the impact on LCOE values and attainment of grid parity.

---------------------------------------------------------------

LNG Market Development in Asia

ERIA Research Project Report 2018 no. 04

Edited by Yoshikazu Kobayashi, Yanfei Li

This report highlights the following key findings about the dynamics of the liquefied natural gas (LNG) market in this region. First, transparent and active spot markets are essential for identifying a price that reflects the fundamentals of supply and demand. Second, China and India have become a source of substantial new LNG demand. Because both are large, even small shifts in demand patterns contribute to uncertainty and volatility in LNG prices. Third, in most Asian countries, companies and governments have little direct experience in the operation and con-
struction of LNG re-gasification facilities and connection to electric power plants and distribution networks. Relevant laws and regulations have not been fully developed, leading to delayed decision-making and project implementation. Fourth, as LNG bunkering advances globally, there is the potential that bunker fuel markets will become fragmented. For LNG bunkering to succeed, intergovernmental coordination is necessary. Fifth, traditional patterns of risk allocation in financing new LNG export capacity are not adequate to meet recent market trends.

Supportive government policies and new risk-sharing strategies are needed to for more projects to reach Final Investment Decisions. Last but not least, the Panama Canal Authority (ACP) recognises its critical role as a transit point and a potential bottleneck in the movement of United States LNG exports to Asia. The ACP has eliminated unfair practices and physical limitations in their arrangements for LNG cargo passage.

Policies and Financing Strategies for Low-Carbon Energy Transition: Overcoming Barriers to Private Financial Institutions

ERIA Discussion Paper no. 324

by Venkatachalam Anbumozhi, Peter Wolff, Xianbin Yao

Placing Asian economies on a low-carbon path requires an unprecedented shift in private investment and new financing models. A growing community of investors is seeking new climate- and environment-friendly opportunities, which financial institutions can use to diversify their funding base and reduce their funding costs. But this requires commitment from all actors across the financing chain. It is simply not enough to allocate money to low-carbon causes – achieving the necessary scale requires a fundamental redesign of risk mitigants and investment enhancers. Banks should join forces with regulators and stakeholders to develop common standards and implement capacity as soon as possible. This paper identifies the current trends, analyses the constrains, and makes recommendations aimed at banks, banking regulators, and institutional investors in emerging economies of the Association of Southeast Asian Nations (ASEAN) and East Asia, to help them improve the level of low-carbon financing, both in individual institutions and across the wider industry.
**Public Acceptance of Nuclear Power Plants in Hosting Communities: A Multilevel System Analysis**

*ERIA Research Project Report 2018 no. 18*

*Edited by Tomoko Murakami and Venkatachalam Anbumozhi*

Problems with public acceptance have resulted in significant setbacks for nuclear power plant projects in ASEAN and East Asian. Trust within the communities that host the nuclear facilities is one of the key factors expected to enhance public acceptance of nuclear energy. However, in countries with a multilevel governance system, the concept of public acceptance needs to be specified and reinforced further through open communications. By employing both a multinomial opinion leader path and direct communications models as evolved in Japan, Finland, France, the United States, and the United Kingdom, this report shows that public acceptance can be positively influenced by energy authorities and local governments.

**Shaping Energy Policies to Achieve the Sustainable Development Goals in Myanmar and the Greater Mekong Subregion**

*ERIA Research Project Report 2018 no.10*

*Edited by Hisashi Yoshikawa, Venkatachalam Anbumozhi*

Increases in access to electricity in the poorest countries have begun to accelerate, energy efficiency continues to improve, and renewable energy is making gains in the electricity sector. Despite such progress, some 100 million people in the Mekong Sub-region remain without electricity while access to clean cooking fuels and technologies needs dedicated attention. Moreover, if Sustainable Development Goals 7, 13, and related Goals are to be met, much higher levels of ambition and effective energy policies are required in countries like Myanmar. This report analyses the barriers to overcoming the rural electrification challenges in the Greater Mekong sub-region in general and in Myanmar in particular, from the perspective of the Sustainable Development Goals, and presents innovative solutions.
The three themes the analysis in this report has focused on are electricity connectivity, barrier analysis of mini-grids, and energy for sustainable development. It was also found that energy issues are tied to many other important national security issues such as conflict resolution, peace building, and national unity. The report recommends an integrated energy policy and a new planning body to implement the required reforms.

Social Benefit of Clean Coal Technology

ERIA Research Project Report 2018 no.13

Edited by Kei Shimogori, Ichiro Kutani

This study analyses the cost and benefit of more stringent air emission standards for coal-fired power plants. The cost is assumed to be the investment amount needed for a typical air-quality control system (AQCS) to comply with strengthened air emission standards. The benefit is the reduced health impact in monetary terms thanks to better air quality. In the Association of Southeast Asian Nations (ASEAN) countries surveyed for this study, the potential benefit gained by tightening air pollutant emission standards often exceeds the cost required to install AQCS, thus may be considered economically rational.

For ASEAN countries, coal-fired power generation will continue to be an important power source because local resources can be utilised or fuel costs are low. We suggest ASEAN policymakers tighten air emission standards for coal-fired power generation at the right time and on the right scale, and to make coal use sustainable.
**Study on Biomass Supply Chain for Power Generation in Southern Part of Thailand**

*ERIA Research Project Report 2018 no. 09*

*Edited by Han Phoumin, Wongkot Wongsapai, Yaowateera Achawangku, Shigeru Kimura*

This study was inspired by the leadership of His Excellency Dr Siri Jirapongphan, Thailand’s former Minister of Energy, as Thailand wants to see a greater role for renewable energy in the power generation mix to promote use of inclusive energy and sustainable development. This study of the biomass supply chain for power generation in the southern part of Thailand provides policy implications to promote biomass-fired power generation with a view to meeting increasing demand in the southern provinces. The study starts with scoping the supply chain of biomass and associated incoming generating opportunities for local people to engage in the activities, thereby increasing the earnings and well-being of people in the southern province. The study also analyses the levelised cost of energy to check the competitiveness of biomass power generation. The results suggest that expansion of biomass power generation in the southern provinces, supported by the government’s policy on feed-in tariff, makes investment in biomass power generation very attractive, and its expansion promotes jobs and improves the well-being of the people.

**Study on the Biomass and Coal Co-Combustion in the ASEAN Region**

*ERIA Research Project Report 2018 no. 17*

*Edited by Otaka Yasuo, Yamada Fumiko, Han Phoumin*

Co-combustion of agricultural waste and coal could make a very significant contribution to reducing CO2 emissions compared with simple coal combustion for power generation. Since the countries of ASEAN are generally rich in biomass resources, the co-combustion of biomass and coal could play an important role in combating climate change. For this study, we compared two cases: case 1 focuses on Indonesia as a biomass-rich and coal-producing country; and case 2 focuses on the Philippines as a biomass-rich and coal-importing country. The study also calculat-
ed the Levelised Cost of Electricity (LCOE) to check whether the electricity cost produced from the co-combustion of biomass and coal are economically feasible, compared with the electricity cost produced from coal-fired power generation only. The results show that biomass and coal co-combustion is not feasible under the current tariff situation; it will require putting into place the right incentives such as a feed-in tariff or other kinds of incentives. In the next study, therefore, further consideration shall be given to identifying tailor-made country-specific models with optimal capacity and technologies as well as appropriate incentives.

---

**Study on Electric Vehicle Penetrations’ Influence on 3Es in ASEAN**

*ERIA Research Project Report 2018 no. 06*

*Edited by Shigeru Suehiro, Alloysius Joko Purwanto*

The study analyses the effects of electric vehicle deployment on the economy, energy, and the environment (3Es) in Indonesia, Malaysia, Thailand, and Viet Nam. In the scenario that assumes a continuation of historical trends, those countries may face challenges in the 3Es especially in terms of increasing CO2 emissions and decreasing energy self-sufficiency. The study reaches four main conclusions. First, the effect of electric battery electric vehicle (BEV) penetration in terms of reducing CO2 emissions is limited unless the power generation sector is decarbonised. Second, BEV penetration requires investment funds and subsidies several times higher than that for hybrid electric vehicles, and large investments in low-carbon power supply are required. Third, charging infrastructure is a key requirement, but not the only one, for plug-in electric vehicles. Finally, introducing electric vehicles into ASEAN countries would fulfil various policy purposes, but their massive deployment might have negative economic side effects. Electric vehicle penetration, therefore, requires realistic and affordable policies.
Unlocking the Potential of Private Financing for Low-carbon Energy Transition: Ideas and Solutions from ASEAN Markets

by Venkatachalam Anbumozhi, Matthew LoCastro, Dharish David, Dian Lutfiana, Tsani Fauziah Rakhmah

Under the Paris Agreement in 2015, the opportunities for the ASEAN Member States (AMS) to maximise low-carbon energy sources to achieve the Nationally Determined Contributions (NDC) target in reducing carbon emission levels have expanded. In order to move towards a low-carbon energy transition, private sector actors must work together with governments to implement strategies to invest in the low-carbon economy. However, major barriers such as insufficient enabling policy environment, availability of technologies and access to funding somehow impede the implementation. It is believed that unlocking the potentials of private sector would accelerate the transition of low-carbon energy. This paper, based on a market survey, which aimed to identify barriers and risks that private sectors face in accelerating the low-carbon investments. The survey respondents are divided into two categories, Lenders and Borrowers. Analysing 110 total respondents helped to identify the perceived and actual barriers as well as risks underlying to the access to financing and generated potential solution for policymakers to overcome these barriers.

The survey results indicate that the main obstacles faced by private sectors are incoherent policies that created a high-risk environment for investment, a lack of access to de-risking mechanisms, and insufficient capacity to communicate the opportunities amongst financial institutions and project developers. To bare these risks, this paper suggests four interdependent solutions – establishment of a low-carbon transition fund, government warranty programme, broadening of de-risking mechanisms, and capacity building programme to accelerate the low-carbon energy transition across ASEAN.
Industry and Manufacturing
Determinants of Product Sophistication in Viet Nam: Findings from the Firm – Multi-Product Level Microdata Approach

ERIA Discussion Paper no. 314

by Thi Ha Tran, Quang Hoan Truong, Van Chung Dong

Through capitalising data from the Viet Nam Enterprise Survey and applying the methods proposed by Hausmann, Hwang, and Rodrik (2007) and Eck and Huber (2016), this study investigates the determinants of product sophistication at the firm–multi-product level in Viet Nam – a developing economy – over 2010–2016. Regression results show that horizontal foreign direct investment (FDI) spillovers have a negative effect on the firm–multi-product sophistication of Viet Nam. On the vertical side, we find opposite influences on product sophistication, with a positive contribution of forward spillovers and a negative contribution of backward linkages. Estimated outcomes also indicate that the average amount of labour and revenue of firms has advantageous impacts on the product sophistication.

This paper suggests that strengthening forward FDI linkages by facilitating the supply of intermediate inputs from multinational firms, coupled with improving governance capability, could help Viet Nam’s domestic firms to produce more sophisticated goods.

Does Home (Output) Import Tariff Reduction Increase Home Exports? Evidence from Korean Manufacturing Plant–Product Data

ERIA Discussion Paper no. 315

by Chin Hee Hahn, Ju Hyun Pyun

This study examines the effects of domestic output import tariff reduction on domestic plant export dynamics and clarifies the underlying mechanism, using rich plant–product data from the Republic of Korea for 1991–2002. We find that home import liberalisation increases domestic plants’ export market participation (extensive margins), particularly for industry where markup growth is more negative during tariff reductions. However, we do not find evidence that cutting
Does Participation in Global Value Chains Increase Productivity? An Analysis of Trade in Value Added Data

ERIA Discussion Paper no. 301

by Shujiro Urata, Youngmin Baek

This paper examines the impact of global value chain (GVC) participation on productivity by considering both backward and forward participation. Conducting a panel estimation covering 47 countries and 13 manufacturing sectors for 1995–2011, we found that both backward and forward GVC participation contributes to an increase in the productivity of the countries involved in GVCs. In particular, benefits in the form of improved productivity are larger in cases where developing countries procure intermediate goods from developed countries, or backward participation.

Our analysis indicates the importance of GVC participation for improving productivity. We argue that, in order for a country to increase GVC participation, an open, free, and transparent trade and foreign direct investment environment (which is provided by regional trade agreements); well-developed soft infrastructure (e.g. educational and legal systems); hard infrastructure (e.g. transportation and communication systems); and the availability of capable human resources are important.
Domestic Value Added, Exports, and Employment: An Input–Output Analysis of Indonesian Manufacturing

ERIA Discussion Paper no. 292

by Premachandra Athukorala and Arianto A. Patunru

The paper is motivated by the current emphasis on the share of domestic value added in exports (SVEX) as a policy criterion for export development strategy in developing countries. Our hypothesis is that the policy emphasis on SVEX, which harks back to the import substitution era, is inconsistent with the objectives of achieving economic growth with employment generation in this era of economic globalisation. We test this hypothesis by examining the relationship of the SVEX with both export-induced employment and the total domestic value added, or the contribution of exports to gross domestic product, by applying the standard input–output methodology to data from Indonesian manufacturing. Our findings do not support the view, widely held in policy circles, that industries characterised by a higher SVEX have the potential to make a greater contribution to employment generation and total domestic value added. The policy inference is that, in this era of economic globalisation, policy makers should focus on the export potential of industries in designing export development policy, rather than on the SVEX.

Effectiveness of Industrial Policy on Firms’ Productivity: Evidence from Thai Manufacturing

ERIA Discussion Paper no. 316

by Juthatip Jongwanich, Archanun Kohpaiboon

This paper examines the role of industrial policy on firms’ productivity, using 3 years of panel data on Thai manufacturing as a case study. A range of industrial policy tools is defined — tariff measures, subsidies, and investment incentives through the Board of Investment (BOI) — which are the main tools used in Thailand. The effect on firm productivity of partial trade liberalisation undertaken through free trade agreements (FTAs) signed between Thailand and its trading partners is also examined. The key finding is that trade openness and research and development
(R&D) are more crucial in fostering firms’ productivity than industrial policies. This is especially true for the narrow definition of industrial policy focusing on trade policy protection, measured by the effective rate of protection. In addition, the FTA-led trade liberalisation effect fails to add substantial competitive pressure and make firms improve productivity. Our results show that sectors benefiting from subsidies show noticeably lower productivity than others. Our study found weak support for investment promotion policy through the BOI, even when the domestic competitive environment is considered in our analysis.

Enhancing Inter-Firm Linkages through Clusters and Digitalisation for Productivity Growth

ERIA Discussion Paper no. 309

by Vo Tri Thanh

This paper examines the policies for industrial cluster development in Viet Nam. The first export processing zone was established in 1991. Since 1994, Viet Nam has focused more on developing domestic productive capacity and thus various types of industrial estates were established. The key actors in industrial cluster policy are the government, Prime Minister, ministries, provincial people’s committees, and management boards of industrial and economic zones. The choice of industrial estate is often determined by factors such as geographic location, land, labour, infrastructure, industry, business environment, and incentives. Viet Nam has provided various incentives to industrial estates of various types, but the scope and extent of preferential policy support for firms in general and those operating in industrial and economic zones are rather modest. The industrial estates have contributed significantly to attracting foreign direct investment, to exports, to productivity improvement, etc. Looking forward, Viet Nam needs further efforts on industrial cluster development, including development of statistics, analysis of cluster policy impacts, and provision of FTA-consistent incentives.
Exports and Innovation: Evidence from Antidumping Duties Against Japanese Firms

ERIA Discussion Paper no. 317

by Nobuaki Yamashita, Isamu Yamauchi

By conducting a difference-in-difference analysis, we examine how the targeted exporters adjust their innovative activities in the face of the negative export shock inflicted by the policy experiments of the antidumping cases in the United States market during 1991–2008. We construct the novel micro-dataset, combining the targeted firms by antidumping duties and firm-level patenting as a measure of innovative activities. We found that the antidumping-targeted firms respond to the negative export shock by allocating more innovation activities to expand international patents at the cost of domestic innovation. This resource allocation of innovative activities is more prominent when the initial export intensity is high.

Future Visions and Policy Recommendations for ASEAN Member States (AMSs) based on Estimation of Industrial Property Applications

ERIA Research Project Report 2018 no. 23

Edited by Yoshitoshi Tanaka, Mika Goto, Yuji Tou, Suzuka Yoshida

The research project ‘Future Visions and Policy Recommendations for ASEAN Member States (AMS) based on Estimation of Industrial Property Applications’, was conducted by the Yoshitoshi Tanaka Project Group of the Tokyo Institute of Technology over a 2-year period from Sept 2017 to Aug 2019 under the supervision of ERIA. This research forecasts the number of industrial property applications in each AMS using multiple-regression analysis based on historical data of the World Intellectual Property Organization (WIPO) database and the World Bank database as independent variables. It was found that the number of industrial property applications by residents in most AMS has been lower and is forecast to remain lower than the number of applications by non-residents. Indeed, in every AMS patent applications by residents are quite low, which will become a big obstacle to their future industrial development. In the hope of making
Input Allocation Behaviour on Tariff Changes: The Case of Indonesia’s Manufacturing Industries

by Samuel Nursamsu, Dionisius A. Narjoko, Titik Anas

Can firms reallocate their imported inputs to domestic sources when faced with import tariffs? To answer this question, we analyse the input allocation behaviour of Indonesian medium and large-sized manufacturing firms in responding to the movement of import tariffs from 2000 to 2013 by utilising plant-level input data of Indonesian manufacturing. We find that an increase in tariffs only creates a weak substitution effect. Our findings indicate that firms reallocate their inputs towards domestic sources, although this is accompanied by a decrease in the firms’ value added. This implies that domestic inputs are worse substitutes for imported inputs and that firms’ capacity to switch over to domestic products is limited, suggesting that firms will immediately switch back to importing when the tariff is removed. We find no evidence that firms make any adjustment towards more domestic-oriented input composition over time; and heterogeneity exists within the result, as industries with a strong basis in the domestic market are more capable of adjusting.
Learning-to-Export Effect as a Response to Export Opportunities: Micro-Evidence from Korean Manufacturing

ERIA Discussion Paper no. 320

by Chin Hee Hahn, Yong-Seok Choi

This paper aims to investigate whether empirical evidence supports the learning-to-export hypothesis, which has received little attention in the previous literature. By taking full advantage of plant–product level data from the Republic of Korea during 1990–1998, we find some evidence for the learning-to-export effect, especially for innovated product varieties with delayed exporters: their productivity, together with research and development and investment activity, was superior to their matched sample. On the other hand, this learning-to-export effect was not significantly pronounced for the industries protected by import tariffs. Thus, our empirical findings suggest that it would be desirable to implement some policy tools to promote the learning-to-export effect, while tariff protection cannot be justifiable for that purpose.

Services to Support Manufacturing Value Chains in East Asia

ERIA Policy Brief 2019 no. 07

by Shandre Thangavelu, Fukunari Kimura, Christopher Findlay

The drivers and consequences of the development of global value chains (GVCs) in East Asia have been the subject of significant policy research. This work has stressed the importance of efforts to reduce impediments to the movement of goods, and most progress so far has been made with respect to reductions in tariffs and efforts to facilitate trade, the latter led by the World Trade Organization Agreement on Trade Facilitation. Various projects led by ERIA have made significant contributions to understanding priorities for policy attention in these areas, for example, the work on production networks in South East Asia (Ing and Kimura, 2017). Services, however, are vital components of GVCs. This Policy Brief explains why services matter and makes policy recommendations to facilitate their role in value chain development in the region.
The Impact of Economic Globalisation on Firm Performance and the Labour Market: Evidence from Japan

ERIA Discussion Paper no. 301

by Keiko Ito

This paper summarises the major findings and arguments in the literature on the impact of globalisation on firm performance and the labour market, focusing on the case of Japan. Internationalised firms show better performance. Although offshoring has shifted labour demand towards skilled workers, the direct contribution of globalisation to the widening wage gap is quite limited. The empirical evidence for Japan is more or less consistent with that for other developed countries, but some observations on Japan are worth pointing out. First, several empirical studies confirm a learning-by-exporting effect. Second, there is no strong evidence that increases in imports from China have reduced domestic employment. Increases in imports from China have a positive effect on value added growth in downstream industries, implying that imports from China are likely to be complementary to domestic production in Japan.

The Impact of Global Value Chain Integration on Wages: Evidence from Matched Worker-Industry Data in Thailand

ERIA Discussion Paper no. 291

by Sasiwimon W. Paweenawat

Using a two-stage estimation of matched worker-industry data from 2000 to 2011, this study investigates the impact of global value chain (GVC) integration on wages and the skill premium in 32 industries in Thailand, a country with recent heavy involvement in GVCs. This study employs foreign value added in both final and intermediate goods exports as a proxy for the degree of industry integration in GVCs and applies a panel fixed effects estimation on constructed panel data to investigate its relationship with wages. The main finding indicates that a higher level of industry integration with GVCs leads to higher wages and a higher skill premium, confirming the positive effect of GVC involvement on wages and the complementary effect of high demand for skilled workers in GVC-oriented industries in Thailand. Workers in industries with positions
close to the end of the value chain (downstream position) will earn a higher wage than those working in the upstream position. These results have significant policy implications. The Thai government should not only attempt to increase industry involvement in GVCs overall, but also aim to lift industries to higher positions in the GVC to gain the most benefits for Thai workers and the country overall.

Value Added Exports and the Local Labour Market: Evidence from Vietnamese Manufacturing Firms

ERIA Discussion Paper no. 293

by Duc Anh Dang

The formation of global value chains (GVCs) has reshaped production processes across countries. This paper investigates the relationship between GVCs and firms’ employment by using panel data on Vietnamese small manufacturing firms for 2005–2011. The results suggest that increased foreign value added in exports results in higher wages, increased productivity, and a greater share of production workers in domestic small and medium-sized enterprises. In addition, it brings about a lower share of professionals and makes smaller firms retrain their existing workers. At the same time, domestic value added in the export of intermediate products has negative impacts on employment and increases wages, particularly in medium-sized firms. All of these may come from the increased competition for labour from larger firms.
Innovation and Technology
**A Spark Beyond Time and Place: Ogawa Shinsuke and Asia**

**ERIA Discussion Paper no. 290**

*by Tamako Akiyama*

One of the most important documentary film-makers of the post-war period, Ogawa Shinsuke, had an enormous impact on film-makers across Asia. This paper will unpack some of the paradox-filled processes by which his influence spread across the Asian film-making world through an analysis of interviews, film festival records, and the role of translation during his lifetime (1936–1992). Energised by an increasing interest in mentoring young Asian film-makers in his later years, and having created a platform for the exchange of films and ideas through the first documentary film festival in Asia in the late 1980s, Ogawa continued to offer a kind of spiritual orientation to other film-makers in translation even after his death. This paper will examine how this process was not merely a result of Ogawa’s own efforts but realised through a series of interwoven yet contradictory social, economic, and interpersonal histories. Amidst the call for a greater exchange of media within and beyond Japan, the circulation across Asia of Ogawa’s cultural capital offers an opportunity to think about the significance of the various ‘investments’ that form such capital, and poses important issues for considering the conditions under which it can continue to survive.

**Cool Japan, Creative Industries, and Diversity**

**ERIA Discussion Paper no. 287**

*by Koichi Iwabuchi*

This paper critically considers the operation and objective of Japan’s ‘creative industry’ policy and suggests how to redesign it to align it with recent attention to cultural diversity. But the paper’s scope goes beyond business and extends to defining ‘creativity’ as a means to enhance civic dialogue, sympathy, and inclusion, to imagine a better society. The ‘creative industry’ can include independent and non-profit cultural projects that promote diversity by involving artists, museums, non-governmental and non-profit organisations, public service corporations, local communities, volunteers, and researchers. Such a redesign is compatible with the creative industry policy’s aim to advance social inclusion and democratisation by promoting grassroots creativity.
Government Initiatives Matter for Innovation in ASEAN

by Masahito Ambashi

ASEAN member states (AMS) need to greatly enhance their ‘innovation capability’ to achieve technology-driven sustainable development, and there still remains much room to do so. AMS governments should function as active agents in controlling and coordinating systematic innovation policies, including R&D incentives, human resources development, and industrial policies. In this sense, government initiatives matter for innovation in ASEAN where industrialisation has just started based on technology and innovation. Since the problem most AMS face is the absence or functional failure of the government organisation in terms of policymaking processes, it is important to give responsibility for innovation policy to preferably a single body in a government organisation. This government body should hold unified authority with strong leadership under government control to lead and coordinate innovation policies developed across various departments from a holistic viewpoint. Furthermore, AMS may well be able to set goals of R&D intensity through government initiatives, which are expected to motivate AMS governments to secure sufficient budgets for steadily implementing necessary policies.

In the Closet: Japanese Creative Industries and their Reluctance to Forge Global and Transnational Linkages in ASEAN and East Asia

by Shinji Oyama

This paper addresses rarely asked questions: is Cool Japan a creative industries policy and, if so, what kind of creative industries policy is it? It addresses these questions by examining Cool Japan’s differences from the UK derived and globally very influential creative industries model. The paper will try to make sense of these differences by looking at how the Japanese creative industries comprise businesses of different sizes with a varied history and prestige, how those companies have complex and contrasting relationships with various state organisations, and
how the forces of globalisation and its free-market and neo-liberal economic ideologies affect companies in various sectors differently. This will challenge the dominant narrative of Japanese Creative Industries and Cool Japan in which, it is generally believed, the former embraces globalisation and digitalisation, and the latter is responsible for broadening the appeal of Japanese popular culture abroad. This paper reveals the complexity and diversity of the creative industries from socio-cultural and politico-economic perspectives often overlooked in the Cool Japan discourse.

The Contents of Power: Narrative and Soft Power in the Olympic Games Opening Ceremonies

by David Leheny

This paper examines debates about soft power and popular culture, with particular attention to the framing and reception of the opening ceremonies at the Olympics. It examines how national narratives, particularly in the oft-noted Beijing 2008 Games and the London 2012 Games, have been analysed, turning then to a discussion of clues regarding the likely framing of the 2020 opening ceremony in Tokyo.

The Next Generation Automobile Industry as a Creative Industry

by Seio Nakajima

The aim of this paper is to describe the recent transformation of the automobile industry from a manufacturing industry to include aspects of the service and creative industries. Firstly, it reviews the recent trend of the automobile industry as a service industry. Secondly, it discusses the automobile industry’s move toward the creative industries. It examines these two trends, mostly based on the next-generation automobile industry in Japan. Finally, it discusses the implications
of the above transformation of the automobile industry on academic studies of the creative industries, and argues for what it calls a strong programme in creative industries studies. It also provides a provisional note on government policies in the era of the next-generation automobile industry.

Words and Their Silos: Commercial, Governmental, and Academic Support for Japanese Literature and Writing Overseas

ERIA Discussion Paper no. 296

by Anne McKnight

This paper connects in a preliminary way realms of analysis and data regarding practices of disseminating Japanese literature and writing translated in English and Association of Southeast Asian Nations (ASEAN)–located languages since about 2000. The assumption is that translations from different languages have been consistently silo’ed – separated and allowed to accumulate and dynamically evolve. I outline a history of the de-linking of ‘writing’ from ‘literature’ as well as language study itself, which has led to both a withdrawal and an explosion of funding since about 1990. I note secondary effects of re-concentration in English and European languages, a flourishing of small-press activity and writing on food (Jonathan Gold) and self-help (Kondo Marie), and a focus on the ‘authorised translator’ model in both English and ASEAN languages following a tendency to standardise copyright law. Second, I introduce some histories and distinctive practices that could model support for translators. Last, I discuss economies of both money and prestige in different practices, and offer some suggestions based on interviews with an eye to supporting translators so that all languages have a hand in creative practice, and English-language–based translators can collaborate with translators in other languages.
Regulatory Management and Governance
Economic Consequences of Globalisation: The Australian Framework for Reforms

ERIA Discussion Paper no 306

by Christopher Findlay, Kostas Mavromaras, Zhang Wei

Australia has experienced significant reforms to policy affecting trade in goods and services, investment, and people. The contributions of these reforms to growth have been significant. However, the scope remains for significant further reform. The drivers of reforms since World War II are reviewed in this chapter. The consequences of globalisation in Australia and the slowdown in the pace of reform and its consequences, for productivity growth in particular, are also discussed. The Australian experience provides valuable insights for other economies, in relation to the scope and timing of reform and the role of supporting institutions.

Global Value Chain Participation and the Relative Demand for Skilled Labour in East Asia

ERIA Discussion Paper no 323

by Deborah Winkler

Global value chains (GVCs) may have distributional consequences for the relative demand for skilled labour. This study relates GVC participation to the share of skilled labour in total compensation, focusing on the experience of 12 East Asian countries. It applies a macro-level analysis covering 114 countries and 27 sectors for intermittent years from 2001 to 2011. It uses a widely accepted measure of backward GVC participation – the share of foreign value added in exports. This study finds that while GVC participation is positively associated with the relative demand for skilled labour in the global data set, the positive correlation is smaller for the sample of East Asian countries and negative in a few cases. This could reflect East Asia’s specialisation in manufacturing GVCs, which tend to make intensive use of lower-skilled labour. In agriculture, the direction of the correlation depends on a country’s position in the agribusiness value chain and its skill intensity, while the results for services do not show any statistically significant correlations. Finally, the study assesses if policy matters for the relationship between backward GVC participation and the relative demand for skilled labour, and finds that higher labour market flexibility increases the positive relationship.
New Frontiers for Services in Globalisation

ERIA Policy Brief 2019 no. 08

by Christopher Findlay, Fukunari Kimura, Shandre Thangavelu

The building of global value chains in manufacturing is much discussed, but less attention is given to the growth of value chains in services, their drivers and their implications. In this policy brief, we discuss the nature of cross-border value chains in services production, the value of taking a value chain perspective on the design of services policy, and how to develop priorities in that respect.

Tariff Policies and Wages in Manufacturing Industries: New Evidence from Viet Nam

ERIA Discussion Paper no. 326

by Dao Ngoc Tien, Hounge Quynh Nguyen

This paper reviews the tariff policies and their impact on the wages of workers in manufacturing during the substantial trade liberalisation period in Viet Nam from 2011 to 2015, the four years following Viet Nam becoming a middle-income country. The key results are as follows. At the industry level, decreasing trends of input tariffs the net effective rate of protection (ERP) are observed in accordance with the reduction in output tariffs. Positive ERP is only found in some manufacturing of final products, while negative ERP remains in several high-intensive technology industries. At the provincial level, higher ERP was found in provinces in the northern key economic zone in 2011, however the ERP of these provinces dropped in 2015. At the firm level, given the global trade modes of firms, the decrease in the ERP as well as the ITR and the NRP induces better earnings for workers in low-skilled, labour-intensive firms. This new evidence may suggest that in the era of new-generation free trade agreements in which negotiating for better market access for imported inputs is in focus, more attention should be paid to the ERP in technology-intensive industries and the better earnings of workers in high-skilled, labour-intensive firm. Additionally, the localised effects of tariff structures should be considered for regional development.
The Economic Consequences of Globalisation in the United States

by Peter Petri, Meenal Banga

The unprecedented rise in global interdependence since World War II, especially since the 1970s, has been very productive. World gross domestic product (GDP) growth increased from around 2% per year in the 1970s to 4% per year before the global financial crisis. Globalisation helped to lift a billion people from extreme poverty and improved the lives of billions more. The United States also gained an estimated 11%–19% of its annual GDP. Yet many Americans are concerned about the fairness of these gains. We review evidence of increasing wage inequality and stubborn unemployment effects, even though, on balance, technological change has had a much greater impact on these outcomes than globalisation. Barriers against globalisation do not offer solutions to inequality – they reduce the size of the economic pie without necessarily improving its distribution. Policies should focus on redistributing gains from growth, increasing the productivity of all workers, and helping affected communities adapt socially and economically to rapid change.
Trade and Investment
Non-Tariff Measures - An Update

Edited by Doan Thi Thanh Ha, Samuel Rosenow

Whilst tariffs have declined following disciplines instituted by the World Trade Organization, the use of non-tariff measures is on the rise worldwide. This trend is also reflected in the updated Non-Tariff Measure (NTM) database of the Economic Research Institute for ASEAN and East Asia (ERIA) and the United Nations Conference on Trade and Development (UNCTAD), where the number of NTMs in the Association of Southeast Asian Nations (ASEAN) has increased over time. Given the complexity of NTMs, their increasing use should be interpreted with caveats. The increase in NTMs reflects the dynamics of regulatory reform in ASEAN Member States. In certain circumstances, however, NTMs have also served as disguised barriers to international trade and become a convenient tool to provide undue protection to certain products or industries. More importantly, regardless of their objectives, NTMs can contribute greatly to increasing trade costs, reducing an economy’s competitiveness. Addressing NTMs, especially in the context of declining tariffs, should, therefore, be a priority in national competitiveness agendas. NTMs are neutral and, more often than not, eliminating them is not an option. A pragmatic approach should consider the costs and effectiveness of NTMs from the perspective of governments and producers, with evidence-based support from academia.

This report documents the trend and pattern of NTMs utilisation in ASEAN based on the updated ERIA–UNCTAD NTMs in ASEAN database, and discusses ongoing regional and national efforts in addressing NTMs. We recommend four areas of focus in addressing NTMs: (1) Enhancing the capacity of issuing and enforcing agencies; (2) Establishing an inter-agency committee to oversee and manage the use of NTMs; (3) Strengthening engagement and consultation with the private sector and research institutions; and (4) Applying regulatory practice core principles.
Regional Integration and Non-Tariff Measures in ASEAN
Edited by Lili Yan Ing, Ralf Peters, Olivier Cadot

Though tariffs have been reduced, the number of non-tariff measures (NTMs) continues to increase, and is often blamed in part for the lack of integration in ASEAN. Unlike tariffs which could be eliminated entirely, a world without NTMs would be hard to imagine as they can play an important role in ensuring the quality of goods. As countries become wealthier, demand for better quality and greater safety of products is inevitable. However, not all NTMs are benign; some of them can complicate business rather than achieving their main goals. To improve the trade environment and make NTMs work for the common good, ASEAN should break with the ‘trade negotiation’ approach and strive instead for regional transparency, further cooperation in conformity assessment procedures, and dynamic disciplines.

This book explores relevant issues related to NTMs and their relation to regional integration issues in ASEAN countries. It discusses contemporary issues related to NTMs in the region, including recent world trends, regulatory convergence, government procurement, and environmental issues. The studies in this book employ relevant impact analysis methodologies for NTMs, from ad-valorem equivalent (AVE) to CGE modeling.
Do Regional Trade Agreements Really Help Global Value Chains Develop? Evidence from Thailand

ERIA Discussion Paper no. 325

by Kazunobu Hayakawa, Nuttawut Laksanapanyakul, Toshiyuki Matsuura

This paper examines the firm-level nexus between exporting and importing by using firm-level data from Thai customs. We differentiate firms’ imports according to the tariff regime used (e.g. regional trade agreements (RTAs)). Our finding is that imports under RTA regimes have a small, though significant, correlation with exports. Greater exports are found in firms with larger imports under the most favoured nation or other preference regimes (e.g. duty drawback for raw materials imported to produce export products). One reason for the result in RTA imports is that active RTA importers mainly target the domestic market rather than the export market. If the main market is abroad, firms tend to use other preference regimes. Thus, the other preference regimes may contribute more greatly to the development of firm-level back-and-forth international transactions than RTAs do.

Economic Consequences of Globalisation: Case Study of Thailand

ERIA Discussion Paper no. 308

by Archanun Kohpaiboon, Juthathip Jongwanich

The paper reviews empirical works examining the effect of globalisation in Thailand, beginning with a discussion of its integration into the economy. Three drivers of economic globalisation are emphasised: international trade, foreign direct investment, and cross-border labour mobility. The findings point to globalisation’s potential to create a favourable economic impact. Opening up to international trade could promote productivity and drive economic growth. Large foreign direct investment inflows enticed by export-oriented industrialisation are likely to generate horizontal technological spillovers within a given industry; vertical spillovers through the linkages were not a robust result. There is no evidence that employing foreign workers retards firm productivity; rather, the opposite is the case. Well-performing firms are in a position to attract for-
Since Doi Moi (Renovation) in 1986, economic integration has been an important pillar of Viet Nam’s reforms. Economic integration has gradually deepened, and even World Trade Organization accession in 2007 marked no end to Viet Nam’s economic integration process. Impact assessments of trade and investment liberalisation indicate that deepened economic integration has broadened economic opportunities, raising GDP growth, trade and foreign investment, and incomes. However, liberalisation requires Viet Nam to rethink and reinvigorate its approach to economic integration. This paper recommends ways to more effectively pursue economic integration in the new context.

---

**Economic Consequences of Trade and Investment Liberalisation: The Case of Viet Nam**

**ERIA Discussion Paper no. 303**

*by Thanh Tri Vo, Duong Anh Nguyen, Thien Thi Nhan Do*

By conducting a difference-in-difference analysis, we examine how the targeted exporters adjust their innovative activities in the face of the negative export shock inflicted by the policy experiments of the antidumping cases in the United States market during 1991–2008. We construct...
the novel micro-dataset, combining the targeted firms by antidumping duties and firm-level patenting as a measure of innovative activities. We found that the antidumping-targeted firms respond to the negative export shock by allocating more innovation activities to expand international patents at the cost of domestic innovation. This resource allocation of innovative activities is more prominent when the initial export intensity is high.

Feasibility Study of the Free Trade Agreement between The Kingdom of Cambodia and The Eurasian Economic Union

ERIA Research Project 2018 no. 16

Prepared by Ministry of Commerce of Cambodia, Ministry of Economy and Finance of Cambodia

To expand market access to Eastern Europe, Cambodia is currently exploring a free trade agreement (FTA) with the Eurasian Union – a common market comprised of five nations (Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia), 176 million people, and a gross domestic product of US$2.5 trillion. An FTA between Cambodia and the Eurasian Economic Union (EAEU) would allow both sides to increase trade, investment, and economic collaboration. The study examined the key impacts of Cambodia–EAEU FTA (CEFTA) on the Cambodian economy and the Association of Southeast Asian Nations (ASEAN) region in terms of trade, investment, welfare, and growth impact on the domestic and regional economy. CEFTA appears to be a win-win opportunity for Cambodia for deepening its economic integration into the global production value chain and integrating its economy with Central Asia and Russia. CEFTA is also expected to create potential dynamic gains for Cambodia through its integration with the global economy and through implementation of key structural reforms in the domestic economy within a structured framework. Global Trade Analysis Project (GTAP) simulations show greater potential dynamic output gains for Cambodia if the Cambodia–EAEU FTA leads to deeper and more structural economic liberalisation.
Foreign Direct Investment and Labour Market Dynamics in a Developing Country: Evidence from Indonesian Plant-Level Data

by Toshiyuki Matsuura, Hisamitsu Saito

This study examines the impact of inward foreign direct investment on the wages and employment of skilled and unskilled workers in Indonesian manufacturing plants. Entry of multinational enterprises affects local labour markets through spillovers as well as labour and product market competition. Our results show that spillovers increase the labour demand of local plants for unskilled workers, but increased wages due to severe labour market competition reduce the demand for skilled workers. We also find that product market competition causes resource reallocation from low- to high-productivity plants. Thus, attracting inward foreign direct investment effectively enhances aggregate productivity growth, but may retard the transition to skill-intensive production in Indonesian manufacturing.

FTA Strategies to Strengthen Indonesian Exports: Using the Computable General Equilibrium Model

by Masahiko Tsutsumi, Masahito Ambashi, Asuna Okubo

This paper aims at evaluating the economic impacts of the various Indonesian free trade agreement (FTA) strategies in enhancing export-led growth. The potential impact of abolishing tariffs on three key sectors or commodities – (i) oil seeds, vegetable oils, and fats (VegOil); (ii) fishery and processed foods (FisheryPFD); and (iii) textile and apparel products (TextWapp) – with three trading partners – the European Union (EU28), members of the Gulf Cooperation Council (GCC), and India – is calculated using a computable general equilibrium model. To explore the long-term influence, we also take into account capital deepening and technological spillovers induced by trade.
The economic development of Malaysia has been strongly driven and shaped by globalisation, from the pre-colonial to the post-independence period. The country has harnessed trade, foreign capital, and foreign labour to grow and has transformed its economy from one that was highly dependent on primary commodities (tin and rubber) into one driven by manufactured exports. The impact of globalisation on the Malaysian economy has changed through the various phases of its development experience. The early phases of the country’s engagement with globalisation reduced poverty and inequality. In later stages, excessive dependence on low-skilled foreign labour, although beneficial initially, may have compromised the competitiveness of the economy. Malaysia’s multi-ethnic society has also posed considerable challenges in the balancing of domestic needs and benefits with greater engagement with globalisation. The openness of the Malaysian economy has also made it vulnerable to global economic shocks.
**Processing Trade, Trade Liberalisation, and Opening Up China’s Miracle of International Trade**

ERIA Discussion Paper no. 304

by Miaojie Yu, Huihuang Zhu

Understanding the role of international trade is the key to understanding China’s miraculous economic growth. This paper reviews the literature on international trade in the context of China, with a focus on processing trade, trade liberalisation, and firm performance to provide a better understanding of China’s experience of opening up over the past four decades.

---

**Production Dynamics in Multi-Product Firms’ Exporting**

ERIA Discussion Paper no. 321

by Kazunobu Hayakawa, Hayato Kato, Toshiyuki Matsuura, Hiroshi Mukunoki

To create room for production capacity for exported products, new exporters may decrease either the production of exported products or of other products for the domestic market, or of both. Namely, when firms begin to export, they must reallocate their resources across products and markets. This study investigates the within-plant reallocation of resources across products and markets when multi-product firms begin exporting. To this end, we employ the Indonesian manufacturing surveys during 2000–2012. As a result, we found a different pattern of resource reallocation between when the first exported product is a core-competence product and when it is not. Further, the magnitude of such reallocation is found to be different according to firms’ resource abundance.
Co Publications
Russia has been a full dialogue partner of the Association of Southeast Asian Nations (ASEAN) since 1996. The 20th year of ASEAN–Russia dialogue relations was marked with a commemorative summit in Sochi, Russia on 19–20 May 2016. Aptly, the theme of the Summit—Moving Towards a Strategic Partnership for Mutual Benefit—resonated the forward-looking sentiments of both partners. During the summit, the leaders adopted the Sochi Declaration, which charts out the future direction of the ASEAN–Russia relationship and cooperation.

In keeping with the theme of the Sochi Declaration, Russia’s senior economic official initiated a study to bring out the existing strengths of Russia–ASEAN trade and investment cooperation and the prospects for deepening trade, investment, and economic cooperation further in the coming years. The study also covers integrated trade and value chain connectivity between ASEAN and the Eurasian Economic Union (EAEU), as both groupings are based on similar principles of economic relations. The study was jointly conducted by the Economic Research Institute for ASEAN and East Asia (ERIA) in Jakarta and the Center for Strategic Research at the Russian Foreign Trade Academy (RFTA) in Moscow.
Developing the Digital Economy in ASEAN

Edited by Lurong Chen and Fukunari Kimura

This book advances the international debate on the development of e-commerce with focus on emerging ASEAN economies. It provides readers insights on Asia’s needs and efforts to improve the regional legal and economic conditions to support e-commerce.

This book looks at the rules and regulations on e-commerce, and e-commerce for inclusiveness growth. It provides insights from several ASEAN member states and discovers the requirements for Asian countries to better grasp the new juncture of growth associated with economic digitalization, which also have deep implications on continuous regional integration and community-building.
East Asian Integration: Goods, Services and Investment
Edited by Lili Yan Ing, Martin Richardson, Shujiro Urata

The growth of world trade has been stagnant in recent times; trade liberalisation now has been challenged. The recent rise of anti-globalisation calls for a better integration in East Asia. How should East Asia manage its openness? This book provides profound analyses on rules of origins, non-tariff measures, restrictiveness in services and investment.

It gives insight into how East Asian countries should shape its trade, investment and industrial policies. This book helps to answer what kind of a better integration it should be, and how East Asia can realise it.
Small and medium-sized enterprises (SMEs) account for about 97–99 per cent of total enterprises and 60–80 per cent of total employment in ASEAN countries. The participation of SMEs is thus crucial for achieving greater regional economic integration amongst ASEAN countries. SMEs are, however, often constrained by many disadvantages that limit their abilities to become importers and exporters. This is well documented in the research literature on trade and firm size. This volume contains selected ASEAN country studies on the participation of SMEs in regional economic integration based on primary microdata. This is supplemented by empirical studies on the role played by East Asian multinational enterprises in the region.

‘The editors and authors of SMEs and Economic Integration in Southeast Asia are to be congratulated for this major contribution to the scholarly and policy literature on a subject of much public discussion but limited analytical research. The emphasis on economic integration highlights the importance of these firms in Southeast Asia’s growing regional and global engagement. The thirteen chapters, by leading authors in the field, comprise both insightful country analyses and careful examination of the links between SMEs and foreign investment.’ —Hal Hill, H.W. Arndt Professor Emeritus of Southeast Asian Economies, Australian National University
Emerging Global Trade Governance Mega Free Trade Agreements and Implications for ASEAN

Edited by Lurong Chen, Shujiro Urata, Junji Nakagawa, Masahito Ambashi

Mega free trade agreements (FTAs) are being formed to fill the gap created by new developments in global governance and are reshaping the world economic order. The Trans-Pacific Partnership (TPP) agreement is one of such 21st century FTAs.

This book highlights three trade-related issues covered by the TPP that greatly concern emerging countries – investment, intellectual property rights (IPR), and state-owned enterprises (SOEs). It contains rigorous economic, legal, and political analyses on the final text of the agreement, combined with country-specific policy discussions focusing on Indonesia, the Philippines, Thailand, and Viet Nam, giving readers insights on the establishment of global rules and regulations for 21st century trade. The book also outlines the requirements for emerging Asian countries to better formulate trade policies in the new era of international trade and promote regional integration in ASEAN and East Asia.
Don’t miss our latest updates.

Follow us on social media

ERIA.org
ERIAorg
Economic Research Institute for ASEAN and East Asia
ERIAorg-Indonesia

or visit our website on www.eria.org
ABOUT ERIA

The Economic Research Institute for ASEAN and East Asia (ERIA) is an international organisation providing research and policy support to ASEAN and the broader East Asia region and the ASEAN and East Asia summit processes. ERIA’s policy research focuses on three pillars: deepening economic integration, narrowing developing gaps, and achieving sustainable development in the region.

ERIA’s establishment was formally agreed among 16 heads of Government at the Third East Asia Summit in Singapore on 21 November 2007. It works closely with the ASEAn Secretariat, researchers and research institutes from East Asia.

ERIA is based in Jakarta, Indonesia

Annex Office (Mailing Address)
Sentrall Senayan II, 5th & 6th Floor
Jalan Asia Afrika No.8
Gelora Bung Karno, Senayan
Jakarta Pusat 10270, Indonesia

Headquarters
The ASEAN Secretariat
70A, Jalan Sisingamangaraja
South Jakarta 12110, Indonesia

www.eria.org