Research and Research-Related Activities



Research is at the core of ERIA's mandate. From it springs other roles that ERIA is tasked to do, such as research dissemination; capacity building aimed at strengthening policy research capacities in less developed countries, especially Cambodia, Lao PDR, Myanmar, and Viet Nam (or the CLMV countries); and providing policy recommendations to policymakers of ASEAN and East Asia Summit countries.

ERIA research projects focus on four major themes: (i) deepening economic integration, (ii) narrowing development gaps, (iii) achieving sustainable economic development, and (iv) energy-related research.

Below is a summary of the completed research projects in FY2017 according to themes.

Deepening Economic Integration





East Asian Economic Integration 2nd Edition (RCEP 2nd Edition)

Partners: Members of ERIA Research Institutes Network (RIN), ADB Institute, ERINA, Australian National University (ANU), governments of RCEP countries

The Regional Comprehensive Economic Partnership (RCEP) is a critical element of regional integration in East Asia and the Pacific.

Members of ERIA Research Institutes Network (RIN), ADB Institute, ERINA, Australian National University (ANU), governments of RCEP countries

ASEAN and East Asia

The Regional Comprehensive Economic Partnership (RCEP) is a critical element in regional integration in Fast Asia and the Pacific.

RCEP takes initiatives on regional economic integration to a higher level. First, in contrast to the ASEAN+1 free trade agreements (FTAs) where individual ASEAN Member States (AMS) had essentially bilateral commitments with the ASEAN+1 dialogue partners, the AMS would likely need to have common commitments vis-à-vis the partners (with perhaps a few exceptions) under RCEP. Second, the commitments of the dialogue partners need to be common commitments congruent with those of the AMS. Third, the commitments under RCEP need to be substantially better than those under the ASEAN+1 FTAs. In short, RCEP should not be merely a consolidation of the ASEAN+1 FTA commitments for the simple reason that mere

consolidation is only feasible at the lowest common denominator that delivers far less than several ASEAN+1 FTAs. RCEP would need to be a high-quality agreement for it to be credible and worthy of the resources and time expended for the negotiations and related activities to ensure its successful conclusion. Moreover, given that RCEP effectively includes an implicit FTA agreement amongst China, Japan, and the Republic of Korea, which results in trade and investment diversion from ASEAN compared to the ASEAN+1 FTAs, only deeper facilitation and liberalisation commitments would provide additional benefits to the AMS compared to the current ASEAN+1 FTAs.

The book, which is the final output of this study, provides analytic support in sharpening (or enhancing) the RCEP negotiations process to ensure a successful and mutually beneficial outcome for all parties.

Geographic Scope: ASEAN and East Asia



Export Dynamics and Export Industry Development

The development of new export industries is a key policy agenda for many countries. Developing countries consider this the centrepiece of their growth and industrialisation strategies. Developed countries emphasise it as a way of sustaining income growth and creating jobs since their traditional export industries are losing comparative advantage with increased competition from developing countries. Although many countries promote development of new export industries with these and other payoffs in mind, the outcomes have been diverse.

Conceptually, such development would involve igniting new export growth and sustaining it. At the micro level, it would involve first-time entry into exporting by export pioneers; survival at the export market; and increase in the number of exporters, products, and markets. Furthermore, this process will be influenced by various government policies aimed at stimulating new exports, such as on trade and investment liberalisation, exchange rate, and other export promotion policies, including marketing assistance and information provision. Although there has been a growing number of empirical studies to clarify the export dynamics and to evaluate the effects of various policies on new exports, our knowledge on these important issues seems to be far from satisfactory.

Against this background, the project aims to clarify the export dynamics further, and examine the effects of various government policies on export dynamics and new export industry development – all these towards providing recommendations to promote export.

Global Production Value Chain, Cities, and Urban Amenities

Partners: Centre for Strategic and International Studies, Indonesia; Indian Institute of Technology, Trichi, India; Institute of Regional Sustainable Development (IRSD), Viet Nam; Institute for Southeast Asian Studies, ISEAS; Keio University, Japan; Korea University Business School, Seoul; Philippines Institute for Development Studies, Philippines; Presisi Indonesia, Indonesia; University of Adelaide, Australia; University of Indonesia, Indonesia; University of California, Santa Cruz

The project focused on the role of cities in creating urban networks and urban amenities, attracting and developing skills and human capital, as well as driving creativity. This in turn supports the development and liberalisation of the services sectors and the operation of the global production value chain in the region. These linkages of urbanisation, innovation, services, and the global value chains form the key agenda for the next stage of development and growth in Asia.

The study focuses on the following:

The regional competitiveness and productivity
 of cities, and what drives creativity in urban
 areas, leading to innovation and more extensive
 entrepreneurial activities. Success in this respect
 also leads to larger cities, achieving economies
 of scale, which further reinforces success. Such
 success might then be able to offset the cost of
 high population density.



- The attraction of cities with urban networks and amenities to skilled workers to live and work, thereby contributing to greater services 'unbundling' and linkages to global production value chain activities. Not only 'skilled' workers are required but also workers who are innovative and able to operate in different ways. These developments would lead to the emergence of new types of work, so the flexibility of the labour market also plays a role in this context.
- The extent to which a creative and innovative urban environment, which is attractive to the right types of workers, can lead to greater support for services liberalisation. This will have important implications for the regional free trade agreements such as the Regional Comprehensive Economic Partnership in developing strategies for liberalising the services sector.
- The key policy considerations in terms of strategies for the second stage 'unbundling' or fragmentation of industrial production and its implications for services sector liberalisation. Understanding the effects of urban amenities on development of small and medium-sized enterprises and entrepreneurial activities in the region is important.
- Observation of both the first and second stages
 of 'unbundling' are occurring concurrently in
 Asia. It is important to understand the policy
 considerations for countries in different stages of
 growth and different stages of fragmentation and
 the linkages between the first- and second-stage
 fragmentation.

Geographic Scope: ASEAN, China, Japan, Republic of Korea

Impact of FTA on Firms and Industries (Phase I)

Partners: Ajou University, Republic of Korea; Interdisciplinary Studies Center, Institute of Developing Economies, Japan; Korea Institute for International Economic Policy (KIEP); Myongji University, Republic of Korea; Institute of Regional Sustainable Development (IRSD), Viet Nam; Presisi Indonesia, Indonesia; Science and Technology Development Program, Thailand Development Research Institute, Thailand; Takushoku University, Japan; University of Adelaide, Australia

Bilateral and regional free trade agreements (FTAs) and economic partnership agreements (EPAs) have proliferated in the past 25 years, partly due to the slow progress of multilateral trade negotiations.

Reviews on trade agreements are important and need to be undertaken regularly, given the constantly changing economic environment and policy direction in countries involved in the agreements. One first needs to carefully assess the impact of the agreement to properly review its cost and benefit. This project examines the impact of FTAs on trade, especially on import flows.

The project derived a new approach to computing FTA utilisation and applied it to imports in several countries: Australia, China, Indonesia, Japan, Thailand, and Viet Nam. The results are generally positive. Imports (exports from an FTA partner) are shown to have increased when using the preferred tariffs. This finding holds for all countries with some degree of variation across them. Within a country, the extent of FTA utilisation typically varies across industries, reflecting



the degree of domestic competition and comparative advantage of the export destination country in trading with an FTA partner.

Geographic Scope: Australia, China, Indonesia, Japan, Thailand, Republic of Korea, and Viet Nam

Microdata: Export Dynamics and Export Industry Development

Partners: Australian National University; Centre for Transformative Innovation, Swinburne University of Technology, Australia; College of Business Law and Governance, James Cook University, Australia; Department of Economics, Gachon University, Korea; Faculty of Business and Economics, Padjadjaran University, Indonesia: Faculty of Business and Economics, University of Indonesia, Indonesia; Faculty of Economics, Chuo University, Japan; School of Economics, School of Economics, Senshu University, Japan: Faculty of International Social Sciences. Gakushuin University, Japan; Institute of Developing Economies, Japan; Inter-disciplinary Studies Center, Institute of Developing Economies, Japan; Keio Economic Observatory, Keio University, Japan; Presisi Indonesia, Indonesia; Science and Technology Development Program, Thailand Development Research Institute. Thailand: Seinan Gakuin University. Japan; University of Economics and Business, Vietnam National University Hanoi

Development of new export industries is a key policy agenda for many countries. The process of new export industry development would involve igniting new export growth and sustaining it. At the micro level, this would involve first-time entry into exporting by export pioneers; survival in the export market; and increasing the number of exporters, products, and markets. Furthermore, this process will be influenced by various government policies aimed at stimulating new exports such as: trade and investment liberalisation policy, exchange rate policy, and other export promotion policies including marketing assistance and information provision. Despite the growing number of empirical studies to clarify the export dynamics and evaluate the effects of policies on new exports, our knowledge about these important issues seems to be far from satisfactory.

This study aims to (i) clarify the export dynamics further, and (ii) examine the effects of various government policies on export dynamics and new export industry development.

This paper comprises of 10 country studies that provide some new information about the factors affecting export. For example, the study on Australia, which utilised the census of participants' data of the State of Victoria trade missions from 2010 to 2013, found that trade missions increased participating firms' export value significantly, by more than 170 percent.

One of the studies on Indonesian manufacturing revealed some important findings such as: (i) the impact of bonded zones on the performance of firms appears to be limited – while it improves the productivity of



firms, measured by output per worker, the impact is not immediate; (ii) there is no consistent evidence that bonded zones promote exports at the intensive or extensive margin; and (iii) the bonded zones increase demand for workers.

The paper on China explored the interconnection between domestic firms' product innovation, export, and the presence of foreign direct investment (FDI). It showed that firms' product innovation is positively correlated with their export revenue, and that FDI's presence affects firms' product innovation and export behaviour, both directly and indirectly (via its impact on product innovation), albeit not in all industries.

The paper on the Republic of Korea's manufacturing found that real exchange rate movement influences both plant and product entry and exit in the export market (extensive margin), and their export volume (intensive margin). The paper on Japan's manufacturing found that an appreciation of the Japanese yen decreases firms' exports controlling for various firm characteristics such as import intensity, productivity, and R&D investment. It also found that an appreciation of the yen has a negative effect on firms' first-time entry to the international market; however, this is mitigated by firms' importing activity.

The study on Viet Nam's manufacturing examined the importance of institutions in terms of their effect on exports. It found that some components of the institutional quality index, such as transparent business environment and low informal costs, positively affect the probability of exporting or the value of export. It also found that a depreciation of Viet Nam's currency

leads to an increase in exporting for firms located in provinces with higher business transparency and higher time costs, less proactive provincial leadership, and fewer business support services. This shows that less productive firms' exports respond more positively to a currency depreciation.

Geographic Scope Australia, China, Indonesia, Japan, Republic of Korea, Thailand, and Viet Nam

Reducing Unnecessary Regulatory Burdens on Business and Engendering Informed Regulatory Conversations in Priority Integration Sectors in ASEAN

Partners: ERIA Research Institutes Network (RIN) and Malaysia Productivity Corporation (MPC)

Two critical challenges facing ASEAN Member States (AMS) in an increasingly open and integrated ASEAN are (i) promoting a conducive business and investment environment and (ii) improving economic performance and productivity. To meet these challenges, the AMS need to focus on reducing the burden of government regulations on business, together with minimising border barriers and greater investment in infrastructure and people. An important means of enhancing investment attractiveness as well as productivity and competitiveness of industries is Reducing the Unnecessary Regulatory Burdens (RURB) on business, particularly in sectors with significant export potential.



RURB is also an important element of ASEAN's drive towards institutionalising good regulatory practice in the ASEAN Economic Community (AEC) Blueprint 2025. RURB addresses unnecessary costs arising from poorly designed or excessive regulation, as well as from poor administration and enforcement of regulations. RURB supports national regulatory reform initiatives to improve overall regulatory regimes such that policies and regulations complement one another in support of greater efficiency, enhanced competitiveness, and increased trade.

This research focuses on RURB, particularly in the trade-related activities of firms in selected sectors that have significant export potential or are of significant policy interest in each of the nine AMS (excluding Singapore) covered in the study. The sectors chosen include the automotive industry for Indonesia; fishing (e.g. tuna for the Philippines, fish production for Myanmar, fish production and trade for Viet Nam); warehousing for Malaysia; halal manufacturing for Brunei Darussalam; coffee and corn for Lao PDR; passenger land transport service for Thailand; and pepper for Cambodia.

Overall, the RURB approach has great potential. The project indicates that the approach is indeed useful to improve the regulatory regime. Hence, its institutionalisation in each AMS to support the good regulatory practice agenda in the AEC Blueprint 2025 is highly recommended. The project also suggests that the RURB approach is best done by institutions that have analytic skills and strong and continuing links with the government and the private sector. This is because conversations about RURB appear to raise

expectations of the private sector regarding solutions to their regulatory concerns. However, the 'solutioning' phase can take a long time and involves pilot testing, review, and eventual rollout if found to be effective.

Geographic Scope: ASEAN except Singapore

Review of ASEAN-Australia-New Zealand Free Trade Area

Partner: Brunei Darussalam Institute of Policy and Strategic Studies (BDIPSS); Cambodian Institute for Cooperation and Peace (CICP); Central Institute for Economic Management (CIEM); Centre for Strategic and International Studies (CSIS); CrimsonLogic Singapore; De La Salle University, Australia; Interdisciplinary Studies Center, Institute of Developing Economies, Japan; Institute for Democracy and Economic Affairs (IDEAS); Keio University, Japan; National Institute for Economic Research (NIER); Philippine Institute of Development Studies (PIDS); Presisi Indonesia; Singapore Institute of International Affairs (SIIA); Thailand Development Research Institute (TDRI); University of Adelaide, Australia; World Trade Institute; Yangon Institute of Economics (YIE)

The study reviews the implementation of the ASEAN and Australia—New Zealand Free Trade Agreement (AANZFTA). It was carried out by ERIA to assist ASEAN with its general review of the FTA. The study focuses on the implementation and impact of the FTA on ASEAN economies, utilising appropriate ex-post qualitative and quantitative methods. The following presents several of the study's key findings.



The study found that ASEAN Member States (AMS) actively utilised the AANZFTA scheme and have increased their exports. Viet Nam, Indonesia, and the Philippines have more intensively utilised the FTA's preferential rates for exports. In terms of the implementation of the rules of origin (ROOs) of the FTA, lack of information on available preferences is cited as an issue for smaller firms in the trade between AMS and Australia and New Zealand. The study conducted a survey to determine the implementation of sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) measures in Australia and New Zealand. Respondents included producers, exporters, traders, manufacturers, and industry associations of the AMS. The experience of the business sector in the area of publication of government regulations and other requirements is relatively favourable. The survey suggested, amongst others, a simplification of standards and regulations and documents required for trade.

One of the important highlights of the study is the assessment of economic cooperation under AANZFTA. The study investigated the significance of economic cooperation under the FTA and its overall conclusion is that, technically, the economic cooperation chapter is the backbone of the AANZFTA. The impact and the capacity building footprint effected via the FTA economic cooperation programme (i.e. the Economic Cooperation Work Programme) is a significant driver of economic integration in the region and must be continued, strengthened, and replicated in other future trade agreements.

The focus group discussions conducted in each AMS for the study pointed out that not all traders experienced a positive impact. There are still challenges and/or additional costs that do not allow them to fully benefit from the preferential treatment offered by the FTA. One of the most challenging factors is the difficulties exporters from AMS encounter in meeting the high standards imposed by Australia or New Zealand. Over time this could be improved, however, by acquiring greater knowledge about product requirements. One way in which this could be done is by allowing for foreign direct investment (FDI) from Australia and New Zealand.

Geographic Scope: ASEAN, Australia, and New Zealand

The Indonesian Economy: Trade and Industrial Policy

Partner: Government of Indonesia

Trade evolves. Production is sliced. A large portion of production is based on production networks. Imports are largely used as inputs for exports. Many countries are engaged directly and indirectly in producing final products. The development of global production chains, with an increased use of imported inputs, reduces the domestic value-added content of each unit of manufacturing production and exports. According to Cappariello, the decreased ratio of domestic value added to total exports was quite feasible in the major euro area economies in 2000–2007 with a stronger reduction for Italy than for Germany and France. This



phenomenon was also feasible in several developing countries (based on calculations from OECD Trade in Value Added in 2000–2009).

Indonesia's manufacturing sector was amongst seven gainers in the share of the world's manufactured products over the past 3 decades – even though relatively small – in terms of contribution to the world's value added in manufacturing. Indonesia's contribution increased from 0.1% in 1970 to 1.8% in 2011. Baldwin noted that the winners in the manufacturing sector over the last 3 decades are developing countries that industrialised by joining, rather than by building, production networks that are part of those of the United States (US) and Germany (namely, Poland and Turkey) and part of the production networks of Japan (namely, China, Indonesia, Republic of Korea, and Thailand).

However, the share of Indonesia's exports of machinery parts and components exports to total exports and total imports, which is widely used to indicate the degree of participation in international production networks, remained low at 13% and 37%, respectively, in 2000. Indonesia lags behind its peer countries – the Philippines, Singapore, Malaysia, and Thailand, and even Viet Nam.

This leads us to ask whether relatively high domestic contents and composition of exports are correlated: What do we know about value added of Indonesia?

This study then aims to provide evidence on the value added of Indonesia's products and insights in

designing trade, industrial, and investment policies to improve the value added of Indonesia's products.

The key message of the book is that Indonesia should not only pick certain industries to grow – by providing tax incentives or subsidies or allocating large amounts of national spending to develop certain industries – at the cost of other industries and inefficient resource allocation. Instead, the country should improve the basic conditions for all industries to grow – that is, improve infrastructure, quality of workers, and access to finance – and adopt conducive trade and investment policies that ensure the growth of all industries.

Geographic Scope: Indonesia, Southeast Asia

Trade in Value Added of Southeast Asia

Partners: ERIA Research Institute Network (RIN) members and the Organisation for Economic Co-operation and Development (OECD)

The economic growth of East Asia Pacific (EAP) has outperformed world growth over the last 2 decades, except from 1997 to 1999 due to the Asian financial crisis. Most East Asian economies are well positioned to weather renewed volatility. The drivers of global economic growth are shifting towards East Asia, and Emerging East Asian economies are well positioned to benefit from the growing power of Asian economies. The emerging Southeast Asian economies experienced strong growth in the last 2 decades and are estimated to be on a par with China.



China's growth pattern is changing as it moves up the income stages and is likely to rely more on consumption and less on investment and exports, and more on services and less on industry. This creates opportunities for Southeast Asia to expand its economies through trade and investment.

The study aimed to provide a framework on globalisation's second unbundling related to trade and industrialisation in Southeast Asia. Its objectives were to provide rigorous analyses on (i) Southeast Asia's value added and trade competitiveness; and (ii) product development, product variety, quality upgrading, export market concentration, and new market creation of its manufactured export products that will provide lessons on how to build or join production networks.

The key message of the book: trade is growing, production is sliced, and tasks are fragmented. More openness in trade and investment may tend to pull down the ratio of domestic value added but raise the total amount of domestic value added.

Geographic Scope: Australia, Cambodia, China, Indonesia, Japan, Republic of Korea, Thailand, Malaysia, Philippines, Viet Nam

