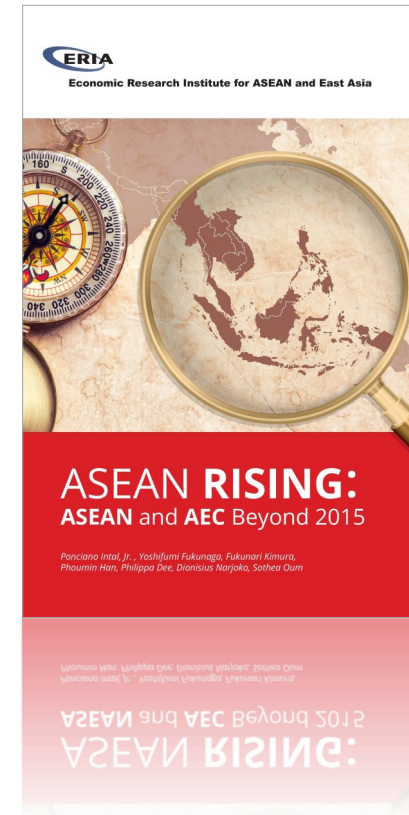


# ASEAN Economic Community

ERIA is tasked to provide analytical support to the work of the Mid-Term Review of the ASEAN Economic Community (AEC) Blueprint. It also conducts improvement efforts of the AEC Scorecard on several priority sectors. Furthermore, ERIA works closely with related governments to conduct necessary follow-ups to the Jakarta Framework and Bali Concord III which look beyond 2015.



## ASEAN RISING

By Ponciano Intal, Jr., Yoshifumi Fukunaga, Fukunari Kimura, Phoumin Han, Philippa Dee, Dionisius Narjoko, Sothea Oum

*ASEAN RISING: ASEAN and AEC Beyond 2015* puts together ideas, thoughts, and papers from more than 30 experts and specialists in the region on various areas relating to ASEAN and the ASEAN Economic Community (AEC) beyond 2015. It discusses the challenges for ASEAN and AEC, how to face them, and how ASEAN should move forward towards AEC 2015 and beyond.

ASEAN is predicted to be highly populated by 2030, with about 720 million people, making the region a huge market. It is likely that by 2030, three or four ASEAN Member States (AMSs) would be high income countries, two to four AMSs would become upper middle income countries, and three to four rising towards becoming upper middle income countries themselves. The AMSs should maintain the momentum of reforms, institutional development, and community building towards an integrated and highly contestable ASEAN, a competitive and dynamic ASEAN, an inclusive and resilient ASEAN, and a global ASEAN. This then translates into an ASEAN RISING indeed.

This publication is ERIA's latest endeavour to support ASEAN and the regional integration efforts in ASEAN and East Asia. The recommendations made in this project are hoped to help the region move forward confidently into 2015 and beyond.

## Automobile and Auto Components Industries in ASEAN: Current State and Issues

by Research Institute Auto Parts Industries, Waseda University  
ERIA Research Project Report 2013-7

The realisation of the ASEAN Economic Community (AEC) 2015 will result in a common market with a population of over 600 million. The creation of such a common market will have great consequences for the world economy.

This research project focuses on the impact of AEC 2015 on the automotive industry, which includes vehicle producers and auto parts suppliers. The reason is that the brand-to-brand complementation (BBC) scheme as proposed by Mitsubishi Motors allows the automotive industry to play an important role in the historic development of AEC. The BBC scheme and the ASEAN Industrial Cooperation, which were replaced by the ASEAN Free Trade Area (AFTA), developed into the present AEC 2015.

However, this development is not the only relationship between the automotive industry and AEC; AEC is, in fact, the driving force in the development of said industry. The agglomeration of the automobile original equipment manufacturers and the extensive supplier industry is linked to this growth. In short, the automotive industry has been a main promoter and beneficiary of regional integration. Therefore, the research will be limited to exploring the impact of the forthcoming AEC 2015 on the automotive industry.

## ASEAN Beyond 2015: The Imperatives for Further Institutional Changes

By Rizal Sukma  
ERIA Policy Brief 2014-05

As the members of the ASEAN are now committed to a deeper integration process towards an ASEAN Community beyond 2015, the need for greater and deeper institutionalisation has become more urgent. While ASEAN recognises the need to strengthen its institutions, as reflected in its commitment to undertake greater institutionalisation efforts mandated by the ASEAN Charter, the willingness of its member states to rely on regional institutions is still circumscribed by strong attachment to the principle of sovereignty and preference for maintaining unity amidst regional institutions without necessarily transforming itself into a supra-national organisation.

## Delivering Results in Standards and Conformance in ASEAN: The Critical Roles of Institutional Strengthening and the Private Sector

By Simon Pettman  
ERIA Policy Brief 2014-07

Addressing technical barriers to trade, as part of trade facilitation, is a key priority of ASEAN in achieving an integrated economy under the ASEAN Economic Community in 2015 and in building an effective and competitive economic community beyond 2015. Standards and conformance assessment measures, while seeking to ensure quality and safety of products for consumers, should not become barriers to trade across the region as ASEAN liberalises its trading regime. A delicate balance needs to be achieved between the two to build a thriving economic region. ASEAN has been working towards achieving standards harmonisation in its priority sectors of integration and bringing about regulatory convergence, taking into account the diversities in its 10 member states. More, however, needs to be done and, as this policy brief shows, the roles of institutional strengthening and the private sector are critical in this task.

## Education and Human Capital Development to Strengthen R&D Capacity in ASEAN

By Tereso S. Tullao, Jr. and Christopher James Cabuay  
ERIA Policy Brief 2014-01

Education is crucial in the process of economic development. Initially, investments in training and education produce the necessary technical workers. At higher levels of economic development, the formation of highly skilled technicians, engineers, and professionals are made through advanced levels of education. The accumulation of sophisticated types of human capital is a major factor in creating the research and innovation infrastructure of a mature economy. Yet, most ASEAN countries still have ways to go in order to fully develop their innovative capacity, judging by their research and development (R&D) capacity. Engineering, a significant source of innovations, needs to have its curriculum revamped to adapt to global competition and to cater to the need of countries to innovate. This study recommends the improvement of technical competence of engineering education, the exploration of possible cooperation among engineering schools and professionals, the development of the soft skills of engineering students, and the adoption of an innovation perspective in the development of a nation.

## Financial Integration Challenges in ASEAN Beyond 2015

By Maria Monica Wihardja  
ERIA Policy Brief 2014-08

Financial integration can potentially bring economic benefits. However, it also comes with potential risks. Since ASEAN's financial sector is generally bank dominated, the banking sector is a key driver in the financial integration process. The ASEAN Banking Integration Framework (ABIF) aims to provide financial stability in the region and achieve multilateral liberalisation in the banking sector by 2020 for ASEAN commercial banks. Given the diversity of financial market development, economic structure, and priorities among ASEAN members, the implementation process of ABIF is very challenging; the biggest technical challenges concern harmonising of the principles of prudential regulations and building financial stability infrastructure. Political challenges, meanwhile, stem from varying political commitments to ABIF between countries, with the ABIF process experiencing numerous domestic political backlashes.

ASEAN countries can learn lessons from European Union (EU) banking integration, although the ABIF will not be the same as that of the EU. Ultimately, ABIF will continue to progress in the 'ASEAN way', marked by small incremental changes, pragmatism, and countries retaining much of their sovereignty.

## Stimulating Innovation in ASEAN Institutional Support, R&D Activity, and Intellectual Property Rights

By Rajah Rasiah  
ERIA Policy Brief 2014-06

The policy brief suggests initiatives that poorer ASEAN member governments should take to stimulate technological upgrading of firms at the bottom with a focus on innovation, and discusses the governance framework of intellectual property rights (IPRs) in ASEAN. With an emphasis on technology as the driver of economic growth, typologies of taxonomies and trajectories are used to evolve a policy framework to coordinate the relationship between macro-institutions, meso-organizations, and micro-agents (firms) for ASEAN members to transform from developing nations to join Singapore as developed nations. Recognising the varying capacities of ASEAN members, the paper recommends that a common platform of IPRs be developed with the more developed members assisting the least developed ASEAN members to quicken the development of a technologically more egalitarian region.

## The ASEAN Single Aviation Market: Liberalizing the Airline Industry

By Alan Khee-Jin Than  
ERIA Policy Brief 2014-04

This policy brief presents an overview of the barriers facing air transport liberalization in ASEAN. It lays out the policies that governments should undertake to overcome these barriers, particularly in light of rapid changes in the aviation industry. It also assesses the incomplete or unfinished nature of the ASEAN Single Aviation Market that necessitates further liberalizing steps beyond 2015. In particular, more meaningful market access and ownership/control relaxations must be pursued to deal with the increasing competition from airlines outside the region. A united external policy is also required to enhance ASEAN's negotiating position vis-à-vis other countries and blocs.



## Towards Freer Movement of Skilled Labour in AEC 2015 and Beyond

By Siow Yue Chia

ERIA Policy Brief 2014-02

Movements of skilled labour in ASEAN have been largely from the lower income labour surplus economies to the higher income labour deficit economies in response to employment and remuneration differentials. The ASEAN Economic Community Blueprint includes the objective of free flow of skilled labour to facilitate flows in services and investment. However, free flow is obstructed by differences in qualifications, standards, and language proficiency as well as by national legal provisions and policies despite mutual recognition arrangements (MRAs) on professional services and the Agreement on Movement of Natural Persons. To facilitate free flows, their net benefits have to be emphasised; MRAs and labour market access be implemented effectively; and regional differences among tertiary institutions in standards, capabilities, and English language proficiency be narrowed through academic cooperation and exchanges, and joint establishment of regional centres of excellence.

## Transmission Channels of Economic Shocks in ASEAN

By Ruperto Majuca and Jesson Pagaduan

ERIA Policy Brief 2015-01

This policy brief examines the transmission of economic shocks both from the rest of the world into the ASEAN region and into a typical ASEAN Member State (AMS). 'Typical' here means representative AMSs, e.g., Singapore for a developed country, Philippines or Indonesia for ASEAN-5 economies, and Viet Nam for the CLMV (Cambodia, Lao PDR, Myanmar, Viet Nam) countries. It looks into the trade and financial linkages of a typical AMS and employs a specialised type of vector autoregression model to decompose the shocks into trade shocks, financial shocks, and commodity price shocks. The policy brief concludes with an analysis of the implications for macroeconomic policy coordination in the region.

## Auto and Car Parts Production: Can the Philippines Catch Up with Asia?

By Rene E. Ofreneo

ERIA Discussion Paper 2015-09

The Philippines pioneered the establishment of automotive assembly in Southeast Asia in the 1950s. But Thailand, Indonesia, and Malaysia have led the region since the 1990s. The foremost reasons for the decline are policy incoherence and unchecked inflows of smuggled cars, which are reflected in the erosion of the domestic automotive components supply base. Japanese assemblers are increasingly sourcing them from abroad through global production networks (GPNs), which has also made the Philippines a global producer of selected auto parts. Institutional support is necessary for the Philippines to take advantage of GPNs to catch up with the leading countries.

## China's Semiconductor Industry in Global Value Chains

By Xin Xin Kong, Miao Zhang, Santha Chenayah Ramu

ERIA Discussion Paper 2015-15

This article examines how global production networks have benefited technological upgrading in the semiconductor industry of China. Evidence shows that trade impacted positively on technological capabilities. The empirical evidence likewise shows that 93 percent of firms were engaged in incremental innovation activities, while 87 percent in new product development in 2012. Government support (90 percent) and collaboration with universities and research institutes (87 percent) have been pertinent in firms' participation in research and development activities.

## Current State and Issues of the Automobile and Auto Parts Industries in ASEAN

By Hideo Kobayashi

ERIA Discussion Paper 2015-22

This paper provides an overview of the current situation of the automotive industry in ASEAN and certain member states. The current state of the ASEAN automobile industry is explained by putting it in the global context, including the ASEAN strategy of original equipment manufacturers (OEMs) from Europe, Japan, and other countries.

In general, the ASEAN Economic Community (AEC) 2015 will likely impact the automotive industry, which has two distinct patterns: on one side is production in developed markets with an integrated supply chain, while on the other side is production in developing markets that is mainly based on assembly of imported completely-knocked-down kits. While Toyota's Intelligent International Multi-Purpose Vehicle project represents the former, those of Tan Chong and Truong Hai Auto Corp. represent the latter. Thus, cases will be investigated to show the distinct effects of AEC 2015 on automobile production in the ASEAN region.

## Firm-level Evidence on Productivity Differentials and Turnover in Vietnamese Manufacturing

By Doan Thi Thanh Ha and Kozo Kiyota  
ERIA Discussion Paper 2014-07

This paper examines the relationship between productivity differentials and firm turnover in Vietnamese manufacturing. The study utilised firm-level data between 2000 and 2009, including the year 2007, when Viet Nam joined the World Trade Organization. The major findings are: (i) the productivity of entrants, survivors, and exiters increased simultaneously from 2006 to 2007, suggesting that the cut-off productivity level increased after trade liberalisation; and (ii) the resource reallocation between firms was facilitated after the liberalisation. These findings are consistent with the implications of the recent models of international trade and firm heterogeneity.

## Global Production Networks and Host-Site Industrial Upgrading: The Case of the Semiconductor Industry in Thailand

By Patarapong Intarakumnerd, Pun-Arj Chairatana, Preeda Chayanajit  
ERIA Discussion Paper 2015-18

Although Thailand's electronics industry has been considered as one of the strategic sectors, the evidence in this paper shows it is dominated by midstream and downstream activities. Despite accounting for a quarter of electronics exports, semiconductors manufacturing is confined to low value added activities. The lack of industrial policy has restricted technological upgrading in the industry. Upgrading efforts made by both public and private initiatives have so far failed. The case studies show that firms in Thailand must acquire and develop technological capabilities to stimulate the industry's transformation from low to high value added activities.

## Globalization: A Woman's Best Friend? Exporters and the Gender Wage Gap

By Esther Ann Bøler, Beata Javorcik, Karen Helene Ulltvei-Moe  
ERIA Discussion Paper 2015-25

While the impact of globalization on income inequality has received a lot of attention, little is known about its effect on the gender wage gap (GWG). This study argues that there is a systematic difference in GWG between exporting firms and non-exporters. By virtue of being exposed to higher competition, exporters require greater commitment and flexibility from their employees. If commitment is not easily observable and women are perceived to be less committed workers than men, exporters will statistically discriminate against female employees and will exhibit a higher GWG than non-exporters. This paper tested this hypothesis using matched employer-employee data from the Norwegian manufacturing sector from 1996 to 2010. The identification strategy relies on an exogenous shock, namely, the legislative changes that increased the length of parental leave days available only to fathers. The paper argues that these changes have narrowed the perceived commitment gap between the genders and show that the initially higher GWG observed in exporting firms relative to non-exporters has gone down after the changes took place.

## Host-site Institutions, Regional Production Linkages, and Technological Upgrading: A Study of Automotive Firms in Viet Nam

By Nguyen Dinh Chuc, Nguyen Ngoc Anh, Nguyen Ha Trang, Nguyen Ngoc Minh  
ERIA Discussion Paper 2015-11

Using technological capabilities that take account of technology embodied in machinery, organisation, processes, and products, this paper examines its link with host-site institutions and regional production linkages. The statistical results show no relationship between these variables. In-depth interviews complement the quantitative findings. Overall, the results show that the government's localisation efforts failed because too many joint-venture assemblers were approved in the 1990s when the domestic market was small. The lack of economies of scale also affected the growth of national suppliers. Hence, national producers are confined to low value added segments and lack the quality to compete in export markets.

## Host-site Support, Foreign Ownership, Regional Linkages, and Technological Capabilities: Evidence from Automotive Firms in Indonesia

By Rajah Rasiah, Rafat Beigpoor Shahrivar, Abdusy Syakur Amin  
ERIA Discussion Paper 2015-08

This study analyses the influence of host-site institutional support, foreign ownership, and regional production linkages on firm-level technological capabilities using data from automotive firms in Indonesia. The results show that host-site institutional support and foreign ownership are positively correlated with technological capabilities. In addition, regional linkages show a significant and positive link on technological capabilities. However, regional linkages and foreign ownership explain more strongly technological capabilities than host-site institutional support in automotive firms in Indonesia. This evidence suggests that the supporting high tech environment requires further strengthening to stimulate higher technological capabilities of Indonesia's automotive industry.

## Import Penetration, Export Orientation, and Plant Size in Indonesian Manufacturing

By Sadayuki Takii  
ERIA Discussion Paper 2014-17

This paper empirically examines differential impacts of globalisation on plant size among plants with different characteristics, including initial plant size, import and export status, and ownership. After accounting for other characteristics, results of this analysis suggest that both import penetration and export orientation do not have differential impacts on the size of larger and smaller plants. This is contrary to fears that only relatively large plants can benefit from globalisation while smaller plants would lose their market shares. The results also suggest that the negative impact of import penetration on plant size is greater for importers and that the increase in export orientation positively impacts the size of exporting plants.

## Industrial Upgrading in Global Production Networks: The Case of the Chinese Automotive Industry

By Yansheng Li, Xin Xin Kong, Miao Zhang  
ERIA Discussion Paper 2015-07

This article examines the development of China's automotive industry. Evidence shows that integration in global production networks has stimulated upgrading of technological capabilities among automotive firms. However, the competitiveness and intra-industry analyses show mixed results. Although intra-industry trade in automotive products has improved since 2000, the trade competitiveness of completely built vehicles has largely remained in low value added activities. Nevertheless, firm-level evidence shows that the industry has undergone considerable upgrading, albeit in low value added activities. Trade integration and host-country institutional support have been the prime driving forces of technological upgrading of China's automotive industry.

## Institutional Support, Technological Capabilities, and Domestic Linkages in the Semiconductor Industry in Malaysia

By Rajah Rasiah and Yap Xiao Shan  
ERIA Discussion Paper 2015-16

This article examines the relationship between host-site institutional support and regional trade linkages on firm-level technological capabilities in the semiconductor industry in Malaysia. An evolutionary perspective was used to measure technological capabilities using knowledge embodied in machinery, organisation, processes, and products. The results show that host-site institutional support and regional trade linkages were correlated with technological upgrading. The relationship between host-site institutional support and technological upgrading was stronger than that between regional trade linkages and technological upgrading. Findings further revealed that host-site institutional support is more important than regional integration in influencing firms' capacity to upgrade their technological capabilities.

## **Intra-industry Trade, Product Fragmentation, and Technological Capability Development in Thai Automotive Industry**

By Patarapong Interakumnerd and Kriengkrai Techakanont  
ERIA Discussion Paper 2015-10

Thailand's automotive industry has evolved from a small import-substituting industry to a vibrant exporting one. It has contributed significantly and increasingly to the economy and intra-industry trade in Southeast Asia. The country also has experienced 'qualitative' change from simple production to technologically sophisticated activities. The evidence amassed illustrates that firm strategy and collaboration with other actors in the national innovation system were the most important drivers of technological upgrading in the industry. Local automotive part suppliers in particular had to become 'active' learners by collaborating with other partners beyond their own multinational buyers to compete in export markets.

## **Market Integration and Energy Trade Efficiency: An Application of Malmqvist Index to Analyse Multi-Product Trade**

By Yu Sheng, Yanrui Wu, Xunpeng Shi, Dandan Zhang  
ERIA Discussion Paper 2014-20

This paper uses the data envelope analysis method to investigate the Malmquist index-based gravity relationship between bilateral energy trade flows and their determinants throughout the world. Using a balance panel data of 40 countries between 1995 and 2008, this paper shows that market integration will increase energy trade by improving trade efficiency between trade partners, though allowing for a flexible substitution between different energy products tends to weaken these effects. This result highlights cross-product substitution and its implications for the aggregate energy trade pattern, providing insights on the importance of prioritising product-specific trade facilitating policies.

## **Migrant Networks and Trade: The Vietnamese Boat People as a Natural Experiment**

By Christopher Parsons and Pierre- Louis Vézina  
ERIA Discussion Paper 2014-09

This paper provides cogent evidence for the causal pro-trade effect of migrants and, in doing so, establish an important link between migrant networks and long-run economic development. It studies a unique event in human history, the exodus of the Vietnamese boat people to the United States (US). This episode represents an ideal natural experiment as the large immigration shock—the first wave of which comprised refugees exogenously allocated across the US—occurred over a 20-year period during which time the US imposed a complete trade embargo on Viet Nam. Following the lifting of trade restrictions in 1994, the share of US exports to Viet Nam was higher and more diversified in those US states with a larger Vietnamese population, resulting from larger refugee inflows 20 years earlier.

## **Multinationals, Technology, and Regional Linkages in Myanmar's Clothing Industry**

By Tin Htoo Naing and Yap Su Fei  
ERIA Discussion Paper 2015-14

Myanmar's clothing industry has played a pivotal role in generating employment and exports. This article makes a contribution to the explication of the role of supporting institutions in the development of clothing manufacturing in Myanmar. The statistical analysis show that technological intensity is not correlated with labour productivity and export intensity, which may be a consequence of the infancy of the industry and the use of old technologies in Myanmar. Also, the Probit estimations show that regional linkages matter in labour productivity and export intensities but not with technological intensities in Myanmar's clothing industry.

## **Offshoring and the Shortening of the Quality Ladder: Evidence from Danish Apparel**

By Valéria Smeets, Sharon Traiberman, Frederic Warzynski  
ERIA Discussion Paper 2014-12

A small and growing empirical literature, particularly that of Khandelwal (2010), has attempted to analyse the role of quality in our understanding of trade. This paper builds on this new structural literature using similar demand estimation techniques on a panel of Danish apparel firms from 1997 to 2010 to analyse how firms responded to China's entry to the World Trade Organization and to the dismantling of the Multi-Fibre Agreement. This paper explores the implications of offshoring and import competition on the distribution of apparel quality in Denmark, and demonstrates the firm-level mechanisms that induced the observed aggregate changes. Finally, it shows how import competition appears to spur entry of higher quality firms and exit of lower quality producers. Nevertheless, the reallocation pattern is imperfect, suggesting that two sources of heterogeneity—productivity and quality margin—are key to understanding these patterns.



## Social Protection in ASEAN: Challenges and Initiatives for Post-2015 Vision

By Mukul G. Asher and Fauziah Zen

ERIA Discussion Paper 2015-06

ASEAN is engaged in framing a post-2015 vision for social protection in the region that would facilitate productive ageing. This paper assesses existing social protection systems in ASEAN and suggests initiatives which policymakers and other stakeholders could consider for progressing towards a more robust social protection system. The paper argues that progressing towards the post-2015 vision of social protection will require greater coordination between the economic and social sector groups in ASEAN, as weak social protection systems existing today will increasingly constrain future economic growth. ASEAN as a group will also need to lessen its reliance on outside donors for funding and expertise. The specific initiatives suggested for facilitating productive ageing in ASEAN are (i) creating an ASEAN social protection forum for developing more robust databases, encouraging communication and indigenous research, and rendering technical assistance to members; (ii) pursuing measures to reduce expenditure needs of the elderly, including well-designed discount systems for public amenities and basic needs; (iii) giving greater priority to cross-border worker agreements to improve their living conditions, and encourage totalisation agreements; and (iv) enhancing professionalism and systemic perspectives.

## The CLMV Automobile and Auto Parts Industry

By Hideo Kobayashi and Yingshan Jin

ERIA Discussion Paper 2015-23

To begin, consider the general economic characteristics of Cambodia, Lao PDR, Myanmar, and Viet Nam, collectively known as the CLMV countries. These countries joined ASEAN relatively late and are economically less developed than the original members. According to the World Bank (2012), Viet Nam's gross domestic product (GDP) stood at US\$155.8 billion in 2012, Myanmar's at around US\$50 billion, Cambodia at US\$14.04 billion, and Lao PDR at US\$9.41 billion. Therefore, these countries can be labelled developing countries. The level of economic development is also reflected in their GDP per capita. While Viet Nam and Lao PDR roughly have US\$1,500, that of Cambodia and Myanmar are below US\$1,000 and are, therefore, among the least developed countries.

More than 20 years after the end of the civil war, Cambodia still has not progressed economically. Under the military junta, Myanmar's economy also stagnated but with the gradual democratisation process, the country is receiving foreign direct investment and appears to slowly improve its economic status. However, while all these countries are on the path towards market economy and are strengthening their trade relations with Western countries, the common characteristic is that these countries' economic relations are strongly linked to the United States, China, South Korea, and Thailand.

## The Garment Industry in Laos:

### Technological Capabilities, Global Production Chains and Competitiveness

By Vanthana Nolintha and Idris Jajri

ERIA Discussion Paper 2015-13

This article examines the relationship between institutional support and regional production linkages, and technological capabilities and firm performance in the garment industry of Lao PDR. Evidence shows that the technology of garment firms in Lao PDR have been upgraded considerably, and that firm performance and technological capabilities are determined by export intensity. Firms' technological capabilities are determined by the quality of host-site institutional support, while foreign firms have invested little to upgrade human capital in the country. In addition, firms of all ownership structure have invested little in research and development.

## The Indian Automotive Industry and the ASEAN Supply Chain Relations

By Tristan Leo Dallo Agustin and Martin Schröder

ERIA Discussion Paper 2015-24

Automotive supply chains have been increasingly studied as these raise questions related to economic development, especially from the perspectives of simultaneous globalisation and regionalisation, and trade. While ASEAN is a prime example of intraregional production networks, supply chains that connect ASEAN and India have not been studied in depth. Therefore, this paper investigates the Indian automotive industry, which is composed of automobile original equipment manufacturers and parts and components producers, and other supply chain connections to the neighbouring ASEAN region.

## The Transformation of the Clothing Industry in China

By Miao Zhang, Xin Xin Kong, Santha Chenayah Ramu

ERIA Discussion Paper 2015-12

This article examines the transformation of clothing manufacturing in China with a focus on institutional support, technological upgrading, and global production chains. Evidence shows that reforms and integration into global production chains have rapidly expanded China's exports but have also driven the relocation abroad of Chinese clothing firms. Global integration has motivated clothing firms to upgrade through learning, adoption, and innovation. Hence, despite improvements in technological capabilities, the share of clothing value-added in manufacturing has gradually declined. Also, China has increasingly faced industrial structural change from clothing to the capital goods, real estate, and high tech sectors.