



Trade and Investment



Innovation Policy in ASEAN

Edited by Masahito Ambashi

Innovation Policy in ASEAN is a first attempt at a comprehensive innovation study of ASEAN. The book includes not only an overall theoretical framework for ASEAN, but also individual country analyses based on detailed data, empirics, case studies including both those of success and of failure, and concrete policy recommendations ranging from national to ASEAN-wide regional innovation policies.

For ASEAN it is important not only to increase investment in research and development and innovative activities, but also to enhance innovation capability's physical and intangible characteristics, and improve the environment where innovation tends to take place. In the face of this significant challenge, achieving innovation can help each ASEAN Member State sophisticate its economies and industrial structures in the years to come. The book aims to provide insights for all stakeholders wishing to examine innovation policies in the region.

Are Production Networks Passé in East Asia? Not Yet

ERIA Discussion Paper 2018-03

By Ayako Obashi and Fukunari Kimura

Many people have a vague notion that the room for expanding international production networks is almost exhausted and that this is why international trade has slowed down since the recovery from the great trade collapse. This paper presents evidence against such belief in the East Asian context by classifying finely disaggregated international trade data into five categories based on the stages of the production process. Our thorough data examinations show that the slowdown in world trade and East Asian trade was attributed mainly to sluggish growth in trade of primary goods and processed raw materials. In contrast, East Asian trade in manufactured parts and components and the assembled end products within international production networks mostly seen in machinery industries, continued to expand steadily, underpinned by the intensive margin growth. We argue that East Asian production networks did not slow down and the potentiality of the production networks has not been exhausted yet.

Can Indonesia Secure a Development Dividend from its Resource Export Boom?

ERIA Discussion Paper 2018-04

By Rashesh Shrestha and Ian Coxhead

Indonesia has enjoyed a long spell of sustained and relatively rapid economic expansion, largely on the back of strong commodity prices. But threats to the continuation of this growth are mounting and Indonesia now faces the challenge of locking in gains and setting a course to sustain future development in less favourable times. Post-2000 growth differs from earlier experiences in that exports of agricultural products, especially palm oil, now play a leading role. In contrast to the country's earlier oil and gas export boom, the gains from agricultural export growth accrue mainly to private actors that include corporations, smallholders, and the agricultural labour force, with a much smaller share passing through to government budgets. Government can no longer simply mandate the use of funds for development purposes; many other actors and institutions are involved.

It is reasonable to assume that the benefits from such a decentralised export boom would be widely diffused, with relatively large effects on rural and farm households and lower-skilled workers. However, this boom has been accompanied by a sharp rise in inequality and virtually no real wage growth. Moreover, while spending rose robustly during the boom, it is not clear whether poor, farm-based households have chosen (or been able) to use the gains to smooth consumption or to invest for future generations.

China's Processing Trade and Value Chains

ERIA Discussion Paper 2018-02

By Lili Yan Ing, Wei Tian, Maiojie Yu

The authors of this paper investigate how trade liberalisation affects the performance of Chinese manufacturing firms. To better understand China's role in global value chains, they examine Chinese firms with a significant import share from Indonesia, one of its largest processing source countries. They found that Chinese firms with a greater import share from Indonesia perform better in productivity, export, and sales, and they are more likely to engage in processing exports. Moreover, the impact of foreign trade liberalisation on China's export scope is more pronounced for firms with a larger import share from Indonesia because of their greater extent of engagement in global value chains.

Entering the Export Market: Do Trade Missions Help?

ERIA Discussion Paper 2018-15

By Alfons Palangkaraya and Elizabeth Webster

In this paper, we investigate the impact of trade missions on export performance. Using the census of participant data of the State of Victoria trade missions during 2010–2013, we estimate the impact of trade missions at the extensive and intensive margins by employing matched difference-in-differences analyses. We find, on average, the missions increased participating firms' export value by more than 170%. We also find non-exporting (at the time of the mission) participants were 26 percentage points more likely to become exporters after the missions. There is evidence for diminishing returns for repeat participants and that the impact varies by the size and sector of the participants and by the destination country of the trade mission.

Exchange Rate Movements, Exporting by Japanese Firms, and the Role of R&D and Global Outsourcing

ERIA Discussion Paper 2018-19

By Tomohiko Inui and Young Gak Kim

We investigate the effect of the exchange rate on Japanese firms' performance in the international markets, using a comprehensive Japanese firm-level dataset. We examine the effect of firm characteristics on firm export dynamics at the firm-region export level. The estimation results overall indicate that a depreciation in the exchange rate may play an important role in export expansion or entry, but a limited role in additional entry to a new regional market. The results also indicate that Japanese firms strategically utilise imports to alleviate negative shocks from the exchange rate on exports for price competitiveness.

Export Dynamics and the Invoicing Currency

ERIA Discussion Paper 2018-14

By Kazunobu Hayakawa, Toshiyuki Matsuura, Nuttawut Laksanapanyakul, and Taiyo Yoshimi

In this paper, using finely disaggregated firm-level export data for Thailand, we examine how firms' export experience is related to the dynamic choice of the invoicing currency. We present evidence that the majority of exporters seldom change the invoicing currency for the same product/destination during the sample period. This evidence implies that changing the invoicing currency is costly for exporters. We also find that even after controlling for export size, the probability of choosing the export country's currency, or the producers' currency (PC) for the first export is significantly higher than for the export of the second and subsequent products/destinations. Assuming importers are risk averse, this finding implies that the accumulation of firm export experience provides better know-how for exchange rate risk management and enhances the use of currencies other than the PC in order to gain better profit. We also propose a theoretical model that provides the rationale for these empirical findings.

Exporter Dynamics and Productivity Dispersion within Industry

ERIA Discussion Paper 2018-20

By Keiko Ito

This paper uses the firm-level panel data for Japan to examine between-firm productivity dispersion, and explore whether export market entry improves productivity and accelerates productivity catch-up by new exporters in relation to frontier firms. Even though a sizable number of firms start exporting every year, this paper's results show that, on average, these new exporters' productivity growth rate tends to deteriorate after export market entry. The results also imply that in the case of Japan, the sluggish productivity growth experienced by almost all firms may be attributable to the very low or even negative productivity growth of national frontier firms or top exporters.

Failure of an Export Promotion Policy? Evidence from Bonded Zones in Indonesia

ERIA Discussion Paper 2018-16

By T. Yudo Wicaksono, Carlos Mangunsong, and Titik Anas

This study investigates the impact of the bonded-zone policy on firms' performance, employment, and extensive and intensive margins of exports, using Indonesia's medium-large manufacturing establishment database. We use modified difference-in-differences models to estimate the impact of the zones and exploit differences in the timing of zone approval as our identification strategy. Using a novel procedure to construct a data set of firms in bonded zones, we identified firms in bonded zones. We identified bonded-zone locations by using presidential, ministerial, and customs decrees that clearly lay out locations of the zones at the village level. We then linked this information with information from Statistik Industri. We consider the heterogeneity of factors that may bias the impact of the bonded-zone policy. Our research finds no consistent evidence that the zones promote exports either intensively or extensively. We do find, however, that bonded zones increase employment although not very robustly.

Imported Intermediate Inputs and Plants' Export Dynamics Evidence from Indonesian Plant-product-level Data

ERIA Discussion Paper 2018-13

By Sadayuki Takii

This paper asks the question of whether the use of imported intermediate inputs leads to an expansion of plant-level export scope. Using a panel dataset constructed from Indonesian plant-product-level data, the number of plant exports is regressed on the number of intermediate inputs imported by the plant. The results of the instrumental variable estimation support the hypothesis that importing leads to export expansion. The results also indicate that importing intermediate inputs from East Asian countries promotes the expansion of export to advanced countries.

Innovation Process in Public Research Institute: Case Studies of AIST, Fraunhofer, and ITRI

ERIA Discussion Paper 2018-10

Byeongwoo Kang

The design of national innovation systems has attracted attention from scholars and policymakers. Firms, universities, and government organisations (including public research institutes) are defined as the three major players, and interactions between the players are considered the key to a successful national innovation system. However, public research institutes are relatively understudied compared to firms and universities, even though their contribution to national innovation is not trivial. This paper aims to understand the detailed processes and reveals practical information regarding the innovation process in public research institutes. Focusing on the National Institute of Advanced Industrial Science and Technology (AIST) in Japan, Fraunhofer-Gesellschaft (Fraunhofer) in Germany, and the Industrial Technology Research Institute (ITRI) in Taiwan, this paper analyses and compares innovation processes of public research institutes with their patent data. Based on findings, this study further discusses issues for better management of public research institutes.

Product Innovation, Exporting, and Foreign Direct Investment: Theory and Evidence from China

ERIA Discussion Paper 2018-17

By Sizhong Sun

This paper explores the inter-connection between domestic firms' product innovation, exporting, and the presence of foreign direct investment (FDI). We first set up a theoretical model where, in a monopolistically competitive market, heterogeneous firms first make an optimal decision on product innovation and then set prices for their products in both the domestic and foreign markets. Under mild assumptions, the theoretical model generates a set of population moments, which are applied using data on eight three-digit manufacturing industries in China. We find evidence that firms' product innovation is positively correlated with their export revenue, and the presence of FDI affects firms' product innovation and export behaviour both directly and indirectly (via its impact on product innovation), albeit not in all industries. The findings have significant implications for policymakers, not only in China but also in other developing countries.

Technical Change, Exports, and Employment Growth in China: A Structural Decomposition Analysis

ERIA Discussion Paper 2018-09

Doan Thi Thanh Ha and Trinh Quang Long

This paper analyses the sources of employment growth and assesses the contribution of exports to job creation in China. To do so, we utilise an input–output table to decompose employment growth into contributions from technical change, labour productivity, domestic final demand, and exports of domestically produced output. Our main data source is the annual input–output data from the China Industrial Productivity Database covering 1981–2010, of which employment figures have been adjusted to account for serious structural breaks observed in official statistics. The input–output framework allows us to explore both the direct impact of exports on employment within a given industry and the indirect impact through inter-industry transactions. Our major findings are fourfold. First, the increase in final demand, including both domestic demand and exports, is the main driver of employment growth in China. The strong growth in final demand offsets the decline in employment caused by enhanced labour productivity, especially during the 2000s. Second, the contribution of exports to job creation has increased significantly, especially in manufacturing and agriculture, following China's accession to the World Trade Organization. Third, labour productivity accelerated in all sectors, led by manufacturing. Last, most technical upgrading occurs in manufacturing, while agriculture experiences increased technical upgrading through the decline in labour usage.

Infrastructure and Industrialisation: Ensuring Sustainable and Inclusive Growth in Africa

ERIA Policy Brief 2018-02

By Anita Prakash

Africa's economy is on a growth curve where development and investment plans must focus on the expansion of infrastructure, capacities, and institutions. Infrastructure development, which allows investing economies and companies to target the higher end of industrial value chains, will help to diversify the African economy and trade patterns, promote value-added production of goods and services, and boost consumption. Infrastructure planning and investment must be responsive to the development priorities of a country or subregion if infrastructure is to be an agent for growth and the narrowing of development gaps.