

## Sustainable Economic Development



### **Business Opportunities and Managerial Challenges for East Asian SMEs in the Globalized Economy: An In-depth Case Study of Japanese SMEs Multi-plant Operation in East Asia for Apparel and Clothing Accessories Production**

*Status: Ongoing*

*Geographic scope: China, Japan, Thailand, Viet Nam*

Three unlisted Japanese small and medium-sized enterprises were selected to study firm strategy based on information available only to insiders ('insider management studies'). Phase 1 of this research focuses on Firm A, a producer and seller of apparel products. The research team collected information by visiting Firm A's domestic and international factories and conducting in-depth interviews of its factory and distribution managers.

Focus is mostly on the economic reasons for maintaining labour-intensive production in Japan and the benefits from multi-factory operations in three countries. The study also sheds light to the importance of procurement/production/delivery lead times, the

difference in defect rates among Firm A's factories and subcontractors, and the burden of repairing defectives.

Japan's clothing industry struggles to manage risks associated with seasonal changes in sales and exchange fluctuations. This single-firm, multi-factory case study strategy helps better understand these issues; it enables inter-factory comparison of producing a specific product under the same quality standard. To manage the seasonality, Firm A combines make-to-stock and make-to-order. Choice of production sites for a specific product depends on procurement, production, and delivery lead time. Make-to-order requires a 'quick response', which factories in Japan can achieve. Each Japanese factory takes only 1 day to transport its products to the Saitama delivery centre; China takes more than 5 days; and Viet Nam, 1 week. Factory location influences on-time delivery; Firm A's factories in Japan and China and its distribution centre in Japan are near toll gates of expressways.

These findings contradict a widespread perception that labour cost is crucial to the choice of production sites for the labour-

intensive apparel manufacturing processes, leading to the conclusion that Japan is disadvantaged in apparel manufacturing. Such conventional perception significantly influences policy debates in upper-middle income countries in Southeast Asia that face competition from less-developed countries. This case study can provide policymakers and practitioners with new perspectives of policy alternatives and business strategies. It will describe such findings, investigate whether the findings from Firm A can be applied to other Japanese firms, and develop a theoretical framework for further empirical studies.

### **Distributional Effects of Disasters on Food Security in ASEAN**

*Status: Ongoing*

*Geographic scope: ASEAN, focusing on Cambodia, Lao PDR, Myanmar, Viet Nam*

The ASEAN Socio-Cultural Community (ASCC) Blueprint and East Asia Summit (EAS) statements clearly recognise the need for concerted efforts to address the issue of disasters and climate change and their impacts on socio-economic development, health, and the environment. ASEAN Member States (AMSs) agreed to implement 11 related actions based on the

principles of equity, flexibility, effectiveness, common but differentiated responsibilities; and enhance their institutional capabilities. Ensuring adequate access to food for all ASEAN peoples is also a priority agenda for ASCC Blueprint implementation. However, climate change and the increasing number of natural disasters are affecting regional and local food security.

Why are AMSs not investing more in disaster resilience, despite the prevalence and rising costs of disaster events? This may be because decision-makers in governments, businesses, and households tend to focus on avoiding losses from disasters, and perceive the return on investment as uncertain. Effective policy actions require sector-specific damage and loss of data for the agriculture and trade ministries of AMSs. The national strategies on disaster risk reduction and climate change adaptation that support resilience must address the types of disasters with the greatest impact on the agriculture sector. Government must design measures specific to the crop, livestock, and fisheries subsectors, and be enabled to adopt more systematic strategies that counteract the

impact of disasters on the growth and development of the agriculture sector, and on national and regional food security.

Nevertheless, the business rationale for climate change adaptation and disaster risk management should be based on the multiple dividends of resilience. Actions should look beyond avoiding losses (the first dividend) but to wider benefits to be gained independently whether disaster occurs.

Hence, the objectives of this study are to (i) understand key food security challenges posed by disasters and climate change and the required actions taken by policymakers to address these risks, (ii) share experiences on adjustment of key planning instruments relating to the agriculture sector, (iii) exchange experiences on successful adaptation measures across key vulnerable areas, (iv) undertake cost-benefit analysis and identify necessary structural and non-structural measures that could contribute to a resilient ASEAN.

## **Economic Policy Making in the Indonesian Economy**

*Partner: Centre for Strategic and International Studies*

*Status: Completed*

*Geographic scope: Indonesia*

Indonesia's President Joko Widodo started his government with great confidence, following the successful presidential election and strong public support for his economic agenda. Great expectations emerged for his agenda of reforms to achieve strong economic growth and higher living standards. The policies he introduced in the first few months of his leadership were encouraging. These include significantly reducing fuel subsidies and introducing new social assistance programmes.

However, the positive signal was short-lived. Several months later, it became clear that the government lacked a robust framework to achieve strong growth. Many policies or ideas for policies were not deliberated during preparation, did not have a visible strategy for implementation, or were inconsistent with other policy objectives.

While still subject to debate, the potential underlying issues are weak understanding (by policymakers) of the problem at hand, or lack of solution that can quickly be implemented or feasible for some issues, such as those in infrastructure development. Adding to the complexity of the problem is the tendency towards inward-looking policies and the emphasis on stability (over rapid growth) in the President's general economic agenda.

The research should contribute to the government by providing knowledge, ideas, or updated information to help the President and his government put effective policies in place. This project does so by supporting discussions on key policy issues by scholars and relevant stakeholders. Implicit in this project is the idea to contribute to the process of building a strong yet independent advisory group driven by the local research community.

The project addresses several topics such as infrastructure, food security, trade and industry, investment and business climate, fiscal policy and macroeconomic challenges, food security, and services. The outcome of the project includes 16 policy briefs and a website ([www.paradigmaekonomi.org](http://www.paradigmaekonomi.org)).

## **Human Resource Management and Coordination for Innovative Activities in Production Networks: Towards Effective Uses of Internal and External Resources**

*Partner: The Institute of Developing Economies, Japan*

*Status: Ongoing*

*Geographic scope: India, Indonesia, Japan, Lao PDR, Malaysia, Philippines, Thailand, Viet Nam*

This research focuses on the presence or absence of formal R&D organisations and on internal factors of firms to realise innovation.

Key findings include:

- Top management (owners/founders or professional chief executive officers) played important roles in initiating and executing technology upgrading in relation to human resource management.
- An organisational culture open to new ideas and to acquiring new knowledge cannot be taken for granted. The open innovation concept is becoming a norm for R&D/innovation management. Firms should enhance their 'internal' capabilities

to realise an open innovation strategy.

- Firms involved in innovative activities have a strong customer orientation. This, combined with top management's leadership, may help firms develop an organisational culture for innovation.
- Cross-functional team is widely introduced to use the internal resources of firms. ISO (International Organization for Standardization) standards are used to develop organisations focusing on innovation. Quality control practices are fundamental to innovative activities.
- A reward system – job promotion and monetary rewards – for personnel contributing to upgrading is present in some innovative firms. A separate career path for researchers helps retain those people and increase their morale.
- Firms need to collaborate and cooperate with other firms and institutions. Sales engineers play key roles in understanding customer needs and in establishing collaborative relationships with their customers. Trade fairs are used to find both customers and partners for innovative activities.

## **Industry 4.0: Empowering ASEAN for Circular Economy**

*Status: Completed*

*Geographic scope: ASEAN, China, Germany, Japan, and Republic of Korea*

The emerging economies of Asia are experiencing strong growth, accompanied by increased production and consumption. Ample evidence suggests that the regional economic development experienced in ASEAN, China, and India is associated with Industry 1.0 (through introduction of mechanical production facilities powered by water and fossil fuel). This slightly differs from Industry 2.0 (where mass production is based on the division of labour and renewable electrical energy). This was followed by Industrial Revolution 3.0, where electronics, information and communications technology, and robots played a key role in automating production. For the last several years, analysis of industries 1.0, 2.0, and 3.0 has been largely absent from the assessment of integrated economic and environmental policy formulations. Recent agreements on Intended Nationally Determined Contributions (INDCs) by major developing countries of the East

Asia Summit (EAS) also highlight the importance of understanding the improvements in resource efficiency that will drive Industrial Revolution 4.0.

Industry 4.0, where a new economic model replaces the linear approach to industrialisation and which considers resource constraints and application of product and process innovation, will become an economic and social imperative for the EAS region. Linking economic opportunities in ecosystem boundaries of industrialisation requires a disruptive paradigm shift.

This study revealed the following:

- The introduction of Industry 4.0 in the manufacturing environment is ushering new opportunities for export-oriented middle-income countries. But the status of technology and innovative capacity is not yet considered seriously in sectoral policies.
- In the transition towards a circular economy, refurbishment can be applied to regain value from used products, reduce waste, and improve resource efficiency. Indicators in cities and sectors need policy attention.
- Creating integrated business models to meet the targets of Industry 4.0 and a circular economy needs further policy incentives and capacity building programmes.

## **Policy Index for Natural Disasters Resilience**

*Status: Ongoing*

*Geographic scope: 50 pilot cities in Indonesia (but the formula can be applied anywhere)*

ASEAN is one of the world's most vulnerable regions to natural disaster. This project aims to evaluate the influential factors to a region's resilience, construct the index to represent said resiliency, and apply the formula to pilot regions.

The research faces several challenges: (i) there is no universal definition of resilience; (ii) scholars have constructed some formula but so far there is no evidence to prove their accuracy; and (iii) the value of variables is usually relative from one region to another because of different use by locals.

Using the Schipper and Langston (2015) approach, the research team will define the influential variables to represent the capabilities of learning, options, and flexibility to be used as proxies for resilience. The three groups of variables to characterise influential variables are financial and economic capital, social

capital, and institutional capital. The research team will construct a relative position of the city for each variable. The result will provide policymakers with the data of areas that need to be maintained or improved.

## **Reducing the Vulnerability of Supply Chains and Production Networks**

*Partners: ASEAN Socio-Cultural Community, ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre)*

*Status: Completed*

*Geographic scope: ASEAN, China, India, Japan, Republic of Korea*

The global supply chain and production network is an example of an economic structure that is vulnerable to impacts of unexpected events. Whereas several studies investigated the direct impacts on specific geographical areas or production networks over the past decade, quantifying the economic effects of extreme weather events and economic crisis on such production networks gained less attention. The great complexity of the global economic system, coupled with methodological and data gaps, makes it difficult to estimate the interrelated effects of unexpected events.

The apparent ability of some supply chains to recover faster than others has recently triggered an important policy debate on supply chain resilience. A clear understanding of this phenomenon is a fundamental step in building socio-economic resilience. Within this context, this study aims to (i) define the conceptual and sectoral domains of supply chain risk management and resilience by examining the welfare effects of extreme weather events and other economic shocks on the selected global supply chain in East Asia Summit economies; (ii) analyse the scope of public-private partnerships in tackling the risks by exploring empirically the effects of supply chain risks and information management, and the four formative supply chain capabilities of flexibility, velocity, visibility, and collaboration; and (iii) propose a regional cooperation framework in the context of major manifest supply chain vulnerability events, such as disasters and global financial crisis.

The study revealed the following:

- Extensive supply chains can negatively affect recovery because of higher vulnerability to network disruption, and positively through support from trading partners, easier search for new partners, and the general benefits of agglomerations – thus, policies to support the resilience programme.
- Procurement activities and public financing immediately after disasters significantly contribute to creating supply chain resilience. Certain intra-organisational and inter-sectoral issues also impact supply chain resilience. Business continuity plans need specific considerations.

This study identified which supply chain capabilities can support the containment of disruptions and how these capabilities can be supported by the ASEAN Agreement on Disaster Management and Emergency Response (AADMER).

### **Social Protection Floor: A Perspective from Developing East Asia**

*Partners: National Economic Research Institute ; Philippine Institute of Development Studies; Thailand Development Research Institute; National University of Singapore; Fudan University; Ministry of Labour, Invalids, and Social Affairs of Viet Nam; Council for Agricultural and Rural Development Cambodia*  
*Status: Completed*

*Geographic scope: China, India, Indonesia, Philippines, Thailand, Viet Nam*



East Asian economies have different ways and time frames in developing and implementing social protection programmes. The study portrays and critically discusses the how public policy responds to the dynamics of global trends, including the Millennium Development Goals and the ASEAN Sustainable Development. Adopting a social protection floor progressively requires dedicated funds that largely come from the state budget. The issue of creating sufficient fiscal space to finance social security is usually only being lightly discussed, while it is actually one major challenge in implementing the social security system.

This study discussed implications on fiscal space and reviewed different aspects of methodologies needed to assess the sustainability of social protection. The cases were from East Asian countries with the largest population – China, India, and Indonesia – and several emerging economies – the Philippines, Thailand, and Viet Nam. There had been ample lessons from each country and suggestions for moving forward.

The study also examined the concept of social protection system and its floors, and

reviewed the debate on – and methodologies needed to assess – social protection sustainability and affordability. Availability of good quality statistics on social protection expenditure, financing, coverage, and adequacy is a precondition for good quantitative governance of any public expenditure programme. Therefore, attention is drawn to existing challenges towards the availability of social protection statistics at the national and international levels. Policymakers should be aware of these data limitations when they undertake social protection initiatives.

Finally, the study tackled the debate on going beyond pure static accounting in assessing the financial sustainability of public expenditure and discussed various challenges associated with incorporating projection results into inter-temporal government accounts.