

Report on Open Seminar

Roles of Regulation and Private Standards

in the Management
and Performance of
Value Chains

The Institute of Developing Economies
Japan External Trade Organization (IDE-JETRO)

Institute of Development Studies (IDS)
University of Sussex

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Introduction

The Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO) has conducted research on issues on the role of regulations and standards and their impacts on firms through global value chains. The characteristics of regulations and standards that we have been targeted as a research topic are to assess to what extent regulations and standards act as non-tariff barriers.

Regulations and standards can become a trade barrier because unless complying to regulations or meeting standards, exporting firms will lose market access, and firms that are part of value chains exporting to such markets may lose their customers, and firms that plan to enter to regulated export markets may face entry barriers.

To deepen analysis and to gain wider perspectives in this issue, IDE-JETRO and the Institute of Development Studies (IDS) conducted an international research project 'Roles of Regulation and Private Standards in the Management and Performance of Value Chains' from 2014 to 2015. To share on-going research findings and to have discussions on this matter, on February 9, 2015, an international workshop was organized inviting experts from different fields. An IDE-JETRO team is led by a project leader Dr. Etsuyo Michida and Professor Humphrey from IDS organized the event.

We invited several experts from relevant professional arena as discussants, namely Mr. Steve Homer, director of SMHProject Limited (consultancy firm for CSR and agri-standards) as a regulation and standard analysis expert, Dr. Peter Holmes, (Project Director of Sussex Innovation Centre, Sussex University) as an eminent academia in Economics and European law, and Professor Roger Strange, Professor of International Business, Sussex University, as an expert of global business and management particularly in the East Asian context. All experts have deep background knowledge and understandings on the issues relevant to the scope of the workshop.

Central aims of the workshop are to address the complexity of the interrelations between public regulations and private standards and their impacts on trade and to discuss how these regulations and standards impact policies of Asian countries and Asian firms' activity through global value chains (GVCs).

The geographical area of our interest is the Asian region, a world manufacturing centre in which fragmented production networks are formed with GVCs that cover both developed and developing countries. Chemicals regulations such as EU RoHS Directive and EU REACH Regulation both of which regulate chemicals in products with chemical-related private standards and food safety regulations with food-related private standards such as Global G.A.P. that was originally established by a European retailer group are the one of the main focuses in this workshop. The aim of this article is to summarize the discussion we made and to highlight the major findings we reached at the workshop.



**Public Regulations
and Private
Standards:
Complexity of
Interrelation and
Potential Impacts on
Firms' Activity in
GVC**

Public Regulations Have Faced a Challenge

Public mandatory regulations are set by governments and many regulations aim at protecting human health, safety, and the environment by restricting inclusion and distribution of contaminated food or hazardous chemicals in manufactured products. However, in recent years, public regulations have faced a challenge and have been revealed to have limitation in terms of effectiveness and coverage.

There are four reasons behind this. First, government sectors faced with tighter fiscal space play smaller role due to budget constraints. Second, the society prefers market oriented policies over regulatory policies. Third, government can obtain limited information on business activities under globalization. Coordination of value chains that are extended and fragmented across the world is becoming difficult. While domestically located value chains are more likely to be governed by national level regulations, it has become more difficult to control the chain when it extends beyond the national borders. Finally, regulations needs to be based on scientific evidence but it sometimes takes a long time to prove the causality scientifically so that another quick solution beside public regulations is demanded.

Firms Prefer to Adopt Private Standards Established by the Third Party

Therefore, supplementing public regulations, private standards have emerged while private sectors are expected to take more social responsibility on providing food and goods that are safe and environmental friendly.

Final good producers need to assure that their products meet technical regulations and are safe for consumers. When firms along the chains have closely ties, a lead firm which often coincides with a final good producer has to manage the chain which is consisted of fragmented group of firms located in different countries and it is increasingly challenging.

Under such circumstances, the lead firm would prefer to adopt a private standard established by the third party, which helps their suppliers to comply with both legal and other requirements in the market rather than lead firms themselves establish a management process on their own (and incur the audit costs themselves).

Public Regulations and Private Standards Complement Each Other

In food safety area, interrelation between EU food safety regulation and Global G.A.P. which is designed for encouraging good agriculture practice and governing primary product production processes present an example that public regulation and private standard functionally complement each other.

EU food safety regulation mandates importers that they must meet legal requirements on risk assessment along entire food value chains. To comply, importers have incentive to choose competent suppliers by way of requiring them to obtain private standard certification.

A similar interrelationship between public regulation and private standards is not restricted to food sector but is also observed between EU Timber Regulation and Forest Stewardship Council for forestry resource conservation with regard to forestry products.



**Diffusion of EU
RoHS/REACH
and Global GAP in
East Asia:**

Our observation shows that both EU RoHS/REACH regulations and Global G.A.P. standards are diffused to Asian countries and similar versions are implemented as their policies. As these are the regulations/standards introduced in an important market, motivations of countries that implement the similar measures are to help local firms to smoothly adapt to the regulations/standards of their export market by having similar content in their own languages, to prevent inflow of substandard products that cannot be exported to EU, and to have stricter health or safety policies after observing EU's policy.

Asian Local Standards: Similar yet Different

However, Asian countries have introduced similar yet slightly different regulations/standards to reflect their local conditions and intentions. The climate conditions, motivations, or economic situation behind replicating the EU policies are so diverse that reflecting the diversity, we find many variations of the contents of replicated regulations/standards across Asian countries. As soon as these are used as some requirements of business, it may create trade barriers in the region. However, there is no global platform to discuss and to coordinate domestic regulations/standard that can have global impacts but some coordination is necessary.

Less Global G.A.P. Diffusion in Japan

Here, we illustrate the case of Global G.A.P. diffusion in Japan and China. As Global G.A.P. is recognized globally, it has been diffused in several distinguished ways. In Japan, GAP has been accepted and been promoted by Ministry of Agriculture, Forestry and Fishery (MAFF) as more to promote domestic 'good agricultural practices' for each of local level farmers than to serve as a certification which enables them to export their products to overseas markets particularly in the EU.

Agriculture cooperatives and groups of farmers have, therefore, adopted their own version of 'GAP' which should appropriately suite their local conditions; products, climate, geographical location etc. As a result, more than hundreds of local 'GAPs' were established in Japan. Besides, we can observe other types of GAPs in Japan including JGAP established by a private standard setting organization, Coop GAP developed by the retailer.

However, motivations and stakeholders of these GAPs are different from those of Global G.A.P. Japanese agrifood producers are less likely to be motivated to obtain Global GAP certification, because Japan has relatively small portion of agrifood export to the EU market.

Indonesian Government Adapted Global G.A.P.

With regard to interrelation between public regulation and private standards, Indonesian case offers an interesting case. The Indonesian government has started requiring a GAP certification that includes Global G.A.P. for obtaining licenses to import some agricultural products as a public regulation. Global G.A.P. was originally developed as private standard but now it is used as a part of a public regulation outside European countries.

As ASEAN market is a promising export market for Japan, Global G.A.P. certification and other variants might be important for future exportation. Therefore, Japanese exporters obviously need to look at Global G.A.P. not only when their destination market is EU but those that export to ASEAN markets also may be required to obtain Global G.A.P. or other equivalent GAP.

Japanese government has started considering to increase Global GAP certified producers in order to achieve the agrifood export target reaching 1 trillion yen by the year of 2020 through expanding its export particularly to emerging ASEAN market including Indonesia.

Global G.A.P. diffusion in China

Chinese case is also a case of government policy formulated based on foreign private standard. In China, the government has introduced China GAP as a Chinese version of Global GAP as a voluntary certification scheme; China GAP has been once benchmarked against Global GAP, and there are more than six hundred certified producers as of July 2014. However, the number of certified producers remains still quite small compared to the massive amount of national level agrifood production.

Moreover there is two unbalanced development; one is between developed coastal regions and less developed inland regions in China and the other one is between sectors to the other in primary products. For example crop sector is relatively well certified; more than 70% of total firms in the sector are certified in 2013, aquaculture sector remains in less than 5% of certification. China aims at expanding export as well as securing more safety foods provision in domestic market through China GAP diffusion.

Is It Fit for the Purpose?

Interestingly, for example, Thailand has two different GAPs in two different purposes; one is Thai GAP for trade promotion (private standard), the other one is Q-GAP for ensuring food safety (public standard).

As already discussed, Global GAP has been adopted in respective countries reflecting the different motivations, climate, and economic conditions. However, the question remains, "Is it fit for the purpose?" GAPs in Japan are more likely to concentrate its focus on highly qualified branded (export) products differentiation, whereas China GAP tries to upgrade its large quantity of food production to be safe both for export and for domestic consumption.



Impacts on Firms' Activity

Product related Environmental Regulations: Their Impacts on Firms' Activity

The Workshop also accommodated empirical analyses which econometrically measures the impacts of product related environmental regulations such as EU Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) and Restriction of the use of certain Hazardous Substances (RoHS) and other environmental regulations on firms' activity.

There are three different perspectives: first one is to assess the impacts of imposing regulations on firms' response to adoption of private standards.

The second one is to examine whether imposing regulations give impacts on firms' operational performance. The third one is to see whether behavioral changes of firms adopting Carbon Disclosure Project (CDP) on measuring Scope 3 emissions (all indirect emissions that occur in the supply chains, including both upstream and downstream emissions) can be observed.

First analysis primarily argues that the sampled firms in manufacturing sector in Malaysia which adopted ISO9001 are more likely to adopt ISO14001 than the firms do not. Based on this argument the analysis identifies that imposing REACH has indirect effects to the firms for adopting ISO14001 by promoting ISO9001 which requires firms to ensure their quality control measure which helps firms to avoid the risks of chemical contamination in their products.

Second analysis argues that imposing REACH and RoHS affects the performance of firms in Malaysia and Vietnam in the following way: if firms comply with the regulatory requirements they increased the probability of export in more diverse markets even they need to carry additional production costs for compliance.

Third analysis identifies that the manufacturing firms in Japan which get involved in CDP is more likely to measure their Scope 3 emissions. The analysis also emphasizes that information disclosure requirements regarding emissions from their stakeholders such as investors and customers have stronger effect on the firms' behavioral change of dealing with emissions.

Conclusion

Although there are some specific differences between food safety and product related environmental regulations, firms commonly need to comply with the regulations, otherwise they are likely to be less competent and may be eliminated from the market.

Some evidence shows that imposing regulations and standards encourage firms to be more competent, when firms have sufficient capabilities to comply with the requirements whereas these regulations and standards might be a barrier for entering a market if firms fail to comply with them. Complicated interrelationship between public regulations and private standards makes it difficult for firms to operate. Even worse, inconsistency and duplications among standards leads to massive increase in their compliance costs.

Therefore, research needs to keep addressing the current complexities. This would help firms to have better understanding what the current challenges are, how much burden these regulations and standards are imposed on producers in particular regions and how they should respond to it. The results of this kind of research could point to a right direction in terms of the regulatory and standards cooperation among different countries perhaps through regional agreements.

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Appendix 1 : Session Information

“Product Related Environmental Regulations and Trade”

Date: 9 February, 2015

Location: Institute of Development Studies, University of Sussex, England

Time	Title	Speaker
9:00	Opening	Kaoru NABESHIMA, Chief Senior Researcher, Inter-disciplinary Studies Center
	PART I	
9:10	Regulations and Private Standards under Globalization (Discussion)	Etsuyo MICHIDA, Environment and Natural Resource Studies Group
9:40	Analysis of Interaction between Regulation and Private Standards (Discussion)	John HUMPHREY, Professorial Fellow, Institute of Development Studies
11:00	Break	
11:10	Diffusion of Private Standards: A Case of Japan GAP	Kaoru NABESHIMA
	Diffusion of Private Standards: A Case of China GAP (Discussion)	Lei LEI, Business and Industry Studies Group
12:00	Lunch	
	PART II	
13:00	Product-related Environmental Regulation and Voluntary Environmental Actions in Vietnam (Discussion)	Toshi ARIMURA, Professor, Waseda University
13:30	Estimating the Effect of Chemical Safety Standards on Firm Performance (Discussion)	Tsunehiro OTSUKI, Professor, Osaka University
14:00	What Factors Facilitate Environmental Practices through the Supply Chain? The Case of Scope 3	Hakaru IGUCHI, Assistant Professor, Atomi University
14:30	Break	
14:40	Discussion	
16:20	Closing	

Appendix 2 : List of Panelists

Toshi Arimura, Professor, Waseda University

Peter Holmes, Project Director, Sussex Innovation Centre, University of Sussex

Steve Homer, Director, SMHProject Limited

John Humphrey, Professional Fellow, Institute of Development Studies, University of Sussex

Hakaru Iguchi, Assistant Professor, Atomi University

Lei Lei, Institute of Developing Economies, JETRO

Etsuyo Michida, Researcher, Institute of Developing Economies, JETRO

Kaoru Nabeshima, Chief Senior Researcher, Institute of Developing Economies, JETRO

Tsunehiro Otsuki, Professor, Osaka University, School of International Public Policy

Ewan Robinson, Research Officer, Institute of Development Studies, University of Sussex

Roger Strange, Professor, International Business, University of Sussex

Kenmei Tsubota, Institute of Developing Economies, JETRO

Noburu Yoshida, seconded to Institute of Development Studies, IDE

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