

Impact of Chemical-related PRERs on Firms in Vietnam

Etsuyo Michida
Kaoru Nabeshima

Introduction

Environmental and health related regulations for products, or product-related environmental regulations (PRERs), that are imposed by importing countries have raised concerns among exporting countries. If exported products do not satisfy the regulatory requirements, these products cannot be placed in regulated markets and firms might face technical barriers to trade. The concern is especially relevant to countries in Asia, which have been the center of the global manufacturing and are where many parts and component suppliers of global assemblers are located. However, little examination has been done to gauge the impacts on these industries and assess how firms have adapted to PRERs. To examine the situation, the Institute of Developing Economies at the Japan External Trade Organization (IDE-JETRO) has conducted a survey of firms in Vietnam that focuses on the impact of chemical-related regulations, such as the European Union (EU) Restriction on Hazardous Substances (RoHS) directive¹ and Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation² in 2011–2012. We distributed the survey to 12,000 firms, of which 1,055 firms responded. Around half of the responding firms were domestic firms and 30% were subsidiaries of foreign firms.

Nearly half of firms in Vietnam were requested to improve their management of chemical ingredients

Among respondents, 43% of Vietnamese firms had been requested by their customers to improve the chemical management related to their products. The rate of product rejections by customers due to improper use of chemicals in products is 5% on average. A key question is whether or not PRERs have hampered the market access of firms to the EU. The survey shows that only 4% of firms have changed markets due to chemical-related PRERs. However, 29% of firms have changed materials to meet PRER requirements and 51% of firms answered that they use different materials depending on the destination market. These results are similar to those found in our Malaysian survey (Policy Brief No. 8).

As a result of adapting to the PRERs, 60% of firms experienced an increase in the cost of production and 71% of firms responded that there has been no change in their level of exports, and 41% of firms answered that they adapted to the regulations and requirements to avoid rejections by their customers. Adapting to PRERs is becoming mandatory to stay in business.

Supply chain management is crucial for successful adaptation

The results of the Vietnam survey also show the importance of supply chain management in terms of motivation to meet requirements and to successfully share information on regulations, as well as on allowable chemicals. One quarter of firms took actions in response to customers' demands and 12% did so on their own initiative. If products are exchanged in anonymous spot markets, a firm typically cannot obtain the necessary information for compliance with regulations and customer requirements. Among respondents, 60% of firms know the names of the regulations that they are required to meet, but the remaining firms blindly followed measures to meet customer demands. Fully 90% of firms answered that customer and supplier assistance is important for adapting to the regulations. Good communication along the supply chain is important for a firm to take appropriate actions.

Discussion

The process of adapting to PRERs through supply chain management requires firms to have better traceability. Firms with this capacity are more competitive than those without. Some firms changed inputs to meet the product requirements; this implies that adapting to PRERs has changed the structure of supply chains through the switching of suppliers. Firms with the capacity to participate in supply chains with better traceability are more competitive, while firms that do not may face entry barriers to highly regulated export markets. Moreover, to meet the PRER requirements, final assembling

firms tend to procure from a smaller number of capable suppliers to control non-compliance risks. This accelerates the consolidation and vertical integration of supply chains. The number of PRERs is rising around the world (see Policy Brief No.7) and could negatively impact small and medium enterprises, which have less capacity to adapt to new requirements. Governments need to pay special attention to SMEs and provide sufficient information to them so that these firms can enter and stay in the export market.

1. The EU RoHS directive was implemented in 2006. It restricts six hazardous materials—lead, mercury, cadmium, polybrominated biphenyl, and polybrominated diphenyl ether—contained in electronic and electrical equipment.
2. EU REACH regulation was implemented in 2007. It regulates chemical substances, as well as chemicals contained in products, that cause serious concern for consumers' health and the environment without specifying product categories.

(Etsuyo Michida, IDE-JETRO/ Kaoru Nabeshima, Chief Senior Researcher, IDE-JETRO)