EXECUTIVE SUMMARY

This research project examines firm- or plant-level adjustments in response to globalization, or trade and investment liberalization, utilizing micro data on seven East Asian countries. The primary goal of this project is to enhance our understanding of the various dimensions of the causes, as well as the consequences, of the international trade and investment flows. It is our view that a better understanding of these issues is important not only for maintaining the current momentum toward a closer economic integration among countries but also for strengthening its linkage with economic growth and development of each country.

Since the 1990s, research in international trade has shifted its focus from country- or industry-level analysis to firm- or product-level analysis, and the accumulation of both theoretical and empirical research along the latter line has provided us with new insights into the causes and consequences of the aggregate trade and investment flows. This shift was first triggered by some new empirical regularities put forward by several pioneering studies, which could not be reconciled with traditional Hecscher-Ohlin theories or the new trade theories based on monopolistic competition and horizontally-differentiated products. Motivated by the these findings as well as the earlier research on industry dynamics that emphasized the important role of resource reallocation in the aggregate productivity growth, Melitz (2003) theoretically showed that trade liberalization can improve aggregate productivity by triggering selection and reallocation among heterogeneous firms even when firm-level productivity is fixed. Taking the implications of the Metitz' paper as a theoretical framework, various authors further examined micro data and came up with new empirical findings. Having growing this fast, yet this literature has not exhausted all issues relevant to the theory and trade literature in general. This report attempts to make some contributions along this line, addressing the current and some of the remaining issues using the experiences of seven East Asian countries: Japan, China, Korea, Indonesia, Malaysia, Philippines, and Vietnam.

The topics addressed in each paper are diverse, but all papers try to empirically assess the causes and/or the effects of international trade and investment and clarify the

adjustment mechanism of firms or plants along various dimensions. The nine papers can be classified into the following three groups: (1) Export Market Dynamics, Finance, and Intermediaries, (2) FDI Spillovers and Adjustment of Production Network, and (3) Plant Exit, Mark-up and Labor Market.

The first group of papers addresses the role of finance in determining the dynamics of firms in export markets. These chapters show that banks, or other financial intermediaries, are institutions that are able to support participation of a firm in exporting. The study on Chinese exporters reveals that the extent of a firm's financial constraint matter in determining the increase in the number of exported product as well as wider export destination. The other study that examines Japanese exporters underlines the important role of banks as a conduit for information about export markets. As a result of dealing with exporters, over the time these kind of banks build a pool of knowledge about export markets which in turn can be shared to firms which are about to start exporting. This study indeed finds evidence of this, and the marginal benefit seems to be the largest for new exporters, not for the existing one. The finding on the role of banks as provider of information is consistent with the view of expensive cost in exporting, especially for the new ones. The study using the data of Vietnamese small and medium enterprises (SMEs) shows that because of the costly efforts to penetrate export markets, many of the Vietnamese SMEs initially use the services of other firms to sell their products overseas before directly doing so.

The second group of papers addresses the issues related to foreign firms. The study on Indonesian manufacturing finds evidence on the existence of positive spillovers from the presence of multinationals through forward linkages. This study further finds that the effects are stronger for firms at the downstream that source input locally. Underlying this analysis is the presumption that foreign firms operating locally produce higher-quality, lower-cost inputs than imported inputs, and/or increase the availability of inputs. Under these conditions, the downstream firms that source inputs locally are more likely to benefit from them. The other study examines the decision to shut down overseas affiliates of a multinationals, using a case study of Japanese multinationals. It finds that affiliates located in a country small numbers of agglomerations are likely to be shut down. This is true regardless the level of development of the host countries. This finding however also finds that multiple (i.e., too many affiliates) in one country lead to higher probability of any affiliate to be shut down. This study overall sends a message that a consolidation of MNE's affiliates is expected as countries' markets are more integrated with each other.

The last group of papers addresses the differential impact of trade liberalization on firms. The paper using the data of Philippines manufacturing plants finds that trade liberalization has a differential effects on firm exit probability depending on the level of productivity, which is broadly consistent with the theoretical prediction. One paper, which uses Korean data, examines the effect of exporting on markup and total factor productivity (TFP). A particular attention is given to the effect of export intensity rather than export participation. Utilizing a generalized propensity score matching methodology, this study finds that the pro-competitive effect and the productivity-enhancing effect from exporting are found for a subset of firms. In particular, it finds an inversely U-shaped relationship between export intensity on the one hand and markup and TFP on the other. Meanwhile, another paper that utilizes Korean plant-level data reveals that exporting firms experience much faster skill upgrading than non-exporters, and this is accentuated if the exporting activities is complemented by more intensive innovation activities.

The findings of the studies covered by this project provide useful suggestions for policy makers. In general, what seems to have emerged from these studies is a direction of policies that is able to give just a 'right' balance between, first, policies to maximize the benefit from liberalization in trade and investment regime and, second, policies to minimize the adverse impact from the losers of the more opened economy. The studies conducted in this project also highlight the importance to focus on detailed and targeted policies, either those of services sectors or those which are rather specifically targeted to a group of firms.

More specific policy suggestions coming out from these studies are the following. First, it is important to develop financial sector, at the same time when a country liberalize its investment and trade regime. This is especially for banking sector, for the role it plays as a financial intermediary to support export. Two papers in this project further suggest the idea that banks, or other financial institutions, need to put more efforts in supporting services for the firms that are capable to export. Second, it is also important to keep promoting policy to encourage export, for the reason it facilitates firms to increase their productivity. As noted, one of the studies show that exporting firms experience much faster skill upgrading than non-exporters. Third, policy to invite foreign direct investment (FDI) could be designed to be rather specifically, with an intention to tackle some unique or narrowly targeted objective. The studies in this project suggest the importance of foreign investment in upstream industries and of creating more agglomeration in order to improve the chance of survival of affiliates. Lastly, clear and measured strategies, or policies, are needed to mitigate the adverse impact of trade and liberalization. One study in this project confirms the policy approach to facilitate adjustments rather than providing measures to protect in addressing some immediate adverse impact from liberalization. This study further suggests a modification of traditional trade adjustment assistance (TAA) in which it needs to take individual worker as the target and the basic unit of the TAA program. This is for the reason that trade liberalization may cause different impact even among the winners (i.e., exporters in this case), which is not suitable with the traditional TAA program that is usually designed to be triggered by an adverse impact in output of the affected firm.