EXECUTIVE SUMMARY

ERIA Microdata research FY 2012 examines the impact of globalization on labor market outcomes. Globalization in this study is broadly defined to include trade and foreign direct investment (FDI) liberalization, trade (exports and imports), international capital flows, outsourcing and traded intermediate goods, while labor market outcomes are defined as wages and employment as well as volatility and dispersion of wages. This research cover the topic for many of the East and Southeast Asia countries, namely Australia, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand, and Vietnam.

Globalization and wage inequality between skilled and unskilled workers is a long-standing debated issue in international economics. Two competing explanations have been put forward as a cause for this phenomenon: trade and skill-biased technological progress. According to the standard *Heckscher-Ohlin* (H-O) theory and its companion Stolpher-Samuelson theorem, international trade is expected to increase the relative wages of the skilled workers in a skill-abundant country while decreasing it in a skill-scarce country. An alternative explanation is due to an increase in relative demand for skilled workers because of improvement in technology. Given these potential explanations, there is a consensus coming from early studies which suggests that skill-biased technological progress, rather than trade, is the principal cause for the increase in the inequality.

It may be more accurate to say however that what is not widely accepted is the view that trade causes wage inequality in the way predicted by H-O theory. There are observations that do not really accord the predictions and assumptions of the theory. First, while trade liberalization increases the wage inequality in skill-abundant developed countries and decreases it in skill-scarce developing countries, wage inequality in practice rises not only in developed countries but also in middle-income developing countries. Second, notwithstanding the theoretical prediction about the across-industries reallocation behind an aggregate increase in the relative employment, most empirical studies found that much of this increase, or at least part of it, occurs through within-industry mechanisms. Finally, although H-O theory is based on the assumption of free labor mobility across industries, many empirical studies found that the inter-industry labor mobility following trade liberalization is very limited.

Given all these, our understanding of the issue is still far from satisfactory. There are several reasons for this, first, new theoretical frameworks, such as heterogeneous firm trade theories, together with the increased availability of firm-, plant-, or even product-level datasets, allow us to conduct in-depth analyses of the issue. Second, international outsourcing and trade in intermediate goods have expanded over the past two decades, and from the current analytics it is expected that the outsourcing could raise wage inequality. Third, previous studies of countries in East and Southeast Asia are scarce. Most of available studies are either on developed countries or on several middle-income countries in Latin America. Since countries in these regions comprise those ranging from skill-scarce, low-income, outsourced countries to skill-abundant, high-income, outsourcing countries, researching this issue using case studies of these countries provides an excellent case for a set of country studies.

The key questions addressed by this research are the following, whether globalization causes wage and income inequality to rise, the mechanisms at work, whether there are specific country effects, and whether there policies that can be adopted by a country to maximize the impact of globalization.

Country studies conducted under the research provide evidences that globalization does affect labor market outcomes and wage inequality (between skill and unskilled workers) in the countries covered by the research. Studies shows evidence that premium wage is affected by various forms of globalization. Moreover, almost all of these evidences underline the importance of firm/plant characteristics in shaping the nature or direction of the impact. In the the study of South Korea and Vietnam, for example, tariff cut and increase in trade rise the wage premium in R&D-performing plants (Korean study) or technology intensive (Vietnamese study). Meanwhile, the wage premium exists in Malaysia between exporters and non-exporters.

Two studies examine the issue in the context of international production networks that underlines the nature of outsourcing. The first, the study on Thailand, examines the effects of both the engagement with international production networks and the reductions in tariffs on wage skill premium within firm. Engaging with the production networks increases wage skill premium in skill-intensive firms while the tariff reduction is found to reduce the skill premium within firms. The study on Japan investigates how the expansion of overseas activities by Japanese multinationals (MNEs) affects employment of the multinational in home country (Japan). This study does not find any negative effects of overseas expansion of the MNEs on the multinationals's employment at home. The studies instead find an expansionary effect.

In contrast to these, the study on Indonesia and the Philippines founds that globalization seems to have somehow smoothened its adverse impact on labor market outcomes. In the study on Indonesia, while there is evidence that firms pays higher wage for skilled workers, there is declining pattern of relative (skilled to unskilled) workers over the time. In the study on the Philippines, meanwhile, premium of skilled workers in terms of wage (wage skill premium) is found to have declined over the time, and it is attributed to the decline in trade protection.

The study using case study of Australia addresses a less frequently investigated channel through which globalization may affect the welfare in the domestic economy. It estimates the effect of domestic economy's exposure to international competition on individual labor income risk in Australia. The study finds evidence that an increase in import penetration is associated with an increase in permanent income risk, and this is found to be stronger in manufacturing than in services.

Many of the studies provide interesting results and one of them is a fact that the impact on labor market can not be separated from the impact on the other aspects. Policies promoting globalization are beneficial to firms and the economy in terms of technology adoption and knowledge accumulation.

The positive impact however is not without a cost. As many of the studies highlight, the impact on the outcome of labor market is not always positive. The gap between skilled and unskilled workers tends to widen in firms that upgrade technology capability, as the demand for skilled workers increases. The skilled-unskilled wage gap could be further widened because, at the same time, not all firms respond to the liberalizations by upgrading their technology capability; some of them choose to continue producing low-end products which sustains the high demand of unskilled workers.

The challenge in terms of policy therefore is to have right balance to manage all sorts of these impacts of globalization. Ideally, liberalization helps country, or firm in the country, to upgrade its technology capability and to accumulate knowledge but. At the same time though, other policies need to be in place to neutralize the potentially adverse effect on labor market. Two policy options are suggested for the latter. First, improving policies to develop human capital, by programs such as training and skill upgrading, is important. This will increase the pool of skilled workers in a country and therefore hiring them should be cheaper. Second, strengthening general social protection scheme, instead of having globalization-specific adjustment assistance, needs to be considered. Strengthening social protection is important because groups of workers that adversely affected are not always clear. In addition, globalization evidently also changes the expected risk of income in the future. All in all, complexity of these two demands a more general approach instead of the specific globalization adjustment program such as trade adjustment assistance (TAA), which targets only the displaced workers by FTA-related import penetration.

Applying these policies in a country however is not always a clear-cut, and the reason is, the mechanics of how globalization affects firms and labor market could be different from country to country. Studies in this project suggest that it depends at least on three factors: (i) the state of industrialization or general level of technology adoption in a country, (ii) the current state of labor market, and (c) the current state of education or human capital development. As in the more advanced country such as South Korea, for example, strengthening general social protection scheme could be put higher weight because the level of technology adoption in this country is relatively higher than the other Asian countries. In developing countries such as Indonesia or Vietnam, putting higher weight in training programs seems to be the more sensible approach since the level of technology adoption in general is low or at best varies tremendously across firms.