## Decoupling and Sources of Structural Transformation of Emerging Asian Economies? An International Input-Output Decomposition Analysis

Topic: World input-output modeling and databases I Author: Jong-Hwan Ko

This study aims to answer two questions: 1) Have emerging Asian economies decoupled? 2) What are the sources of structural changes in total outputs and value added of emerging Asian economies related to the first question? The sources of the shifts in total outputs and value added of emerging Asian economies between 1995 and 2000, 2000 and 2005, and 2005 and 2011 can be ascribed to changes in technology in terms of input coefficients and value added coefficients, domestic final demand, and intra-regional and extra-regional final demand. We make use of input-output decomposition analysis, for which we use World Input-Output Tables for 1995, 2000, 2005 and 2011.

The main findings of the study are as follows. First, the changes in the impact of the final demand components on total output and value-added of emerging Asia show that since 1995, there has been a trend of increasing dependence on exports, indicating no sign of "decoupling", but rather an increasing integration of emerging Asian countries into global trade. In other words, the exposure of emerging Asia to extra-regional markets has increased.

Second, even though this study does not support the decoupling thesis for emerging Asia, there is a contrasting feature in the sources of structural changes in gross output and value-added between non-China emerging Asia and China. Dependence of non-China emerging Asia on intra-regional trade has increased, in line with the strengthening of economic integration in emerging Asia, but China has disintegrated from the region.

Third, there have been differing trends in changes in the sources of extra-regional demand during 1995-2011. The contribution ratio of EU demand to changes in total output and value-added of emerging Asia increased between 1995-2000 and 2000-2011, while the shares of Japan and the US declined. As a result, the dependence of emerging Asia's output and value-added on the G3 economies decreased. However, the higher exposure of emerging Asia to extra-regional markets during 2000-2011 than during 1995-2000 was due to stronger trade linkages with the rest of the world (ROW), with their higher share in emerging Asia's total output and value-added.

Keywords: Emerging Asian economies, decoupling, World Input-Output Tables, input-output decomposition analysis, factors of economic growth

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