PREFACE

Why are they so poor and why are they so rich? Why were some countries successful in economic growth, why were some others not? When we try to answer these questions directly, we enface so many plausible answers to be found from various perspectives and academic theories. However, as economists, we are trying to get answers from empirical results based on reasons by economic theories. Economic growth theory explains that without technological progress, there is no economic growth possible for the long-run. We have been standing on this belief and are trying to explain what determines technological progress of an economy.

In this respect, to understand and explain the reason of the rapid growth of two former developing countries, Taiwan and Korea, will provide insightful policy implications for the growth of developing countries. The main focus of this study is to review and reassess the sources of technological growth for the manufacturing industries of Taiwan and Korea. We are using total factor productivity growth which would be an essential part of technological growth and explain large portions of potential economic growth. Among various sources of technological progress, openness to international trade has been the most important one, especially for rapidly growing economies such as Taiwan and Korea. It has been well known that these two countries have adopted export oriented economic policies since 1960s. Furthermore, recent endogenous economic growth theories imply that FDI and R&D would be important factors for explaining technological growth. Thus we will include these variables for our investigation.

The next point of this study is to investigate segregated manufacturing industries and not an aggregated manufacturing. Empirical results from segregated manufacturing industries will provide much more robust findings than from those of aggregated manufacturing data. It was not easy to find good and consistent time series data of each country's manufacturing industries, but we were fortunate to use the database of Taiwan and Korean manufacturing.

Let us briefly summarize our findings in this study. Our findings do not support such a usual hypothesis of the virtuous cycle of trade and growth, but we conclude that a scale effect of output growth has affected total factor productivity growth of Taiwan and Korea. It would be quite a complicated task to dissolve the impact of outward oriented policy variables toward whole economic growth. In order to solve those difficulties, we should be more careful in using econometric methodology and basic assumptions of the total factor productivity growth model. Furthermore, we should have to do a firm/plant specific research and not an industry specific approach in order to verify a puzzle between total factor productivity growth and export growth more precisely. Those complicated matters will be delivered to our future study.

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Insang Hwang and Eric C. Wang