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The role of financial development in economic growth: The experiences of Taiwan, Korea, and Japan

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Abstract

Since the financial crisis broke out in East Asia, the importance of financial development and stability had been noted. This paper tries to examine the relationship between financial development and the source of growth for three Asian economies, namely, Taiwan, Korea, and Japan. Particularly, we wish to emphasize the role of financial development and structure (including banking and stock markets), monetary and financial policies, as well as the degree of international capital mobility in the economic growth processes. Using the generalized method of moments (GMM) and principal component analysis, we find that (1) high investment had accelerated economic growth in Japan, while high investment to GDP ratio did not necessarily lead to better growth performance if investment did not have been allocated efficiently, e.g. in Taiwan and Korea cases; (2) real export growth rate had contributed to Taiwan and Korea; (3) the finance-aggregate had positive effects on Taiwan's economy, but had negative effect on other countries; (4) the stock market development had positive effects on Taiwan's economic growth; (5) Taiwanese economy suffered less from the Asian financial crisis; (6) after foreign exchange deregulation, capital outflows had negative effects on all three economies, while the effect of capital inflows is negative but insignificant.

JEL classification: C33; E44; F2; F43; G32

Keywords: Financial development; Economic growth; International capital mobility; GMM estimation

1. Introduction

The rapid economic growth of the Asian countries has been a focus of interest for academics and policy makers for the last three decades. Among them, once Taiwan and Korea were colonies

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of Japan, and these three nations exhibited similarities in economic structure and policies. For example, all three economies had followed export oriented development strategy and had accumulated significant foreign reserves from trade surplus and experienced higher rates of domestic investment over the past 30 years. These three nations are also active members in the WTO.[2] In addition, financial liberalization and financial reform have been undergone in these nations recently. This offers a superb sample to be examined the role of the financial sector development in economic growth processes. That is, it is interesting to investigate the relationship between financial development and the source of growth in Taiwan, Korea, and Japan.

The general idea that economic growth is related to financial development and structure can go back at least to Schumpeter (1911). Schumpeter emphasized the importance of the banking system in economic growth and highlighted circumstances when financial institutions can actively spur innovation and future growth by identifying and funding productive investments. Earlier literature including Goldsmith (1969), McKinnon (1973) and Shaw (1973) had suggested that financial system should have played an important role in economic growth. These models, McKinnon (1973) and Shaw (1973) showed that financial development would raise saving, capital accumulation, and hence economic growth. Recent theoretical papers by Greenwood and Jovanovic (1990), Bencivenga and Smith (1991), Levine (1991), Saint-Paul (1992), King and Levine (1993a), and Bencivenga, Smith, and Starr (1995) have developed various theoretical frameworks that link financial activities or services with steady state growth. However, among them, except Saint-Paul (1992), models also show that financial development can hurt growth. Specifically, financial development by enhancing resource allocation and hence the returns to saving may lower saving rates.

At the empirical studies, King and Levine (1993a, 1993b) used cross-countries data to analyze the relationship between economic growth and the financial development. Their results had shown that a range of financial indicators are robustly positively correlated with economic growth. But, they also found that government intervention in the financial system has a negative effect on the growth rate. Demirgüc-Kunt and Levine (1996b) used 44 cross-countries data from 1986 through 1993 had found that a positive relationship between stock market and financial institutions development. Demetriades and Hussein (1996) employed time series data for each of 16 countries showed that finance is a leading sector in the process of economic development. Also, Odedokun (1996) employed time series data for 71 developing countries and showed that financial intermediation had promoted economic growth, in some 85% of the countries. While the empirical works above focus on only banking sector development, they ignored the effect of stock market development.

Levine and Zervos (1998) investigated whether measures of stock market liquidity, size, volatility, and integration with world capital markets are correlated with economic growth. Their study provided empirical evidence on the theoretical debates regarding the linkages between stock markets and long-run economic growth. However, their study did not utilize time series model to test the growth relation in a particular country. Instead, they used 47 countries data from 1976 though 1993 by taking the standard cross-country growth regression framework like Barro (1991) to test the economic growth hypothesis. Also, Leahy, Schich, Wehinger, and Pelgrin (2001) used OECD countries data and showed that stock market and financial institutions

[2] Japan and Korea had been a WTO member since 1 January 1995, Taiwan became the member of the WTO on 1 January 2002.