## Chapter 5

### **Conclusions and Implications**

#### **5.1 Conclusions**

The objective of this study is to examine the relationship between FDI and economic growth as well as the relationship between economic growth and the interactions of FDI and two different kinds of human capitals (namely knowledgeable human capital and technical human capital) in China. The data employed is secondary annual data from 30 provinces of China during the period 1995-2009. Economic growth is measured by the logarithmic form of real gross domestic products at constant price of 2000, FDI is measured by the logarithmic form of actual utilized foreign direct investment, the interaction terms of FDI and human capitals are represented by the logarithmic form of FDI multiplies with the ratio of the enrollment of university and college students over the total employed people and FDI multiplies with the ratio of the enrollment of specialized secondary school (including vocational school) students over the total employed people, respectively.

Empirical results are based on an unbalanced panel by using panel unit root tests, panel cointegration tests and panel dynamic ordinary least squares (DOLS) estimation as well as panel Granger causality tests associated with vector error correction model (VECM) approaches.

The result of this study is in conflict with the conventional belief of presuming that it is always beneficial for China to have more FDI. Evidence shows an insignificant positive relationship between FDI and economic growth, which means that FDI by itself does not generate a significant positive effect to enhance economic growth. The same results have been found by Carkovic and Levine (2002) as well as Katerina et al. (2004).

On the contrary, the result shows strong complementary effect between FDI and knowledgeable human capital towards economic growth. FDI generates a relatively large positive effect on economic growth when it is interacting with knowledgeable human capital. This result is consistent with the idea that the flow of advanced technology brought along by FDI can increase the growth rate of host economy only by interacting with that country's absorptive capability, which was proposed by Borensztein et al (1998). Kottaridi and Stengos (2010) revealed the same empirical results that FDI benefits economic growth only for countries with a minimum threshold of absorptive capacity. For the interaction of FDI and technical human capital, evidence shows that there is a significant negative effect on economic growth. This result is conflict with the presumed hypothesis. Technical human capital supposed to have a significant positive effect on economic growth in the presence of FDI. The reason for this contrary result might be the data which has been employed to represent the technical human capital. Since the unavailability of collecting the exactly number of technicians and skilled labor, technical human capital in this study is measured by the enrollment of specialized secondary school students, which might lead to the inaccuracy of the effect of technical human capital on economic growth.

Empirical result also indicates that in the case of China, it is likely that higher efficiency of FDI results from a combination of advanced management skills and more advanced technology. Knowledgeable human capital plays a more important role in the presence of FDI to enhance China's economic growth. FDI contributes to economic growth only when an adequate absorptive capability of advanced technologies is available in the host economy. It also confirms that a higher academic education is more needed in China compared with the secondary technical education.

#### **5.2 Implications**

The results may be useful for policy makers in China to help make decisions in attracting and allocating FDI. They can use the empirical results to see how FDI has affected China throughout the past 15 years. The study emphasizes the significant role of human capital in enhancing economic growth. FDI by itself does not positively affect the economy when there is an absence of knowledgeable human capital. The result reveals that knowledgeable human capital is much more efficient compared with technical human capital in enhancing China's economic growth together with FDI. It also provides insights into the impact of FDI on economic growth through different human capitals. It might be useful for policy makers to build up a more suitable education system which reinforces China's economic growth.

#### 5.3 Suggestions for Future Study

This study employs panel unit root tests, panel cointegration tests and panel dynamic ordinary least squares (DOLS) estimation as well as panel Granger causality tests associated with vector error correction model (VECM) approaches which only can be used in dealing with non-stationary data. Single human capital variables are excluded since the stationarity of the data in their levels. The results show there is a positive effect of the interaction term of FDI and knowledgeable human capital on economic growth. Further research may bring single human capital variables into the model to test the impact of human capital on economic growth by itself.

Furthermore, the results show that the positive effect of FDI on economic growth depends on the recipient region's capability of human capital resource. Future study may focus on testing the relationship between economic growth and the interaction terms of FDI and other factors of the recipient region's capability such as regional development, financial development and trade openness. The study does not examine in detail of FDI in different specific industries which could lead to positive or negative effects on economic growth. These issues deserve further investigation.

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