CHAPTER VI

CONCLUSION

6.1 Conclusion

Income inequality is an important problem in Thailand. Not only does this problem have an adverse impact on quality of life of the poor, but it can be a cause of other problems as well. Understanding the major determinants of income distribution may discover policy implications that will help to reduce income inequality. This research looks closely at one of the main determinants of income distribution, namely education. The objective of this research is to study the role of educational attainment, educational inequality, and quality of education on income inequality. The hypothesis is the higher educational level and quality of education, the lower income inequality, and the more dispersion of education, the higher inequality of income. Besides, this paper also examines the relationship between economic development and income inequality.

This research provides empirical evidences on the relation between education, and income inequality in Thailand by using two methods. The first one is cross section technique. The data used in cross section regression is provincial data of 76 provinces. There are four regressions for four periods, 1996, 1998, 2000, and 2002. However, the results from cross section estimation are less reliable since the model is static. Therefore, another better technique is pooled least square technique. The data for this method is a panel data set of 76 provinces catagorized by educational service area into thirteen groups during 1996- 2002. The finding indicates that educational factors play clearer roles on income inequality.

The positive relationship between average year of schooling and Gini coefficient indicates that the higher educational attainment, the more inequality of income. It might be because primary and secondary enrollment ratios are already high, so an increase in educational attainment is increasing in higher educational level. Most people who can get access to higher education come from high and middle income group. Therefore, higher educational attainment makes people from high and middle income group gain higher wages, while people from low income still gain low wages. As a result, income discrepancy between the rich and the poor is larger.

Since only high income people can get access to higher education, an increase in educational attainment widens income gaps. However, after some periods of educational expansion, supply of high educated workers increase, so their wages decrease. Thus, income differences are lower. Whenever everybody can access to higher educational level, an increase in educational attainment will lead to more equality of income.

In addition, the higher quality of education measured by more expenditure on education could reduce inequality of income. More expenditure on education improves quality of low educational level, and thus raises marginal productivity and wages of low educated workers. While wages of low educated workers are higher, those of high educated workers are unchanged. Therefore, income becomes more equal.

6.2 Policy Implication

6.2.1 The policy focusing on an increase in level of education alone can raise income inequality as long as the poor cannot get access to educational opportunities. Most people who can access to higher education are from high and middle income groups. An increase in educational attainment, thus, represents a

higher education of the wealthy. After graduation, their wages are higher, whereas wages of the poor are still low. The gap of income between the rich and the poor, therefore, is larger. In order to reduce income inequality, the policies should focus on providing higher education to poor people. Whenever everybody can access to higher educational level, an increase in educational attainment will lead to more equality of income.

- 6.2.2 Regarding to educational policy that provides free twelve years basic education up to upper secondary school, it may not be effective since there is no mechanism providing this free basic education to poor people who cannot access to education. In addition, some people, especially the poor family, choose not to send their children to school. Although they do not have to pay for tuition fee, but there is an opportunity cost in poor families. Children of primary and secondary school age are typically needed to work for family. If they cannot work because they have to go to school, the family will either suffer a loss of income or be required to hire labor to replace the absent children.
- 6.2.3 Government should not focus only on quantity of education, quality is also important. The most effective method is increasing expenditure on education. Government should allocate more budgets to education in order that it will indirectly reduce income inequality. Furthermore, government should improve quality of education to the same level for all over the country.
- 6.2.4 Apart from educational factors, production technology has currently changed dramatically. There are likely engaged more capital in the modern production process. Due to capital skill complementary, skilled workers who can work with capitals are more demanded, while unskilled workers are replaced with capitals. Thus, wages of skilled workers are higher, while those of unskilled workers are lower. Income, therefore, becomes more unequal. As a result, government should improve quality of unskilled workers, such as providing them occupational training in order to enhance their practical skills.

6.3 Limitation of the Study

- 6.3.1 The data used to calculate income inequality is still arguable. The most used data is household survey data. Although it is appropriate in that it surveys both income and expenditure of households, few errors in income data exist. First, households in the upper class tend to understate their income level, so the calculated income distribution tends to be lower than it really is. Second, in Thailand, there are few numbers of affluent households, so it is uncertain that these households are surveyed in every round. This point degrades the credibility of the calculated income distribution.
- 6.3.2 This research uses Gini coefficient reported by National Economic and Social Development Board. Compared to Gini coefficient calculated by other sources, the Gini coefficient from National Economic and Social Development Board is lower than others. Thus, the regression results could be different if using the different values of Gini coefficient.
- 6.3.3 The data of educational expenditure by province collected from National Account Office is available only from the year 1999 to 2002. As a result, the educational expenditures of the year 1996 and 1998 have to be estimated. The estimated values might have some errors and differ from the true values. This could cause unreliable results.
- 6.3.4 This research cannot find the relationship between income inequality and economic development suggested by Kuznets. It implies that in the case of Thailand while economy keeps growing, there is no guarantee that income will become more equal in the future. This conclusion might not be accurate partly owing to data limitation. Because educational data by province is available only

during 1996-2003, and Gini coefficient is calculated every other year, this research, thus, uses data in 1996-2002. This series may be too short to test Kuznets hypothesis.

6.4 Suggestion

- 6.4.1 There are many factors determining income inequality. This research focuses only on the role of education. Therefore, studying other determinants is a challenging topic in the future.
- 6.4.2 Next research should test the causality between education and income distribution. This research has only four years of annual data, so it is not able to test such a causal relationship.
- 6.4.3 Next research should do simulation in order to test the validity of the model. Besides, it is beneficial to predict income inequality in the future.
- 6.4.4 Focusing on quality of education, this research uses input approach to represent quality of education. Another interesting method is using output approach, such as national test scores. Although it is impossible to do it now, it may be possible in the future.