

## 論 文 概 評

氏 名	THONGCHART BOWONTHUMRONGCHAI
学位の種類	博士（経済学）
学位記番号	博人社甲第26号
学位授与年月日	令和2年9月23日
学位授与の要件	学位規則第3条第3項該当
学位論文題目	Impact of the Lewis Turning Point on the Industrialization and the Capital Accumulation in Thailand 1960 – 2015 : A Counterfactual Analysis of Corporate Income Tax
論文審査委員	委員長 長島 正治 委 員 田口 博之 委 員 広田 幸紀 委 員 Kitti LIMSKUL

### 論文の内容の要旨

A dual economy consists of two sectors: a small industrialized sector and agricultural sector. The labor market in a dual economy is stratified into two parts, with the workers in the industrial sector earning higher wages than their counterparts in the rural sector. For much of the present-day literature on a dual economy, starting point is Arthur Lewis's classic paper (1954). In accordance with standard theory, it is supposed that the marginal product of labor rises as the capital stock increases. In the process of economic development, the profit in the urban sector is invested causing a further shift in the urban marginal product curve of labor. The process continues, with the urban wage remaining constant, up to the point where the wages in the two sectors begin to move upward, and they maintain parity. At this point, the rural marginal product ceases to be below the urban wage. This is the famous "turning point." From here onward, the economy begins to look very much like a developed economy, and the classical assumption of unlimited labor ceases to hold. The Lewis model generated much interest among development economists, and in the 1960s there were many attempts to restate it more formally. The main concern of these efforts was to examine the turning points in the long-run process described by Lewis.

In the process of economic development, author focusses on the development of the labor market, domestic migration and capital accumulation in Thailand during 1960 to 2015. At first, he identifies the turning points empirically and investigates capital accumulation path in the development process of Thai economy. Concretely, author examines the path of the rural-to-urban migration and the labor

market progress applying the Lewis-Ranis-Fei model. Since then, he investigates the path of the capital accumulation and the transition from the light industries-based economy to the heavy industries-based economy in Thailand. Finally, the impacts of a labor turning point and the key factors in an industrialization are derived, and the corporate income tax reform is proposed as a result.

The dissertation consists of five Chapters as follows:

Chapter 1 is an introduction of the dissertation. In this Chapter, author asserts the significance of the investigations of the capital accumulation and the turning point in the labor market in Thailand.

Chapter 2 provides a success story of the economic development in Thailand before 1997 and a failure after the crisis in the perspective of the labor migration and the capital accumulation. Author reviews economic development and industrialization along with the transition of the domestic labor migration from low productivity sectors to high productivity sectors. Since then, Lewis (1954) and Lewis-Ranis-Fei (1968) which describe economic development with unlimited supplies of labor are introduced, author examines the existence of the Lewis's turning point in Thailand. On an investigation of the turning point, author applies Minami (1968) method being the most famous and direct technique to determine the turning point in Thailand. Minami proposes five criteria to identify the turning point. The empirical result using Minami's criteria shows that Thailand has passed the labor shortage point around 1990 and the turning point around early of the 2000s respectively.

Chapter 3 discusses the implications of the turning point and the path of industrialization in Thailand. In this Chapter, author applies Inada, Sekiguchi and Shoda (1992) model being a dynamic model of Lewis model. This model provides a formal theory of economic development to explain the economic development pattern in Japan and emphasizes the importance of role of labor supply from the agricultural sector. Inada model predicts the effects of turning point for the process of industrialization in Thailand. The result shows that Thailand follows the pattern to proceed to an economy with heavy industries. The growth rate has declined, however, due to the turning point and resulted in a slow pace of capital accumulation. While there is no surplus labor, the slow pace of capital investment is a dilemma in Thai economy.

Chapter 4 provides a discussion on the policy recommendation. Author asserts that Thai economy needs some economic reforms in an economic dilemma. The counterfactual analysis using by CGE model is applied to analyze Corporate Income Tax reform in this Chapter. Author constructs Social Account Matrix (SAM) 2000, which has five sectors: (1) agriculture and mining, (2) light industries, (3) heavy industries, (4) public utilities, and (5) services. Then, he applies the CGE model developed by Robichaud, Le Melin, Maisonnave, and Decaluwe (2010). Author simulates the CGE model for several scenarios of Thailand as follows: 1. Business as Usual (BAU), 2. Revenue neutral (SIM 1) by increasing consumption tax to make the government income equal to BAU, and 3. Balance budget and expenditure cut (SIM 2) by cutting public expenditure uniformly to make the government saving equal to BAU. The result shows that if corporate tax is reformed earlier, the positive impact supports the economic growth in Thailand, the welfare improvement measured by private consumption, and the investment in both of revenue-neutral and expenditure cut scenarios.

Chapter 5 concludes this dissertation. In this conclusion, some suggestions and policy recommendations are described. At first, it is suggested that Thai government needs to promote the new machine investment to replace the shortage of labor. Second, Thai government should also encourage the private sector to attract the business chances in Thailand. Finally, author insists that the agriculture sector is still essential and significant for Thai economy, therefore this sector should not be abandoned. On the basis of this, as a result, it is expected that agricultural mechanization will allow Thai economy to grow further in the post-turning point era.

## 論文審査の結果の要旨

The final examination was held by using Zoom system connecting Tokyo, Yokohama, Fukuoka and Bangkok on 18th July 2020. In the final examination, the following questions, suggestions and comments including those for the future research works were pointed out.

First, the description about the corporate tax is running short absolutely. Especially, description about the system of corporate income tax in Thailand and the economic conditions in the background lack among other things. It is also pointed out that author should calculate an “Effective Tax Rate,” in the dissertation.

Second, though author applies Inada model to discuss the path of industrialization in Thailand, the description about the results and meanings which Inada model derives for the industrialization in Thailand is also short. So, author should write more detail about Inada model and its results.

Third, as for the corporate income tax, for example in the 1990s before Thailand faced the turning point, it was asked whether the taxation system revision was necessary or not.

Fourth, as for policy recommendation which is derived as a result of discussion, it is pointed out that even if the mechanization of the agriculture is necessary, it is not described what kind of mechanization is necessary to be concrete in the dissertation.

Fifth, it was a question on the author’s conclusion whether it is a deterministic story that “passing the turning point have a negative impact to capital accumulation, industrialization and growth”, which would be rather a discouraging message for latecomers like Myanmar. The author explained that it is not deterministic, and that the Thailand-specific factors such as the existence of immigrant workers and policy failures have delayed the capital accumulation.

Although there has been much room for improvements, the dissertation is considered to have a lot of contributions to the existing literature on the dispute about the turning point and economic development in Thailand. Through comprehensive considerations, consequently, the committee unanimously agreed that the dissertation meets the requirement for the Doctorate’s degree.