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Dutch Disease and Tourism

The Case of Thailand

by

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Abstract

Tourism is often being viewed as one of the worlds largest sectors and a great contribution to growth and development. There is a large motivation amongst developing countries to promote themselves as a tourist destination, since they expect the tourism to generate economic growth. The government of Thailand has been promoting tourism since 1960, and the number of foreign visitors has increased from 100 000 back then to 13.5 million in 2006.

The purpose of this paper was to investigate weather the increasing tourism industry in Thailand has pulled resources away from other sectors of the economy towards the tourism sector, and in that way harming Thailand's international competitiveness and causing deindustrialization. A theory called the Dutch disease has served as a framework, and the empirical evidence has been analysed according to this theory. The theory predicts an appreciation of the real exchange rate, as a result of a large inflow of foreign capital. For Dutch disease to occur the economy must rely heavily on the booming sector, in the case of this thesis, the tourism sector. The tourism sector is a large contributor to total GDP and is gaining more and more importance in Thailand, but, according to the investigation carried out for this thesis, it has not lead to Dutch disease. Thailand's manufacturing industry is characterized by a great range of export products and the industry is the largest contributor to GDP and source of foreign capital inflow. Thus, Thailand is not solely depended on tourism to earn foreign capital. Nor has Thailand's international competitiveness decreased as the theory predicts, as the manufacturing sector is more complex now then it was in the beginning of the industrialization.

Key words: Dutch disease, tourism, Thailand, real exchange rate, international competitiveness, export

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List of abbreviations

- CPI:** Consumer Price Index
- GDP:** Gross Domestic Product
- GE:** General Equilibrium model
- FTA:** Free Trade Agreement
- NEER:** Nominal Effective Exchange Rate
- IMF:** International Monetary Fund
- IO:** Input- Output model
- REER:** Real Effective Exchange Rate
- RER:** Real Exchange Rate

1 Introduction

Tourism is said to account for 3.6 percent of world GDP in 2007 and is expected to grow at an annual rate of 4.3 percent over the coming ten years (World Travel & Tourism research). Of the world's total export of services, tourism represents around 35 percent, in the least developed countries it represents as much as 70 percent (www.world-tourism.org). So there is no wonder that many developing and industrialized countries see tourism as a tool to accelerate economic growth. The positive effects of tourism are well recognized. That an expansion of the tourism industry leads to more jobs, improvement in income and an inflow of foreign capital, is known by the tourists themselves, as well as the governments and the politicians of the countries they visit. The tourism-led growth hypothesis, which assumes a positive relation between the earnings from international tourism and economic growth, remain a solid pillar in many development strategies. The importance of international tourism to achieve economic growth is pointed out in several studies, but economic growth does not always make the residents better off, it does not automatically lead to an increase in resident's income or welfare. A tourism boom can actually make residents worse off. Except for the environmental and socio-economic costs that tourism can generate, an increase in inbound tourism can worsen conditions for other sectors in the economy and lead to deindustrialization. It is thus important for policy makers not to put all focus on the positive results, but also to have knowledge about the conditions and symptoms of these negative effects generating from a tourism boom, especially for countries with a large tourism sector.

1.1 Problem definition

Many countries with beaches, beautiful nature and pleasant climate usually specializes in tourism and these elements becomes a comparative advantage for the destinations, as natural resources becomes a comparative advantage in countries with a boom in raw materials. In many cases, an increase in inbound tourism can be compared with a large inflow

of foreign capital from exports of natural resources, such as oil. A boom caused by a specific market condition can lead to an allocation of resources away from the country's manufacturing sector to the emerging sectors, worsening conditions for the industrialized sector. In the economic literature, this mechanism is called Dutch disease. The symptoms of Dutch disease was first observed in Holland in the 60s, when a large finding of natural gas reserves lead to a deindustrialization and a real appreciation of the Dutch guilder. The analysis that follows is closely related to the Dutch disease theory. But since the tourism sector varies from other exporting sectors, like commodity or natural resources, a straightforward application of the Dutch disease theory is not possible. (Copeland 1991: 515-516 and Nowak & Sahli 2007a: 51) Previous studies that has analyzed the effects of an increase in tourism on residents welfare has used input-output models, but this type of methodology is inadequate for this type of analysis because it does not consider indirect mechanisms. The framework I have decided to work with, the General Equilibrium model, has its origin in input-output methodology, but considers the indirect effects as well.

1.2 Purpose

The purpose of this study is to analyze whether Thailand suffers from Dutch disease due to the growing role of the tourism sector. With the aim of doing this, the Dutch disease theory and the General Equilibrium model will serve as a framework and the case of Thailand will be studied through the eyes of this framework. Except for a closer study of the tourism industry in Thailand, sectors where the symptoms are likely to occur will be investigated deeper, like the manufacturing and agricultural sector, the labor force and the real exchange rate.

Not many studies have investigated the relation between an increase in inbound tourism and the Dutch disease theory. Hopefully this study will serve as a complement to the studies that has been done about this condition and previous studies about the tourism industry in Thailand.

1.3 Disposition

The paper will start with a description of the theory of Dutch disease, to get an overview of the symptoms the disease can show and how it can affect different elements in an economy. Thereafter, the effects of an increase in inbound tourism will be explained through the eyes of the Dutch disease theory, to get an understanding of both similarities and differences between tourism as export and commodity export and to be able to understand the choice of Dutch disease as a theoretical framework. Following this will a description of the General Equilibrium model take place. This section will start with a general overview of the model and the effects generating from an increase of foreign tourists. Thereafter, a formal, more economically, explanation of the model will follow, where general assumptions underlying an analysis of a tourism boom according to the model will be set out.

Once we have set out the theoretical framework and model that will be used to analyze the effects of an increase in the tourism sector in Thailand, we can start looking closer at empirical evidence from Thailand and the different sectors where symptoms of Dutch disease are expected to appear. Finally, a summary of the findings will be introduced, with a comparison between the empirical findings and the theoretical framework in order to analyze whether Dutch disease is something that Thailand suffers from.

2 The Dutch disease theory

The theory of Dutch disease explains the relationship between a large inflow of foreign capital and an appreciation of the country's real exchange rate. This increase in capital will raise the exchange rate and cause a reallocation of production resources. This will make the sector exposed to international competition less competitive. It was first observed in Holland in the 60s, when the Dutch guilder appreciated due to the discovery of a large natural gas reserve in the North Sea. (Ebrahim-Zadeh 2003:50) The model has mainly been used for analyzing the impact on the economy from a large discovery of natural resources, such as oil, but can also be used for analyzing the effects of any increase in foreign capital, such as aid, remittances or tourism.

W.M Corden (1984) and W.M Corden and J. Peter Neary (1982) developed a theoretical model for Dutch Disease in attempt to show the adverse economic effects a large inflow of foreign currency can have. The Dutch disease model is used for a medium-run analysis. The model describes a small open economy, divided into three sectors. The first two sectors produce two goods that are traded internationally, at exogenously determined prices. One export sector is booming and the other is lagging. The booming sector usually consists of natural resources, such as oil. The lagging export sector includes other tradable manufactured goods. The third sector produces a non-traded good that supplies domestic residents, such as retail trade, services and construction. Here the prices are flexible and determined by domestic supply and demand. The only factor of production that moves freely between these sectors is labor. There are two types of effects of a boom in a country's export sector, the *resource movement effect* and the *spending effect*. In the type of model I will use in this thesis, with labor as the only mobile factor of production, these two effects will lead to de-industrialization. (Corden & Neary 1982:1-5)

2.1 The spending effect

When there is a boom in a country's export sector this results in a large inflow of foreign currency, leading to an increase in incomes. This increase in income is followed by an increase in spending and demand for both non-tradable and tradable goods. As mentioned before, the prices of non-tradable goods are determined by domestic supply and demand, so when there is an increase in demand it is followed by an increase in the price of non-tradable goods. Since the prices of tradable goods are exogenously fixed in the world market, and we assume a small economy, an increase in domestic demand would not affect the price of tradables. The increase in the price of non-tradable goods leads to an appreciation of the real exchange rate, weakens the competitiveness of the country's tradable good sector and, thus, causes that sector to contract. This process is called "the spending effect". (Gooroochurn & Blake 2005:3-4)

2.2 The resource movement effect

Simultaneously with the spending effect, there is an increase in the wages of the booming sector, due to an increase in marginal productivity, leading to labor movement from the lagging export sector and the sector with non-tradable goods, to the booming sector. This movement will continue until the wages in all sectors are equalized. Reduced supply in the non-tradable sector results in an excess demand, which is followed by an increase in prices and thus, increase in wages. This means that there will be movement of labor to the non-traded sector from the lagging sector until wages again, are equalized. This process is called "the resource movement effect". (Gooroochurn & Blake 2005:3-4)

2.3 The real exchange rate

An important variable for Dutch disease theory is the real exchange rate. Since the theory shows how a large inflow of foreign capital leads to an appreciation of the real exchange rate and thus a loss in competitiveness of the tradable sector, a definition of the real exchange rate is important. Looking at the consequences of an appreciation of the real exchange rate, we can see that it measures the country's international competitiveness. The most common used definition is the purchasing power parity definition. Two currencies are at purchasing power parity when a unit of domestic currency can buy the same basket of goods at home or abroad. Thus, the exchange rate is the ratio of foreign to domestic prices measured in the same currency. The following definition is the same definition used by Falck (2000:3). RER represents the real exchange rate, NER is the nominal exchange rate, Pd is the price index in the home country and Pf is the price index in the foreign country.

$$\mathbf{RER = NER * Pf/Pd}$$

From this definition it is easy to see that it is important to study the effects from foreign capital inflow on the nominal exchange rate and the prices of both domestic and foreign goods and services to see the effects on the real exchange rate. (Dornbush et. al., 2004:308)

3 Dutch disease and tourism

In the literature, an increase in tourism is comparable to an export boom, similar to the one occurring in the Dutch disease theory. But there are some major differences that need to be considered between trade in tourism and commodity export. Copeland (1991:515-516) has defined three differences between tourism and commodity export. The first difference is that the consumer moves instead of the product. Since tourists consume goods that are normally non-tradable, such as accommodation and restaurant meals, such goods become tradable in the sense that they generate foreign exchange. The other difference Copeland discusses is the fact that tourists consume more than one good, hence take into consideration the price of the whole cost before deciding to visit the destination. The last difference he mentions is that tourists consume these goods together with other services that have no price, such as climate, nature and scenery.

Since tourists consume products that are otherwise non-tradable, an increase in inbound tourism will cause the prices of these goods to increase, leading to an appreciation of the real exchange rate and a welfare improvement. The tourism boom affects the economy through a terms of trade effect. (Gooroochurn & Blake, 2005:3-5) Unlike commodity exports it has both indirect and direct effects on the non-tradable sector. The *direct effects* from tourism on the non-tradable sector generate from tourists' consumption of non-traded goods at domestic prices. The direct effect is the increase in the price of non-traded goods. The *indirect effect* is a result from changes in domestic income, which changes domestic spending on non-traded goods. (Copeland 1991:518)

The indirect and direct effects are similar to the resource movement effect and the spending effect in the Dutch disease literature. But due to the differences between trade in tourism and the traditional internationally tradable sector, a modification of the Dutch disease theory is necessary. Also, the Dutch disease literature does not consider distortions and without distortions (full employment, perfect competition, etc) tourism can benefit the host country through a price increase (appreciation of the real exchange rate) (Gooroochurn & Blake 2005:3). Since distortions are present in the real world, it is important to consider all of

them when analyzing the net benefits to the domestic residents from a tourism boom (Nowak & Sahli 2007a:52)

4 The framework

Due to the differences between tourism and commodity export, a straightforward application of the Dutch disease model developed by Corden and Neary (1984) is not possible. Most studies that have analyzed the economic impact of an inbound tourism boom have used input-output models and Keynesian multipliers (Nowak & Sahli, 2007a: 50) These studies have successfully captured some of the impact of tourism, but the problem with these techniques is that they are inadequate as means of measuring the net effects on an economy resulting from an export boom. These models are based on incomplete partial equilibrium frameworks with restrictive assumptions. (Javier Capó et. Al, 2007:616)

It is important to consider indirect mechanisms when analyzing the economic impact on an increase in tourism, something that these models ignore. It is also important to distinguish between economic impact and net benefits, economic impacts are changes in macroeconomic variables, whereas net effects measures changes in resident's welfare. Another thing that makes input-output models inadequate is that they do not consider factor substitution between sectors or the fact that prices adjust. This can result in an overestimation of the economic impact of a tourism boom. (Nowak & Sahli, 2007a: 51)

In accordance with Copeland (1991), Sahli and Novak (2007), and Capó, Font and Nadal (2007), I will use a General Equilibrium model (GE) to analyze the economic impact of a tourism boom in a small open economy. This model has its origin in an input-output (IO) methodology but allows prices to vary and resources to be flexible between production sectors. The framework is set up by three sectors, an emerging sector, a tradable sector and a non-tradable sector. The model is letting wages to either be flexible or fixed and workers in different production sectors may have different degrees of mobility among these sectors. Previous studies have used similar, but different models, the framework I have chosen is the most appropriate for the purpose of this thesis.

4.1 The model

I will start with a general explanation of the theoretical framework in tourism economies, before a deeper, more economical explanation. As with the framework for Dutch disease, this analysis assumes a small open economy. In this case the booming sector is the tourism sector, the lagging sector is a tradable sector, usually manufacture and agriculture and a non-tradable sector which consists of services and construction. In the first two sectors prices are exogenously fixed in world market, whereas the prices in the non-tradable sector are fixed in the domestic market. The only factor of production that moves freely between the sectors is labor, thus the workforce will move around until there is wage equalization.

When there is a tourism boom, natural resources will be used in a new way, per capita GDP will rise due to an increase in welfare. Simultaneously, the increase in inbound tourism will alter relative prices, which has both direct and indirect impacts on production. As mentioned earlier, the *direct effect* is in the form of allocation of resources. An increase in inbound tourism leads to an increase in marginal labor productivity in the tourism sector, which in turn leads to an increase in demand for labor and hence, an increase in wages. Thus, the direct impact is a fall in production in the tradable and non-tradable sector as labor move from those sectors to the tourism sector. The *indirect effects* are an increase in domestic demand due to an increase in wages. This leads to an increase in relative prices on non-tradable goods as a result of a higher demand. To meet this higher demand, output in the non-tradable sector needs to increase. Labor will, again, move, and this time from the tradable sector to the non-tradable sector until wages are the same in all sectors. The fall in production in the tradable sector is met by an increase in imports.

This process leads to an increase in prices of non-tradable goods, but since the prices of tradable goods are exogenously determined, there will be an appreciation of the real exchange rate, making exports more expensive and causes the tradable sector to contract. This process runs simultaneously with the growth in the tourism sector, and will lead to a decrease in the production of export commodities and an increase in non-tradable goods if the income effect compensates for the fall in production. (Capó, Font & Nadal, 2007:617-618)

4.2 The General Equilibrium model

In this section I will set out the general assumptions underlying the analysis of the effects of an increase in inbound tourism. Previous studies have used a General Equilibrium model to analyze the macro economic effects of a tourist boom on outputs, income distribution, unemployment, internal labor migrations and national welfare. For example Nowak & Sahli (2007a) and (2007b), Copeland (1991) and Chao et. al (2003). For simplicity I will use the same definitions as Nowak and Sahli (2007b).

The General Equilibrium model I will use to analyze the impact on Thailand from an increase in inbound tourism divide the economy into two regions. An urban region (U) with one sector that produces manufactured goods S_M and a rural region (R) with two sectors, one agricultural sector S_A and one tourism sector S_S . The agricultural sector is an importing sector and the tourism sector is, as we already know, an export sector. This sector varies from traditional exporting sectors since it is the customer that moves instead of the product. Domestic residents in both regions consume the manufactured goods S_M .

The manufacturing sector in the urban region has a regulated labor market where the real wage rate \bar{w}_U is rigid. This sector contains physical capital \bar{K} two sectors in the urban region, agriculture and tourism has a fully flexible wage rate due to market forces. The input used in this region is land \bar{T} . The total labor factor in the economy is denoted by \bar{L} .

The model assumes perfect competition with constant returns to scale, using standard neo-classic production functions. The theoretical model is based on Harris and Todaro model, with no migration and wage equalization. These authors developed a theoretical framework that provides an explanation to urban unemployment and rural-urban labor migration in developing countries. The wage rate in the urban region is higher than equilibrium and, thus also in the rural region, due to minimum wage regulations etc. This leads to labor migration from the rural area to the urban, since people have an incentive to move. This in turn will lead to unemployment in the urban region due to an excess supply of labor. If workers instead decided to stay in the rural region, they would be sure to have a job, but will earn less. Thus, workers will decide to move to the urban region if they expect a higher wage rate, workers will move back to the rural area if the rural wage is higher than the expected urban wage rate. This process continues until the wage rate in both regions is equalized and there are no longer incentives to move. (Nowak & Sahli 2007b:429)

Various studies have pointed out the importance of tourism induced migration, but it is not taken into consideration in formal theoretical models. (Nowak & Sahli 2007b:429) In the model I will use, this aspect is not ignored, thus we can use this model to study the impact of tourism development in the rural region.

In *the urban region*, labor L_M and specific capital K is combined by firms when producing manufactured goods S_M . The prices of these goods P_M are exogenously determined by world price P_M^* , since we assume that the country is small and that these goods are imported. As mentioned before, we assume that the real wage rate in this region \bar{w}_U is fixed and that the rental price of capital r is flexible and hence, full employment of the capital stock is guaranteed.

In *the rural region* there are two factors of production, land T and labor L , which can be used in both the tourism sector and the agricultural sector. Thus, agriculture and tourism compete for land and labor. Readers who are familiar with macroeconomics can see here that the rural region becomes a mini version of a Heckcher-Ohlin economy, where one sector is land intensive and the other labor intensive. In this type of economy, both factors of production are perfectly mobile and are required for the production of both goods.

In contrast to the urban region, the real wage rate in the rural region w_R is flexible. The rental price of land t is also flexible, leading to full employment of both factors of production. The prices of agricultural goods P_A are exogenously determined, since we assume a small economy and that these products are homogenous. The relative prices of tourism goods and services P_S are determined within the host country by supply and demand. We can characterize the prices of these goods like this:

$$P_A = C_A(w_R, t) \quad (1)$$

$$P_S = C_S(w_R, t) \quad (2)$$

The tourism demand is never perfectly elastic because there are no exact foreign substitutes. This indicates that the prices of tourism goods and services can vary across countries. As mentioned previously, the prices in this sector are determined by domestic supply X_S and foreign tourists' demand DE_S . Foreign demand is positively determined on exogenous factors Δ . The following equation shows us this relationship.

$$X_S = DE_S(P_S, \Delta) \quad (3)$$

As long as the wage rate is different in the two regions, there will be rural-urban labor migrations.

$$\begin{aligned} W_R = W_U^e &= \bar{w}_U (L_M / L_U) \\ &= \bar{w}_U / (1 + \kappa) \end{aligned} \quad (4)$$

Here w_R is the rural wage rate, \bar{w}_U is the minimum urban wage rate, W_U^e is the expected urban wage rate, L_M is the number of workers in the manufacturing sector, and L_U is the total urban work force. $\kappa = L_{CH} / L_M$ is the rate of urban unemployment, the ratio of unemployed to employed workers in the urban region. The employment condition in the labor market looks like this:

$$\bar{L} = L_R + L_U = (L_A + L_S) + L_U \quad (5)$$

$$= (L_A + L_S) + L_M (1 + \kappa) \quad (5a)$$

L , L_R and L_U represent the aggregate total, rural and urban employment. L_A denotes labor used in agriculture and L_S the labor used in tourism.

The expenditure function of domestic residents is determined by the assumptions that agricultural and manufactured goods are consumed and available by all domestic residents and that there is no income transfer between the two regions. It can be written as follows:

$$e(P_A, P_M, u) = Y \quad (6)$$

Y is the national income and u is a scalar that represents the level of domestic utility. If we do not consider all modifications, the national income is the same as gross domestic product (GDP):

$$Y = P_M \cdot X_M + P_A \cdot X_A + P_S \cdot X_S$$

$$= \bar{w}_U \cdot L_M + r \cdot \bar{K} + w_R \cdot L_R + t \cdot \bar{T} \quad (7)$$

Thus, the general equilibrium of this economy is defined for any given level of the international price for manufactured goods P_M^* , of the urban wage rate \bar{w}_U and of foreign tourists' demand Δ .

4.2.1 The effects on domestic welfare from an increase in inbound tourism

This section examines the impact of a tourist boom on residents' welfare. From equation (3) we can see that the increase in tourism demand is captured by a change in Δ . We can describe the differences in residents' welfare y by the following mathematic solution where $[\hat{\cdot}]$ denotes relative changes:

$$y^{\wedge} = \delta_s \cdot P_s^{\wedge} - \delta_{CH} \cdot \kappa \quad (8)$$

As already discussed, the first effect of an increase in inbound tourism demand is an increase in the price of tourism goods and services P_S , which in turn has two effects on national welfare. The first effect is a welfare gain to the residents of the country through the improved terms of trade. The increase in P_S will increase the real income and hence have a positive effect on residents' welfare. The first part of equation (8) ($\delta_s \cdot P_s^{\wedge}$) gives us its value and we can see that it is always positive. The second effect is that the increase in P_S , will result in an increase in wages in the rural area, and hence, the wages between the two regions will no longer be equal, leading to a labor migration. This can result in either an increase or a decrease of the urban unemployment rate. The second expression in equation (8) ($\delta_{CH} \cdot \kappa$) shows us that it can be either positive or negative. Note that this expression is proportional to

δ_{CH} which denotes the portion of national income that would have been paid to unemployed workers had they decided to stay at in the rural area at the current wage rate.

Ambiguous net welfare effect. Whether a tourism boom leads to an increase in welfare or immiserization depends upon whether the tourism industry is relatively less labor intensive than the agricultural sector: $(T_S/L_S) > (T_A/L_A)$. When this is the case, the increase in P_S results in an increase of the rental price of land t and decreases the rural wage rate w_R , which becomes lower than the expected urban wage rate, $w_R < w_U^e$ (equation [4]). This in accordance with Stolper-Samuelson theorem. Workers will now move from the rural area to the urban area, increasing the ratio of urban unemployment ($\kappa > 0$) (in equation [8]).

On rural sector outputs, the increase of an inbound tourism boom (an increase in P_S) has two effects. The first effect is a price effect; the increase in P_S gives rise to an increase in the output in the tourism sector, at the expense of the agricultural sector. The second effect is a resource movement effect due to labor migration. When workers migrate to the rural area, the more labor-intensive product loses, and the more land intensive product will expand, in our case tourism.

Unambiguous positive net welfare effect. In addition to the previous effect, this case requires the tourism sector to be more labor intensive than the agricultural sector. The increase in P_S will then lead to an increase in rural wages w_R and the rental price of land t to decrease. The labor force in the rural area will increase as unemployed workers from the urban area will migrate to the rural region. This migration flow causes the ratio of urban unemployed to employed workers to decrease. An increase of the labor force in the labor-intensive sector, here tourism, will boost the economy's total production. Also in this case the rise in P_S will lead to a price effect and a resource movement effect, and we can see that both these effects, in contrast to when tourism sector is more land intensive, leads to an increase of the tourism sector and a decline in the agricultural sector.

5 Case study: Thailand

To see whether Thailand has suffered from Dutch disease, the Dutch disease theory and the General Equilibrium model will function as a theoretical framework. In order to be able to do so, the different areas where symptoms of Dutch disease are expected to arise will be examined; the real exchange rate, the manufacturing sector, the agricultural sector and the labor force. But, the first thing that needs to be investigated when searching for symptoms of Dutch disease is the Thai tourism sector, since Dutch disease is a result of resource dependence.

5.1 The tourism sector

For over 40 years has tourism played an important role in Thailand's economic development. The number of visitors has been steadily increasing since 1960 when Thailand began promoting it self as a tourist destination. Less than 100 000 foreign tourists visited Thailand in 1960 (Da Silva, 2002), in 1990 the figure was 5.29 million (Noypayak, 2001:1) and by 2006 the number of foreign tourists had increased to 13.5 million (World Travel and Tourism Council).

Today, Thailand is one of the world's most favorite tourist destinations, with a world market share of 0.7 percent (World Travel and Tourism Council). Since 1990, Thailand has been ranked among the top 20 most popular tourist destinations in the world (Noypayak, 2002:1). Tourism in Thailand is expected to grow at an annual rate of 5.3 percent in real terms between 2008 and 2017 (World Travel and Tourism Council).

The General Equilibrium model assumes an economy where international inbound tourism generates a large inflow of foreign capital. In 1999 the revenue from international tourism was 253 million bath (Noypayak, 2001:1) and by 2006 the revenue from international tourism was almost the double, 482 million bath, which was also an increase by more than 31 percent since 2005. (Bank of Thailand, Annual Economic Report 2006:17-18 & 2004:14-15)

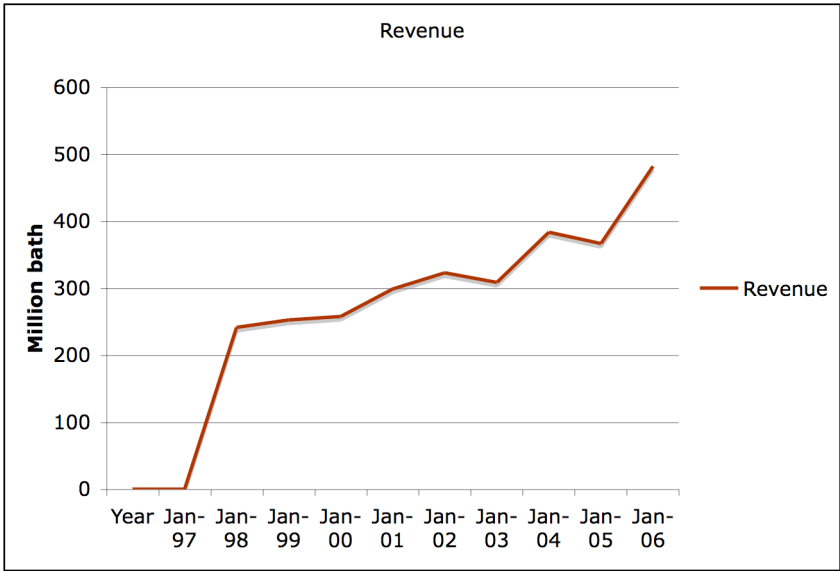
and http://www2.tat.or.th/stat/web/static_index.php). The contribution to GDP from the tourism industry in Thailand has increased from 5.4 percent in 1999 to 6.7 percent in 2007 and show signs of a continuous increase in coming years. (World Travel and Tourism Council and Noypayak 2001:1). Tourism export as a share of total exports in Thailand where expected to generate 12.6 percent of export revenues in 2007. (World Travel and Tourism Council).

Figure 5.1: International tourists 1997-2006



Source: http://www2.tat.or.th/stat/web/static_index.php

Figure 5.2: Revenue from international tourists 1997-2006



Source: http://www2.tat.or.th/stat/web/static_index.php

5.1.1 Key factors contributing to an increase in the tourism sector

In 1960 was the first organization in Thailand exclusively responsible to promote tourism established, the Tourism Authority of Thailand (TAT). The policy and marketing plan for the TAT includes using promotion of tourism as a source to accelerate economic growth, create more jobs and increasing household incomes. Tourism as a mean to improve the quality of life is a major objective of Thai policymakers. (www.tourismthailand.org). TAT has cooperation with the public sector and recognizes that there are strong linkages between the tourism sector and other industries. The stakeholders vary from health and retail shopping to trade and transportation. The TAT integrates these stakeholders into campaigns for promoting tourism, which has turned out to be a win-win situation for all. (Noypayak 2001:1).

Compare to its neighbors, Thailand started early to carry out active campaigns to promote tourism. The number of visitors started increasing dramatically after the launch of “Visit Thailand” in 1987. The years between 1987 and 1996 is often called “the Golden Decade of tourism”. External factors contributed to the spectacular increase of foreign visitors during this decade by increasing the demand for tourism and reduce costs for longer travels. For example the end of the Cold War, the expansion of international trade and investment and the opening of new tourism destinations in the region close to Thailand. Thailand also has a strategic location to offer a variety of tourism packages to international tourists, since it is located as a gateway to Indochina and inner China as well as a half way stop-over between Europe and East Asia and Australia. (Fuller, 1997)

After decades of impressive growth, Thailand experienced a financial crisis that started in 1997. Following this was a change in the government and loans from IMF as help to conquer the crisis. Tourism received a main position as one of the many initiatives used to renew the economy. The campaign “Amazing Thailand 1998-1999” was launched and became a huge success, and the tourism industry turned out to be one of the few industries that survived the crisis without damage. During the crisis was Thailand the only country in the region to experience an increase in tourism. Throughout 1999 Thailand had an average current account surplus of about 1 billion US dollars, revenue from tourism and a trade surplus helped Thailand achieve this positive result (www.assumptionworlds.com)

5.2 The agricultural sector

Until the 1960s was Thailand an agricultural based society, the agricultural sector contributed to 37 percent of total GDP in 1961 and employed 80 percent of the total labor force (Yamada pp 3). But, due to fast growth in other sectors in the economy, the contribution to GDP from the agricultural sector has decreased to 13 percent of total GDP in 1991 (Yamada pp 3). Even though the agricultural sector still employs a majority of the labor force, the sector only contributed to 10.7 percent of GDP in 2007 (<http://www.thaiwebsites.com/thailandfacts.asp>). For 30 years, between 1961 and 1991, the agricultural GDP grew about 12.3 times. But other sectors showed an even more significant growth during the same time (Yamada pp 6). Conversely, the agricultural sector persists to be important as it still employs a majority of the labor force.

Thailand's major agricultural export products include fishery products, rice and cereal products, fruit and vegetables, meat, sugar and animal feeds. Thailand is the 14th leading exporting country of agricultural products with a 2.3 percent share of the world agricultural export (www.thailand-focus.com). For rice, sugar and chicken, Thailand was among the top five exporting countries in the world in 2006. As a result of an active engagement in FTA negotiations, the international markets for Thailand's agricultural products have broadened. (Asia-Pacific Trade and Investment review, 2006:57, 66)

5.3 The manufacturing sector

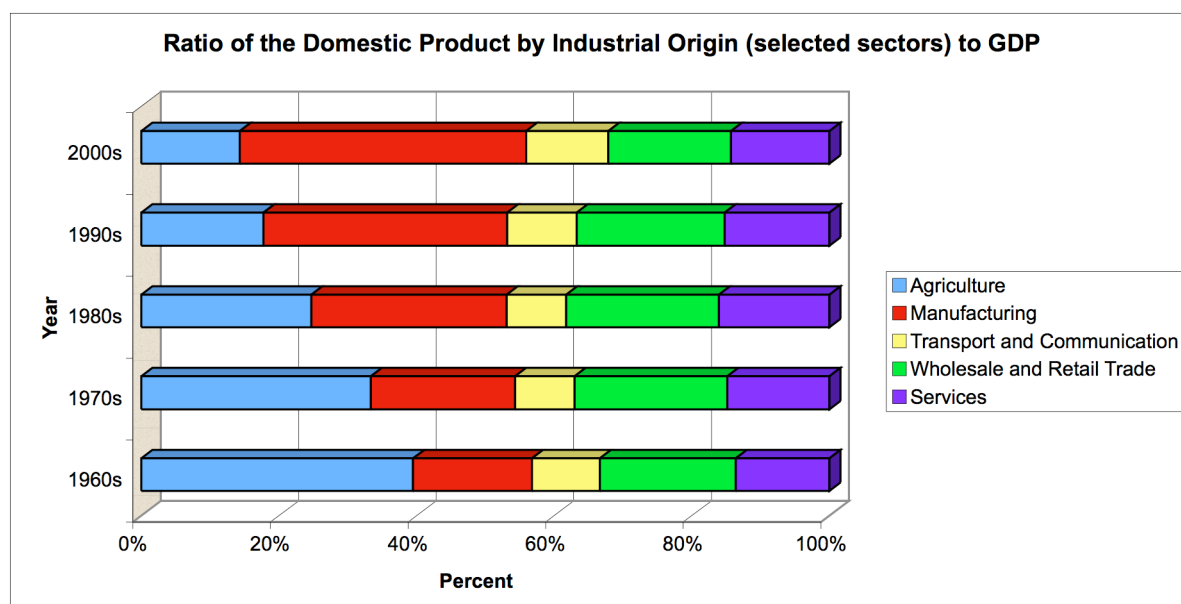
Modern industrialization in Thailand started in the beginning of 1960s with the establishment of the Board of Investment as an act to promote industrialization. While the First Industrial promotion act was established already 1954, it was not until 1962 when the Act was modified to promote industrialization in specific areas, as the industrialization actually began.

1972 did the government of Thailand shift in policy, reaching towards an export-oriented economy as opposed to an import-substituting economy as it has been since the beginning of the industrialization. During the 1960s there was a decrease of consumer and manufactured imports among total imports in Thailand, as there was an increase of

intermediate and capital goods. Component parts and other intermediate parts started being produced within Thailand instead of it being imported. In the 1970s did locally produced goods start to compete on world markets and export oriented industries became more important, resulting in this shift in policies. There was also a big anxiety about a decrease in domestic demand for locally made goods, which also contributed to the shift. (<http://www.mahidol.ac.th/thailand/sector-per.html>).

Manufactured exports has grew at a very rapid pace during the last decades, at an annual growth rate of 31.8 percent between 1986 and 1995, in contrast to 14 percent growth of primary products. Manufactured exports as a share of total exports was 2.4 percent in 1957, compared to 64.4 percent in 1993 (<http://www.mahidol.ac.th/thailand/sector-per.html>) By 2002, manufactured goods accounted for 75.6 percent of total merchandise exports, in addition to 23.2 percent for primary products. (Athukorala & Suphat, II:a & Table 2) Manufacture as a share of GDP contributed to about 44.6 percent in 2007, an increase from 42 percent in 2000 (<http://www.thaiwebsites.com/thailandfacts.asp> and www.worldbank.org). The manufacture industry is being supported by the public sector through various developmental amenities, such as building up infrastructure and assist effectiveness of the private sector by creating a good conducive setting. There is a high degree of diversification in the industrial sector in Thailand today and the industry is more complex then it was in the 1960s. The production of manufactured goods are evenly distributed amongst different groups in the industry, making the economy less sensitive to changes in price and/or demand shocks (<http://www.mahidol.ac.th/thailand/sector-per.html>).

Figure 5.3: Ratio of the domestic product by industrial origin to GDP



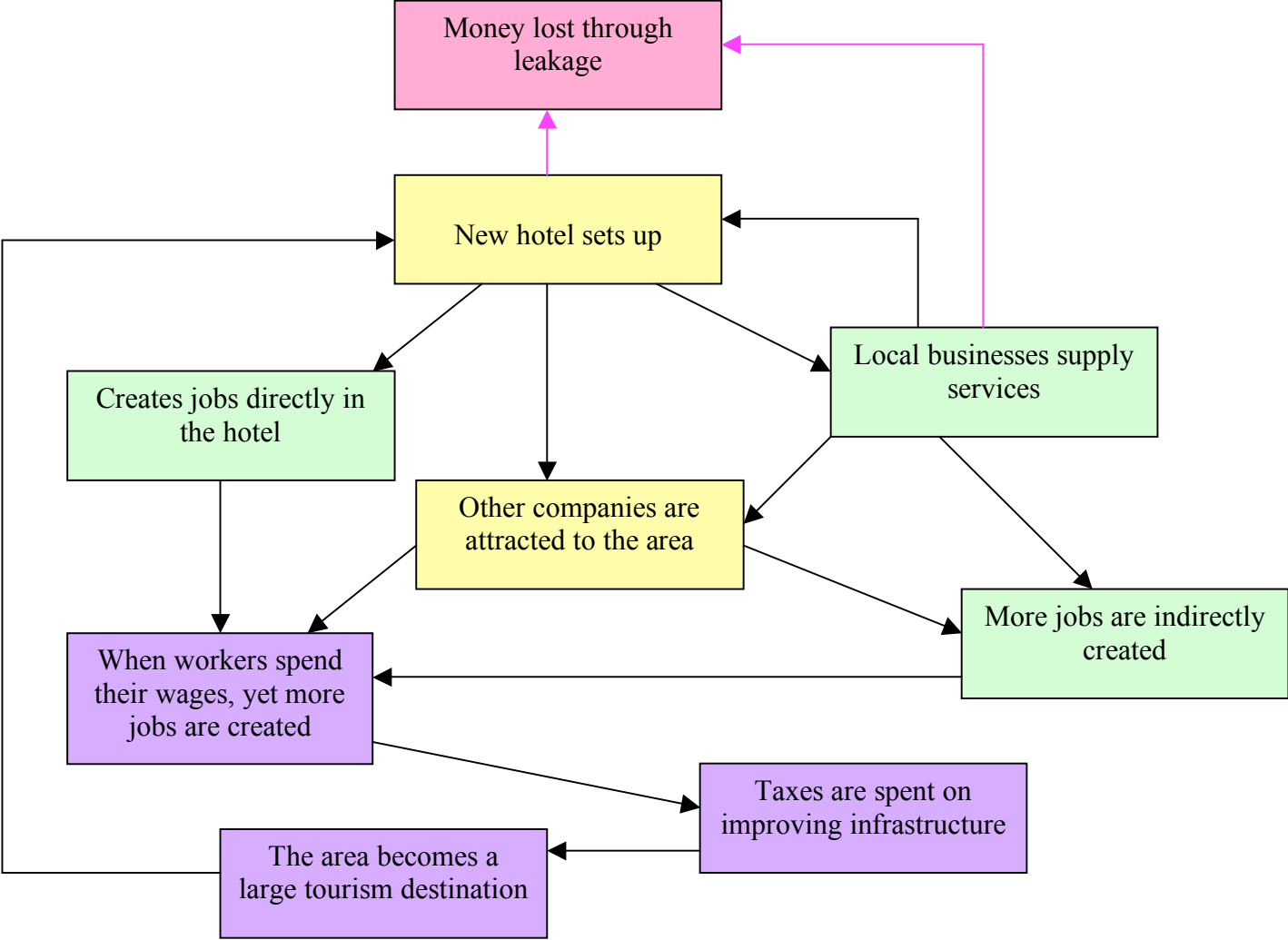
Source: National Economic and Social Development Board (NESDB)

5.4 The labor force

An increase in inbound tourism can lead, as mentioned earlier, to an indirect effect and a direct effect, similar to the spending and resource effects predicted by the Dutch disease theory. These effects predict a reallocation in the labor force between the sectors. The direct effect expects labor to move from the tradable and non-tradable sector to the tourism sector, since an increase in demand leads to higher price and hence wages. This will continue until wages are equalized. The indirect effect expects labor to move from the tradable to the non-tradable sector.

Tourism can lead to employment creation both directly and indirectly. Directly through hotels, restaurants, nightclubs, souvenir shops and taxis for instance, which in some cases also are seasonal. Indirectly through the supply of goods and services required by businesses related to the tourism industry. This is called the multiplier effect, and is shown in figure 5.4.

Figure 5.4 The tourism multiplier effect



Source: <http://geographyfieldwork.com/TouristMultiplier.htm>

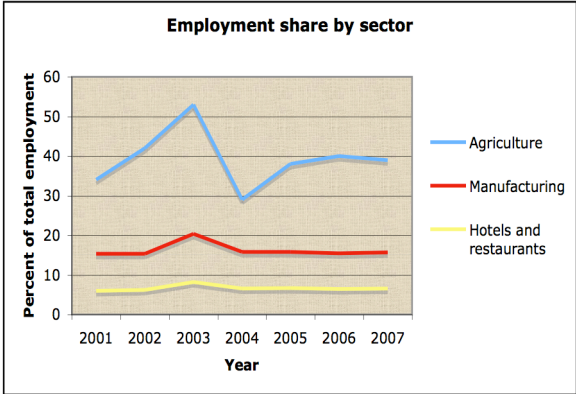
As we can see in the figure above, measure the amount of people employed in the tourism industry is difficult and the statistics available has divided up the sector in hotels and restaurants or the whole service sector. For this study, the data of hotels and restaurants has been used, hence, it is important to keep in mind that it does not cover the entire industry.

Thailand has developed a flexible and well functioning labor market, making it easy for the labor force to migrate between the sectors. During the rapid economic growth that Thailand experienced before the financial crisis, there was a major employment change from agriculture into other economic sectors. The transition from agriculture started 1990, and between that year and 1997 there was a drop of employed in agriculture from 64 percent to 45 percent, or from 17.7 million workers to 14 million workers. (Warner, 2004:4a) The labor

force in that sector has since then decreased by 300 000 workers, but are still the sector in Thailand where most people are employed. (<http://web.nso.go.th>)

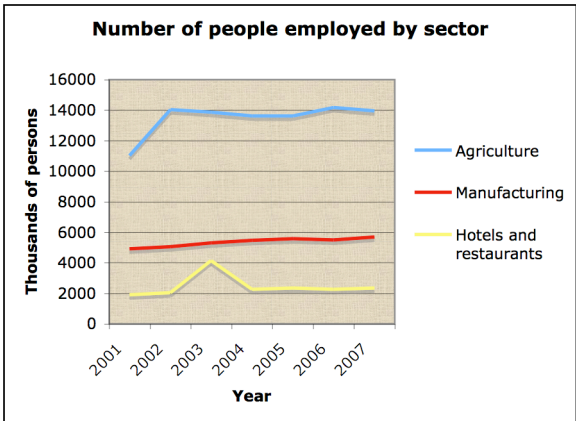
Manufacturing employs almost 5.2 million workers in the second quarter of 2006, which is an increase by around 48 000 workers since the first quarter of 2001. The number of people employed in hotels and restaurants do not compose a large employment share of total workforce, but it has increased by almost half a million workers since 2001 (<http://web.nso.go.th>).

Figure 5.5: Employment share by sector 2001-2007



Source: Authors calculation, raw data from the Labor Force Survey, National Statistical Office <http://web.nso.go.th>

Figure 5.6: Number of people employed by sector 2001-2007



Source: Authors calculation, raw data from the Labor Force Survey, the National Statistical Office <http://web.nso.go.th>

As we can see in the figures 5.4 and 5.5 the amount of people employed in the agricultural sector is declining, whereas there is a small increase of people employed in manufacturing

and hotels and restaurants. The wage rates in the agricultural sector is the lowest of the three sectors, the wage rates in manufacturing and hotels and restaurants show an upward curve in Figure 5.6 whereas the wage rate in agriculture is rather stable since 2004.

The unemployment rate in Thailand is fairly low and has decreased to about 1.77 percent in 2006 from about 3.3 percent 2001 (Authors calculation from www.web.nso.go.th).

Figure 5.7: Average wage of employed persons by industry for whole Kingdom 2001-2005



Source: Report of the Labor Survey, National Statistical Office, <http://web.nso.go.th>

5.5 The real exchange rate

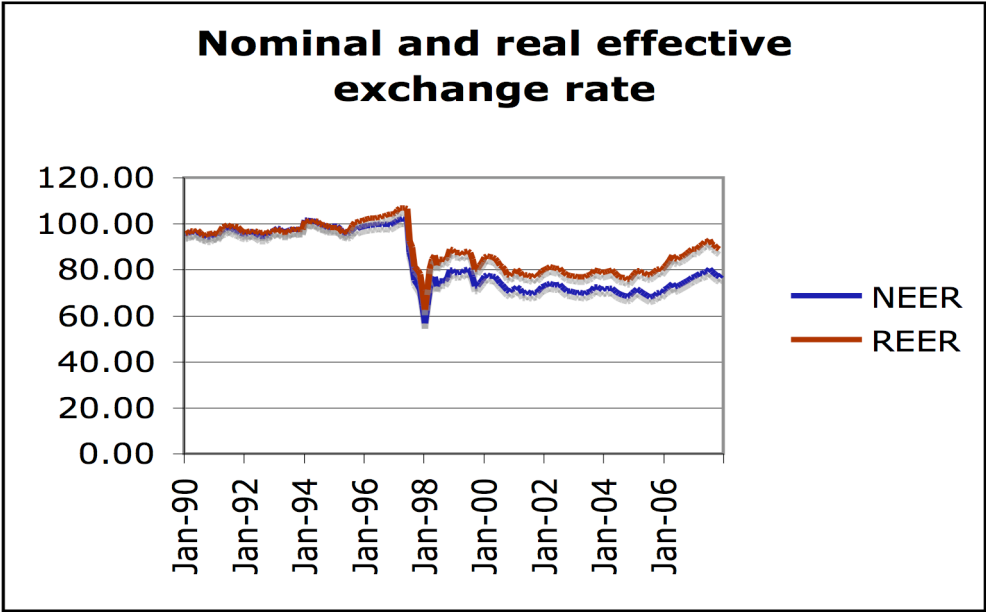
The theory of Dutch disease assumes an appreciation of the real exchange rate due to large capital inflows. The real exchange rate measures the competitiveness of a country relative to its trading partners. Thus, it is an important variable to look at when analyzing whether Thailand is suffering from Dutch Disease due to their inbound tourism. On July 2, 1997, the Thai bath collapsed and resulted in the largest economic crisis since the Great Depression. It threatened the entire world as it spread from Asia, via Russia, to Latin America. Over one night the value of the bath fell by around 25 percent. (Stiglitz, 2002:89)

Thailand managed the sharp crisis with help from an IMF program, and since 1998, several institutional reforms have contributed to a recovery. (Kokko, 1999:6) After about six months after the crisis the currency stabilized both in terms of value and volatility.

The Bank of Thailand uses the real effective exchange rate (REER) to measure the Kingdoms external competitiveness relative to its trading partners. The real effective exchange rate measures the relative price of Thailand's goods and services to its trading partners, measured in the same currency. Changes and developments in price and nominal exchange rates of Thailand's main trading partners determine the movements of Thailand's REER¹. When constructing the REER, the Bank of Thailand also considers third market effects. This means that instead of just comparing the competitiveness of trade between Thailand and its trading partners, it also considers the competition between Thailand's exports and its trading partners' exports in third country. Such measure includes competition in all markets and shows how the price competitiveness of Thai goods and services are determined by changes in other currencies. (Waiquamdee et. Al, 2005:4)

Since the REER compares prices across countries, the consumer price index (CPI) is generally used. This is so because the CPI measures the relative costs of a basket of goods and services across countries. Other measurements are possible, such as the export deflator or the producer price index, or unit labor costs (total wage costs divided by total output). But, the Bank of Thailand's REER makes use of the CPI index. (Waiquamdee et. Al, 2005:4) Up until the crisis 1997, Thailand's REER remained relatively stable. Then as a result of the fall in the nominal value of the bath, there was a sharp depreciation of the REER in 1997. The real exchange rate in Thailand still remains below pre-crisis levels, which shows stronger competitiveness. From 2005 the REER has appreciated, as a result of large foreign capital inflows in the form of FDI and a weaker US dollar. (World Bank Office, 2007:7)

Figure 5.8: Nominal and real effective exchange rate 1990-2006



Source: www.bot.or.th

¹ Thailand's main trading partners are the US, EU, Japan, ASEAN and China (Waiquamdee et. Al, 2005:4)

6 Conclusion

The purpose of this thesis was to examine whether the increasing tourism sector in Thailand has pulled resources away from other sectors in the economy towards the tourism sector, and thus harming their international competitiveness. The case of Thailand has been investigated with the theoretical framework of the Dutch disease theory and the General Equilibrium model. This section will examine the analysis of the different sectors where Dutch disease is expected to occur followed by a final conclusion. According to my findings, the increasing tourism industry has not led to Dutch disease, even though some sectors have shown signs of Dutch disease, it has not been a result of an increase of foreign visitors.

For Dutch disease to occur, there needs to be an over-reliance on the booming sector. Thailand does not solely depend on tourism as a source of earning foreign capital. The economy's export sector is characterized by a large diversity of goods, both intra-industry and inter-industry diversity. However, the tourism industry has gained a more important role as a source for foreign earnings, and its contribution to total GDP has increased rapidly over the past decades and shows signs of further growth in the coming years. The largest contributor to total GDP is the manufacturing sector, which is also the sector that generates most foreign capital. The agricultural sector continues to be of great importance, since the majority of the labor force is still employed in that industry, but the industry's share of total GDP has been on a decreasing scale since the early 1960s, even though the actual output has increased.

Further, the Dutch disease theory predicts an appreciation of the real exchange rate as a consequence of a large inflow of foreign capital. The Thai bath depreciated rapidly 1997, following the fall in the nominal value of the bath. Since then the REER continues to be below pre-crisis levels. However, it has appreciated from 2005, as an effect of FDI and a weaker US dollar. Consequently, the increase of the tourism industry has not resulted in a real appreciation of the bath.

The Dutch disease theory expects the tradable sector to decrease and that the economy could face deindustrialization, which has not been the case for Thailand. The economy has gone from an agricultural based society to an industrialized society. The manufacturing sector in Thailand has been expanding with an impressive pace, since the

industrialization began in the early 1960s. The public sector has been supporting this industry through various policies, and the industry has developed a great diversity and is more complex than it was in the 1960s. If Thailand had faced a threat of Dutch disease, these policies would have helped to reduce the symptoms, since they helped to increase the international competitiveness for that industry.

Thailand has developed a flexible labor market, meaning that labor is mobile between the sectors, in accordance with the theoretical framework. Thus, if Thailand would suffer from the symptoms of Dutch disease, resources would be pulled away from the other sectors of the economy into the tourism sector. Since 1990, there has been a transformation of labor from the agricultural sector, towards the manufacturing sector. But, this is an effect of the industrialization and not the increasing tourism industry.

To sum up, Thailand has been going through the face of modern industrialization, meaning that the economy has gone from mainly a producer of agricultural products, to import-substitution and finally export-oriented growth. This process has taken place simultaneously as an increase of foreign visitors to the country. The government has been a big player in the promotion of Thailand as a tourist destination, with the establishment of the TAT. Further, the TAT cooperates with both the public and the private sector in the promotion of tourism. Also, the government has helped boosting the competitiveness of the manufacturing industry. How Thailand would have reacted without the government's intervention is hard to say, but the economy is not exclusively dependent on the tourism industry due to their large manufacturing sector and the great range of export products.

During the work with this study I have discovered that tourism is both a curse and a blessing for Thailand. The active players in the promotion of tourism faces both challenges and opportunities, but to be able to give any advises a further investigation on the impact from tourism on other elements in Thailand, such as economic leakage, the environment, the sex-industry and the fight for land, is vital.

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