

The Impact of Joining ASEAN Free Trade Area on International Trade and Foreign Direct Investment: *In the case of Lao PDR*

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I. Introduction

The Lao People's Democratic Republic (PDR) is one of a few developing countries in the Southeast Asian region. Since 1986, the government introduced the New Economic Mechanism (NEM) by changing the program of reform to transform the Lao PDR from a central planning or command economy to a market economy. It is the first step of opening the country to the world. Consequently, the Lao PDR was accepted as a full member of ASEAN in July 1997 and AFTA from 1 January 1998. The main aim of AFTA is for the Lao PDR to reduce tariff rate (as CEPT package) to ASEAN members at 0-5 percent within 10 years. After which vast imported commodities and foreign direct investment will flow into the Lao PDR. However, under the integration scheme, there are many issues that the Lao government has to adjust in orders to their policies to support domestic industries and to prevent negative effect from trade liberalization.

1.1 Objectives of study

The objective of this paper is to study the impact of joining AFTA on international trade in terms of the welfare gains resulting from trade creation and the welfare losses resulting from trade diversion. Moreover, the comparative advantage of commodities of the Lao PDR has to be investigated in order to know which exported commodities of the Lao PDR have more comparative advantages than the commodities of other ASEAN countries. The third aim is the comparison of FDI flows into the Lao PDR with the rest of ASEAN members to find out the FDI position in the Lao PDR. Finally, this study is to answer a question, "What is the factor of falling down foreign direct investment in the Lao PDR?" by using evidences of empirical analysis.

1.2 Scope of study and its limitations

Scope: This paper will study the effect of Lao PDR's accessing AFTA on Lao economy, especially international commodity trade from 1996 to 2000 and foreign direct investment flows during 1995-2001, by using secondary data collected from the various institutions, including the United Nation, the Lao PDR authority, IMF, ADB, ASEAN and other international organizations.

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Data and its limitations

There is limited trade data measured in value terms from the Lao PDR sources because of insufficient trade data processing by the Lao PDR government officials. Trade data reported by Customs Department of Ministry of Finance is different from trade data reported by the Bank of Lao PDR. Lao officials in the National Statistical Center said that they do not have enough budgets to install computers for recording database. Therefore, the data collected by the center are biased with underestimation and different from those recorded by trading partners.

To avoid the problems associated with the data collected by Lao PDR sources, I use the data collected and reported by trading partner countries on import and export trade with Lao PDR. That is, I assemble a trade database inversely, using data reported by trading partners. These data are compiled from the UN's COMTRADE database. This was a major task, which involved arranging and summarizing a trade matrix consisting of more than 17,000 entries. This data allows us to provide import and export value data that are defined by country and commodity. This database is more comprehensive than any other that I am aware of, and overcomes most of the problems associated with the data from Lao PDR sources. Nevertheless, there are at least some limitations of my data, which should be born in mind. The first is the problem of cross-border or informal trade; neither Lao PDR nor its trading partners are able to record it. Second, the samples of the countries which were collected by the United Nations. There are not many countries, which are significant trading partners of the Lao PDR. An expectation being Vietnam, whose is a trading partner of the Lao PDR which has increased trade with Laos recently.²

Since the Asian financial crisis in 1997, the Lao PDR has been affected from that crisis same as other Asians countries. It made a high inflation in the two and three digits level recently. As a result, the consumer price index within the Lao PDR is very high. When I used the consumer price index to calculate trade creation and trade diversion, it possibly made the result underestimate the value. The next research should use the wholesale price rather than consumer price index in order to avoid a calculating error.

1.3 Structure of Research

This paper is divided into five sections. After section 1 (introduction), section two will discuss the effect of tariff change on the Lao economy. It will briefly analyze import, export and government revenue. Section three is the most important part of the research. At the beginning of this chapter, there is an introduction of the theory of trade creation and trade diversion, and that theory is used to analyze the welfare gains and losses from joining AFTA in the Lao PDR.

² Menon, Jayant, "Transitional Economies in Free Trade Areas: Lao PDR in the ASEAN free trade area," *Journal of the Asia Pacific Economy* 4 (1999): 363.

In addition, revealed comparative advantages in one- and two-digits SITC level is to be explained significantly in order to see the competitiveness of Lao PDR's exporting commodities.

The foreign direct investment flows into the Lao PDR will be discussed in section four because it has played an important role in the development of the Lao PDR since the country transitioned from a centrally planned economy to a market economy. However, nowadays FDI has declined significantly. If we compare FDI flows to the Lao PDR with other ASEAN countries, there is smaller FDI in the Lao PDR than other new ASEAN memberships. Finally, section five will be the concluding remark.

1.4 Literature review

There are many research papers including, theoretical and empirical papers that examine the impact of free trade integration on economic growth especially international trade and international capital movements as foreign direct investment flows. The EU common market is one of custom union and free trade integration among European countries. They freely move the commodities, services, people and capital between the member states. The ASEAN Free Trade Area (AFTA) also wants to step to the custom union as the European Common Market in future. Therefore, the effective integrations of both individual country and groups are challenging aspects that economists want to find out whether negative or positive.

In 1998, The Lao's People Democratic Republic became a member of AFTA. It was a new development of trade policies by the Lao government to promote the international trade of Laos within ASEAN countries. Surely, the Lao PDR had to face the impact of joining AFTA on international trade and foreign direct investment flows by direct and indirect effects. These effects are the main objective of my empirical study. I want to examine the effect of trade creation and trade diversion from this integration by using Ex-post income elasticities of import demand in intra-area and extra-area (Balassa, 1963).³ He used to investigate the effect of trade creation and trade diversion in the European Common Market. Moreover, he gave definition on this method as: Ex-post income elasticities of import demand were the ratio of the average annual rate of change of import to that of GDP, both expressed in constant prices. However, this method had to induct under some limited condition of economies. Moreover, the processing calculation must require the commodity prices as wholesaler prices.

International economists are interested in the Lao PDR after joining AFTA. They tried to find out the impact of that integration especially trade creation and trade diversion. Jayant Menon (1999) found that trade diversion is likely to be lower than trade creation, and that AFTA will provide the vehicle to negotiate market access issue with ASEAN countries in particular

³ Balassa, Bela, "Trade Creation and Trade Diversion in the European Common Market," *the Manchester School* 42 (1974): 93

with Thailand.⁴ However, He did not use any empirical calculation about the effect of trade creation and trade diversion. He just inspected and analyzed from trade partner statistics. Recently, there was a good theoretical and empirical study concerning the economic effect of the Lao PDR joining AFTA as Emiko Fukase and Will Martin (2001). They used a simple Computable General Equilibrium (CGE) model to make an overall evaluation of gains and losses from integration. They found that the welfare gains from trade creation appeared to outweigh the welfare loss from trade diversion. The Equivalent Variation (EV) gain resulting from the increase in imports from ASEAN is 6.4 million US dollars, which is larger than the welfare loss of 3.1 million US dollars due to the decrease in imports from the rest of the world. Moreover, the welfare gains from improvements in the term of trade are 8.7 million US dollars.⁵ These researches concluded that the post-integration had more trade creation than trade diversion. This means that the Lao PDR joining AFTA could increase social welfare after integration.

The second effect of integration is the foreign direct investment flows to the Lao PDR. It had evidently increased since the late 1980s when the opening of the country interested foreign investors especially in the energy sector. Jayant Menon (1999) found that AFTA would not significantly affect FDI flows to the Lao PDR because the Lao PDR is a transition economy country that has poor infrastructure and human resources. It is not yet in a position to attract efficiency-seeking investment. Therefore, the Lao PDR would have to adopt ASEAN's Agreement on the Promotion and Protection of investment. It might provide foreign investors with greater confidence in the security of their investment.⁶ However, according to Lao official statistics of the FDI significantly declined after the Lao PDR joined AFTA in 1998. Nick J. Freeman (2001) pointed out that the foreign direct investment has decreased in recent years as the result of the Asian financial crisis in Thailand, which is the main investment partner country⁷. Moreover, the macroeconomic health of the Lao PDR deteriorated significantly after the financial crisis such as depreciation of the Kip currency and a high inflation rate of up to three-digits.

⁴ Jayant Menon, "Laos in the ASEAN Free Trade Area: Trade, Revenue and Investment Implications," *Journal of the Asia Pacific Economy* 4 (1999): 353-354.

⁵ Emiko Fukase and Will Martin. *Free Trade Area Membership as a Stepping Stone to Development: The case of ASEAN* (Washington, D.C: The World Bank Discussion Paper, 2001), 49.

⁶ Jayant Menon, 358-359

⁷ Nick Freeman. "The Rise and Fall of Foreign Direct Investment in Laos, 1988-2000," *Post-Communist Economies* 13 (2001): 101-113

II. The impact of tariff change on Lao Economy

There are direct and indirect effects of the tariff change from the accession to AFTA by the Lao PDR. Direct effects include those on exports, imports, and revenues. Indirect effects cover those on FDI and the overall comparative advantage of the Lao PDR.

2.1 Import and Export

Since 1997, the Lao PDR has become a member of ASEAN officially. As discussed in previous section, the Lao PDR has to reduce tariff lines to 0-5 percent. It is the direct effects on export and import sectors by trade liberalization. The Lao PDR should expect that there are trade creations rather than trade diversions, as theoretical gains from joining AFTA.⁸

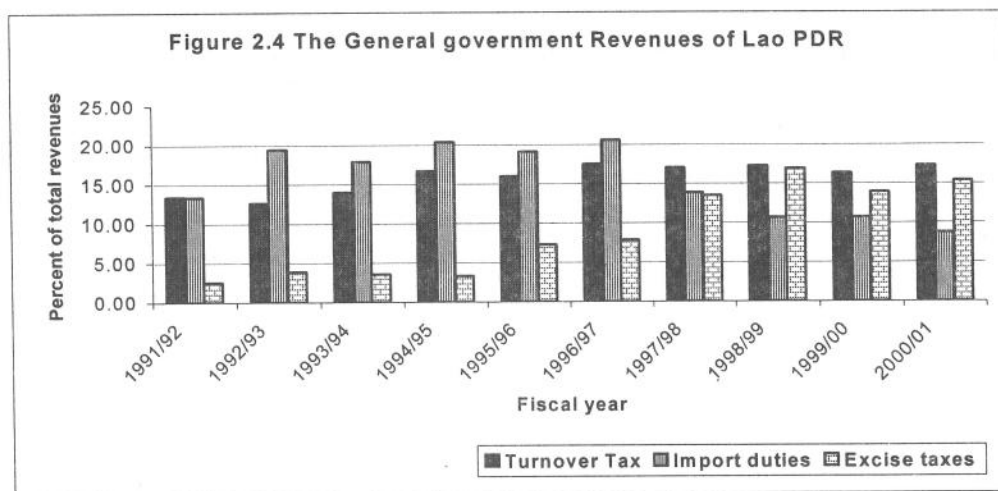


Figure 2.1 presents the Lao PDR's exports to ASEAN and Non-ASEAN during 1991-1999. There were more exports to extra-ASEAN than intra-ASEAN. It accounted for 58.41 percent with intra-ASEAN and 41.59 percent with extra-ASEAN in 1991. The share of total exports to intra-ASEAN increased to 78.29 percent while the extra-ASEAN was only 21.71 percent in 1996. Then, the Lao PDR exports to the ASEAN countries were sharply decreased from 78.29 to 16.60 percent between 1996 and 1997. Since the impact of the Asian financial crisis in 1997, it made exports to ASEAN countries decrease significantly due to weak demand for Lao exports, while demand for Lao export from Europe sharply increased (from 21.71 percent in 1996 to 83.40 percent in 1997). After joining ASEAN and AFTA in 1997 and 1998,

⁸ Details of trade creation and trade diversion will be discussed in next section, which is the main topic of this paper.

the pattern of Lao trade suddenly changed from export to Europe and America to ASEAN markets as shown on figure 2.1. The shares of total exports were 83.40 percent with intra-ASEAN and 16.60 percent for extra-ASEAN in 1997. Then, the Lao PDR's exports to intra-ASEAN have increased about 35 to 65 percent in 1998 and 1999, respectively.

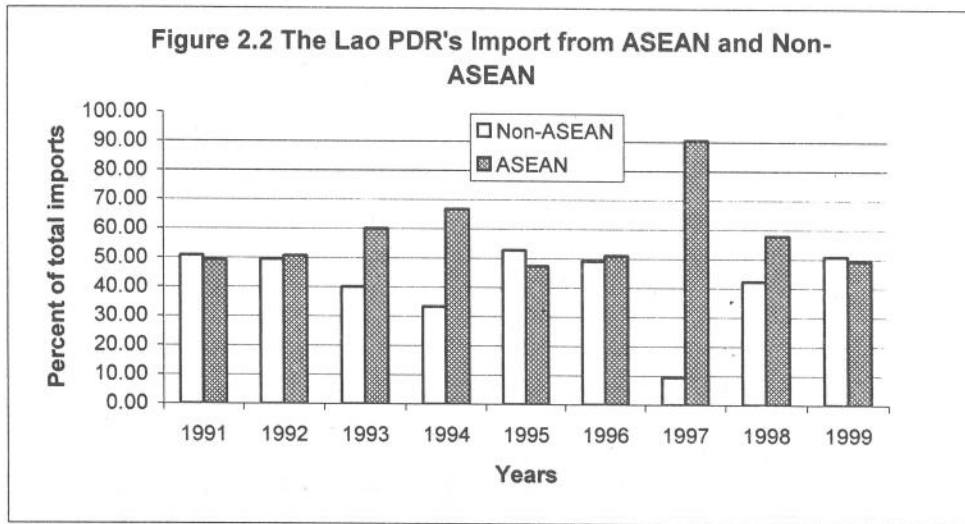
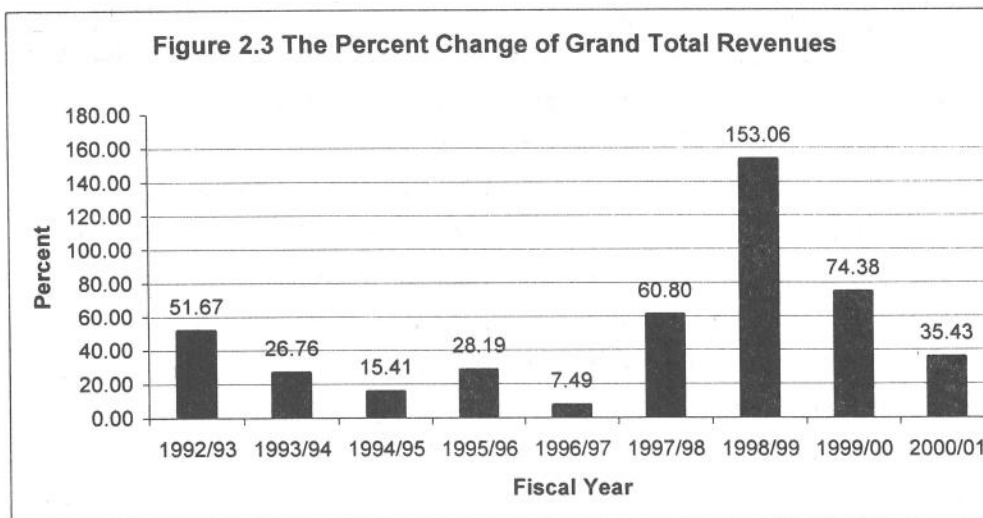


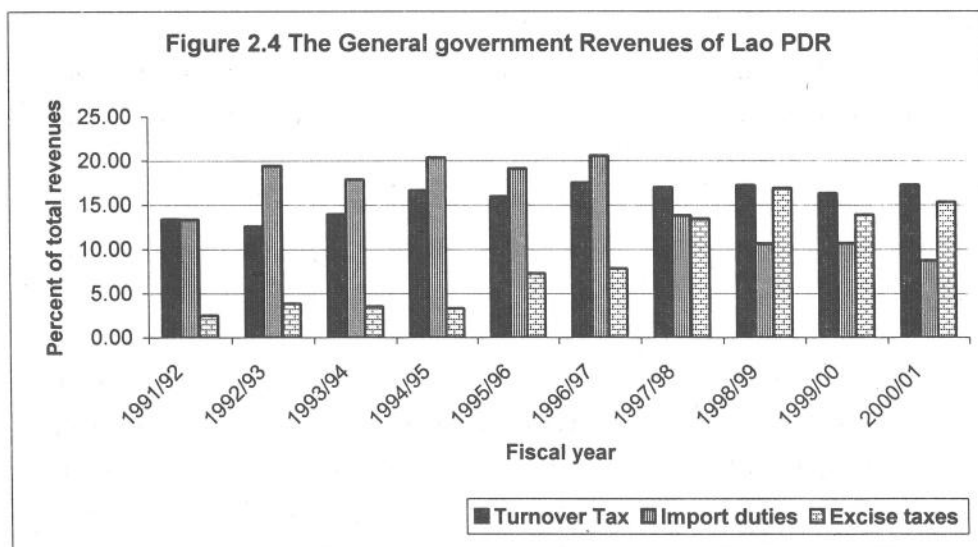
Figure 2.2 shows the Lao PDR's import from intra-ASEAN and extra-ASEAN during 1991-1999. Before the Lao PDR joined AFTA, the share of total import from intra-ASEAN increased during 1991-1997 and it was greater than import from extra-ASEAN. However, the share of total import from Non-ASEAN countries was gradually shifting by 15 percent between 1998 and 1999, as a result of tariff reform policy.

2.2 Government revenues

How important are revenues collected from trade (import and export) taxes to the Lao-PDR's economy? Figure 2.3 shows the percentage change of grand total revenues of the Lao PDR. It increased from 75 to 113.2 billion of Kip between 1991/92 and 1992/93 by more than 50 percent. Moreover, it suddenly increased between 1997/98 and 1998/99 by 153 percent, as a result of export tax rather than import duty. However, the percentage change has been trending downwards by 35.43 percent in 200/01 compared with the previous year because of tariff reduction under AFTA scheme.



By the financial year 1991/92, the foreign trade tax collections accounted for around 21 billion Kip (3.25 percent of GDP at 1990 constant market prices),⁹ and 27.76 percent of grand total tax revenues. After that, the percentage of foreign trade tax collections of the Lao PDR slightly declined year by year, although the amount of foreign trade tax collections has increased.



The most important source of the government revenues is tax revenue rather than non-tax revenue. The share of tax revenue was around 80 percent of the grand total, with foreign

⁹ The value of GDP at 1990 constant market prices was 637,160 million of Kip in 1991.

trade tax was 19 percent and profit tax was 10 percent.¹⁰ In order to find out the effect of tariff reductions on the Lao PDR government under CEPT scheme, we can compare some of the tax revenues with grand total revenues, including turnover tax, import duty, and excise tax.

As shown in figure 2.4, the import duties significantly increased during 1991/92-1996/97, which is the pre-integration. It increased from 13.36 to 20.59 percent of grand total revenues in 1991/92 and 1996/97, respectively. After the Lao PDR became a member of AFTA on 1 January 1998, the Lao government had to lose some revenues from tariff reduction in Inclusion List. Therefore, the import duties have decreased from 13.24 to 8.75 percent in 1997/98 and 2000/01, respectively. At the same time, turnover and excise taxes took the place of the losing import tax. Both of them have increased during the 1990s especially the excise tax which increased from 2.51 percent in 1991/92 to over 15 percent in 2000/01.

III. Trade Creation and Trade Diversion

3.1 Theoretical Reviews

3.1.1 An Ex-post Income Elasticity of Import Demand

The method

In order to estimate the effect of the Lao PDR joining the ASEAN Free Trade Area (AFTA), I look at the effect from trade creation and diversion. The method of estimation I use here is the comparison of ex-post income elasticities of import demand in intra-area trade for periods preceding to and following integration.

Balassa, Bela (1974) said that the *ex-post income elasticities of import demand* were defined as the ratio of the average annual rate of change of imports to that of GDP, both expressed in constant prices. There is an assumption that income elasticities of import demand would have remained unchanged in the absence of integration. If the ex-post income elasticity of import demand increases for the intra-area imports, it would indicate *gross trade creation*. It means that the intra-area trade increases either domestic or foreign sources of supply. Moreover, a rise in the income elasticity of demand for imports from all sources taken together would give expression of trade creation proper. For example, that demand shifted from domestic to partner-country sources. For Trade diversion, if income elasticity of import demand shifts from extra-area to intra-area sources, it would indicate trade diversion.¹¹

¹⁰ Take average 10 years during 1991/92 – 2000/01

¹¹ Balassa, Bela, "Trade Creation and Diversion in the European Common Market," *Manchester School* 42 (1974): 93

This method was subsequently applied in both one-digit and two-digits of Standard International Trade Classification (SITC) commodity. In order to make the comparison of the effect of integration clearly, I have divided my analysis into two periods by taking 1996-1997 as the pre-integration and 1998-2000 as the post-integration, since Lao PDR became a member of the Association of South East Asian Nation (ASEAN) in 1997. However, the Common Effective of preferential Tariff (CEPT) was implicated in the beginning of 1998. Thus, the year 1998 is the border of analysis for the impact of preferential trade liberalization on the Lao PDR's international trade.

3.1.2 Revealed Comparative Advantage

The Lao PDR has major trade partners in both the ASEAN and the European countries. Therefore, it is very important to find out the comparative advantage of the Lao- PDR with these trading partners. In order to evaluate the competitive ability in international commodities that Lao PDR has. The author calculates share of commodity in total Lao PDR exports and compares them with those of the world. The method used to analyze the comparative advantage of the Lao- PDR's export commodities is the index of Revealed Comparative Advantage (RCA).¹² The model can be written as below:

$$RCA_{ij} = \left(\frac{X_{ij} / X_{iw}}{\sum X_j / \sum X_w} \right)$$

X_{ij} = Laos' Exports of Commodity i

X_{iw} = The World's Exports of Commodity i

$\sum X_j$ = Laos' Total Export to All Countries

$\sum X_w$ = The World's Total Exports to the World

The revealed comparative advantage index refers to the share of an export product in total exports of a country divided by the same product's share in total world exports. When the revealed comparative advantage index value for that particular export product is greater than one, it means that the country has a comparative advantage on that particular product. In addition, if the revealed comparative advantage index value increases, it indicates that the country is gaining advantage in that product relative to the ASEAN or world market. This model calculates the revealed comparative advantage index by using exports data. The calculation is based on the One-digit and Two-digits of standard international trade classification level.

¹² This model has developed by Balassa who is a modern Ill-known economist (1965).

3.2 Welfare gains and loses from joining AFTA

3.2.1 Trade Creation and Trade Diversion for One-digit SITC level

The results of the calculation are presented in Table 4.1. If we consider the ex-post income elasticities of demand for imports of all commodities, taken together, it provides evidence of trade creation in the joining of AFTA by the Lao PDR. However, there is no indication of trade diversion. It is clear from Table 4.1 that between the periods 1997 and 1998-2000, the income elasticity of demand for imports increased from 0.33 to 2.53 with respect to the total of all commodity (intra-ASEAN and extra-ASEAN) imports. Moreover, the inter-ASEAN trade increased from 1.55 to 1.71, while it greatly rose from -3.02 to 6.15 for extra-ASEAN imports. But the results of this section vary widely between commodity groups.¹³ It can be more useful in conclusion and analysis if we consider the disaggregated data level.

Table 4.1 does not show trade creation in Machinery and transport equipment. The ex-post income elasticities of demand for import of intra-ASEAN in machinery and transport equipment declined from 6.85 to 3.41 in the post-integration period, while the ex-post income elasticities of import demand increased from -3.53 to 1.11 for extra-ASEAN imports. There are some indication of trade creation in Crude materials, Mineral fuels, Chemicals, Basic Manufactures and Miscellaneous manufactured articles. On the other hand, there is some indication of trade diversion in Food, live animals, beverages, tobacco, and other goods categories. This conclusion is affected from the Lao PDR government's five years planning policies to increase domestic food products¹⁴ and to decline demand for food from Thailand due to an increased Baht exchange rate of more than 100 percent after the Asian financial crisis of 1997. As a result, the ex-post income elasticities of import demand declined in the post-integration period for those products.

Further, the data points to the existence of trade diversion in Beverages and tobacco, and Oils and fats. This result is a consequence of tariff reduction of the Common Effective Preferential Tariff scheme of AFTA commitment. Thereby, the Lao PDR's imported Beverage and tobacco, and Oils and fats substitute foreign producers for partner-country sources of supply. For the other goods categories, they also transformed imports from extra-area to intra-area significantly because of tariff sensitiveness.

¹³ More specific details are explained in section 4.3.2 by the calculation for two-digits SITC commodities

¹⁴ As reported in Socio-Economic Development Strategy for 2020, 2010 and Five year Socio-Economic Plan 2001-2005 that government achieved their goal to increase food products especially rice products (during the five years plan IV 1996-2000).

3.2.2 Trade Creation and Trade Diversion for Two-digits SITC level

This section presents the result of calculations of ex-post income elasticities of demand for imports for two-digits SITC level. It has little change from calculations in previous sections which show it has reduced trade diversion and increased trade creation. If we compare the result of calculations for one-digit and two-digits SITC level, the result of calculations for two-digits seem to indicate the trade creation rather than trade diversion. It is shown that the ex-post income elasticities of demand for imports increased from 0.32 to 2.60 with respect to total of imports (intra-ASEAN and extra-ASEAN). The extra-ASEAN's ex-post income elasticities of demand for imports have increased from -3.30 in 1997 to 6.65 during 1998-2000, while the ex-post income elasticities of demand for imports have remained unchanged for intra-ASEAN imports. To explain the effect of trade creation and trade diversion from joining AFTA of the Lao PDR clearly, we need to examine the results for the detailed commodity categories.

TABLE 3.1 Ex-Post income elasticities of import demand in the Lao PDR, 1996-2000

SITC	Products	Annual rate of growth		Ex-Post income elasticity of import demand		Difference (1997) & (1998-2000)
		1997	1998-2000	1997	1998-2000	
Total Imports						
0	Food, live animals	0.20	-0.12	2.86	-2.13	-4.98
1	Beverages, tobacco	-0.06	0.15	-0.88	1.93	2.81
2	Crude materials	-0.34	0.21	-4.84	5.96	10.80
3	Mineral fuels	0.11	0.51	1.57	8.96	7.39
4	Oils and fats	0.22	0.80	3.14	11.40	8.27
5	Chemicals	0.03	0.22	0.43	4.81	4.38
6	Basic manufactures	-0.17	0.09	-2.46	2.47	4.94
7	Machines, transpt Eq.	0.16	0.09	2.24	2.55	0.31
8	Misc manufactures	-0.28	0.07	-4.09	1.03	5.12
9	Other Goods	0.41	-0.01	5.88	0.87	-5.02
	Total from above	0.02	0.11	0.33	2.53	2.19
Intra-ASEAN Imports						
0	Food, live animals	0.19	-0.12	2.77	-2.46	-5.23
1	Beverages, tobacco	-0.09	0.18	-1.29	2.19	3.48
2	Crude materials	-0.39	0.16	-5.63	5.99	11.62
3	Mineral fuels	0.10	0.10	1.47	1.86	0.39
4	Oils and fats	0.22	0.18	3.14	3.84	0.70
	Chemicals	0.04	0.10	0.64	2.48	1.84
6	Basic manufactures	-0.11	0.06	-1.58	2.08	3.66
7	Machines, transpt Eq.	0.47	0.12	6.85	3.41	-3.45
8	Misc manufactures	-0.29	0.04	-4.18	0.01	4.18
9	Other Goods	0.16	0.12	2.27	4.44	2.17
	Total from above	0.11	0.06	1.55	1.71	0.15

Extra-ASEAN Imports						
0	Food, live animals	0.25	-0.02	3.56	1.27	-2.29
1	Beverages, tobacco	0.32	0.09	4.61	2.87	-1.74
2	Crude materials	-0.20	0.33	-2.85	6.37	9.22
3	Mineral fuels	1.79	16.75	25.89	239.56	213.66
4	Oils and fats	0.00	-0.33	0.00	-5.80	-5.80
5	Chemicals	-0.04	0.89	-0.51	17.46	17.97
6	Basic manufactures	-0.37	0.28	-5.29	4.65	9.94
7	Machines, transpt Eq.	-0.24	0.07	-3.53	1.11	4.64
8	Misc manufactures	-0.27	0.17	-3.89	3.43	7.33
9	Other Goods	0.70	-0.07	10.11	-1.07	-11.19
	Total from above	-0.21	0.34	-3.02	6.15	9.16

Source: Compiled from COMTRADE database, United Nations

The result of calculation of two-digits shows a trade creation in the Vegetables and fruits (SITC 05), and Coffee, Tea, Cocoa and Spices (SITC 07). There was evidence of trade diversion for one-digit SITC level. As a result of increasing domestic demand for extracted coffees and food prepared with cocoa from Thailand, we have seen a falling demand for the same products from Indonesia that has been an important trading partner of the Lao PDR within ASEAN countries. At the same time, there is an external trade creation in the Vegetables and fruits (SITC 05), and Coffee, Tea, Cocoa and Spices (SITC 07) as they have increased the ex-post income elasticities of demand for imports from extra-ASEAN imports because the major supplier of Lao PDR's imported tea was China

As well as further evidence of trade diversion in Beverage and tobacco, and Oils and fats at one-digit SITC level, the data also provided evidence of trade creation in tobacco and tobacco manufactures (SITC 12), and processed animals, vegetables, oils, etc (SITC 43). These are examples of increase in imports from Thailand and Malaysia instead of Singapore in 2000 for ASEAN and China and the United Kingdom for non-ASEAN. Finally, there is a trade creation in the Special transactions and commodities not classified (SITC 93), with the ex-post income elasticities of demand for imports increase from 2.27 to 4.44 for intra-ASEAN imports and rise from 1.67 to 15.42 for extra-ASEAN imports.

According to the analysis in the previous section, we met with a conclusion concerning the impact of Lao PDR joining ASEAN Free Trade Area (AFTA). The result of calculations made apparent the trade creation rather than trade diversion, although it has indicated some evidences of trade diversion in the Food and live animals, Beverages and tobacco, and Oils and fats for one-digits SITC level. It is apparent that there is a trade creation within these categories for two-digits SITC level. The Lao PDR would have obtained benefits rather than costs during post-integration periods. However, the Lao PDR has to implement tariff reduction on the CEPT

scheme under AFTA commitments within 2008.¹⁵ It means that the Lao PDR government has to lose some revenues from the part of import tariff. But if we compare with social benefits as a whole from *trade creation* by residence having better quality and cheaper consumption commodities than before, it may be compensated more than the loss from *trade diversion*. Therefore, I expect the welfare gains from integration to a free trade area as joining AFTA, may be greater than if the country was closed.

3.3 Revealed Comparative Advantages in Commodities of the Lao PDR

The results of the calculation of Revealed Comparative Advantage (RCA) are defined as the share of product group in the Lao PDR's exports divided by that product group's share in the world trade. In order to find out actual revealed comparative advantage of the Lao PDR within the ASEAN or world markets, the author looks at RCA indices within ASEAN-10 share rather than the share of world as a whole because the ASEAN will be a major analysis divided into one-digit and two-digits SITC levels, which explains more individual commodities.

3.3.1 Revealed Comparative Advantage for One-digit SITC level

This section presents the results of calculated RCA indices of the Lao PDR with the world share as a whole. It indicated comparative advantages of Lao PDR's export commodity categories by RCA indices being greater than one, and there is an increase in trend in comparative advantage for some commodities recently. The Lao PDR has a comparative advantage in Food, live animals, Crude materials, and Miscellaneous manufactured articles with the world market share as shown on figure 4.1.

Moreover, there are some products that might become major products for exports in the future such as chemicals, machines, transported equipment, and basic manufactures because these products' categories have tended to increase RCA indices from 1999 to 2000, particularly the RCA indices of Basic manufactures which increased from 0.20 in 1998 to 1.06 in 2000. However, the commodities that had a comparative advantage in the first half of the 1990s fell in RCA indices in the late 1990s.

In contrast, the data in table 3.3 shows the RCA indices of the Lao PDR with ASEAN-10 countries' share. It appears to have more comparative advantages in many product categories and an increase in the RCA indices. For example, the beverages and tobacco have comparative advantages within ASEAN countries in 1996 and 1997, but the Lao PDR has lost those comparative advantages in the post integration periods. Source: Compiled from table 4.3
extended the period of tariff reduction (the inclusion list of CEPT scheme) in those product

¹⁵ The Lao PDR has to phase in all of tariff lines (3,551 tariff lines) in to Inclusion List at 0-5 percent by 2008 (see Table 3.1 the CEPT package of Lao PDR).

categories under AFTA commitment in order to protect domestic industries. Thus, trading partners also used a high tariff rate with imported commodities from the Lao PDR. However, comparative disadvantaged commodities have gained more advantages with ASEAN-10 countries after AFTA integration in 1998. The RCA indices of the Food and live animals, and crude materials increased in 1998 and 1999, but they declined in 2000 as presented in figure 4.2.

TABLE 3.2 Revealed Comparative Advantage Indices of the Lao PDR with the world share (US\$ Thousand)

SITC Product	1996	1997	1998	1999	2000
0 Food, live animals	1.00	1.76	2.10	2.19	1.07
1 Beverages, tobacco	0.25	0.26	-	0.01	0.03
2 Crude materials	8.71	7.74	7.31	9.37	5.10
3 Mineral fuels	0.06	0.50	0.07	0.22	0.03
4 Oils and fats	-	-	-	0.11	-
5 Chemicals	0.03	0.06	0.00	0.00	0.33
6 Basic manufactures	0.28	0.34	0.20	0.21	1.06
7 Machines, transpt Eq.	0.02	0.01	0.04	0.01	0.71
8 Misc manufactures	4.35	3.99	4.45	4.16	2.42
9 Other Goods	0.10	0.20	0.26	0.23	0.11
Grand Total	1.00	1.00	1.00	1.00	1.00

Source: Compiled from COMTRADE database, United Nations

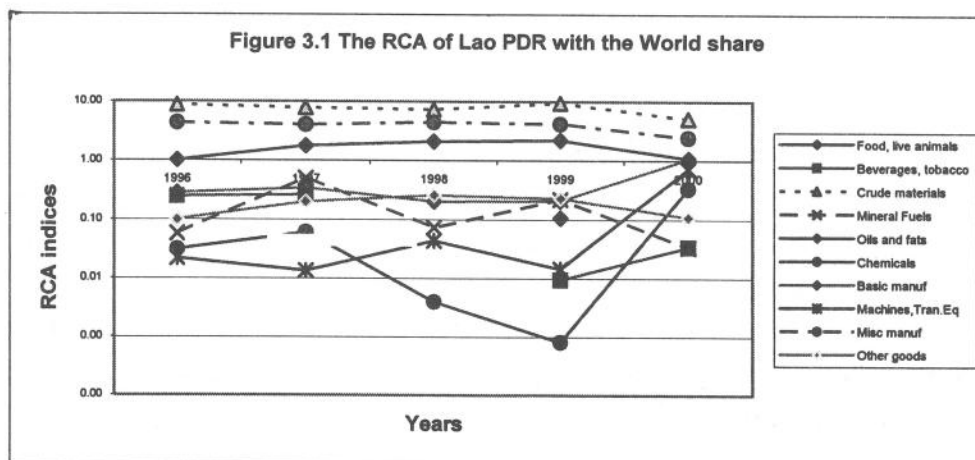
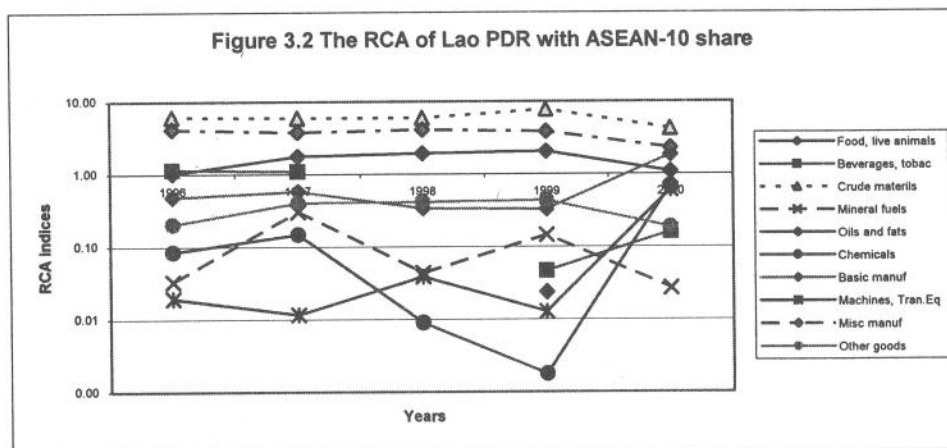


TABLE 3.3 Revealed Comparative Advantage Indices of the Lao PDR with ASEAN-10 share (US\$ Thousand)

SITC	Product	1996	1997	1998	1999	2000
0	Food, live animals	1.02	1.77	1.94	2.07	1.08
1	Beverages, tobacco	1.16	1.10	-	0.05	0.16
2	Crude materials	6.11	5.97	5.97	7.73	4.24
3	Mineral fuels	0.03	0.30	0.04	0.14	0.03
4	Oils and fats	-	-	-	0.02	-
5	Chemicals	0.08	0.15	0.01	0.00	0.68
6	Basic manufactures	0.48	0.58	0.34	0.33	1.84
7	Machines, transpt Eq.	0.02	0.01	0.04	0.01	0.60
8	Misc manufactures	4.15	3.81	4.11	3.90	2.30
9	Other Goods	0.20	0.40	0.41	0.44	0.19
	Grand Total	1.00	1.00	1.00	1.00	1.00

Source: Compiled from COMTRADE database, United Nations

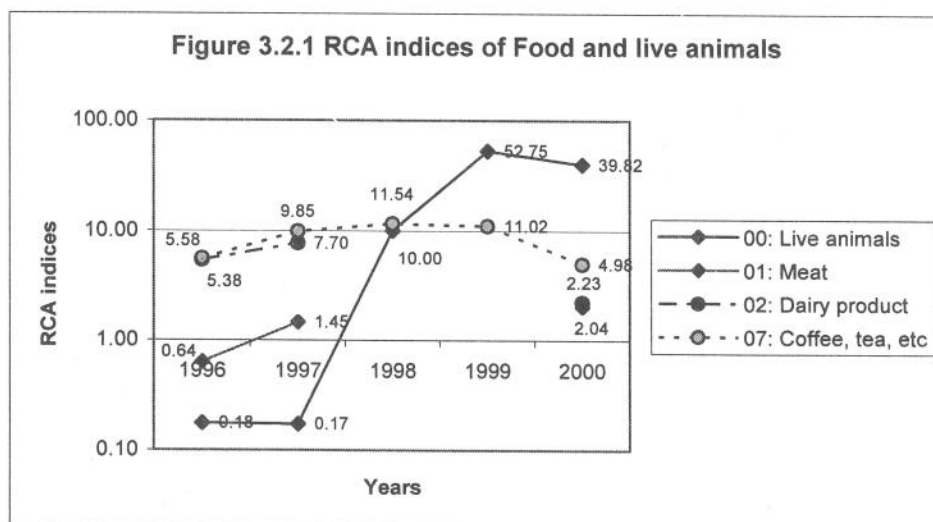


4.4.2 Revealed Comparative Advantage in Two-digits SITC level

The results of calculation of RCA indices of the Lao PDR with the world share have shown in Two-digits SITC level. We could see individually the comparative advantage commodities more clearly than on the one-digit commodities level. These RCA indices fluctuate greatly every year. Some years have comparative advantage, then they became disadvantage in the following years and vice versa. However, the RCA indices of the world share are less than the indices of ASEAN share because the Lao PDR has trade with ASEAN countries rather than non-ASEAN countries. In addition, the Lao PDR has the preferential trade agreement with ASEAN-10 countries. Thus, this section would consider the RCA indices of ASEAN-10 share in commodities, which had indices greater than one and should increase in the future.

Food and Live animals

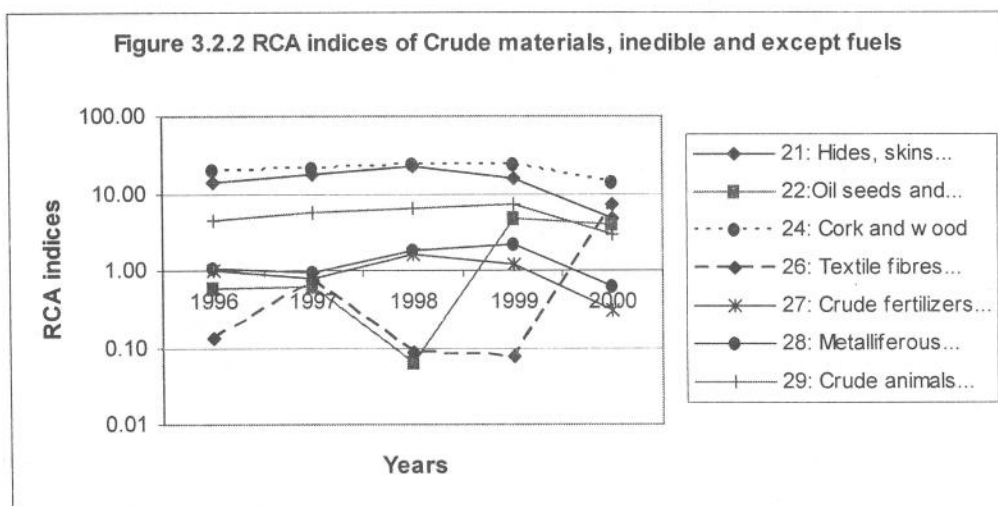
Figure 3.2.1 presents that the live animals, other than animals of division 03 (SITC 00), has the RCA indices greater than one after 1998, when the Lao PDR joined AFTA and the indices increased to 39.82 in 2000. Meat and meat preparations (SITC 01) indicated comparative advantage in the post integration by increasing the RCA indices from 1.45 to 2.04 in 1997 and 2000, respectively. Moreover, Dairy products and birds' eggs (SITC 02) decreased in comparative advantage in 2000 by 3 times compared with 1997. Finally, Coffee, tea, cocoa, spices, and manufactures thereof (SITC 07) increased in comparative advantage during 1996 – 1999, but the revealed comparative advantage indices declined from 11.02 to 4.98 between 1999 and 2000 as the result of falling demand for non-roasted coffee in Singapore which is the main trading partner for imported Coffees from the Lao PDR. Although Indonesia imported non-roasted coffee from the Lao PDR initially, the total export value of non-roasted coffees in 2000 were less than the total export value in previous years.



Crude materials, inedible and except fuels

These commodity categories are the major exports of the Lao PDR with ASEAN partners. Figure 3.2.2 shows the RCA indices of Crude materials, inedible and except fuels with ASEAN share during 1996-2000. The hides, skins and fur skins (SITC 21), Cork and wood (SITC 24), and Crude animal and vegetable materials (SITC- 29) have the RCA indices greater during 1996-2000. Moreover, they have had a strong comparative advantage with ASEAN countries, especially cork and wood which had a high value of exports, and have been a main

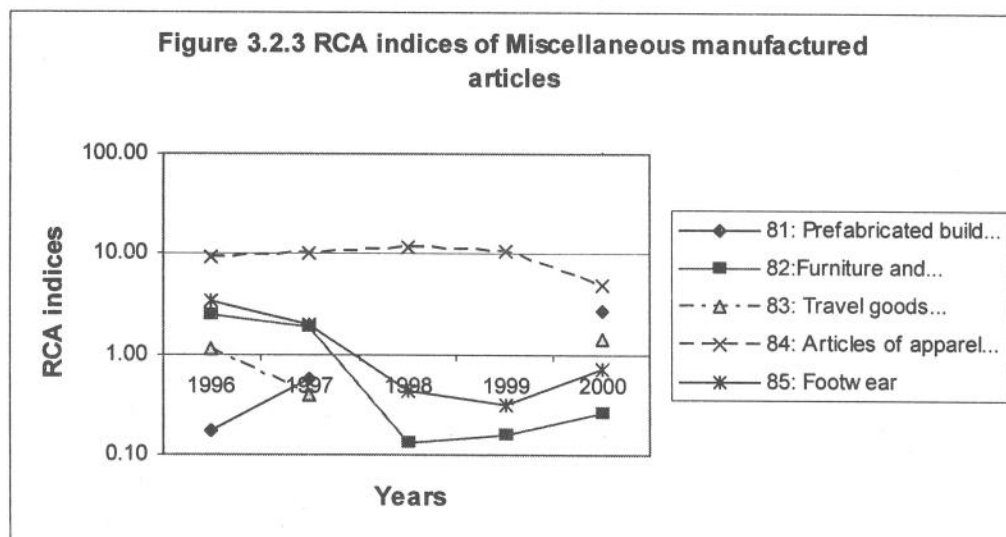
revenue source of the Lao PDR government for a long time. However, their comparative advantages have declined in the late 1990s because of the Lao PDR government's policies to protect environment by growing plants instead of cutting trees. The figure 3.2.2 also presents another comparative advantage commodities such as textile fibres (SITC 26) that had comparative disadvantage during 1996-1999, but became strong by comparative advantage by indices at 7.34 in 2000 Oil seeds and oleaginous fruits (SITC 22) also had comparative advantage in the post integration periods.



Miscellaneous manufactured articles

Figure 3.2.3 presents the RCA indices of miscellaneous manufactured articles with ASEAN-10 share. The indices indicate that the Articles of apparel and clothing accessories (SITC 84) had a high comparative advantage in both previous and post integration, but those indices slightly declined (4.98) in 2000. The Furniture and parts thereof (SITC 82), and Footwear (SITC 85) had strong comparative advantage in pre-integration.¹⁶ And the Travel goods, handbags and similar containers (SITC 83) have increased comparative advantage in the post integration periods. The indices increased from 1.15 to 1.41 in 1996 and 2000, respectively. Therefore, it might be the comparative advantage commodities of the Lao PDR that promotes export later.

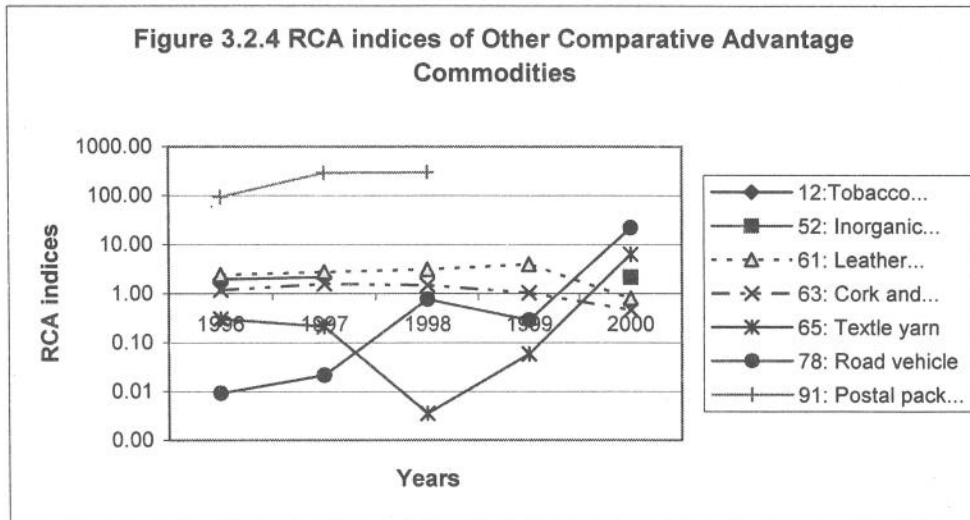
¹⁶ The pre-integration is defined as before 1998 and after 1998 was the post integration periods



Other Comparative Advantage Commodities

The comparative advantage of the Lao PDR's exported commodities also appeared in various commodities except three categories that are mentioned above. The Rubber manufactures (SITC 61), and Cork and wood manufactures excluding furniture (SITC 63) had revealed comparative advantage indices greater than one during 1996-1999, but they became comparative disadvantage commodities in 2000 as illustrated in figure 3.2.4. Further, the Textile yarn, fabrics and made-up articles (SITC 65), and Road vehicles including air-cushion vehicles (SITC 78) had comparative disadvantage, as the RCA indices lines of both commodities were lower than one value in the pre-integration periods. However, they began to show a strong comparative advantage in the post integration periods by indicating indices greater than one value in 2000.

The Lao PDR's export structure appeared in the agricultural sector and labor-intensive industries. For instance, the garment industries used unskilled labors, which had comparative advantage of lower cost of production. However, the materials of those industries were imported from abroad. Thus, the Lao PDR's export patterns should concentrate on agricultural products and try to develop exported processing commodities rather than exported raw materials.



IV Foreign Direct Investment Inflows to Lao PDR under AFTA

4.1 The structure of Foreign Direct Investment in Lao PDR

Foreign Direct Investment became important for the development of the Lao PDR in the 1990s. There were a lot of capital flows from ASEAN countries and the rest of the world in various sectors especially the hydroelectric power energy sector. However, Menon (1999) said that it should be noted that foreign investment approvals data does not always provide an accurate indication of actual or implemented investments. An initial survey by the Foreign Investment Management Committee (FIMC) of 131 projects found that only about 25 to 30 percent of licensed investment flows had been realized. Why is there such a large discrepancy between the approved and actual investment figures? The first reason relates to the concentration of foreign investment interest in large and lumpy projects like hydropower. These projects are generally long-term, and the cut-off period of 5 years for the survey may not capture a significant portion of the planned investment. The second reason relates to the fact that many applications may not represent a genuine interest in investing in projects applied for and approved. Once an application is prepared, it is often submitted to all countries that are options in the hope that at least one will be successful. Furthermore, a successful application in one country is often used to strengthen the applicant's case in gaining approval in the preferred investment site. For these reasons, approvals data on foreign investment need to be interpreted with caution.¹⁷

¹⁷ Menon, Jayant, "Transitional Economies in Free Trade Areas: Lao PDR in the ASEAN free trade area," *Journal of the Asia Pacific Economy* 4 (1999): 347.

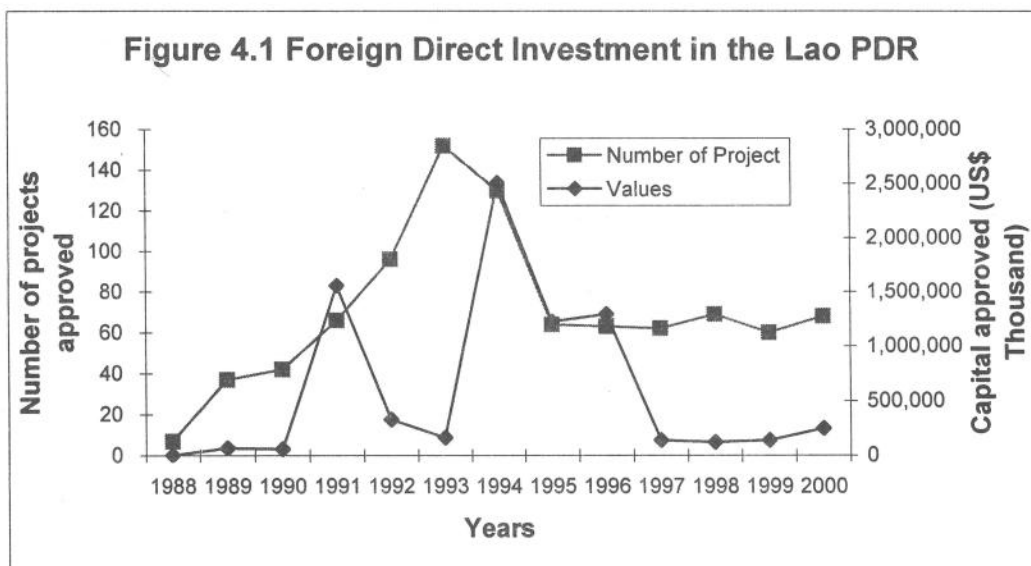
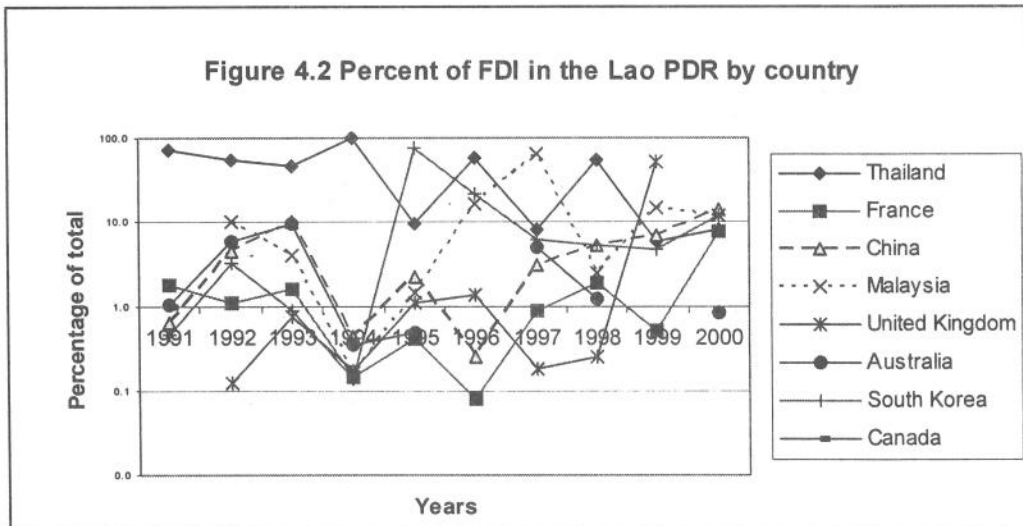


Figure 4.1 shows that the Lao PDR's Foreign Direct Investment inflows rose and fell during 1988-2000, both in terms of the number of projects approved and the total value of capital pledged. In 1993, the number of Foreign Direct Investment projects approved was at its peak, when it accounted for 152 licenses while in terms of the capital approved the peak was at 2.5 billion of US dollars in 1994. However, both the number of projects and capital approved has tended declined since 1994. The IMF estimates that in 1997 actual FDI inflows declined by 41 percent and the FDI inflow pledges decreased by 91 percent, from the effects of the Asian financial crisis.¹⁸ Conversely, since the Lao PDR has become a member of ASEAN in 1997, the FDI inflows into the Lao PDR increased. Both of FDI projects and capital approved increased. The number of projects increased from 62 to 68 FDI projects in 1997 and 2000, respectively. Likewise, the capital approved slightly increased from 123 to 250 million US dollars between 1998 and 2000. There are more detailed examinations on the rise and fall of the Lao PDR's FDI. It will be discussed in the next section as foreign direct investment inflow into the Lao PDR by country and sector sources.

¹⁸ Ngozi Okonjo-Iweala, Victoria Kwakwa, Andrea Beckwith, and Zafar Ahmed, "Impact of Asia's Financial Crisis on Cambodia and the Lao PDR," *Financial and Development*, 36 (1999): 3.

4.1.1 The Foreign Direct Investment stock by countries

Figure 4.2 presents information on the percent of foreign direct investment in the Lao PDR by country sources for the period 1991 to 2000 (first nine months). It is clear that Thailand had the largest foreign direct investment in the Lao PDR during 1991-1994. However, it was very fluctuated peaking at 97.5 percent in 1994, because Thai investors were facing financial problems as discussed in section 2.4.2 (the impact on FDI inflows to the Lao PDR in chapter 2). Nevertheless, other countries have placed important partnerships with the Lao PDR, the share in total FDI being 76.8 percent from South Korea in 1995. Moreover, Malaysia had an FDI share in total by 64.4 percent in 1997 and 53.2 percent from the United Kingdom in 1999. Thus, the Lao-PDR's foreign direct investments have slightly increased after the Lao economy recovered in 2000. In addition, China and Vietnam have become new sources of investment capital in the Lao PDR. Historically investment by Vietnam in the Lao PDR has been small, with a capital stock of 22 million US dollars since 1989.



However, Vietnamese investment in Laos has increased rapidly in recent years. For example, Vietnamese companies have been bidding for contracts in road construction and the building of dams for hydroelectric power. Moreover, China and the Lao PDR have a good relationship on political and economic policies. A Lao PDR official said that Lao-China governments have signed a series of agreement on trade, investment, land transport, tariff, extradition, education, banking and other aspects, which has laid a solid foundation for further

friendly cooperation on the basis of mutual benefits. Presently, total Chinese investment in Laos has reached 128 million dollars, including 58 Chinese-owned projects and 37 joint ventures.¹⁹

4.4.2 The Foreign Direct Investment stock by sectors

In terms of sectoral distribution of the Lao PDR’s FDI stock, the energy sector has been the largest recipient of foreign investment. Figure 4.3 shows the percentage of FDI in the Lao PDR by sector. Even though there were 2 licenses of energy sector, they accounted for about 90 percent of total approved foreign investment stock in 1991 and 1995. Other major recipients of FDI inflows include the manufacturing sector (largely comprising of food processing, wood processing, textiles and garments, and handicrafts), telecommunications and transport, banking, hotels and tourism, and Mining.

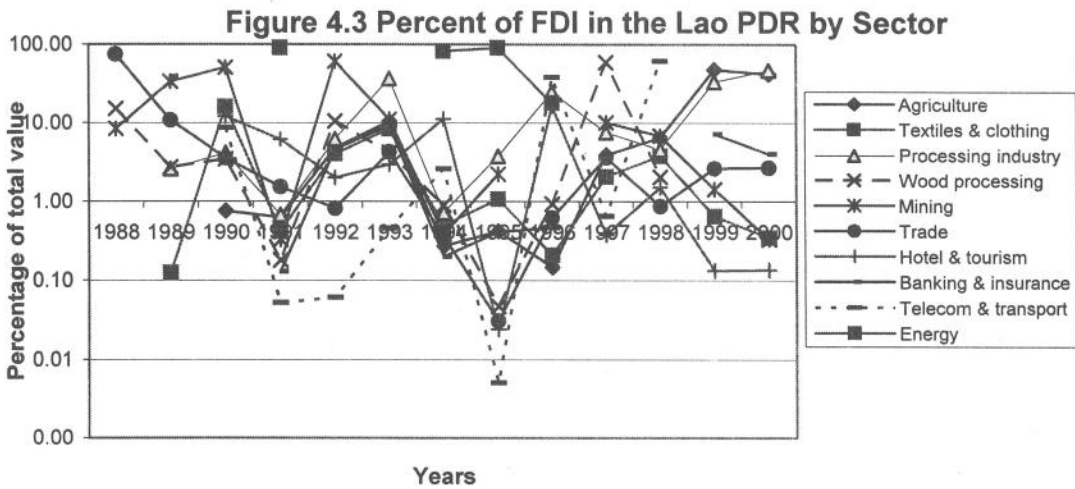


Figure 4.3 demonstrates that the agriculture and processing industry sectors increased by 35 and 42 percent in 2000 compared with 1998, respectively. They have tended to increase recently because of promoting policies in these sectors. It is a good signal for the Lao PDR’s development in the future. Some of the larger mining and petroleum exploration FDI were licensed in the early 1990s. The mining sector continued to increase in fluctuation during 1988-1992, but its scale of capital pledge dropped in the middle and end of the 1990s.

¹⁹ Reported by People’s daily newspaper, “China-Laos Cooperation Set to Further Prosper: Lao Official,” at: http://english.peopledaily.com.cn/200205/13/eng20020513_95533.shtml

The Nam Theun 2 hydroelectric dam is the biggest hydropower project in the country. The project is under construction and the 1,070 Megawatts plant is expected to be in commission by 2007. The total cost of the construction will be approximately 1.1 billion US dollars. According to the company the project will be financed by equity share and borrowing in Thailand and Singapore. The output of about 995 Mw of electricity will be sold to Thailand, and the rest of 75 Mw will be supplied for domestic users.²⁰

The Lao PDR attracted a total foreign investment of 493.8 million US dollars for 84 projects during the 2001-2002 periods. The energy sector accounted for 73.2 percent of the total investments and industry and handicrafts, 12.2 percent of the total investment; whilst services, contributed 3.3 percent of the total investment, according to the Lao government's report on implementation of the annual socio-economic development plan.²¹

4.2 The comparison of Lao FDI with ASEAN countries

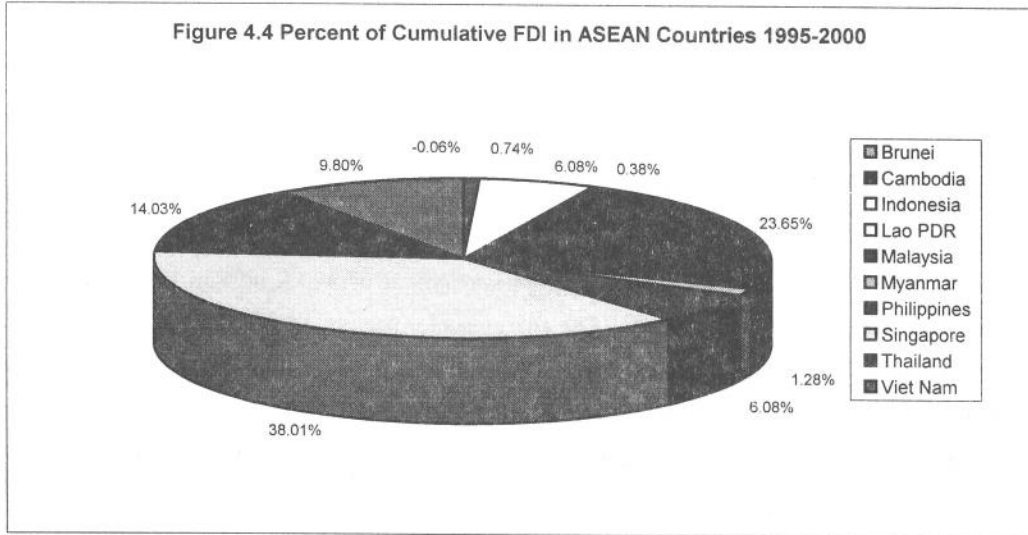
The Lao PDR is one of the least developed countries in the world. Population is 5.2 million, and Gross Domestic Products (GDP) per capita was around 300 US dollars in 2000. Since 1986, the Lao government has adopted a New Economic Mechanism in order to change from a central planning economy to a market economy. Foreign direct investment, law and other policies were some of the priority aspects that the Lao government had to reform. Despite the fact that the Lao PDR has tried to open country to a global market, the foreign direct investment inflows into Lao economy was small during 1997-1999, compared with other new members of ASEAN such as Vietnam, Cambodia and Myanmar. This section will examine why the flow of foreign direct investments into the Lao PDR has been smaller than in other ASEAN countries. To answer this question, there are 4 comparison methods: the comparison of cumulative inflows of FDI, FDI; inflows per capita; FDI inflows as a ratio of GDP, and FDI inflows as a ratio of exports and imports. It will be useful to measure the Lao PDR's ability to attract foreign direct investment with other ASEAN members.

4.2.1 The Comparison of Cumulative Inflows of FDI

This section looks at the cumulative level of foreign direct investment in the Lao PDR in order to compare with other ASEAN members, as it represents how the country is an attractive target for foreign investors.

²⁰ Vientiane Times reporter, Vientiane Times, 4 October 2002.

²¹ <http://www.Vietnamnews.vnagency.com.vn/2001-12/27/Today.htm>.



If we compare the Lao PDR's cumulative level of foreign direct investment from 1995 to 2000 with ASEAN-10 as shown in Figure 4.4. The Lao PDR comes ninth, with 490 million of US dollars or 0.36 percent of total capital inflows into ASEAN-10 during 1995-2000. The smallest one is Brunei Darussalani, which has a minus cumulative capital stock with 106 million US dollars. It means that Brunei investors invest abroad more than foreign investors invest in Brunei. In contrast, the cumulative foreign direct investment in Singapore is the largest attracting foreign investor from both the intra-ASEAN and extra-ASEAN. It has attracted over 100 times more foreign direct investment than the Lao PDR, even though Singapore has smaller population and land. The second at attracting foreign direct investment is Malaysia, with 23.65 percent share of cumulative foreign direct investment in ASEAN countries. New members of ASEAN including Cambodia and Myanmar also have a small inflow of foreign direct investment accounting for 0.74 percent in Cambodian and 1.28 percent in Myanmar.

4.2.2 The Comparison of FDI Inflows per Capita

Table 4.1 shows that the Lao PDR has the sixth lowest cumulative inflow of foreign direct investment per capita in all of the ASEAN countries, registering with 108 US dollars per head or per person. It is higher than Cambodia and Myanmar because the population of the Lao PDR is smaller (5.22 million people in 2000), while Cambodia and Myanmar have 12.2 and 49 million people, respectively. However, Singapore still has the largest cumulative inflow of foreign direct investment per capita (4,144 US dollars per person) because the population is small, but there is a high level of foreign direct investment inflow. The second and third cumulative inflows of foreign direct investment are from Malaysia and Thailand. They have a large market and labor necessary for low cost of production in Thailand.

TABLE 4.1 CUMULATIVE FDI STOCK PER CAPITA OF ASEAN COUNTRIES (In US dollars)
1996-2000

Countries	1996	1997	1998	1999	2000	Ranking
ASEAN	144	208	242	268	291	
Brunei Darussalam	-164	-153	-210	-321	-257	10
Cambodia	46	68	72	83	91	7
Indonesia	61	84	82	68	45	8
Lao PDR	58	75	83	96	108	6
Malaysia	807	1,089	1,185	1,313	1,520	2
Myanmar	16	24	30	35	39	9
Philippines	55	71	94	102	119	5
Singapore	6,527	9,733	11,025	12,766	14,144	1
Thailand	103	162	244	301	336	3
Viet Nam	75	112	140	164	189	4

Source: ASEAN Secretariat: *Data compiled from UNCTAD-World Investment Report 2001*

4.2.3 The Comparison of FDI Inflows as a Percent of GDP

If we look at foreign direct investment as a percentage of the Gross Domestic Product (GDP) in 1996 and 2000 as presented in table 4.2. The Lao PDRs' foreign direct investment constituted only 8.60 percent of its GDP or ranking fourth compared with ASEAN countries in 1996. It slightly declined to 4.21 percent in 2000. This was greater than Myanmar in both 1996 and 2000, which has the same economic structures due to its economy being in transition. In contrast, foreign direct investment inflow as a percentage of GDP in Cambodia was greater than the Lao PDR and Myanmar. Moreover, socialist Vietnam was the second of the foreign direct investment inflows as a percentage of GDP, with 10 percent in 1996 and 6.64 percent in 2000. If we consider the aggregated data of all ASEAN countries, it is clear that foreign direct investment as percent of GDP decreased from 3.63 percent in 1996 to 1.48 percent in 2000, due to slow economic downturn.

TABLE 4.2 FDI INFLOWS AS PERCENTAGE OF GDP IN 1996 AND 2000

Countries	1996	Ranking	2000	Ranking
ASEAN	3.63		1.48	
Brunei Darussalam	-1.32	10	0.44	8
Cambodia	9.39	3	4.58	4
Indonesia	2.73	6	-3.02	10
Lao PDR	8.60	4	4.21	5
Malaysia	7.23	5	6.18	3
Myanmar	0.23	9	0.07	9
Philippines	1.83	7	1.99	7
Singapore	11.40	1	6.89	1
Thailand	1.25	8	2.00	6
Viet Nam	10.22	2	6.64	2

Source: ASEAN Secretariat: *Data compiled from UNCTAD-World Investment Report 2001*

4.2.4 The Comparison of FDI Inflows as Percentage of Exports and Imports

Table 4.3 and 4.4 show the Lao PDR's inflow of foreign direct investment as a proportion to its total exports and imports in 1996 and 2000. Percentage of exports accounted for 50.47 percent and 21.82 percent in 1996 and 2000, respectively. They rank first in all of ASEAN countries because the Lao PDR has both few exported products and small exported values, and the foreign direct investment inflow did not come to the export industry sector, so that the foreign direct investment inflow as percentage of export became the biggest share. In comparison, other ASEAN countries such as Thailand and Philippines had a small percentage of export, but they had a huge amount of exports and foreign direct investment inflow. As a proportion of its exports, in Thailand it was only 4.15 percent and 7.40 percent in the Philippines.

If we look at the foreign direct investment inflows as percent of imports, it is clear that the values of import commodities are still high because some foreign direct investment projects have to import large raw materials from abroad every year. According to table 5.4, the Lao PDR's foreign direct investment inflows were 23.19 percent in 1996 and 13.46 percent in 2000. It means that foreign direct investment in Lao PDR in 2000 declined, while Lao PDR's import has increased significantly.

Therefore, to conclude from the above comparison it is relative to population, gross domestic product and other indicators, the Lao PDR has so far been attracting very little foreign direct investment compared with other ASEAN countries.

TABLE 4.3 FDI INFLOWS AS PERCENTAGE OF EXPORT IN 1996 AND 2000

Countries	1996	Ranking	2000	Ranking
ASEAN	9.08		3.23	
Brunei Darussaiam	-2.67	10	0.40	9
Cambodia	45.65	2	12.13	4
Indonesia	12.34	5	-6.96	10
Lao PDR	50.47	1	21.82	1
Malaysia	9.50	6	5.63	5
Myanmar	33.05	4	14.60	2
Philippines	7.40	8	3.99	7
Singapore	8.23	7	4.60	6
Thailand	4.15	9	3.60	8
Viet Nam	34.72	3	14.40	3

Source: Data compiled from UNCTAD-World Investment Report 2001 and ASEAN Secretariat.

TABLE 4.4 FDI INFLOWS AS PERCENTAGE OF IMPORT IN 1996 AND 2000

Countries	1996	Ranking	2000	Ranking
ASEAN	8.58		3.88	
Brunei Darussalam	-2.95	10	1.50	9
Cambodia	27.43	1	10.04	4
Indonesia	14.00	5	-11.27	10
Lao PDR	23.19	3	13.46	2
Malaysia	10.02	6	7.14	5
Myanmar	16.59	4	11.07	3
Philippines	4.77	8	4.90	7
Singapore	8.38	7	5.02	6
Thailand	3.21	9	3.92	8
Viet Nam	25.11	2	14.79	1

Source: Data compiled from UNCTAD-World Investment Report 2001 and ASEAN Secretariat

V. Conclusion

5.1 Concluding Remark

In this paper, the author examined the impact of joining ASEAN Free Trade Area on the Lao economy, by focusing on international trade and Foreign Direct Investment flows. The author found that trade creation is greater than trade diversion in the post-integration periods for both one- and two-digits Standard International Trade Classification (SITC) level. At one-digit level, the total income elasticities of import demand (intra- and extra-ASEAN taken together) increased from 0.33 in the pre-integration periods to 2.53 in the post one. It provides evidence of trade creation in the AFTA integration. However, there appears some trade diversion in the food and live animals, beverages and tobacco, and other goods categories. Still trade diversion in those categories for two-digits level are presented in few commodities because the Lao PDR still imposed high import tax on some commodities from ASEAN countries. My analysis also found that Lao international trade with extra-ASEAN significantly increased in the post-integration periods. It was caused by the maximum tariff rate, which fell from 150 percent to 40 percent.²² Since most of the Lao PDR's trade is already with Thailand, the Lao PDR's trade with intra-ASEAN is larger than trade with extra-ASEAN. Moreover, AFTA is going to provide the Lao PDR with a good opportunity to negotiate market access issues in the Thai market and other ASEAN members as well. It could lead to an increase in Lao PDR's exports in the future.

Calculated results of Revealed Comparative Advantage indices in both one- and two-digits SITC level, clearly indicated the comparative advantage of Lao PDR's commodities in ASEAN markets and the rest of the world as a whole. For one-digit SITC level, the Lao PDR has a comparative advantage in the food, live animals, crude materials and Miscellaneous manufactured articles categories with the ASEAN-10 share. The rest of the other categories tend to increase the degree of comparative advantage after integration.

Those advantages are obviously in the two-digits level. The Lao PDR has a strong comparative advantage within live animals other than animals in division 03 (SITC 00), dairy products and birds' eggs (SITC 02), coffee, tea, cocoa, spices, and manufactures thereof (SITC 07), hides, skins and fur skins (SITC 21), cork and wood (SITC 24), and crude animal and vegetable materials (SITC 29). Those commodity categories are raw materials in the agricultural sector that the Lao PDR exports to ASEAN market, particularly cork and wood, which could earn a lot of money for the Lao government. Furthermore, the Lao PDR also has a comparative advantage in basic manufactured goods such as Leather, leather manufactures and dressed fur skins (SITC 61), Cork and wood manufactures excluding furniture (SITC 63) and Articles of apparel and clothing accessories (SITC 84). These commodity categories might be important as

²² A 1993 IMF proposal recommended a program of greater uniformity and neutrality in the tariff structure (Jayant Menon, 346.).

exported manufactured products of small industries in the Lao PDR. However, there were some commodities that appeared to be comparatively disadvantaged in the post-integration periods in spite of having comparative advantage before joining AFTA. For example, Footwear (SITC 85) had comparative advantage in the pre-integration periods in contrast to the post-integration one when it became to be a comparative disadvantage commodity. It is because the footwear industries in Thailand and Indonesia have more economic scales and better quality than that of Lao industries.

Another point found in this study is that Foreign Direct Investment (FDI) flowed to the Lao PDR by country and sector were still smaller than foreign direct investment flowed to the similar countries among the new ASEAN members. The foreign investors are from Asian and European regions, while the major foreign direct investment flows to the Lao PDR from intra-ASEAN was made by Thailand. It accounted for around 60 percent of the total capital flows in 1996. The reason for attracting Thai investors is the cultural similarity between the two countries. Lao – Thai people are able to communicate by language, so they can understand each other. Another reason is the low cost of production. The wage of unskilled labor in the Lao PDR is lower than the wage in Thailand. However, the foreign direct investment from Thailand decreased in the late 1990s because Thailand faced an economic downturn after 1997.

If we consider foreign direct investment flows to the Lao PDR by sector, we see that the energy sector is of most interest to foreign investors. It accounted for about 90 percent of the total amount of capital inflow in 1991 and 1995. Conversely, it rapidly declined during 1997 – 2000 because of over investment in this sector. In addition, the mount of capital flows into the agriculture and processing industry sector significantly increased in the post-integration periods. It might be a good signal for joining AFTA of the Lao PDR by more capital-intensive countries (in ASEAN-6) will move to labor-intensive countries as new ASEAN members.

There are some reasons for small foreign direct investment in Lao PDR in recent years. The first reason; the Lao PDR is less attractive for FDI because of its small size market and poor infrastructure. If we compare the population of ASEAN countries, the Lao PDR has the smallest population. Moreover, the road is being reconstructed and improved, but transportation is inconvenient between remote areas and city areas, and it is an obstacle for transferring commodities to the international market. Another reason is the Asian financial crisis of 1997-1998. It made high capital outflows because there were high inflation rates and a fluctuating exchange rate at that time. Finally, the political system is a reason foreign investors always complain about to the government, who should have actuated a more efficient method of granting license applications.