

*A Study of Relocation Factors of Production Base and Investment of Japanese Investors from Thailand to CLMV+I Countries*

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**Abstract**

This study aims to examine the relocation factors of production base and investment of Japanese investors from Thailand to CLMV+I countries. The samples were executives of Japanese companies or organizations in Thailand. Purposive sampling was used to select the samples. One short case study was used to collect the data. The research instrument was a 5-point rating scale questionnaire. The data were analyzed by a statistical analysis software program for percentage, mean, standard deviation, and factor analysis. The results showed that there were 13 relocation factors of production base and investment of Japanese investors. All 13 factors had the cumulative variance at 68.44%. Regarding to their factor loading, the results were reported from the highest loading to the lowest loading, respectively. The 13 relocation factors included 1) infrastructure systems; 2) government management in preparation for natural disasters; 3) production cost; 4) raw materials; 5) political situation; 6) communication and land transportation systems; 7) transportation systems accessing; 8) production factors; 9) government's laws and policies; 10) political trust; 11) environment and labor; 12) labor skills; and 13) operation obstacles. Moreover, it also found that Japanese investors mostly tended to relocate their production and investment in Indonesia, Vietnam, Myanmar, Cambodia, and Laos, respectively.

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## **Introduction**

The industrial sector has an important role in economic development of Thailand. Many foreign investors have invested in the industrial sector and building their production bases in Thailand such as auto and auto-parts industry, electronic industry, fashion industry, and jewelry industry. Thailand Board of Investment (2014) reports the net total of investment from foreign investors in 2012, and 2013 which was 334,012.5 million baht, and 390,088 million baht, respectively. In these two years, the main foreign investor was Japan. The reasons that attract the foreign investors were the effective infrastructure system, cheap and skilled labor. Moreover, product contribution is easy because Thailand provides ports and roads connecting to many countries such as Myanmar, Laos, and Cambodia.

According to Industrial Location Theory created by Alfred Weber, the factors affecting the selection of production bases consists of three factors including transportation cost, agglomerative force, and labor cost (Reid, 1968). Labor is one of the most important factors of production base selection because labor force drives the industrial sector. Even though technology is used for production, labor force is still necessary, especially the housing industry. Therefore, Thailand provides this advantage to foreign investors since Thai labors are cheap and skillful.

Moon-chuen (2000) studied the impact of relocation of manufacturing activity across the border of Hong Kong. He found that the manufacturing relocation could promote economic by providing companies with investment and gaining more profits. As a result, Hong Kong has tried to develop itself to attract the foreign companies. In addition, Lee, Kuse, and Castro (2005), from their study, address that production base relocation aims to decrease production cost and logistics cost as well as to distribute produces and selling.

Nowadays, one major problem of the industrial sector is the new policy that raises the minimum labor wage rate to 300 baht/day. Since companies have to pay more for the labor force, production cost is higher, but profits are less. Thailand Development Research Institute (2014) reports according to Bank of Thailand, the increasing of the labor wage has increased the production cost. The higher production cost also affects the sell price. The Thai Chamber of Commerce (n.d.) addressed that the minimum daily wage at 300 baht increased the labor cost of industrial sector up to 22.29% which raised the production cost up to 3.34%. Normally, before products come to consumers' hands, they must pass through around 10 production processes starting from upstream, midstream, and downstream. With this situation, the higher labor cost affects each supply chain of each production process and pushes the production cost higher. Consumers would spend money up to 10-15% higher. The hiring rate of small, medium, and large enterprises decreased 19.7%, 20.54%, and 27.33%, respectively. With this situation, foreign investors are considering of relocation their production base to a country with cheap labor.

Furthermore, Thailand is also facing with political crisis and the flooding in 2011. These situations are factors that foreign investors use for their consideration of production base relocation.

Consequently, the researcher was interested in study more insightful on factors that affect the decision making of foreign investors in relocation manufacturing bases and investment from Thailand to the countries in CLMV+I group.

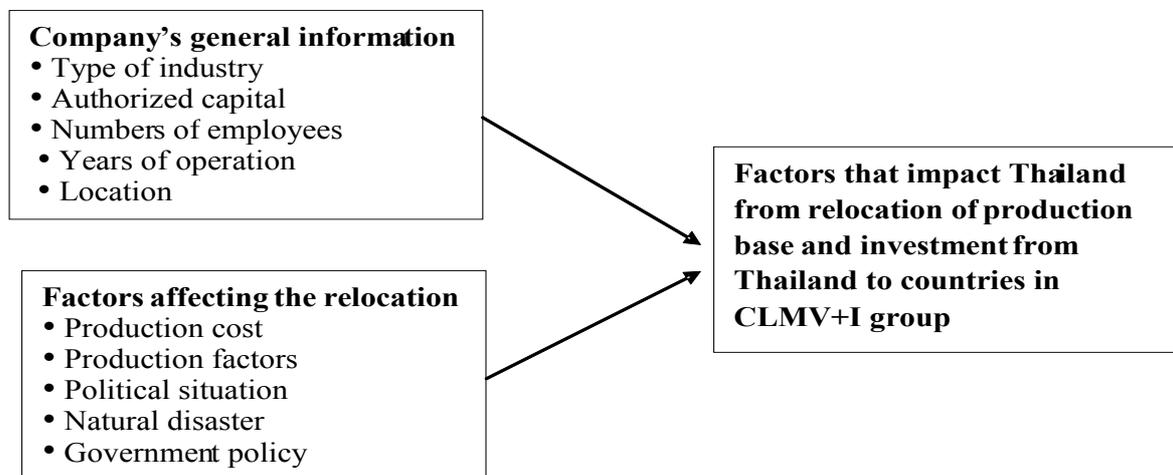
### **Research objectives**

To study the factors affecting the relocation of production base and investment from Thailand to the countries in CLMV+I group.

### **Significance of the study**

The study would help identify the factors that affect foreign investors in making their decision to relocate production bases and investment in countries in CLMV+I group instead of Thailand.

### **Framework of the study**



The participants were executives from 400 Japanese companies or organization in Bangkok and Eastern Thailand. 145 questionnaires were returned to the researcher which was 36.25% of all.

## **2. Research instrument**

The research instrument was a 5-point Likert scales questionnaire containing two separated parts. The first part was the companies' general information. The second part was on the factors affecting the relocation of production base and investment from Thailand to countries in CLMV+I group. 44 items included; production cost 7 items, factors of production 19 items, political situation 9 items, natural disaster 4 items, and government policy 5 items.

The instrument was examined for its content validity by three experts. Then it was revised before tried out with the auto-parts manufacturing industry for its reliability. The instrument was revised again before using it with the main study.

### **Data collection and data analysis**

Simple random sampling was used to select the samples. The questionnaire was distributed to each company and organization via e-mail. The time of study was in June – September 2014. The data were analyzed using an instant program for descriptive analysis (percent, mean, and standard deviation) and factor analysis.

### **Results**

From the data analysis, the results are the following:

Table 1 shows the general information of selected companies and organization.

**Table 1: Companies and organizations' general information**

| General information                                 |                                       | Numbers of companies | Percent (%) |
|---|---------------------------------------|----------------------|-------------|
| Types of industry                                   | Automotive and auto-parts             | 21                   | 14.5        |
|   | Chemical                              | 11                   | 7.6         |
|   | Electrical appliances and electronics | 25                   | 17.2        |
|   | Machinery and equipment               | 18                   | 12.4        |
|   | Rubber and plastics                   | 19                   | 13.1        |
|   | Food and beverages                    | 19                   | 13.1        |
|   | Paper                                 | 10                   | 6.9         |
|   | Energy                                | 3                    | 2.1         |
|   | Furniture and house decoration        | 12                   | 8.3         |
|   | Textile                               | 7                    | 4.8         |
| Authorized capital (million baht)                   | Less than 50                          | 96                   | 66.2        |
|   | 50-200                                | 47                   | 32.4        |
|   | More than 200                         | 2                    | 1.4         |
| Numbers of employees                                | Less than 50                          | 80                   | 55.2        |
|   | 50-200                                | 58                   | 40.0        |
|   | More than 200                         | 7                    | 4.8         |
| Years of operation in Thailand                      | Less than 10 years                    | 61                   | 42.1        |
|   | 10-20 years                           | 75                   | 51.7        |
|   | More than 20 years                    | 9                    | 6.2         |
| Main export markets                                 | North America                         | 24                   | 16.6        |
|   | South America                         | 20                   | 13.8        |
|   | Europe                                | 28                   | 19.3        |
|   | Africa                                | 10                   | 6.9         |
|   | Middle East                           | 20                   | 13.8        |
|   | Asia                                  | 86                   | 59.3        |
|   | Japan                                 | 84                   | 57.9        |
| Company's location                                  | Bangkok and outskirts                 | 54                   | 37.2        |
|   | Central                               | 34                   | 23.4        |
|   | Northern                              | 8                    | 5.5         |
|   | Southern                              | 10                   | 6.9         |
|   | Eastern                               | 22                   | 15.2        |
|   | Western                               | 14                   | 9.7         |
|   | North-eastern                         | 3                    | 2.1         |
| Interesting countries for relocation and investment | Myanmar                               | 50                   | 34.5        |
|   | Laos                                  | 24                   | 16.6        |
|   | Cambodia                              | 34                   | 23.4        |
|   | Vietnam                               | 75                   | 51.7        |
|   | Indonesia                             | 78                   | 53.8        |
| Types of relocation                                 | Expand the production base            | 67                   | 46.2        |
|   | Move the entire production base off   | 76                   | 52.4        |

Table 2 demonstrates the descriptive analysis of factors that affect foreign investors on investment and production base relocation in countries of CLMV+I groups instead of Thailand.

**Table 2: The result of factors affecting investment and production base relocation in CLMV+I countries instead of Thailand**

| <b>Factors</b>      | <b>N</b> | <b>Mean</b> | <b>Std.deviation</b> |
|---------------------|----------|-------------|----------------------|
| Production Cost     | 145      | 3.6621      | 0.54289              |
| Production Factors  | 145      | 4.6897      | 6.65782              |
| Political situation | 145      | 3.6276      | 0.52632              |
| Natural Disaster    | 145      | 3.6414      | 0.69398              |
| Government Policy   | 145      | 3.5724      | 0.54956              |
| Overall             | 145      | 3.6966      | 0.46134              |
| Valid N (listwise)  | 145      |             |                      |

From Table 2, the result shows that factors of productions have the highest mean (4.6897) and standard deviation (6.65782). It means that factors of productions have highest impact to Thailand on foreign investment and production base relocation in CLVM+I countries. Then each factor was analyzed for its effect to different types of industries.

**Table 2.1: The effect of factors on chemical industry and automotive and auto-parts industry**

| <b>Industrial Types</b>   | <b>Factors</b>      | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|---------------------------|---------------------|----------|-------------|-----------------------|
| Automotive and Auto-parts | Production Cost     | 21       | 3.7143      | .46291                |
|                           | Production Factors  | 21       | 3.6190      | .49761                |
|                           | Political Situation | 21       | 3.9048      | .30079                |
|                           | Natural Disaster    | 21       | 3.7143      | .56061                |
|                           | Government Policy   | 21       | 3.8095      | .51177                |
|                           | Overall             | 21       | 3.7619      | .43644                |
|                           | Valid N (listwise)  | 21       |             |                       |
| Chemical                  | Production Cost     | 11       | 3.4545      | .52223                |
|                           | Production Factors  | 11       | 3.4545      | .52223                |
|                           | Political Situation | 11       | 3.4545      | .52223                |
|                           | Natural Disaster    | 11       | 4.0000      | .77460                |
|                           | Government Policy   | 11       | 3.5455      | .52223                |
|                           | Overall             | 11       | 3.5455      | .52223                |
|                           | Valid N (listwise)  | 11       |             |                       |

**Table 2.2: The effect of factors on electrical appliances and electronics industry and machinery and equipment industry**

| <b>Types of Industries</b>            | <b>Factors</b>      | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|---------------------------------------|---------------------|----------|-------------|-----------------------|
| Electrical Appliances and Electronics | Production Cost     | 25       | 3.6800      | .47610                |
|                                       | Production Factors  | 25       | 3.6800      | .47610                |
|                                       | Political Situation | 25       | 3.7200      | .45826                |
|                                       | Natural Disaster    | 25       | 3.8000      | .57735                |
|                                       | Government Policy   | 25       | 3.8400      | .47258                |
|                                       | Overall             | 25       | 3.8400      | .37417                |
|                                       | Valid N (listwise)  | 25       |             |                       |
| Machinery and Equipment               | Production Cost     | 18       | 3.7222      | .66911                |
|                                       | Production Factors  | 18       | 3.7222      | .46089                |
|                                       | Political Situation | 18       | 3.5556      | .51131                |
|                                       | Natural Disaster    | 18       | 3.5556      | .61570                |
|                                       | Government Policy   | 18       | 3.4444      | .61570                |
|                                       | Overall             | 18       | 3.8333      | .38348                |
|                                       | Valid N (listwise)  | 18       |             |                       |

**Table 2.3: The effect of factors on rubber and plastic industry and food and beverage industry**

| <b>Types of Industries</b> | <b>Factors</b>       | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|----------------------------|----------------------|----------|-------------|-----------------------|
| Rubber and Plastics        | Production Cost      | 19       | 3.6842      | .47757                |
|                            | Production Factors   | 19       | 3.4211      | .60698                |
|                            | Political Situation  | 19       | 3.5789      | .50726                |
|                            | Natural Disaster     | 19       | 3.3684      | .83070                |
|                            | Government Policy    | 19       | 3.6316      | .49559                |
|                            | Overall              | 19       | 3.5789      | .50726                |
|                            | Valid N (listwise)   | 19       |             |                       |
| Food and Beverage          | Production Cost      | 19       | 3.6842      | .47757                |
|                            | Production Factors   | 19       | 3.6316      | .59726                |
|                            | Political Situations | 19       | 3.6316      | .49559                |
|                            | Natural Disaster     | 19       | 3.6842      | .74927                |
|                            | Government Policy    | 19       | 3.4211      | .60698                |
|                            | Overall              | 19       | 3.6316      | .49559                |
|                            | Valid N (listwise)   | 19       |             |                       |

**Table 2.4: The effect of factors on paper and energy industry**

| <b>Types of Industries</b> | <b>Factors</b>      | <b>N</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|----------------------------|---------------------|----------|-------------|-----------------------|
| Paper                      | Production Cost     | 10       | 3.4000      | .84327                |
|                            | Production Factors  | 10       | 3.4000      | .51640                |
|                            | Political Situation | 10       | 3.7000      | .67495                |
|                            | Natural Disaster    | 10       | 3.5000      | .52705                |
|                            | Government Policy   | 10       | 3.3000      | .48305                |
|                            | Overall             | 10       | 3.5000      | .52705                |
|                            | Valid N (listwise)  | 10       |             |                       |
| Energy                     | Production Cost     | 3        | 3.6667      | .57735                |
|                            | Production Factors  | 3        | 4.0000      | 0.00000               |
|                            | Political Situation | 3        | 3.3333      | .57735                |
|                            | Natural Disaster    | 3        | 3.3333      | .57735                |
|                            | Government Policy   | 3        | 3.3333      | .57735                |
|                            | Overall             | 3        | 4.0000      | 0.00000               |
|                            | Valid N (listwise)  | 3        |             |                       |

**Table 2.5: The effect of factors on furniture and house decoration industry and textile industry**

| Types of Industries            | Factors             | N  | Mean   | Std. Deviation |
|--------------------------------|---------------------|----|--------|----------------|
| Furniture and House Decoration | Production Cost     | 12 | 3.9167 | .51493         |
|                                | Production Factors  | 12 | 3.7500 | .45227         |
|                                | Political Situation | 12 | 3.6667 | .49237         |
|                                | Natural Disaster    | 12 | 3.5833 | .79296         |
|                                | Government Policy   | 12 | 3.4167 | .51493         |
|                                | Overall             | 12 | 3.8333 | .38925         |
|                                | Valid N (listwise)  | 12 |        |                |
| Textile                        | Production Cost     | 7  | 3.4286 | .53452         |
|                                | Production Factors  | 7  | 3.2857 | .48795         |
|                                | Political Situation | 7  | 3.0000 | .81650         |
|                                | Natural Disaster    | 7  | 3.5714 | .97590         |
|                                | Government Policy   | 7  | 3.2857 | .48795         |
|                                | Overall             | 7  | 3.2857 | .48795         |
|                                | Valid N (listwise)  | 7  |        |                |

Table 2.1- Table 2.5 demonstrate the effect of factors on different types of industries regarding investment and production base relocation. The result reveals that automotive and auto-parts industry has the highest mean on political situation (3.9048). Chemical industry has the highest mean on natural disaster (4.0000). Electrical appliances and electronics industries have the highest mean on government policy (3.8400). Machinery and equipment industry has the highest mean on production cost and production factors which has equal means (3.7222). Rubber and plastics industry has the highest mean on production cost (3.6842). Food and beverage industry has the highest mean on production cost and natural disaster (3.6842). Paper industry has the highest mean on political situation (3.7000). Energy industry has the highest mean on production factors (4.0000). Furniture and house decoration has the highest mean on production cost (3.9167). Textile industry has the highest mean on natural disaster (3.5714).

The data were also analyzed with factor analysis. There were thirteen factors that had the eigenvalues higher than 1.00 and the sum of cumulative variance was 68.448%. The result is on Table 3.

**Table 3: Numbers of Factors, Eigenvalues, Variance, and Cumulative Variance**

| Factors | Eigenvalues | % of Variance | % of Cumulative Variance |
|---------|-------------|---------------|--------------------------|
| 1       | 3.590       | 8.160         | 8.160                    |
| 2       | 3.279       | 7.452         | 15.611                   |
| 3       | 3.011       | 6.842         | 22.453                   |
| 4       | 2.648       | 6.019         | 28.472                   |
| 5       | 2.402       | 5.459         | 33.931                   |
| 6       | 2.382       | 5.414         | 39.345                   |
| 7       | 2.237       | 5.084         | 44.430                   |
| 8       | 2.171       | 4.934         | 49.364                   |
| 9       | 1.992       | 4.528         | 53.892                   |
| 10      | 1.737       | 3.947         | 57.839                   |
| 11      | 1.724       | 3.918         | 61.757                   |
| 12      | 1.476       | 3.354         | 65.111                   |
| 13      | 1.468       | 3.336         | 68.448                   |

In order to interpret the meaning of the results clearly, the orthogonal rotation was used with Varimax to find the association between variables and factors. The result revealed thirteen factors that had factor loading of more than 0.30. Table 4 – Table 15 demonstrate each factor and its variables.

**Table 4: Factor 1: Infrastructure**

| Item No.                                  | Variables  | Factor Loading |
|---|--|----------------|
| 24  | Inconvenient waterworks system                                       | .852           |
| 25  | Insufficient electricity system                                      | .808           |
| 26  | Inconvenient electricity system                                      | .734           |
| 23  | Insufficient waterworks system                                       | .632           |
| 22  | Ineffective communication system (especially telephone and Internet) | .482           |
| Eigenvalue = 3.590, % of Variance = 8.160 |  |                |

The first factor is infrastructure consisting of five variables. The factor loading is between .482 - .852 with the eigenvalue at 3.590. This factor involves mainly with waterworks, electricity, and communication system. From the result, the inconvenient waterworks system seems to be the most important variable that needs more attention.

**Table 5: Factor 2: Government Management in Preparation for Natural Disaster**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 36  | Lack of concrete planning to encounter with natural disaster                          | .818           |
| 38  | Lack of communication for natural disaster warning                                    | .771           |
| 37  | Don't follow the plan in coping with natural disaster situations                      | .728           |
| 39  | Insufficient help after natural disaster situations                                   | .599           |
| 28  | When the government could not serve a full term, it could badly affect your business. | .449           |
| Eigenvalue = 3.279, % of Variance = 7.452 |   |                |

Factor 2 is government management in preparation for natural disaster including five variables. The factor loading is between .449 - .818 with the eigenvalue at 3.379. The highest factor loading is on "Lack of concrete planning to encounter with natural disaster" (.818). That may imply that foreign investors are concerning if the government has provided any plan to help coping with the natural disaster situations.

**Table 6: Factor 3: Production Cost**

| Item No.                                  | Variables                                       | Factor Loading |
|---|---|----------------|
| 2   | Unreasonable costs for raw-material procurement | .713           |
| 1   | Unreasonable raw-material costs                 | .685           |
| 7   | Unreasonable expense for land rental            | .540           |
| 3   | Unreasonable labor costs                        | .521           |
| Eigenvalue = 3.011, % of Variance = 6.842 |   |                |

Factor 3 is production cost including four variables. The factor loading is between .521 - .713 with the eigenvalue at 3.011. The highest factor loading is on "Unreasonable costs for raw-material procurement (.713).

**Table 7: Factor 4: Raw Materials**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 8   | Insufficiency of raw materials  | .736           |
| 30  | The taking over of National Council for Peace and Order has a negative effect on your business. | .695           |
| 9   | The quality of raw materials is not good enough.  | .590           |
| 10  | The difficulty of raw material procurement  | .530           |
| 29  | Protest has a negative effect on your business.   | .368           |
| Eigenvalue = 2.648, % of Variance = 6.019 |   |                |

Factor 4 is raw materials consisting of five variables. The factor loading is between .368 - .736 with the eigenvalue at 2.648. The highest factor loading is on "Insufficiency of raw materials" (.736).

**Table 8: Factor 5: Political Situation**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 34  | Political situations have negative effects on sale volumes and advance orders.              | .720           |
| 35  | Political situations have negative effects on customers.                                    | .716           |
| 32  | Political situations have negative effects on transportation of products and raw materials. | .618           |
| 25  | Political situations have negative effects on overall image of your business.               | .448           |
| Eigenvalue = 2.402, % of Variance = 5.459 |   |                |

Factor 5 is political situation including four variables. The factor loading is between .448 - .720 with the eigenvalue at 2.402. The highest factor loading is on “Political situations have negative effects on sale volume and advance orders” (.720).

**Table 9: Factor 6: Communication and Land Transportation Systems**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 20  | Communication systems (telephone and Internet) lack of wide coverage areas. | .692           |
| 19  | Communication systems (telephone and Internet) are difficult to access.     | .564           |
| 15  | Land transportation systems are not good enough.                            | .544           |
| Eigenvalue = 2.382, % of Variance = 5.414 |   |                |

Factor 6 is communication and land transportation systems including three variables. The factor loading is between .544 - .692 with the eigenvalue at 2.382. The highest factor loading is on “Communication systems (telephone and Internet) lack of wide coverage areas” (.692).

**Table 10: Factor 7: Transportation Systems Accessing**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 19  | Water transportation systems are difficult to access.   | .768           |
| 18  | Air transportation systems are difficult to access.   | .697           |
| 17  | Water transportation systems could not provide a good support for product or raw material transportation. | .491           |
| Eigenvalue = 2.237, % of Variance = 5.084 |   |                |

Factor 7 is transportation systems accessing including three variables. The factor loading is between .491 - .768 with the eigenvalue at 2.237. The highest factor loading is on “Water transportation systems are difficult to access” (.768).

**Table 11: Factor 8: Production factors**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 12  | Personnel lack of language skills.  | .685           |
| 14  | The difficulty of labor recruitment   | .662           |
| 5   | Unreasonable expenses of electricity energy   | .525           |
| 16  | An air transportation system could not provide a good support for product or raw material transportation. | .523           |
| Eigenvalue = 2.171, % of Variance = 4.934 |   |                |

Factor 8 is production factors including four variables. The factor loading is between .523 - .685 with the eigenvalue at 2.171. The highest factor loading is on “Personnel lack of language skills” (.768).

**Table 12: Factor 9: Government’s Laws and Policies**

| Item No.                                  | Variables  | Factor Loading |
|---|--|----------------|
| 40  | Government lacks of policies that support your business. | .824           |
| 41  | Laws could not provide a good support to your business.  | .752           |
| Eigenvalue = 1.992, % of Variance = 4.528 |  |                |

Factor 9 is government laws and policies including two variables. The factor loading is .824 and .752 with the eigenvalue at 1.992. The highest factor loading is on “Government lacks of policies that support your business” (.824).

**Table 13: Factor 10: Political Trust**

| Item No.                                  | Variables  | Factor Loading |
|---|--|----------------|
| 31  | Political situations have negative effect on your trust for business investment. | .787           |
| Eigenvalue = 1.737, % of Variance = 3.947 |  |                |

Factor 10 is political trust containing one variable. The factor loading is .787 with the eigenvalue at 1.737.

**Table 14: Factor 11: Environment and Labor**

| Item No.                                  | Variables   | Factor Loading |
|---|---|----------------|
| 44  | Environment laws and regulations are an obstacle for your business operation. | .703           |
| 13  | Numbers of labor are not enough.  | .454           |
| 4   | Unreasonable expense for labor recruitment.                                   | .417           |
| Eigenvalue = 1.724, % of Variance = 3.918 |   |                |

Factor 11 is environment and labor including three variables. The factor loading is between .417 - .703 with the eigenvalue at 1.724. The highest factor loading is on “Environment laws and regulations are an obstacle for your business operation” (.703).

**Table 15: Factor 12: Labor Skills**

| Item No.                                  | Variables                         | Factor Loading |
|---|-----------------------------------|----------------|
| 11  | Personnel lack of working skills. | .756           |
| Eigenvalue = 1.476, % of Variance = 3.354 |                                   |                |

Factor 12 is labor skills containing one variable. The factor loading is .756 with the eigenvalue at 1.476.

**Table 16: Factor 13: Operation Obstacles**

| Item No.                                  | Variables  | Factor Loading |
|---|--|----------------|
| 33  | Political situations have a negative effect on production planning and business expanding. | .562           |
| 43  | Tax is an obstacle to business operation.  | .524           |
| 6   | Waterworks system expense is not reasonable.   | .504           |
| 42  | Policies of CLMV+I countries provide a better support than Thailand's.                     | .494           |
| Eigenvalue = 1.468, % of Variance = 3.336 |  |                |

Factor 13 is operation obstacles containing four variables. The factor loading is between .494 - .562 with the eigenvalue at 1.468. The highest factor loading is on “Political situations have a negative effect on production planning and business expanding” (.562).

## **Conclusion and Discussion**

From the result, it could be concluded that the factors affecting the investment and production base relocation of foreign investors in CLMV+I countries instead of Thailand are the following:

Infrastructure includes waterworks systems and communication systems. Waterworks systems are not enough to fulfill the need. The communication systems including telephone and Internet are ineffective. There are many areas in Thailand that the infrastructure systems could not reach or be difficult to reach. In fact, there are a few developed areas that provide effective infrastructure system such as Bangkok and Chonburi. This problem has made it hard for investors even though Thailand, comparing to CLMV+I countries, has better infrastructure systems. However, while other countries are trying to develop their infrastructure systems to attract the investors, Thailand seems to stop developing. From Central Intelligence Agency (2015), it shows that CLMV+I countries have quick developed on the infrastructure systems. For example, Vietnam has already constructed the road up to 195.468 kilos,

ranked as #24<sup>th</sup>. Indonesia has constructed the road up to 496, 607 kilos, ranked as #14<sup>th</sup>. Thailand has constructed the road for 180,053 kilos, ranked as #28<sup>th</sup>. Therefore, in order to solve the problem, Thailand could determine business areas for each region including Northern, Southern, Eastern, Western, North-Eastern and Central. Each province that is determined as an economic province for that region should provide a good infrastructure system for investors.

Government management in preparation for natural disaster: Thai government seems to lack of concrete preparation plans to encounter with the natural disasters. Although there were the plans, when facing with the real situation, the plans could not be followed. Besides, people could not be aware of the natural disaster because of the lack of communication. These situations have been holding the foreign investors back since Thailand was attacked from many natural disasters such as flooding and earthquakes. With the lack of natural disaster prevention, many damages had happened to many industries. Chotiphongphut (2013) studied the influences of factors on production base relocation of companies in industrial estates that experienced the 2011 flooding. The result showed that the perception of natural disasters had high influence on decision of production base relocation. As a result, in order to gain trust from investors, government should provide policies to prevent natural disasters and to support industrial investors.

Production cost: The new minimum daily labor wage of 300 baht/day seems to have effect on production cost. Chalamwong et al. (2012) conducted research on the influences of minimum wages on national economic. The government new policy has set the minimum labor wage at 300 baht/day and the minimum salary of bachelor's degree employees at 15,000/month. This new policy has made the labor cost higher. It slows down Thailand's economy so much that it put some production industries at a high risk. Those industries need to increase selling price to cope with the higher production cost. The present research result showed that the labor wage rate has strong effect on the decision of moving the production bases to the AEC countries with have a lower labor wage rate. For example, textile industry was facing with the labor cost because it needed a high number of labors. Therefore, the textile industry had moved to Thailand's nearby countries that offered a lower minimum labor wage rate. Cambodia has a minimum labor wage at 75 baht/day. Laos has a minimum wage at 80 baht/day. Myanmar has a minimum wage at 110 baht/day. Indonesia has minimum wage at 230 baht/day. Vietnam has a minimum wage at 95 baht/day. Consequently, Thai government needs a well planning to solve the labor-wage problem in order to prevent the relocation of production bases and investment.

Raw Materials: The major problem of raw materials is the insufficient number of raw materials or expensive raw materials, especially the companies that need to order import raw materials. The price of import raw materials is high because the import taxes are high. ASTVManager (2012) reports that in other ASEAN countries, entrepreneurs could buy cheaper raw materials due to their import taxes have been revoked. On the other hand, Thai entrepreneurs still have to pay for the import taxes that raise the production cost higher. Going to AEC could not help Thailand solving the anti-dumping problem because Thai government has a policy to protect the upstream industries. Moreover, entrepreneurs also have to face with the high competition with other countries, especially the products from Singapore and Malaysia. These countries have high potential in production of industrial machines.

They could produce a product with lower cost to compete with Thailand. These factors are important impacts that affect investment and relocation of production bases.

**Political Situation:** The political situation has negative effects on sale volumes and advance orders as well as customers and transportation of products and raw materials. This factor is difficult to deal with because it could not be predicted. Thailand's political situation is not stable comparing to other nearby countries. The frequent change of government has decreased trust of Japanese investors. Many of them have turned to other countries with a stable political situation and offering laws that give better support to investment. Kasikorn Research Center (2012) studied the political situation of Myanmar. The result showed that Myanmar's politic had been accepted more from international. The sign of the abatement of boycott has appeared since 2012 and made Myanmar's economic activities better. After many countries have revoked the boycott from Myanmar, the relationship on trading and investment between Myanmar and other countries has been developed. This research finding supports the result of the present study revealing that foreign investors tend to invest in Myanmar and countries that have a stable political situation.

**Communication and Land Transportation Systems:** Problems relating to communication systems, including telephone and Internet, are the lack of wide coverage areas and the difficulty to access. The land transportation systems are also not good enough. The investors have considered these two factors as important elements of product shipping because they need to be able to follow their products' status all the time. Moreover, the land transportation should have a system that allows manufacturers to contact the drivers and follow their products so that they could be able to send products to customers on time and at need. Nowadays, the nearby countries, especially CLMV+I countries, have rapidly developed their communication systems. Central Intelligence Agency (2015) reports the information of telephone users and mobile phone accessing. Indonesia had 29.64 million numbers for home phones which came to the eleventh of the world ranking. The mobile phone accessing was 319 million numbers which was the fourth of the world ranking. Vietnam had 5.56 million numbers of home phones which came to the twenty-eighth of the world ranking. The mobile phone accessing was 136.1 million numbers which was the tenth of the world ranking. For Thailand, there were 5.69 million numbers of home phones and 97.1 million numbers of mobile phones which was the twenty-seventh and sixteenth of the world ranking, respectively. From this information, Thailand needs to urgently develop the communication systems in order to compete with the nearby countries.

For the land transportation systems, the Japanese investors in Thailand have been facing with problems of old-fashioned transportation of all kinds. The land transportation is outdated and has been controlled only by Thai government. Thailand does not have a high-speed rail to commute between each region. Other nearby countries have been considered to construct the high-speed rail. For example, Indonesia had planned to loan fourteen million million baht for rail transportation development to solve the traffic and product transportation problems.

Ongkittikul (2013) studied the effect of high-speed rail and reported that the high-speed rail had many advantages to a country. In Germany, after the high-speed rail

opened for service, the number of tourists in four cities increased which made the land prices increased. An employment rate in one city also increased.

In France, the high-speed rail had affected the increasing of population, mostly the cities that the high-speed rail could reach. It increased the employment rate in two cities and the number of tourists in four cities. It also affected the number of school students and university students in one city due to the convenient commute.

In Japan, the high-speed rail affected the increasing of population in four cities and affected the economic in four cities. It also affected the increasing number of school students and university students in three cities.

It could be seen that the high-speed rail provides many benefits to a country. Therefore, Thailand should give the high-speed rail in consideration. Not only the high-speed rail gives many benefits to Thai people, but it also helps Thailand to compete with other nearby countries. Moreover, to provide more alternatives for Thai people and investors, it would be a good solution if Thai government allows private sectors to cooperate in giving service on rail transportation.

**Production Factors:** In order to compete with other countries, CLMV+I countries have tried to develop themselves in many aspects to become a better choice for foreign investors. Personnel, labors, electricity energy, and air transportation system are one of the most important elements for production factors. In order to attract the investors and prevent production base relocation, Thailand needs to develop personnel's skills, especially language skills. Government needs to give more consideration on the new minimum labor wage rate and electricity charge in order to help investors lower the production cost. Furthermore, the air transportation system needs to be developed to make product and raw material transportation more convenient.

**Government's Laws and Policies:** Some companies have still had problems with laws and policies of Thai government. In fact, the problems happen from unclear laws and from slow and unclear processes. The investors also experienced with inconvenience and side-taking. They have lost their trust in investment in Thailand and turned to other countries as a new choice. Jangseebeer (2015) addressed that Thailand's labor laws were more an obstacle of international trading than a supporter. Even though Thailand had many laws, the control of laws was not good. The laws should support and protect the entrepreneurs in many ways. Some laws should be reconsidered, especially tax laws that are overlapped and become a main obstacle for current foreign investors.

**Political Trust:** Every time that Thailand had political protests, the vast damage always happened with companies and organizations. The situations have been holding the foreign investors back. Thailand has lost its trust to the investors. Thus, they tend to look for a country with more stable politic. Yueh (2014) reported that the announcement of Thailand's martial law affected investors' decision; however, it did not affect much on Thai baht. The stock market in Thailand was down to about 2%. The Asian market still grew even though Thailand had the coup. In fact, this was the 12<sup>th</sup> coup of Thailand after becoming a democracy country in 1930. Thus, the taking over of military seemed to be a normal incident in Thailand. Nevertheless, it has shaken the foreign investors' trust. Some of them withdrew their capital from

Thailand which put Thailand in economic recession. In fact, the Thailand's economy had declined for six months before the coup due to the long period of the political protest. Consequently, in order to help Thailand's economy to grow, the political stability is necessary to gain trust from foreign investors.

Environment and Labor: Labor force and environment policies have been important factors for production and services. Many countries compete with each other with the minimum labor wage rate. Government has paid more attention on environment and issued some laws and policies to preserve the environment. For example, Myanmar required foreign investors to submit their development plans to Foreign Investment Management Committee for consideration first. Post Today (2015) reported that the settlement of ASEAN affected the production factors such as labor force and production capital, and increased the growth of industries. However, if those production activities created a bad effect on environment such as air pollution or water pollution, it would affect people's welfare in a long term. Therefore, environment laws and policies are necessary to help control the production activities such as environment taxes and the emission trading schemes. Nevertheless, government needs to find a middle path that provides the most advantages to foreign investors and preserves environment of the nation.

Labor Skills: The result reveals that the lack of skills is an important factor that affects decision of foreign investors. With the higher labor wage of Thailand and lower labor wage of nearby countries, labor skills have come to the consideration. Chalamwong et al. (2012) addressed that unreasonable labor wage rate had negative effects on national economy. It put Thailand's economy in deceleration. Some industries, which had high production cost due to the higher labor wage, needed to increase their sell prices. Labor skills seem to be less important when comparing to the labor wage rate. Therefore, many investors have decided to invest and move their production bases to a country with a lower labor wage even though their labor skills may not be as good as Thai labors.

Operation Obstacles: From the result, the major operation obstacles are political situations, taxes, waterworks system expense, and the policies that support the operation. Political situations are the most important obstacle that affects planning and expanding. For taxes, the foreign investors have seen them as an obstacle to business operation. Moreover, they concern about the unreasonable waterworks expense. Finally, CLMV+I countries have provided policies that give a better support for their investment than Thailand. As a result, CLMT+I countries seems to be a better place for investment and production base relocation.

For the future research, more time should be provided in data collection so that more data could be collected. The study could be done with investors from different countries, not only Japanese. Then the result may be different and show more insightful of this issue.

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