What Thailand Has Gained and Lost from Japanese Investment

Liu Xiaodong

The boom of Japanese Direct Investment (JDI) in Thailand after 1986 is a significant event which has changed not only the economic situation in Thailand, but also the economic map of this region. This article focuses on what Thailand has gained and lost from JDI, in other words, the contributions and conflicts of JDI in Thailand’s economy and then attempts to forecast JDI in Thailand in the future and discuss approaches for integrating JDI into the development of Thailand’s economy.

1. The boom of JDI in Thailand during 1986 to 1990 and the impact on Thailand’s economy

1) The boom of JDI in Thailand after mid-1986

The years between 1986 and 1990 witnessed a sharp surge of JDI in Thailand. Thailand became the major target of Japanese capital among Asian countries during that period. As recorded by the Ministry of Finance, Japan, the total amount of JDI in Thailand from 1986 to 1990 reached 3,663 million US dollars and accounted for 25.13% of the total JDI to ASEAN countries. It indicates a great proportional increase because the figure was only 14.5% in 1986.1

Another major source of investment statistics is the Board of Investment (BOI), Thailand. Their records show that Japanese investment has become the major source of foreign capital inflow. The amount of JDI, as recorded by BOI, for the 25 year period from 1960 to 1984 comprised only 178 projects and 4,460 million Baht, while the figure in 1988 alone surpassed the accumulated total in the previous 25 years. From 1986 to 1990, the total amount of JDI in Thailand reached 267 billion Baht, and accounted for 33% of the total foreign investment in Thailand, far ahead of other major investors such as Taiwan, U.S.A. and Hong Kong (see Table 1).

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1 This article is supported by the Japanese Center, Institute of East Asian Studies, Thammasat University, Thailand.

** Institute of Southeast Asian Studies, Jinan University, Guangzhou, China.
## Table 1
Investment Applications Approved by BOI  
(Unit: Million Baht)

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>Taiwan</th>
<th>U.S.A.</th>
<th>H.K.</th>
<th>TDI*</th>
<th>FDI</th>
<th>JDI/ TDI</th>
<th>JDI/ FDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>4,460</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1984</td>
<td>6,593</td>
<td>939</td>
<td>1,067</td>
<td>1,178</td>
<td>34,610</td>
<td>25,047</td>
<td>19%</td>
<td>26%</td>
</tr>
<tr>
<td>1986</td>
<td>24,363</td>
<td>7,700</td>
<td>4,432</td>
<td>3,144</td>
<td>67,289</td>
<td>50,064</td>
<td>36%</td>
<td>48%</td>
</tr>
<tr>
<td>1987</td>
<td>77,019</td>
<td>21,498</td>
<td>17,028</td>
<td>11,416</td>
<td>201,812</td>
<td>158,066</td>
<td>38%</td>
<td>48%</td>
</tr>
<tr>
<td>1988</td>
<td>90,569</td>
<td>22,305</td>
<td>14,123</td>
<td>14,430</td>
<td>287,844</td>
<td>205,495</td>
<td>31%</td>
<td>44%</td>
</tr>
<tr>
<td>1989</td>
<td>69,231</td>
<td>19,567</td>
<td>27,912</td>
<td>183,412</td>
<td>474,880</td>
<td>360,470</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>1990</td>
<td>267,775</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,066,435</td>
<td>800,082</td>
<td>25%</td>
<td>33%</td>
</tr>
<tr>
<td>1991</td>
<td>44,908</td>
<td>14,587</td>
<td>28,849</td>
<td>8,677</td>
<td>127,280</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>49,972</td>
<td>7,393</td>
<td>31,321</td>
<td>3,548</td>
<td>254,553</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>68,497</td>
<td>5,327</td>
<td>10,918</td>
<td>3,151</td>
<td>108,735</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: BOI, Thailand

* TDI means total direct investment applications approved which include Thai capital. FDI means foreign direct investment.

The factors pushing Japanese capital to Thailand can be summarized simply as follows:

A) The appreciation of the Yen after the Plaza Accord of 1985, which brought about the pressure for multinationalization of Japanese firms for cost reduction. The appreciation of the Yen to the Baht was nearly 100% in that period.\(^2\) That is why the Japanese found it lucrative to come to Thailand.

B) Fairly good relations between Thailand and Japan even with the exception of the anti-Japanese student movement in 1974 during the visit of then Japanese Prime Minister Kakuei Tanaka. Thailand has no bitter memory of the Second World War which is still deeply rooted in the minds of many other Asian nations. Some have even mentioned the similarities in monarchies and Buddhist religion between the two countries.\(^3\)

C) Comparative political and economic stability in Thailand. Even though interrupted frequently by military coups d’état, Thailand boasts stability while neighboring countries like Philippines have suffered long term political turmoil.
D) A sound investment environment. Many Japanese feel quite comfortable with the laissez-faire policy of the Thai government. A lot of work has been done in improving infrastructure and services. Thailand's embassy to Japan, for example, has paved the way in encouraging Japanese businessmen to Thailand. Another factor is the comparatively low wage rate. If the wage rate in Thailand is 100, the comparative rate in Singapore is 200 and Malaysia 150. Even though workers in Indonesia earn only 30% and the Philippines 50% as much as their Thailand counterparts, their advantages have been offset by the poor investment environments in those two countries.4

E) A fast developing economy which generates an increasingly larger domestic market. Rising living standards enable people, especially the middle class, to afford foreign goods, which arouses the interest of foreign firms in locating their factories to cater to the domestic market.

2) What Thailand has gained from JDI

The influence of JDI in Thailand's economy in this period is so obvious that it has aroused public attention as well as profound academic analysis. The following are the major points of contribution of JDI to Thailand's economy:

A. Economic growth and industrialization

First, whether capital inflow can or cannot help the growth of an economy depends on its absolute amount and relative proportion to the total capital input. The proportion of JDI to the gross private investment in Thailand increased quickly from 1.5% in 1987 to 5% in 1988.5 It is not unreasonable to conclude that Thai economy growth could not have sped up after 1986 without the increased input of JDI. The Japanese embassy remarked that JDI might account for 2% of the 11% GDP growth in 1987.6

Second, the importance of JDI could be rated higher if its structure is taken into consideration. A big portion was to the manufacturing sector which enjoyed a faster growth rate than other sectors and therefore became the leading sector of Thailand's economy in that period.

As the statistics show, during the time of the JDI boom, 57% of JDI was in the manufacturing sector of which the electronic, automotive and machinery industries accounted for 58% of investment (see Table 2). The impact may be summarized as follows:

a) An increase in the proportion of the manufacturing sector in Gross Domestic Product. The proportion rose from 21.9% in 1985 to 28.2% in 1991.7
b) The formation of a diversified manufacturing structure due to Japanese investment in some areas which previously had none.

c) The formation of new core industries in Thailand, mainly electronic, automobile, and chemical, replacing the agro-product processing industry as a mainstream of Thailand’s economy.

B. Export Promotion:

This is also an area in which JDI has made a great contribution. The total exports of Japanese firms in Thailand in 1991 were estimated at 156,400 million Baht, which was 21.5% of the total exports of 725,800 million Baht in that year. That is to say, Japanese investment accounted for more than one fifth of Thai exports. Furthermore, the proportion of Japanese manufacturing exports to that of total exports of Thailand grew from 7.4% in 1988 to 12.5% in 1991, which helps the advancement of the export structure of Thailand (see Table 3).

Table 2
The structure of JDI from 1986 to 1990
(Unit: Million Baht, %)

<table>
<thead>
<tr>
<th></th>
<th>JDI</th>
<th>2/1</th>
<th>3, 4, 5, 6, 7/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total JDI</td>
<td>67,477</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. JDI in Manufacturing sector</td>
<td>39,039</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>3. JDI in Electronic</td>
<td>18,793</td>
<td></td>
<td>48%</td>
</tr>
<tr>
<td>4. JDI in Chemical</td>
<td>3,327</td>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>5. JDI in Steel &amp; Metallic</td>
<td>5,642</td>
<td></td>
<td>14%</td>
</tr>
<tr>
<td>6. JDI in Machinery &amp; Automotive</td>
<td>3,980</td>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>7. JDI in Others</td>
<td>19,530</td>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: Bank of Thailand

Table 3
Composition of Thailand’s Exports
(Unit: Percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>48.4</td>
<td>19.7</td>
<td>19.5</td>
</tr>
<tr>
<td>Agro-Industry</td>
<td>8.2</td>
<td>11.8</td>
<td>11.2</td>
</tr>
<tr>
<td>Mineral</td>
<td>3.8</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>35.6</td>
<td>65.9</td>
<td>67.0</td>
</tr>
<tr>
<td>Others</td>
<td>4.0</td>
<td>1.25</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: Pocket Thailand in Figures
Before 1985, Japanese in Thailand were interested mainly in catering to the domestic market and their response to the Thai government’s export promotion policy was not very enthusiastic. Things changed in 1986 because of the pressure of Yen appreciation rather than the policy of Thai government. Japanese firms were forced to find an offshore manufacturing base with lower costs. In the years of 1987 and 1988, of the sales of Japanese-related investment, 19.13% were export sales, while the rate in 1973 and 1974 was 8.6%. Some sectors showed a higher rate of exports (see Table 4). The effect of the shift from import substitution to export promotion, therefore, would not have been so successful without the inrush of JDI after 1986, which brought more foreign exchange revenue to the Thai government.

### Table 4
Imports and Exports of Japanese Related Firms

(Unit: Percentage)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage of Imported Materials</th>
<th>Sales</th>
<th>Percentage of Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Food</td>
<td>14.4</td>
<td>0.69</td>
<td>41.45</td>
</tr>
<tr>
<td>2. Tobacco</td>
<td>100.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Wood products</td>
<td>57.13</td>
<td>50.00</td>
<td>32.73</td>
</tr>
<tr>
<td>4. Paper products</td>
<td>6.02</td>
<td>-</td>
<td>87.86</td>
</tr>
<tr>
<td>5. Chemical products</td>
<td>52.30</td>
<td>6.73</td>
<td>43.19</td>
</tr>
<tr>
<td>6. Durable products</td>
<td>50.39</td>
<td>73.72</td>
<td>-</td>
</tr>
<tr>
<td>7. Plastic products</td>
<td>77.55</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Nonmetallic mineral products</td>
<td>30.79</td>
<td>40.67</td>
<td>90.77</td>
</tr>
<tr>
<td>9. Glass products</td>
<td>72.10</td>
<td>62.33</td>
<td>33.99</td>
</tr>
<tr>
<td>10. Metal products</td>
<td>60.94</td>
<td>91.78</td>
<td>4.08</td>
</tr>
<tr>
<td>11. Machinery and parts/components</td>
<td>49.02</td>
<td>41.50</td>
<td>1.30</td>
</tr>
<tr>
<td>12. Electronic &amp; electric products</td>
<td>84.44</td>
<td>76.74</td>
<td>26.67</td>
</tr>
<tr>
<td>13. Transportation equipment parts/components</td>
<td>69.34</td>
<td>69.32</td>
<td>2.05</td>
</tr>
<tr>
<td>14. Professional and scientific equipment</td>
<td>-</td>
<td>47.87</td>
<td>12.50</td>
</tr>
<tr>
<td>15. Other Manufacturing</td>
<td>61.27</td>
<td>62.05</td>
<td>23.40</td>
</tr>
</tbody>
</table>

Source: BOI Annual Survey of Promoted Firms.
C. Job creation:

There is no doubt that the large amount of JDI has created many jobs for local people not only in Japanese-related joint-venture companies but also in Thai companies which do business with them. One statistic indicates that the number of persons employed by Japanese firms was 225,000 in 1991, and in the manufacturing sector, 183,000, which accounted for 5.6% of the total work force in this industry.\textsuperscript{11}

D. Technology Transfer

This is an area causing many doubts and controversies not only in Thailand, but also in other Asian countries receiving JDI. The lack of a convincing method to measure the extent and depth of technology transfer internationally is one of the reasons. Some scholars try to estimate it by counting the number of Thai employees being sent to Japan for training. But neither the number of trainees nor the period of training is impressive. In any case, the process of technology transfer has taken place to some degree, in part through the purchase of patents, even though always costly, from Japan, and in part through on-the-job-training.

3) What Thailand has lost from JDI

The reason why foreign capital flow happens is simply that the flow is to the interest of the investor. It is customary that interests of the investor and the host country are not in agreement. Even though JDI undoubtedly has always been a blessing for Thailand’s economy in many ways, conflicts with local development still exist in the following aspects:

A. “Over” industrialization and urbanization

The economic situation in Thailand is quite different from NICs in that Thailand is basically a rural society with a large proportion of the population in the countryside. Among the rural population, the educational level is far from satisfactory. Second, there are few industrial centers outside Bangkok. Third, agriculture is vital to the economy not only as a major source of export products, but also as a major source for industrial processing. The sector, therefore, is an organic part of industry. In other words, industry here begins and ends with agriculture. Thus, it is suggested that it could be a big failure were the model of NICs characterized by urbanization and manufactualization to be adopted. A substitute approach, “agro-industrialization”, has been advocated.

But actual development in recent years seems to have takes another direction. Most investment, both domestic and foreign, has come to sectors far away from agriculture and far away from rural areas. JDI in agriculture was 4.7%, 3.8%, and 1.2% in 1986, 1987, and 1988, respectively, showing a diminished investment.\textsuperscript{12} Fast
growing industries in Thailand, mainly in Greater Bangkok, have already caused serious economic and social problems as follows:

a. city congestion

Bangkok is known worldwide as a city of traffic jams. No country in the world has had its economy so seriously hurt by transportation problems. Some newly established JDI projects locate their plants outside of Bangkok, but they are still not too far away from Bangkok in order to enjoy the proximity to the consumer market and infrastructure facilities.

b. income disparity

Another side effect is that people in rural areas seldom share the fruits of the fast economic growth of recent years. Farmers, especially those in the northeast, are still in a state of poverty and the gap of living standards between farmers and other citizens is becoming larger and larger.

B. Low rate of technology transfer

Even though job creation, as mentioned above, is one of the main contributions of JDI to the Thai economy, this can hardly be overstated because JDI is not of a labor-intensive nature. The average employment records of business enterprises from other sources such as Taiwan, Hong Kong are more impressive than that of Japan. One survey shows every million Baht of Taiwanese investment, the second largest foreign investor since 1987, creates 3.5 job opportunities, while that of Japan creates only 0.9.\textsuperscript{13}

In the same way, the technology transfer of JDI cannot be overstated either. Even though what Thailand expects most from JDI is technology transfer in order to upgrade the economy, there is much evidence to show that the process has not occurred as expected. The following factors limit the efficiency of such transfer:

a) The lack of well trained technicians in Thailand. Technology transfer is by no means an easy process and to a great extent depends on the qualifications of the recipient rather than the donor. There has been a shortage of qualified engineers in Thailand for a long time. So Japan is not the only party to blame.

b) The unwillingness of Japanese headquarters to transfer high technology to its overseas subsidiaries in order to maintain their advantages.

c) The lack of advanced technology from some Japanese firms as the majority of them are small and middle sized companies.
d) About one fourth of JDI to Thailand is 100% owned by Japanese. The nature of business operation in that type of business hinders effective technology transfer.

C. Large trade deficit

Even though Japanese companies have increased their share of export value, looking at each sector carefully, we find that the sectors with the highest rate of export value are based on natural resources. For example, the rate in 1988 was over 50% in plastic products, wood products and furniture, food, textile products and garments. In addition, sectors with higher JDI were basically aiming at the domestic market. The rates in electronic and electric products and parts/components, chemical products, transportation equipment and parts/components were just 50%, 45% and 2%, respectively; much lower than the above sectors (see Table 4).

If we look at the percentage of imported materials, we would find that areas with the largest JDI were always dependent on imported materials, such as metal products (91.78%), machinery and parts/components (41.50%), electronic & electric products (76.74%), transportation equipment and parts/components, (69.32%) (see Table 4).

That is, a great portion of JDI in the boom time was still aimed at the domestic market and heavily dependent on imported materials and semiproducts. In this regard, the degree of value adding from exports is limited. That is why so great a deficit has been created in Thai-Japanese trade, which greatly offsets the effects of earnings or saving of foreign exchange through JDI exports. The trade deficit between Thai-Japan reached 150,648 million Baht in 1991 and 157,800 million Baht in 1992, accounting for 64% and 76% of the total deficit of Thailand.

In short, the model of the Thai economy after the boom of JDI could be described as follows:

a) A shift from import substitution to an export oriented economy has been completed and the export sector has become the most dynamic part of the economy.

b) The formation of new core industries, i.e., electronics and components, automobile and machinery industries, has replaced the traditional agricultural product processing industry. This indicates a great change not only in the manufacturing sector, but also in the pattern of the national economy, which generates profound influences in economic and social life.

c) The development of the assembling industry in Thailand. Thailand therefore becomes an important overseas assembling center of Japanese low value added industries. A pattern of division of labor between Thailand and Japan has been formed.
All of these indicate close economic ties between Thailand and Japan. In other words, the rise and fall of Thailand’s economy will depend to a great extent on the economic situation in Japan.

2. Prospects of JDI and how to integrate JDI in economic development in Thailand.

1) The prospect of a new boom of JDI in Thailand

The boom of JDI has passed. The decline of JDI began in the second half of 1990 and continued in the following years. The reasons come from both in and outside of Thailand:

A. Factors outside of Thailand:
   a. Economic recession in Japan and western world
   b. Increase of JDI to other areas like China

B. Factors inside of Thailand:
   a. Deterioration in the investment environment such as rises in wage rates and real estate prices and city congestion in Bangkok
   b. Unsuitability of the political situation, especially the May Event in 1991

All this led to the decline of JDI as well as other direct foreign investment in Thailand. JDI reduced sharply from the high point of 90,569 million Baht in 1989 to the low of 44,980 million Baht in 1991 (see Table 1), resulting in a slowdown of economic growth in the following years.

But there appears light at the end of tunnel in the recent period. The Japanese economy, after long term recession, showed signs of recovery in 1994. The Japanese Yen, on the other hand, is facing the pressure of a new round of appreciation. The exchange rate of the US dollar to the Japanese Yen has broken the limit of 1:100 in recent days, which is the highest Yen value ever. Many Thailand economists as well as government officers have been encouraged by this development. They believe the good old days would return and there would be a new round of JDI boom.

The picture is not be as rosy as people imagine. The following factors which hinder more JDI in Thailand still exist:

A. The economic recovery in Japan is still a slow process, and it is deeply influenced by frequent “earthquakes” in the government administration.

B. Competitors for JDI have appeared than in the years of the middle 1980s. China has an advantage in its huge market and cheap labor. Even other Southeast Asian countries like Vietnam, and the Philippines have revealed their interest and are
offering new charming prospects to foreign businessmen including those from Japan.

C. The investment environment in Thailand gives little signs of improvement for foreigners due to real estate price increases, city congestion, infrastructure support and supply problems.

It is therefore more realistic to forecast that JDI will continue to come to Thailand in the coming years, but not in the same amount and pattern as in the past. Possible scenarios would be:

A. There will be more JDI in the service sector. First, an economy at a higher stage of development gives more space for growth in the service sector. Second, the Thai government and financial administration are giving more and more financial liberty to Thai as well as foreign bankers. A recent example is the execution of the policy named BIBF aiming at opening the domestic market to foreign bankers. Third, Japanese firms already operating in Thailand require more services in financing and information, etc. Some Japanese will choose Thailand as a headquarters for controlling their business in this region.

B. New investment might concentrate on the expansion and upgrading of already existing industries like automobiles, electronics and machinery, and industries supporting them. First, the industries mentioned have deep roots in Thailand and have a large portion of the local market. Second, Thailand could become a manufacturing center for these industries and export products to nearby markets. An example is the automobile industry: cars could be made in Thailand and exported to other countries like Vietnam and Laos. These industries, therefore, still have potential for further development and supporting industries might come in order to form a closer link between upstream and downstream sectors.

C. There will be little investment in hi-technology or new industry in Thailand because of the reasons mentioned above.

2) How to integrate JDI into the Thai economy

Given the situation above, how can Thailand manage to integrate JDI into the Thai economy more efficiently and lessen the previous conflict and lack of harmony? Several suggestions are given as personal views:

A. Do not hope too much for high-technology transfer or the upgrading of industrial structure.

There is a base of opinion suggesting that labor intensive industry is no longer suitable for Thailand because of rising labor wages and the need for economic
upgrading. But if we consider, first, the income and education level of farmers and, second, the un-industrialized areas outside of Bangkok, the need for labor intensive investment from both domestic and international sources should not be neglected. Small and middle size JDI and investment from other less developed countries or areas like NICs are also desirable. The question is how to attract them to the areas outside Bangkok.

Based on our discussion above, it is too early to expect that technology transfer from Japan will increase, satisfying the needs of Thailand. The main reasons are partly the reluctance of Japanese to transfer and partly the inability of Thai technicians to digest new technology.

The urgent tasks for Thailand at present, therefore, are to train more qualified technicians and increase R&D input in order to speed up the transfer process. Second, attention should be paid to the transfer of middle level technology instead of high level technology.

B. Agro-industry development and decentralized investment should be encouraged with greater effort and with new policies.

More investment, including investment from Japan, should be directed to the agricultural sector and to areas outside Bangkok. So far, the third zone development program is under way, but more effort should be made in order to reach satisfactory results.

A related issue and one of the key factors for the new birth of the Thai economy is the necessity to cultivate new centers of growth besides Bangkok. These new centers could possibly be located in the following areas:

a. Board regions neighboring Singapore and Malaysia
b. Board regions neighboring Vietnam, Laos and China
c. Eastern Board region

These new centers could become bases for international trade and investment. Thus, the problems of congestion and income disparity could be lessened to some degree. The keys to the successful formation of new centers are: first, solving the problem of transportation, especially access to seaports; second, locating and relocating supporting industries in these areas; third, making progress in searching for cooperation with relevant countries to pave the way for the formation of such multinational growth centers.
C. Attract more Japanese investment in the service sector

Economic upgrading involves multiple choices. It means not only advancement in technology and upgrading of industrial structure, but also a shift to other sectors such as services. It is more realistic for Thailand to develop its service sector and become a regional center. Thailand could more actively encourage the setting up from Japan of operational headquarters, financial organizations, service centers, research and development centers and product designs.

D. Reduce overdependence on JDI

More sources of capital as well as technological assistance should be sought from elsewhere than Japan in order to reduce overdependence. Here, it is useful to refer to the then Prime Minister of Thailand Chatichai and his remarks to the US news agency in November 1989 that the US should compete more against Japan in Thailand. Sources could be sought not only among developed countries like the United States, Germany, and Great Britain, but also from less developed countries such as NICs, and even developing countries like China.
Notes

1 Ministry of Finance, Japan.
2 Tran Van Tro, Japan's Direct Investment in Thailand, Patterns and Issues, p. 34.
3 Nigei Holloway, Japan in Asian, p. 137.
5 Bank of Thailand.
6 Nigei Holloway, Japan in Asian.
7 Pocket Thailand in Figures, p. 68.
8 Foreign Investment in Thai Development, Special Focus on Japanese Investment, IDRIF, p. 19.
10 Tran Van Tro, Japan's Direct Investment in Thailand, Patterns and Issues, p. 20.
12 Bank of Thailand.
13 Foreign Investment in Thai Development, Special Focus on Japanese Investment, IDRIF, p. 18.
14 Foreign Investment in Thai Development, Special Focus on Japanese Investment, IDRIF, p. 17.
15 Pocket Thailand in Figures, p. 108.
16 Nigei Holloway, Japan in Asian.
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