<論　説>

AFTA and Industrial Restructuring in Thailand*

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In the new millenium, the member countries of ASEAN Free Trade Area (AFTA) will decrease tariff rate under the ASEAN Common Effective Preference Tariff (CEPT) scheme significantly. The six original ASEAN member countries will reduce tariff rate to 0－5 percent for 85 percent of all products in the year of 2000. Furthermore, AFTA will also plan to eliminate duties on all products, as well as non－tariff barriers to become real free trade area.

The reduction and elimination of tariff and non－tariff barriers will expand intra－ASEAN trade significantly. Following this trade expansion, Thailand's industrial structure will be changed in some degree. In long run, the integrated market of ASEAN countries will induced more foreign direct investment (FDI). The increasing FDI will have impacts on the industrial structure. Furthermore, the Thai government industrial policies also shape Thailand's industrial structure.

This paper is to give an overview of the industrial restructuring in Thailand within the context of the ASEAN Free Trade Area (AFTA). It is divided into four parts: (1) an overview of industrial sector in Thailand, (2) AFTA and Thailand, (3) the government industrial policies, including Industrial Restructuring Master Plan (1998－2002), and (4) some remarks.

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1 An overview of Industrial Sector In Thailand

1.1 Production

Currently, the production of manufacturing sector has a positive growth. Its production is more export–oriented after the 1997 financial crisis. However, the growth of productivity is not impressive.

a) Positive Growth in 1999

In the period of 1990 – 1995, the production of manufacturing sector grew drastically at 11.7 percent per year. However, its growth rate began to decline in 1996, due to the slowdown in export and domestic demand. Its growth rate decreased from 11.2 percent in 1995, to 6.9 percent in 1996. Furthermore, owing to financial crisis, its growth rate continued to decrease to 0.1 percent in 1997, and became negative growth in 1998, as shown in Table 1.

Fortunately, the manufacturing sector has recovered in this year. Its growth rate is 5.4 percent and 7.7 percent in the first and second quarter of 1999, respectively. However, some industries such as iron and steel, and automobile still have considerable excess capacity.

Table 1 GDP by sectors

(Percentage change from same quarter of previous year at 1988 prices)

	1996	1997	1998				1999	
			Q1	Q2	Q3	Q4	Q1	Q2
Agriculture	3.8	−0.5	−0.5	−3.4	0.2	2.7	3.8	1.3
Manufacturing	6.7	0.1	−11.0	12.9	−12.4	−1.4	5.4	7.7
Construction	7.2	−26.6	−21.4	−39.0	−39.6	−37.3	−25.9	−7.2
Wholesale & Retail-Trade	1.8	−2.1	−5.0	−10.3	−7.3	−2.5	3.1	5.0
Transportation	11.9	3.8	3.3	−7.9	−6.1	4.0	3.3	5.8
Hotels and Restaurants	3.6	−2.4	−7.6	−11.5	−0.8	6.0	8.3	4.9
Banking	5.2	−10.3	−50.1	−42.4	−78.8	−72.4	−40.5	−33.1
Others	7.5	5.3	4.4	−0.4	−0.4	0.8	−0.8	4.4
GDP	5.9	−1.8	−8.2	−12.3	−13.6	−5.8	0.8	3.5

Source : The National Economic and Social Development Board

b) More Export-oriented

Owing to the depreciation of Baht since July 2, 1997, shrinkage in domestic demand, and the need of foreign exchange for debt repayment, the manufacturing sector has adapted to be more export-oriented. Especially, export of automobile industry has increased significantly since 1997.

c) Low Productivity Growth

Several studies pointed out that the productivity growth of Thailand's industrial sector is very low. For example, Pranee Tinakorn and Chalongphob Sussangkarn (1998) reports that, in the period of 1981 - 1995, the total factor productivity growth (TFPG) is 1.09 percent for manufacturing sector, and 0.42 percent for industrial sector. It means that the contribution of total factor productivity (TFP) to the growth of output is 10.53 percent for manufacturing, and 4 percent for Industry. After regarding improved labor quality as part of the factor inputs, adjusted TFPG of manufacturing and industry become negative.

1.2 The Change in Industrial Structure

During the period of 1980 - 1996, the share in GDP of manufacturing sector increased significantly from 21.6 percent in 1980 - 1984 to 31.4 percent in 1996. The share of transportation and communication in GDP also increased as shown in Table 2. On the contrary, the share in GDP of agricultural sector decreased significantly from 20.0 percent in 1980 - 1984 to 10.6 percent in 1996. The share of mining and quarrying sector in GDP also decreased during the same period.

Table 2 Share of GDP by sectors

(Unit : percent)

	1980－84	1990－91	1994	1995	1996
Argriculture	20.0	12.8	11.4	10.8	10.6
Mining and Quarrying	2.4	1.6	1.6	1.5	1.7
Manufacturing	21.6	27.8	30.3	31.0	31.4
Construction	4.5	6.5	6.4	6.3	6.3
Electricity and Water Supply	2.2	2.1	2.6	2.7	2.7
Transportation and Communication	6.8	7.1	7.9	8.1	8.5
Wholesale and Retail trade	16.6	17.1	16.5	16.8	16.1
Banking and Insurance and Real estate	2.8	5.5	7.9	7.6	75.3
Ownership of dwellings	4.6	2.9	2.7	2.7	2.7
Public Administration and Defense	5.3	3.5	2.6	2.6	2.5
Services	13.0	13.1	10.1	9.9	10.0
GDP	100.0	100.0	100.0	100.0	100.0

Source : Bank of Thailand

Among manufacturing sectors, the share of machinery and electrical machinery industry in manufacturing GDP increased drastically from 6.2 percent in 1980－1984 to 18.7 percent in 1996. The share in manufacturing GDP of transport equipment, non–metal products, and petroleum refineries also increased significantly in the same period as shown in Table 3. On the contrary, the share in manufacturing GDP of food products, beverages, and tobacco products decreased drastically from 30.5 percent in 1980－1984 to 16.0 percent in 1996. The share in manufacturing GDP of textiles and wearing apparel also decreased significantly 23.6 percent in 1980－1984 to 15.0 percent in 1996.

Table 3 Thailand's Industrial Structure

(Percent of manufacturing's GDP)

	1980	1990	1996
Food products	14.1	9.6	7.7
Beverages	9.8	6.7	6.8
Tobacco products	6.6	2.9	2.0
Textiles	14.5	10.0	7.1
Wearing apparel	9.1	10.5	7.9
Leather and footwear products	1.8	3.8	2.9
Wood and wood products	2.1	1.4	0.4
Furniture and fixtures	1.3	2.7	1.5
Paper and paper products	1.8	1.3	1.7
Printing and publishing	1.6	1.0	1.2
Chemicals	4.2	2.7	2.6
Petroleum refineries	5.2	6.0	8.8
Rubber and plastic products	2.8	2.7	2.7
Non-metal products	3.6	5.7	6.2
Basic metal	1.8	1.6	1.8
Metal products	1.8	2.6	3.0
Machinery	3.3	5.2	8.9
Electrical machinery	2.9	6.1	9.8
Transport equipment	7.8	9.5	9.3
Other manufacturing	3.9	8.0	7.7
Total	100.0	100.0	100.0

Source : The National Economic and Social Development Board

1.3 Export

In Thailand, the export share of machinery, manufactured goods, and miscellaneous manufactured goods increased from 63.6 percent of the total export in 1990 - 1992, to 68.7 percent in 1998 as shown in Table 4. Among manufacturing products, the proportion of labor-intensive products in the export has decreased from 34.6 percent of the total manufactured export in 1992, to 15.99 percent in 1998 as shown in Table 5. On the other hand, the proportion of technology intensive products has increased from 43.1 percent in 1992, to

63.73 percent in 1998.

Table 4 Export Structure by Commodity Groups

(Unit: Percent)

	1990−92	1994	1998
Food	26.6	20.7	17.5
Beverages and tobacco	0.5	0.3	0.3
Crude materials	5.2	4.9	3.7
Mineral fuel and lubricant	0.9	0.7	1.4
Animal and vegetable oils and fats	0.0	0.1	0.1
Chemicals	1.8	2.1	4.0
Manufactured goods	17.1	16.7	15.4
Machinery	24.6	33.5	40.2
Miscellaneous manufactured goods	21.9	20.0	13.1
Misc. Transactions and commodities	1.2	0.8	4.1
Re−exports	0.2	0.2	0.2
Total	100.0	100.0	100.0

Source : Bank of Thailand

Table 5 The Change in manufacturing Export Structure

(Unit: percent)

	1992	1996	1997	1998
Labor−intensive products	34.60	22.80	17.42	15.99
Resource−based products	15.80	14.20	11.11	11.20
Technology−intensive products	43.10	55.00	61.13	63.73
Other manufactured products	6.50	8.00	10.34	9.08
Total	100.00	100.00	100.00	100.00

Source: Bank of Thailand.

1.4 Import

Thailand has heavily relied on imported capital goods. The import of capital goods was 50.4 percent of the total import in 1998 as shown in Table 6. The import of intermediate products and raw materials also has a large share in the total import. For vehicles and parts, its import share decreased significantly due to a slowdown in domestic demand.

Table 6 Import Structure by Economic Classification

(Unit: percent)

Categories	1992	1998
Consumer Goods	10.5	11.5
Intermediate Products and Raw Materials	32.1	27.3
Capital Goods	40.9	50.4
Vehicles and Parts	5.7	1.2
Fuel and lubricant	8.3	7.4
Miscellaneous	2.5	2.2
Total	100.0	100.0

Source: Bank of Thailand

2 AFTA and Thailand

The six original ASEAN member countries (Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand) will reduce tariff rates to 0 – 5 percent for 85 percent of all products by the year 2000. In addition, they will reduce tariff rates to 0 – 5 percent for 90 percent of all products by the year 2001, and for all products by the year 2002. For New member Countries of ASEAN, they will increase the number of tariff lines with tariffs of 0 – 5 percent by 2003 for Vietnam, by 2005 for Laos and Myanmar[1].

Moreover, ASEAN Member countries plan to eliminate import duties on all products. In addition, the AFTA Council also aims to eliminate non-tariff barriers.

Under the AFTA framework, Thailand will reduce tariff rates to 0 – 5 percent for 7,737 items by the 2000. In addition, 455 tariff lines more will be reduced to 0 – 5 percent on 1 January 2001, and 811 tariff lines more will be reduced to 0 – 5 percent on 1 January 2002.

Under the scheme, Thailand's intra-AFTA trade, both export and import will increase significantly. In addition, foreign direct investment will increase, and industrial structure will be changed.

(1) Thailand's Intra-AFTA Trade

The share of export to original ASEAN in the total of Thailand's export became the largest share in the first time in 1995, at 19. 1 percent. However, the share of export to ASEAN has decreased after the 1997 crisis due to the economic slowdown in this region. The share of export to ASEAN (including Indochina and Myanmar) is 18. 1 percent of the total of Thailand's export in 1998. It is the second largest share, as shown in Table 7.

On the other hand, the share of import from ASEAN (including Indochina and Myanmar) increased from 13. 1 percent of the total import in 1995, to 15. 0 percent in 1998 as shown in Table 8.

It is expected that the intra-AFTA trade of Thailand will increase after the tariff reduction in the year of 2000. Specifically, intra-industry trade of electrical appliance and electronic industry will expand significantly.

Table 7 Thailand's Export Structure by Countries

(Unit: percent)

	1990	1995	1998
United States	22.7	17.8	22.3
Japan	17.2	16.8	13.7
EU	22.6	15.1	17.9
ASEAN	11.4	19.1	15.2
Indochina and Myanmar	0.6	2.7	2.9
Others	25.5	28.6	28.0
Total	100.0	100.0	100.0

Source: Bank of Thailand

Table 8 Thailand's Import Structure by Countries

(Unit: percent)

	1995	1998
United States	12.0	14.1
Japan	30.5	23.7
EU	16.0	12.5
ASEAN	12.6	14.2
Indochina and Myanmar	0.7	0.8
Others	28.2	34.7
Total	100.0	100.0

Source: Bank of Thailand

(2) AFTA and Thailand's Foreign Direct Investment (FDI)

Since the AFTA will become a large integrated market, many multinational corporations have increased the investment in this region. For example, several automobile assemblers have recently increased their direct investment in Thailand because they expect that Thailand will become an automobile production base in this region.

Among Thailand's industrial sectors, machinery and transportation equipment, electrical appliances, metal and non–metallic have large shares in the net flow of FDI in 1995 – 1998, as shown in Table 9. As a result, the share in manufacturing GDP of these sectors has increased significantly as shown in Table 3.

Table 9 Net Flows of Foreign Direct Investment Classified by Sectors

(Unit: Millions of Baht)

	1990	1995	1998
1. Industry	31,003.4	14,114.3	83,505.0
1.1 Food & sugar	1,756.6	973.0	2,960.0
1.2 Textiles	1,776.7	941.1	3,712.0
1.3 Metal & non metallic	2,886.2	2,850.9	13,345.0
1.4 Electrical appliances	10,676.9	5,812.3	10,260.0
1.5 Machinery & transport equipment	2,474.9	3,597.1	27,218.0
1.6 Chemicals	4,318.2	2,333.0	8,805.0
1.7 Petroleum products	3,028.7	−4,019.0	12,737.0
1.8 Construction materials	12.1	625.9	−75.0
1.9 Others	4,073.1	1,548.8	4,543.0
2. Financial Institutions	4,530.8	642.8	20,776.0
3. Trade	12,928.4	11,111.6	34,222.0
4. Construction	3,300.9	906.1	6,167.0
5. Mining & quarrying	1,139.2	1,418.6	2,451.0
6. Agriculture	792.7	232.3	19.0
7. Services	2,053.9	2,186.1	12,110.0
8. Real estate	8,421.4	21,245.8	20,421.0
9. Others	524.3	−1,970.6	18,595.0
Total	64,695.0	49,887.0	198,266.0

Source : Bank of Thailand

(3) AFTA and Thailand 's Industrial Structure

It is expected that the AFTA scheme will have a positive impact on electronics and electrical appliances, automobile, metal and non–metal products, machineries, gems and jewelry, and food industries in Thailand. These sectors can expand further because Thailand has a comparative advantage over the majority of AFTA member countries. On the contrary, Thailand can not compete against some ASEAN countries in some industries, such as petroleum products and chemicals. These sectors may have some difficulties to grow.

3 Major Policies affected Industrial Sector

Major changes in some policies of the Thai government have impacts on industrial restructuring in Thailand. This paper will discuss three major changes in policies, (1) Industrial Restructuring Master Plan, (2) small business policy, (3) tariff policy, and their impacts on industrial structure.

3.1 Industrial Restructuring Master Plan (1998 – 2002)

After the decrease in export of manufacturing goods in 1996, the Ministry of Industry began to formulate the Industrial Restructuring Plan in 1997. In January 1998, the cabinet approved the plan. The plan has been financed by loans from the World Bank and the Asian Development Bank.

For plan formulating process, Sompop Amatayakul, chair of a subcommittee of the National Committee for Industrial Development, said that "My goal is to get people (manufacturers/exporters, academics, bankers and civil servants) to share their visions and work together rather than having one or the other dominate"[2]. The subcommittee got many people from various sectors to involve in the formulation of industrial restructuring plan.

The principal programs of this plan are (1) Improvement of industrial productivity and streamline of production processes to increase competitiveness in production cost and product delivery,

(2) Upgrading technological capabilities,

(3) Improving labor skills,

(4) Incubation and strengthening of small and medium supporting industries,

(5) Promoting product design & development, and global marketing channels,

(6) Promoting the decentralization and relocation labor–intensive industry

to regional and rural areas,

(7) Inducing foreign direct investment in targeted industries with technologies of the future, and

(8) Relocating and managing high polluting industries, and promoting clean technology[3).

There are 13 targeted industries in this plan: (1) Food and animal feed,

(2) Textile and garment,

(3) Footwear and leather,

(4) Wooden products and furniture,

(5) Pharmaceutical and chemicals,

(6) Rubber and rubber products,

(7) Plastic products,

(8) Ceramic and glassware,

(9) Electrical appliances and electronic,

(10) Automobile and parts,

(11) Gems and jewelry,

(12) Iron and steel, and

(13) Petrochemicals.

Based on these programs, it seems that this master plan mainly is the development plan for target industries. The industrial restructuring is not a major focus of this plan because its target industries are very broad.

3.2 Small and Medium Enterprises (SME) Policy

Since its first national economic development plan (1961 – 1966), the Thai government has emphasized on industrial development, especially manufacturing sector. During last four decades of industrial development, the government has mainly promoted foreign direct investment and large industrial investment projects through the Board of Investment (BOI). On the other hand, small business has obtained relatively less promotion, although the government has planned to promote small business since the first national plan.

However, the Thai government and political parties recently began to pay more attention on small business because the financial crisis (1997 – 1998) caused severe damage on small business. Currently, the government is making the Small and Medium Enterprises Promotion Act. It is expected that the law will be enacted within 1999. Furthermore, the Ministry of Industry is formulating the master plan for the development SMEs.

In June 1999, the Ministry of Industry cooperating with various universities established the Institute for SMEs Development in order to provide information, technical and managerial training. In addition, the Stock Exchange of Thailand is considering to set–up the SME board. Listing on this board, each company will require registered capital of at least 40 million baht, compared with 100 million baht for the main board.

In August 1999, the Ministry of Finance announced the plan to enhance the effectiveness of SME financing by restructuring two specialized financial institutions, the Small Industry Credit Guarantee Corporation and the Small Industry Finance Corporation, and establishing the Financial Advisory Centers for SMEs.

However, since the government just began to pay more attention on SME promotion after the 1997 financial crisis, the government sector does not have enough SME specialists, especially in the SME financing area.

3.3 Tariff Restructuring

The Thai government began to reform the tariff structure in September, 1990. The Cabinet decided to restructure the tariff system by reducing the number of tariff rate from 39 rates to 6 rates. Under the "Value–added escalation principle", the new cascading tariff structure is as follows :

- Zero for tariff–exempt products such as medical equipment ;
- 1 percent for raw materials, electronic components and vehicles for international transportation ;
- 5 percent for primary products and capital goods ;
- 10 percent for intermediate products ;
- 20 percent for final products ; and
- 30 percent for products requiring "special protection" such as carpets, clothes, shoes, television sets and refrigerators.

However, automobile industry is excluded from this tariff structure. Currently, the tariff rate on imported CBU car is 80 percent.

Why did the Thai government decide to reform the tariff structure? First, the old tariff structure was very complicated. Since the Bowring Treaty (1855) was amended to allow Thailand to increase the tariff rate in 1883, the Thai government has changed tariff rates from time to time in order to increase governments revenue, or to protect domestic industries (especially since 1960 s), or to improve the balance of payments such as in 1970, or to control rising inflation from oil crisis in 1974. After these changes in tariff rates, the number of tariff rates were increased from only one rate under the Bowring Treaty to 39 rates in 1990. The complicated system has given difficulties to importers and domestic producers. Thus, many people have demanded the simplification of tariff system.

Second, under the old tariff system, while some industries such as garments, canned meat and automobile have high effective rate of protection (ERP), some industries such as products of basic metal have low ERP (Sanchai, 1999). This wide range of different rates of protection is a result of unsystematic changes in tariff rates. Thus, the government plans to change tariff structure to cascading one. Under new structure, the production of finished products will be highly protected.

Third, as a member of the World Trade Organization (WTO) and the ASEAN Free Trade Area (AFTA), Thailand has to liberalize trade and investment. For example, on January 1, 2000, under the Information Technology Agreement (ITA) of WTO, 153 items will be exempted from import duties. In addition, under AFTA agreement, import duties on 7,769 items will be reduced to 0 – 5 percent.

Under the international agreements, the government has reduced import duties from time to time. On December 27, 1994, the Ministry of Finance unilaterally cut import duties on 6,898 items following the Uruguay Round Agreement and the AFTA agreement.

Fourth, the fact that the government started the tax reform in 1990 is attributable to high economic growth and strong fiscal position, enabling the Thai government to reduce import duties in 1990. The share of tariff in government's tax revenue decreased from 33.23 percent in 1960 to 24.17 percent in 1990. Thus, the important role of tariff as a main source of government revenue has steadily declined over time.

Fifth, export–oriented industries have expanded rapidly. This sector became an engine of growth and strong political base. Thus, the government has to restructure the tariff system in order to promote export–oriented sector as well as to lower some industrial protection that would make this sector less competitive in the world market.

On August 10, 1999, the government announced the "Measures to Encourage Private Investment". Under this package, the Ministry of Finance reduced tariffs on capital goods over 326 items such as mechanical appliances and electrical machinery from 5 and 20 percent to 3 percent. Tariffs on raw materials about 300 items were also cut. In addition, the Cabinet decided to remove the 10 percent import duty surcharge which was collected since October 15, 1997. This tariff reduction changes Thailand's tariff structure in some degree. It is a part of the government's continuing efforts to reform tariff structure in order to enhance competitiveness of industrial sector.

3.4 Potential Impacts on Industrial Structure

These policies will have some impacts on Thailand's industrial structure as following discussions.

(1) Based on the master plan, 13 target industries will be promoted. The government sector has provided many projects to support these sectors.

However, the government has established four industrial institutes, food industry institute, textile and garment industry institute, electronics and electrical appliances industry institute, and automobile industry institute. These institutes are independent institutes, but subsidized by the government. Their objective is to support the development of each industry. It indicates that the government has provided a strong support to these four industries.

(2) The SME policy will not have much impact on industrial structure because the policy does not focus on any particular industry. However, it will have a positive impact on supporting industry.

(3) The tariff restructuring will lower the protection of heavy industries, such as iron and steel, and petrochemicals. On the other hand, the export-oriented industries, such as electrical appliances and electronics will have some benefits because the tariff on imported raw materials will be reduced.

4 Some Remarks

4.1 Industrial Restructuring Master Plan VS AFTA

The government has to make the Industrial Restructuring Master Plan because of the zero export growth in 1996 and the 1997 financial crisis. The plan did not deal directly with the impacts of AFTA scheme. This may be because the impacts of AFTA on Thailand's industrial sector still are not significant.

However, the tariff reduction under the CEPT scheme will have more impacts on Thailand's industrial sector after the year of 2000. The intra-AFTA trade will shape the industrial structure in some degree in the near future.

4.2 Spatial Structure of Industry

Frauke Kraas (1998) points out that Thailand has enormous disparities between the number of industrial enterprises and workers in the Bangkok Metropolitan Region (BMR) and remaining 70 provinces. In addition, within BMR, there are disparities between Bangkok and the surrounding five provinces. Regarding to the failure of industrial decentralization, F. Kraas (1998) believes that some of its causes are inadequate planning, co-ordination and implementation, limited financial support, and the lack of real political will.

The Industrial Restructuring Master Plan (1998-2002) includes industrial decentralization as its principal program. However, the implementation of decentralization plan has not been successful.

Regarding to the context of AFTA, the industrial decentralization should include the development of growth triangles such as Indonesia-Malaysia-Thailand Growth Triangle, and the Greater Mekong Subregion. These growth triangles will expand intra-ASEAN trade and investment, and support the success of AFTA.

4.3 Corporate Restructuring and Industrial Restructuring

Alba, Claessens and Djankov (1998) points out that, in Thailand, fragile financial structure and weak corporate governance of many firms contributed to the crisis in 1997. In order to improve competitiveness and to keep sustainable growth of industrial sector, Thailand has to improve the financial structures and corporate governance of firms. Corporate Restructuring is necessary for industrial restructuring in Thailand. However, private sector will play a major role in corporate restructuring.

Notice

1) The joint press statement of the 13th meeting of the AFTA Council, 29 September 1999.
2) The Nation, January 8, 1998.
3) See more details in The National Committee for Industrial Development (1998).

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