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Watching Thai Industrial Goods After AEC

Center for International Trade Studies,
University of the Thai Chamber of Commerce

Thai Para-rubber Under The Asean Economic Community

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Producers of Official Statistics of AEC Countries:

Thailand, Cambodia, Laos, And Myanmar

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Global Trade and Investment

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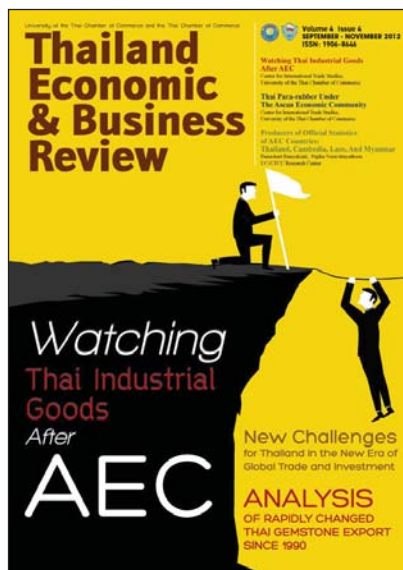
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Editor's Memo



“New Challenges in Trade and Investment in the World Economy 2012”

With the world’s constantly fluctuating economic situation, depending solely on one’s own strength it can no longer create the development necessary to keep pace with the world changes. The ASEAN Economic Community (AEC) may be the last solution, using the union of every country in the ASEAN region, to help world economy 2012. Furthermore, new challenges from the changing world dynamics are certain to happen in many dimensions in the context of the global trade and investment. These necessarily affect Thailand’s future trade and economy. In order to be prepared these challenges, this issue of Thailand Economic and Business Review presents “New Challenges for Thailand in the New Era of Global Trade and Investment” by the Editorial Team, which summarizes the main points of the keynote speaker, Dr. Supachai Panichpakdi, Secretary General of the UNCTAD, in his Special Lecture to the Top Executive Program in Commerce and Trade (TEPCoT) of University of the Thai Chamber of Commerce. It contains the content and guidelines of how we must operate in the world’s economy after 2012, when the free trade agreements will go into effect.

In every issue, we have never missed a chance to present economic and business analyses of the ASEAN countries group. In this issue, the Center for International Trade Studies contributes two analyses, “Watching Thai Industrial Goods after the AEC” and “Thai Para Rubber under the ASEAN Economic Community”. In addition, the UC-UTCC Research Center, University of the Thai Chamber of Commerce, offers “Producers of the Official Statistics of the AEC Countries: Thailand, Cambodia, Lao and Myanmar”, written jointly by Panuchart Bunyakiati and Pajika Voravittayathorn. Finally, Mr. Chompol Pornchindarak of the Thai Gems and Jewelry Traders Association offers his “Analysis of Rapidly Changing Thai Gemstone Exports since 1990”.

The new challenges for Thailand in the new era of global trade and investment are not only to face with the world’s economic fluctuation, but also to face with challenges of the changes of global strategic landscape. Is Thailand ready for going into the new landscape? We believe our articles will support you for this new challenges. Also, Thailand Economic and Business Review is a publication to present economic and business data which gives you important knowledge for your business during the world’s economy of the post 2012 era. *Enjoy your reading...*

Arrada Mahamitr
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CONTACT : Academic Service Center, University of the Thai Chamber of Commerce Tel. 02-697-6861-3

New Challenges for Thailand in the New Era of Global Trade and Investment



On August 17, 2012, the Top Executive Program in Commerce and Trade (TEPCoT) of the University of the Thai Chamber of Commerce organized a Special Lecture called “New Challenges for Thailand in the New Era of Global Trade and Investment”. **The keynote speaker was Dr. Supachai Panitchpakdi, Secretary-General of the UNCTAD. In addition, representatives from TEPCoT Class 1 to Class 5 participated in the discussion, called “AEC & Beyond: Direction of Trade and Investment in the New Dynamism”.** The guest speakers were Mr. Kittipong Urapeepatanapong, Chairman of Baker & McKenzie Co., Ltd. from TEPCoT Class 1, Mrs. Nantawan Sakultanak, Deputy Director-General of Ministry of Commerce from TEPCoT Class 2, Mr. Paiboon Ponsuwanna, Chairman of the Thai National Shippers’ Council from TEPCoT Class 3, Mr. Aekpittaya Iemkongaek, Managing Director of Union Auction Co., Ltd. from TEPCoT Class 4, and Mr. Paiboon Nalinthrangkurn, Chairman of the Federation of Thai Capital Market Organizations from TEPCoT Class 5. The program moderator was Assist. Prof. Thanawat Pholwichai, Ph.D. Vice President of Research Department and Program Director of the TEPCoT. This seminar was considered as an arena

for “leaders” from the public and private sectors to present their visions and connections of various sectors to provide the guidelines for driving Thai strategies in the global market. Thailand Economics and Business Review therefore would like to present a summary of the main points as follows:

World Economy Situation

Dr. Supachai Panitchpakdi said on September 8, 2008, he gave the first lecture to the participants in TEPCoT Class 1. Six days later, September 14 it was an historical day in the world’s economy when Lehman Brothers collapsed, which resulted in global imbalances.

If we look back at the IT Bubble or the Y2K crisis in 2001, the solution in the United States at that time was interest rate reduction to stimulate the economy and what seemed to be “the never-ending party”. The monetary rate was relaxed and the world’s economy grew quite well. As a result, people became careless in investing and the quality of decision-making was low. The UNCTAD forecast every year that the economy was excessively stimulated. The U.S. was faced with a current account imbalance; the quality of debts was immensely damaged; rules and regulations were relaxed; and there was no governance.

Before the book named “The Wealth of Nations”, the 18th century Scottish economist Adam Smith wrote The “Theory of Moral Sentiments”. His theory has once again become a topic of discussion. **Dr. Supachai suggested we should adjust the “Theory of Moral Sentiments” to the market drive and always keep Moral Sentiments as our**

background. In comparison, Thailand has the “Sufficient Economy Philosophy” of His Majesty the King and has used the middle path principle for the development of the country.

One cause of the world’s economic problems was a wrong policy that led to a lack of liquidity. However, **the main cause of the U.S. economy problem was the idea of creating “Derivatives”** by means of assets capitalization and the purchase and sales of them. In fact, derivatives have no value in themselves; “underlying assets” are

money must follow it and be a supporting part. However, in the last decade, the monetary system led the economy. The average income of the middle class has decreased, and the U.S. has become the country with the highest class differences or imbalances among the developed countries. The U.S. under President Obama announced its entry into a **“Fiscal Cliff” situation by increasing taxes.**

The GINI Index indicates imbalances in the distribution of household income. Index 1 means a perfect imbalance; and 0 means a

Dr. Supachai suggested we should adjust the Theory of Moral Sentiments to the market drive and always keep Moral Sentiments in the background. In comparison, Thailand has the “Sufficient Economy Philosophy” of His Majesty the King and has used the middle path principle for the development of the country.

used in various forms through derivatives business transactions to gain profits. Debt management has no rules, regulations and supervision. Consequently, it led to the collapse of the U.S. economy and the current global economy. The world monetary system has become the leader of the economy and this resulted in an economic crisis or recession that can be called a “Balance Sheet Crisis”. It was caused by bad balance sheets of both banks and the government, and it is an accumulation of debt in many forms, including household debts, companies’ debts, banks’ debts and government’s debts. The U.S. government allowed the amount of debt inflation to grow too high.

The monetary system cannot lead the manufacturing sector;

perfect balance. In the Scandinavian countries, the index is 0.3, and in the U.S. the index is 0.42 which is equal to the index of Thailand. The index of our country tends to increase, but the U.S.’s index is high number, compared to other developed countries. If the amount of income shows that rich persons who account for 20% of the world population have 70% of the world’s income, the poor who account for 80% have only 2% of world assets, how could the world survive? The U.S. under President Obama announced its entry into a Fiscal Cliff situation by increasing taxes, especially those related to assets and wealth.

The global economy has a high risk of expanding at a reduced rate next year. The UNCTAD anticipates

the expansion will be only 2.5%, while the economic situation this year will not expand as the IMF has forecast. This is because world trade will recede and expand by only 4%, down from the 5% expansion in 2012. The U.S. economy and the crisis in the Euro Zone will increasingly deteriorate.

The solution to the world's economy in this period is not like the economic collapse in 1997, since at that time the IMF helped poor countries like Thailand. Nowadays, the IMF has spent almost all of its money to assist European countries, as this is the first time in history that

have also reduced their interests, with as a result an enormous amount of spending.

Dr. Supachai anticipated this year the EU's economy will drop by 0.5-0.7% from the first half of the year, where it had already fallen by 0.3%. Next year the EU's economy will recede by 1.3%. He also **advised Asian countries to use foreign exchange reserves to purchase assets or technology from the EU, as Asia has 60% of the global foreign exchange reserves**; in particular, China has a reserve of 3.4 to 3.5 trillion dollars.

Our world has no global

Fiscal Union. If there is Monetary Union, there should also be Fiscal Union and Banking Union. However, it seems the Euro Zone unification has yet to be accomplished. Dr. Supachai emphasized that every country that has growth must also have governance.

★ Challenges for Trade and Investment in the AEC

Development at the level of the Asian region is significant. The ASEAN Economic Community and the CMI (Chiang Mai Initiative) must be created and achieved. What we should worry about is not just Thailand, but whether the AEC itself can survive. Consequently, Thailand and the group of ASEAN countries should increase their cooperation under the ASEAN Framework Agreement +3, the ASEAN Framework Agreement + 6 and the ASEAN Economic Community. This region is the main mechanism that drives the world's economy by its quantity of trade, which is over 50% of total global trade.

★ Mutual Recognition

The AEC and the ASEAN + 3 must be successful, since all sources of growth are in these agreements. As to the operation of the AEC, the use of a Single Currency can be overlooked. It cannot be accomplished because each country is very different. However, tax reduction can be put into practice immediately. Nevertheless, **the most difficult thing to achieve is "Mutual Recognition"; banking and environmental standards must be the same, and competition rules and regulations must have the same standards** so that people can trade without advantages

If the rich who account for 20% of the world population have 70% of the world income, while the poor who account for 80% have only 2% of world assets, how could the world survive?

almost all European countries have had to request the IMF assistance.

As to the situation in Europe, the per capita income of Greece has been -5% consecutively for 5 years, and unemployment now numbers 23% of the population. Out of a total population of about 10 million, 1 million are government officials; this seems to be a source of help for the unemployed. The question is how Greece could be allowed to enter the Euro Zone, which is modelled on Germany. To enter the Euro Zone, a country must have numerous products, high investment and good trade. However, Greece has only one advantage - a very low interest rate, while Germany has both low interest accompanied by sufficient savings. Spain and Portugal

governance; there are only global rules for trade under the WTO's supervision. There are no rules in finance and investment. Currently, international investment has no common rules and governance. Noticeably, steel companies in Europe now belong to India, whiskey manufacturing companies belong to Asia, and some European public utilities, such as water, electricity and gas are owned by Asia. Obviously, European banks have no ability to increase capital and have had to sell their assets. The unification of the Euro Zone has a loophole; the Euro Zone has a Monetary Union without a Fiscal Union, and this means the Monetary Union has only an interest policy and none for controlling banks or the

or disadvantages. Nowadays, the UNCTAD is the focal point of global competition regulation. It does not mean only competition but also has to consider consumers and insure equal competition.

ASEAN should strengthen its cooperation in creating trade stability while jointly setting bank standards, inspection measures and giving warning signs to prevent future deflation. Furthermore, ASEAN should give importance to creating a single market law and consumer protection law. Real unity requires the same standards in order to avoid confronting problems later. The risk is the creation of the AEC may not be accomplished. Laws must have the same standards when a market is open. For example, some ASEAN countries have trade competition laws that are effective, while others do not have such laws or do not use them efficiently.

★ Technology

As for **technology promotion**, Thailand must have ownership of technology, including intellectual property protection. Our country has seldom registered its intellectual property with the World Intellectual Property Organization (WIPO). China is the country that has registered most at the WIPO. We need to promote our educational technology, thinking out of box and protecting copyrights.

★ Infrastructure

ASEAN still has to cooperate in **developing the infrastructure**, which includes its transportation system, energy, telecom and financial organizations in order to connect ASEAN together. In the past, 80%

of transportation in Thailand was by land; as a result, the costs were very high, compared to other countries. The rail system of Thailand still uses 1 meter wide track, while most of the rest of the world uses the 1.40 meter rail system. Rail connection thus is a problem. Furthermore, the locomotives of the Thai railway have not been changed for years, and the rail system needs more investment.

★ Disparity

Many economists have shown that a country with a high disparity is one that has an unstable and impermanent growth. This can be a disparity between regions, occupations, and technologies, and is a digital divide. Therefore, the gap between access to technology must be reduced.


★ Governance

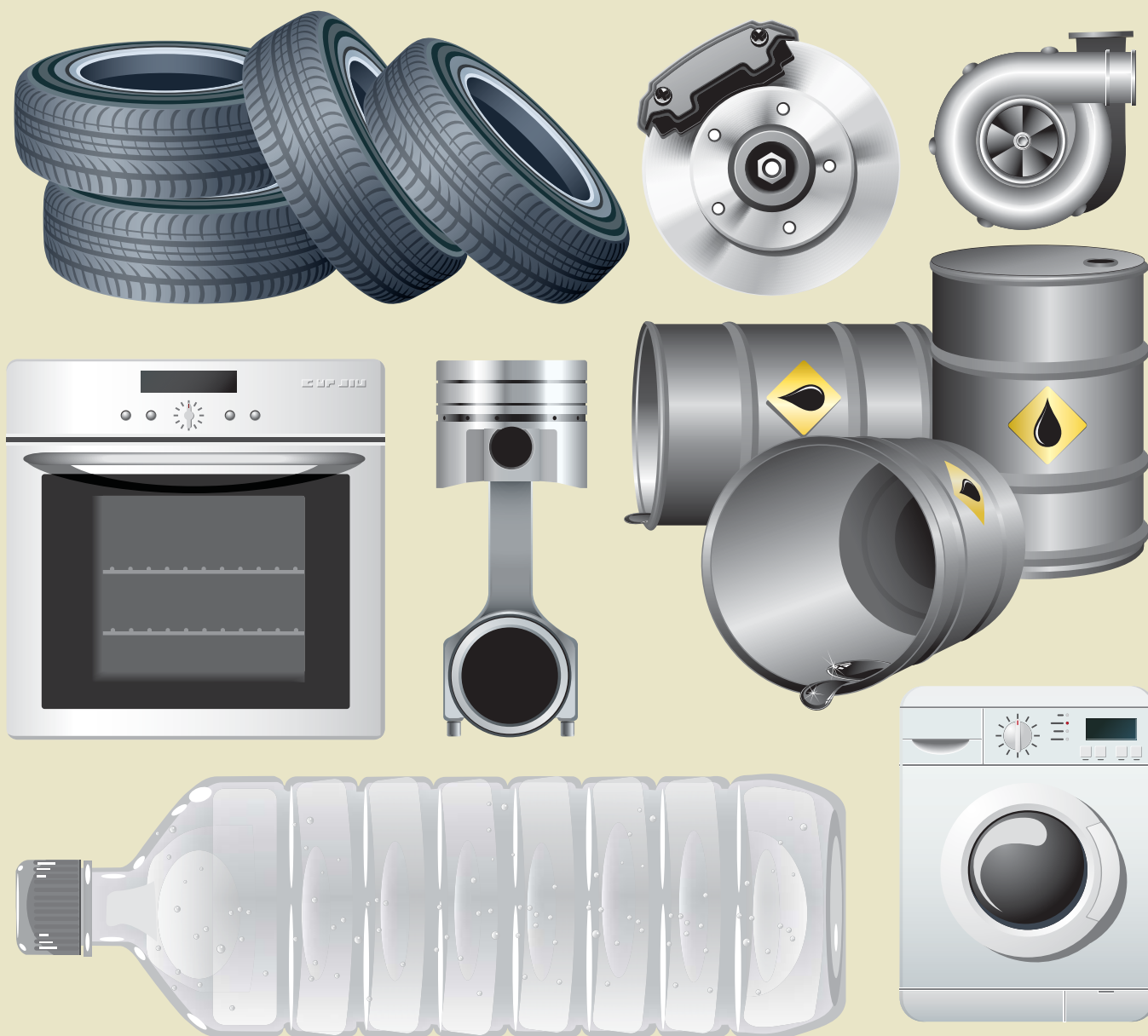
The ASEAN should focus on **governing, not merely in the private sector but in the government sector as well**. Last year, *the World Economic Forum* evaluated Thai competitiveness at the 39th rank. The low scores that hold back us back are politics and politicians' credibility. The Corruption Index rated Thailand at level 3 ("the lower, the worse"), with Singapore was rated at level 7. The Corruption Index measures several factors, including spending money according to its purpose, the use of a budget, transparency in business, and politicians' credibility.

★ Productivity

In addition to all of this, we must speed the **improvement of productivity as well as connections**

in the supply chain to reduce production costs. Thailand must accelerate personnel development by producing trained people to feed the manufacturing system, instead of producing personnel who will probably be unemployed or who are not qualified for the positions they want. The Board of Investment of Thailand should be in charge of this, rather than the Ministry of Education.

The matter that worries foreign investors is that Thailand has little skilled labor. They are not concerned about wages. Currently, we need vocational education beyond a bachelor's degree, and the salary for such vocational graduates should be equivalent or greater than for a bachelor's degree. This would motivate producing more trained personnel who meet the demands. The BOI knows more about this than the Ministry of Education. Manpower plans should be under the BOI, since it is well informed about the demands for skilled labor in the investment sector. 



WATCHING THAI INDUSTRIAL GOODS AFTER **AEC**

by

*The Center for International Trade Studies,
University of the Thai Chamber of Commerce*

ASEAN aims to be a single market and joint production base which will have a free flow of goods, services, investment, capital and skilled labor. Each member country has joint agreements under the ASEAN Economic Community Blueprint¹, which is the plan for an integrated economic operation. ASEAN has specified time goals which step by step decrease or eliminate trade obstacles among the member states.

One goal of being a single market and joint production base is the free flow goods of member countries throughout the ASEAN Free Trade Area (AFTA). The original ASEAN member countries, consisting of Indonesia, Malaysia, Philippines, Singapore, Brunei and Thailand, have decreased the tax to zero² on every item of goods traded among them since 2010. The newer ASEAN member countries, the CLMV (Cambodia, Laos, Myanmar and Vietnam) will have to decrease taxes on their goods to zero in 2015.

As the older ASEAN member countries began decreasing their taxes from January 1, 2010, it is interesting to see whether the export potential of Thai industrial goods changed in any direction within the ASEAN market following the free trade opening. This study presents an analysis of the direction of Thai

industrial goods export after the AEC went into effect in the ASEAN : 5 markets, Indonesia, Malaysia, Philippines, Singapore and Thailand

1. ASEAN Trade

Imports by the ASEAN-5 members in the ASEAN market in 2011 had a total value of US\$ 230,699.39 million. This was an increase of 15.48% when compared to the previous year. The most imported goods was fuel made from mineral oil, with a total value of US\$ 64,692.37 million. This increased by 43.96% over the year 2010 and was an increase of 28.04% compared to ASEAN's total imports value. The second most imported goods were electrical machines, electrical equipment, engines, boilers, plastics, motor-vehicles and accessories, calculated as 22.25%, 14.14%,

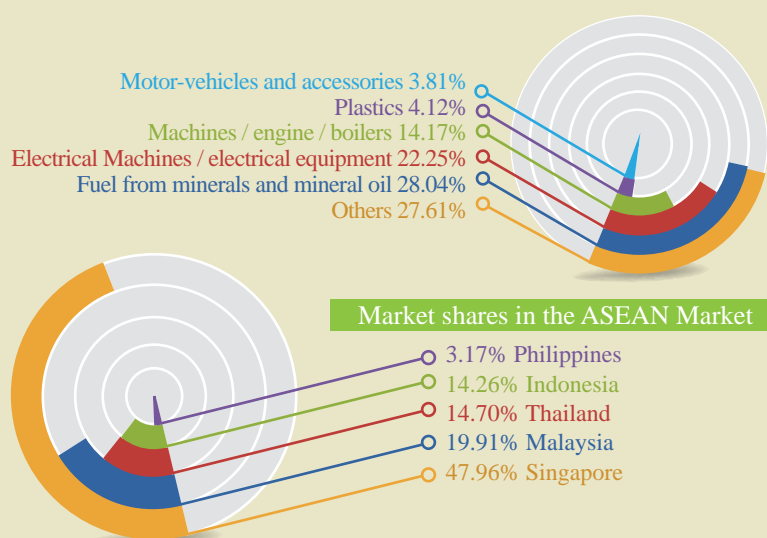
When looking at market shares, it is found that most imports in ASEAN where from Singapore, with 47.96%. Malaysia, Thailand, Indonesia and the Philippines followed at 19.91%, 14.70%, 14.26% and 3.17% respectively.



1. The ASEAN Economic Community Blueprint aims at promoting ASEAN to be a single market and production base with a free flow of goods, services, investment and skilled labor, plus a greater free flow of capital. It also wants to promote ASEAN's competitive ability, to narrow the development gap between member countries and promote ASEAN to join with the world community.

2. Except for items on the Sensitive List, taxes must not exceed 5%. For items on the Highly Sensitive List, taxes can be individually specified.

Proportion of Imports in the ASEAN Market



4.12% and 3.81% respectively.

Looking at market shares, we find that most imports in ASEAN were from Singapore, with 47.96%. Next came Malaysia, Thailand, Indonesia and the Philippines at 19.91%, 14.70%, 14.26% and 3.17% respectively. (Chart 1)

2. Thai Trade in the ASEAN Market

Thailand's exports to ASEAN-5 markets in 2011 had a total value US\$ 33,923.84 million. This was an increase of 18.79% over 2010. It was found that Thai exports to ASEAN had fallen to -22.78% in 2009, as the Hamburger Economic Crisis had a negative impact on the world's economy, including Thai exports, in the total picture and the ASEAN market.

When looking at the important Thai industrial exports, it is found the highest Thai export proportion to ASEAN was in fuel from minerals and mineral oil, an

increase of 17.65% compared to the total industrial export value to ASEAN. Next came machines, engines, boilers, electrical machines, electrical equipment, motor vehicles and accessories, rubber products with 17.09%, 14.37%, 12.43% and 7.73% respectively.

3. An Analysis of the Export of Thai Industrial Goods after AEC

This analysis of the export of Thai industrial goods after the AEC applies an advantage index by using the Revealed Comparative Advantage: RCA of Balassa (1965), which is the index used to compare the ability or potential of export competition. The analysis found the RCA value of each Thai industrial goods from a total 73 types according to the customs tariff of the Harmonized System Code 2 digit. Then the comparison of RCA values before AEC during 2001-2009 and after AEC in 2010 and 2011 were taken to analyze the potential of Thai industrial exports in the period before and after the AEC opening in the first and second year. The industrial goods could be categorized in 12 groups (Table 1). There were four especially interesting groups:

- Permanent Star. The goods in this group had trading potential before and after AEC, and they had an increasing potential trend.

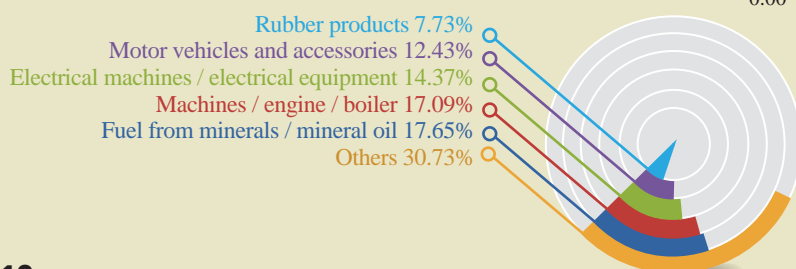
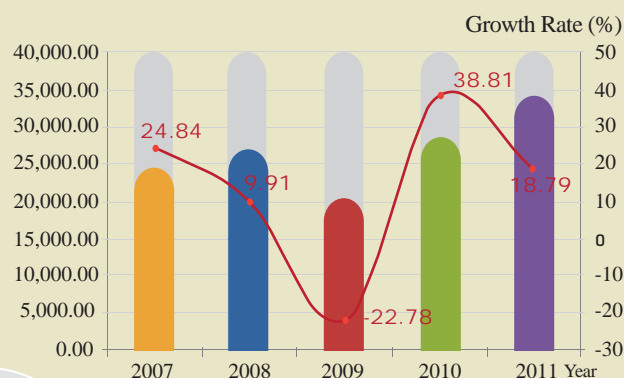


Table 1 Criteria for Categorizing Industrial Goods after AEC

Before AEC 2001-2009	1st year after AEC 2010	2nd year after AEC 2011	2nd year after AEC	Group of goods
With potential $RCA_{\text{before AEC}} > 1$	With potential $RCA_{1st} > 1$	$RCA_{2nd} > 1$ and $RCA_{2nd} > RCA_{1st}$ $RCA_{2nd} > 1$ and $RCA_{2nd} < RCA_{1st}$ $RCA_{2nd} < 1$	1. Increasing potential 2. Decreasing potential 3. Losing potential	Group 1 (Permanent Star) Group 2 Group 3
With potential $RCA_{\text{before AEC}} > 1$	No potential $RCA_{1st} < 1$	$RCA_{2nd} < 1$ and $RCA_{2nd} < RCA_{1st}$ $RCA_{2nd} < 1$ and $RCA_{2nd} > RCA_{1st}$ $RCA_{2nd} > 1$	4. More losing potential 5. Less losing potential 6. Getting potential	Group 4 (Artificial Star) Group 5 Group 6
No potential $RCA_{\text{before AEC}} < 1$	With potential $RCA_{1st} > 1$	$RCA_{2nd} > 1$ and $RCA_{2nd} > RCA_{1st}$ $RCA_{2nd} > 1$ and $RCA_{2nd} < RCA_{1st}$ $RCA_{2nd} < 1$	1. Increasing potential 2. Decreasing potential 3. Losing potential	Group 7 (Rising Star) Group 8 Group 9
No potential $RCA_{\text{before AEC}} < 1$	No potential $RCA_{1st} < 1$	$RCA_{2nd} < 1$ and $RCA_{2nd} < RCA_{1st}$ $RCA_{2nd} < 1$ and $RCA_{2nd} > RCA_{1st}$ $RCA_{2nd} > 1$	4. More losing potential 5. Less losing potential 6. Getting potential	Group 10 (Falling Star) Group 11 Group 12

- Artificial Star. The goods in this group had trading potential before the AEC, but following it they did not have the same potential and had a decreasing trend.

- Rising Star. The goods in this group did not have potential before the AEC, but after it they had more potential and had an increasing potential trend.

- Falling Star. The goods in this group did not have potential before the AEC, and after the AEC they had a decreasing potential trend.

The study revealed that Thai industrial goods in the Permanent Star Group consisted of 7 types that made up 11.85% of the export value of Thai industrial goods. In the Rising Star Group there was only one type at 0.06%. In the Artificial Star Group there were 4 types at 0.09%, while the Falling Star Group included 15 types at 34.64% of the export value of Thai industrial goods. (Table 2)

From the results of this study, we see that many Thai industrial goods are in the Falling Star Group, which did not much have potential both before or after AEC, and now

The study revealed that Thai industrial goods in the Permanent Star Group consisted of 7 types that made up 11.85% of the export value of Thai industrial goods. In the Rising Star Group there was only one type for 0.06%. In the Artificial Star Group there were 4 types at 0.09%, the Falling Star Group had 15 types at 34.64% of the export value.

have a decreasing potential trend. However, this study analyzes only the total directions of Thai industrial exports in each type after the AEC. A deep analysis should be done of each item, such as HS-4, to find which items cause problems or are real weak point. The analysis should also look for the causes of why a decreasing potential has occurred.

Table 2. Categorizing Thai Industrial Exports after the AEC

Goods in the **Permanent Star Group** 11.85%

HS	Goods	(%)
39	Plastics	5.76
29	Organic chemical products	3.31
73	Products made of iron or steel	1.88
34	Soap / artificial grease / modified grease / grease used in dentistry	0.57
69	Ceramic products	0.17
60	Cloth made by knitting or crochet	0.16
46	Products made of straw / knitting and weaving materials / basketwork	0.00

Total Goods in the **Rising Star Group** 0.06%

HS	Goods	(%)
79	Zinc and products made of zinc	0.06

Total Goods in the **Artificial Star Group** 0.09%

HS	Goods	(%)
47	Wood tissue or tissue obtained from cellulose fiber material	0.06
58	Special woven cloth / lace / embroidery	0.03
51	Wool / hair cloth, horse hair yam / woven fabrics	0.00
66	Umbrella / garden umbrella	0.00

Total Goods in the **Falling Star Group** 34.65%

HS	Goods	(%)
27	Fuel from minerals / mineral oil	17.65
85	Electrical machines / electrical equipment	14.37
90	Equipment and equipment used in visual science	1.21
76	Aluminium and aluminium products	0.52
38	Miscellaneous chemical products	0.46
30	Pharmaceutical products	0.17
31	Fertilizer	0.09
96	Miscellaneous products	0.07
37	Things used in taking photos or filming	0.06
78	Lead and lead products	0.02
75	Nickel and nickel products	0.02
36	Explosive material / firework products	0.00
81	Other types of metal	0.00
50	Silk	0.00
97	Arts products	0.00



Note: % is the export proportion of that goods reflecting the export of Thai industrial goods to ASEAN; thus some industrial goods have 0.00 proportion, it does not mean that there is no export, but the proportion is less than 2 digits of the decimal system.



THAI PARA-RUBBER UNDER THE ASEAN ECONOMIC COMMUNITY

By the Center for International Trade Studies, University of the Thai Chamber of Commerce

Para rubber is obtained from a tree grown in regions where the rainfall is not less than 1,350 millimeters per year and where it rains at least 120 days each year. There also must not be much change in the temperature (normally the average is about 24-27°C) and the average relative humidity has to be not less than 65% each year. Para rubber trees are now grown on the continents of Asia, Latin America and Africa, and its cultivation totalled more than 70 million rais in 2011. The world's main Para rubber producers are Thailand, Indonesia and Malaysia, which contain about 64.67% of the earth's Para rubber growing area, about 47.27 million rais in 2011. The size of the Para rubber growing areas has been steadily increasing over the last five years, going from 63.97 million rais in 2006 to 73.09 million rais in 2011. This is a result of high Para rubber prices, which motivate the steady expansion of growing areas. There are now more caring for Para rubber trees, delaying cutting old tapping trees, and speeding the tapping of new trees, in addition to

governmental policies in some countries to increase the rubber growing areas. (Table 1)

Para rubber (or natural rubber production) has steadily increased following the world's economic recovery and its price is currently high. The high price stimulates growers to increase production, emphasizing care of the trees and extending the time to cut the rubber trees. Rubber production increased from 9.83 million tons in 2006 to 10.70 million tons in 2011. However, it decreased in 2009 from 10.13 million tons to just 9.69 million tons (Table 2) as a result of the impact of global warming and heavy rains in the major producing countries of Indonesia and Malaysia.

Even though Indonesia has the largest rubber tree growing area in the world, its production is second to that of Thailand, which is number one. This is because in some Indonesian rubber growing areas the trees have not been properly cared for. For this reason Indonesia's rubber production total of 2.64 million tons in 2006 increased only slightly to 2.74 million tons in 2011.

In 2008 and 2009, Indonesia's rubber production actually dropped, due to natural disasters that damaged trees in the rubber growing regions.

Malaysia, ranks third in rubber growing after Indonesia and Thailand. Nevertheless, Malaysia's rubber growing areas decreased from 7.82 million rais in 2006 to 6.58 million rais in 2011. The continuous decrease was in accordance with the Malaysian government's policy of converting rubber growing areas to planting oil palm trees. In addition, there is a trend towards a labor shortage in agriculture in Malaysia, since the general population is now more interested in working in the industrial and services sectors than on rubber plantations. In the last year or two, however, with rubber prices continually increasing, the Malaysian Government decided to increase its Para rubber production. It set a target of expanding the rubber growing areas to a total of 7.50 million rais, with rubber tree tapping areas of 6.25 million rais by 2020. This strategy increased the Para rubber growing areas from 6.38 million rais in 2010 to 6.58 million rais in 2011, allowing Malaysia to produce 1.8 million tons. The growing areas will also be expanded in the State of Sarawak and State of Sabah on the island Borneo. Virgin forest land will be cleared to plant Para rubber trees.

Because of the reduction Para rubber growing in Malaysia between 2006 and 2011, the country's rubber production for that period dropped

Table 1 World Para Rubber Growing Areas in 2006 to 2011

Unit : Million rais

Year	Thailand	Indonesia	Malaysia	China	India	Vietnam	Other	Total
2006	14.35	20.91	7.82	4.85	3.84	3.23	7.95	63.97
2007	15.35	21.34	7.80	4.85	3.94	3.43	7.83	64.54
2008	16.72	21.46	7.79	5.83	4.06	3.87	6.30	66.03
2009	17.25	21.47	7.73	5.83	4.25	4.21	7.26	68.00
2010	18.10	21.53	6.38	6.28	4.45	4.63	9.50	70.86
2011	18.76	21.93	6.58	Na.	Na.	Na.	25.82	73.09

Source: International Rubber Study Group (IRSG) referred by the Rubber Research Institute, Department of Agriculture (2012)

Table 2 Rubber Production Quantities Categorized by Country in 1998 to 2011

Unit : Million ton

Year	Thailand	Indonesia	Malaysia	China	India	Vietnam	Other	Total
2006	3.14	2.64	1.28	0.53	0.85	0.56	0.83	9.83
2007	3.06	2.76	1.20	0.59	0.81	0.61	0.87	9.89
2008	3.09	2.75	1.07	0.56	0.88	0.66	1.11	10.13
2009	3.16	2.44	0.86	0.64	0.82	0.71	1.06	9.69
2010	3.25	2.74	0.94	0.67	0.85	0.76	1.20	10.40
2011	3.57	2.89	1.02	0.69	0.89	0.78	0.87	10.70

Source: International Rubber Study Group (IRSG) referred by the Rubber Research Institute, Department of Agriculture (2012)



Thailand is the main rubber producing country in the world and also the main rubber exporter, with Thai Para rubber exports in 2011 valued at \$383,318.60 million (US\$ 13,037 million).

from 1.28 million tons in 2006 to 1.02 million tons in 2011.

The rubber producing countries in the next rank are China, India and Vietnam.

China ranks fourth in Para rubber growing areas at present. **The largest Chinese rubber growing area is in Hainan Province, with almost 60% of the country's rubber producing area.** Rubber growing areas also include Yunnan, the Guangxi Zhuang Autonomous Region, and some areas in Guangdong and Fujian Provinces, since they all have a hot, humid climate suitable for rubber plantations. India is number 5 in Para rubber growing area, and expanded it from 4.85 million rais in 2006 to 4.45 million rais in 2010. India's rubber production is mainly for local consumption, as is as China's. Nevertheless, some Indian rubber is exported to other countries. The main rubber producing area are in the south, in Kerala and Tamil Nadu States, which have a production capability of more than 0.6 million tons.

Thai Para Rubber Production

Para rubber is an important crop for Thailand, with the rubber growing areas second in size only to Indonesia. From 2006 to 2011, the rubber growing area expanded from 5.35 million rais in 2006 to 18.76 million rais in 2011. The expansion was a result of the government's support policy; total production increased at an average of 1.53% per year, from 3.07 million tons in 2006 to 3.35 million tons in 2011 (Table 3). Para rubber production decreased as a result of the disasters caused by windstorms, floods, and land and mud slides in the Para rubber growing areas of southern Thailand, which caused a reduced production output.

World Para Rubber Demand and Balance

The world's rubber situation changes constantly, being dependant on the global economic situation. However, rubber consumption increases each year. In studying rubber production and consumption between 2006 and 2011, it was found that rubber production was

less than rubber consumption. Rubber production had a growth rate 1.78%, while the consumption grew at 2.13% per year, from 9.69 million tons in 2006 to 10.61 million tons in 2011. The change in the developed countries is fairly small, in contrast to developing countries such as China, which now has a growing automobile industry. In 2009, world rubber consumption was only 9.33 million tons, a decrease from the previous year of 8.31%, as the global economic situation deteriorated. There were economic crises in the leading rubber consumers, the United States, Japan and the EU (Chart 1), which caused a decrease in Para rubber consumption. Rubber production had a decreasing rate of 4.40% per year. (Table 4)

Besides being the main rubber producer of the world, Thailand is also the leading rubber exporter, with a Thai Para rubber export value in 2011 of 383,318.60 million or US\$ 13,037 million. (Table 5)

If we consider Thai Para rubber exports by type, we find that Thailand exports mostly block rubber, with rubber smoked sheets and natural latex concentrate following in that order. Block rubber exports increased from 1.07 million tons in 2006 to 1.30 million tons in 2011, while rubber smoked sheets decreased from 0.94 million tons in 2006 to 0.75 million tons in 2011. Natural latex concentrate exports in 2011 also decreased from the previous year. This in part resulted from the high price of natural latex concentrate, mostly exported to Malaysia to produce rubber gloves. Malaysia's rubber glove manufacturers instead turned to synthetic rubber, as they already faced a labor shortage and higher prices for energy and could not increase their production.

Table 3 Growing Area, Tapping Rubber Area, Total Production and Average Production of Thai Rubber between 2006 and 2011

Year	Growing Area (Million rai)	Tapping Rubber Area (Million rai)	Total Production (Million tons)	Average Production (Kgs / Rai)
2006	14.35	11.89	3.07	282
2007	15.35	11.05	3.02	274
2008	16.72	11.37	3.17	278
2009	17.25	11.60	3.09	266
2010	18.10	12.07	3.05	253
2011	18.76	12.77	3.35	262

Source: Office of Agricultural Economics (2012)

Thai Para Rubber's Marketing Position in the World Market

The Center for International Trade Studies, University of the Thai Chamber of Commerce, analyzed Thai Para rubber and the main Para rubber producers of the world by dividing it into categories: block rubber, rubber smoked sheets and natural latex concentrate. The Center would propose especially noticing the marketing positions of block rubber (Limit HS 400122) of Thailand, Malaysia, and Indonesia on the world market. **Block rubber (Limit HS 400122) has had the highest export value to the world market in the Thai Para rubber category since 2007. This is because Thailand switched to producing block rubber in response to the world market changing to use more block rubber as a raw material. The strongest competitor was Indonesia. In 2011 Indonesia topped the block rubber market with a 49.5% market share (Chart 2). It exported the most to United States, a total of 23.0%. This was followed by the Chinese, Japanese and ASEAN markets, at 16.0%, 15.0%, and 4.0%. Thailand was second in the world block rubber market with 24.4%, its main export market being China, accounting for 50.0% of the kingdom's block rubber export worldwide. After China, Thai block rubber went to**

Japan, South Korea and the United States in that order. **Thai rubber smoked sheets and natural latex concentrate placed first in the markets of the world.**

Urgent Suggestions as a Policy Warning

Thailand is the world's main Para rubber producer and exporter and this product is recognized as one that has competitive ability. If we study the situation, we will find that the production per rai is still at a low level. There is also no stability in prices, especially those paid to the growers. When entering the AEC, Thailand must adjust itself to gain the highest benefits from the free market opening. The Center for International Trade Studies presents these urgent suggestions to accomplish this:

1. Set Up Thailand as a Para Rubber HUB

Thailand is the leading producer and exporter, and being the Para rubber HUB would increase the country's negotiation powers. Thailand would be the price setter and industrial center for Para rubber production and similar value added industries. Thailand must accelerate the establishment of a Rubber Cluster to unite all groups in the beginning, middle and the end of the rubber industry to create its ability to be the HUB.

2. Free Prices to follow the Market without any Manipulation

The government needs to allow prices to follow the market without manipulation to promote the industry and support the creation of rubber products' value to solve the problems of pricing and foreign market dependence.

3. Speed Up the Establishment of Rubber Authority of Thailand

The important sections of the Rubber Act of Thailand will abolish the Rubber Replanting Aid Fund and the Rubber Estate Organization and establish the Rubber Authority of Thailand to manage the country's Para rubber system through its complete cycle. This should be speedily enacted so the organization can operate to eliminate duplication and create a continuous policy without interference from the political sector.

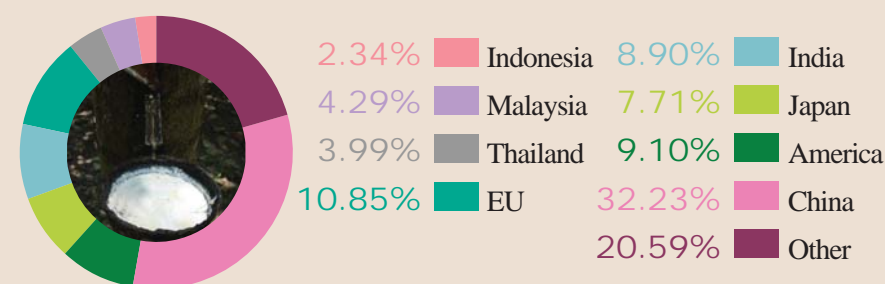
Table 4 Production Quantity, Rubber Consumption Quantity, Export, Import and Stock of World Para Rubber in 2006 to 2011

Unit : Million ton

Year	Production	Consumption	Export	Import	Stock
2549	9.83	9.69	6.93	6.84	1.85
2550	9.89	10.18	6.86	7.23	1.57
2551	10.13	10.18	6.76	7.08	1.52
2552	9.69	9.33	6.28	6.31	1.88
2553	10.40	10.78	7.15	7.4	1.50
2554	10.70	10.61	7.19	7.37	1.40
Growth rate (%)	1.78	2.13	0.97	1.92	- 4.40

Source: International Rubber Group (IRSG) referred by the Rubber Research Institute, Department of Agriculture (2012), and Rubber Research Institute, Department of Agriculture (2012)

Chart 1 Proportion of Average Natural Rubber Consumption of Countries in 2007 to 2011



Source: Calculated from data of the International Rubber Study Group (IRSG) referred by the Rubber Research Institute, Department of Agriculture (2012) and the Rubber Research Institute, Department of Agriculture

beginning, middle and end of rubber industries is essential to creating competitive a potential with low cost, standard quality goods. This will create sustainability of the production system, including the promotion of local Para rubber end industries and related industries. It will increase local rubber consumption, decreasing risk in exporting to the main markets, and supporting a rubber growing area expansion both domestically and in neighboring



Ranking second in the block rubber market was Thailand, with a market share 24.4%. Its main export market was China, with 50.0% of the Thai block rubber export worldwide. China was followed by Japan, South Korea, and United States. Thailand ranked number one in the world's market for rubber smoked sheet and natural latex concentrate.

4. Accelerate the Development of a Strong Central Market and AFET Market

Central Markets are scattered and vary in supporting goods at fair prices. The Agricultural Futures Exchange of Thailand (AFET) must be speedily developed to be promote a strong agricultural goods future market.

5. Develop Technology to Create a Higher Local Utilization Proportion

Investment in research to develop technologies from the

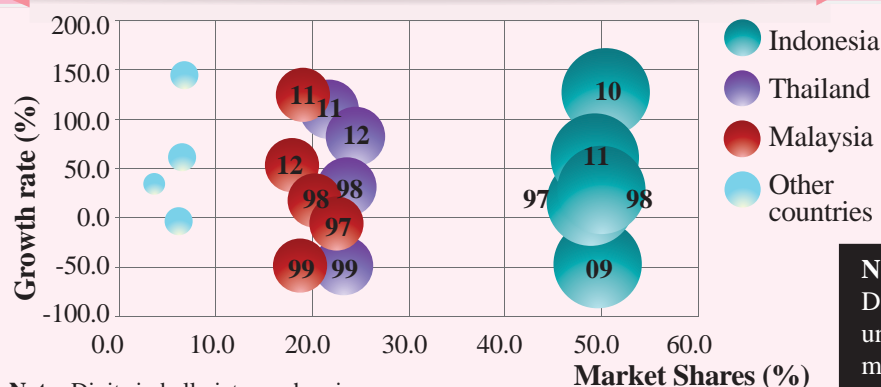
Table 5 Export Value of Thai Para Rubber to Important Importing Countries

\$	Year	China	Japan	EU-27	America	India	World	\$
	1998	162	374	163	207	10	1,322	
	1999	54	297	100	155	6	859	
	2000	296	348	163	221	4	1,503	
	2001	271	292	146	155	16	1,320	
	2002	357	376	186	208	5	1,735	
	2003	716	544	288	253	19	2,793	
	2004	782	667	385	329	31	3,418	
	2005	812	756	402	326	29	3,691	
	2006	1,362	1,002	549	409	39	5,430	
	2007	1,715	927	613	480	122	6,061	
	2008	1,950	1,014	666	581	124	6,807	
	2009	1,546	455	320	295	110	4,285	
	2010	2,447	1,091	732	573	196	7,894	
\$	2011	5,031	1,704	1,141	996	286	13,037	\$

Source: Data base of Global Trade Atlas (2012)

Unit : million dollars

Chart 2 Block Rubber (Limit HS 400122) Market Positions of Thailand, Indonesia and Malaysia in Exports to the World Market from 2007 to 2011



Note: Digits in ball pictures showing years

Source: Calculated from the data base of the Global Trade Atlas (2012)

countries. In addition, new products should be invented and developed to create added value, such as in the production of raw rubber or new industries such as in the cosmetic industry using substances extracted from Para rubber tree bark or Para rubber itself.

Note: This analysis is part of AEC Academic Document No.9, "Thai Para Rubber Future under the ASEAN Economic Community". For more details, please contact the Center for International Trade Studies, University of the Thai chamber of Commerce.

PRODUCERS OF OFFICIAL STATISTICS OF AEC COUNTRIES: THAILAND, CAMBODIA, LAO, AND MYANMAR

by Panuchart Bunyakiati and Pajika Voravittayathorn

UC-UTCC Research Center, University of the Thai Chamber of Commerce, Bangkok, Thailand

Introduction

Official statistics are typically produced by national statistical offices, government departments, or other public bodies. These statistics are yet again collected and disseminated by international agencies to generate a world view about a particular topic or geographical area, changes over time, and comparisons between countries. Statistical information has been essential for decision-making, research purposes, and for designing and implementing various social and economic development programs in the past. For instance, Vietnam's transformation to a market-based economy was successful in part due to the institutional cooperation between Vietnam's General Statistical Office (GSO) and Statistics Sweden (SCB) that aimed to develop timely supply of economic statistical information of appropriate quality and in cost-efficient forms.

The use of statistics is also deemed necessary for accomplishing regional cooperation. For example, Eurostat's timely estimate for the Harmonized Index of Consumer Prices (HICP) has proven to be a useful device in managing financial markets for the European Union (EU). **With the formation of an ASEAN economic community (AEC) by 2015, it is therefore important for us to examine official statistics**

as well as the existing statistical systems of ASEAN member states as to develop an insight into the matter and to find areas for future improvement. This essay is the first series of such discussion papers and thus provides details about the producers of official statistics for the four ASEAN states including Thailand, Cambodia, Lao, and Myanmar.

The Producers of Statistics

In **Thailand**, the statistical information for the whole country is collected and disseminated by **the National Statistical Office or NSO** (<http://www.nso.go.th/>). Data available at the NSO consists of data through surveys that are conducted by the NSO as well as those from other government agencies. The office generates data that covers a variety of areas including economics, people and society, environment and energy, industry and construction, information communication technology (ICT), and agriculture and fishery. A majority of these statistics account for the whole population of Thailand where data are normally classified by regions. The statistical information released by the NSO often presents details about the situation in Thailand within a particular year. However, not all of the data are collected and disseminated every year. For instance, information about employment

conditions or economic indicators are collected and disseminated on an annual basis whereas data about alcohol consumption or the elderly are available for every three years. The NSO also provides time series for several social and economic indicators such as poverty, unemployment rate, etc. (see Time Series on NSO website for more details).

The **National Institute of Statistics (NIS) of Cambodia** (<http://www.nis.gov.kh/>) is the national body responsible for collecting data through surveys, compiling and consolidating data from government agencies, and publishing official statistics for the nation. The NIS collects and disseminates four kinds of statistics including social statistics (e.g. social affairs, education, culture), demographic statistics, general statistics (e.g. consumer price index), and economic statistics (e.g. industry, commerce, telecommunication, environment). Similar to Thailand, NIS's dataset usually presents information about a particular area within a given year. Although some datasets are assembled and published on an annual basis (e.g. labor force survey statistics, socio-economic survey statistics), others are not (e.g. education and literacy survey statistics, population census statistics). The NIS also produces time series data such as national accounts (i.e. GDP, GDP by economic activity, growth rates), Consumer Price Index (CPI), and socio-economic survey.

The collection and dissemination of official statistics in Laos is the responsibility of the **Laos Statistics Bureau (LSB)** (<http://www.nsc.gov.la/>). The bureau mainly obtains data from administrative records and surveys. It generates four types of statistics including economic statistics (e.g.

agriculture, monetary, information technology), socio statistics (e.g. population, education, labor), environment and natural resources statistics (e.g. natural resources, human development, waste management), and security and stability statistics (e.g. national defense). The statistical data published by the LSB often present details about the situation in the country for a particular year. Certain datasets such as labor and employment, population estimation, health, etc. are also available in time series. However, not all of the datasets are collected and disseminated every year. The LSB only conducts certain socio-economic census when considered necessary and specific survey or case study as additionally needed.

As for **Myanmar**, national social and economic statistics are collected and disseminated by the **Central Statistical Organization (CSO)** (<http://www.csostat.gov.mm/>). These data are based on surveys conducted by the organization as well as data from other government agencies. The CSO has been conducting surveys covering a variety of issue areas such as population, housing, income and expenditure, agriculture, health, labor force, transport, and private sector industry. In addition, the CSO also produces monthly economic indicators on foreign trade, production, prices, finance, foreign investment, transportation and travel, and labor and employment which illustrate a trend of these activities over different periods of time.

Apart from these national statistical offices, official statistics of Thailand, Cambodia, Lao, and Myanmar are also produced by international agencies like the Association of Southeast Asian


Table 1 : Websites of the major providers of statistic data sets for Thailand, Cambodia, Lao, and Myanmar.

National Statistical Office of Thailand (NSO)	http://www.nso.go.th/
National Institute of Statistics of Cambodia (NIS)	http://www.nis.gov.kh/
Lao Statistics Bureau (LSB)	http://www.nsc.gov.la/
Central Statistical Organization of Myanmar (CSO)	http://www.csostat.gov.mm/
Association of Southeast Asian Nations (ASEAN)	http://www.aseansec.org/
World Bank	http://www.worldbank.org/

Nations (ASEAN)(<http://www.aseansec.org/>) and **World Bank** (<http://www.worldbank.org/>). Within ASEAN, ASEANstats is responsible for the compilation, dissemination, and communication of statistical information about ASEAN and its member states. ASEANstats obtains its data directly from member states and their national statistical systems as well as other international statistical agencies. The statistical information disseminated by ASEANstats typically presents a yearly overview of a particular subject area. It produces information such as demographic indicators (e.g. total population, population growth), macroeconomic indicators (e.g. GDP, imports and exports, trade capacity), and tourism statistics. The World Bank possibly provides the most comprehensive set of data of all countries around the globe. Its World Databank contains a variety of databases such as world development indicators & global development finance, gender statistics, health nutrition and population statistics, global economic prospects, education statistics, worldwide governance indicators, poverty and inequality database, etc. These statistics are available for the years of 1960-2011 (depending on subject areas and countries). Collections of times series data are also

available on a variety of the above mentioned topics.

Conclusion

Thailand, Cambodia, Lao, and Myanmar all have a national body that is responsible for collecting data through surveys and from government agencies and disseminating them for the country. The national statistical organizations in all four countries similarly produce the sort of statistics that provide an overview of the social, demographic, and economic structure of their society. These statistics are yet again collected and disseminated by international agencies like ASEAN and World Bank to generate an overview and comparisons between them. While there are many similar details in terms of the sorts of official statistics that these statistical organizations produce, the dissemination formats and accessibility level are very much varied by different organizations in which is the major focus of the next series of paper in this collection. 

References

- Association of Southeast Asian Nations (ASEAN). <http://www.aseansec.org/> (accessed July 24, 2012).
- Central Statistical Organization of Myanmar. <http://www.csostat.gov.mm/> (accessed July 23, 2012).
- Cygniak, Richard, et al. "Official Statistics and the Practice of Data Fidelity." In *Linking Government Data*, edited by David Wood, pp. 135-151. New York: Springer, 2011.
- European Central Bank. "Statistics and Their Use for Monetary and Economic Policy-Making." Paper presented at the Second ECB Conference, Frankfurt, Germany, April 22-23, 2004.
- Lao Statistics Bureau. <http://www.nsc.gov.la/> (accessed July 23, 2012).
- National Statistical Office of Thailand. <http://www.nso.go.th/> (accessed July 23, 2012).
- National Institute of Statistics of Cambodia. <http://www.nis.gov.kh/> (accessed July 23, 2012).
- Paris21 Secretariat, OECD/DCD. "The Role of Statistics in World Development." <http://www.paris21.org/sites/default/files/2532.pdf> (accessed July 25, 2012).
- Walczak, Tadeusz. "How is quality of statistics managed and understood for a wider audience?" *Statistical Journal of the United Nations ECE* 21 (2004): pp. 223-230.
- World Bank. <http://www.worldbank.org/> (accessed July 24, 2012).

ANALYSIS OF RAPIDLY CHANGED THAI GEMSTONE EXPORT SINCE 1990



During 21 years (1990-2011), Thailand has evolved into the acknowledged regional center for both manufacture and trade gems and jewelry by combining its renowned skilled in production and excellent design with cutting edge technology. Today, international businessmen recognized **Thailand's heat enhancement for gemstones** especially ruby, sapphires and etc. because Thailand remains the world leader in gemstones heat enhancements with the finest technology and skills

that accumulated for over a century. This expertise enabled Thailand to be the world's greatest producer of high – quality gemstones with very low rate.

Heat enhancement emulates the natural heating process of near the roughstones your million of year. The process speeds up the natural process and preserves all the gemstones authentic value. Approximately 90% of gemstones traded around the world are enhanced by heat. It is a common global trade practice. This

is one of most crucial factors to help Thailand achieve its goal of becoming global Gem & Jewelry hub.

During 21 years (1990-2011) there have been many positive and negatives factors to effect on Thai gem and jewelry export. The positive factors are (1) This industry can increase competitiveness on itself such as heat enhancement, skilled cutting, good design and excellent craftsmanship. (2) The Thai government opened the Free Trade Agreement with many countries such as Asean FTA, Thai-India FTA, Asean-China FTA, Thai-Australia FTA etc. (3) TGJTA and Thai government could defend on continue US.GSP for silver jewelry (HS.7113.1150) while India, Brazil and Malaysia could not and etc. Simultaneously, during 21 years there also has been many negative factors happen such as (1) Tom Yum Koong Financial Crisis in Thailand and spread out East Asia during 1997-1998 (2) Thai political crisis during 2008-2010 (3) Hamburger Crisis in 2008 and (4) Since 2010, EU public debt crisis. Of course, these factors are do directly effect on Thai gem export both directly and indirectly which we can analyses as the details as follows;

Table 1 : Gems export During 21 years (1990-2011)					(USD:Million)
	1990	1995	2000	2005	2011
1. Gems & Jewelry	1454.47	2192.34	1741.85	3232.66	12301.11
2. Gems	550.64	425.36	236.76	230.89	604.51
3. Gems/ gems & Jew.	37.86	19.40	13.59	7.14	4.91
4. Top Five Markets	1. U.S.A. 34.26% 2. Japan 28.00% 3. Hong Kong 9.34% 4. Swiss 7.94% 5. Germany 4.89%	1. Japan 33.04% 2. U.S.A. 22.01% 3. Hong Kong 14.32% 4. Swiss 6.57% 5. Germany 3.98%	1. U.S.A. 33.88% 2. Japan 21.34% 3. Swiss 8.91% 4. Hong Kong 8.20% 5. India 6.27%	1. U.S.A. 28.43% 2. Hong Kong 16.09% 3. Japan 14.89% 4. India 11.18% 5. Swiss 5.73%	1. Hong Kong 44.59% 2. U.S.A. 13.42% 3. India 9.58% 4. Swiss 5.24% 5. China 4.04%
5. Market share of Top Five	84.83%	79.92%	78.60%	76.34%	76.87%

Source : Ministry of commerce

Most Prosperity in Gem Export in 1990

In 1990, the gems businessmen were so happy which can do their business well and the gem export was also very good which was USD 550.64 million while the total gem and jewelry export was 1,454.47 million USD which covered 37.86% of total Thai gem and jewelry export. Furthermore hundred years, the Thai ruby has been known as “Siamese Ruby”. It was a proud gemstone from Thailand. Arguably, it was the world finest ruby with the richest and deepest crimson hue. Therefore, It may say that Thai gem export could reach the most prosperity business in 1990.

In 1990, the top five countries imported Thai gems were 1. U.S.A. (34.26%), 2. Japan (28.00%), 3. HongKong (9.34%), 4. Switzerland (7.94%) and 5. Germany (4.89%) respectively. These old top five countries could cover 84.83% of total gem export. Especially, U.S.A and Japan were distractive major markets for Thai gems export. See detail in Table 1.

Coming to the worst of gemstone export in 2000

During 1990-2000, as we known, Thailand faced financial crisis in 1997 which we called “Tom Yum Kroong Financial Crisis” was;

3.1 **The crisis started in Thailand with the financial collapse of the Thai baht** after the Thai government was forced to float the baht (due to lack of foreign currency to support its fixed exchange rate), cutting its peg to the U.S. dollar, after exhaustive efforts to support in the face of a severe financial overextension that was in part real estate driven. At the time, Thailand had acquired a burden of foreign debt that country effectively bankrupt even before the collapse of its currency. As the crisis spread, most of Southeast Asia and Japan saw slumping currencies, devalued stock markets and other asset prices, and a precipitous rise a precipitous rise in private debt.

3.2 **Though there has been general agreement on the existence of a crisis and its consequences, what is less clear are the causes of**

the crisis, as well as its scope and resolution. (1)Indonesia, South Korea and Thailand were the countries most affected by the crisis.(2) Hong Kong, Malaysia, Laos and the Philippines were also hurt by the slump. (3)The People’s Republic of China, Pakistan, India, Taiwan, Singapore, Brunei and Vietnam were less affected, although all suffered from a loss of demand and confidence throughout the region.

3.3 **Foreign debt-to-GDP ratios rose from 100% to 167% in the four large Association of Southeast Asian Nation(ASEAN) economies in 1993-96**, then shot up beyond 180% during the worst of the crisis. In South Korea, the ratios rose from 13 to 21% and then as high as 40% while the other northern newly industrialized countries fared much better. **Only in Thailand and South Korea did debt service-to-exports ratio rise.**

3.4 Although most of the government of Asia had seemingly sound fiscal policies, the International Monetary Fund (IMF) stepped in to initiate a \$40 billion program to

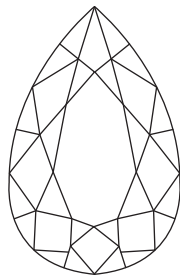
stabilize of South Korea, Thailand and Indonesia economies particularly hard hit by the crisis.

3.5 Furthermore, The Thai heating gemstones were attracted from international gemstone certification agencies such as CIBJO, GIA, GAAJSSEF on Beryllium, Borex and Lead glass filled on the process of heating which made the Thai heated gemstones to be low quality and substandard. More seriously, the heat gemstones might be fraud which was bigger impact on both Thai domestic sale and exportation.

3.6 In 2000, therefore from two serious factors (Tom Yum Koong Financial Criciss and attracting international gemstone certification agencies on Thai gemstones heating) affected directly to Thai gem and jewelry export dropped repidly to be USD1,741.85 million and only gem export was, also rapidly dropped to be only USD236.76 million, See detail in table 1.

3.7 The top 5 countries of Thai gem import were (1) U.S.A. (33.88%), (2) Japan (21.34%), Switzerland (8.91%), Hong Kong (8.20%) and India (6.27%) respectively. Remarkably, India was the first year to be one country in top five countries because she did not receive the impact on Tom Yum Kong Financial Crisis. Secondly 1995 the Indian government open on Indian economy to be liberalization, welcome foreign direct investment and promotes Indian businessman to do his international trade and businesses. Of course, India government emphasized on diamond and jewelry industry which was one of the strongest industries and the Indian government is fully support.

4. Recovered Gem Export But Market Structure changed from Old Market to Be New One in 2011. There were many economic factors happen in during that time, as the details as follows;



For 21 years ago (1990-2011), the value of Thai gemstone export is very slightly increasing from USD 550.64 million in 1990 to be USD 604 million in 2011 which growth rate was increased slightly only 9.78% but Thai businessman can develop and increase high value added on the gemstone to be as silver gold jewelry export.

4.1 Hamburger Crisis in 2007 in U.S.A and Speard Out to the World

- **In 2007, most of U.S. people think that the effect from the Hamburger Crisis** or the declining in economy will effect in the finance industry and the property part only, but it wild spread to another part especially affect seriously at this time; automobile industry. All big three (General Moter, Ford and Cryster) were nearly bankruptcy on that time.

- **The effect on stock market** :Stock Market condition must meet with hard crisis from Hamburger crisis that have effect to index decrease to 50 %. After the united state liberates to give “Lehmen Brothers” becomes bankrupt, stock worldwide exchange down nearly 50% too.

- **The effect on unemployment**: The effect from hamburger crisis has an effect on the unemployment. Many companies have the trend to decrease the labor force because they want to reduce the cost of productivity. The U.S. unemployment rates in the United State reach to 9.8 percentages (about 1.2 million workers were unemployed) which was the highest since unemployment sincethe U.S.A. faced great economy recession in 1930s.

4.2 European Public Debt Crisis since 2010 Until Now

- The European sovereign debt crisis is an ongoing financial crisis that has made it difficult or impossible for some countries in the euro area to refinance their government debt without the assistance of third parties (Central European Bank or IMF) .

- Since 2010 fears of a sovereign debt crisis developed among investors as a result of the rising government debt levels around the world together with a wave of downgrading of government debt in some European states such as Greece, Ireland, Portugal, Spain, Italy and France. Concerns intensified leading Europe's finance ministers on 9 May 2010 to approve a

rescue package worth €1 trillion aimed at ensuring financial stability across Europe by creating the European Financial Stability Facility (EFSF).

- Right now, European economy is still recession with economic recession and high unemployment (about millions workers cannot get their jobs). Also there are thousands of private companies that were closed and bankrupt.

4.3 Rising Star Asian Economy

- Since 1990s China has opened her economy and welcome foreign companies to invest. The Chinese economy has been better and better which she could enjoy her growth rate more than 10% during a decade (2000-2010). Right now Chinese Gross Domestic Product (GDP) is USD 9.8 trillion which is the second biggest economy in the world. Also India opened her economy in 2000s, her growth rate has been more than 6% during a decade (2000-2010). Right now, Indian economy is USD 4.0 trillion, which is the fourth biggest economy in the world. Both China and India are very high potential markets for Thai gem and jewelry export.

4.3 We might say that both US and European Markets is not so good for Thai

*In 21 years,
The Structure of
Thai gem export
is also rapidly
changeable from
5 major countries
were (1) U.S.A.
(2) Japan
(3) Hong Kong,
(4) Switzerland
(5) Germany
in 1990 to be
(1) Hong Kong
(2) U.S.A.
(3) India
(4) Switzerland
(5) China.*

gem and jewelry export as the same in previous time. However, Simultaneously, Asia economy get better and better such as China, India, Middle East and 10 Asean Countries, They will be a big market for Thai export instead of U.S. and European markets.

4.4 As the mention on above, in 2011, Thai gem and jewelry export was the big jump again to be USD12,301.11 million. For only Thai gems export, it was USD 604.51 million but gem export value was only 4.91% of total gem and jewelry export which means Thai entrepreneurs can create more value added by exporting jewelry rather than exporting cut gemstones alone. Secondly, Thai gems and jewelry export can diversify itself from only gems and gold jewelry in 1990 to be many items such as gold bullion, fashion jewelry and tools and machine etc. This is a talent Thai businessman and an increasing high competitiveness of Thai gem and jewelry exportation. They have to survive themselves in the cut-throat competition of international gem and jewelry markets and in any rapidly global economic change. 📈

Conclusion

For 21 years ago (1990-2011), the value of Thai gemstone export is very slightly increasing from USD 550.64 million in 1990 to be USD 604 million in 2011 which growth rate was increased slightly only 9.78% but Thai businessman can develop and increase high value added on the gemstone to be as silver gold jewelry export.

In 21 years, The Structure of Thai gem export is also rapidly changeable from 5 major countries were (1) U.S.A. (2) Japan (3) Hong Kong, (4) Switzerland (5) Germany in 1990 to be (1) Hong Kong (2) U.S.A. (3) India (4) Switzerland (5) China.

During 2010-2011, China and India are the big potential markets for Thai gems export because both countries are giant country which cover population 1,200 million (China) and 1,000 (India). Their GDP are USD 9.8 (China) and 4.0 trillion (India) and their growth rate, China's and India's growth rates are more than 10% and 6% respectively. Both countries encourage their businessmen to do international businesses and welcome foreign direct investment from abroad.

In the next decade 2010-2020, both China and India will be major markets for Thai gem and jewelry export. This trend will be the same in the next 2 decades. The other potential markets are still in Asia such as Middle East and ASEAN Countries is very good for Thai gem and jewelry export. For U.S.A. And European markets currently are a big market for Thai gem and jewelry export but they will be smaller and smaller in the near future.



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