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# Ten Years into NAFTA and Its Lessons to Korea

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## Preface

One of the hottest debate topics these days in Korea is about the currently on going negotiations of the Korea-U.S. free trade agreement. Many ask why the U.S. and why now. Dr. Youngmin Kwon's "Ten Years into NAFTA and its lessons to Korea" gives clear answers for that kinds of questions. We often neglected the real purpose of the open economic policies like FTA and only focus on the market access issues, as much debate on export surge and import protection issues unfold. However, the main source of positive economic effects from trade liberalization is resource reallocation toward more productive sectors. The resource reallocation in theoretical word can be translated into industrial restructuring in practical sense. Dr. Kwon brilliantly pointed out this fact as the main motivation for the forming of NAFTA ten years ago. That is, facing ever more increasing competitions from outsiders, especially from East Asian countries, such as Korea, Japan, and China, U.S. needed to restructure their core industries to survive. By building alliances with their two neighbors, the U.S. could restructure their automobile and electro industries to become more competitive. The surge in trade in automobile and electro industries among the NAFTA member countries in every directions is the result of the industrial restructuring throughout the North American continents that had taken an advantage of the lower trade barriers with the launch of the NAFTA. Facing a nutcracker situation between the advanced nations and newly developing nations, Korea seems to lose grounds in the world exports markets. It was the similar situation

that the U.S. faced ten years ago and Korea nowadays badly needs restructuring of its own industries. The Korean government seemed to determine to do such with the help of active engagements in regional trade arrangements. Korea already completed FTA negotiations with Chile, Singapore, EFTA, and ASEAN. Korea is negotiating FTAs with Canada and Mexico and more recently with the U.S. and India. Also China and MERCOSUR are considered to be another partners in the near future. However, governments and opinion leaders alike seem to forget the real purpose of making FTA arrangements. Again, that is the restructuring of the national economy to survive in a more competitive world of these days. Thanks for Dr. Kwon to remind that point by doing his research during his sabbatical visit to the U.S. It must have been difficult away from usual staff support of the home institution. Considering the situation, the work has been successfully done and I again appreciate Dr. Kwon's sincere efforts. However, it is appropriate to mention that the argument in this book is Dr. Kwon's own view and not related to official position of the Korea Economic Research Institute.

Dr. Sung-Tae RO  
President  
KERI

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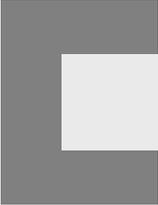
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Chapter I



Introduction



It has been now more than ten years, since the North American Free Trade Area (NAFTA hereafter) had formally launched in 1994. Whether NAFTA had provided economic prosperity that was promised ten years ago is not an easy question to be simply answered. Some say it is a success and others say it does very little. Cautious observers say it is too early to tell and hasty concluders say they already have seen enough. The answers, however, depend on what they think NAFTA should have aimed for. If NAFTA was thought to be for the expansion of trades among the U.S., Canada, and Mexico, it may certainly be claimed to be a success, because the trade among these countries have in fact surged for last ten years. However, if the object for the NAFTA were to enhance the economic growth of involving member countries, the answers would be mixed, as we cannot yet see a clear sign of upward shift of economic growth trends at least for now. Furthermore, if the goal of NAFTA is the deepening of the economic integration among North American countries, it is far from yes, as vast majority of its ordinary people other than those along the borders may feel little about the effect of the integration.

Nevertheless, the launch of NAFTA ten year ago had a huge impact enough to change the shape of world trade regimes. That is, there were ever more increases in the number of regional trade agreement around the world. In fact, there are more than 130 new regional trade agreements are notified to the WTO for just ten years period since 1995, and this number surpasses the total of 124 over the much longer periods between 1948 and 1994.<sup>1)</sup> Although there hasn't been a formal analysis on the causality, it is hard not to imagine that NAFTA has triggered the competition for engaging in the regional trade agreement around the world. Especially in Asia, where the regional trade

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1) [http://www.wto.org/english/tratop\\_e/region\\_e/regfac\\_e.htm](http://www.wto.org/english/tratop_e/region_e/regfac_e.htm).

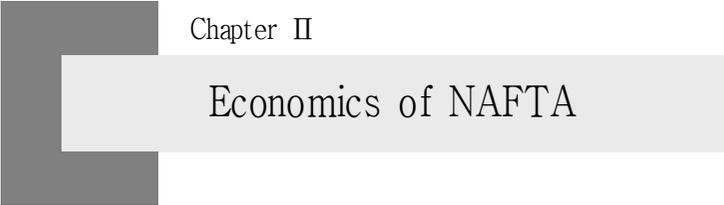
agreements were not traditionally welcomed, a sudden blossom of talks on free trade agreement is noticeable. Japan and Singapore were the first in the region to make such an arrangement. Korea followed the suit by negotiating and concluding FTA with Chile, Singapore, and recently with ASEAN. Although it is suspended over the agricultural market opening for now, Korea and Japan are officially negotiating the FTA between themselves. China also introduced similar agreement with Hong Kong and Macao and now concluded FTA negotiation with ASEAN, Chile, and Pakistan. As there are many negotiations and/or discussions are ongoing among various groups of countries in the region, it certainly looked like a competition to take a regional economic initiative. Worrying competitions among Asian countries and that against western economic blocks such as NAFTA and EU, some suggests the need for the Asia-wide trade arrangement so that it can function as a harmony among them and a strategic cooperation toward outside.

The main focus of this paper is what Korea and its neighbors can do within these vastly changing trade environments. Especially, this paper looks for lessons, if any, from the experience of NAFTA for the last ten years. In the light of that purpose, this paper first tries to investigate the economic effects of NAFTA to its member countries and outsiders, especially Korea, Japan, and China. As NAFTA itself is an arrangement for trade among member countries, we will focus on the effects of trade and begin by looking up changes in trade volumes. We are not only interested in aggregate trade volumes but also in specific product groups, as we want to see who gains and loses as a result of NAFTA. These winners and losers could be in among the U.S., Canada, and Mexico, but also be outsider countries. Therefore we look for the changes in trade with other countries as well as within NAFTA member countries. Expanding or contracting volumes of trade will also have effects

on productions, employments, new capital investments, and so on. Thus we will also try to look at such industrial effects that related with NAFTA trade. Some may say that the more fundamental and eventual goal of the free trade agreement would be making its people better off through trade liberalization and thus it may be desirable to look at long-run effects such as GDP and wage growths. However, it would be rather a complicated task, if not impossible, to seek a complete picture on such a long-term effect in just ten years. Fortunately, there already were some courageous efforts to deal with such an enormous task and we can take a look at the results from those works. Thus, this paper will start by looking at those issues on long-term growth effects that are borrowed from the other pioneering researches.

It would be immature, however, to think that a free trade agreement is for the purely of the economic reasons. Thus, it would be incomplete to look into only economic side and ignore the other aspects of the integration. In fact, engaging in international treaty often touches the issue of national sovereignty and, before its enactment, NAFTA itself had to deal with many debates about political issues in each member country. Therefore, we also need to concern with other issues more than simple economics, especially when we are trying to extract the lessons out of it. These factors will be reviewed in the part III of this paper, after the analysis of economic factors in the part II. Especially in this part, we will focus on the real political motivation of each country's leadership by looking at stories behind the negotiations. In part IV, we will try to bridge the analysis of previous two parts with current condition of Korea and its neighbors, mainly with China and Japan, two big powers around Korean peninsula. This will also consist a significant part of the paper, as the current situation in East Asia might be very different from what NAFTA countries have experienced ten years ago. With these comparisons, we hope to shed some lights on

the possibility of the East Asian economic integration. Depending on whether it is possible or not, the conclusion of this paper might be different. Therefore, in the final part V of this paper, where we are seeking lessons and policy recommendations to Korea and its neighbors, we will present a dual approach. That is, we first gives recommendations for the region as a whole and then for Korea herself.



Chapter II

# Economics of NAFTA



## 1. Assessments on General Economic Effects

During the last ten years of NAFTA, the average annual growth rates of GDP for the U.S., Canada, and Mexico are 3.33%, 3.47%, and 2.92%, respectively. As the average annual GDP growth rate for the OECD countries as a whole<sup>2)</sup> is only 2.56%, all the three NAFTA countries did better than other developed nations and it was a good indication for NAFTA. However, Mexican GDP performances were somewhat disappointing, considering the prior expectations that NAFTA would assist them to close the gap with their North American neighbors.

<Table II-1> GDP Growth Comparison 1994-2004

|        | 1994               | 1995               | 1996               | 1997               | 1998               | 1999               | 2000               | 2001                | 2002               | 2003               | 2004               |
|--------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|
| U.S.   | 7,775.5<br>(4.06)  | 7,972.8<br>(2.54)  | 8,271.4<br>(3.75)  | 8,647.6<br>(4.55)  | 9,012.5<br>(4.22)  | 9,417.1<br>(4.49)  | 9,764.8<br>(3.69)  | 9,838.9<br>(0.76)   | 9,997.6<br>(1.61)  | 10,269.3<br>(2.72) | 10,703.9<br>(4.23) |
| Canada | 567.2<br>(4.80)    | 583.0<br>(2.79)    | 592.4<br>(1.61)    | 617.5<br>(4.24)    | 642.7<br>(4.08)    | 678.8<br>(5.62)    | 714.5<br>(5.26)    | 727.1<br>(1.76)     | 749.4<br>(3.07)    | 764.3<br>(1.99)    | 786.7<br>(2.93)    |
| Mexico | 474.6<br>(4.45)    | 445.3<br>(-6.17)   | 468.3<br>(5.17)    | 500.0<br>(6.77)    | 521.1<br>(4.22)    | 544.9<br>(4.57)    | 580.8<br>(6.99)    | 580.6<br>(-0.03)    | 585.1<br>(0.78)    | 593.6<br>(1.45)    | 619.4<br>(4.35)    |
| OECD   | 21,190.0<br>(3.08) | 21,704.9<br>(2.43) | 22,375.5<br>(3.09) | 23,145.6<br>(3.44) | 23,731.3<br>(2.53) | 24,457.6<br>(3.06) | 25,350.2<br>(3.66) | 25,262.2<br>(-0.35) | 25,957.1<br>(2.75) | 26,441.4<br>(1.87) | 27,318.5<br>(3.32) |

Note: GDP in billion U.S.\$ in 2000 price level and exchange rate and Annual Growth Rate in Parentheses

Source: OECD

Before the enactment of NAFTA, there were numerous studies by the method of CGE modeling.<sup>3)</sup> While the effects on GDP will be positive for all the member countries, most of the researches predicted as such, there also was consensus that the effect on

2) Czech Republic, Hungary, Poland, and Slovak Republic are excluded.

3) There is an excellent assessment of the CGE models on the performance of the evaluating the NAFTA impacts by Kehoe (2005).

Mexico would be larger in magnitude. It is rather surprising, however, that there are only a few studies dealing with the Mexican economic growth. Not only for Mexico but also for other member countries of NAFTA, in fact, there is a very small number of studies about the national income growth for the first ten years of NAFTA. Researchers are often citing the economic and political turmoil in Mexico during the early years of NAFTA and the long expansion period of the U.S. economy throughout most of the 1990s as disrupting factors that makes it hard to extract the separate NAFTA effects. Despite these difficulties, however, a study by the U.S. Congressional Budget Office (2003) tackled the issue and concluded that NAFTA has increased annual U.S. GDP, but by a very small amount-probably no more than a few billion dollars, or a few hundredths of a percent.<sup>4)</sup> They also said that the effect on Mexican GDP has also been positive and, as the magnitude are at least in the same order, the effect on much smaller Mexican economy should have been much larger in terms of percentage. In line with these findings, the World Bank (2003) also reported that the speed of convergence of Mexican growth to the U.S. level increases since 1994. However, this report from the World Bank draw fire from others and it is now at the heart of the academic debate. Weisbrot, Rosnick, and Baker (2004) claim that the data used by the World Bank are widely out of line with per capita GDP data from all authoritative sources<sup>5)</sup> and, when these data from other sources are used in the same regression, NAFTA seemed to slow the rate of growth for Mexico. Even though the debates are far from over, it again showed how difficult to measure the long term economic effects of the event like NAFTA. Bypassing such

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4) This is an exact expressions quoted from the CBO report (2003).

5) Such as Penn World Tables, OECD, and World Economic Outlook by IMF, according to the authors.

difficulties and disappointing with less than brilliant performances, especially with Mexico, there are other venues of the studies that focused on reasons why Mexico could not do better. The World Bank study mentioned above, for example, argues that the more aggressive reforms in Mexican economic system would have brought the better results. However, others like, Tomell, Westermann, and Martinez (2004) blamed the lack of stability in financial sectors instead. Whatever the reasons, however, there seems to be a consensus that the growth effects of NAFTA as a whole, and especially for the Mexico, were not satisfactory, although we may need more time to assess the long-term growth effects of NAFTA.<sup>6)</sup> After all, the growth effects of regional trade agreements are through the increased trade and investment and it will take times. Therefore, we now better turn our attention to the trade itself.

## 2. Effects on Trade

Like the studies on GDP we surveyed above, researches on the effects of NAFTA on trade also faced the difficulties in differentiating the direct effect of NAFTA itself. However, many succeeded in abstracting the effect, by using techniques of CGE or gravity modeling, and those results are well documented in the excellent summary by Hufbauer and Schott (2005). Rather than stroll through the same avenue of technical models, we will instead focus more on the effect to the individual industries or product groups. Prior to that, however, the following is a brief

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6) We may also need to look into the Canadian growth after NAFTA. However, we omit that part in a belief that such an effects would be minimal as Canada and the U.S. enters the FTA with each other much earlier in 1988. Those who are interested in the effects on Canada can see Colgan (2005).

look at the general characteristics of the trade among the NAFTA member countries.

## 2-1. Characteristics of NAFTA Trade

One of the peculiar characteristics of the trades between the NAFTA countries would be a heavy dependency on U.S. market by two other partners. We can find that, in 2004, Canada's trades with the world amounts to more than 620 billion U.S.\$ and that about 70% of them are from the trades with the U.S. Similarly, for Mexico, their total trade volume records over 410 billion U.S.\$ and more than 67% of them are from the trades with the U.S. On the other hand, the U.S. trade with Canada and Mexico are more balanced in a sense that the combined U.S. shares of trade with them are less than 30% of their total trade volume of 2,409 billion U.S.\$. Despite these numbers, as of 2004 however, Canada and Mexico are still the two largest trading partners for the U.S with the trade volume of 436 billion U.S.\$ and 280 billion U.S.\$, respectively. Thus based on these observations, it may be argued that the NAFTA economies are closely integrated and it indeed is true.

However, as mentioned above, we cannot say that the economic closeness of the U.S., Canada, and Mexico is the direct result of NAFTA itself. In fact, these three countries had been closely integrated since long before the enactment of NAFTA. The question is then whether NAFTA intensify the process of economic coherence for these countries. To answer that question, if we compare today's number with that of 1993, the year before NAFTA came into effects, we may say that a little has changed for the last ten years. Of course, the overall trade volume has been more than doubled between the U.S. and Canada, tripled between the U.S. and Mexico, and quadrupled between Canada and Mexico. However, at the same time, the

total trade volume of the U.S. and Canada with the world grew more than twice and that of Mexico increased more than three times. As a result, the share of trades for 2004 that we mentioned above had not been changed much since 1993. As we can see from the table below, the share of the U.S. trade with Canada has been slightly decreased from 19.10% to 18.10%, Canada's trade share with the U.S. decreased from 71.22% to 70.18%, and Mexico's trade share with the U.S. decreased from 74.59% to 67.57%. On the other hand, the U.S. trade share with Mexico increased from 8.36% to 11.61% and Canadian trade share with Mexico increased from 1.43% to 2.78%. Finally, Mexico's trade share with Canada increased from 3.42% to 4.17%. In fact, from these numbers, we may even conclude that NAFTA had helped Canada and Mexico to reduce their trade dependency on the U.S., while their own economic ties each other strengthened.

<Table II-2> Overall Trade among NAFTA Member Countries

| Pair of Trading Partners |        | 1993               |        | 2004               |        | B/A  |
|--------------------------|--------|--------------------|--------|--------------------|--------|------|
|                          |        | million U.S.\$ (A) | %      | million U.S.\$ (B) | %      |      |
| U.S.                     | Canada | 210,152            | 19.10  | 436,065            | 18.10  | 2.07 |
|                          | Mexico | 91,941             | 8.36   | 279,730            | 11.61  | 3.04 |
|                          | World  | 1,100,152          | 100.00 | 2,408,685          | 100.00 | 2.19 |
| Canada                   | U.S.   | 210,152            | 71.22  | 436,065            | 70.18  | 2.07 |
|                          | Mexico | 4,211              | 1.43   | 17,255             | 2.78   | 4.10 |
|                          | World  | 295,059            | 100.00 | 621,371            | 100.00 | 2.11 |
| Mexico                   | U.S.   | 91,941             | 74.59  | 279,730            | 67.57  | 3.04 |
|                          | Canada | 4,211              | 3.42   | 17,255             | 4.17   | 4.10 |
|                          | World  | 123,264            | 100.00 | 414,014            | 100.00 | 3.36 |

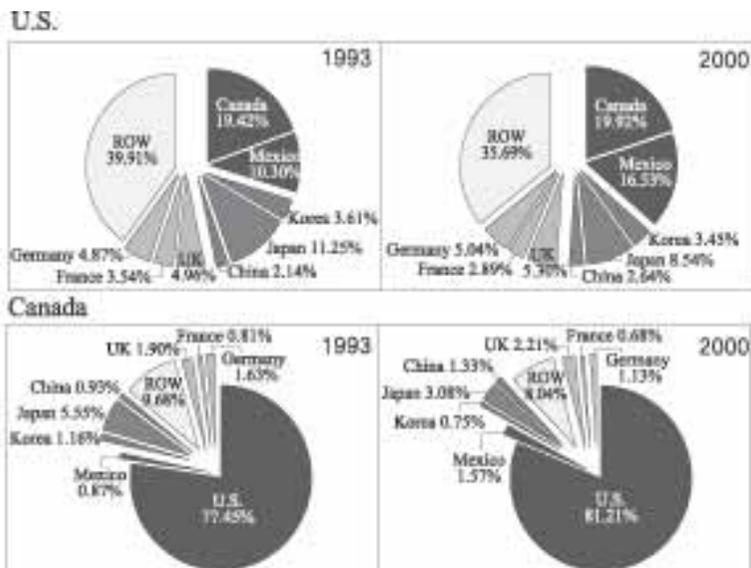
Note: Data is based from Importer Countries.

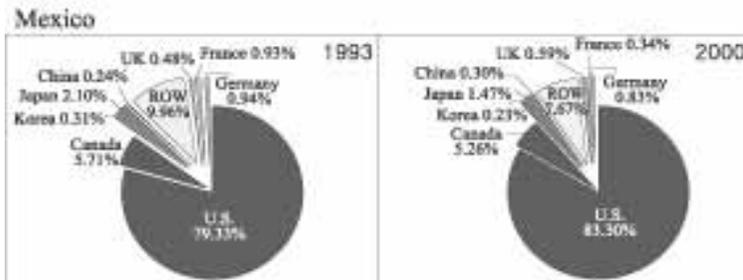
Source: KITA, IMF

However, if we look into export and import data separately, the conclusion mentioned above does not seem to have a strong foundation. In terms of export, the share of the NAFTA

countries for each member all grew larger between 1993 and 2004, as we can see that the U.S. shares of export to Canada and Mexico grew respectively from 19.42% to 19.96% and from 10.30% to 13.80%, the Canadian export shares to the U.S. and Mexico also increased respectively from 77.45% to 80.61% and from 0.87% to 1.82%, and finally the Mexican shares of export to the U.S. and Canada rose respectively from 79.33% to 81.88% and from 5.71% to 5.91%. Therefore, contrary to when we look at overall trade, these increases in exports shares among the NAFTA countries seem to be a sign of growing interdependency each other. With these two conflicting evidences from above, where we simply looks at overall trade statistics, we cannot conclude whether NAFTA itself helps improving togetherness of its member countries for last ten years. To have a more concrete answer, we may have to study more detailed data and we will do such analysis in the following sections.

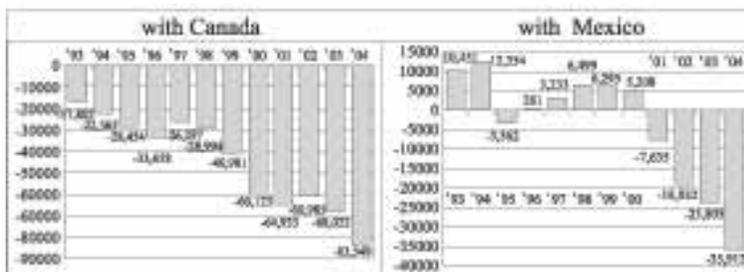
<Figure II-1> the Export Shares





Before turning into the new sections, another feature that is worth mention about the trade among the NAFTA member countries is the deepening of trade imbalances among them. That is, the U.S. trade deficits with Canada and Mexico became larger especially in recent years. Although the U.S. is chronically deficit ridden in trade with most of its major trading partners, the share of the NAFTA countries among the total trade deficits grew significantly during the last ten years. This is mainly because the U.S. trade balances with Mexico switches from surplus to deficit since 2001.

<Figure II-2> the U.S. Trade Imbalances



Note: Imbalance amounts in million U.S.\$

In fact, since the beginning of NAFTA, the U.S. records trade surplus with Mexico every year until 2000, except for 1995.

Even though many said that it was because of the Peso crisis and other economic difficulties in Mexico,<sup>7)</sup> we can say that NAFTA certainly helps Mexico dealing with such difficulties. This is certainly true when we noticed that the Mexican trade surplus with Canada also has grown steadily for the last ten years.

## 2-2. Imports penetration by other countries

In the discussion above, we mentioned that the overall trade shares among the NAFTA countries decreases while the export share among them increases for the last ten years. This tells us that the import shares among the NAFTA countries decreased and those of the nonmember countries increased. In fact, looking into data, the import shares of the NAFTA countries for Canada and Mexico are decreased, respectively, from 67.02% to 62.75% and from 72.98% to 57.74% during the periods between 1993 and 2004, while that of the U.S. is increased from 25.60% to 27.38%. Although the facts that import shares of the NAFTA countries have decreased seem to somewhat strange at the first look, however, it can be regarded as natural phenomenon for the regional trade agreement like NAFTA. That is, as preferential regional trade arrangements discriminate against trade from other countries, there are incentives to import goods from the discriminated in the semi-processed form at lower tariff and, after some assembly, re-export them to the member countries as final goods. The fact that, with exception of the U.S., the import share of outsiders in the Canadian and Mexican market seemed support the idea of the indirect import market penetration by the third countries. After all, the U.S. is the largest import market and there always were incentives for outsiders to take advantage of favorable treatment for the NAFTA member countries.

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7) See G. Hufbauer and J. Schott (2005)

<Table II-3> NAFTA Imports from Selected Countries

| Exporter | U.S.                |                       |           | Canada              |                     |           | Mexico             |                     |           |
|----------|---------------------|-----------------------|-----------|---------------------|---------------------|-----------|--------------------|---------------------|-----------|
|          | 1993                | 2004                  | '04 / '93 | 1993                | 2004                | '04 / '93 | 1993               | 2004                | '04 / '93 |
| U.S.     | -                   | -                     | -         | 96,535<br>(65.05)   | 176,258<br>(58.94)  | 1.83      | 51,196<br>(71.20)  | 121,909<br>(55.09)  | 2.38      |
| Canada   | 113,617<br>(18.84)  | 259,807<br>(17.03)    | 2.29      | -                   | -                   | -         | 1,280<br>(1.78)    | 5,860<br>(2.65)     | 4.58      |
| Mexico   | 40,745<br>(6.76)    | 157,821<br>(10.35)    | 3.87      | 2,931<br>(1.98)     | 11,395<br>(3.81)    | 3.89      | -                  | -                   | -         |
| Korea    | 17,677<br>(2.93)    | 47,814<br>(3.13)      | 2.70      | 1,873<br>(1.26)     | 4,931<br>(1.65)     | 2.63      | 728<br>(1.01)      | 5,751<br>(2.60)     | 7.90      |
| Japan    | 110,418<br>(18.31)  | 133,339<br>(8.74)     | 1.21      | 9,076<br>(6.12)     | 11,281<br>(3.77)    | 1.24      | 3,706<br>(5.15)    | 11,642<br>(5.26)    | 3.14      |
| China    | 33,513<br>(5.56)    | 210,526<br>(13.80)    | 6.28      | 2,627<br>(1.77)     | 20,433<br>(6.83)    | 7.78      | 389<br>(0.54)      | 15,811<br>(7.15)    | 40.65     |
| UK       | 22,392<br>(3.71)    | 47,677<br>(3.13)      | 2.13      | 3,797<br>(2.56)     | 8,136<br>(2.72)     | 2.14      | 648<br>(0.90)      | 1,604<br>(0.72)     | 2.48      |
| France   | 15,694<br>(2.60)    | 32,619<br>(2.14)      | 2.08      | 1,887<br>(1.27)     | 4,439<br>(1.48)     | 2.35      | 1,185<br>(1.65)    | 2,635<br>(1.19)     | 2.22      |
| Germany  | 29,462<br>(4.89)    | 79,117<br>(5.19)      | 2.69      | 2,982<br>(2.01)     | 7,955<br>(2.66)     | 2.67      | 3,115<br>(4.33)    | 7,858<br>(3.55)     | 2.52      |
| ROW      | 219,457<br>(36.40)  | 556,710<br>(36.50)    | 2.54      | 26,697<br>(17.99)   | 54,228<br>(18.13)   | 2.03      | 9,655<br>(13.43)   | 48,201<br>(21.78)   | 4.99      |
| World    | 602,975<br>(100.00) | 1,525,430<br>(100.00) | 2.53      | 148,405<br>(100.00) | 299,056<br>(100.00) | 2.02      | 71,902<br>(100.00) | 221,271<br>(100.00) | 3.08      |

Note: Export Volume in million U.S.\$, numbers in parentheses are import market shares.

Source: KITA, IMF

The data we are dealt with in this paper confirms that Asian countries did well on that matter especially through Mexico. The table above shows changes in import volumes and shares for the NAFTA countries by major exporters in 1993 and 2004. The most noticeable country is China because they are the second largest exporter for all of the NAFTA member countries in 2004. Since 1993, China's export to the U.S. and Canada had increased, respectively, more than six and seven times and an amazing forty times to Mexico. As a result, their import market share had increased substantially in all three countries. However, even in this case of China, as the export to Mexico increased substantially more than to the U.S. and Canada, we may say that

Chinese products indirectly penetrated into the U.S. market through Mexico. Likewise, if we can detect the sign of indirect import penetration from the fact that the export growth to Canada or Mexico outperforms that to the U.S., other Asian countries like Korea and Japan also have tried the indirect market penetration to the U.S. market through Mexico. In fact, we can see that their exports to Mexico are approximately 2.5 times more than that to the U.S. and Canada. However, in the case of European countries selected here, U.K., France, and Germany, it is hard to see such a sign of the indirect market penetration. Their exports to the NAFTA countries have grown more evenly and, in the case of Germany, the export growth to Mexico was smaller than that to the U.S. and Canada. This distinction between Asian and European countries may have an important implication and we will discuss it in the later part of this paper.

### 3. Trade Effects on Product Groups

#### 3-1. Sectors with Increasing Trade after NAFTA

To identify the most affected industrial sector by NAFTA, we try to look at the changes in trade volume among the NAFTA member countries by 2 digits SITC<sup>8)</sup> product groups. The most casual way to find the change would be checking the list of main export items. However, if we look at the changes in the top 10 exports item within the NAFTA member countries, we can find a few alteration. In fact, except for the Mexican exports to the U.S., there have been no changes in the number one export

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8) Standard International Trade Classification, Rev. 3

<Table II-4> Most Increased Exports Item among NAFTA Countries

| Rank | U.S. Export to |          |         |        | Canadian Export to |          |         |        | Mexican Export to |          |         |        |
|------|----------------|----------|---------|--------|--------------------|----------|---------|--------|-------------------|----------|---------|--------|
|      | Canada         |          |         |        | U.S.               |          |         |        | U.S.              |          |         |        |
|      | SITC           | 91-93(a) | 2000(b) | b-a    | SITC               | 91-93(a) | 2000(b) | b-a    | SITC              | 91-93(a) | 2000(b) | b-a    |
| 1    | 78             | 18,170   | 32,653  | 14,483 | 78                 | 29,308   | 56,134  | 26,826 | 78                | 5,243    | 26,194  | 20,951 |
| 2    | 71             | 4,420    | 10,295  | 5,875  | 93                 | 5,031    | 14,897  | 9,866  | 76                | 3,496    | 16,235  | 12,739 |
| 3    | 77             | 6,953    | 12,377  | 5,424  | 33                 | 7,251    | 17,099  | 9,847  | 77                | 5,657    | 17,821  | 12,164 |
| 4    | 74             | 4,967    | 10,038  | 5,071  | 76                 | 1,154    | 9,902   | 8,748  | 33                | 4,852    | 13,066  | 8,214  |
| 5    | 69             | 2,415    | 6,111   | 3,696  | 34                 | 3,550    | 11,897  | 8,347  | 75                | 926      | 9,100   | 8,174  |
| 6    | 76             | 1,726    | 4,813   | 3,087  | 64                 | 6,360    | 10,565  | 4,205  | 84                | 1,183    | 8,810   | 7,627  |
| 7    | 87             | 1,955    | 4,986   | 3,031  | 71                 | 2,566    | 6,671   | 4,105  | 93                | 1,530    | 5,845   | 4,315  |
| 8    | 89             | 4,307    | 7,051   | 2,745  | 74                 | 2,132    | 6,036   | 3,904  | 74                | 1,050    | 4,648   | 3,598  |
| 9    | 75             | 3,759    | 6,378   | 2,619  | 89                 | 1,755    | 5,513   | 3,758  | 71                | 1,403    | 4,828   | 3,425  |
| 10   | 58             | 1,989    | 4,514   | 2,526  | 79                 | 2,218    | 5,976   | 3,757  | 87                | 888      | 3,719   | 2,831  |
| Rank | Mexico         |          |         |        | Mexico             |          |         |        | Canada            |          |         |        |
|      | SITC           | 91-93(a) | 2000(b) | b-a    | SITC               | 91-93(a) | 2000(b) | b-a    | SITC              | 91-93(a) | 2000(b) | b-a    |
|      | SITC           | 91-93(a) | 2000(b) | b-a    | SITC               | 91-93(a) | 2000(b) | b-a    | SITC              | 91-93(a) | 2000(b) | b-a    |
| 1    | 77             | 5,261    | 29,452  | 24,190 | 78                 | 85       | 887     | 802    | 78                | 1,059    | 2,382   | 1,323  |
| 2    | 78             | 4,253    | 13,986  | 9,733  | 76                 | 51       | 343     | 292    | 76                | 148      | 1,133   | 985    |
| 3    | 89             | 2,526    | 9,364   | 6,838  | 74                 | 35       | 229     | 194    | 77                | 247      | 1,205   | 958    |
| 4    | 69             | 1,757    | 8,569   | 6,812  | 77                 | 29       | 201     | 172    | 75                | 118      | 787     | 670    |
| 5    | 74             | 2,221    | 7,528   | 5,307  | 71                 | 13       | 184     | 172    | 71                | 162      | 426     | 264    |
| 6    | 76             | 1,504    | 5,870   | 4,366  | 22                 | 32       | 182     | 150    | 82                | 100      | 323     | 223    |
| 7    | 71             | 763      | 4,932   | 4,170  | 1                  | 30       | 172     | 142    | 74                | 111      | 256     | 145    |
| 8    | 65             | 964      | 4,927   | 3,963  | 69                 | 17       | 146     | 129    | 33                | 138      | 267     | 129    |
| 9    | 58             | 1,057    | 3,974   | 2,917  | 4                  | 78       | 171     | 93     | 84                | 14       | 139     | 125    |
| 10   | 75             | 1,397    | 3,974   | 2,577  | 89                 | 19       | 100     | 81     | 87                | 10       | 122     | 112    |

Note: Individually calculated from the original data by the author and export volumes are in million U.S.\$.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

item each other. That is, while the product group SITC 77<sup>9)</sup> remains as the number one export item for the U.S. to Mexico, the product group SITC 78<sup>10)</sup> has been the number one export item

9) Electrical Machinery, Apparatus and Appliances, N.E.S., and Electrical Parts Thereof (Including Nonelectrical Counterparts of Household Type, N.E.S). We will simply call it Electro industry hereafter.

10) Road Vehicles (including Air Cushion Vehicles). We will simply call it automobile industry hereafter.

for each country. The only change is the switch of SITC 77 to SITC 78 in the case of Mexican export to the U.S. Although there have been one or two item changes for the period between 1993 and 2000<sup>11)</sup> in each country, even the product groups that were dropped out of the top 10 list, the export volume had been increased for the period. Therefore, it does not mean that the product group has not benefited from NAFTA.

To find out the most benefited product group, therefore, we look for the changes in the trade volume and the above table ranks the first ten of them<sup>12)</sup> There, it seems that automobile (SITC 78) and electro (SITC 77) industries are the most beneficiary sectors in the U.S., as total export volume of the each product group to Canada and Mexico combined had increased more than 20 billion U.S.\$. Among other industries that also made into the top 10 beneficiaries, the exports of power generating machinery (SITC 71), general industrial machinery (SITC 74), and manufactured metal (SITC 69) increased more than 10 billion U.S\$. One peculiar fact about the U.S. top 10 beneficiaries is all of them are manufacturing industries. For Canada and Mexico, the automobile industry (SITC 78) is also the most beneficiary sector, as it is the most increased export item with more than 20 billion U.S.\$ increment for each country. For Mexico, the exports of telecommunication equipment (SITC 76) and electro (SITC 77) industries had increased more than 10 billion U.S\$. Although most of the top 10 beneficiaries in Mexico and Canada are in manufacturing industries, however, in the case of Canadian exports to Mexico, agricultural products like meats (SITC 01), cereals (SITC 04), oil seeds and fruits (SITC 22) also made into the top 10 lists. This tells us that, while NAFTA mostly benefited manufacturing industries,

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11) Contrary to the overall trade statistics used in the previous section where we reported for 10 years, the newest data that we can obtain for the individual product group were for the year 2000.

12) We compare the average export volume of 1991~1993 with the export volume in 2000.

some Canadian agricultural sectors also were better off with NAFTA.

### 3-2. Some Possible Loser Groups

While most of the SITC 2 digits product groups had experienced increases in the export volume to the NAFTA countries, there were some exceptions that export volumes had decreased. The only one exception for the U.S. is footwear (SITC 85) industry. For Canada, they are tobaccos (SITC 12), textiles (SITC 26), and primary form plastics (SITC 57). In the case of Mexico, the exports of tobaccos (SITC 12), oil seeds and fruits (SITC 22), cork and woods (SITC 24), crude fertilizer (SITC 27), gas (SITC 34), animal oil and fats (SITC 41), processed fats and oils (SITC 43), fertilizers (SITC 56) had decreased.<sup>13)</sup> For the U.S. and Canada, because those industries are in the manufacturing, and there are other possibilities like relocation, production diversification, or other reasons, we cannot say for sure that they are losers. However, for Mexico, as they are mostly raw or lowly processed products, we may say that they lost grounds after NAFTA was in effect. This also contrasted with the fact that some Canadian agricultural sectors were included in the most benefited groups. That is, there seems to be a trade off between Canada and Mexico in some sectors.

## 4. Reasons for Expanding Trade

In the analysis above, for each NAFTA member country, we identify some possible beneficiary industries in which trade

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13) Also for some products group in 90s reported decreases in exports volumes. We exclude them, however, as they are unspecified transactions.

volumes had been increased by larger amounts. In theory, we may have two sources of trade expansions among members of the regional trade arrangement, like NAFTA. Trade creation occurs, when the tariff and other trade barriers lowered among the members, as the enactment of the arrangements boosted trades among more efficient sectors. Trade diversion occurs when the tariff and other trade barriers remained intact for the non-members, as the launch of the trade agreement discriminated against them and this increased trade among less efficient sectors. In reality, however, we cannot distinguish these two effects by looking at simple trade statistics and the analysis above did not take these differences into the account. Therefore, it can be argued that the simple fact, that their trade volume had increased, cannot guarantee for sure that the sector had benefited from NAFTA. The following analyses are part of efforts to overcome that kind of shortfalls.

#### 4-1. Import Market Shares

With the intention that mentioned above, we are trying to look at the changes in import market shares among the NAFTA member countries. If a product group had succeeded in expanding their market shares in large amount after the enactment of NAFTA, the sector can be certainly considered as the beneficiaries of the trade agreements. Especially, as mentioned in the earlier part of this paper, with the fact that the overall import shares among the NAFTA countries has decreased compare to the pre NAFTA periods, if the import market share of a particular product group is increased, we can say that product group has benefited from NAFTA, even in the presence of import market penetration by outsiders. Looking into SITC 2 product groups, the exports of 27 items from the U.S. to Canada had experienced

increases in the market shares. For the U.S. exports to Mexico, in 31 items, their market shares had improved. In the case of Canadian exports, 40 items to the U.S. and 42 items to Mexico had recorded increments in the import market shares. Finally for Mexico, their export to the U.S. and Canada had experienced positive gains in the market shares in 50 and 47 items, respectively. In terms of the number of products that gained market share in each NAFTA country, Mexico may be the most benefited country and the U.S. may be the least benefited country.

<Table II-5> Items with Jumps in Imports Market Shares

| Exporter | Importer | SITC2 | Market Share, % |       | Increment % |
|----------|----------|-------|-----------------|-------|-------------|
|          |          |       | 91-93 Avg.      | 2000  |             |
| U.S.     | Canada   | 42    | 36.94           | 57.28 | 20.34       |
|          |          | 22    | 69.34           | 87.88 | 18.53       |
|          | Mexico   | 79    | 50.95           | 73.77 | 22.81       |
|          |          | 6     | 63.88           | 82.13 | 18.25       |
|          |          | 26    | 73.85           | 88.63 | 14.79       |
|          |          | 84    | 63.76           | 77.81 | 14.05       |
|          |          | 65    | 66.57           | 79.01 | 12.45       |
|          |          | 61    | 69.92           | 81.84 | 11.92       |
| Canada   | U.S.     | 96    | 8.70            | 98.94 | 90.24       |
|          |          | 78    | 37.37           | 86.91 | 49.54       |
|          |          | 1     | 23.09           | 45.33 | 22.24       |
|          |          | 63    | 35.07           | 53.73 | 18.66       |
|          |          | 21    | 57.35           | 71.37 | 14.02       |
|          |          | 58    | 29.83           | 41.44 | 11.61       |
|          | Mexico   | 22    | 4.44            | 15.11 | 10.67       |
| Mexico   | U.S.     | 78    | 6.67            | 40.55 | 33.89       |
|          | Canada   | 57    | 0.00            | 10.13 | 10.13       |

Note: 1) Individually calculated from the original data by the author.

2) Here, we arbitrarily decide more than a 10% increases as a jump.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

However, if we pay more attentions to the items that had improved their market shares, it is not clear that they are solely benefited from NAFTA. As is shown in the table above, where items with more than 10% increases in the market shares, most of the items that have experienced large jump had enjoyed relatively high market shares already. A couple of items, however, drew a particular attention and they are coins other than gold (SITC 96) from Canada to the U.S. and automobiles (SITC 78) from the Canada and, especially, from Mexico to the U.S. Interestingly, the automobile is the item that also recorded the most increases in export volumes each other in the NAFTA countries. Therefore, for the automobile industries, we can say that NAFTA had certain role in expanding trade between the NAFTA countries. There could be three reasons for the expanding trade after the enactment of NAFTA. First, it could be the result of the expansion of the existing automobile industries in each country. Second, it could be the outcomes of the relocation of the automobile industries among the NAFTA countries. Thirdly and finally, it could be the result of the import market penetration by others. Therefore, in the following section, we will investigate the possibility of the relocation and the market penetration in the automobile industry.

While we were concerned about a jump in the import market share to identify the possible beneficiary industries, we implicitly assumed that the product groups with decreased import market share would be the loser groups. Even under the protection of the competition from outsiders, if some product groups lost the market share, they must be in the waning sector. Although most of the product groups in consideration seemed to fit into that category, we found a peculiar product group that could not be considered as a losing industry. Even the Canadian market share of the U.S. electro products (SITC 77) decreases more than 10%, the U.S. exports of electro products to Canada and Mexico

combined had increased by over 30 billion U.S.\$. This is a strong indication that there occurs some sort of relocation. Therefore, in addition to the investigation of automobile industry, we will also look into the electro industry, in the next section.

#### 4-2. Intra Industry Trade

The most common way to measure the degree of intra industry is the Grubel-Lloyd index defined, in the case of two countries  $i$  and  $j$  for the trades in product group  $k$ , as;

$$I_{ij}^k \equiv \frac{(X_{ij}^k + M_{ij}^k) - |X_{ij}^k - M_{ij}^k|}{X_{ij}^k + M_{ij}^k} \times 100 \quad (\text{Eq. 1})$$

in which,  $X_{ij}^k$  is the export of country  $i$  to country  $j$  in product group  $k$  and  $M_{ij}^k$  is the import of country  $i$  from country  $j$  in product group  $k$ .

The table below shows the changes in the Grubel-Lloyd Index for the year 2000 compare to the average of the years between 1991 and 1993<sup>14)</sup> in the trades of the electro industry (SITC 77) and the automobile industry (SITC 78). As it is shown in the shaded areas, in terms of SITC 2 digits level, while the level of intra industry trade between Canada and Mexico has increased, there was a little change in the degree of intra industry trade between U.S. and Canada and between U.S. and Mexico. In fact, there are slight increases in the electro industry and there are slight decreases in the automobile industry.

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14) As there are announcements effects, in a sense that the expectation about the completion of the free trade agreement made industries to act in advance, we compare three years average before the 1994.

<Table II-6> Degree of Intra Industry Trade

| Partners | U.S. ↔ Canada |                |          | U.S. ↔ Mexico |                |          | Canada ↔ Mexico |                |          |
|----------|---------------|----------------|----------|---------------|----------------|----------|-----------------|----------------|----------|
|          | SITC Code     | 91-93 avg. (%) | 2000 (%) | Increment (%) | 91-93 avg. (%) | 2000 (%) | Increment (%)   | 91-93 avg. (%) | 2000 (%) |
| 77       | 67.88         | 69.12          | 1.24     | 75.03         | 75.40          | 0.36     | 21.22           | 28.58          | 7.36     |
| 771      | 94.10         | 98.37          | 4.27     | 58.97         | 89.73          | 30.76    | 3.18            | 54.67          | 51.49    |
| 772      | 76.24         | 59.52          | -16.72   | 72.82         | 69.93          | -2.89    | 1.99            | 36.32          | 34.33    |
| 773      | 46.49         | 75.11          | 28.63    | 59.38         | 78.37          | 18.99    | 3.00            | 10.94          | 7.94     |
| 774      | 27.42         | 64.64          | 37.22    | 96.37         | 88.38          | -7.99    | 2.88            | 55.23          | 52.34    |
| 775      | 35.87         | 80.17          | 44.30    | 74.29         | 52.84          | -21.45   | 0.40            | 41.45          | 41.05    |
| 776      | 85.99         | 72.64          | -13.35   | 43.14         | 27.39          | -15.75   | 1.21            | 31.23          | 30.03    |
| 778      | 39.31         | 58.23          | 18.93    | 73.07         | 76.62          | 3.55     | 3.11            | 42.51          | 39.39    |
| 78       | 76.67         | 73.55          | -3.12    | 73.11         | 69.62          | -3.49    | 14.49           | 54.25          | 39.76    |
| 781      | 56.65         | 41.87          | -14.78   | 18.86         | 31.42          | 12.56    | 0.51            | 24.17          | 23.66    |
| 782      | 42.93         | 63.67          | 20.74    | 63.89         | 40.40          | -23.48   | 2.18            | 71.32          | 69.13    |
| 783      | 81.13         | 71.69          | -9.44    | 0.44          | 77.48          | 77.04    | 27.31           | 8.40           | -18.91   |
| 784      | 76.21         | 73.80          | -2.41    | 51.94         | 67.29          | 15.34    | 5.15            | 95.00          | 89.86    |
| 785      | 25.43         | 40.03          | 14.60    | 76.76         | 52.33          | -24.43   | 0.91            | 0.00           | -0.91    |
| 786      | 25.51         | 46.06          | 20.54    | 94.74         | 96.61          | 1.86     | 1.11            | 33.62          | 32.50    |

Note: Individually calculated from the original data by the author.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

However, if we look into the subdivision level of SITC 3 digits, we can find more significant changes in the degree of the intra industry trade in every direction. Among the electro industry, the subgroups of SITC 771, 773, and 778 improved the level of intra industry trade in every direction of the trade among the NAFTA members. For the subgroups of SITC 772 and 776, intra industry trade with the U.S. has decreased, while that between Canada and Mexico increased significantly. For the subgroups of SITC 774 and 775, there were significant increases in the level of intra industry trade around Canada, while the intra industry trade between the U.S. and Mexico. For the interpretation of the findings in this paper that we will discuss

later, it may be interesting to note the fact that the subgroup 774 includes precision medical devices, such as X-ray machines, surgical equipments and dental devices, and the subgroup 775 includes popular household equipments, such as laundry machines, refrigerators, and dish washers.

Looking into the subgroups of the automobile industry, we found that the trade in the subgroup 781, that includes mainly passenger cars, the level of intra industry trade between Canada and the U.S. has decreased, while those through other two directions around Mexico have increased. On the other hand, the level of intra industry trade for the subgroup 782 between the U.S. and Mexico has decreased, while those two other directions around Canada have increased. Finally, for the subgroup 783, the level of the intra industry trade between the U.S. and Mexico has surged, while those in other two directions have decreased. As the subgroups 781~783 are different type of vehicles, we can see that a possibility of relocation of production by product types among the NAFTA countries. This kind of relocation possibility can be also found in auto parts industry of the subgroup 784 as the level of the intra industry trade has increased significantly between Canada and Mexico and between the U.S. and Mexico, while that level has decreased between the U.S. and Canada.

One other final thing to note on the trade of the automobile industry is that the subgroup 785, which is the category of motorcycles and cycles. It is somewhat interesting that the intra industry trade between the U.S. and Canada has increased while that type of trade through other two directions in NAFTA has decreased. Upon looking into the more detailed subgroup of SITC 4 level, however, we found that the main forces to increase the level of the intra industry trade between the U.S. and Canada is the SITC 7853 that is mainly the invalid carriage used by handicapped people. This fact is consistent with the earlier finding that the level of intra industry trade for the

medical devices of SITC 774 has increased between the U.S. and Canada.<sup>15)</sup> However, as we mentioned earlier, the mere fact that the level of intra industry has increased does not mean the relocation of the production and it leads us into the subject of the next section.

### 4-3. Import Market Penetration

In the subsection 4-2, we have witnessed an evidence of the indirect market penetration by the Asian countries of Korea, Japan, and China into the NAFTA market through Mexico. Thus, in this section, we will focus on those three Asian countries in checking the possibility of the market penetration into NAFTA in the electro and the automobile industries.

As we see in the table below, for the electro industry, there is a sign of indirect market penetration through Mexico. At the SITC 2 digits level, the import market share of the three Asian countries in the U.S. and Canada had decreased, while that in Mexican market had increased. If we look into the more detailed level of SITC 3 digits, we found that the market penetration occurred in the product groups 772, 776, and 778. It is interesting to note that they are mainly electro parts category. This is contrasted with the fact that the import market share of the sub product groups 771, 773, and 775 in all the three NAFTA countries had increased. This indicates that the export of finished product like households equipments (SITC 775) had taken a more direct channel, while the intermediate products like electro part had taken an indirect route of market penetration. Also it is worthy to note that the imports from Asian countries of the

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15) For the other sub product group 786, the level of the intra industry trade has increased in all direction. However, it may be rather natural as it consists of miscellaneous products with many different varieties.

subgroup 774 in the all three NAFTA countries had decreased. This is well confirmed with the fact that the Canadian exports of the precision medical devices in this group of 774 had gained much ground within the NAFTA markets.

<Table II-7> Import Market Penetration by Asian Countries\*

| SITC Code | Into U.S.  |       |           | Into Canada |       |           | Into Mexico |       |           |
|-----------|------------|-------|-----------|-------------|-------|-----------|-------------|-------|-----------|
|           | 91-93 avg. | 2000  | Increment | 91-93 avg.  | 2000  | Increment | 91-93 avg.  | 2000  | Increment |
| 77        | 37.36      | 34.32 | -3.04     | 11.61       | 10.08 | -1.53     | 4.88        | 9.47  | 4.60      |
| 771       | 26.26      | 32.59 | 6.34      | 12.94       | 25.62 | 12.68     | 4.78        | 13.94 | 9.16      |
| 772       | 30.77      | 28.18 | -2.59     | 8.86        | 5.26  | -3.60     | 4.88        | 6.60  | 1.72      |
| 773       | 11.16      | 13.34 | 2.18      | 8.24        | 18.34 | 10.10     | 2.93        | 4.91  | 1.99      |
| 774       | 32.48      | 30.81 | -1.66     | 15.80       | 2.99  | -12.81    | 16.67       | 11.83 | -4.83     |
| 775       | 41.67      | 51.07 | 9.40      | 14.70       | 46.77 | 32.06     | 8.37        | 24.80 | 16.43     |
| 776       | 43.22      | 34.92 | -8.30     | 25.25       | 1.82  | -23.43    | 5.59        | 10.92 | 5.33      |
| 778       | 45.08      | 43.11 | -1.97     | 17.49       | 10.55 | -6.94     | 5.14        | 9.32  | 4.18      |
| 78        | 40.24      | 30.82 | -9.42     | 14.70       | 1.82  | -12.88    | 9.82        | 5.99  | -3.83     |
| 781       | 44.26      | 29.64 | -14.62    | 48.15       | 0.01  | -48.15    | 8.49        | 5.79  | -2.70     |
| 782       | 19.33      | 4.31  | -15.02    | 20.28       | 0.00  | -20.28    | 1.06        | 7.92  | 6.86      |
| 783       | 0.15       | 0.05  | -0.10     | 0.00        | 0.00  | 0.00      | 0.02        | 5.96  | 5.94      |
| 784       | 35.17      | 28.66 | -6.52     | 11.34       | 0.85  | -10.49    | 9.01        | 5.43  | -3.58     |
| 785       | 56.46      | 70.26 | 13.79     | 54.41       | 20.22 | -34.19    | 42.96       | 34.55 | -8.42     |
| 786       | 21.57      | 46.95 | 25.38     | 0.94        | 8.14  | 7.20      | 0.44        | 2.62  | 2.18      |

Note: \*Asian countries include Korea, Japan, and China and numbers are percentages that are Individually calculated from the original data by the author.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

However, there is little sign of market penetration for the automobile industry, at least in the SITC 2 digits level. In fact, the market share of the three Asian countries in the NAFTA countries had decreased significantly. In the SITC 3 digits level, decreases in the import market shares of the passenger vehicles of the group 781 and auto parts of the group 784 had been also

evident. However, in the subgroups of the cargo vehicles in 782 and of the miscellaneous type vehicles in 783 showed some sign of indirect market penetration through Mexico. Another peculiar fact in the automobile industry is that the export of Asian countries in the motorcycles and cycles in the product group of 785 to the U.S. had increased to a significant level over 70%. Although the export of trailers and semi-trailers in the product group 786 in all the NAFTA countries had increased, the U.S. import market share of the Asian countries has especially increased to a significant level near 50%.

If we summarize the findings in this section, we could find some sign of indirect market penetration in the electro industries especially in the intermediate levels of the product groups. However, in the automobile industry overall, there are not much evidence of indirect market penetrations. We believed that this was because the differences of the approaches between electro and auto industries taken by Asian exporters.<sup>16)</sup> That is, for the electro industries, they were taken a path of indirect market penetration by locating the production facilities in the other countries. However, the Asian makers of automobiles took a more direct approach of setting their plants within the NAFTA territories. This looks evident especially in the high value added category of passenger vehicles. To confirm this belief, it is now needed to turn our attention to the industrial activities such as direct investments, capital accumulations, and employments.

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16) It may be the difference of the rules of origin between two industries. It is well known that automobile industry has more strict local value contents rule. In fact, a unanimous referee for this article points out that the highly required regional contents standard for the automobile industry in NAFTA should make the difference in the behavior of Asian exporters.

## 5. Effects on Industrial Performances

### 5-1. Automobile Industry

The following table shows the changes in the automobile production and sales within the NAFTA countries from 1993 to 2003. Although we see the increases in the production of automobiles in the all three countries compare to the year 1993, we can see the peaks in production for the U.S. and Canada reached in 1999 and for Mexico in 2001 and 2002. Since then the production level has decreased. Especially for the U.S., the production level in 2003 is even lower than in 1994. This decrease in the U.S. automobile production can be partly explained by the decreases in the total sales since 2000.

<Table II-8> Automobile Production and Sales in NAFTA

| Year | U.S.       |       | Canada     |       | Mexico     |       |
|------|------------|-------|------------|-------|------------|-------|
|      | Production | Sales | Production | Sales | Production | Sales |
| 1993 | 10.9       | 14.2  | 2.3        | 1.2   | 1.1        | 0.6   |
| 1994 | 12.3       | 15.4  | 2.3        | 1.3   | 1.1        | 0.6   |
| 1995 | 12.0       | 15.1  | 2.4        | 1.2   | 0.9        | 0.2   |
| 1996 | 11.9       | 15.5  | 2.4        | 1.2   | 1.2        | 0.3   |
| 1997 | 12.2       | 15.5  | 2.6        | 1.4   | 1.4        | 0.5   |
| 1998 | 12.0       | 16.0  | 2.6        | 1.4   | 1.5        | 0.7   |
| 1999 | 13.1       | 17.4  | 3.1        | 1.5   | 1.5        | 0.7   |
| 2000 | 12.8       | 17.8  | 3.0        | 1.6   | 1.9        | 0.9   |
| 2001 | 11.5       | 17.4  | 2.5        | 1.6   | 1.9        | 0.9   |
| 2002 | 12.3       | 17.1  | 2.6        | 1.7   | 1.8        | 1.0   |
| 2003 | 12.1       | 17.0  | 2.6        | 1.6   | 1.6        | 1.0   |

Note: Numbers are in million units

Source: Reproduced from Hufbauer and Schott (2005)

However, the fact that the level of automobile sales in the U.S. in 2003 is still higher than in 1994 explains that there had been increases in the automobile imports. In fact, we can see that the sales of automobiles in the U.S. always exceed the number of units produced. That is, the U.S. always has been a net importer of the automobile trades. On the other hand, Canada and Mexico has been net exporters in automobile trades, as we also see in the table.

In the previous section, we have noticed that there had been little sign of import market penetration by other countries. This means that the decreases in the U.S. production of automobiles mainly substituted by the production and import from Canada and Mexico. It is well known fact that the U.S. big three auto makers have established a production networks through out the North America since the 1930s, when the big three started investment into Mexico. Especially through the 1965 Auto Pact with Canada and the 1977 Mexican Automotive Decree,<sup>17)</sup> the U.S. automakers vigorously expanded their production capacity in Mexico as well as in Canada. The U.S.-Canada FTA and the subsequent NAFTA later had given the U.S. automotive manufacturers chances to further streamline their production facilities into more cost saving ways.

However, as we see in the table below, although the U.S. investment into the Canadian and Mexican automobile plants had accumulated significantly compare to the rest of the world. The lion shares of investment still occurred within the U.S., where the world's largest demand existed. This had been also true for the foreign automakers who wanted to sell in the NAFTA markets. For the years between 1999 and 2003, the amount of direct investment into the U.S. by the European and Japanese automakers had been totaled to 26.26 billion U.S.\$\$. This number

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17) The 1977 Automotive Decree of Mexico invited many foreign automakers into the nation on the condition of meeting export requirement.

is almost ten times higher than their investment total of 2.9 billion U.S.\$ into the Mexico.<sup>18)</sup>

<Table II-9> Investment by the U.S. Auto Industry

| Year  | Canada | Mexico | Domestic | ROW  |
|-------|--------|--------|----------|------|
| 1994  | 2.1    | 1.0    | 18.0     | 2.1  |
| 1995  | 2.6    | 0.7    | 16.0     | 2.6  |
| 1996  | -0.6   | -0.2   | 17.9     | 1.5  |
| 1997  | 2.0    | 0.1    | 18.3     | 2.5  |
| 1998  | -2.2   | 1.3    | 27.5     | -0.5 |
| 1999  | 0.2    | 1.4    | 24.9     | 2.9  |
| 2000  | 4.5    | 1.1    | 29.8     | 2.3  |
| 2001  | 2.1    | -1.0   | 24.2     | 0.7  |
| 2002  | 2.1    | 0.6    | 23.6     | -0.3 |
| 2003  | 0.6    | -      | 24.2     | 0.9  |
| Total | 13.4   | 5.0    | 224.4    | 14.9 |

Note: Numbers are in billion U.S.\$

Source: Reproduced from Hufbauer and Schott (2005)

<Table II-10> Employments in NAFTA Countries

|      | U.S.          |               |                    | Canada        |               |                    | Mexico        |               |                    |
|------|---------------|---------------|--------------------|---------------|---------------|--------------------|---------------|---------------|--------------------|
|      | Auto Industry | Manufacturing | Unemploy. Rate (%) | Auto Industry | Manufacturing | Unemploy. Rate (%) | Auto Industry | Manufacturing | Unemploy. Rate (%) |
| 1994 | 1,168,500     | 17,021,000    | 6.1                | 128,742       | 1,716,245     | 10.4               | 122,063       | 1,409,238     | 3.5                |
| 1995 | 1,241,500     | 17,241,000    | 5.6                | 133,180       | 1,748,443     | 9.6                | 103,542       | 1,298,665     | 5.8                |
| 1996 | 1,240,300     | 17,237,000    | 5.4                | 137,718       | 1,788,952     | 9.7                | 110,559       | 1,332,931     | 4.3                |
| 1997 | 1,253,900     | 17,419,000    | 4.9                | 135,651       | 1,855,391     | 9.2                | 123,739       | 1,409,849     | 3.4                |
| 1998 | 1,271,500     | 17,560,000    | 4.5                | 144,968       | 1,916,170     | 8.4                | 138,711       | 1,459,307     | 2.9                |
| 1999 | 1,312,600     | 17,322,000    | 4.2                | 150,088       | 1,955,914     | 7.6                | 142,176       | 1,475,223     | 2.1                |
| 2000 | 1,313,600     | 17,263,000    | 4.0                | 153,866       | 2,253,900     | 6.8                | 148,489       | 1,495,822     | 2.2                |
| 2001 | 1,212,800     | 16,441,000    | 4.7                | 146,495       | 2,229,500     | 7.2                | 137,913       | 1,432,840     | 2.1                |
| 2002 | 1,151,200     | 15,259,000    | 5.8                | 149,099       | 2,291,000     | 7.7                | 127,759       | 1,360,866     | 2.4                |
| 2003 | 1,125,400     | 14,510,000    | 6.0                | 152,148       | 2,283,400     | 7.6                | 115,446       | 1,290,526     | 2.5                |
| 2004 | 1,109,100     | 14,329,000    | 5.5                | 149,151       | 2,297,000     | 7.2                | 112,885       | 1,260,103     | 3.0                |

Source: Hufbauer and Schott (2005) & World Bank, <http://web.worldbank.org/>

18) These figures are also from Hufbauer and Schott (2005)

If we look at the employment data, tabled above, we can find that the number of employment in the U.S. automobile industry had peaked in 2000 and had declined since then. That feature can be found in the Canadian and Mexican automobile industries, too. However, if compare the level of employment between 1994 and 2004, we can find that, except for Canada, the number had been decreased. Reminding the fact that the auto productions and sales in all three countries had grown from 1994 to 2004, the decrease in the number of employment may be used as an evidence for the restructuring of the auto industries throughout the North American regions. In fact, the total employment level in entire manufacturing sector took the similar path as automobile industry. Although it is not possible to find direct linkage, if we consider that the unemployment level has been lowered between 1994 and 2004, we may argue that the North American manufacturing industry, that include the automobile manufacturing, went through a serious process of restructuring with help from the NAFTA enactments and became more productive.

## 5-2. Electro Industry

Like the automobile industry, the electro industry is also believed to have benefited most by the enactment of NAFTA. In the section 3, we have seen that the trade of electro products across the NAFTA border had surged by large amounts since the launch of NAFTA. The table below showed the reason behind such increases in trade. That is, with the major share of the U.S. investment in the electro industry went to domestic sector, the U.S. investment in both domestic and world level fluctuated year after year. However, the share of foreign direct investment in Canada and Mexico had steadily increased. The combined share of

Canadian and Mexican investment, barely marked to be 3% in 1994, had grown into the range of 33~44% in years 2002 to 2004.

<Table II-11> U.S. Investment in the Electro Industry

|      | U.S.   | Canada         | Mexico         | ROW              | World Total       |
|------|--------|----------------|----------------|------------------|-------------------|
| 1994 | (C)    | 78<br>(2.29)   | 24<br>(0.70)   | 3,308<br>(97.01) | 3,410<br>(100.00) |
| 1995 | (C)    | 165<br>(3.69)  | 22<br>(0.49)   | 4,279<br>(95.81) | 4,466<br>(100.00) |
| 1996 | (C)    | 179<br>(4.18)  | (C)            | (U)              | 4,280<br>(100.00) |
| 1997 | 28,367 | 261<br>(5.60)  | (C)            | (U)              | 4,663<br>(100.00) |
| 1998 | 26,817 | 234<br>(11.40) | 8<br>(0.39)    | 1,811<br>(88.21) | 2,053<br>(100.00) |
| 1999 | 24,973 | 108<br>(10.82) | 87<br>(8.72)   | 803<br>(80.46)   | 998<br>(100.00)   |
| 2000 | 31,915 | 85<br>(7.88)   | 78<br>(7.23)   | 916<br>(84.89)   | 1,079<br>(100.00) |
| 2001 | 28,896 | 74<br>(11.06)  | 40<br>(5.98)   | 555<br>(82.96)   | 669<br>(100.00)   |
| 2002 | 16,329 | 98<br>(19.25)  | 89<br>(17.49)  | 322<br>(63.26)   | 509<br>(100.00)   |
| 2003 | 14,819 | 158<br>(26.73) | 100<br>(16.92) | 333<br>(56.35)   | 591<br>(100.00)   |
| 2004 | 14,872 | 263<br>(19.51) | 175<br>(12.98) | 910<br>(67.51)   | 1348<br>(100.00)  |

Note: Numbers are in million U.S.\$ and numbers in parenthesis are percentage to the world total. (C) means compressed data and (U) means unable to determine because of the data compression.

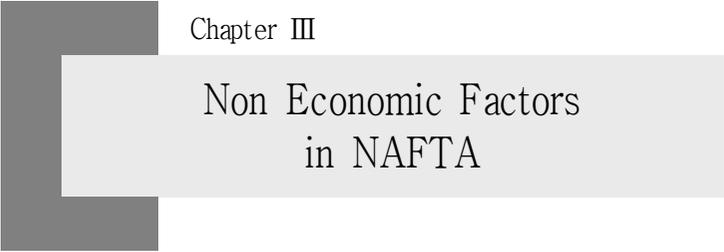
Source: <http://www.bea.gov/bea/di/dilusdbal.htm> U.S. Bureau of Economic Analysis

We have the data that the level of employment in Canadian electro industry has increased from 1994 to 2004, while that in the U.S. has decreased. Also in Maquiladora Mexico, where many foreign electro manufacturers have assembly plants, the employment level has been improved at least until early 2000. Even though the situation in Maquiladora has been deteriorated

with the new security measures after the terrorist attacks to the U.S. in 2001, the initial increases in the level of employment in Canadian and Mexican electro industry after NAFTA should have been a result of industrial restructuring around the U.S. As we will discuss later, Canada wanted to push its industrial structure into more high tech sector and Mexico needed to create jobs to fight poverty. That demands in both countries must be well complemented with the U.S. needs to restructure especially in the electro industry, too.<sup>19)</sup>

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19) Although it is argued that the automobile and electro industries are most benefited from NAFTA, we could detect many recent signs that these industries are again losing ground to the foreign competitions. However, the author believes that, at least for the first ten years, NAFTA helped them and, as times go by, the effectiveness has been weakened. The recent calls for the NAFTA II with customs union scheme should have related with concerns of weakening effectiveness of the original NAFTA.



Chapter III

Non Economic Factors  
in NAFTA



# 1. The Issues with the Borderline

## 1-1. Two Episodes among Many

In 1996, Andy McMechan was served 155 days in jail for his illegal selling of a couple bushels of U.S. grown barley in Canada.<sup>20)</sup> Individual sales of wheat and barley are prohibited in Canada and they should be sold through the Canadian Wheat Board. The monopoly agency argues that through the collective pricing they can protect Canadian farmers from volatile fluctuations of the world market. Mr. McMechan, however, was a Canadian farmer who happened to have farmlands in the U.S., as well as in Canada, and that caused the problem for him. Although he was born and grew up in Lyleton, Manitoba, Canada, he married an American girl who had lived a few miles away in Antler, North Dakota, USA. As her family had left her 640 acres of farmland there, Mr. McMechan had to farm that land as well as his own 1000 acres in the Canadian side of the border. Having done that, he had to occasionally cross the border and he almost became unaware of the very existence of the national boundary.

On the Sunday when Mr. McMechan was arrested, he went to the U.S. to clear snow from the driveway to his farmland in Antler. On the way back, however, he made a mistake to bring some of his own grown barley to Lyleton. Although he had been warned before not to sell his U.S. grown crops and not to come within one-half miles of the border, he thought it was not a big deal to cross the border especially on a quite Sunday. In fact, there were no problems, when he entered the U.S. territory in earlier that day. However, a few hours later when he came back

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20) This is a story abstracted from DePalma (2001)

to the same border, the atmosphere was completely changed. He was surprised to be greeted by not only customs officers but also by Mounties. His arrest became the national news, because he was portrayed as the symbol of a rebellion fought against the monopoly system in Canada. Although it was an unfortunate incidence for Mr. McMechan and many growing number of Canadian farmers who had challenged the monopoly power of the Canadian Wheat Board for a long period of time, it also reminded us that there are issues other than economics in the discussion of free trade agreements like NAFTA. In this case, it is about an old system in a new environment and people who have to live in the midst of those conflicting situations.

Although the above story was happened in the border between Canada and the U.S., we can find much more diverse stories from the other border of the NAFTA territories, that is, between Mexico and the U.S. Although it is a fictionalized in a movie, here is an interesting story that sharply shows the very existence of the border. The movie titled as “the Day after Tomorrow”<sup>21)</sup> is about the natural disaster related with sudden shifts in meteorological earth atmosphere.<sup>22)</sup> In the movie, as northern polar ice melted continuously due to the global warming, there happened sudden changes in ocean currents and that, in turn, caused a mega cold air pressure system in the northern hemisphere. The story led to a massive evacuation of the U.S. citizens to its southern neighbor, i.e. Mexico. However, in the movie, people were jammed in the bridge between the U.S. and Mexico, as the Mexican government closed the border. Frustrated people with only handful of their belongings cut the wire fence at the border and started to cross the Rio Grande on foot. This

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21) Twentieth Fox Century (2004)

22) Even though the issues involved in environmental protection and trade are hot topics in the debates over the globalization, this movie did not touch that matter.

is a complete reversal of what is really happening somewhere in the U.S.-Mexican border almost everyday.

This scene dramatized the fact of life in reality. That is, even though goods are now enjoying more freedom to cross the border with NAFTA, people are still not free to move. Illegal immigration at the border between the U.S. and Mexico, in fact, has been problems for decades long before NAFTA. However, despite the many hopes and beliefs, there has been little improvement for this problem even after NAFTA. In fact, after the wake of the 9-11 terrorist attack in the U.S., the border security problems became more exaggerated. At least for now, the mere abolishment of impediments to the movements of the goods has not been enough to be a panacea for the economic disparity along the borderline. After all, there existed two different systems that had been evolved through distinctive paths for many centuries. It takes time to balance the living standard of the two different economic systems and, until that will have achieved, there will always be problems arose from the national boundary issues and its people.

## 1-2. National Sovereignty Vs. Free Trade

There broke an outrage in the U.S. Congress when they heard the news of the U.S. quota for working permit to foreigners being on the negotiation agenda in the WTO ministerial meeting at Hong Kong in 2005.<sup>23)</sup> A group of Senators were reported to write a letter to Robert Portman, the U.S. Trade Representative then, warning not to use American jobs as a bargaining chip in WTO negotiations. Traditionally and legally, the immigration policy believed to be controlled by the U.S. Congress and they

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23) This is according to the report by CNN's Lou Dobbs Tonight, Dec. 9, 2005.

fear that the inclusion of immigration matters in free trade agreements may decrease their plenary power. However, as a matter of fact, the U.S. is already obliged to offer 65,000 H-1B visas for foreign workers each year under the WTO agreement. Likewise, the engagement in trade agreement is more or less involved with giving up some national sovereign power to the international treaties.

NAFTA was no exception and it should have been much serious concern for Canada and Mexico than the U.S., as they are much smaller countries in size and historically had feared of absorptions to their giant neighbor. Ever since the American colonists' attempts of convincing Canadians to join the fight against British after the end of the Seven Years war and following attacks on Quebec and Montreal in 1774, Canadians in their mind seemed have worried the U.S. invasion and, even today, Canadian general perceptions of the Americans seemed to be aggressive.<sup>24)</sup> In case of Mexico, that fear did not remain in a simple worry but the U.S. in fact disputed with Mexico several times and forced final border to be drawn along the Rio-Grande when the treaty of Guadalupe-Hidalgo was signed in 1848.<sup>25)</sup> Since then Americans must have seen as new conquerors who replaced powerful old Spain in the American continent and, in Mexican mind, the U.S. may be a neighbor whom they are inevitably depended upon, but not full heartedly trustful.

With these historical and emotional backgrounds, there must have involved a huge political risk for leaders in both countries

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24) DePalma (2001) described this sentiment by mentioning Kellogg's news paper ad for a new cereal, the Quintessentially Canadian Cereal, in which it said "Americans are known to be aggressive among other things..." See P. 193 of the book.

25) As a result of the treaty, parts of what are now, Texas, Colorado, Arizona, New Mexico and Wyoming, and the whole California, Nevada and Utah were given to the U.S.

when NAFTA was negotiated and agreed upon. As matters of facts, political leaderships both in Canada and Mexico at that time went in disgrace after the NAFTA negotiations were completed. In Canada, the former prime minister,<sup>26)</sup> Mr. Brian Mulroney was furiously humiliated in October 1993 election, as his party, Progressive Conservative Party, went from a majority of 169 seats among 292 total parliamentary seats to just taking 2 seats. In March 1995, the former president Carlos Salinas of Mexico, who was in charge during the time of the NAFTA negotiations, also had to seek a political asylum in the U.S., and later in Canada, after a few days of hunger strike against accusations from his successor, President Ernesto Zedillo, and his cabinet members for the wrong doings during the presidency and that eventually leading to the economic crisis at the time of his departure. Although not as much disgraced as other counterparts, it was the President George Bush, who actually initiated and negotiated NAFTA but failed to get reelected in the late 1992 presidential election, during which he had to fight against Ross Perot's the famous giant sucking sound campaign and eventually lost to the president William Clinton, who got responsible for the final stage of NAFTA. As we saw in the downfall of the leaderships in all three countries involved, entering into a free trade agreement posed a great danger to the power of politics. Despite the perilous outcomes, if the leadership at that time bet on NAFTA, there should have been some positive expected gains enough to overcome such a danger, that we now turn our interest in.

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26) Although the Canadian Prime Minister at the time of the election was Kim Campbell, Mulroney's successor, the election defeat was considered to be a public revenge against Mulroney, who led Canada into the FTA with the U.S. in 1987.

## 2. Sociopolitical Backgrounds of NAFTA

### 2-1. Mexican Perspective

From the standpoint view of the western capitalists, Mexico long had been a protectionist economic regime, at least until Mexico finally joins the GATT in 1988. Although high tariffs and import substitutions had helped Mexican economy achieved relatively high growth from 1940s to 1960s, competitions had been kept out of Mexico for a long time. With the lack of innovations under the protectionist policy, however, Mexican economy had continuously lost its vigor as times went by. Especially, after being deluded by the oil crisis of the early 1970s, the sudden drops in oil prices forced Mexico to default external debts. With such a hard hit to Mexico, it became clear that the protectionist policy could no longer be self-sustainable. It was President Miguel de la Madrid who first realized that protectionist policy should have reversed to draw foreign capitals needed for the revitalization of the Mexican economy. In return for the joining GATT with lowering tariffs and other non-tariff barriers, Mexico could have rescheduled its debt with the help of the United States, under the name of Brady plan.

However, Mexico needed more than simple rescheduling not only for the repayment of the debts but also to feed its population of nearly 100 millions. Without more dramatic measures against economic catastrophe that seemed to have been long overdue, Mexico could not escape from chronic poverty and start rebuilding process of the national economy. President Carlos Salinas de Gortari, the immediate successor of the President Miguel and an economist graduated from Harvard, knew one method to revive the lagging economy, proven from the experience of many developing countries mainly in Asia. That

method was luring foreign investment to build the modernized manufacturing industry and exporting goods to developed countries. Fortunately, Mexico had the world's largest export market just across its northern border and it is the U.S. If Mexico came up with an arrangement to lower or remove the tariffs for the goods that crossed the U.S. and Mexican border, the increases in Mexican export to the U.S. would benefit Mexico, at least in theory.

However, Salinas hesitated first, because he thought that such a deal was for the countries with similar economies. Fearing it would harm rather than benefit Mexico, as two countries were so different and unequal, Salinas first thought of an alternative and decided to have Europe as a partner. When he went to the international economics forum at Davos, Switzerland in 1990, however, he found that responses from European countries were not that favorable. In fact, they were busy in dealing with new markets fallen out of the recently dissolved soviet bloc and not much interested in the faraway country like Mexico. Now President Salinas had left with no other options but to strike a deal with the U.S. One late night at Davos, the Mexican commerce secretary then, Jamie Serra Puche recalled, the president Salinas appeared in front of his door and told him to start negotiating a comprehensive deal with the U.S. at the meeting scheduled a few hours later in the very next morning with Carla Hills, the U.S. trade representative then.<sup>27)</sup> Once received a favorable response from the U.S. Salinas became one of the most outspoken proponents of the free trade.

Although many Mexicans considered a movement by the President Salinas and his party, the PRI,<sup>28)</sup> as a surrender of national sovereignty, he virtually had no political challenges for

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27) This recollection of dramatized scene is abstracted from De Palma (2001).

28) In English, it can be translated as Institutional Revolutionary Party.

his decision. After all, his party had ruled Mexico for nearly seventy years under various names and he had a solid rock bottom support at Mexican parliaments. President Salinas in fact tried to use this opportunity not only for his country to break the chain of longtime poverty but also for prolonging his political life. Limiting only a six years single term by the constitution, Mexican presidents often went in disgrace after leaving the presidential office. Salinas may have dreamed of becoming the first president to leave his office in grace and being remembered as the founding father of a modern industrial Mexico. It is an irony, however, he too had to leave an exile later. Once considered to be the first secretary general of the newly established WTO in 1995, as mentioned earlier, he has to live an exile life in the U.S. and later in Canada. Although he had lost the gamble for his political life, we don't know yet whether it was worthy for Mexico as whole to take such big risks.

## 2-2. Canadian Perspective

While modernizing its industry to escape from poverty and to develop exports sector is a good explanation for Mexico to take such a huge gamble, it was somewhat less clear why Canada joined in the U.S.-Mexican deal. Especially considering the unpopularity among the Canadian people about the U.S.-Canada FTA a few years back in 1988, it was rather surprising that the then ruling party, the Progressive Conservative Party, took part in the negotiations and make it trilateral talks. Although the Prime Minister Mulroney, faced with growing deficits, rising unemployment, and falling investors confidence, finally abandoned century long policy of deliberate isolation from its giant neighbor and completed the deal to dismantle the trade barrier along the border with the U.S., general Canadian public feeling was that

they surrendered the last line of their national defense. Even though the deal was easily ratified in the parliament with the strong support from big businesses, Canadian nationalists painted Mr. Mulroney as a traitor to sell their national sovereignty and throw a red carpet for the U.S. to colonize Canada across the border.

When the Prime Minister heard the news about the U.S.-Mexico deal, however, he may have worried that the benefit of the U.S.-Canada FTA would be snatched off by the new agreement and Canada would be left out cold. He was reported to consider a separate deal with Mexico, but only to conclude that such a deal would be no match with the giant U.S. That thought might led him to take part in three way negotiations. Despite the fact that he became unpopular after the U.S.-Canada FTA, as he himself believed that Canada had benefited nicely with the FTA, he may have convinced that Mexico would also become a good trading partner for Canada. In addition, he thought that two small countries, by acting together in defense of commonly shared interests, would have better leverage on negotiation with the big country like the U.S. Worrying political backlash, Mr. Mulroney wisely decided not to run for reelection and succeeded the prime minister position to the head of his party, Kim Kempbell. However, when the new Prime Minister called an election in late 1993, Canadian voters considered that as a chance to revenge against Mulroney for the agreement in 1988. As we mentioned earlier, in the election that time, the Progressive Conservative Party suffered a humiliating defeat and the trilateral deal would come to a sudden end.

Mr. Jean Chrétien, the winner at that election as the head of the Liberal Party was widely believed to be against the free trade with the U.S., and anti-free trade politicians in the U.S. had cheered as the deal seemed to die soon. It was the famous story that Ross Perot, the most vocal opponent of the U.S.-Mexican

free trade at that time even telephoned Chrétien and promised him to build a monument to him in Texas when he hit the final blow to the agreement. As a masterly skilled politician, however, Mr. Chrétien saw an excuse to change his position by pointing out that it was a good opportunity for Canada to be out of recession. Canadians, after all, were only angry with Mulroney and his party and conceded that the deal with the U.S. in 1988 could not be reversed. With that understanding, there formed a consensus among Canadian people, if cannot block the deal, it had to be negotiated at least in a way to address the issues Canadian concerned most. Canada demanded the stricter rule on environments and labor standard. They could protect their local industries from the dumping of cheap Mexican goods. They were even awarded the rights to take action, if they felt Canadian cultures were invaded. In addition and most importantly, they got the deal with the U.S. in helping Canada to restructure their industries into higher value added form of the advanced technology. In other words, the Canadian participation into NAFTA became possible again with the support from big businesses that had stakes both in the U.S. and Canada.

### 2-3. U.S. Perspective

In 1980, during his campaign as a presidential candidate then, Mr. Reagan vaguely proposed a hemisphere wide free trade arrangement in the American continent. This proposal had first realized into the U.S.-Canada FTA in 1988 and, at that time, there were virtually no opposition to the agreement in the U.S. While it became a huge national debate in Canada, U.S.-Canada FTA was virtually unnoticed at the national level in the U.S. Although Canadians think that they have national heritage that is far different from its southern neighbor, the U.S. people

traditionally does not even realize that there exists a national border in the north and tend to consider Canada as a part of their territory. Not only from the perspective of culture and history but also from the viewpoint of the everyday life, economic and social, they believe that they are the same, or somewhat superior, and the U.S. people usually don't feel any objections to do business with Canadians. Considering these kinds of sentiments within the U.S., it was rather natural that ordinary people had no hard feeling against the free trade between the U.S. and Canada.

However, it was the far different story when the news of making free trade deal with Mexico was heard. It was a shock to most of the ordinary U.S. people that their first rated nation went shoulder to shoulder with a the third rated country for free trade. It seemed to be a conspiracy that tried to steal their jobs with cheap labors from the underdeveloped country. Politicians were quick to cash in the mood among ordinary working class voters. Ross Perot, an independent candidate in the presidential election in 1992, even urged voters to listen for the giant sucking sound of American jobs heading south into Mexico. Even though it was passed in the U.S. House of Representatives in 1993, by a vote of 234 to 200, where three fourth of the republicans and only a handful of democrats supports the deal, it was rather unpopular deal especially among blue collar workers in the U.S. To make it passed, even the President Salinas of Mexico had to campaign hard in the U.S.<sup>29)</sup>

However, it was not President Salinas or President Clinton who was really behind NAFTA to pass the U.S. congress at that time. It was the growing competition from the outside world, especially from Asian countries. Once dominating and leading

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29) There were rumors that Mexican government had spent the total of the 45 million U.S.\$ for campaigns to convince Democrats in the U.S. House of Representatives and Senate to approve the bill.

forces in the world economy and trade, the many U.S. industries are on the verge of being driven out of competitions. Automakers from Japan seemed to outperform the U.S. big three counterparts. Electronic chips from Korea also seemed to take technical edges over the U.S. makers. Not only in such a high tech and high value added products, variety of low priced goods from China seemed to flood into almost every corner of the U.S. market. The U.S. manufacturing sector needed a partner to help them fight against infiltration in every direction, especially against the lower labor cost advantaged. Even though the majority of working class people did not like the idea, for the U.S., Mexico was a best choice for being a partner for such a defense. With Mexico, U.S. seemed to be able to recover the comparative, if not absolute, advantage in high value added sectors, such as automobile and electro industries. Also in the low value added industries, by modernizing its neighbor with plenty of labor, the growing dependence of the U.S. on the semi-market economy of the far away Asia could be lessened.



Chapter IV

Contemporary Korea and  
Its Neighbor



# 1. Economic Environments

## 1-1. Overall Economic Size

In 2004, the combined GDP of the selected Asian countries, Korea, Japan, and China, is about 7,374 billion U.S.\$. If we compare this number with the GDP of the NAFTA countries, tabled in the chapter II, it is about 60% level. However, that is because of the extra large size of GDP for the U.S., the world's largest economy. We can see that, in terms of the GDP size, Asian countries are more balanced than the NAFTA countries. That is, in 2004, the GDP sizes of Korea and China are respectively about 11.55% and 29.10% of the Japan, while that of Canada and Mexico are respectively 7.35 and 5.79% of the largest U.S. Comparing to 1994, this is the result of the surging Chinese GDP size, which had grown almost 2.4 times. Although Korea and Japan also had enlarged their GDP sizes, they were no matches for the Chinese economic growth during the same periods. While it is the order of Japan, China, and Korea in terms of the GDP sizes, the per capita GDP of Korea is more than 10 times higher than China and is about 1/3 of the Japan. That is, in terms of per capita GDP, it is the order of Japan, Korea, and China.

<Table IV-1> GDP Comparison for Selected Asian Countries

|       | 1994                 | 1995                 | 1996                 | 1997                 | 1998                 | 1999                 | 2000                 | 2001                 | 2002                 | 2003                 | 2004                 |
|-------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Korea | 532.54<br>(11,943)   | 605.62<br>(13,455)   | 621.28<br>(13,682)   | 549.82<br>(12,007)   | 347.63<br>(7,533)    | 448.68<br>(9,653)    | 511.66<br>(10,938)   | 465.43<br>(9,894)    | 513.75<br>(10,868)   | 556.10<br>(11,717)   | 605.44<br>(12,709)   |
| Japan | 4,769.48<br>(38,119) | 5,280.37<br>(42,085) | 4,731.23<br>(37,606) | 4,330.99<br>(34,335) | 3,956.31<br>(31,285) | 4,556.12<br>(35,943) | 4,953.91<br>(38,998) | 4,410.59<br>(34,650) | 4,253.95<br>(33,356) | 4,719.43<br>(36,946) | 5,243.10<br>(40,987) |
| China | 637.10<br>(528)      | 716.87<br>(588)      | 790.52<br>(642)      | 860.54<br>(693)      | 928.80<br>(741)      | 995.48<br>(788)      | 1,079.00<br>(847)    | 1,156.79<br>(901)    | 1,259.73<br>(975)    | 1,388.24<br>(1,068)  | 1,525.70<br>(1,166)  |

Note: GDP are in billion U.S.\$ in 2000 price level and Per Capita GDP in Parentheses are in U.S.\$

Source: IMF, International Financial Statistics, 2005.

## 1-2. Regional Trade

The table below shows that the export performances of Asian countries that we are interested in this article. Here, we can see that the exports of Korea, Japan, and China have all increased. During the periods between 1993 and 2004, Chinese total exports to the world had increased more than 5 times and Korean total exports had increased 3.5 times, while Japanese total exports has increased just 1.6 times. Except for Japan, these increases in total exports in two Asian countries exceeded that of the NAFTA countries, which had been increased 2 or 3 times as we saw in the chapter II. If we look at export performance of each country more closely, we can again see that the growing importance of China within Asian market. While Korean exports to Japan had increased by less than 1.9 times, its exports to China had increased more than 11.6 times. As a result, Korea's export share to China had increased more than 3 times and their import market share in China also had been more than doubled. Thanks to surge in export to China, Korea's exports to their neighbors became larger than to the NAFTA countries. For Japan, NAFTA still is its largest export market, even though the gap had been diminished to a very small level. Like Korea, this result in Japan again happened because of its growing trade dependence on China. On the other hand, from the perspective of China, NAFTA became a more important exports market than its neighbor Korea and Japan. Even though their import market shares in both Korea and Japan had been increased significantly, their export shares had been stayed relatively unchanged. However, as Chinese export to the NAFTA countries had surged more than 6.7 times, both of their export share and import market share had increased significantly.

<Table IV-2> Export of the Selected Asian Countries

| Exporter | Importer  | 1993                  |                     |                     | 2004                  |                     |                     | B/A   |
|----------|-----------|-----------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|-------|
|          |           | million U.S.\$<br>(A) | Export Share<br>(%) | Market Share<br>(%) | million U.S.\$<br>(B) | Export Share<br>(%) | Market Share<br>(%) |       |
| Korea    | Japan (J) | 11,742                | 15.21               | 4.86                | 22,063                | 8.09                | 4.85                | 1.88  |
|          | China (C) | 5,360                 | 6.94                | 5.17                | 62,250                | 22.83               | 11.09               | 11.61 |
|          | J+C       | 17,102                | 22.15               | 4.95                | 84,313                | 30.92               | 8.30                | 4.93  |
|          | NAFTA     | 20,278                | 26.26               | 2.46                | 58,496                | 21.45               | 2.86                | 2.88  |
|          | World     | 77,209                | 100.00              | 2.03                | 272,660               | 100.00              | 2.87                | 3.53  |
| Japan    | Korea (K) | 20,016                | 5.14                | 23.11               | 46,145                | 7.46                | 20.56               | 2.31  |
|          | China (C) | 23,303                | 5.98                | 22.49               | 94,372                | 15.26               | 16.81               | 4.05  |
|          | K+C       | 43,319                | 11.12               | 22.77               | 140,517               | 22.72               | 17.88               | 3.24  |
|          | NAFTA     | 123,200               | 31.64               | 14.96               | 156,199               | 25.25               | 7.64                | 1.27  |
|          | World     | 389,442               | 100.00              | 10.26               | 618,554               | 100.00              | 6.52                | 1.59  |
| China    | Korea (K) | 3,929                 | 2.47                | 4.54                | 29,585                | 3.67                | 13.18               | 7.53  |
|          | Japan (J) | 20,652                | 12.98               | 8.54                | 94,335                | 11.70               | 20.74               | 4.57  |
|          | K+J       | 24,581                | 15.44               | 7.49                | 123,920               | 15.36               | 18.24               | 5.04  |
|          | NAFTA     | 36,529                | 22.95               | 4.44                | 246,770               | 30.60               | 12.06               | 6.76  |
|          | World     | 159,162               | 100.00              | 4.19                | 806,511               | 100.00              | 8.50                | 5.07  |

Note: Data is based from Importer Countries. Export share is calculated for the total export of each country, while market share is calculated for the total import of concerned market.

Source: KITA, IMF

### 1-3. Trades for Individual Product Groups

The Table below shows that the most increased and decreased exports items of Korea, Japan, and China to the other two Asian countries in terms of SITC 2 digits level. Similar to the investigation conducted in chapter II, where we have looked for the most increased export items among the NAFTA countries, we can find a product group that had increased substantially among the Asian countries of our interest. That group is the electro product (SITC 77) and it is the number one item in terms of export increase for Korea and Japan and the number two item for China.

<Table IV-3> Most Increased and Decreased among Asian Trades

| Rank | Korean Export  |          |         |        | Japanese Export |          |         |        | Chinese Export |          |         |        |
|------|----------------|----------|---------|--------|-----------------|----------|---------|--------|----------------|----------|---------|--------|
|      | Most Increased |          |         |        | Most Increased  |          |         |        | Most Increased |          |         |        |
|      | SITC           | 91-93(a) | 2000(b) | b-a    | SITC            | 91-93(a) | 2000(b) | b-a    | SITC           | 91-93(a) | 2000(b) | b-a    |
| 1    | 77             | 1,216    | 7,696   | 6,480  | 77              | 4,776    | 17,518  | 12,742 | 84             | 4,882    | 15,616  | 10,733 |
| 2    | 33             | 599      | 5,213   | 4,613  | 87              | 1,096    | 3,467   | 2,371  | 77             | 433      | 6,675   | 6,242  |
| 3    | 75             | 173      | 3,100   | 2,928  | 76              | 1,999    | 4,015   | 2,015  | 75             | 120      | 3,880   | 3,760  |
| 4    | 58             | 483      | 2,855   | 2,371  | 51              | 1,474    | 3,427   | 1,953  | 89             | 964      | 4,007   | 3,043  |
| 5    | 51             | 336      | 2,482   | 2,146  | 67              | 3,742    | 5,642   | 1,900  | 76             | 381      | 3,396   | 3,015  |
| 6    | 65             | 983      | 3,042   | 2,059  | 58              | 1,148    | 3,027   | 1,879  | 03             | 1,079    | 2,866   | 1,787  |
| 7    | 76             | 719      | 1,838   | 1,119  | 75              | 1,112    | 2,842   | 1,731  | 85             | 474      | 1,894   | 1,420  |
| 8    | 67             | 2,110    | 3,143   | 1,033  | 65              | 1,672    | 3,265   | 1,593  | 65             | 1,909    | 3,314   | 1,405  |
| 9    | 64             | 107      | 911     | 804    | 72              | 4,377    | 5,887   | 1,510  | 05             | 1,007    | 2,122   | 1,115  |
| 10   | 61             | 234      | 1,031   | 797    | 88              | 973      | 2,089   | 1,116  | 32             | 524      | 1,518   | 995    |
| Rank | Most Decreased |          |         |        | Most Decreased  |          |         |        | Most Decreased |          |         |        |
|      | SITC           | 91-93(a) | 2000(b) | b-a    | SITC            | 91-93(a) | 2000(b) | b-a    | SITC           | 91-93(a) | 2000(b) | b-a    |
|      | SITC           | 91-93(a) | 2000(b) | b-a    | SITC            | 91-93(a) | 2000(b) | b-a    | SITC           | 91-93(a) | 2000(b) | b-a    |
| 1    | 84             | 2,193    | 1,025   | -1,168 | 78              | 1,973    | 1,934   | -39    | 33             | 2,310    | 1,819   | -491   |
| 2    | 85             | 444      | 149     | -295   | 61              | 130      | 97      | -34    | 26             | 426      | 351     | -75    |
| 3    | 83             | 355      | 121     | -234   | 54              | 199      | 179     | -20    | 08             | 247      | 213     | -34    |
| 4    | 29             | 226      | 161     | -65    | 90              | 31       | 21      | -10    | 22             | 205      | 173     | -32    |
| 5    | 82             | 111      | 75      | -35    | 32              | 18       | 7       | -10    | 42             | 23       | 9       | -14    |

Note: Individually calculated from the original data by the author and export volumes are in million U.S.\$.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

Also included into the top 10 most increased export items for all the Asian countries of our interest were, the textile and fabrics (SITC 65), the office machine and the automatic data processing machine (SITC 75), and the telecommunication and sound recording machine (SITC 76). In the absence of the regional trade arrangement like NAFTA, that we are interested in this article, the increase in the export volume into the region might have resulted in the increase in the level of the interdependency each other. Therefore in the next subsection, we will look for the changes in the level of intra industry trade among Asian nations of our interest. Before doing that, however,

it is worth note that there also are items that had decreased in the export volume. Although, in most cases, the decreased volume had been small, the export of the articles of apparel and clothing accessories (SITC 84) for Korea had decreased more than one billion U.S.\$. It is interesting to note that the same product group is the product group with most export increase in China. Similarly, the leather and leather manufacturers (SITC 61) is the second on the list of the Japanese export decrease and, at the same time, in the top 10 lists of the Korean export increases. One more thing to note before proceed into the next subsection, the Japanese export of automotive into the Asian neighbor had been decreased. This might be the result of the relocation of production reallocation by the Japanese automakers that we also have discovered in the earlier section.

#### 1-4. The level of Intra Industry Trade among Asian Countries.

One surprising result from the table below, in which the top 10 products groups with most increased level of the intra industry trade is that we can find no single product group that commonly had increased in the level of the intra industry trade. For the general machinery and equipment (SITC 74), the office machine and the automatic data processing machine (SITC 75), and the professional and scientific precision instruments, although there are some signs of growing interdependencies between Korea and Japan and between Japan and China, we cannot find the increase in the level of intra industry trade between Korea and China. The lack of interdependencies among Asian nations might the result of growing competition among them and we will investigate such a possibility in the next subsection.

<Table IV-4> Most Increased Intra Industry Trade

| SITC | Korea ↔ Japan     |             |                 | Korea ↔ China |                   |             |                 | Japan ↔ China |                   |             |                 |
|------|-------------------|-------------|-----------------|---------------|-------------------|-------------|-----------------|---------------|-------------------|-------------|-----------------|
|      | 91-93<br>Avg. (%) | 2000<br>(%) | Increase<br>(%) | SITC          | 91-93<br>Avg. (%) | 2000<br>(%) | Increase<br>(%) | SITC          | 91-93<br>Avg. (%) | 2000<br>(%) | Increase<br>(%) |
| 64   | 30.49             | 94.84       | 64.35           | 66            | 33.07             | 90.43       | 57.36           | 78            | 4.27              | 57.79       | 53.52           |
| 57   | 0.00              | 35.86       | 35.86           | 54            | 18.04             | 71.15       | 53.10           | 76            | 46.00             | 92.70       | 46.70           |
| 23   | 18.24             | 53.12       | 34.88           | 71            | 42.70             | 93.13       | 50.43           | 88            | 54.29             | 97.10       | 42.81           |
| 55   | 10.97             | 39.88       | 28.91           | 01            | 2.76              | 46.38       | 43.61           | 62            | 19.59             | 59.97       | 40.38           |
| 08   | 63.35             | 91.77       | 28.41           | 79            | 50.86             | 91.02       | 40.16           | 74            | 11.87             | 49.52       | 37.65           |
| 75   | 35.15             | 62.63       | 27.48           | 88            | 38.11             | 77.77       | 39.66           | 87            | 19.75             | 55.55       | 35.79           |
| 87   | 12.47             | 38.41       | 25.94           | 81            | 57.21             | 95.11       | 37.90           | 75            | 37.13             | 72.09       | 34.96           |
| 41   | 2.40              | 26.64       | 24.24           | 43            | 0.00              | 31.33       | 31.33           | 71            | 43.24             | 77.28       | 34.04           |
| 74   | 14.38             | 37.96       | 23.58           | 56            | 19.95             | 50.44       | 30.48           | 79            | 13.85             | 45.46       | 31.61           |
| 58   | 39.43             | 61.58       | 22.15           | 62            | 48.64             | 78.91       | 30.28           | 52            | 20.05             | 49.20       | 29.15           |

Note: Individually calculated from the original data by the author.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

### 1-5. Export Market Competition among Asian Countries.

One of the most commonly used index that is used for measuring the competition between a pair of countries is the export similarity index, defined as follows:

$$E_{hij}^K \equiv \sum_{k=1}^n \min\left(\frac{X_{hi}^k}{X_{hi}^K}, \frac{X_{hj}^k}{X_{hj}^K}\right) \times 100 \quad (\text{Eq. 2})$$

where  $X_{hi}^k$  is export of good k from country i for country h,  
 $X_{hi}^K$  is export of group K from country i for country h,  
 $X_{hj}^k$  is export of good k from country j for country h,  
and  $X_{hj}^K$  is export of group K from country j for country h.

Here, if an index between two counties is closer to 100%, we can say that the composition of exports item between two

countries is more similar and, as a result, it shows that there are more competitions for the product group in concern. On the other hand, if it closer to 0%, we can say that there is fewer competitions. Using this index, we calculated the level of export market competitions among Korea, Japan, and China in the U.S. market, which is the largest export market for each of the Asian countries in NAFTA, and the table below shows that the top 10 items with most increases in the export similarity index between the period between 1991 and 2000.

<Table IV-5> Most Increased Export Similarity Index

| SITC | Korea ↔ Japan     |             |                 | Korea ↔ China |                   |             |                 | Japan ↔ China |                   |             |                 |
|------|-------------------|-------------|-----------------|---------------|-------------------|-------------|-----------------|---------------|-------------------|-------------|-----------------|
|      | 91-93<br>Avg. (%) | 2000<br>(%) | Increase<br>(%) | SITC          | 91-93<br>Avg. (%) | 2000<br>(%) | Increase<br>(%) | SITC          | 91-93<br>Avg. (%) | 2000<br>(%) | Increase<br>(%) |
| 12   | 29.38             | 98.33       | 68.95           | 97            | 0.00              | 100.00      | 100.00          | 97            | 0.00              | 100.00      | 100.00          |
| 28   | 7.73              | 67.04       | 59.31           | 08            | 0.00              | 83.78       | 83.78           | 32            | 29.06             | 98.73       | 69.67           |
| 33   | 19.86             | 71.71       | 51.86           | 24            | 0.00              | 73.86       | 73.86           | 23            | 45.34             | 95.63       | 50.30           |
| 08   | 33.33             | 77.13       | 43.80           | 34            | 0.00              | 73.32       | 73.32           | 26            | 7.42              | 50.13       | 42.71           |
| 93   | 66.67             | 100.00      | 33.33           | 42            | 20.73             | 75.11       | 54.38           | 34            | 0.00              | 42.21       | 42.21           |
| 61   | 28.76             | 54.16       | 25.40           | 23            | 44.22             | 95.63       | 51.41           | 67            | 15.83             | 55.68       | 39.85           |
| 75   | 60.31             | 83.84       | 23.53           | 55            | 35.98             | 82.80       | 46.81           | 06            | 15.26             | 52.62       | 37.36           |
| 67   | 40.16             | 62.85       | 22.69           | 67            | 11.00             | 57.58       | 46.58           | 63            | 22.41             | 55.48       | 33.07           |
| 63   | 32.76             | 55.29       | 22.53           | 26            | 4.32              | 48.72       | 44.40           | 68            | 16.98             | 49.23       | 32.25           |
| 34   | 49.95             | 68.89       | 18.94           | 06            | 13.98             | 52.62       | 38.64           | 75            | 63.92             | 93.31       | 29.39           |

Note: Individually calculated from the original data by the author.

Source: NBER-UN World Trade Data obtained from [www.nber.org/data](http://www.nber.org/data)

Unlike when we were concerned with the intra industry trade index, where we found few signs of the growing interdependencies, we can find many overlapping products groups in which the level of export market competitions had increased. Especially, in the natural and manufactured gas (SITC 34) and iron and steel (SITC 67), the export market competitions in the U.S. among Korea, Japan, and China had been all increased. Also there are four other product groups in which the U.S. market competition

between Korea and China and between Japan and China, two other product groups in which the U.S. market competition between Korea and Japan and between Japan and China had been commonly increased. On the other hand, there is only one product group in which the export competition in the U.S. market between Korea and Japan and between Korea and China had increased simultaneously. From these observations, we can say that there had been increases in the level of export market competition among Asian countries. This result well is conformed of the expectation that we made in the previous subsection in which we could not find any significant increases in the level of interdependencies among Asian countries.

## 2. North America 10 Years Ago and Northeast Asia Today

In the subsection above, we have seen that the economic environment around Northeast Asian nations is very different from what the NAFTA countries had faced 10 years ago. Although there is a growing interdependency among Northeast Asian countries, its level is unlike the situation in the North America ten years ago. In 1993, while the U.S. trade share with Canada and Mexico combined was 27.46%, Canadian and Mexican trade shares with the U.S. were well over 70%. However, in 2004, the export shares of Korea, Japan, and China with two other partners are at most 30%. That is, the super dependency on a single country by its neighbors, like Canada and Mexico on the U.S., does not exist in Northeast Asia at least in terms of Trade. In the North America, the U.S. is a superpower who dominates other neighbors not only in terms of the economy but also in almost every aspect of the national

power that include the military strength. However, in Northeast Asia, such a super dominance by a single country does not established at least yet. Of course, in terms of the economics, Japan is the leader with their total GDP being more than eight folds of Korea and three folds of China. In terms of per capita GDP, especially, one might say that Japan is a dominant power with its level more than \$40,000, while Korea's per capita GDP is only one third at about \$13,000 and China's GDP is far behind at about \$1,200. However, considering other aspects of national strength, it is not certain that Japan is a single superpower. That is, in terms of the population, the size of the territory, the military strength, and so on, China might become a super dominant power in the Asian Region in the future. In fact, there exists military tensions in between China and Japan and, if the militaristic North Korea is brought into the picture, the situation becomes more complicated. Economic cooperation, not the integration, is that much difficult in this region with no clearly dominant leader in terms of national power.

As was mentioned in the chapter III, the forming of a regional trade arrangement often involves with the national sovereignty problem. In the North America, however, there had been compelling reasons to overcome such issues for each country, at least from the viewpoint of the political leaders who hold the power at that time.<sup>30)</sup> That is, ten years ago in the North America, each nation had faced with growing economic difficulties and that had been the driving force to bypass the national sovereignty issues. However, in the Northeast Asia today, there seem no urgent reasons to give up even a tiny part of the national sovereignty for the sake of a regional trade arrangement. To be more precise, economic situation in the

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30) Even though they had paid the price, as was explained in the section II, it seemed that the leaders for each country at the time believed that their move was right.

Northeast Asia today is far different from what the North American nations faced ten years ago. Although Korea and Japan have been experiencing economic hardship for some time now, their industries are still considered to be leading classes at least in high tech industries with high value added products. Considering China especially, they are winning in almost every aspect of the economy and there seem to be no serious challengers for them to be a world's leading economic power. In short, Chinese economic future looks too bright to take an idea of a regional economic collaboration seriously.

Not only in the national level, but also in the industry level, Korea, Japan, and China are not yet seem to need a joint alliance even in a ever more competitive environment these days. In this article, we could identify the automobile and the electro industries as a supporting force behind the political leadership in the NAFTA countries. They, at that time, desperately needed to go through the serious restructuring process in the face of growing international challenges, especially from Asia. As it was shown in the previous subsection immediately above, however, we cannot find the industries in need of mutual cooperation of all the three nations in the Northeast Asia. Although there exist several industries with growing interdependence between a duel pair, measure in term of the Grubel-Lloyd indices, we cannot find a single industry with the trilateral interdependency. Furthermore, by investigating the export similarity indices, we could find that the level of competitions among three nations in the major export markets is still on rise.



Chapter V



# Lessons and Recommendations



## 1. Northeast Asian Economic Integration in Reality

As we see in the section immediately above, compare to the situation for the NAFTA countries 10 years ago, the atmosphere in the Northeast Asia is not that favorable for an imminent regional integration scheme at least in the economic perspective. Under such circumstances, however, it is interesting to witness that talks about the Northeast Asian economic integration are in some sense inundated all over the region. It may be out of the frustration that the preferential trade arrangements in other regions spread widely all over the world. While other nations had been actively engaged in the FTA and the similar arrangement, Korea, Japan, and China were among the last countries without such a scheme until very recently. Once out of a long isolation from such a race, each country in the Northeast Asia now looks to be in a race of its own. In addition, they all seem to agree in the necessity of the regional economic cooperation and integration in the future. They emphasize the harmonization among them to compete with the giant economic blocks such as the EU and NAFTA in other continents. However, in reality, they are now competing each other to take an advantageous position for a possible future regional economic integration scheme. They are all negotiating with ASEAN countries, but not with each other.<sup>31)</sup> They are seeking partners in other parts of the globe, but not within their own region. Political leaders in the all three countries, of course at occasion, ballooned a need for the deeper regional economic cooperation, but it in fact is a fairly diplomatic gesture. Business leaders who are vocal for the regional integration often coincide with the

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31) Korea and Japan stop negotiating the FTA between them since November 2004 and it is not clear when or whether it will be resumed.

direct beneficiary of such a regime, but they do not have enough power and legitimacy to direct the nations into the direction where they want to be. Academic scholars who voiced loudly for the necessity of such a scheme often live in their own knowledge world, but the actual situations around are usually very different from what they see. In fact, throughout this article, it is shown that there are many huddles that should be removed in the Northeast Asia even just to start any meaningful and fruitful discussion about the real economic integration in this region. The following subsection will discuss what need to be done for such favorable environments.

## 2. Lessons for Northeast Asian Economic Integration

Often found in the talks of the Northeast Asian integration, many expected that the simple launch of the economic integration scheme in this region guaranteed the mutual improvements in their common economic future. However, as we see in the early part of this paper, there is not a clear evidence yet that NAFTA had directly improved the growth rate of the countries involved. Contrary to what many expected, prior to NAFTA, it was not sure that the economic gaps between Mexico and their rich partners, the U.S. and Canada, were narrowed. In the case of the NAFTA, there were clear leaders in both national and industrial levels. In the national level, it was the U.S. who held the leadership position and can give carrots, and sometimes sticks, to convince its neighbors to join them. There were the automobile and the electro industries that were able to collaborate each other to survive the competition from outsides. Even though the increasing economic growth was possible in

theory, they needed tangible gains that can be realized sooner. If there were clear leaders and followers and if they can agree on how they share the fruits of collaboration, the deal could be made and that's what really happened in the NAFTA case. However, the current industrial situations in the Northeast Asia are not in that shapes. First of all, Korea, Japan, and China had established a similar industrial structure and they are competing each other in the same industries for the same markets. In this competing situation, it is not possible for one to yield to others for the bigger, but existing only in the possibility, gain in the future. Winners are winners and losers are losers for now. The promised positive economic growth in theory will be in the remote future. Talks in the Northeast Asia are about the distance future and this makes it difficult to take steps for the real actions.

Therefore, it is rather much more practical to discuss the possible steps to lessen the tensions among them. Fortunately, we see some areas of possible collaboration among these countries and particularly among industries. At the industry level, as three countries compete against each other, these countries are now suffering over capacity problems in many industries. As those industries need to be restructured, there are chances for them to collaborate. In fact, we could witness that the two giants from Korea and Japan, in the electronic industry, already collaborate each other<sup>32)</sup> and this showed a possible directions for the regional industries to cooperate. As this types of mutual stakes grow in the future, the much larger collaboration at the national level, like FTA and beyond could become more feasible.

At the national level, another area of collaboration is to dissolve the trade imbalances among Korea, Japan, and China. In fact, Korea recorded a huge trade deficit with Japan, while earns

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32) Samsung of Korea and Sony of Japan established a joint venture in LCD panel making a few years back.

a large surplus from the trade with China. Interestingly, Japan runs a big trade deficits with China and this makes a kind of chained linkage among these countries. It is different from the NAFTA countries, where the U.S. runs huge trade deficits with both of its partners. In the case of NAFTA, the U.S. bears the huge burden of running trade deficits. However, in the Northeast Asia, countries should share the burden among them. Although each country runs trade deficits from the bilateral point, the three countries involved are in balance in the sense that trilateral trade imbalances are chained. This provides possibilities for the collaboration at the national level in helping industries to restructure. One potential solution is to boost direct investment in the opposite direction to the trade overflows.

Not only in terms of the economy, but also in terms of the politics, the three nations in the Northeast Asia should cooperate each other to improve the chance of realizing the regional economic integration in the near future. North Korea often has been a huddle blocking the progress in regional economic cooperation. In recent days, the South has tried to persuade and help North Korea to develop its economy and to open for the international trade regime. However, Korea alone finds it is difficult to help them to come out of the long time isolation from the free world trade. The additional helps from China and Japan could make it easier for the North Korea to transit into the free trade world and this could subdue the military tensions in the region. Likewise, the tension between China and Taiwanese territories could be lessened with more active trades within the region. Other areas of potential cooperation among the nations in the region are energy developments and environmental protections. With these kinds of cooperation in the base level should be tried first and, if they are proved to be successful, the progress in the regional economic integration in the East Asia might be realized sooner than expected.

### 3. Recommendations to Korea

Although it has been discussed that the way to improve the chance for the progress in the regional economic integration, it could be long time before such a dream to be realized. However, in a so-called nutcracker situation, Korea has no time to waist in waiting for such an event to be unfolded. Therefore, Korea needs to do action of its own at the moment. Making bilateral trade agreement with as many countries as possible is the one method to take and Korean government seems to follow that approach. However, as we saw in the case of NAFTA, engaging in the free trade agreement is really about the industrial restructuring. Free trade agreement is the way to give a nation a vitality to begin the process of economic restructuring. That is, by lowering its trade barrier, FTA will increase the level of competition from outside and this will in turn raise the efficiency of the economy through the process of industrial restructuring. Therefore, it is more desirable to have a trade agreement with larger countries because that will give much bigger impact. That is why many scholars from academia insist that the regional trade agreement with Japan and China should be devised. However, as we see in this article, the Northeast Asian nations are not ready yet to take such a step.

Therefore, Korea should find a way to help restructure its economy from other sources. If FTA with China is a remote possibility, Korea should go with the bilateral agreement with Japan first. Considering the rivalry between Japan and China for the regional economic hegemony, the FTA with Japan may encourage China to begin negotiation for the bilateral FTA with Korea. In that way, Korea may be able to enjoy the benefit of regional trade integration without the formal East Asian wide agreement. Of course, this may also induce early launch of the

formal regional agreement. With the same reason, it should be welcomed that Korean government recently started the bilateral FTA negotiation with the U.S. If successful, Korea will suddenly become a runner in the front group for the FTA race not only in the Asian region but also in the world. Again, this may induce Japan to speed up the bilateral FTA negotiation with Korea, that is currently suspended over the issue of agricultural market access into Japan.

However, often neglected in the discussion of the FTA issues are negotiations within the country. For the NAFTA cases, political leaders were able to secure support from the business sector at the earlier stage and, as we knew from the fact that the deal successfully endorsed by the legislative body of each government, they finally won the support from their own people later. In Korea, however, the process of winning the public support for the FTA is often postponed until very later stages. As it was known from the passage of the FTA with Chile in the national assembly, it would be very costly as times went by. Therefore, it is very important to win the public support from the earlier stage. We have already seen the sign of very strong oppositions to the recently announced FTA negotiation with the U.S. This is not good news for Korea to go into the long process of economic restructuring of its own, in the way that was described in the above. However, people in Korea should understand it is not only for the trade but also for the economic survival of the entire nation. It is, not just for a certain group of industries, but also for the majority of people who are consumers as a whole. There should be a more effort by the leaders in politics, in government, in academia, in business, and in public opinion making to orchestrate the campaign for the national restructuring. They need to have better communication channel and information-sharing scheme to reduce the cost in dealing with whom, want to stay in the safely protected status quo

situation. That way, Korea should survive in the increasingly competitive environments of the twenty first century.

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## Abstract

It has been now more than ten years, since the North American Free Trade Area (NAFTA hereafter) had formally launched in 1994. Although it is not yet clear that NAFTA had provided economic prosperity that was promised, the launch of NAFTA ten year ago had a huge impact enough to change the shape of world trade regime. In fact, there were ever more increases in the number of regional trade agreement around the world after 1994. Especially in Asia, where the regional trade agreements were not traditionally welcomed, a sudden blossom of talks on free trade agreement are noticeable. Japan and Singapore were the first in the region to make such an arrangement. Korea followed the suit by negotiating and concluding FTA with Chile, Singapore, and recently with ASEAN. Although it is suspended over the agricultural market opening for now, Korea and Japan are officially negotiating the FTA between themselves. China also introduced similar agreement with Hong Kong and Macao and now concluded FTA negotiation with ASEAN, Chile, and Pakistan. It certainly looks like a battle to take a regional economic initiative. Worrying competitions among Asian countries and that against western economic blocks such as NAFTA and EU, some suggests Asia-wide trade arrangement so that it can function as a harmony scheme among them and a strategic cooperation toward outside.

The main focus of this paper is to draw lessons from ten years experience of NAFTA to the Northeast Asian Economic Integration.

In this paper, it is argued that the leadership of the U.S., motivated both by economic and political concerns, played a greater role in pushing for NAFTA. Facing the growing competition with

other continents, especially with Asia, the U.S. need to secure both economic and political ties with its two neighbors. In return, the U.S. had to give carrots to Canada and Mexico in the form of what they wanted. For Canada, it was the restructuring of their industries into more high tech sectors. For Mexico, it was the promise of helping them to modernize their industry and to fight against its chronic poverty. To give these economic benefits to its neighbors, the political leadership of the U.S. also had to have a support from its own industries. This paper identifies the automobile and electro industries as the critical players in supporting the idea of NAFTA in the U.S. They were the industries that had faced the fiercest competition from East Asian countries, such as China, Japan, and Korea. Although the overall economic performance of NAFTA for its member countries seems not that brilliant, we need to look at the performance of the core industries that supported NAFTA in the process. The automobile and electro industries certainly had benefited from NAFTA, while Canada and Mexico restructure their industries into the direction that they wanted.

In light of the findings in this paper, the current situation in Northeast Asia is very different from what North America was ten years ago. First of all, there is no outstanding leader like the U.S. in North America. While China and Japan compete each other for the position of the leader, Korea also wants to take a significant role of their own. Furthermore, it is not clear what they can give each other. Considering the fact that Japan, Korea, and even China have been pursuing a similar economic development strategy and they are now competing each other in almost every industrial product category in the world export market, it seems not possible to devise a scheme to satisfy major players in the national as well as in the industrial level. Therefore, it seems not possible to see the Regional Economic Integration Scheme in Northeast Asia at least in the near future.

Therefore, it is rather much more practical to discuss the possible steps to lessen the tensions within this region first. Fortunately, we see some areas of possible collaboration among these countries and

particularly among industries. At the industry level, as three countries compete against each other, these countries are now suffering over capacity problems in many industries. As those industries need to be restructured, there are chances for them to collaborate. At the national level, another area of collaboration is to dissolve the trade imbalances among Korea, Japan, and China. In fact, Korea recorded a huge trade deficit with Japan, while earns a large surplus from the trade with China. Interestingly, Japan runs a big trade deficits with China and this makes a kind of chained linkage among these countries. It is different from the NAFTA countries, where the U.S. runs huge trade deficits with both of its partners. In the case of NAFTA, the U.S. bears the huge burden of running trade deficits. However, in the Northeast Asia, countries should share the burden among them. Although each country runs trade deficits from the bilateral point, the three countries involved are in balance in the sense that trilateral trade imbalances are chained. This provides possibilities for the collaboration at the national level in helping industries to restructure. One potential solution, for example, is to boost direct investment in the opposite direction to the trade overflows.

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