

Loose Functional Integration in Northeast Asia: The Northeast Asian Development Bank

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Abstract

This paper aims at discussing the reasonability of the Northeast Asian Development Bank by focusing on the Bank's potential contribution to the medium- and long-term regional co-operation in Northeast Asia. For this rationale, an approach of "Loose Functional Integration" as the main functionality of the Bank within a larger regional context and the rising importance of intra- and inter-regional trade of Northeast Asia are analyzed. The first part focuses on the general characteristics of the region and the rationality for economic co-operation. The second part deals with the current necessities of the region for financial co-operation. The last part argues the functioning, financial system and the contribution of the Northeast Asian Development Bank with reference to current empirical data.

Keywords: Northeast Asia, the Northeast Asian Development Bank, Loose Functional Integration, regional economic co-operation.

Loose Functional Integration in Northeast Asia: The Northeast Asian Development Bank

Introduction¹

The Northeast Asian economic co-operation is the latest outgrowth of the Asia-Pacific regional co-operation evolution that has occurred over the past half-century. Among the current examples of regional co-operation, ASEAN (the Association of Southeast Asian Nations) has been a successful one in terms of its wide range membership and degree of regional co-operation. Asia-Pacific Economic Cooperation (APEC) is another well-covering regional gathering with the premises of free trade and regional co-operation. For the Northeast Asian region, long-standing conflicts and ideological differences that for so long fractured the region (the division of the Korean peninsula at the 38th parallel being the most prominent example) are now giving way to a more pragmatic view of the need for, and benefits of, development of the region as a whole.

It is noteworthy that the drive for the Asia-Pacific regional co-operation was led by academics on the one hand and business people on the other hand. Arrangements that emerged from the discussions, such as the Pacific Trade and Development Conference (PAFTAD) and the Pacific Basin Economic Council (PBEC), both formed during the late 1960s, reflected academic and business interests in the Asia-Pacific regional co-operation respectively. It was not until the discussions led to the formation of the Pacific Economic Co-operation Council (PECC) in 1980, that governments became formally, though only partially, involved and it was not until the formation of APEC in 1989, that governments deliberately focused on regional co-operation issues.

Throughout the considerations issued by the above different interest groups, the Northeast Asian economic co-operation proposals have been characterized according to the specific features of the region. There have been many ideas like Northeast Asia Free Trade Agreement (NEAFTA), Council for Northeast Asian Economic Co-operation, institutional co-operation at local or central government levels and joint business initiatives. However, given the regional distinctiveness and the unique relationship among the countries in both economic as well as political and security measures, a more functional and integrative approach, focusing on financial and technical collaboration in short- and medium-terms is aimed in this paper. There has been a growing number of scholarly studies on the idea of the Northeast Asian Development Bank (NEADB) with political, economic as well as technical perspectives. Having been discussed since the beginning of the 1990s, NEADB would be the crucial feasibility mechanism of a functional integration potential of the region via breakthrough development of the regional economies.

This paper aims at contributing to this effort of establishing the Northeast Asian Development Bank by looking at the regional rationale of the Bank in terms of regional

¹ This work has been inspired by the paper "The Northeast Asian Economic Integration Process," presented by Seiji F. Naya at a Conference in Mongolia (2003). We also would like to thank to Prof Naya for his valuable comments on this work..

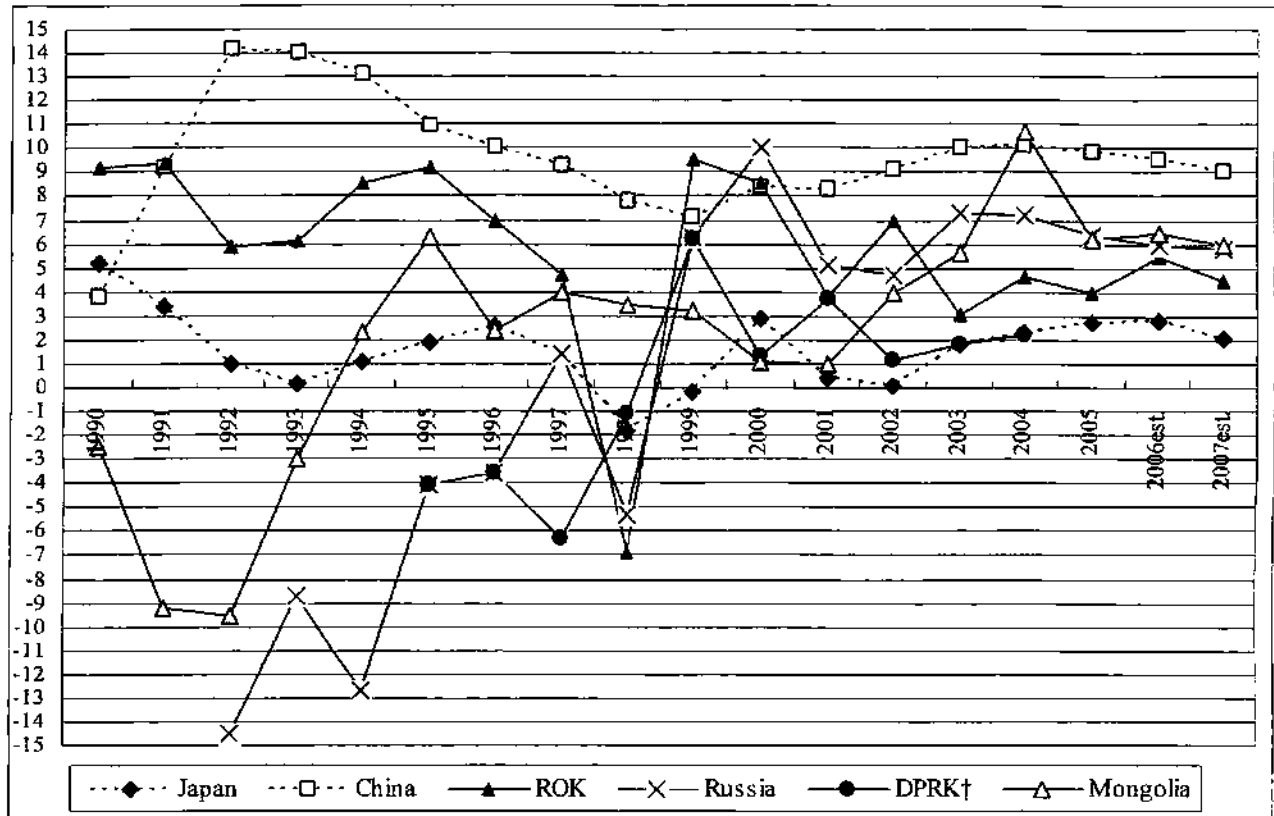
co-operation. An analysis of “Loose Functional Integration” as the main reasoning of the Bank for further regional co-operation with its short, medium- and long-term outcomes for Northeast Asia is the main contribution of the paper to the existing literature on NEADB. According to this analysis, regional infrastructural discrepancies and development levels are so crucial that they can only be conveyed into a complementary platform via a loose functional integration mechanism and NEADB is the most feasible way to realize the short and medium-term economic co-operation in connection with a long-term regional institutional integration in Northeast Asia. Detailed empirical analysis on the rising importance of intra-regional trade in connection with the idea of NEADB is the other contribution of the paper to the current discussion on the Bank.

The paper is divided into three main parts. The first part is devoted to the general characteristics of the region and the rationality for economic co-operation in Northeast Asia. The second part examines the most divisive feature of the region: i.e. infrastructural gap and indicates the financial necessity of the region in order to invoke further informal and formal regional co-operation. The last part discusses the main contribution of “Loose Functional Integration” approach, upon which the proposal of NEADB is feasible in Northeast Asia. Based on this feasibility, discussion later focuses on the importance of rising intra-regional trade in recent years. General methodology is an argumentative one with utilization of the empirical data of country comparisons. Potential NEADB member countries, which are also natural members of the functional integration in Northeast Asia and other regional actors which have been main contributors to the economic and security scheme of the region, are the main actors to be mentioned throughout the paper.

I. Northeast Asia as a Natural Economic Territory

Northeast Asia in this study covers Japan, People’s Republic of China (China), Republic of Korea (ROK), Russian Federation (Russia), Democratic People’s Republic of Korea (DPRK), and Mongolia. The recent literature usually focuses on the Far Eastern Russia and the Northeastern China as parts of any potential Northeast Asian regional configuration. However, we include both Russia and China as whole countries for practical use of the empirical data and also for a better understanding of NEADB as an instrument of loose functional integration of Northeast Asia in the long-term. In this section, Northeast Asia as a Natural Economic Territory (NET) is explained in order to show the regional complementarities alongside the regional differences. To begin with, Figure 1 shows the growth rates of real GDP for each economy from 1990 to 2007 (estimates). It is obvious from these figures that the regional economic development experiences are so divergent that each country has its own particular path. Nevertheless, it is also evident that the growth rates are becoming closer after 2000 when compared to the deviating growth scale of the economies between 1990 and 2000. This parallel growth rate is the initial indication of a potential regional growth in Northeast Asia.

Figure 1: Growth Rates of Real GDP in Northeast Asia (%)



Source: IMF. (2006). † Figures of DPRK are from the Ministry of Unification, South Korea. (2006).

NET usually comes from a joint development of natural resources and physical, social infrastructures. National borders often separate regions and people with similar and/or complementary resources, tastes and skills. In these cases, when regimes change and/or relations become friendlier or stringer, significant opportunities for trade, investment and mutually beneficial exchange would likely arise, particularly if the facilitating infrastructure can be developed to support the growing linkages. Asian NETs can take advantage of beneficial externalities, provide regional public goods and develop common resources through joint exploration and investment. One example of this kind of NET is the Greater Mekong Sub-region (GMS) where potential opportunities for joint economic development exist as they develop the Mekong River that goes through the bordering areas of Cambodia, Lao PDR, Thailand and Vietnam as well as Yunnan province of China.

Hong Kong, Southern China and Taipei, China nexus with their representative growth triangles exemplify the second type of NET. In these NETs, there is economic complementarity through investment and technology transfer and this stimulates production and trade, including intra-industry trade in a multi-country production network. Such NETs have been successful in taking the advantage of cultural and private business connections, in capitalizing on local comparative advantage and in tapping into regional dynamism. Likewise, the Northeast Asian production networks with the market-driven interaction have been the main ground for deeper

financial as well as economic co-operation during the second half of the 20th century.

There are two situations that can give rise to the emergence of the NET. First of all, there should be the existence of geographic, resource and cultural affinities, which through regional co-operation, can give rise to new growth and development. The second situation is the presence of territorial complementarities, examples of which are South China and Southeast Asian growth triangles where the entities involved have already taken the advantage of local territorial complementarities to spur the growth in trade and production.

Northeast Asian territories, aside from the more advanced entities, would lie in the first category. However, there is no automatic progression and it cannot be assumed that a quantum leap action would move them into the second category. It would be rational to assume that the wide resource diversity would give rise to complementarities that could be properly exploited for greater mutual economic gains. One popular scenario is the utilization of the abundant oil, minerals and other natural resources in Russia and Mongolia; a huge labor force in China and DPRK and the ample capital and technology in ROK and Japan. Each country could benefit substantially from co-operation and a natural economic territory would be transformed into a viable and competitive global economic zone. Table 1, which gives the basic economic indicators of each country in Northeast Asia, shows that the countries have different capacities and can create complementarities in case of regional co-operation.

Table 1: Basic Economic Indicators of Northeast Asian Countries, 2006

Countries	Population (mil)†	GDP Growth	GDP Per Capita	Inflation Rate (%)
		Rate (%)	Current Prices (US\$)	
Japan	128	2.7	35,787	0.3
China	1,304	9.9	1,709	1.8
ROK	48	4.0	16,422	2.7
Russia	143	6.4	5,369	12.6
DPRK‡	22	2.2	914	-
Mongolia	3	6.2	736	12.5

Source: IMF. (2006). † Population figures are from the year 2005. World Bank Development Indicators. (2006).

‡ Figures of DPRK are the year 2004 figures from the Ministry of Unification. South Korea. (2006).

A further rationalization of the issue goes as follow: Different areas within the region have reached different stages of industrial development and demographic transition. These differences show up in wage levels, quality of labor and level of industrial technology. In the process of regional co-operation, the synergy of comparative advantage can be reinforced by the complementarity that exists between different industrial structures, technological levels and demographic features. Interactions among these factors can generate dynamism in an economy as a whole and this can be the force behind economic integration in Northeast Asia. This would also

further encourage economic co-operation through a combination of the maturity of older economies with the potential vitality of the newer ones, as both sectors can benefit in the process. Indeed, the economic development and integration of this region would contribute importantly to enhance regional stability and security, improvements of the standard of living for the region's inhabitants and the strengthening of Asia's role in an increasingly integrated world economy.

II. Economic Challenges Confronting Northeast Asia

It is well known that one of the important lessons learned from the East Asian 'miracle' is the key importance of infrastructure for promoting and supporting economic development. In other words, the basic requirement of self-sustaining economic growth is an adequate base of transportation, communication, energy and environmental and other development-supporting infrastructural preparedness. This lesson is especially important for the Northeast Asian economic region, since by most assessments, the region's infrastructure is too weak and fragmented to support development on a sustainable, region-wide scale. Most of the region's transportation and communications systems were not much different from the situation of the 1950s and the 1960s. Airports, port facilities, railroads, highways, bridges and pipelines are much below the standards. The overall transport infrastructure is more than several decades old. Its low quality, deterioration, outdated design and other weaknesses suggest that it would not meet the minimum standards needed for sustained commercial and industrial expansion during the next few decades. Consequently, sizeable investments and quality improvements are required to replace the existing infrastructure. Table 2, which shows the basic infrastructural figures, proves that a region-wide economic development necessitates a well-balanced infrastructural collaboration; hence a thorough revitalization with major financial resources.

Among those, which needs reconstruction, communication sector is the most urgent one. According to Table 2, while some upgrading has been undertaken in this sector during the past few years, projected demand for communications services indicate that a great amount of updating will be required than the current, mainly ad hoc improvements. Intra-regional communication infrastructures in Northeast Asia, however, are inadequate and more information highways need to be built and related facilities such as submarine cables, landline fiber optic cables and digital phone exchanges must be supplied. Recent technological innovations are changing how business, government and other sectors of economic and social life operate. The dramatic increase in the use of Internet and a concomitant expansion of networks in Japan (587 per 1000 people), Korea (657) and China (73) underline the telecommunications dimension of potential economic growth. As closely related to communications, transportation sector also needs a region-wide system in order to speed up the intra-regional interaction given the fact that Mongolia and DPRK, despite their relatively wide territory, are in need of extended road networks (Mongolia had only 49,250 km, while DPRK had 31,200 km road network in 2004, Table 2). Indeed, smooth transportation is critical for attracting more investment and trade opportunities in those countries. Enhancement of those sectors should be focused by a special financial scheme, i.e. NEADB in order to realize the

region's potential for growth and then to achieve a regional co-habitation.

Table 2: Infrastructural Capacity of Northeast Asia, 2006

Infrastructure	Japan	China	ROK	Russia	DPRK	Mongolia
Total Energy Production, 2003 (thousand metric tons of oil equivalent)	84,643	1,380,786	36,920	1,106,924	18,760	-
Energy Use Per Capita, 2003 (kg of oil equivalent)	4,053	1,094	4,291	4,424	896	-
Net Energy Export (X) / Import (M), 2003 (% of energy use)	84 M	2 M	82 M	73 X	6 M	-
CO2 Emissions, 2002 (metric tons per capita)	9.4	2.7	9.4	9.9	6.5	3.4
Renewable Internal Freshwater Resources, 2004 (billion cubic meter flows)	430	2,812	65	4,313	67	35
Arable Land, 2003 (% of land use)	12.1	15.3 †	16.7	7.5	22.4	0.8
Motor Vehicles, 2003 (per 1000 people)	582	15	304	174	-	41
Total Road Network, 2003 (km)	1,177,278	1,890,829	97,252	537,289	31,200	49,250
Total Rail Lines, 2004 (km)	20,060	61,015	3,129	85,542	5,214	1,810
Registered Air Carrier Departures, 2004 (thousands)	646	1,216	233	399	2	7
Electric Consumption, 2003 (KWH per capita)	7,818	1,379	7,018	5,480	795	-
Telephone Access, 2004 (per 1000 people, fixed lines)	460	241	542	256	44	53
Personal Computers, 2004 (per 1000 people)	542	41	545	132	-	124
Internet Users, 2004 (per 1000 people)	587	73	657	111	-	80
R&D Expenditure, 1996-2003 (% of GDP)	3.15	1.31	2.64	1.28	-	0.28
Unemployment, 2000-04 (% of total labor force)	4.7	4.0	3.5	8.6	-	14.2
Domestic Credit to Private Sector, 2004 (% of GDP)	99.5	120.1	98.2	24.5	-	32.0
Domestic Credit Provided by Banking Sector, 2004 (% of GDP)	154.9	142.6	100.8	25.9	-	34.8
Military Expenditures, 2004 (% of GDP)	1	1.9	2.5	3.9	-	2.1

Source: World Bank Development Indicators. (2006). † Includes Taiwan.

It is projected that inadequate energy generation and distribution would impede the

region's prospective commercial and industrial growth. As can also be seen in total energy production figures of Table 2, Russia has the potential for numerous energy development and trans-shipment of those intact resources together with Mongolia and China (Meyer 1999). Future dynamic economic growth in Northeast Asia depends on the availability of sufficient energy sources and meeting the demand for natural gas use. Because of the abundant reserves of gas in the region and strongly projected future demand for it, generating the necessary financial resources in Northeast Asia and elsewhere in the world is crucial. Nevertheless, balance attainment of energy resources is the key for regional development. If the proposed project for a pipeline system for Northeast Asia were realized, designed and carried out multilaterally and linked to Japan, with Japan taking the initiative with its capital and technology, it would be an important step towards the economic development of Northeast Asia in the twenty-first century. Environmental rehabilitation and eco-system safeguards, including urban water and waste treatment facilities, reforestation, natural resource management and a range of other environment-related infrastructure requirements also require large capital investments.

Over and above, the poor state of transportation, communications and energy infrastructure in the region require the necessary financial infrastructure for future viable economic and commercial development. It is thought that successful development would depend on region's ability to attract private investment and this would increase rapidly when investors perceive that adequate highway, railway and air transportation systems, modern telecommunications, reliable energy supplies and sound environmental programs would support their investments. Domestic credits to private sectors are recently still limited in case of developing countries (Table 2, last two rows). There have also been ongoing projects on bilateral or sub-regional basis and momentum in trade relations since the mid 1990s (Devaeva 2004, NIRA 2001). Nevertheless, even the project based bilateral trade as well as assistance programs underscore the fact that without major improvements, Northeast Asia's infrastructure will not be able to support satisfactory economic growth and development in the future. In relation to this, one grand design approach was proposed by the National Institute for Research Advancement (NIRA), Japan. Main points of this design are as follow:

- 1) Development of the key areas for the promotion of sustainable development throughout the region.
- 2) Planning and construction of infrastructure in different sectors to be integrated with the highest degree possible.
- 3) Comprehensive development of specific areas to construct optimal infrastructure.
- 4) Special focus on cross-border or multi-territorial projects to resolve individual territory concerns.
- 5) Seeking optimal regional benefit and supplementing hard infrastructure development with priority attention to soft infrastructure requirements (e.g. customs procedures, health and quarantine).

These considerations bring out infrastructural development priorities and indicate the need

for tremendous amount of financing. To remedy the infrastructural deficiencies will require investments of capital far beyond the separate saving capacity of the region's members. This raises the question of how and where the needed long-term financing might be found. Burnham Campbell, one of the founders of the idea of NEADB, stated in one of his introductory presentations about NEADB that regional financial co-operation is the most viable approach to closing the resource gap in Northeast Asia (Campbell 1993: 45).

III. The Northeast Asian Development Bank (NEADB)

In this part main contributions of this work on feasibility and reasonability of NEADB are elaborated with theoretical and empirical legitimization. The first section focuses on theoretical discussion for describing the most eligible strand for NEADB. The second part looks at the organizational functioning and the short-term contributions of NEADB to the regional development. The last part complements the picture by focusing on medium- and long-term premises of "loose functional integration" with special attention to the intra-regional trade potential of Northeast Asia.

a. Loose Functional Integration

Regional integration in East Asia is usually analyzed according to two parameters: One aspect drives the institutional, formal forces of regional integration while the other one merits the informal, non-institutional characteristic of the regional collaboration. Northeast Asia is considered as being quite diverse in terms of political regimes alongside different development paths of each country in due time. Hence, an informal economic integration rather than a formal regional integration is usually emphasized in the forms of regional production networks, ethnic business networks and sub-regional economic zones (Katzenstein 1997, Aggarwal and Koo 2005). This informal production networks can be defined as market-driven, privately sponsored, network-based and non-institutional interactions (Peng 2000).

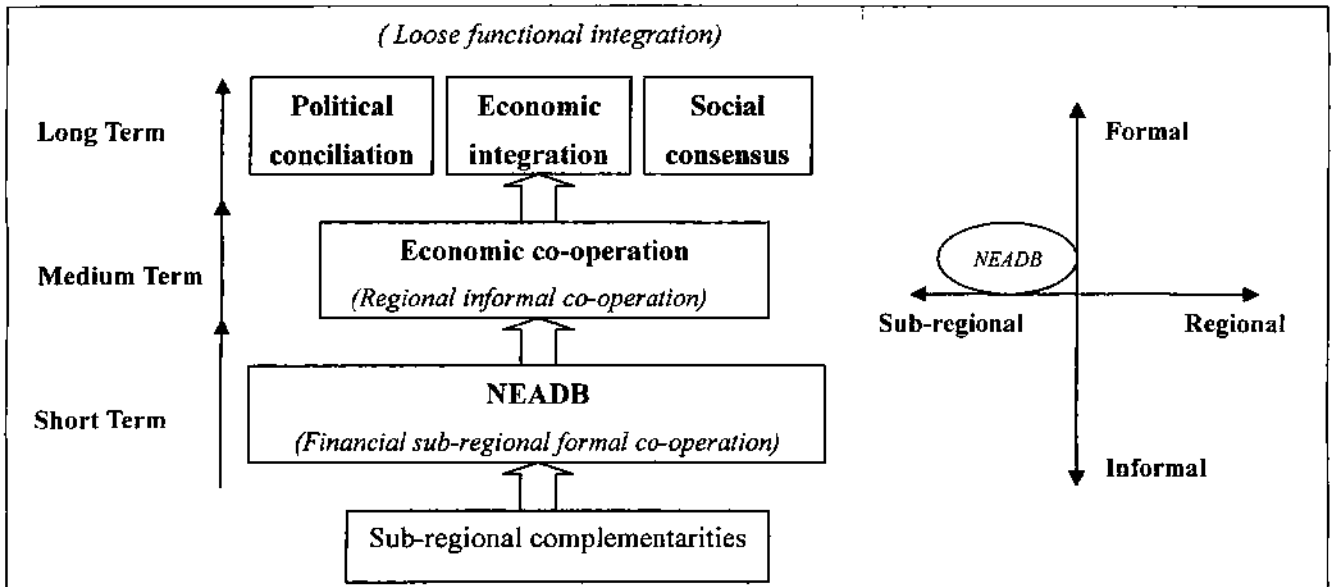
Nevertheless, sub-regional integration is more formal when one considers the spurring effects of the recent preferential trade arrangements in East Asia². Northeast Asian sub-regionalism is also highly argued with different propositions like NEADB, free trade agreement (PTA) or an umbrella council organization for Northeast Asia. According to the analysis of this study, both propositions are to be realized for sub-regional emphasis. Then these sub-regional institutional mechanisms might lead to further regional deepening in terms of integration. Nonetheless, the most feasible mechanism for region's infrastructural development is NEADB.

In the Northeast Asian case, an incremental mechanism of economic as well as financial interaction is needed in the short-term in order to reach a medium-term target of regional economic co-operation. In order to convey the regionalism impetus of more feasible sub-regional formal

² In addition to preferential trade arrangements in East Asia, there are ongoing regionalism attempts in the forms of ASEAN, ASEAN+3 (ASEAN, Japan, China, South Korea) and ASEAN+3+3 (ASEAN+3, India, Australia and New Zealand) and APEC, both covering even a larger area than East Asia itself. Of course these formulations influence the current sub-regional tendencies in Northeast Asia. Therefore, there are varieties of propositions for the Northeast Asian regional co-operation.

entities to regional informal and then formal mechanisms, a loose but functional integration is crucial at initial, sub-regional level. As indicated in Part II, the Northeast Asian regionalism would best be achieved by further regional economic development through regional economic co-operation. Nevertheless, this further formal economic co-operation can only be initiated by a capable infrastructure, which might facilitate and attract enhanced intra- and inter-regional economic interaction. This assumption leads us to the country-level and sub-regional infrastructural problem solving and resource allocating issues which require initial financial sustainability at first stage. A mechanism, which can give impetus to this incremental regional integration process via financial co-operation, is the Northeast Asian Development Bank. According to the “Loose Functional Integration” approach, rationalizing the sub-regional financial problem solving in the short-term would lead the region to a sustainable development along deepening regional understanding and co-operation.

Figure 2: Scheme of “Loose Functional Integration” in Northeast Asia



Source: Created by authors.

This mechanism centers on NEADB as the main policy implementation tool of further regional institutional integration in the long-term vision of Northeast Asia. According to Figure 2, which describes this inductive process of “Loose Functional Integration,” financial initiation on project based co-operation might in the medium-term lead to the economic co-operation and then to political conciliation as well as social consensus in the long-term perspective. In practical terms, it has simply been suggested that the Northeast Asian Development Bank would provide an important part of additional financing that could be effectively employed in expanding and improving Northeast Asia’s infrastructural base. Its purpose would be to supplement the capital transfer activities of the ADB, the World Bank and private and governmental sources, thereby ensuring a more adequate flow of capital to Northeast Asia for its infrastructural development.

b. Functional Mechanism of the Northeast Asian Development Bank

Duck Woo Nam, former prime minister and finance minister of the Republic of Korea initially proposed the idea of Northeast Asian Development Bank in 1991 (Kakazu 1995: 106). Later on, feasibility studies have started by crucial interests of scholars, bureaucrats and regional experts. A special committee, once presided over by Burnham Campbell, has worked on the technical details of the project beginning from the 1994 annual meeting of the Northeast Asia Economic Forum, a renowned research platform of the East-West Center, Hawaii. Then, an ad hoc committee for the study of potentials of the NEADB was adhered for its first meeting in Tianjin, China, May 11-13, 2000 (Jinghua 2001: 77). The idea is still discussed from different aspects at various platforms while gaining substantial momentum both within and outside of the region.

As mentioned in the previous sections, upgrading Northeast Asia's infrastructure would require redirection of engineering and construction services, materials, plantations and equipment. This process would involve investments in infrastructure far beyond the region's current capacity in order to utilize complementarity of the resources within the region. An East-West Center study has estimated that the cost of upgrading and expanding infrastructure would amount to \$7.5 billion a year for the next 15 to 20 years. Nevertheless, the World Bank and ADB could only cover \$2 billion of this amount (Katz 2002: 64). The questions to be addressed, therefore, are how and where this financing can be secured. A recent study concluded that financing for the Northeast Asian infrastructure must come from three main sources: Private sector credits and investments, bilateral official assistance and the existing multilateral development banks like the Asian Development Bank (ADB) and the World Bank (Katz 1996). However, related studies have shown that finances to be expected from existing multilateral financial institutions, governments and the private sector would be far short of meeting the region's projected needs. The East-West Center suggests a tremendous shortfall of \$5 billion annually until the gap is closed (Katz and Cho 2001). Stanley Katz's empirical calculation gives the groundwork analysis of hypothetical allocation of shares in Northeast Asia³. Based on this estimate, a new calculation for the financial mechanism with the potential contributors and projections of the Bank is provided in Table 3. According to the new analysis, 40 US\$ billion, 40 % of which would be allocated by the founding Northeast Asian members and 60 % would be shared by the Asian, Non-Asian and organizational members (the World Bank, IMF, ADB, etc...) of the Bank, is configured for the 20-year term financial scheme.

³ For a detailed calculation of Staley Katz's "Table 2: Hypothetical Allocation", see Katz 2000.

Table 3: Projectional Shares and Contributors of the Northeast Asian Economic Development Bank

Shareholders	Shares (% of total)	Total Amount (US\$ bil)	Total Paid-in Amount, 5-year Term (US\$ bil)	Annual Payment, 5- year Term (US\$ mil)
Regional Members				
Japan	15	6.0	1.5	30
China	10	4.0	1.0	20
ROK	5	2.0	0.5	10
Russia	7	2.8	0.7	14
DPRK	2	0.8	0.2	4
Mongolia	1	0.4	0.1	2
<i>Total</i>	<i>40</i>	<i>16.0</i>	<i>4.0</i>	<i>80</i>
Non-regional Members				
Asian	10	4.0	1.0	20
Non-Asian	20	8.0	2.0	40
Organizational	30	12.0	3.0	60
<i>Total</i>	<i>60</i>	<i>24.0</i>	<i>6.0</i>	<i>120</i>
Grand totals	100	40.0	10.0	200

Source: Created by authors based on the Table 2 by Stanley Katz. (2000).

Of course, the first question about the Bank appears to be related with the long-term sustainability of the financial resources and maintenance of the Bank's efficiency. Table 3 indicates the first 20 year with 5-year quarter terms and annual contributions of shareholders for initiation of the projects. It is obvious that each project has its own duration and repayment process. Success of each project and its contribution to the infrastructural development as well as loose functional evolution of the regional co-operation also depend on related countries' domestic management and implementation patterns. According to the ADB experience in Northeast Asia, an average project takes about 10 to 20 years to be successfully completed and integrated to the regional infrastructure. Hence, the first 15 to 20 years of financial maintenance of the Bank is crucial. Shareholders' preliminary contribution for the first 5-year term would be sustainable enough to start bank operations. Of course, shareholders can take initiative of avoiding contributions and instalments depending on the country performances and changes, the 5-year payment system can be repeated for the next consecutive terms till the projects are completed, implemented and start repayment. In the meantime, allocation of shares of the shareholders can be re-evaluated at the end of each 5-year term. As deepening communication is targeted with initial sub-regional infrastructural projects, the system of repayment can also become smoother with experience and further conciliation. This self-sustaining system is also aimed at keeping co-ordination between shareholders and

beneficiaries in order to prevent any unexpected government or market failures.

Organizational mechanism of the Bank would be similar to that of ADB but it would mainly be based on functional and project-related premises. Shareholders are both regional and non-regional, interested members. Indeed, the Bank would be the only mechanism to bring Japan, China, ROK, DPRK, Russia and Mongolia together with other non-regional actors. Voting power would depend on capital share of each member country. As one of the reasons of NEADB is to integrate the developing countries to the regional economic and political process, voting power of each member might also depend not only on capital shares but capacity building performance of each member as well. This would increase the intention of co-habitation and consensus among member countries. Main targets of financial infrastructural development, economic development as a region and operation areas of each target with related instruments can be seen in the main working mechanism of the Bank in Table 4.

Table 4: Working Mechanism of NEADB

	Regional Member	Non-regional Members		
	Japan, China, ROK, Russia, DPRK, Mongolia	<i>Asian</i>	<i>Non-Asian</i>	<i>Organizational</i>
Shareholders		Australia, New Zealand, India...	US, EU...	World Bank, ADB, IMF...
Voting Power	Capital share % + Capacity sharing %			
Target	Activity			Instrument
Financial Development	- Resource development			
	- Funding for services and equipment imports			
Regional Co-operation	- Communication between the private sector and the government			➤ Loans
	Financial co-operation → Economic co-operation			➤ Grants
Economic Development as a Region	- Promoting regional infrastructure (transportation, energy, communication and environment)			➤ Guarantees
	- Communication between the regional needs and international markets			➤ Co-financing
	- Region-wide natural resource management			➤ Technical Assistance
	- Balancing capital needs vis a vis capacities of the members			

Source: Created by authors.

There are particular pros and cons to configure the potential contribution of NEADB to the short, medium and the long-term needs of Northeast Asia. Since the establishment of the idea, it has been argued that NEADB would take away the roles of ADB and World Bank in the region since they have overlapping issue areas. The Bank was further criticized by claiming that it would create

mismanagement of the already implemented ADB-led projects in the region. Moreover, it was discussed that different economic capacities of the member states would make it costly for each member to handle their financial contributions and bear the responsibilities of the Bank. Lack of clear leadership agenda in the Bank due to the political sensitivity of the region might also create another stalemate for the administrative management of the Bank, according to other critics. On the other hand, it was also stated that strategically defined political and security considerations of the regional members might slow down the establishment of NEADB within its expected due time.

All these critics are useful for better evolution of the idea of the Northeast Asian Development Bank and its further development via loose functional mechanism. First of all, perceptions of ABD and NEADB are different as ADB covers a wider area and sectors with loans, co-financing as well as variety of technical assistance projects for its developing economies. The NEADB, however, would focus more on infrastructural project financing with a certain geographical focus. In other words, NEADB can only be a supplementary organ to wide and issue-oriented activities of ADB. Moreover, neither ADB nor the World Bank covers all of the Northeast Asian countries (DPRK is not member of any of these organizations while Russia is not member of ADB) and a geographically focused financial platform would be beneficial in co-ordinating other organizations' projects as well.

Indeed, NEADB could play this intermediary role both for intra- and inter-regional interactions. This role might even be a domestic communication channeling between the private sector and the government. This collaboration between the government and the market might reduce the potential of government failure in case of government managed formal arrangements and market failure in case of market driven informal attempts to co-ordinate financial co-operation among the member countries. The Bank would not be above but a conveyance mechanism among the states with the support of national, regional and international private mechanisms providing other means for Northeast Asian regional co-operation. Thus, NEADB would be a supplementary and complementary mechanism vis a vis ADB, the World Bank, other international organizations and private financing institutions but not a substituting one.

Another feature is the fact that NEADB would be the only sub-regional institution that links Japan, South Korea, North Korea, China, Russia and Mongolia. Hence, it would be the information, co-operation and interaction centre of the region for learning, training, know-how and other auxiliary activities. It would also be a practical mechanism to manage the underutilized natural resources, especially the energy linkages among the member countries. Indeed, Northeast Asia with China and South Korea is one of the fastest growing regions in the world so that the management of the energy needs while having diverse natural resources is one of the basic essentials of the Bank to function in the region.

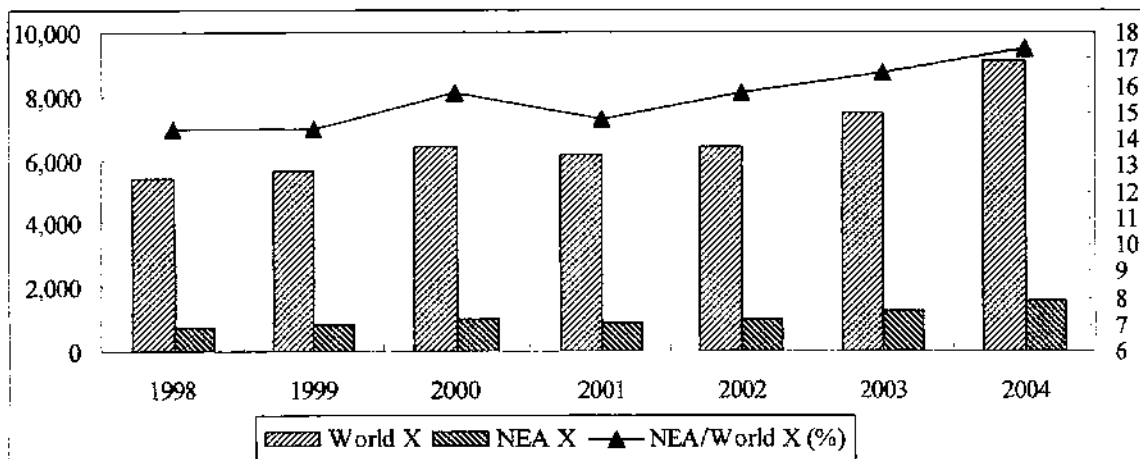
Creation of a common poll for the members to live together and improve together, combining human and natural resources on the one hand and the capital and technology on the other hand would be another direct contribution of NEADB to future regional co-operation. Last, but not the least, the Bank would be the main means of communication for further political co-operation by

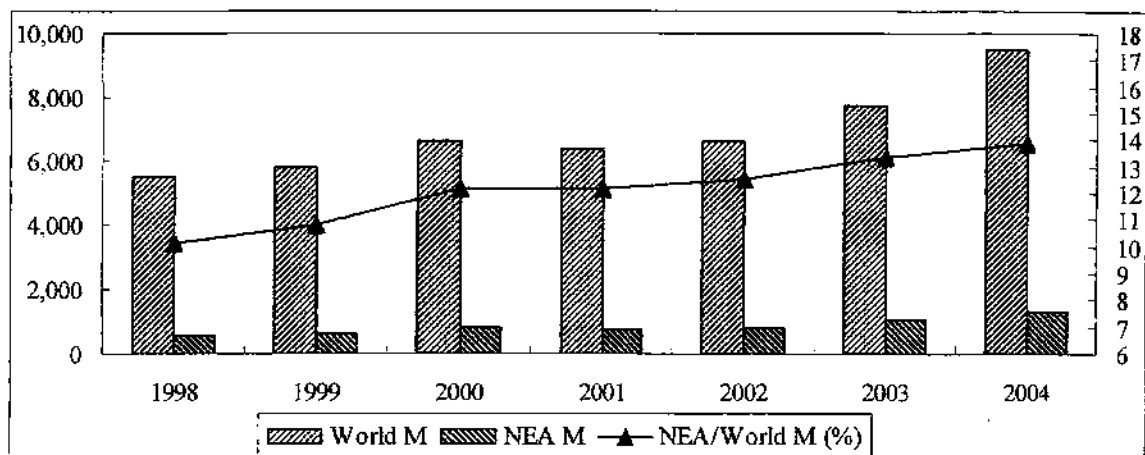
giving a chance of common platform to the members in order to understand each other and learn from each other on stability and strategy as well as bilateral security issues. Hence, these last two functions would lead to the realization of the “Loose Functional Integration”, which aims a long-term regionalism with political conciliation and co-habitation in the region. Implementation of NEADB for deeper regional co-operation with its short, medium- and long-term implications is given in Figure 2, shown earlier, as the main backbone of the Northeast Asian regionalism.

c. Defining Northeast Asia as a Region: Regional Co-operation in the Long-Term

Keeping in mind these regional potentials, other regional co-operation scenarios have also been proposed by different sources. One of the most popular proposals is the Northeast Asian Free Trade Agreement. Preferential trade arrangements might be the way of further informal collaboration at sub-regional level as network basis (Dent 2003). Indeed, preferential trade arrangements are preferred to regional and sub-regional multilateral tracks by claiming that they might bring more economic benefits, political-strategic advantages and social effects of including non-state actors to the agenda (Aggarwal and Koo 2005). However, most of the FTA proposals for Northeast Asia cover only Japan, South Korea and China (Schott and Goodrich 2001). Of course, feasibility approach and related gravity models prove the rationale for an FTA for three countries, however inclusion of all six countries into one frame such as NEADB would create more progressive impact for future economy as well as stability of the region. Nevertheless, trade potential of the region is evident enough for the region to prosper together when the recent trade figures among the Northeast Asian countries are examined. Figures 3, 4 and 5 show different perspectives of Northeast Asian export and import vis a vis world trade.

Figure 3: Northeast Asian Share in World Export and Import (US\$ bil, %)





Source: Calculated by authors based on IMF. (2005).

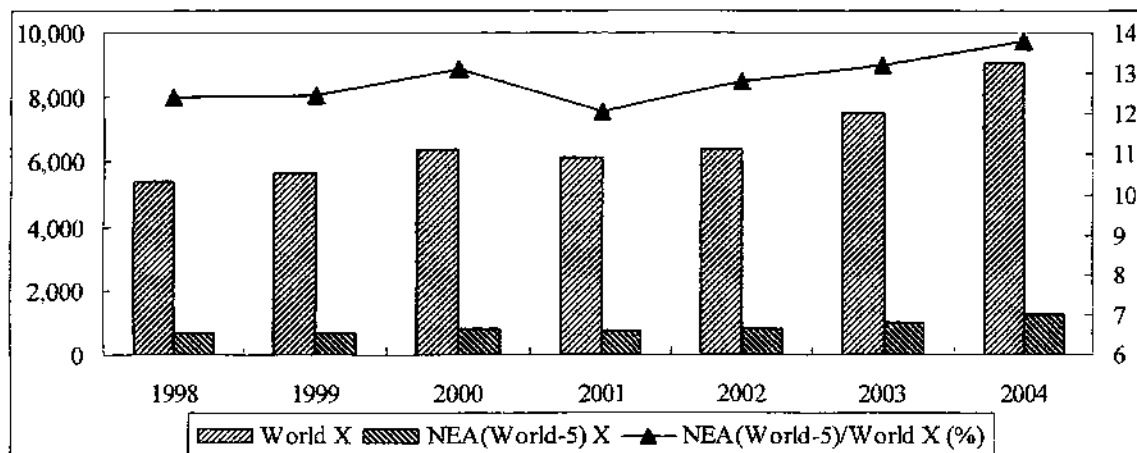
Note: The figures are calculated according to formulas below:

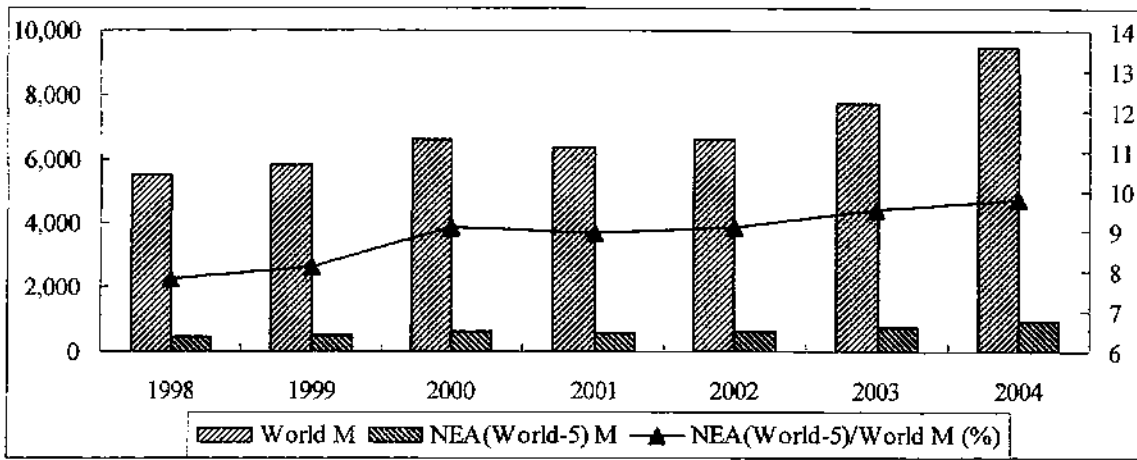
NEA: Northeast Asia (Japan, China ROK, Russia, DPRK, Mongolia), w: World, i: One of the Northeast Asian Countries, y: Year, X: Export, M: Import.

$$X : \frac{\sum_{i=1}^6 X_{i,y}}{\sum_{w=1}^{182} X_{w,y}} \quad M : \frac{\sum_{i=1}^6 M_{i,y}}{\sum_{w=1}^{182} M_{w,y}}$$

Figure 3 shows the export and import ratios of all Northeast Asia in the world. When the slope of this ratio is analyzed, it reveals the rise of 21 % for the case of total exports to the world and 40 % for the case of total imports from the world from 1998 to 2004. These figures already show the rising importance of the region in world-trade. Of course these figures include major economies of Japan, China and the regional economies of South Korea and Russia. The other member countries' contribution to the regional trade might look subtle.

Figure 4: Total Northeast Asian Country Share in World Export and Import except the Rest of Northeast Asia (US\$ bil, %)





Source: Calculated by authors based on IMF. (2005).

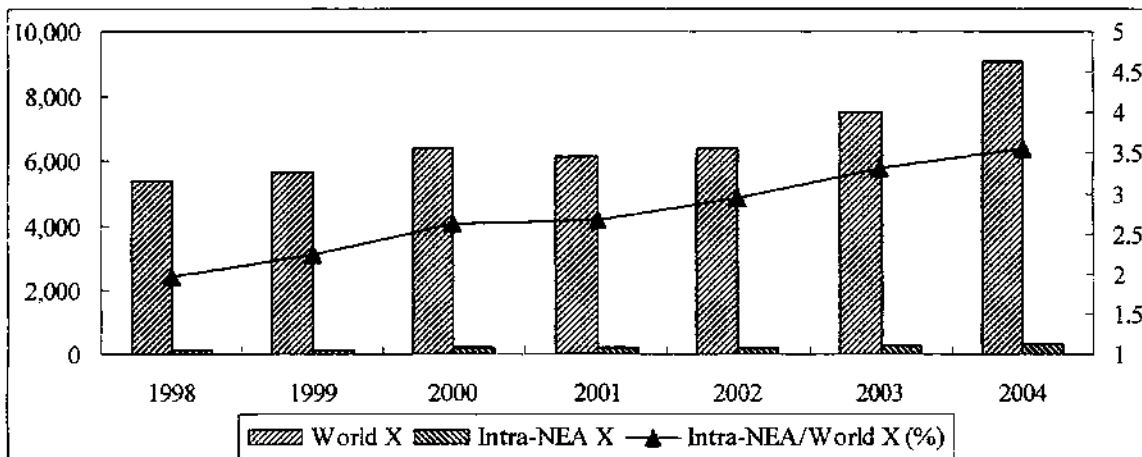
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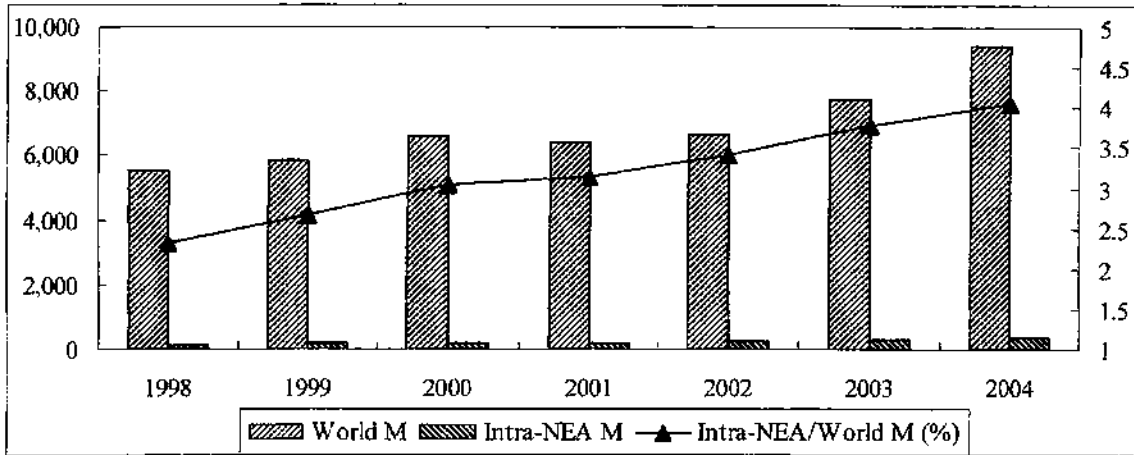
NEA: Northeast Asia (Japan, China ROK, Russia, DPRK, Mongolia), w: World, i: One of the Northeast Asian Countries, y: Year, X: Export, M: Import, World-5: World – (NEA – i)

$$X : \frac{\sum_{i=1}^6 X_{i[w-(NEA-i)],y}}{\sum_{w=1}^{182} X_{w,y}} \quad M : \frac{\sum_{i=1}^6 M_{i[w-(NEA-i)],y}}{\sum_{w=1}^{182} M_{w,y}}$$

However, per country trade values with the rest of the world still indicate crucial importance of Northeast Asia in terms of world trade. Figure 4 gives total ratio of each of the Northeast Asian country in world except the rest of Northeast Asia [world – (NEA-i)]. When the same ratio analysis is made for the Figure 4 data from 1998 to 2004, the rise of export for Northeast Asia is 11 % while it is 25 % for imports. This clear difference between Figures 3 and 4 proves that the individual contribution of each of the regional member countries to the world apart from the other Northeast Asian countries has not changed as markedly as they have contributed to the world economy as a whole region.

Figure 5: Intra-Northeast Asian Share in World Export and Import (US\$ bil, %)





Source: Calculated by authors based on IMF. (2005).

Note: The figures are calculated according to formulas below:

NEA: Northeast Asia (Japan, China ROK, Russia, DPRK, Mongolia). w: World, i: One of the Northeast Asian Countries. y: Year, X: Export, M: Import.

$$X : \frac{\sum_{i=1}^6 X_{i(NEA-i),y}}{\sum_{w=1}^{182} X_{w,y}} \quad M : \frac{\sum_{i=1}^6 M_{i(NEA-i),y}}{\sum_{w=1}^{182} M_{w,y}}$$

This discrepancy is coming from the rising importance of intra-regional trade. Figure 5 clarifies that the recent tendency of intra-regional trade has drastically risen among the six countries. The changing slope in Figure 5, from 1998 to 2004, is 89 % for the intra-regional exports and 73 % for intra-regional imports. It is obvious that the rise of intra-regional trade is more significant than their total trade with the world. Hence, the rising intra-regional interdependency in addition to their rising share in world economy is the main results driven from Figures 3, 4 and 5. Intensive trade within the region and rising trade potential of the region in the world can better be utilized with regional infrastructural development. Furthermore, this rising trade capacity in the region necessitates existence of a regional financial mechanism, i.e. NEADB for smoother functioning of trade. Potential for the intra-regional trade is also evident for future medium-term target of NEAFTA. Hence, NEADB would create the technical basis for near future FTA (which would be related with the second stage of loose functional integration) with its multi-track contributions to the region. The basic data about intra-regional trade and Figure 5 are provided in Appendices for each country.

Another form for the Northeast Asian regional co-operation is the Council for Northeast Asian Economic Co-operation (Lee 2000). This approach mainly focuses on Japan, South Korea and China to create a regional platform for communication and consensus purposes. Nevertheless, a more comprehensive appeal to cover all of the regional countries can be utilized through different considerations, one of which is NEADB. Lee argues the plausibility of the Council with a special attention on institutionalization. However, the current study argues that an institutional co-operation

needs further effort with both economic and political preparedness.

With NEADB, whose membership is wider and the level of interaction is more practical to reach consensus, an environment for future council type of mechanisms can be prepared in due time. Since, the idea of council is not neglected by promoting the Bank. On the contrary, efficient progress of the inductive mechanism of loose functional integration, which might lead to a regional council in its long-term objective, can better be achieved with NEADB. Through NEADB, each member could enjoy regional co-operation by contributing in accordance with its capacity and being responsible given its own comparative advantage, characteristics and resources. Tables 1 and 2 show how each country has certain specialties while contributing to the potential regional development. Namely, factor endowment of each country would be grouped as Japan and South Korea with foreign direct investment capacity, official development assistance potentials, advanced technology, management know-how and large markets; Russia with untapped natural resources; China and Mongolia with large territory and labor force while North Korea enjoys rich natural resources (Kakazu 1995: 106). Hence, these differences do not create a burden for further informal or formal regional co-operation but provide a legitimate reasoning of loose interaction for regional complementarity. This cohesiveness of Northeast Asia, bestowed by its strategic position in East Asia, creates a certain impetus for deeper regional integration.

While capital participation by the United States in NEADB would help validate its role as an engaged power in the region, its security role is also significant. In particular, the US foreign policy toward North Korea is that of engagement, implying that the US and other OECD (Organization for Economic Cooperation and Development) countries are expected to extend economic co-operation. Indeed, North Korea with its strategic position and natural resources is crucial enough not to be excluded from any regional platform. Even the intra-regional trade figures (appendices) show that North Korea is already embedded to the region through economic and commercial linkages. The co-operation, hence, is also aimed at inducing North Korea to gradually open its doors to the outside world and to become a member of the regional and global community through economic and political reforms.

Of course, positions of the US and other non-regional members in the Bank would not only be related with the well functioning of the mechanism but also smooth transformation of the loose functional integration mechanism in its medium- and long-term projections. After initiation of financial co-operation and then economic co-operation in the medium-term, political as well as social cohesiveness of the region alongside the economic integration are the long-term targets. Rozman states that the path to regionalism must first cross the North Korean divide (Rozman 2004: 230). As this statement is crucial for confidence building security measures in the region, financial and further economic engagements are necessary to provide a solid ground for political conciliation and social consensus in Northeast Asian security issues. As other collaborative tracks (mainly the six-party talks and other bilateral consultations among the regional actors) are going on about the North Korea issue, a loose functional stand of NEADB would be the main platform of compromise. Inclusion of DPRK to the sub-regional collaboration might soften the setbacks during the six-party

talks and provide further chances to communicate. Furthermore, a sub-regional stage like NEADB might give a chance to its developing economies like Mongolia and DPRK to have a more diplomatic say in international arena⁴.

Furthermore, economic exchange and the move toward economic integration between the two Koreas are certain to gain momentum from the practices of NEADB. The problem for ROK is that its financial resources are limited, given its status as a medium-sized, middle-income country. The NEADB would significantly lessen the financial burden of ROK in future economic co-operation and integration of the peninsula. China, a giant country with high economic growth, is still having economic problems, including disarray in many of its public enterprises and mass poverty in the inland areas, also has much to gain from the NEADB through its access to additional financial resources.

Other regional co-operation premises like ASEAN and APEC have the same establishment esteem of promoting dialogue among the historically or strategically divided communities. Indeed, the idea of “open regionalism” and “openness” are originated from the development of the idea of ASEAN by which the degree of communication on economic matters was supposed to encourage political dialogue as well. Nevertheless, it is not eligible to compare ASEAN or APEC to NEADB at its initial phase since the NEADB has different reasoning and agenda to promote regional co-habitation. Thus, functional movements like the Bank would again serve to the betterment of the conditions to become ripe enough to bolster more ambitious attempts for regional co-operation. To repeat the obvious, Northeast Asia consists of strong market-oriented economies in Japan and South Korea; economies in various stages of transition in China, Russia and Mongolia and a rather rigid command economy of North Korea. Apart from the inherent political difficulties among these entities, infrastructure needs and broader policy objectives with intra- and inter-regional trade potentials are convincing enough for those countries to prosper together.

Japan, as the main economic power with trade and investment relationships throughout the continent, would appear to be the leading shareholder and management source of the Bank. But aside from its own internal troubles, Japan may also find it difficult to secure Northeastern concurrence from other Northeast Asian countries on joint actions or postures to be taken. Hence, not only leadership of one country but rather a balanced mechanism of capacity-sharing would be the driving force behind the functional integration of Northeast Asia with a vigorous start of NEADB as the financial and development center of the region.

⁴ The same reasoning of the Bank can also be utilized for development of deeper communication between PRC and Taipei China. Then no territory would be out of the scope of the NEADB in Northeast Asia while the Bank consolidates the level of exchange and understanding between the communities and promotes openness in the region.

Conclusion

When one considers any kind of regional integration, related presuppositions would be as follow:

- a) Regionalism or sub-regionalism might be temporary movements in order to manage the recent trends in international economic and political arena.
- b) A regional attempt might be needed as a counterweight in order to protect the territories from harm or, in case of an incremental direction, to share the economic gains vis a vis the other regional forms.
- c) Regional co-operation might produce its own benefits which might not be otherwise obtained within its boundaries.

The third option seems to be the most plausible one for Northeast Asia according to the thorough analysis of the current study. Initially, the general characteristics of the region, which are summarized in the first part of this paper, prove that there are both short-term financial and medium-term economic benefits of region-wide infrastructural development in Northeast Asia. The second part focuses more on the reasonability of the immediate financial collaboration given the current infrastructural needs of the region. The last and the main part discusses the theoretical base, the functioning mechanism, intra-regional trade capacity and the pros and cons of NEADB given its medium and long-term contributions to regionalism premise in Northeast Asia.

Examination of the infrastructural conditions of the region, on the one hand, already proves the necessity of regional collaboration for economic development in case of the developing countries and economic stability for the developed ones. Intra- and inter-regional trade figures of Northeast Asia vis a vis the world trade, on the other hand, reveals the phenomena of rising trade interdependency among Japan, China, ROK, DPRK, Russia and Mongolia. There are several options of how to configure the infrastructural necessities and collaborate through intra-regional trade and development projects. Some of these options are NEAFTA or a Council for Northeast Asian Economic Co-operation. However, our theoretical application of “Loose Functional Integration” explains how NEADB would best optimize the urgent need of financial project-based co-operation in the short-term. Since the functioning mechanism of NEADB is settled, as explained in Part III.b., the sub-regional system would lead to economic co-operation in the medium-term and then to political-conciliation in the perceived long-term.

Thus, given the needs and potentials of the region, functional integration would be more beneficial than immediate formal institutionalization. Functional integration, in other words, would focus on the outcome of market forces rather than on the organizational models of governments or other institutions. The mechanism would further seek to enhance economic co-operation in currently sensitive cross-border issues, such as transportation, communication, environmental protection, energy development and even cultural and educational ones, as well as more enduring concerns of investment, industrial co-operation and macro-policy co-ordination.

In conclusion, this paper intends to contribute to the recent discussion about NEADB by focusing on two particularities of the Bank: First, “Loose Functional Integration” is the most

feasible approach when one considers the immediate, medium- and long-term co-operation needs of Northeast Asia and this perspective can best be utilized with establishment of NEADB as foundation for the future regional integration. Second, NEADB is necessary for betterment as well as utilization of the already growing intra- and inter-regional trade potential in the region. Last but not the least, the Bank is essential for providing a sustaining platform to the regional powers in order to keep them in collaboration along the parallel track of regional stability efforts in Northeast Asia.

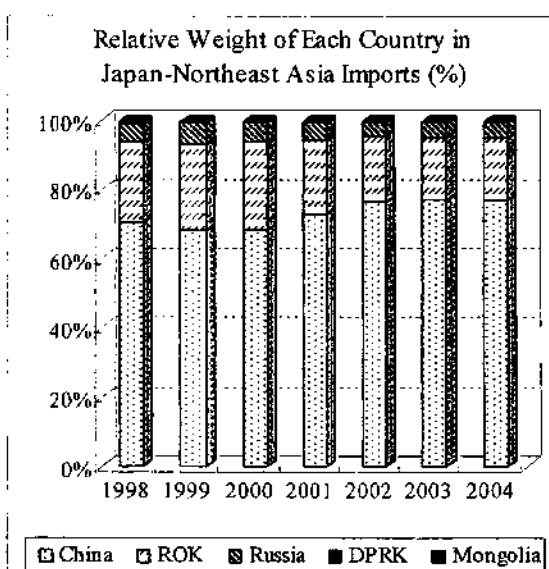
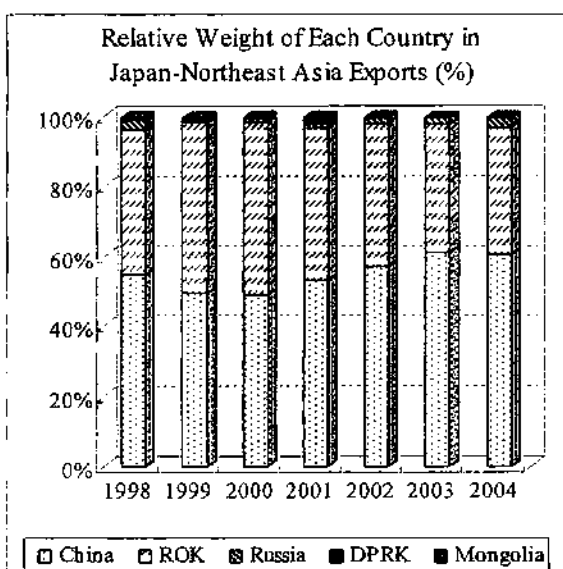
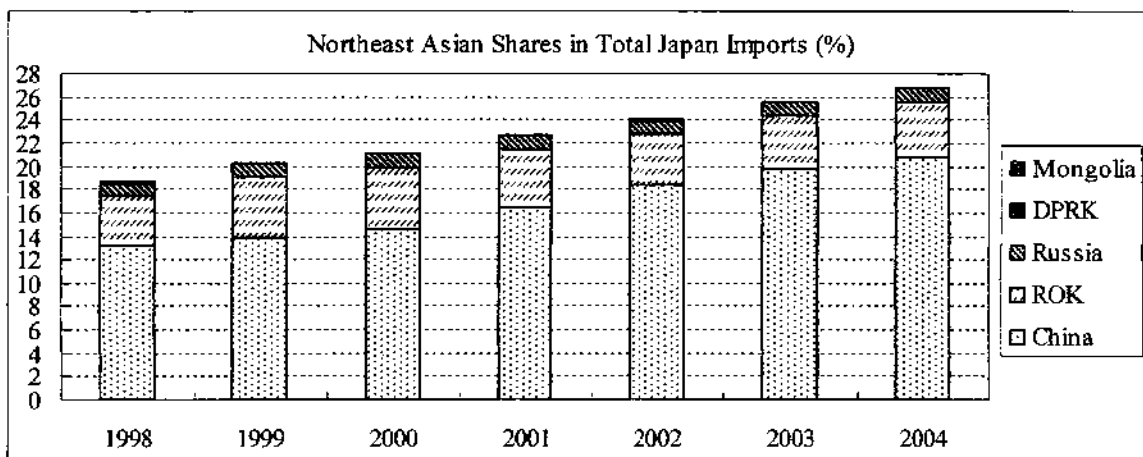
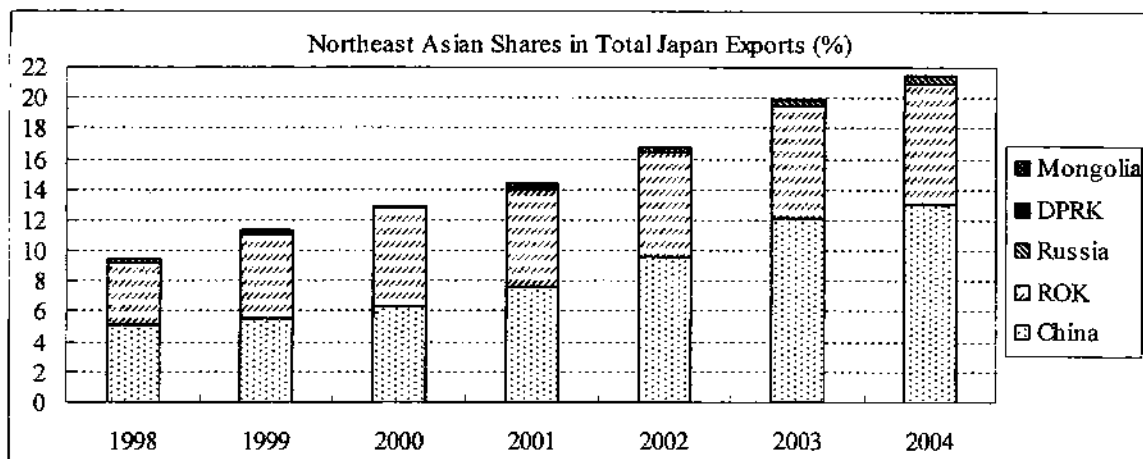
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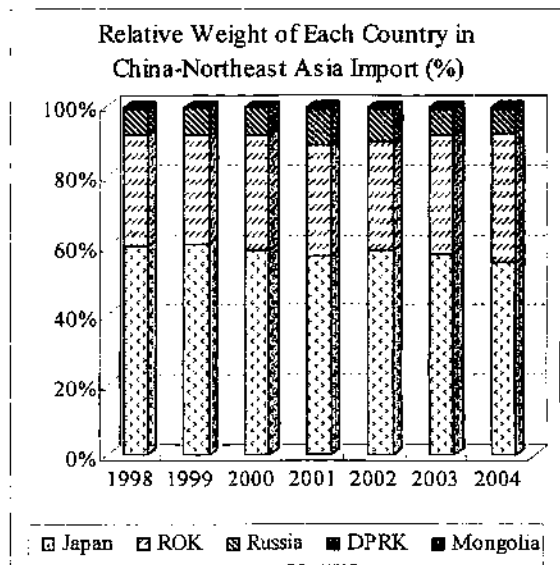
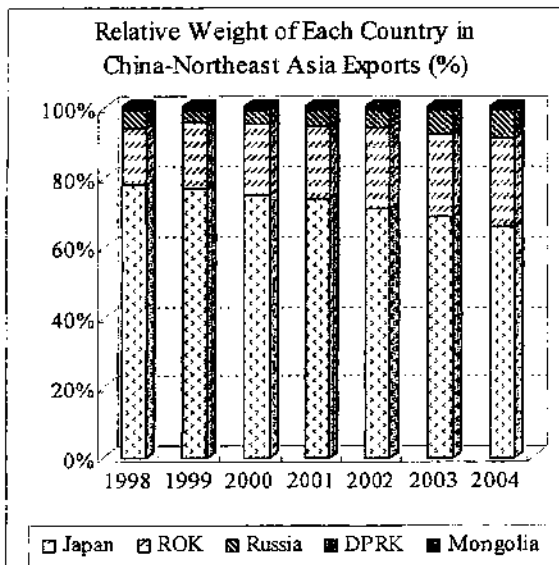
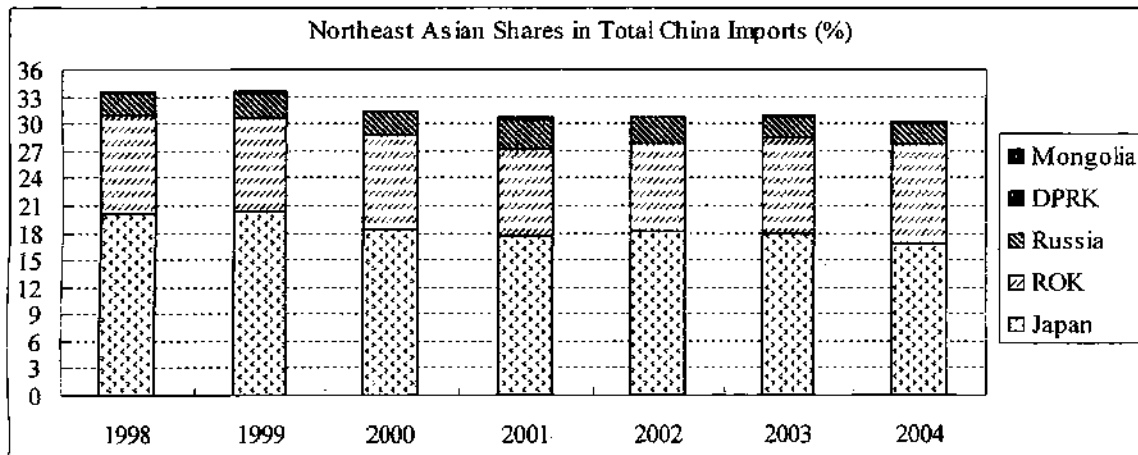
Appendices:

Appendix I. Japan-Northeast Asia Trade Relations



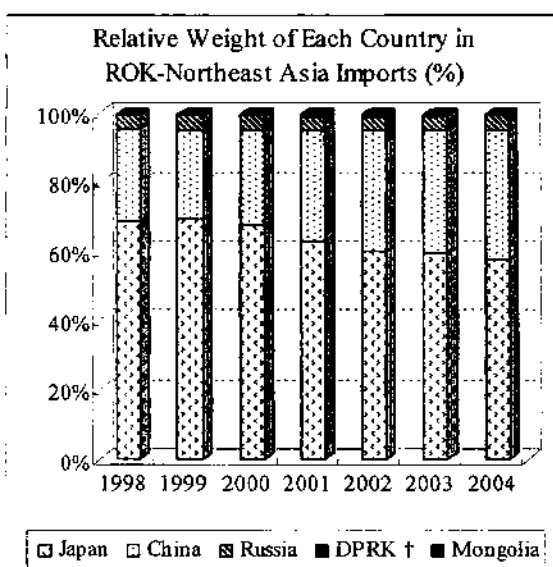
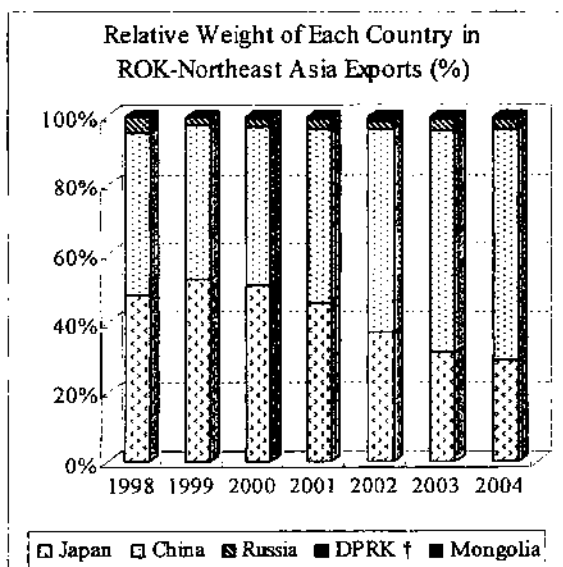
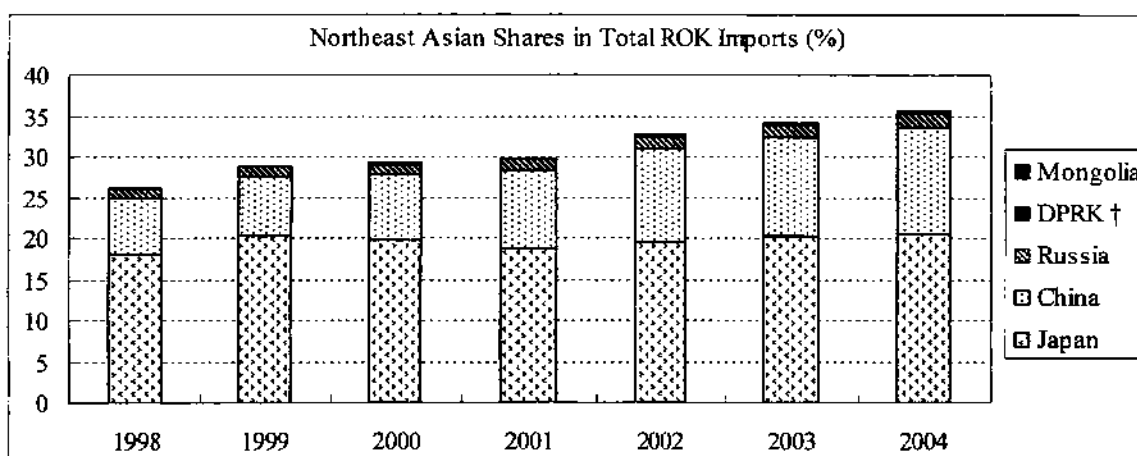
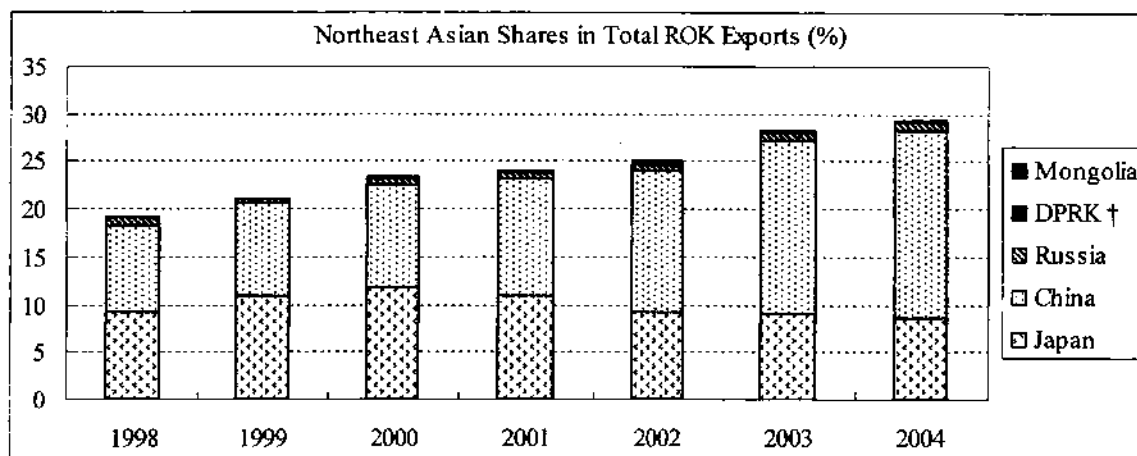
Source: Created by authors based on the data from IMF. (2005). The bottom left box (the relative weight of each country in the country's exports) comes from the first box at the top, while the bottom right box (the relative weight of each country in the country's imports) comes from the second top box.

II. China-Northeast Asia Trade Relations



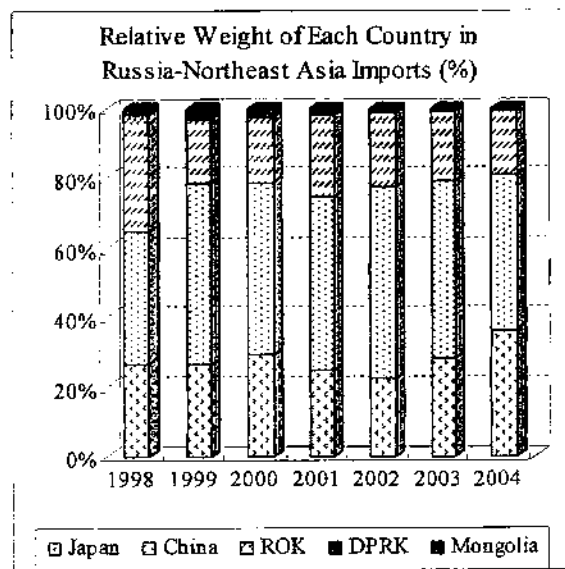
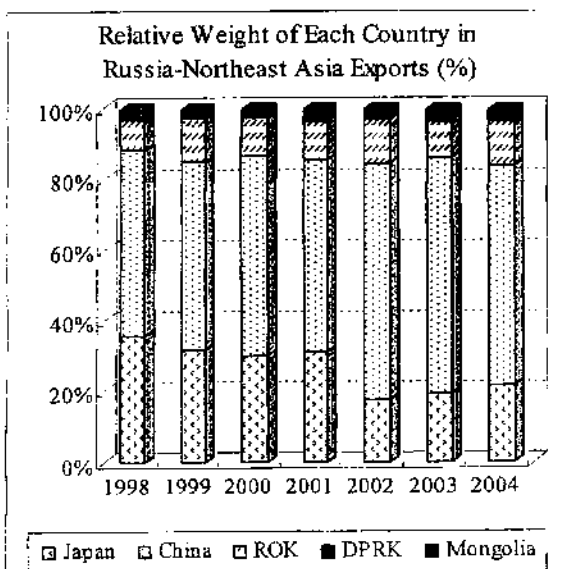
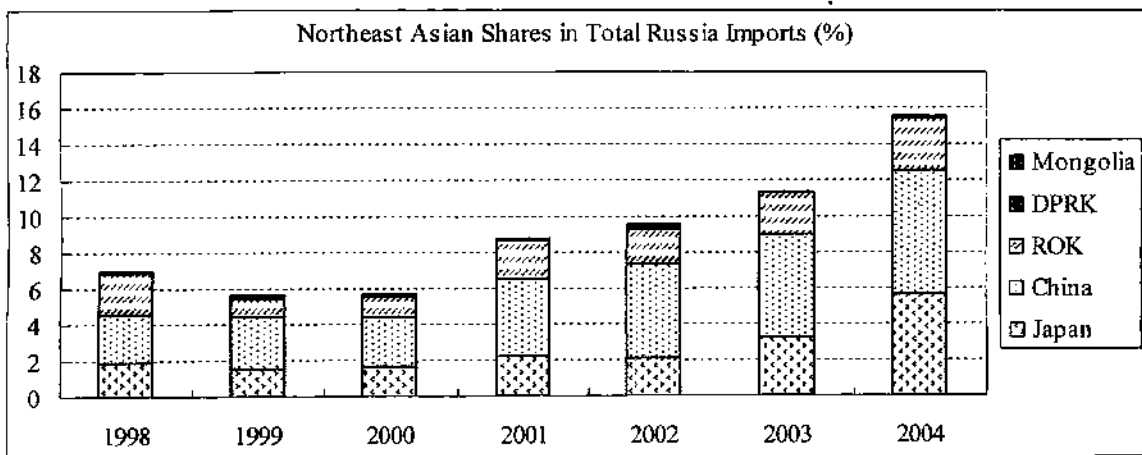
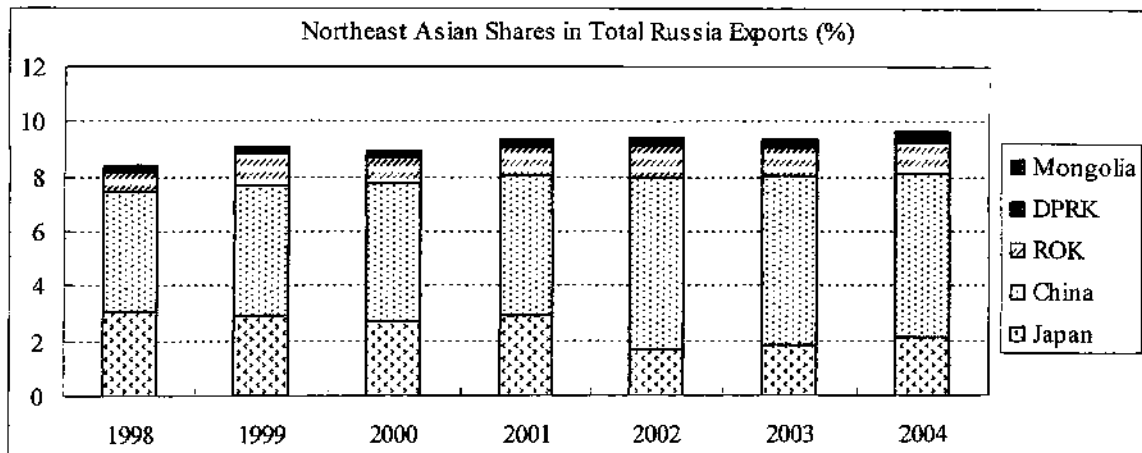
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Appendix III. ROK-Northeast Asia Trade Relations



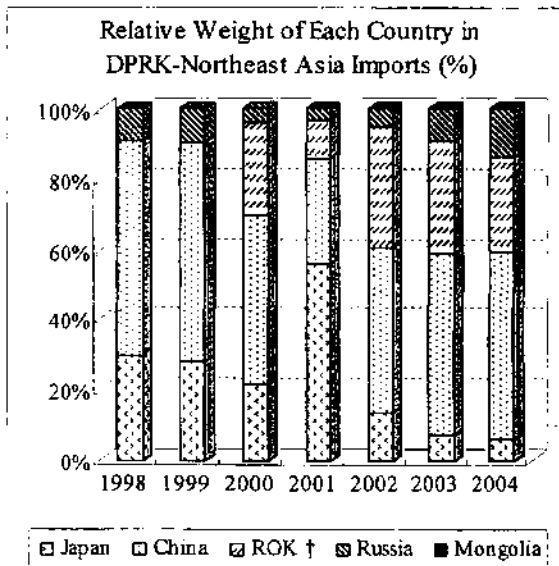
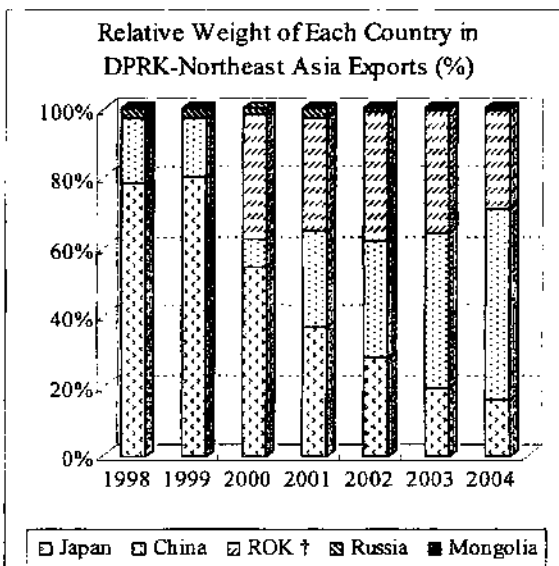
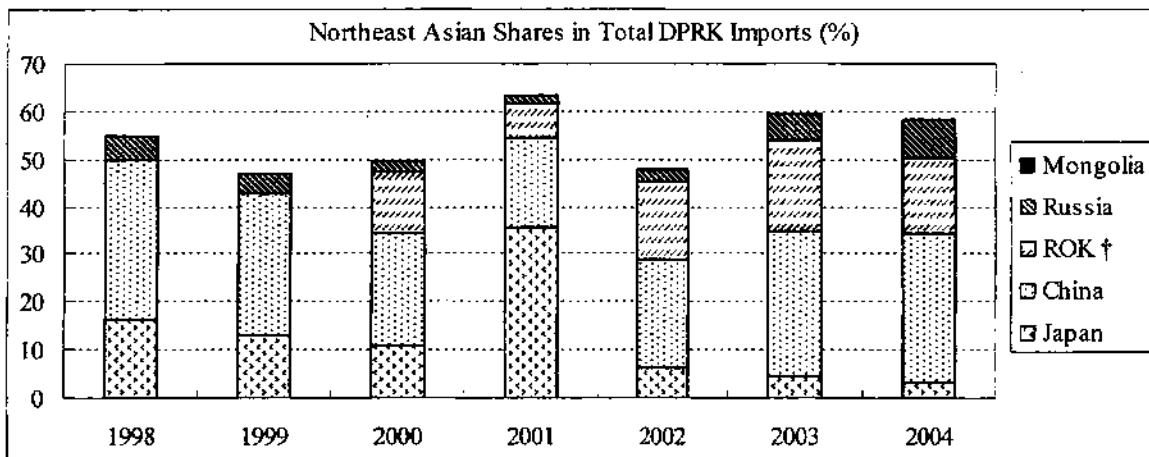
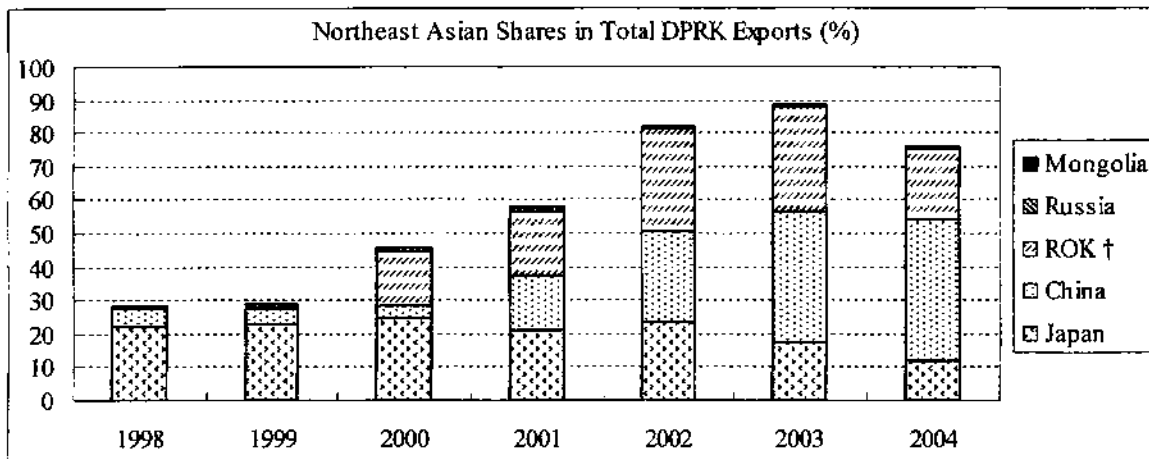
Source: Created by authors based on the data from IMF. (2005). † ROK-DPRK export-import values are taken from the Ministry of Unification, South Korea, (2006). The bottom left box (the relative weight of each country in the country's exports) comes from the first box at the top, while the bottom right box (the relative weight of each country in the country's imports) comes from the second top box.

Appendix IV. Russia-Northeast Asia Trade Relations



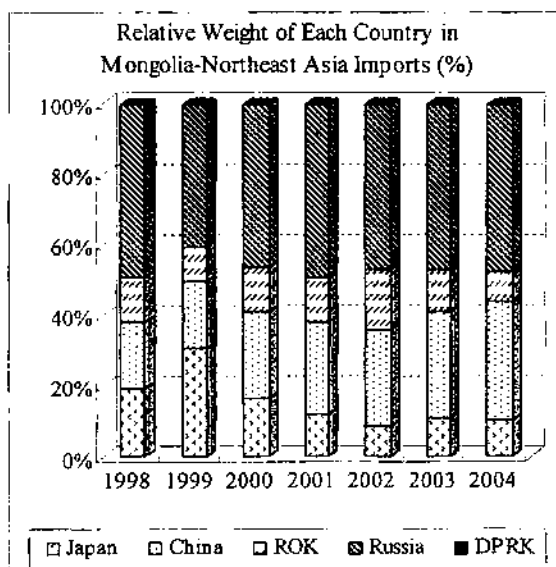
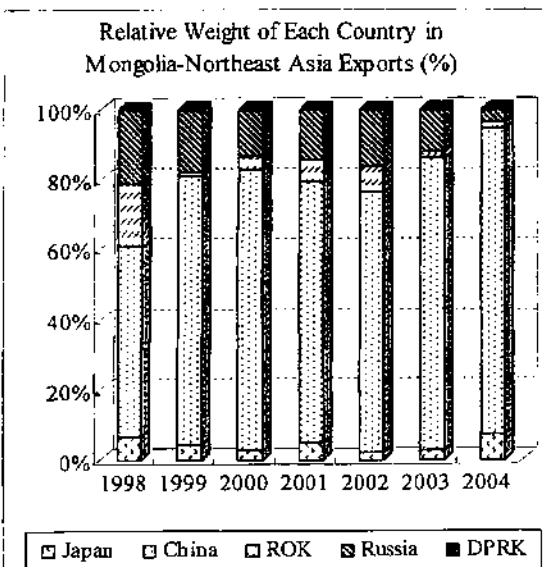
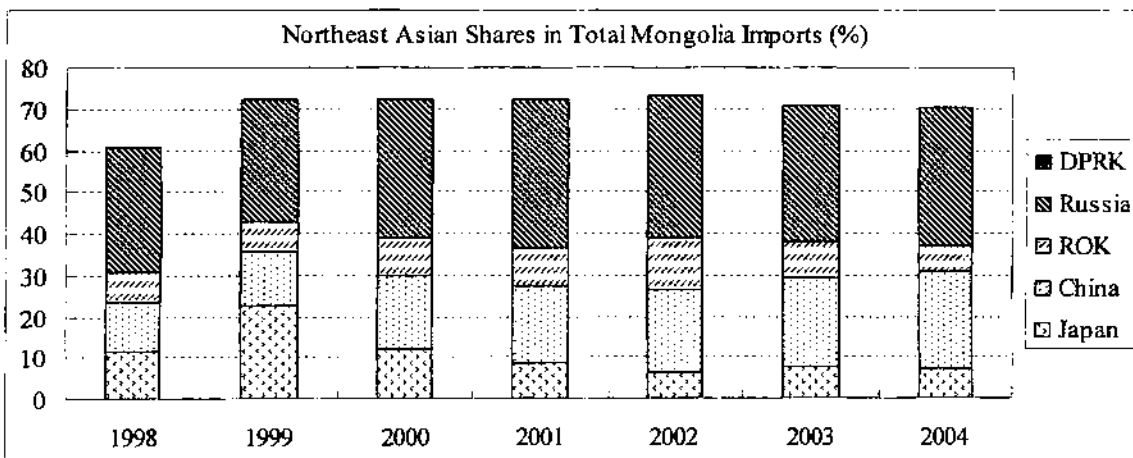
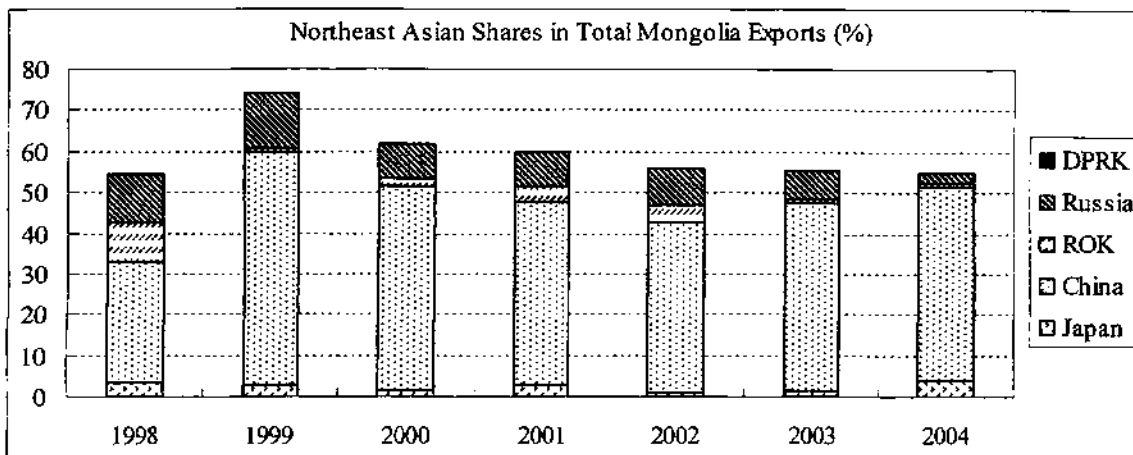
Source: Created by authors based on the data from IMF. (2005). The bottom left box (the relative weight of each country in the country's exports) comes from the first box at the top, while the bottom right box (the relative weight of each country in the country's imports) comes from the second top box.

Appendix V. DPRK-Northeast Asia Trade Relations



Source: Created by authors based on the data from IMF. (2005). † ROK-DPRK export-import values are taken from the Ministry of Unification, South Korea. (2006). The bottom left box (the relative weight of each country in the country's exports) comes from the first box at the top, while the bottom right box (the relative weight of each country in the country's imports) comes from the second top box.

Appendix VI. Mongolia-Northeast Asia Trade Relations



Source: Created by authors based on the data from IMF. (2005). The bottom left box (the relative weight of each country in the country's exports) comes from the first box at the top, while the bottom right box (the relative weight of each country in the country's imports) comes from the second top box.