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ERINA Economic Research Institute for Northeast Asia

The Northeast Asian Economic Review

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Financing Development Cooperation in Northeast Asia

Masahiro Kawai*

Abstract

This paper examines financing mechanisms to support infrastructure development and connectivity in Northeast Asia—comprising the Northeastern People's Republic of China, Japan, the Democratic People's Republic of Korea (DPRK), the Republic of Korea, Mongolia, and the Russian Far East. Although this subregion has developed the Greater Tumen Initiative, the extent of intergovernmental cooperation for cross-border infrastructure investment is not as strong as in other subregional cooperation programs in Asia, such as the Greater Mekong Subregion Program and the Central Asia Regional Economic Cooperation Program. Using various previously published estimates, this paper finds that the total infrastructure investment needs for the subregion excluding Japan and the Republic of Korea (in transport, energy, information and communication technology, and the environment) could be in the order of \$63 billion per year over the next 10 years, and of this total, the governments in the subregion will have to mobilize external funding of \$13 billion a year, focusing on national infrastructure projects in the DPRK and Mongolia and high-priority cross-border projects in Northeast Asia. The paper considers three options as a cooperative financing mechanism for the subregion: special and/or trust funds set up in the existing multilateral development banks (MDBs), a structured infrastructure investment fund supported by MDB(s), and a new subregional multilateral development bank. Then it suggests that the Northeast Asian governments, together with other donors, may begin with setting up special and/or trust funds at the existing MDBs and move to creating an infrastructure investment fund, following the good example of the Association of Southeast Asian Nations Infrastructure Fund, once sufficient confidence and trust is built and the DPRK returns to the international community. The paper recommends against the establishment of a new development bank in the subregion.

Keywords: infrastructure development and connectivity, subregional cooperation programs in Asia, Northeast Asian infrastructure forum, Northeast Asian infrastructure fund

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1. Introduction

Asia's economic interdependence through trade, investment, and finance has risen over the last few decades. Given the current economic and financial risks in Europe and the United States (US), the role of dynamic Asian economies in sustaining global growth has become even more critical.

As an important subregion in Asia, Northeast Asia—comprising the Northeastern People's Republic of China (PRC), Japan, the Democratic People's Republic of Korea (DPRK), the Republic of Korea, Mongolia, and the Russian Far East—is key to Asia's success in contributing to global prosperity and stability.¹ The subregion's major political challenge is to maintain peace and security in the Korean peninsula and manage the territorial disputes among some countries, while pursuing economic cooperation to promote growth and development, trade and investment integration, physical connectivity, energy security, and environmental sustainability.

The Asian Development Bank (ADB) has been supporting several subregional programs in various parts of Asia, such as the Greater Mekong Subregion (GMS) Economic Cooperation Program, the Central Asia Regional Economic Cooperation (CAREC) Program, the South Asia Subregional Economic Cooperation (SASEC) Program, and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). These subregional programs—focusing on infrastructure connectivity, trade facilitation, energy, and environmental sustainability—have delivered tangible benefits, economically and politically. The core of these programs is cross-border infrastructure cooperation, where ADB plays a secretariat or supporting role in designing and implementing the programs.

There are several reasons for increasing infrastructure investment in Asia (ADB and Asian Development Bank Institute [ADBI] 2009). First, investing in infrastructure will enhance competitiveness and productivity, and help to sustain medium- to long-term growth. Second, it will help to raise standards of living and narrow the development gap by connecting isolated (e.g., landlocked) countries, areas, and people to major economic centers. Third, it promotes environmental sustainability and social inclusion if designed properly. Last, infrastructure helps to stimulate aggregate demand and help rebalance growth away from external demand in the US and Europe toward Asia's demand.

In addition, cross-border infrastructure—in transport, electricity and power, and telecommunications—can strengthen connectivity across countries and create large economic benefits for countries involved. The larger the geographical area to be connected, the greater is the benefit due to network externalities. However, in general governments tend to be reluctant to finance cross-border infrastructure projects using their own resources. The reason is that these projects are often viewed as unduly benefiting the neighboring countries when the latter do not adequately invest in the shared projects. The consequence is that governments tend to under-invest in cross-border infrastructure and, as a result, limit cross-border connectivity. This suggests the potential benefit of intergovernmental coordination and cooperation to jointly develop and invest in subregional cross-border infrastructure projects.

This paper explores the possibility of greater subregional development cooperation in Northeast Asia so that the subregion's governments can nurture better political relations and mutual trust among them, jointly design and undertake cross-border infrastructure investment, and maintain growth momentum in a stable manner. It attempts to draw lessons from other parts of Asia for development cooperation and financing, particularly the lessons from the Association of Southeast Asian Nations (ASEAN) Infrastructure Fund (AIF) and several subregional economic cooperation programs, with the view to mobilize Northeast Asia's abundant savings and international funds for infrastructure investment in the subregion.

The paper is organized as follows. Section 2 discusses the potential for infrastructure investment development and cooperation in Northeast Asia, where complementarity across countries has not been adequately exploited. Section 3 attempts to draw lessons from subregional

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cooperation programs in the rest of Asia for Northeast Asia's infrastructure cooperation. Section 4 examines three options for financing infrastructure investment in Northeast Asia—creating special and/or trust funds in the existing multilateral development banks (MDBs), a subregional infrastructure investment fund supported by MDB(s), and a subregional multilateral development bank—and argues that the Northeast Asian governments may start with setting up special and/ or trust funds and then move to creating a well-structured infrastructure investment fund, similar to the AIF, but not another multilateral development bank. Section 5 recommends a cooperative framework for infrastructure development and connectivity in Northeast Asia that includes a Northeast Asian infrastructure forum and a Northeast Asian infrastructure fund. Section 6 concludes the paper.

2. Potential for Infrastructure Development and Cooperation in Northeast Asia

2.1. Economic Characteristics of Northeast Asia

2.1.1. Diversity in Development Stages

Northeast Asian economies are diverse not only in political systems but also in economic characteristics—economic size, population, industrial structure, openness, and stage of economic development (Table 1). Japan and the Republic of Korea are advanced economies with membership of the Organisation for Economic Co-operation and Development (OECD), while the PRC, the DPRK, Mongolia, and the Russian Federation are emerging and/or transition economies. Mongolia is the most open Northeast Asian economy in trade and inward foreign direct investment (FDI), while the DPRK is a highly controlled, closed economy without a functioning market system. The DPRK has yet to join the global institutions—such as the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO)—as well as regional institutions such as ADB.

Itam	CDD	DOD	GDP/	Inv/	Sav/	Ind	ustrial Struc		Exp/	Imp/	FDI/
Item	GDP	POP	POP	GDP	GDP	Agr	Ind [Man]	Serv	GDP	GDP	GDP
Country/Area	(\$ billion)	(million)	(\$)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRC	7,301.1	1,347.4	5,432	45.5	52.5	10.1	46.8[29.6]	43.1	26.0	23.9	10.1
Northeast PRC	919.2	134.5	6,835			10.4	54.2[]	35.2	8.5	9.8	13.9
Japan	5,867.2	127.8	45,903	20.7	19.0	1.2	27.4[19.5]	71.5	15.2	16.1	3.9
DPRK	29.3	24.3	1,204			23.1	36.5[21.9]	40.1	12.7	14.8	12.0
Republic of Korea	1,116.2	49.8	22,424	27.4	31.7	2.4	33.6[28.1]	64.0	56.2	54.1	11.8
Mongolia	8.6	2.8	3,056	48.6	35.8	15.3	36.3[8.3]	48.3	63.5	86.1	110.4
Russian Federation	1,858.9	142.9	13,012	23.2	30.9	4.0	36.7[16.4]	59.3	27.8	16.5	24.8
Russian Far East	84.4	6.3	13,487				[]		29.4	10.9	10.5

Table 1: Key Economic	Indicators of Northeast	Asian Countries, 2011
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Agr = agriculture, DPRK = Democratic People's Republic of Korea, Exp = exports, FDI = foreign direct investment (stock), GDP = gross domestic product, Imp = imports, Ind = industry, Inv = investment, Man = manufacturing, POP = population, PRC = People's Republic of China, Sav = savings, Serv = services. Notes :

- 1. The manufacturing share data for the PRC are for 2010. The industrial structure share data for Japan and the Russian Federation are for 2010. The FDI/GDP data for the DPRK are for 2010.
- 2. The GDP data for the Northeast PRC and the FDI/GDP data for the Northeast PRC and the Russian Far East are estimated using the IMF and ERINA data.
- 3. The GDP data for the DPRK are gross national income (GNI) estimates made by the Bank of Korea.

Sources: International Monetary Fund (IMF), *World Economic Outlook Database*, October 2012; World Bank, *World Development Indicators*, 2012; United Nations Conference on Trade and Development, *World Investment Report*, 2012; Economic Research Institute for Northeast Asia (ERINA), *Northeast Asia Economy Databook*, 2012.

The degree of human development is a good proxy for a country's stage of economic development. It is captured by the Human Development Index (HDI) constructed by the United Nations Development Programme (UNDP), which is a composite indicator measuring the average achievements in three basic dimensions of human development: a long and healthy life, knowledge, and a decent standard of living. The HDI indicators summarized in Table 2 show that Japan and the Republic of Korea performed much better than the European Union average of 0.87 in 2010–2011, whereas Mongolia, the PRC, and the Russian Federation lagged behind.

Country or Region	1980	1990	2000	2010	2011
PRC	0.404	0.490	0.588	0.682	0.687
Japan	0.778	0.827	0.868	0.899	0.901
DPRK					
Republic of Korea	0.634	0.742	0.830	0.894	0.897
Mongolia		0.504	0.555	0.647	0.653
Russian Federation			0.691	0.751	0.755
EU27	0.731	0.771	0.830	0.869	0.871
US	0.837	0.870	0.897	0.908	0.910

Table 2: Human Development Index in Northeast Asia

DPRK = Democratic People's Republic of Korea, EU = European Union, PRC = People's Republic of China, US = United States.

Note: Data for EU27 are averages for the 27 countries for which data are available.

Source: United Nations Development Programme, Human Development Report, 2011.

2.1.2. Trade Integration

Trade integration in Northeast Asia has increased during the last two decades. The share of intra-Northeast Asian trade in the subregion's total trade with the world has risen from 15.2% in 1992 to 22.8% in 2011. Most of this intra-Northeast Asian trade is due to trade among the PRC, Japan, and the Republic of Korea, accounting for 91.7% of total intra-Northeast Asian trade in 2011. Over the last 20 years, Japan, the DPRK, and the Republic of Korea became increasingly dependent on trade with the PRC (Table 3), while the PRC reduced its dependence on Northeast Asia as a result of its rising dependence on the rest of the world, particularly the US and Europe.

Country	1992	2000	2010	2011
PRC	22.2	26.7	19.0	18.6
Japan	10.9	16.6	28.5	28.7
DPRK	54.1	34.0	57.4	75.4
Republic of Korea	23.5	26.0	33.3	32.2
Mongolia	78.2	67.6	82.0	81.7
Russian Federation	12.5	8.1	17.0	15.4
Russian Far East		53.8	65.0	75.0

 Table 3: Trade Dependence of Individual Countries on Northeast Asia (%)

DPRK = Democratic People's Republic of Korea, PRC = People's Republic of China. Source: IMF, *Direction of Trade*, Online.

Although data for the Russian Federation show that its trade dependence on Northeast Asia has been low, at less than 17% over the last 20 years, the Russian Far East's trade dependence on Northeast Asia has been high and risen to very high levels such as 75% in 2011. This rise of the Russian Far East's trade dependence on Northeast Asia is mainly due to its surging trade dependence on the PRC; for example, its import dependence on the PRC surged to 50% in 2011. The trade dependence of Mongolia and the DPRK on Northeast Asia has also risen to a high level; it rose in Mongolia from 78% to 82% and in the DPRK from 54% to 75%, between 1992 and 2011. Thus, the DPRK, Mongolia, and the Russian Far East have strong trade links with Northeast Asia, particularly the PRC, Japan, and the Republic of Korea.

Developing a positive environment conducive to business is crucial for attracting the required investment for sustainable growth of the subregion. The current performance of Northeast Asia's business environments, as measured by the World Bank's Doing Business Index, is mixed (Table 4). Surprisingly, Mongolia's Doing Business Index is better than those of the PRC and the Russian Federation. The PRC's business environment is not so good, despite the large size of inward FDI. The Russian Federation faces a formidable challenge in improving the quality of its business environment, while the DPRK is not in the position to attract investment though no data are available. The Republic of Korea has made substantial progress in improving the business environment and now ranks number 8 globally.

Index Factor	Country	PRC	Japan	Republic of Korea	Mongolia	Russian Federation
Ease of Doing Business Overall Rank		91	24	8	76	112
Starting a Business		151	114	24	39	101
Dealing with Construction Pe	ermits	181	72	26	121	178
Getting Electricity		114	27	3	169	184
Registering Property		44	64	75	22	46
Getting Credit		70	23	12	53	104
Protecting Investors		100	19	49	25	117
Paying Taxes		122	127	30	70	64
Trading Across Borders		68	19	3	175	162
Enforcing Contracts		19	35	2	29	11
Resolving Insolvency		82	1	14	127	53

Table 4: Business Environment Rankings of Countries in Northeast Asia, 2012

PRC = People's Republic of China.

Source: World Bank, Doing Business Index, 2012

Problem areas in Northeast Asia include "starting a business" (the PRC, Japan, and the Russian Federation); "dealing with construction permits" (the PRC, the Russian Federation, and Mongolia); "getting electricity" (the Russian Federation, Mongolia, and the PRC); "protecting investors" (the Russian Federation and the PRC); "paying taxes" (Japan and the PRC); "trading across borders" (Mongolia and the Russian Federation); and "resolving insolvency" (Mongolia). The lagging Northeast Asian economies, including the Russian Federation and the PRC, are encouraged to work on these areas for improvement.

2.2. Quality of Infrastructure in Northeast Asia

Northeast Asia's diversity is its strength, providing opportunities for trade, investment, and economic development through enhancing its physical connectivity. An important area for the subregion's cooperation is in binding the economies more closely through efficient infrastructure linkages in transport, telecommunications, and energy. Economies can flourish when they exploit complementarities. In Northeast Asia, the Russian Far East and Mongolia are resource rich economies, while Japan and the Republic of Korea are strong in high-tech manufacturing industries. The PRC has abundant labor and provides a large, expanding market. Given that the PRC, Japan, and the Republic of Korea need raw materials, minerals, and energy, particularly gas and oil, for economic growth and that the Russian Federation—and to some extent Mongolia—can supply these resources, the Northeast Asian economies can exploit each other's complementarity. However, these cannot be developed without the support of cross-border infrastructure connectivity. To maximize the benefit from complementarities across economies in Northeast Asia, significant subregional cooperation is needed.

2.2.1. Competitiveness and Quality of Infrastructure

The global competitiveness of Northeast Asian economies depends heavily on the quantity and quality of their infrastructure. Given the importance of infrastructure for subregional economic integration and connectivity, this subsection looks at the quantity and quality of infrastructural facilities in the subregion and assesses the need for investment in such crucial components as transport, energy, information and communications technology (ICT), and logistics.

Table 5 shows that, among the Northeast Asian countries for which data are available, Mongolia is weak in infrastructure and there is also room for improvement in the PRC and the Russian Federation. It is essential to strengthen the quality of infrastructure within and between countries to improve the competitiveness of the entire subregion.

		2001–200	2	2012–2013			
Country	GCI	GCI Infrastructure		GCI	Infrastructure		
	Rank	Rank	Score	Rank	Rank	Score	
PRC	47	61	2.9	29	48	4.46	
Japan	15	15	6.0	20	11	5.92	
Republic of Korea	28	27	4.8	19	9	5.92	
Mongolia				93	112	2.83	
Russian Federation	63			67	47	4.52	

Table 5: Global Competitiveness Index and Infrastructure Quality in Northeast Asia

GCI = Global Competitiveness Index, PRC = People's Republic of China.

Note: GCI score for infrastructure: 1 = poorly developed and inefficient; 7 = among the best in the world.

Source: World Economic Forum, Global Competitiveness Report, 2001 and 2012-2013.

Table 6 provides information on logistical performance in Northeast Asian economies, in comparison to Singapore and Hong Kong, which provide one of the best logistics services globally, as well as the US. It is clear that Mongolia and the Russian Federation are weak in logistics, particularly in the areas of customs, logistics competence, infrastructure, and international shipment.

Country	LPI Rank	LPI Score	Customs	Infra- structure	Internat'l shipments	Logistics compe- tence	Tracking and racing	Timeli- ness
PRC	26	3.52	3.25	3.61	3.46	3.47	3.52	3.80
Japan	8	3.93	3.72	4.11	3.61	3.97	4.03	4.21
Republic of Korea	21	3.70	3.42	3.74	3.67	3.65	3.68	4.02
Mongolia	140	2.25	1.98	2.22	2.13	1.88	2.29	2.99
Russian Federation	95	2.58	2.04	2.45	2.59	2.65	2.76	3.02
Singapore	1	4.13	4.10	4.15	3.99	4.07	4.07	4.39
Hong Kong	2	4.12	3.97	4.12	4.18	4.08	4.09	4.28
US	9	3.93	3.67	4.14	3.56	3.96	4.11	4.21

Table 6: Logistics Quali	ity in Northeast Asi	ian Countries, 2012
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LPI = logistical performance indicator, PRC = People's Republic of China, US = United States. Source: World Bank Logistical Performance Indicators, 2012.

Table 7 provides information on the quantity and quality of selected types of infrastructure, such as electricity supply, telecommunications, and paved roads, from international comparative perspectives. In the DPRK, the quantity of infrastructure is very low and its quality very poor in comparison with other countries, followed by Mongolia, though the latter generally performs better than South Asia and Sub-Saharan Africa. The PRC does not exhibit strong performance in comparison to the Russian Federation. Ample room exists for the underdeveloped Northeast Asian economies—the DPRK and Mongolia—to invest more in infrastructure.

Country or Region	Electric power consumption	mobile phone	Internet users (per 100 people)	Percentage paved roads
	per capita (kWh) 2009	(per 100 people) 2011	2011	2009
PRC	2,631	94.4	38.4	53.5
Japan	7,819	153.7	78.0	80.1
DPRK	733	8.9		2.8
Republic of Korea	8,900	169.4	81.5	79.3
Mongolia	1,411	111.8	20.0	3.5
Russian Federation	6,133	210.2	49.3	80.0
East Asia and the Pacific	2,095	97.7	33.6	30.7
South Asia	517	71.5	9.4	53.9
Latin America and the Caribbean	1,892	125.3	39.3	22.5
Middle East and North Africa	1,497	105.1	26.3	75.2
Sub-Saharan Africa	517	54.3	12.3	18.9

Table 7: Levels of Selected Infrastructure in Northeast Asia – International Comparison

DPRK = Democratic People's Republic of Korea, PRC = People's Republic of China.

Notes:

- 1. Data for percentage paved roads are for 2002 (Mongolia), 2006 (the DPRK), 2007 (Russian Federation), and 2008 (the PRC).
- 2. Data for various regions of the world are for developing countries only.

Source: World Bank, World Development Indicators, 2012.

2.2.2. Transport and Logistics, Information and Communication Technology, and Energy and the Environment

Three aspects of infrastructural development are critical to subregional integration: transport and logistics, ICT, and energy and the environment.

High transportation costs are a major factor hindering intra-subregional trade and integration in Northeast Asia. Inadequacies in both hardware and software components of transport contribute to these costs. Cooperation on transport hardware requires investment in subregional transport corridors to ensure better connectivity for the faster movement of goods and people across borders, whereas cooperation in transport software calls for trade facilitation by overcoming institutional constraints and bottlenecks that raise the cost of trade and thus harm competitiveness.

With the exception of the DPRK, Northeast Asia generally performs better on the quality of ICT than the rest of the world. Nonetheless, internet usage is likely to continue to rise rapidly in the years ahead. The development of telecommunications and internet infrastructure in the subregion can help promote trade in services, which will in turn help improve education, innovation and the flow of ideas, technology, and investments.

A reliable supply of energy and electricity power at reasonable costs is critical not only for improving industrial competitiveness, but also other infrastructural services, such as the internet and telecommunications. Northeast Asia needs to address a lack of cross-border transmission links as well as inadequate national infrastructure even for transmitting power within countries. A new challenge is to meet the increasing demand for energy while lowering the impacts on the environment and climate change in the face of rapid industrialization, urban expansion and development, and increased pollution in countries like the PRC. Critical efforts are needed to make transport and energy investments more environmentally friendly, improve the energy mix and energy efficiency, and reduce greenhouse gas emissions. It is important that new infrastructure investment, particularly in transport and energy, should target environmentally sustainable projects.

2.3. Infrastructure Investment Needs

According to ADB and ADBI (2009), developing Asia will need a total price tag of \$8.3 trillion, or \$750 billion per year, for the entire region's infrastructure needs in transport, telecommunications, energy, and water and sanitation during 2010–2020. This investment in Asian infrastructure and connectivity would produce large real income gains of about \$13 trillion for developing Asia during the same period and beyond. This study identified the challenges in strengthening regional infrastructure—both hardware and software—through regional cooperation. It evaluated existing cross-border infrastructure programs, policies, and institutions and offered recommendations to address key challenges for Asian infrastructure forum to help

coordinate and integrate existing national, subregional, and regional infrastructure development initiatives toward a seamless Asia; and an Asian infrastructure investment fund to mobilize national and international financial resources (public and private) and help prioritize, prepare, and finance bankable cross-border infrastructure projects.

Unfortunately, the ADB and ADBI study or background papers prepared for the study (compiled in Bhattacharyay, Kawai, and Nag [2012]) did not identify infrastructure investment needs for Northeast Asia, though the study and the associated papers provided useful information on infrastructure investment needs for the PRC and Mongolia and some cross-border infrastructure projects in the subregion. But no estimates were made for investment needs in the Northeastern PRC, the DPRK, or the Russian Far East.

An earlier study by Katz (1998) estimated that the cost of upgrading and expanding infrastructure in Northeast Asia would amount to \$7.5 billion per year up to the mid-2010s. These figures have been updated by several experts, but not always in a systematic way.

For example, Hiraki (2003) estimated that Northeast Asia would need to invest a total sum of \$160 billion in various types of infrastructure during 2011–2020. This amount was considered necessary to make the level of each country's or area's infrastructure comparable to the level of the Republic of Korea's infrastructure in 2000.² Hiraki provided estimates for three key sectors: transport (airports, harbors, railways, and roads); energy (power plants, and oil and gas pipelines); and environmentally sustainable facilities (portable water supply, waste water disposal, waste management, and pollution prevention apparatus). His estimates indicated that the transport sector would require the largest amount (\$117 billion), followed by the energy sector (\$41 billion) and the environmental sector (\$3 billion). Of the total \$160 billion, the Northeastern PRC would need \$61 billion, the DPRK \$53 billion, the Russian Far East \$41 billion, and Mongolia \$5 billion.

According to an estimate made by Choo (2004), the Northeast Asia subregion would require a total of \$1,590 billion during 2003–2014 for all types of infrastructure investment. Assuming that a substantial portion of this total could be financed domestically, he argued that external financing needs for infrastructure development would be \$161 billion.³ According to Choo, the \$161 billion would be divided into \$81 billion for the Northeast PRC, \$29 billion for the Russian Far East, \$28 billion for the Republic of Korea, \$15 billion for the DPRK, and \$8 billion for Mongolia and Tumen River-related cross-border projects.

In one of the background papers for the ADB and ADBI study, Bhattacharyay (2012) reported the PRC's estimated infrastructure needs to be \$4,370 billion during 2010–2020 and its sectoral allocation to be \$1,130 billion for transport, \$2,780 for electricity, \$360 billion for ICT, and \$110 billion for water and sanitation. He also reported Mongolia's estimated needs to be \$10.1 billion during the same period and its sectoral allocation to be \$9.0 billion for transport; \$0.9 billion for ICT; and \$0.2 billion for water and sanitation. The figures for the PRC covered all provinces and autonomous regions and no separate estimates for the Northeast PRC were available. Given that the Northeast PRC accounts for 10.0% of total population (in 2011), 12.6% of gross domestic product (GDP) (in 2011), and 14.3% of fixed asset investment (in 2010), the Northeast PRC's investment needs could be estimated to be \$440 billion–\$620 billion, much larger than the estimates provided by Hiraki but less than those made by Choo.⁴

Finally, in October 2009, the Mongolian government announced 26 high-priority largescale projects to be implemented during the 2010-15 period. According to this announcement, the total investment cost for the projects was \$20 billion.⁵ Of this total, \$10 billion would be needed for infrastructure development, including energy (\$4.6 billion), transport (\$4.1 billion), water and sanitation (\$0.7 billion), and ICT (\$0.7 billion). In November 2012, the Ministry for the Development of the Russian Far East, Government of the Russian Federation, revealed its infrastructure development plans to be implemented by 2025.⁶ It proposed a total of 92 projects with the cost of 5,880 billion rubles (\$196 billion). Of this total, \$63 billion could be considered as infrastructure development projects in the Russian Far East, including transport (\$52 billion), electric power (\$11 billion), and public utilities (\$0.4 billion).

Putting all the pieces of information together (see Table 8), we may arrive at the tentative conclusion that the total annual infrastructure investment needs for Northeast Asia, excluding Japan and the Republic of Korea, over the next 10 years or so are estimated to be \$63 billion. This total is divided into: \$49 billion for the Northeast PRC (annualized average of the range \$440-\$620 billion during 2010-2020); \$5 billion for the DPRK (annualized average of the \$53 billion estimated by Hiraki for the 2011-2020 period); \$2 billion for Mongolia (annualized average of the \$10 billion announced by the Mongolian government for the 2010-2015 period); \$5 billion for the Russian Far East (annualized average of the \$63 billion proposed by the Russian Federation government for the 2013-2025 period); and \$2 billion for high-priority subregional cross-border investment.⁷ These estimates may still involve a large margin of error. For example, it is extremely difficult to obtain any reliable estimates on the DPRK's infrastructure investment due to lack of data, and investment in ICT and the environment in the Russian Far East would be needed. We now assume that the PRC and the Russian Federation finance most (say, 95% and 75% respectively) of their national infrastructure projects out of their own domestic resources (both public and private), that Mongolia and the DPRK finance little or none (say, 25% and 0% respectively) of their national infrastructure investments domestically, and that no subregional government finances cross-border infrastructure investments using domestic resources. Then the governments in Northeast Asia would have to mobilize external financial resources of roughly \$13 billion per year (\$2.9 billion for the Northeast PRC, \$5.3 billion for the DPRK, \$1.3 billion for Mongolia, \$1.2 billion for the Russian Far East, and \$2.2 billion for subregional cross-border projects).

					(\$1	billion)
Country/Area	a Northeast PRC	DPRK	Mongolia	Russian Far East	Cross- border	Total
Sector Period covered	2010-20	2011-20	2010-15	2013–25		
Transport	12.6	4.3	0.7	4.0	0.8	22.4
Energy	31.0	1.0	0.8	0.9	1.2	34.9
ICT	4.0	0.0	0.1	0.0	0.1	4.2
Environment	1.2	0.0	0.1	0.0	0.1	1.4
Total	48.8	5.3	1.7	4.9	2.2	62.9

 Table 8: Annual Indicative Infrastructure Investment Needs in Northeast Asia

 (\$ billion)

DPRK = Democratic People's Republic of Korea, PRC = People's Republic of China. Notes:

1. The annual investment needs are obtained for each country or area by dividing the original data by the number of years of the period covered in the estimates.

2. The environment refers to water and sanitation.

Sources: Bhattacharyay (2012) for the Northeast PRC; Hiraki (2003) for the DPRK; Mongolian government (2009) for Mongolia; and Russian Federation government (2012) for the Russian Far East.

To summarize, several authors have made various estimates on the infrastructure investment needs in Northeast Asia, but information is fragmented and sketchy and a more comprehensive, up-to-date assessment is necessary. Such a needs assessment should include both national and cross-border infrastructure investment projects—for transport, energy, ICT, and the environment (including water and sanitation)—with the latter focusing on strengthening subregional connectivity. Nonetheless the indicative investment needs obtained above would give us a tentative idea about the scale of financing needs for the subregion's infrastructure development and connectivity.

3. Lessons from Subregional Cooperation in Other Parts of Asia

3.1. Association of Southeast Asian Nations

Asian economies have developed various types of subregional cooperation initiatives to promote trade and investment, infrastructure development, energy security, environmental protection, and finance. The most successful example of subregional cooperation is that of ASEAN, established in 1967, which now comprises Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic (Lao PDR), Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam. Its objectives include promoting economic growth, social progress, and economic integration among its members; narrowing development gaps within the group; and protection of regional peace and stability. The organization is supported by the ASEAN Secretariat. It holds the ASEAN Summit, where heads of member states meet to discuss common issues and make key decisions, and conducts other meetings with heads of state of its dialogue partners outside of the bloc with the intention of strengthening external relations.

3.1.1. Evolution of the Association of Southeast Asian Nations

The ASEAN member states have adopted the following fundamental principles, as contained in the Treaty of Amity and Cooperation in Southeast Asia (TAC) of 1976:

Mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all nations; The right of every state to lead its national existence free from external interference, subversion, or coercion; Non-interference in the internal affairs of one another; Settlement of differences or disputes by a peaceful manner; Renunciation of the threat or use of force; and Effective cooperation among themselves.

ASEAN also began to conclude the TAC with its dialogue partners, including Australia, the PRC, India, Japan, the Republic of Korea, the Russian Federation, and the US.

To celebrate its 30th anniversary in 1997, the ASEAN Leaders adopted the ASEAN Vision 2020, which clarified a shared vision of ASEAN as a concert of Southeast Asian nations; outward looking; living in peace, stability, and prosperity; and bonded together in partnership in dynamic development and in a community of caring societies. In 2003, ASEAN subscribed to the

notion of democratic peace, which meant all member countries believed democratic processes would promote regional peace and stability. The non-democratic members all agreed that it was something all member states should aspire to.

On its 40th anniversary in 2007, the ASEAN Leaders made a strong commitment to establish an ASEAN Community by 2015, composed of three pillars—the ASEAN Economic Community, ASEAN Political–Security Community, and ASEAN Socio—Cultural Community. The ASEAN Charter was adopted in 2008. The Charter—a constitution governing relations among the ASEAN members and establishing ASEAN as an international legal entity—serves as a firm foundation in achieving the ASEAN Community by providing a legal status and institutional framework for ASEAN. It codifies ASEAN norms, rules, and values; sets clear targets for ASEAN; and presents accountability and compliance. With the implementation of the ASEAN Charter, ASEAN began to operate under a new legal framework and established a number of new organs to boost its community-building process.

Among the three communities, the ASEAN Economic Community is making the most significant progress as it builds on the success of the ASEAN Free Trade Area, the ASEAN Framework Agreement on Services, the ASEAN Investment Area, and other economic integration initiatives. As a result of these efforts, ASEAN is now the de facto hub for East Asian economic integration. It has established a series of ASEAN+1 processes, particularly in the form of ASEAN+1 free trade agreements such as those with Australia, the PRC, India, Japan, the Republic of Korea, New Zealand, and others. It is also the core of the ASEAN+3 group (comprising the 10 ASEAN members plus the PRC, Japan, and the Republic of Korea) which has intensified financial cooperation through the Chiang Mai Initiative, regional economic and financial surveillance, and Asian bond market development; the ASEAN+6 group (including ASEAN+3 countries plus Australia, India, and New Zealand) which is working to establish a Regional Comprehensive Economic Partnership; and the East Asia Summit (including also the US and the Russian Federation) which has addressed both economic and non-economic issues.

3.1.2. Master Plan on ASEAN Connectivity

The ASEAN Leaders adopted the Master Plan on ASEAN Connectivity in 2010 to enhance intra-ASEAN connectivity and help establish the ASEAN Community. The Master Plan attempts to accelerate existing ASEAN initiatives and ASEAN Community building; foster a win-win solution for all ASEAN member states; synchronize ongoing sectoral strategies and plans within ASEAN and its subregions; balance ASEAN and national interests; strengthen connectivity between mainland and archipelagic Southeast Asia; preserve ASEAN centrality; and develop clear financial models, including the involvement of private sector funding.

More specifically, the Master Plan promotes three types of connectivity: physical, institutional, and people-to-people. Physical connectivity focuses on transport (ASEAN highway network, railway links, maritime and inland waterways, and multimodal transport systems); ICT infrastructure and services; and energy. Institutional connectivity focuses on the framework agreements on transport facilitation (inter-state passenger land transportation, an ASEAN Single Aviation Market, and an ASEAN Single Shipping Market); liberalization of merchandise trade; development of an efficient and competitive logistics sector (transport, telecommunications, and other connectivity supporting services); trade facilitation (border management capabilities); investment liberalization and facilitation; and institutional capacity strengthening in ASEAN's lagging areas and for improvement of ASEAN–subregional coordination of policies, programs,

and projects. Finally, people-to-people connectivity attempts to promote deeper intra-ASEAN social and cultural understanding and encourage greater intra-ASEAN people mobility. Mutual recognitions among member countries on tourism and education services are identified as important for strengthening people-to-people connectivity.

To help support ASEAN infrastructure development and connectivity generally and the Master Plan more specifically, the AIF has been established as an innovative financial mechanism. The AIF has three main development objectives: (i) helping to implement the Master Plan on ASEAN Connectivity, (ii) providing additional financial resources for enhanced infrastructure, and (iii) promoting private sector participation in infrastructure development through public–private partnership (PPP).⁸

3.2. Other Subregional Programs

Over the years, various cross-border infrastructure and connectivity initiatives have been implemented in several subregions in Asia. They include the GMS Economic Cooperation Program, the CAREC Program, the SASEC Program, and BIMSTEC. Broadly, these initiatives aim to develop and improve transport connectivity, through both hardware and software cooperation; to improve linkages between countries in the respective subregions; and to ease the flow of goods, services, information, and people in each subregion.

ADB has been a key supporter of these subregional programs. Over the last two decades, ADB in partnership with its member countries and other multilateral development partners, has mobilized more than \$35 billion to promote connectivity and integration in these subregions. Table 9 summarizes information on subregional infrastructure and connectivity initiatives in Asia.

Item	Vision/Mission	Priority activity	Amount invested
GMS (1992)	A Mekong subregion that is more integrated, prosperous, and equitable	Transport, energy, telecommunications, environment, human resource development	\$15.0 billion
CAREC (1997)	Good neighbors, good partners, and good prospects	Transport, trade facilitation, energy, and trade policy	\$17.7 billion
BIMSTEC (1997)		Trade and investment, transport and communications, tourism, energy, human resource development, etc.	
SASEC (2001)	From poverty to growth: transforming challenges into opportunities	Transport, trade facilitation, energy, and information and communication technology	\$3.4 billion

Table 9: Subre	egional Coop	peration Prog	grams in Asia
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BIMSTEC = Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, CAREC = Central Asia Regional Economic Cooperation, GMS = Greater Mekong Subregion, SASEC = South Asia Subregional Economic Cooperation.

Source: Author from various sources of ADB.

3.2.1. Greater Mekong Subregion Economic Cooperation Program

Initiated in 1992, the GMS program covers Cambodia, the southern part of the PRC (Yunnan Province and Guangxi Zhuang Autonomous Region), the Lao PDR, Myanmar, Thailand, and Viet Nam. Its main focus is to enhance the so-called "3Cs": connectivity, competitiveness, and community. Key activities include the development of economic corridors (north–south, east–west, and southern), with cross-border roads as the backbone to improve access; institutional and policy support to facilitate trade; and transit policy harmonization to reduce logistics costs within the subregion.

The first GMS Summit was convened in 2002 and it has been held once every 3 years. The GMS also has ministerial conference processes. ADB plays the secretariat role for this grouping.

As of the end of December 2011, 56 priority projects worth about \$15 billion either have been completed or are being implemented. Progress is also being made in power interconnections and hydropower projects, the information superhighway network, and the implementation of the Cross-Border Transport Agreement. The GMS program is now focusing on multisector investments to widen and deepen economic corridors, including urban development, connections to maritime gateways, improved transport, energy, telecommunications, agriculture, environment, human resource development, tourism, transport and trade facilitation, and investment.⁹

3.2.2. Central Asia Regional Economic Cooperation Program

The CAREC Program is an ADB-supported initiative, established in 1997 to encourage economic cooperation among countries in Central Asia, covering 10 ADB member countries: Afghanistan, Azerbaijan, the PRC, Kazakhstan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. Under its new 10-year strategic framework, 2011–2020, CAREC's strategic objectives are to expand trade in the subregion and improve competitiveness by implementing focused, action-oriented, and results-driven subregional programs and projects in transport (roads in particular), energy (hydro), trade policy, trade facilitation, and economic corridor development.

CAREC is also an alliance of multilateral institutions active in promoting economic cooperation in Central Asia, comprising ADB, the European Bank for Reconstruction and Development (EBRD), IMF, Islamic Development Bank, UNDP, and the World Bank. ADB has served as the program secretariat since 2000. Since 2001, ministerial conferences have been organized annually.

During 2001–2011, the CAREC Program implemented 121 priority projects worth \$17.7 billion. Some key achievements of the program include the improvement of 4,000 kilometers (km) of roads and 2,240 km of railways along six priority transport corridors traversing the subregion (east–west and north–south); the pilot-testing of the Kazakhstan–PRC and Mongolia–PRC joint customs control; the adoption of Customs Codes based on the Revised Kyoto Convention, which would simplify and harmonize customs procedures in all CAREC countries; the expansion of power generation capacity and interconnection; and the formulation of a subregional power master plan. The strategic framework has been accompanied by rolling medium-term priority projects in energy, trade facilitation, and transport. The initial projects contain 68 transport projects worth over \$24 billion, 41 energy projects worth almost \$33 billion, and five trade facilitation projects worth \$0.6 billion.

3.2.3. South Asia Subregional Economic Cooperation Program

The SASEC program is a project-based initiative that promotes economic development and cooperation through the enhancement of cross-border connectivity and facilitation of trade among four of the seven member countries of the South Asian Association for Regional Cooperation (SAARC): Bangladesh, Bhutan, India, and Nepal.¹⁰ The priority areas for cooperation include transport, trade facilitation, energy and power, and ICT. Other areas of work include investment, private sector development, tourism, and the environment.

Since the inception of SASEC in 2001, ADB has informally functioned as its secretariat, facilitating economic cooperation initiatives. ADB's support for SASEC has been undertaken mainly through capacity and institutional building for the program and implementing subregional projects and technical assistance.

Progress has been made on a number of fronts, including assessing the need for priority road corridors, upgrading some of these corridors, installing border checkpoints, improving ICT and automation, and addressing border and behind-the-border issues through trade facilitation. Financial support has also been provided to promote rural electrification, cross-border electricity trading and interconnection, and the adoption of clean energy technology. In addition, technical studies were conducted to promote the Bangladesh–India Interconnection Grid project. In November 2011, SASEC officials endorsed investment projects worth \$2 billion to strengthen transport connectivity, trade facilitation, and energy cooperation.

3.2.4. Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation

BIMSTEC is an international organization involving seven countries in South Asia and Southeast Asia: Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand. Its aims and purposes are to create an enabling environment for rapid economic development; accelerate social progress in the subregion; promote active collaboration and mutual assistance on matters of common interest; provide assistance to each other in the form of training and research facilities; cooperate in joint efforts that are supportive of, and complementary to, national development plans of member countries; maintain close and beneficial cooperation with existing international and regional organizations; and cooperate in projects that can be dealt with most productively on a subregional basis and which make best use of available synergies. BIMSTEC was initiated with the goal to combine the "Look West" policy of Thailand and ASEAN with the "Look East" policy of India and South Asia. So BIMSTEC is intended to be a link between ASEAN and South Asia.

The first BIMSTEC Summit held in 2004 had agreed to promote sustainable and optimal energy utilization through the development of new hydro-carbon and hydro-gas interconnection of electricity and natural gas grids, and renewable energy technologies. BIMSTEC covers 13 priority sectors led by member countries in a voluntary manner: trade and investment; transport and communications; energy; tourism; technology; fisheries; agriculture; public health; poverty alleviation; counter-terrorism and transnational crimes; environment and natural disaster management; cultural cooperation; and people-to-people contact. The BIMSTEC countries have agreed to establish a free trade area, encompassing not only trade in goods, but also trade in services, investment, and related economic cooperation (customs, standards, trade finance, e-commerce, and business visas).

ADB has been BIMSTEC's development partner since 2005, and has undertaken a study

designed to help promote and improve transport infrastructure and logistics among the BIMSTEC member countries.

3.3. Greater Tumen Initiative

Northeast Asia can learn lessons from the experience of these subregional programs in other parts of Asia to enhance its own subregional integration and cooperation in areas such as trade and investment, transport connectivity, ICT, energy and power, environmental protection, and finance.

Northeast Asian economies have undertaken an infrastructure cooperation initiative, called the Greater Tumen Initiative (GTI). Established in 1995 under an earlier name, the GTI is an intergovernmental cooperation mechanism in Northeast Asia, supported by UNDP, with the current membership of four countries: the PRC, the Republic of Korea, Mongolia, and the Russian Federation.¹¹ The GTI has an institutional framework consisting of two intergovernmental bodies (the Consultative Commission and the Coordination Committee), the Tumen Secretariat, and the Council of Eminent Persons for the Tumen Programme.

The origin of the GTI is in the Tumen River Area Development Programme (TRADP), a subregional program by UNDP commenced in 1991. Its member countries included the PRC, the DPRK, the Republic of Korea, Mongolia, and the Russian Federation, with Japan, Finland, Canada, the World Bank, and ADB holding observer status. It started as a planned 20-year-long program, which envisioned a grand design to transform about 3,000 square kilometers (km²) of the Tumen River Economic Zone into an economic center in Northeast Asia, like Hong Kong and Singapore. The financial needs for the project were estimated at about \$30 billion. However, due to financing difficulties, the project was adjusted to focus on five sectors: trade and investment, transport and communications, environment, tourism, and energy.

Since its commencement, the TRADP had experienced three phases. Phase I (1991–1996) attempted to create a joint special economic zone to be built on land leased from the PRC, the DPRK, and the Russian Federation. It was envisaged that significant infrastructure investment would be required for this internationally managed cross-border zone. Phase II (1997–2000) aimed to operationalize the agreements signed in Phase I and advance development within the subregion with a focus on trade, investment, and environmental management. Phase III (2001–2005) had a dual objective of strengthening the institutional framework of the initiative and continuing to contribute to the economic development of the subregion through concrete actions in the five sectors mentioned above (trade and investment, transport and communications, environment, tourism, and energy).

In 2005, the TRADP's geographic coverage was expanded to include more provinces in the region and the GTI was newly launched as an intergovernmental framework, with member countries making a commitment to take full ownership of the GTI—including the adoption of a strategic action plan by member countries and greater financial contributions to a common fund—and the establishment of legal institutional frameworks to transfer management of the initiative to member countries. UNDP remained committed to supporting the GTI but would shift the focus to concrete projects.

The GTI is now an important platform for supporting subregional economic cooperation, strengthening policy dialogue, improving business environments, and contributing to peace and stability in Northeast Asia. The core decision-making institution of the GTI is the Consultative

Commission, which is composed of vice-ministers from the GTI member governments. The commission's role is to foster support for regional cooperation and development and promote mutual understanding and benefit. It convenes annually to discuss key policy issues and cooperation projects (Table 10) among the GTI members, and hosts joint sessions with strategic partners as well as local governments. The Tumen Secretariat promotes subregional infrastructure projects and identifies potential investors and donors for funding.

Projects	No.	Name of the Project	
	1	Northeast Asia Ferry Route Border Infrastructure Framework	
	2	Modernization of Zarubino Port	
Transport	3	Mongolia-PRC Railway Construction	
	4	Resuming Hunchun-Makhalino Railway	
	5	PRC Road, Harbor Project in the Border between PRC and the DPRK	
Energy	6	Capacity Building on GTI Energy	
Tourism	7	Capacity Building on GTI Tourism	
Investment	8	Training Program for Officials from GTI Member Countries	
U I		GTI Environmental Cooperation: Trans-boundary Environmental Impact Assessment and Environmental Standardization in Northeast Asia	
		Feasibility Study on Tumen River Water Protection	

Table 10: Approved	Greater Tun	nen Initiative Projects
	0100001 1000	

DPRK = Democratic People's Republic of Korea, GTI = Greater Tumen Initiative, PRC = People's Republic of China.

Source: Greater Tumen Initiative.

The GTI has strengthened its supporting institutional structure, by establishing the Energy Board, Tourism Board, Environmental Board, Transport Board and the Trade Facilitation Committee to enhance subregional cooperation in these priority sectors. To encourage private sector participation and PPP in subregional cooperation projects, the GTI has held Investment Forums and created the Business Advisory Council. To enhance local government participation and capacity, the GTI Local Development Forum was launched and the GTI Northeast Asia Local Cooperation Committee was established. In an effort to build a subregional development financing mechanism, the Northeast Asia EXIM Banks Association was created, along with the signing of a memorandum of understanding by three initial member banks (Export-Import Bank of China [Eximbank of China], Export-Import Bank of Korea [Korea Eximbank], and Development Bank of Mongolia).

Despite its large potential, however, the GTI has not been able to make substantial progress in terms of subregional economic and infrastructure development as well as cooperation. The main obstacle has been political. First, political commitment to subregional development cooperation has not been as strong as in Asia's other subregional groups, as evidenced by a lack of leaders' or even ministers' processes. Sufficient financial resources have not been put by member countries. Second, Japan has never been a member of the TRADP or GTI, and the DPRK withdrew its membership. Japan has not joined the program and/or initiative because of the unfavorable political relationship with the DPRK. Third, without tangible economic reforms and opening on the part of the DPRK—not to mention its GTI membership withdrawal—support for infrastructure development may not bear sufficient fruit. A significant improvement of political stance, external relations, and economic regime in the DPRK would be needed for the GTI to become truly effective.

4. Options for a Cooperative Financing Mechanism in Northeast Asia

External financing needs for Northeast Asia's infrastructure investment are not small, amounting to \$13 billion per year over the next 10 years or so, given the low levels of economic development in the DPRK and Mongolia and inadequate cross-border connectivity through transport, ICT, and energy.

There are challenges in meeting these investment needs. First, there is a coordination failure problem. Even though subregional cross-border infrastructure investment can benefit all countries involved, there may be little incentive for each government to undertake such investment projects. The incentive to free ride on other countries' cross-border infrastructure projects prevents any one single country's unilateral attempt to invest to strengthen subregional connectivity. In addition, one country's under-investment in such projects—perhaps due to the lack of financing capabilities—can create a weak link in the whole network system, rendering the benefit of connectivity smaller for all countries. This suggests the importance of intergovernmental coordination and cooperation to jointly design and implement a financing scheme for subregional cross-border infrastructure development, and to support financially constrained, underdeveloped countries. But, unfavorable political conditions and lack of mutual trust among some Northeast Asian countries can make intergovernmental cooperation difficult.

Second, financial and sovereign risks can prevent adequate financing. While required investments are long-term in nature, it takes even longer to receive adequate financial returns which compensate sovereign risk that creates uncertainties about future returns. Most "bankable" investment projects to be developed therefore need to be at least partly financed by governments and bilateral and multilateral organizations, while engaging private investors in infrastructure development through effective PPP.

This section considers three options as a way of creating a cooperative financing mechanism to meet such investment needs in Northeast Asia, starting with a simpler and moving to a more involved mechanism.

4.1. Special and Trust Funds in Multilateral Development Banks

The simplest approach to fill this financial gap is to set up special and/or trust funds in the existing MDBs (such as the World Bank, ADB, and EBRD), designated for infrastructure investment and connectivity in Northeast Asia. These funds are vehicles for pooling and channeling resources from donor governments to developing country recipients on concessional terms. Special funds are part of MDB resources and accounted for as such, while trust funds are off the MDBs' balance sheets, owned by the contributing donors and administered by a trustee organization such as the MDB(s). Thus, the use of special funds would be appropriate when MDBs participate in a funding effort by allocating resources from their net income to the funds or when donors wish to contribute to the MDBs' core funding windows, and trust funds would be appropriate when MDBs do not provide their own resources in supporting specific activities or countries. In either case the hosting MDBs administer the funds with appropriate governance structures.¹² As such, special and trust funds may help to address some of the technical assistance and investment financing needs for specific purposes. However, the MDBs typically cannot leverage these fund resources directly, in the way they could with other shareholder resources.

4.1.1. Benefits and Costs of Special and Trust Funds

There are several benefits for donor governments to utilize special and/or trust funds. First, when bilateral assistance is difficult, but there is a need to fill gaps in the multilateral aid system, these funds can be mobilized. Second, when the existing allocation system of the MDBs-which is often a country-performance-based system-prevents the use of MDB resources, special and/ or trust funds can be set up as a way of directing aid resources to target countries and subregions of national interest. Third, when donor governments lack the financial resources or expertise to scale up their bilateral programs to deliver desired aid, special and/or trust funds allow these donors to combine their resources with the technical expertise and management capacity of the hosting MDBs. MDBs have the capacity to manage financial and operational risks and deploy financial resources, and generally have strong working relations with recipient governments. Fourth, donor governments can provide technical and financial assistance for non-member countries of an MDB through trust and/or special funds, when it takes time to approve new membership (see Box 1). Fifth, donor governments can provide earmarked special and/or trust fund resources to encourage the MDBs and the broader international community to focus on specific, new development needs. Donors can use these funds as a mechanism for attracting aid in priority areas.

Box 1: EBRD's Support for "Arab Spring" Countries through Trust and Special Funds

In response to the Group of Eight Summit's call for support for "Arab Spring" countries that embrace democracy, pluralism, and market economies, made in Deauville in May 2011, EBRD began to extend its mandate to the Southern and Eastern Mediterranean (SEMED) region. As SEMED countries were not members, EBRD decided to support these countries in three steps:

- Technical assistance through trust funds set up in EBRD;
- Investment and lending support through special funds created in EBRD; and
- Investment and lending support through EBRD itself.

The third step was considered to take a long time as it required the countries to become recipient members of EBRD through the amendment to Article 1 of the Charter, which would require agreement by all shareholders. As a result, EBRD took the first two steps. The first step was relatively easy as EBRD was able to mobilize trust funds for technical assistance for non-members under the existing Charter. The second step was more demanding as it required the amendment of one of the articles of the Charter with 80% consent. EBRD shareholders agreed to this and in May 2012 to the creation of a \in 1 billion special fund to start investment in Egypt, Jordan, Morocco, and Tunisia. EBRD expects to eventually invest up to \notin 2.5 billion a year in the new region. As of the end of 2012, EBRD shareholders have yet to achieve membership expansion (the third step).

Source: European Bank for Reconstruction and Development, website.

There are also benefits to recipient governments in using special and/or trust funds. First, these funds provide additional financing on concessional terms. For low-income countries, which regularly receive assistance on concessional terms from bilateral and multilateral donors, special and trust funds can bring additional aid resources into the country. In middle-income countries, which are reluctant to borrow for technical assistance, these funds can finance such assistance on concessional terms. In addition, these funds provide grants for any recipient country's participation in subregional programs. Second, even if a country is not a member of an MDB, it can receive concessional resources through special and/or trust funds with shareholder consent. Or when a country joins an MDB, it can start receiving technical and financial assistance through special and/or trust funds before normal country operations begin, which may take time due to the required procedures such as needs assessments and country program agreements.¹³ Third, countries with a plethora of donors may view special and trust funds as a mechanism to replace piecemeal support of bilateral projects and to strengthen donor coordination and harmonization. Fourth, special and trust funds can be designed to provide resources reasonably quickly in response to a request for project preparation, specific technical assistance, or additional components to an existing program or project. This flexibility and responsiveness is valued by recipient countries.

While useful and less costly than other mechanisms, there are several issues for special

and trust funds. First, to enable these funds—which are used essentially as grants—to continue financing infrastructure projects, the contributed funds need to be replenished once every few years, which often faces difficulties because of budgetary constraints in donor countries. Second, special and trust funds would not be able to create the multiplier effect of credit that an MDB does, i.e., mobilizing large amounts of funds from international capital markets through bond issuance. The reason is that, typically, special and trust funds are not backed by capital—whether paid-in or callable—or other assets to serve as collateral against their borrowings in the international capital markets. As a result, the total volume of financing to be mobilized through these funds tends to be limited, even though the hosting MDBs can cofinance to supplement fund-supported projects. Third, because of the pooling of donor resources, donor governments typically get less visibility and "credit" from these funds, a factor that has been a source of concern.

4.1.2. Special and Trust Funds for Northeast Asian Infrastructure Development and Connectivity

For Northeast Asia, special and/or trust funds targeting subregional infrastructure development and connectivity could be set up in the MDBs. Given the expertise and knowledge on subregional cooperation programs through its secretariat support for GMS and CAREC, ADB is a natural candidate to administer such funds. However, as the Russian Federation is not a member of ADB, there is a limitation for ADB to function as the sole administrator of the funds. The EBRD can play a role as the Russian Federation is its member. The World Bank, which includes all Northeast Asian countries except the DPRK as its members, may also join such funds. Thus, donor governments may establish special and/or trust funds in ADB, EBRD, and possibly the World Bank.

Since multiple MDBs could be involved, it is essential to organize coordination among the special and trust funds set up in these MDBs. Principles need to be developed to identify and prioritize subregional projects. These principles may include:

Subregional integration: the extent to which fund-supported projects improve subregional connectivity and integration;

Political support: the extent to which projects have been officially endorsed by recipient governments;

Sustainable development impact: the magnitude of projects' development impact and the extent to which they promote environmentally and socially sustainable development;

Institutional capacity: the capacity of the relevant agencies and institutions to implement and manage projects;

Private sector potential: the potential to attract private sector financing and operations;

Stakeholder coordination: liaising with other development stakeholders, including bilateral donors, the private sector, and civil society; and

Implementation: monitoring progress in implementing programs, and compliance with approved policies on the use of fund resources.

4.2. Infrastructure Investment Fund

A second approach is to create a well-structured infrastructure investment fund designed for Northeast Asia, which is more independent than special and trust funds at the MDBs. A good example is found in the AIF.

4.2.1 ASEAN Infrastructure Fund

Recognizing that ASEAN countries would have to mobilize about \$60 billion a year until 2020 to address their infrastructure deficits, ASEAN finance ministers decided to create an AIF. In so doing, they took into account the following points as useful properties of the fund: traditional public financing, greater utilization of domestic savings (including foreign exchange reserves), private sector debt financing through capital markets, promotion of PPP, effective project development, and efficient project management. Traditional public financing was considered necessary as even though private sector funding was essential for large-scale infrastructure projects, the high degree of perceived risk on long-tenor infrastructure transactions could inhibit private sector investment. Public sector support—through the AIF—was expected to help mitigate these risks, providing financing for a portion of PPP. The AIF was considered to be able to pool equity capital, raise sufficient funding, and invest in subregional infrastructure projects.

It took 2 years to design the basic structure, governance, and financing capacity of the AIF. The AIF was created as a corporate entity, domiciled in Malaysia. All investors (nine ASEAN member governments, excluding Myanmar, and ADB) were to be represented at the AIF Board for oversight functions. The ADB was requested to play the role of an equity investor, co-financier, and administrator (Box 2).

Box 2: Main Characteristics of the ASEAN Infrastructure Fund

The AIF will be domiciled in Malaysia as a limited liability company, which ADB has been requested to administer.

The AIF will be established with an initial core equity contribution expected to be \$485 million, of which \$335 million is to be provided by nine ASEAN members and the remaining \$150 million by ADB. Hybrid capital of \$162 million will be raised in capital markets.

The AIF will issue debt to be purchased by central banks' foreign exchange reserves, to recycle the subregion's foreign reserves for its growing infrastructure needs.

The AIF's total lending commitment through 2020 is expected to be about \$4 billion.

With projected 70% cofinancing by ADB, the AIF plans to leverage more than \$13 billion in infrastructure financing by 2020.

The AIF is expected to finance about six infrastructure projects each year, with a \$75 million lending cap per project. Projects will be selected based on sound economic and financial rates of return, and the potential impact on poverty reduction and trade and investment.

Source: Asian Development Bank (2011).

4.2.2. Financial Structure of the ASEAN Infrastructure Fund

The basic financing design and structure of the AIF is summarized in Table 11. First, the AIF is created by equity (core equity of \$485 million provided by nine ASEAN countries and ADB plus hybrid capital of \$162 million raised in capital markets) and debt issued to central banks (through foreign exchange reserves) to leverage 1.5 times the equity. Second, this will allow sovereign annual lending of \$300 million by the AIF. With additional cofinancing from ADB, the AIF can have significant financing capacity. Third, the AIF can also provide support for the public portion of PPP projects, and begin non-sovereign lending in around 2015 (limited to 10% of total).

Equity	Debt	Lending Operations	ADB's Role
\$335 million from nine	Debt issuance to leverage 1.5 times	Lending to relevant ASEAN countries;	Generate the project pipeline;
ASEAN; countries \$150 million from ADB;	the equity; High-investment grade credit rating targeted;	Based on ADB's country partnership strategy, and regional pipelines;	Ensure that appropriate safeguards and due diligence are part of the project design and administration and report to ASEAN;
Around \$162 million in hybrid capital	Central banks and other institutions, including	Initially only on sovereign and sovereign-guaranteed	Provide cofinancing and act as the lender of record;
(perpetual bonds);	private sector, to purchase the debt after a clear track record and sufficient lending volume	projects and the public portion of PPP projects, and later also on loans to private sponsors after formal determination by AIF	Administer the AIF (including financial management, loan servicing, accounting, and financial reporting) during project administration and evaluation

Table 11: Basic Financing Design and Structure of the ASEAN Infrastructure Fund

ADB = Asian Development Bank, AIF = ASEAN Infrastructure Fund, ASEAN = Association of Southeast Asian Nations, PPP = public–private partnership. Source: Asian Development Bank (2011).

Table 12 shows that Malaysia is the largest core capital contributor (\$150 million) among the ASEAN member countries, followed by Indonesia (\$120 million). ADB contributes an amount equal to that of Malaysia. Myanmar is not a member of AIF at this moment and would only be eligible to borrow once it re-establishes a normal relationship with ADB (and other multilateral and bilateral development agencies) by resolving the arrear issue, and can thus start borrowing from ADB. The reason is that the AIF design requires cofinancing of ADB, thus only ADB members can borrow from the AIF. Myanmar's progress on international community engagement and arrears clearance with ADB will enable the country to eventually join the AIF.

Country	Amount (\$ million)
Malaysia	150.0
Indonesia	120.0
Philippines	15.0
Singapore	15.0
Thailand	15.0
Brunei Darussalam	10.0
Viet Nam	10.0
Cambodia	0.1
Lao PDR	0.1
ASEAN Subtotal	335.2
Asian Development Bank (ADB)	150.0
Total Core Capital	485.2

Table 12: ASEAN Infrastructure Fund Core Capital Contributions

Source: Asian Development Bank (2011).

Looking ahead, the AIF's total lending commitment through 2020 is expected to be about \$4 billion. Assuming the cofinancing ratio between AIF and ADB of about 30:70, the AIF can leverage more than \$13 billion for infrastructure investment by 2020. The AIF is expected to finance about five infrastructure projects each year, with a \$75 million lending cap per project. Projects will be selected based on sound economic and financial rates of return and their potential development impact

There are several challenges for the AIF. First, a high credit rating is required for the AIF to effectively mobilize foreign exchange reserves while maintaining their eligibility. Second, ADB will have to identify bankable projects, build a project pipeline, and process these projects, based on ADB policies and international best practices. Third, appropriate PPP projects need to be identified and structured. Fourth, to enlarge its impact, ADB (as AIF administrator) must consult with both public institutions and private sector players who are potential partners of the AIF. The immediate task would be to invite the PRC, Japan, and the Republic of Korea (and potentially India) to join the AIF as new capital contributors, but not as beneficiaries.

4.2.3. Lessons from the ASEAN Infrastructure Fund

There are several important benefits in creating the AIF. First, it is not to be a new, elaborate institution, but an outcome of better utilizing the existing institutions to maximize development impact. This means that by saving time and cost, effective and timely infrastructure financing is possible. Second, the AIF can be a catalyst of private sector participation as it can mitigate risks associated with long-gestation projects, providing financing for a portion of PPP; and its solid, transparent legal framework can provide confidence for the private sector, in terms of both investment and business operations. Finally, the AIF can augment the capital base by expanding membership to include non-borrowing shareholders, and it can provide a good model

for other parts of Asia and the world to emulate for designing financing schemes for subregional infrastructure development.

In addition, active participation by ADB, as an honest broker, allows it to provide greater institutional and capacity support in many key areas, including identification of priority projects; formulation of a forward-looking project pipeline; undertaking of processing, administration and implementation of the projects; provision of policy, knowledge, and capacity support for member countries; creation of a synergy between hardware and software components of infrastructure; adoption of best practices in social and environmental safeguards; creation of productive relationships with civil society and local communities; coordination with other relevant stakeholders and development agencies, making adjustments as required; and conduct of effective evaluation and audit of projects to ascertain project performance.

4.3. Multilateral Development Bank

A third approach is to establish a multilateral development bank that focuses on Northeast Asia's infrastructure development and connectivity. A Northeast Asian Development Bank (NEADB) has been proposed to help fill the subregion's long-term infrastructure financing needs and thereby to accelerate the subregion's economic development and integration.¹⁴ This idea has been around since at least 1991. Financial resources for infrastructure development would be raised by bond issuance in the international capital markets and intermediated through the bank's lending operations to finance member countries' infrastructure projects in Northeast Asia.

4.3.1. Arguments for a Subregional Multilateral Development Bank

Proponents of a multilateral development bank (Campbell 1993; Katz 1999; Cho and Chang 2011; Cho and Katz 2011) have argued that a new bank is needed to take a major role in financing Northeast Asian infrastructure for several reasons.¹⁵ First, the subregion's infrastructure is grossly deficient in terms of what is required to support economic development. As a result, upgrading and expanding the subregion's infrastructure to adequate standards and quality requires large amounts of external long-term financing. Second, private investors, bilateral development agencies, and existing multilateral organizations cannot mobilize a large amount of external long-term financial resources for Northeast Asia, nor can they meet more than a modest share of the subregion's external financing needs. A new development bank could help to mobilize the large volume of external resources required to augment the subregion's infrastructure investment. Third, the World Bank does not include the DPRK as a member, ADB does not include the DPRK and the Russian Federation as members, and EBRD does not include the PRC and the DPRK as members. There is the perception that even MDB member countries are not adequately served: for example, the Northeast PRC has to compete in Beijing for access to ADB and World Bank financing; Mongolia is under-served by the MDBs; and the interests of the Russian Far East are not well addressed by the World Bank or EBRD. The DPRK has no access to any financing from the MDBs. A new subregional multilateral development bank can thus fill the institutional and financing gap by bringing all Northeast Asian countries-particularly the PRC, the DPRK, Mongolia, and the Russian Federation-together as members of a single multilateral organization.

The main work of a new NEADB would be the traditional one performed by the existing MDBs—to obtain funds at the best terms and conditions available in international capital

markets, primarily by issuing its own bonds in these markets, and using the proceeds from such borrowing to finance infrastructure investment in Northeast Asia. A distinctive feature of a new bank would be the subregional, rather than national, orientation of the benefits to accrue from the projects and programs it would support. This approach would be based on the view that maximum efficiencies and benefits in the transport, ICT, energy, and environmental sectors can be achieved by planning and undertaking such activities on a subregional basis.

A new bank could also help close some of the subregion's other financing, technical, and institutional gaps. Such additional activities could include financing trade in goods and services and promoting private investment; supporting the software component of infrastructure such as logistics, national pricing (tariff) policies, and transport, energy, and environmental harmonization at the subregional level; strengthening the subregion's institutions and governance (including legal systems, rule of law and commercial practices); expanding capacity building and training programs; improving statistical and informational capabilities; and assisting the design and implementation of cross-border projects.

4.3.2. Capital and Ownership Structure of a Subregional Development Bank

A recent paper by Cho and Katz (2011) suggests an initial capitalization of \$40 billion, of which 50% would be subscribed and paid in over 5 years, and 50% would be subscribed but not paid in—in the form of callable capital shares. It also suggests the Asian countries' share of the bank's capital to represent 60% (\$24 billion) of the NEADB's total capital, while the 40% balance (\$16 billion) would be available for subscription by non-Asian members. This subregional development bank would supplement, but not supplant, the financing provided by the existing MDBs, such as the World Bank, ADB, and EBRD.

The proposed initial capitalization of \$40 billion is very large in comparison to those of existing MDBs, particularly subregional MDBs. Table 13 shows that the size of capital for the World Bank is large at \$205 billion, followed by ADB (\$162 billion), the Inter-American Development Bank (\$105 billion), the African Development Bank (\$56 billion), the EBRD (\$37 billion), and the Islamic Development Bank (\$28 billion). Subregional MDBs have much smaller capital, ranging from \$0.5 billion (East African Development Bank) to \$5 billion (Development Bank of Latin America). Considering that ADB's capital base was only \$61 billion in 2009, the proposed capital size of \$40 billion for a new subregional bank may be too large. One interesting point is that the share of paid-in capital in total capital subscription is typically high for subregional MDBs, particularly in the case of the Development Bank of Latin America (CAF). The proposed subregional bank follows this example.

Multilateral Development Bank	Total capital (\$ billion)	Paid-in capital (\$ billion)	Share Paid- in capital (%)
World Bank	205.4	12.4	6.1
Asian Development Bank	162.5	8.2	5.0
Inter-American Development Bank	105.0	4.3	4.1
African Development Bank	56.1	3.8	6.9
European Bank for Reconstruction and Development	36.7	8.0	21.8
Islamic Development Bank	27.7	8.3	29.9
Development Bank of Latin America (CAF)	5.5	3.2	59.2
Central American Bank for Economic Integration	2.0	0.45	22.6
West African Development Bank	1.9	0.49	25.1
Caribbean Development Bank	1.5	0.33	22.0
Eastern and Southern African Trade and Development Bank	1.3	0.26	20.0
East African Development Bank	0.5	0.10	18.9

Table 13: Capital Subscription of the Multilateral Development Banks, 2011

CAF = Corporación Andina de Fomento. Source: Author.

Table 14 illustrates hypothetical capital allocation, taking into account suggestions made by Katz (1999) almost 15 years ago.¹⁶ He suggested that the six Northeast Asian countries (the PRC, Japan, the DPRK, the Republic of Korea, Mongolia, and the Russian Federation) as well as most current ADB regional members (including Hong Kong; Taipei,China; Australia; and New Zealand) would become Asian regional shareholders, with the former representing 40% and the latter 20% of total capital subscription. The US, Canada, and the European Union nations were expected to be non-Asian shareholders in a new NEADB. This capital structure was projected to support an initial annual level of bank loans and guarantees for the subregion of 15% of capital, namely about \$6 billion under the proposed \$40 billion capitalization.¹⁷

Item	Share	Shares		Total paid-	Annual
Potential Members	Number ('000)	% of total	amount subscribed (\$ billion)	in capital (\$ billion)	Payment (over 5 years) (\$ billion)
Northeast Asian Mem	bers				
Japan	600	15	6.0	3.0	0.60
PRC	400	10	4.0	2.0	0.40
Russian Federation	280	7	2.8	1.4	0.28
Republic of Korea	200	5	2.0	1.0	0.20
DPRK	80	2	0.8	0.4	0.08
Mongolia	40	1	0.4	0.2	0.04
Northeast Asia Total	1,600	40	16.0	8.0	1.60
Other Asian members	800	20	8.0	4.0	0.80
Asia Total	2,400	60	24.0	12.0	2.40
Non-Asian members	1,600	40	16.0	8.0	1.60
Total	4,000	100	40.0	20.0	4.00

 Table 14: Hypothetical Allocation of Shares in a New Northeast Asian Development Bank

DPRK = Democratic People's Republic of Korea, PRC = People's Republic of China. Notes:

1. Capitalization of \$40 billion evidenced by 4 million shares valued at \$10,000 per share.

2. 60% of shares to be allocated to Asian members and 40% to non-Asian members.

3. Japan would subscribe to the same approximate portion of the total as in the Asian Development Bank. The United States would subscribe to the same approximate portion of the total (10%) as in the European Bank for Reconstruction and Development.

4. The paid-in portion of shares is 50% and its payment is made over 5 years.

Source: Author's adjustment made to Katz (1999).

The role of Japan and the US in a new bank is essential, as they can support bank creditworthiness and functional competence of operations. For a new NEADB to be able to raise sufficient amounts of fund in the international capital markets at low costs, the bank needs to be rated highly by private credit rating agencies. A new bank would require expertise in the areas of portfolio and exposure management, risk management and mitigation, project design and implementation, and environmental and social safeguards. Such expertise is not readily available unless sought in professional markets in the US, Japan, and other developed countries. Without participation by Japan and the US, such a bank cannot function adequately and prudently.

However, the political environment in the subregion does not appear conducive to US and Japanese support for such a bank. The recent political and security concerns over the DPRK have created tensions between the DPRK and other six-party members, particularly the US and Japan. The lack of progress on economic reforms and market opening in the DPRK would limit the effectiveness of any financial support for the country's development. If Japan and the US do not join a new bank as shareholders and/or if the DPRK does not, or is disallowed to, join a new bank, the value of establishing such a bank would be severely limited.

4.4. Assessment

This section examines the pros and cons of the three financing options considered above for Northeast Asia's infrastructure development and connectivity—creating special and/or trust funds in the existing MDBs, a structured infrastructure investment fund supported by the existing MDB(s), and a new subregional development bank—and assesses how the Northeast Asian governments might adopt a strategy to create a multilateral funding mechanism. Table 15 summarizes the pros and cons of these options.

Options	Pros	Cons
Special and Trust Funds	Easy to set up with voluntary contributions; Availability of additional, concessional	Need to replenish fund (often with difficulties) once every several years;
in existing MDBs	resources for recipients governments; Able to rely on knowledge and expertise of the MDBs;	Unable to leverage funds in international capital market due to the lack of capital and other collateral;
	Transparent governance in place	Possible need for a change in the MDBs' charters, or for a recipient country to join the MDBs
Infrastructure Investment Fund	No need for international treaty or domestic diet approval for creation; More transparent in governance with legal	Need for greater diplomatic negotiations among potential member countries than special and trust funds;
(NEAIF) supported by an MDB	personality and better structure than special and trust funds;	Limited ability to leverage capital subscription at least initially;
	Able to generate additional resources, including MDB cofinancing;	Need for a recipient country to join the supporting MDB
	Able to utilize expertise of the MDB	
Multilateral Development Bank (NEADB)	Able to secure solid institutional structure and governance and manage lending to recipient countries and related risks; Able to leverage capital subscription and	Difficult to establish due to fiscal problems (Japan, US, EU) and the cumbersome procedure of international treaty ratification;
	generate a substantial multiplier effect in terms of fund mobilization	Need for high credit rating and, thus, strong shareholder backing;
		Risk of overlap and duplication with businesses of the existing MDBs

Table 15: Pros and Cons of Three Options – Special and Trust Funds, Infrastructure Investment Fund, and Development Bank

EU = European Union, MDB = multilateral development bank, NEADB = Northeast Asian Development Bank, NEAIF = Northeast Asian Infrastructure Fund, US = United States. Source: Author.

The starting point is the recognition that most national infrastructure projects in the PRC, the Republic of Korea, and the Russian Far East should be financed by their own domestic resources including private sector funds. External financing may be mobilized for most or

a large portion of national infrastructure projects in the DPRK and Mongolia—given their financing constraints—as well as high-priority subregional cross-border infrastructure projects, including national infrastructure projects that have significant cross-border implications. From this perspective, any of the financing options should target national projects in the DPRK and Mongolia and subregional cross-border projects, while a fraction of national projects in the Northeast PRC and the Russian Far East can also benefit.

Section 2 has argued that roughly \$13 billion might be needed annually for external financing over the next 10 years or so once the DPRK returns to the international community. Without the DPRK, the amount of such financing needed would be about \$8 billion. Whether \$13 billion or \$8 billion, the required external financing needs can be met, at least partly, by the existing framework of bilateral and multilateral financial support—including the MDBs' lending and investment—and foreign private investment. Only the remainder will have to be met by the new financing scheme. When special funds and trust funds are inadequate in size to fill the gap, a well-resourced infrastructure investment fund can mobilize additional financial resources to meet the needs. This argument does not strongly support the idea of establishing another multilateral development bank. In addition, many Group of Seven and other developed country governments view establishing a new intergovernmental organization, like a subregional multilateral development bank, as too cumbersome to be attractive.

It should also be noted that the DPRK is not a member of any MDB, which could be an obstacle to its benefiting from special and trust funds administered by the existing MDBs or an infrastructure investment fund supported by an MDB.¹⁸ Given that a large portion of the potential financing needs for infrastructure investment in Northeast Asia is found in the DPRK, it does not make much sense to establish a new subregional bank if the DPRK does not join the bank. In addition, the current political environment is not supportive of the participation of Japan and the US as shareholders in a new bank, where the DPRK is a recipient member. For the DPRK to be embraced as a welcome member in the existing MDBs, the country needs to forge a healthy and productive relationship with the international community and embark on significant economic reforms and market opening.¹⁹

4.4.1. Recommended Strategy for Northeast Asia

So a sensible strategy for the Northeast Asian economies would be to begin with setting up special and/or trust funds in the existing MDBs to support subregional cross-border infrastructure investment and connectivity. While these funds are encouraged to work with the GTI, they will not be able to assist the DPRK in strengthening infrastructure connectivity with other Northeast Asian economies as long as the country remains isolated from the international community. For the DPRK to be able to receive concessional funding from special and/or trust funds, the country must do some homework. First, it must return to the GTI as a full member. Second, it must establish normal diplomatic relationships with the US and Japan and show that it has become a peaceful nation ready to cooperate with neighboring countries and the international community. Third, it must express the intention to join the existing MDBs, such as the World Bank and ADB, and be supported by their major shareholders, including the US and Japan.

Once sufficient confidence and mutual trust is built among the Northeast Asian countries and funding limitations become apparent under the special and/or trust fund arrangement, the subregion's governments may consider creating an infrastructure investment fund together with other supporting donors. What needs to be emphasized is that the creation of a new infrastructure fund is not warranted if its only objective is to mobilize financial resources. More important is to nurture a political environment where participating countries are willing to cooperate for the common good of the subregion. ASEAN was able to set up a fund after 45 years of cooperation and trust building processes. Other subregional groups in Asia have not set up such infrastructure investment funds. So, creating a Northeast Asian infrastructure fund would require a firm and enduring process of collaboration and trust building that has yet to start.

To induce Japan to be an active member of the proposed infrastructure investment fund, the DPRK must demonstrate that it is a worthy neighbor to support and several Japan-related projects must be designed, such as the Busan-Fukuoka cross-border cooperation project, the Russian Federation-Japan oil and gas pipeline project, and the Mongolia-Japan cross-border transport project that would go through the PRC. These would benefit Japan, particularly the Japanese local economies along the Sea of Japan, as they can gain from stronger connection with other Northeast Asian economies in terms of transport, energy, and tourism (Saito 2011).

To summarize, there is no compelling case for establishing another development bank even if it would focus on the Northeast Asia subregion and even when the DPRK fully returns to the international community as a cooperative and responsible country. First, the existing MDBs (such as the World Bank, ADB, and EBRD) can provide financial support for subregional infrastructure development and connectivity. Second, the proposed Northeast Asian infrastructure investment fund, similar to the AIF, can leverage additional resources by working with all stakeholders the private sector, multilateral organizations (such as the MDBs and UNDP), and bilateral development agencies—to finance high-priority national and cross-border infrastructure projects in the subregion.

5. Framework for Infrastructure Financing in Northeast Asia

5.1. Policy Dialogue

Given the need to build trust and confidence in Northeast Asia, the subregion's governments may adopt a strategic approach to infrastructure development cooperation. As the countries face wide-ranging policy challenges—including trade and investment integration, subregional infrastructure development and connectivity, energy and the environment, and infrastructure financing—their policymakers are advised to start with comprehensive policy dialogue to tackle common issues of mutual interest.

The first challenge is trade and investment cooperation. There is a need to conclude an economic partnership agreement among the PRC, Japan, and the Republic of Korea (CJK EPA). This agreement should address not only reduction of tariffs but also elimination of non-tariff barriers, liberalization of services trade and investment, protection of intellectual property rights, competition policy, and dispute settlements. Once a CJK EPA is formed, there is scope to connect it with ASEAN+1 free trade agreements and forge a Regional Comprehensive Economic Partnership among the ASEAN+6 countries.

The second challenge is the development of Northeast Asian infrastructure and strengthening of subregional connectivity. To sustain economic development, there is a need to significantly increase infrastructure investment in transport, ICT, energy, the environment, etc. The demand for infrastructure services in Northeast Asian cities is soaring as a result of rapid urbanization and rising population density, while investment in basic infrastructure in rural
areas is crucial to narrow the rural–urban divide. Both the quantity and quality of infrastructure must improve to support economic development and private sector-driven economic growth. Subregional infrastructure development and connectivity also helps strengthen connectivity with the rest of Asia and the world.

The third challenge is the promotion of energy security—through increased supply of energy and the adoption of energy-saving technologies—and the protection of the environment. Rising energy demand in the PRC, Japan, and the Republic of Korea can be met, at least partially, by building oil and gas pipelines that connect Eastern Siberia and the Russian Far East with these three countries. Given the rapid rise in energy consumption, primarily driven by the PRC's surging demand, and the consequent rise in emissions of carbon dioxide and other pollutants, it is important to develop alternative clean energy and improve energy efficiency to help achieve sustainable economic development.

The fourth challenge is the exploration of various possible financing modalities to support these subregional cooperation efforts. One way is to utilize domestic financial markets (banks and bond markets) and institutional investors (such as pension funds) to mobilize localcurrency domestic savings for long-term investment in infrastructure, energy, and environmental improvement. A second way is to mobilize financial resources through the existing MDBs and bilateral agencies. A third, complementary way is to establish a subregional cooperative mechanism to finance high-priority national and cross-border investment projects, such as transport facilities, power distribution networks, oil and gas pipelines, and ICT connections.

The DPRK should be encouraged to participate in these comprehensive policy dialogue processes. The successful infrastructure cooperation in other subregions in Asia shows the value of enhancing subregional connectivity through trade and investment liberalization, economic corridors supported by transit and customs facilitation, and institutional harmonization.²⁰ Similar serious efforts are needed to connect Northeast Asian economies with each other and with other economies outside the subregion. Various ministries need to be actively involved and coordinated as in the case of the GMS and CAREC.

5.2. Northeast Asian Infrastructure Forum

Next, it would be desirable for the subregion to set up a Northeast Asian infrastructure forum. This forum would coordinate and integrate the existing infrastructure systems into a subregionally coherent infrastructure network; identify and prioritize new national and cross-border infrastructure projects (railways, roads, ports, rivers, energy transport, etc.); and channel the necessary funds for these purposes. All stakeholders should join, including national governments; multilateral organizations and forums (the World Bank, ADB, EBRD, the United Nations Economic and Social Commission for Asia and the Pacific [UNESCAP], UNDP, and the GTI); bilateral organizations (Japan International Cooperation Agency [JICA], Japan Bank for International Cooperation [JBIC], Korea International Cooperation Agency [KOICA], Korea Eximbank, China Development Bank, and Eximbank of China); private sector players; and civil society members. The forum's perspective should not be limited to subregional infrastructure, but should have a long-run strategic view of connecting Northeast Asia with other parts of Asia.

One of the most immediate tasks of the proposed forum would be to make a comprehensive needs assessment of infrastructure investment in Northeast Asia, both at the national and subregional levels and in key sectors (transport, energy, ICT, and the environment). The next

task is to produce a strategic framework to create a seamless Northeast Asia as an integrated subregion and then identify high-priority national and cross-border infrastructure projects. This type of comprehensive analysis is highly needed, given the fragmented nature of information available today.

The proposed forum should take a comprehensive approach to subregional infrastructure development and connectivity, complementing the previously adopted, often ad hoc and fragmented approach. It is expected to facilitate the emergence of:

A common vision of an integrated subregion supported by strong political leadership and a shared commitment to subregional integration;

A common subregional infrastructure strategy;

Harmonization of laws, regulations, procedures, and practices to facilitate the creation of an integrated subregion;

Institutional arrangements for planning and implementing coherent subregional infrastructure projects;

Coordination of and communication with stakeholders, including governments, local communities, and civil society; and

Effective financing modalities.

Essentially, a new Northeast Asian infrastructure forum would bring together all the key stakeholders in the subregion, to help build consensus on, prioritize, and coordinate subregional infrastructure plans. It could also develop harmonized standards, based on international best practices where possible, for regulatory and legal issues, as well as a common framework for handling and mitigating negative environmental and social impacts. Within the forum, sectoral subforums could also be developed—for transport, energy, ICT, and the environment, for instance—as well as subforums for soft aspects of infrastructure connectivity, such as regulatory and legal issues. Many of these should build on the achievements made by the GTI.

5.3. Northeast Asian Infrastructure Fund

Finally, Northeast Asian governments may create a cooperative financing mechanism to mobilize external financial resources for the subregion's infrastructure development and connectivity. Among the three options considered in the previous section, this paper strongly recommends starting with setting up special and/or trust funds at ADB, EBRD, and possibly the World Bank. For the DPRK to enjoy the benefits of such funds, it must demonstrate that it is fully committed to becoming a peaceful, responsible, market-oriented nation. Once sufficient confidence and trust has been built and financial constraints prove binding under special and/or trust funds, the subregional governments and other donors may consider creating a new infrastructure investment fund, called the Northeast Asian Infrastructure Fund (NEAIF), following the good example of the AIF. The paper does not recommend the establishment of a new subregional development bank, given the important financing role of the existing MDBs and the prospective ability of an NEAIF to work with bilateral and multilateral development agencies and meet the demand for national and cross-border infrastructure investment. In addition, considering that the developed countries are increasingly reluctant to establish new multilateral

organizations, such as a subregional development bank, the proposed NEAIF would be the most effective arrangement that is feasible.

In a new NEAIF, the Northeast Asian sovereigns will be the primary contributors of core equity as well as beneficiaries, while leaving room for other countries and international organizations to join as equity capital contributors. As in the case of the AIF, debt may be sold to monetary authorities with ample foreign exchange reserves, and cofinancing may be envisaged by bilaterals and multilaterals for infrastructure investment. ADB, EBRD, and possibly the World Bank may join as shareholders and form a joint administrative body. The reason for the recommended participation of the EBRD is the presence of the Russian Federation, which is not an ADB member. The participation of these MDBs would greatly help catalyze private investment.²¹

An important advantage of this approach is that the membership, operations, and governance structure of the proposed NEAIF can be determined in a flexible manner. However, there are a few disadvantages. One is that preparation to create the fund may still take time (it took 2 years for the AIF to be set up). Another is that there may be a concern, held by a small country like Mongolia, that a large country like the PRC—being the hub of Northeast Asian connectivity— may absorb a substantial amount of financial resources for infrastructure development, even if a new NEAIF invests in a small portion of the PRC's national projects and focuses on national projects in the DPRK and Mongolia and on subregional cross-border infrastructure projects. To avoid concerns that the PRC may swamp investment demand and too much lending may go to the Northeast PRC, a country exposure limit could be imposed on lending from a NEAIF as in the case of the AIF (30% of total lending).

At this point, the DPRK is not eligible to join such a fund, but can join it once the country is accepted by the international community after significantly improving political and diplomatic relationships with other six-party members, particularly the US and Japan, and embarking on substantial economic reforms and trade and investment liberalization programs. Then chances are that the large infrastructure investment needs could be met by external financial support, including through a new NEAIF.

6. Conclusion

Northeast Asia—comprising the Northeast PRC, Japan, the DPRK, the Republic of Korea, Mongolia, and the Russian Far East—needs to start intensive policy dialogue on trade and investment integration, infrastructure development and connectivity, energy security, environmental improvement, and cooperative financing modalities. Subregional infrastructure cooperation is essential to adequately invest in cross-border infrastructure and strengthen subregional connectivity. Reducing free rider incentives and weak links in transport systems, energy distribution networks and ICT connections would be essential. This would require a significant degree of mutual trust and confidence among the countries involved. Thus, it is time to set up a Northeast Asian infrastructure forum and consider a cooperative financing mechanism targeted at high-priority national and cross-border infrastructure projects. Public sector support is essential, but engagement with the private sector through PPP is increasingly important.

Relying on various previously published estimates, this paper has found that the total infrastructure investment needs for the subregion excluding Japan and the Republic of Korea (in transport, energy, ICT, and the environment) could be in the order of \$63 billion per year

over the next 10 years or so, and of this total, the governments in the subregion will have to mobilize external financial resources of \$13 billion per year. However, these estimates are in no way accurate. The most immediate tasks of the proposed Northeast Asian infrastructure forum would be to make a comprehensive needs assessment of infrastructure development in Northeast Asia, both at the national and subregional levels and in key sectors—particularly transport, energy, ICT, and the environment—and to identify "bankable" high-priority national and cross-border infrastructure projects. This type of comprehensive analysis is highly desirable, given the fragmented nature of information available today.

Having considered three options for a cooperative infrastructure financing mechanism in Northeast Asia, the paper has suggested a two-step approach. First, the subregion's governments, together with other donors, may set up special and/or trust funds in ADB, EBRD, and possibly the World Bank so that concessional resources can be mobilized for several national and subregional infrastructure projects. The DPRK can benefit from such funds if it fulfills the conditions for joining the hosting MDBs by forging normal diplomatic relations with the international community, particularly the US and Japan, and undertaking market-oriented economic reforms. Second, once sufficient confidence and mutual trust has been built among the economies in the subregion and special and trust funds and MDB resources cannot fully meet the subregion's financing needs, the Northeast Asian governments and other donors may create a well-resourced infrastructure investment fund, similar to the AIF. This investment fund, NEAIF, could help finance most of the national infrastructure projects of the DPRK (assuming the country joins the MDBs) and Mongolia, as well as high-priority subregional cross-border infrastructure projects. A large portion of national infrastructure projects in the Northeast PRC and the Russian Far East would be financed by their respective domestic resources. The paper has recommended against the establishment of a new subregional development bank (NEADB) as the existing MDBs and the proposed NEAIF will be able to address the financing needs by working with all development stakeholders including the private sector.

The current political environment is not favorable to the DPRK's participation in either special funds, trust funds, an infrastructure investment fund, or MDBs. The DPRK may join such a financing mechanism and organization only after it has been accepted by the international community as a cooperative and responsible country and has embarked on economic reforms and market opening. Setting up special and/or trust funds even before the DPRK can join them could be useful to induce the country to make efforts to eventually return to the international community. This result would contribute to the transformation of Northeast Asia into a peaceful, prosperous, and integrated subregion.

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¹ The Northeast PRC includes Liaoning Province, Jilin Province, Heilongjian Province, and Inner Mongolian Autonomous Region. The Russian Far East includes Sakha (Yakutia) Republic, Kamchatka Oblast with Koryak Autonomous Okrug, Primorsky Krai, Khabarovsk Krai, Amur Oblast, Magadan Oblast, Sakhalin Oblast, Jewish Autonomous Oblast, and ChukotkaAutonomous Okrug.

² Hiraki also took into account other basic indicators such as the development of road networks, in kilometers per 1,000 square kilometers, in relation to gross national product (GDP) per capita, and the number of passengers and the volume of cargos in relation to GDP.

³ Choo used different methods to arrive at the estimated figures, but did not provide sectoral allocations except for the Republic of Korea where he showed breakdowns of transport sector investment needs. He assumed that external financing would be necessary to meet part or whole of total investment needs: 6% for the

Northeast PRC, 18% for the Republic of Korea, 50% for the Russian Far East, Mongolia and Tumen Riverrelated projects, and 100% for the DPRK.

- ⁴ The ADB and ADBI (2009) study and Bhattacharyay (2012) also tabulated some information on cross-border infrastructure investment needs involving the PRC, Mongolia, and the Republic of Korea. But information related to the PRC did not cover cross-border projects involving the Northeast PRC. The cross-border investment requirements for Mongolia are \$4.6 billion for transport (\$0.3 billion for airports, \$3.3 billion for railways, \$0.8 billion for roads, and \$0.2 billion for trade facilitation and logistics) and less than \$0.1 billion for energy. These investments are mostly in the context of the CAREC program, the Asian Highway project, and the Trans-Asian Railway project. The cross-border investment requirements for the Republic of Korea, in relation to the Trans-Asian Railway project, are \$61 billion (\$11 billion for the Honam line, \$7 billion for the Kyobu line, and \$43 billion for the National Railway Development Plan).
- The Asian Highway Network was agreed by 32 governments, including all of the six Northeast Asian governments and was put into force in July 2005. The Trans-Asian Railway Network was agreed by 28 governments, including all the Northeast Asian governments except Japan, and was put into force in June 2009. These projects have been proposed and supported by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).
- ⁵ See ERINA Business News, Vol. 80 (July 2010) for details.
- ⁶ The author is grateful to Dr. Tadashi Sugimoto of ERINA for sharing this information.
- ⁷ The total amount of annual indicative investment needs for Northeast Asia at the national level, \$61 billion, is 8.4% of total annual investment needs for Asia's national infrastructure projects identified by the ADB and ADBI study (\$726 billion per year during 2010–2020). Applying the same percentage share of 8.4% to total annual investment needs for Asia's cross-border infrastructure projects identified by the same study (\$26 billion), one obtains an estimate, \$2.2 billion, for annual cross-border investment needs in Northeast Asia. In Table 8, this amount \$2.2 billion is allocated to sectors in the same proportions as total national infrastructure investment needs.
- ⁸ PPP is a partnership of government and the private sector to fund and/or operate government services or private business ventures. In large-scale infrastructure projects, the role of government remains vital as a large proportion of projects—with the exception of telecommunications projects—still requires some form of government guarantee. The major challenges that private sector infrastructure providers face in developing new, and maintaining existing, infrastructure include the ability of government to deliver required infrastructure; economic conditions and availability of financing; skills shortages in the public and the private sector; limited availability of long-term finance in domestic markets; currency mismatches caused by borrowings in foreign currencies with revenues in local currency; and the impact of foreign exchange rate fluctuations on debt repayments (KPMG 2009).
- ⁹ The new GMS Strategic Framework, 2012–2022, uses economic corridor development as a key platform for delivering multisector second-generation investment projects (driven by emerging trends such as urban development), along with greater emphasis on infrastructure "software," including the promotion of trade and transport facilitation, and other policy and institutional reforms to further promote the competitiveness and sustainability of GMS corridors.
- ¹⁰ Other members of SAARC include the Maldives, Pakistan, and Sri Lanka.
- ¹¹ The GTI covers part of Northeast Asia, i.e., the Northeast PRC, the eastern port cities of the Republic of Korea, the eastern provinces of Mongolia, and Primorsky Krai of the Russian Federation. The DPRK was a founding member, but later withdrew membership in 2009. Japan is not a member country but provides an eminent person to the Council of Eminent Persons for the Tumen Programme.
- ¹² These funds are not programs; rather, they are dedicated sources of funding for programs and activities agreed by the donors and the hosting organization. The activities they finance are diverse, ranging from large global programs with their own governance structures to conventional development projects and support for technical assistance. See Chapter 2 and Chapter 3 in Droesse (2011) for issues on special and trust funds. In recent years, trust funds have emerged as an important pillar of the aid architecture along with bilateral and multilateral assistance. These include the Global Environment Facility (GEF); Global Fund to Fight AIDS, Tuberculosis and Malaria; and Climate Investment Funds (CIF)—comprising two separate windows, i.e., the Clean Technology Fund and Strategic Climate Fund.
- ¹³ As in the case of the EBRD, ADB can also provide technical assistance (TA) and financial support to nonmembers through trust and/or special funds. An important qualification is that the territory of any nonmember would have to be found in the region of Asia and the Pacific. In addition, the ADB Board of Directors would have to be satisfied that the terms setting up the trust and/or special fund, and conditions of its use proposed by the donors, would be fully consistent with the purposes and functions of ADB. An example of such TA and financial support for non-members includes the case of the multi-donor Trust Fund for East Timor (administered by the International Development Association of the World Bank and

implemented jointly with ADB) when East Timor was under a United Nations transitional administration before becoming politically independent. East Timor received the benefit of TA and financial support from the World Bank and ADB for its reconstruction and development through this trust fund starting in early 2000 even though the territory did not yet join the World Bank and ADB as a formal member until 2002. ADB assumed the lead role for preparing and managing activities in transport infrastructure (roads, ports, and airports), power, telecommunications, and water and sanitation. However, to name East Timor as an additional territory in which trust fund resources could be validly expended, it was necessary for the ADB Board to make some small technical amendments to the relevant regulations for the provision of assistance. Importantly, no amendment to the ADB Charter was required.

- ¹⁴ The proposed bank is sometimes called the Northeast Asia Bank for Cooperation and Development.
- ¹⁵ Asia hosts no subregional multilateral development bank, though other regions in the world have several. Examples of subregional MDBs are the Caribbean Development Bank, Central American Bank for Economic Integration, Development Bank of Latin America (Corporación Andina de Fomento), East African Development Bank, and West African Development Bank.
- ¹⁶ In an early paper, Katz (1999) assumed the initial capitalization of \$20 billion and provided a table like Table 14. In constructing Table 14, all numbers, except for ratios, are doubled as the size of the newly proposed capitalization of a new bank (\$40 billion) is twice as much as the initially proposed size.
- ¹⁷ In his earlier paper, Katz (1996) suggested that the total capitalization of \$15–\$20 billion could support an initial annual level of bank lending and guarantees of some \$2–\$3 billion.
- ¹⁸ ADB and EBRD may be able to extend TA and financial support for the DPRK through trust and/or special funds even if the country remains a non-member of these banks. However, such operations would require substantial shareholder support, which would certainly demand the DPRK to normalize political and diplomatic relations with the international community, particularly the US and Japan, to embark on transition to democracy (in the case of EBRD) and a market economy, and to be ready to join the banks.
- ¹⁹ The recent development of nuclear weapons and ballistic missiles by the DPRK have created tensions with the international community, particularly the US and Japan. Japan also has the unresolved issue of the abduction of Japanese nationals. The lack of progress on economic reforms and market opening in the DPRK would also be a concern from the developmental perspective.
- ²⁰ Kuroda, Kawai and Nangia (2008) discussed the importance of collaboration of all stakeholders in the construction of cross-border infrastructure, including the hardware and software components.
 ²¹ One may argue that rather than creating a new infrastructure investment fund in Northeast Asia, the AIF
- ²¹ One may argue that rather than creating a new infrastructure investment fund in Northeast Asia, the AIF could be expanded to absorb the Northeast Asian countries as new members. There are several advantages in this option. One is that preparation does not take much time as the existing AIF framework can be utilized. Another is that this would be a first step toward connecting Asia's subregions through an infrastructure investment fund. However, the Russian Federation, a non-ADB member country, cannot join as the AIF presupposes cofinancing with ADB. The DPRK, which is not a member of the Bretton Woods institutions (IMF and the World Bank) nor a member of ADB, needs to make efforts to become an ADB member by first joining the IMF and the World Bank. In addition, ASEAN countries may not agree to membership expansion as these Northeast Asian countries may dominate the share-ownership of and borrowing from the fund.

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Abstract

Trade liberalization measures could be political, social and economic issues. In Korea, FTAs have been one of hottest issues in recent years, but now Korea became one of countries with most extensive FTA networks in the world. The country needed to overcome various obstacles in building FTA networks. This paper overviews Korea's experience in improving public perception on FTA policy, while evaluating its public outreach.

Keywords: FTA, Public Outreach, Trade liberalization, KORUS FTA, Korea

1. Introduction

A trade policy entailing the opening of trade, such as the promotion of FTAs, can have considerable influence on stakeholders' interests based on the import/export structure and induce a backlash from affected groups. In many cases, FTAs become political issues. As a result, a country's FTA policy is viewed as a political issue with considerable influence on public sentiment, thereby provoking a fierce debate over pros and cons. In Korea, the National Assembly tends to support or check the administration's FTA policy while keeping an eye on public opinion. For an FTA to be implemented, the administration has to get it ratified by the National Assembly, and therefore fostering public sentiment favorable to the FTA plays a crucial role in FTA policymaking. Accordingly, it is difficult to promote an FTA policy based only on its economic aspects, and therefore there is a need for considering various political and economic factors. All of the nine FTAs implemented by Korea have been controversial, but among these, the Korea-Chile FTA and the Korea-U.S. FTA (KORUS FTA) have produced the most resistance from various groups at the national level. The controversy over the FTA with Chile can be explained by the fact that it is Korea's first FTA, but the KORUS FTA sparked a fierce and wide controversy over political and economic issues as well as social and cultural ones.

The KORUS FTA features the most comprehensive content and the deepest deregulation to date, and this made it difficult for the negotiators to respond to a diverse range of issues raised over the FTA. With the opposition firmly established among civic organizations, the opposition party, and various special interest groups in the FTA negotiation process, the situation worsened, threatening the authority of the negotiators and even the administration. In addition, before the initiation of the negotiations, the U.S. established the prerequisites for several issues such as the screen quota and automobile, among others, and there were many issues that could potentially influence public sentiment in Korea, including the approval of beef imports (which were temporarily halted because of the reoccurrence of mad cow disease during the negotiations) and the revision of an officially signed agreement based on the Obama administration's request, among others.

With the launch of the official discussion in 2005, the KORUS FTA became effective in March 2012. Since then, there has been no controversy over the FTA. Many anti-FTA advocates have argued that Korea may lose its economic sovereignty and become an economic colony of

the U.S., but such an assertion no longer receives much attention.

During the Cold War, Korea's expansion of trade with the U.S. and dependence on the U.S. market played a decisive role in the country's rapid economic growth. A vast majority of Koreans supported the U.S. as the strongest ally, but the anti-American sentiment slowly surfaced during the process of democratization in the 1980s, which was exacerbated during the KORUS FTA negotiations by those opposing it. Here many groundless accusations were thrown based on ideological views, not on rational economic thinking.

2. Issues in Korea's FTA Promotion

2.1 FTA and Affected Industries

The very first special interest group arose from fishery and opposed Korea's FTA with Chile. According to Korea's laws, tariff-free importations were applied to marine products from local sites after Korea's pelagic fishing vessels sail overseas. Large numbers of deep-sea fishing companies entering Chile imported frozen skate (ray) and marine products on a duty-free basis but argued that the FTA would make it possible for their Chilean counterparts to export their products on a duty-free basis to Korea in the same manner, weakening their competitiveness. At the time, Korea's fishing industry placed considerable pressure on the negotiators, staging large street protests and suggesting the potential interruption in the supply of their marine products. However, when their illegal acts were exposed, domestic fishing companies no longer opposed not only the Korea-Chile FTA but also other FTAs under consideration. Instead, they were interested in the restructuring of their industry and received the government's support during the FTA negotiations with the U.S. and the E.U.

With fishing companies satisfied, Korea's agricultural sector started to argue that Chile's fruits such as grapes were highly competitive at the global level and thus that Chile's natural environments would make it a powerful global producer of fruits. In terms of Chile's industrial structure, only the agricultural sector showed aggressive opposition to the FTA with Chile. In particular, in the late 1990s, when the unfavorable sentiment was somewhat diluted because of the opening of agricultural sector, domestic agricultural groups opposed the FTA with Chile as a means to build their political clout while fostering unity in the agricultural sector. They promoted an anti-FTA atmosphere while arguing the potential collapse of the agricultural sector.

In this process, conservative media aggressively supported the FTA with Chile, whereas progressive and new media opposed it, arguing that the FTA would inflict substantial agricultural damage. Agricultural groups and economists opposing the FTA systematically publicized the potential collapse of the agricultural sector while portraying Chile as an agricultural power exporting diverse agricultural products to the world, including the U.S. and Europe. Here they used Chile's grapes, which are generally consumed as winter snacks by most people in Chile, as an example to provide support for their argument.

The government and FTA advocates responded to this argument while widely publicizing its benefits through seminars, newspaper/magazine articles, and broadcast discussions, among others. That is, they emphasized that Chile is located in the southern hemisphere and the nadir of the earth and that there is considerable difference in seasons between Chile and Korea. That is, they highlighted that the two countries have the opposite the harvest seasons and thus that Korea's agricultural section would see little damage from the FTA with Chile. With deserts to the

north and tundras to the south, Chile's tillable land is relatively small relative to the gross area, and in terms of the distance between the two countries, they are located at the opposite ends of the globe. Because of the lack of infrastructure for logistics, they argued that Korea's imports of fresh fruits (Chile's major exports) would increase only partially increase and thus that there would be little damage to Korea's agricultural sector.

In addition, the government attempted to weaken anti-FTA activists' arguments by countering them with scientific facts based on trade trends and forecasts, stressing that the agricultural sector would not collapse. However, the agricultural sector mobilized physical methods such as staging protests and rallies, and worse, some politicians and National Assembly members whose constituencies were based on rural areas joined anti-FTA rallies organized by the agricultural sector, exacerbating the negative atmosphere across the country. The Korea-Chile FTA was concluded after a great struggle in October 2002 and came into effect only in April 2004 because of the delay in the National Assembly's ratification. In this ratification process, the National Assembly and agricultural organizations demanded certain supplementary measures such as compensation for economic losses, and therefore the FTA was ratified in conjunction with the enactment of the FTA Special Law on the Agricultural.

Policymakers took advantage of the FTA Special Law to persuade farmers and anti-FTA activists, but the agricultural sector became more accustomed to government support with the support. However, the sector helped to turn anti-FTA rallies into larger gatherings and create powerful opposition, using it to draw additional government support. In contrast to policymakers' expectations, there was no serious damage to the agricultural sector even after the implementation of the FTA with Chile, but in accordance as the agreement, the government allocated a budget of KRW 200 billion (\$2 million) every year for seven years to agricultural projects. As a result, many farmers who saw no damage applied for financial support, and there were some efforts to strengthen anti-FTA arguments to secure additional financial support. Therefore, questionable political deals were rampant, and policies were driven by street protests, not by discussions and compromises between special interest groups and government officials in charge of promoting the FTA.

2.2 Public Opinion on the KORUS FTA

Since the beginning of the KORUS FTA discussion, the agricultural sector clarified their opposition, and their position was convincing because Korea imported huge quantities of agricultural products from the U.S. Policymakers responded to anti-FTA activists by providing some examples of exaggerated agricultural damage in the case of the Korea-Chile FTA, but the agricultural sector's argument strengthened over the course of the FTA negotiations. With the resumption of U.S. beef imports under specific conditions, which were temporarily halted because of mad cow disease during the negotiations, the agricultural sector and anti-FTA activists rapidly shifted public opinion against the government. Throughout most of the KORUS FTA negotiations, more than half of the people surveyed did not support the KORUS FTA.

With exaggerated arguments about the risk of mad cow disease, candlelight rallies demanding a stop to the FTA negotiations as well as to U.S. beef imports were held for almost four months across the country. In addition, the resistance to the imports, which was based mainly on potential threats to food safety, spread throughout the country. Further, with the controversy over the investor-state dispute, the FTA with the U.S. started to be perceived by

ordinary people as Korea's loss of policy sovereignty, and the opposition to the FTA peaked.

Another complication was the additional negotiation. The Obama administration demanded additional negotiations on some parts of the signed agreement in June 2007. When the Korean government accepted this demand, a majority of the public doubted the economic feasibility of the KORUS FTA. In this process, anti-FTA activists argued for the abrogation of the agreement while denouncing both Korean and U.S. trade authorities. Accordingly, the government started to publicize the economic benefits of the FTA and the inevitability of additional negotiations through various media. It did not take long for the public to start trusting the government. The media highlighted the exaggerated risk of U.S. beef, and by the end of 2011, when the National Assembly ratified the FTA, a majority of citizens surveyed supported the KORUS FTA.

2.3 Asymmetry Between Pros and Cons

The trade policy entailing market opening invites an easy counterargument, and such a counterargument tends to be well perceived by the public. Counterarguments in TV discussions are generally concise and powerful. For example, when the ISD is applied to direct investment by hundreds of thousands of foreigner investors, it becomes clear evidence of a counterargument. That is, any ISD may be denied in an FTA. By contrast, a supporting argument requires a longer and more logical explanation as well as a logical and persuasive message to convince others because it has to first explain its theoretical background and then describe the process in which desired policy effects are realized through various interactions in economic activity. If there is some error in the explanation, then the overall logic collapses. By contrary, a counterargument is possible even with no basis, and even when an argument is wrong, it is possible to avoid criticism by posing a different issue. This gives rise to asymmetry.

In addition, there is a problem with the media. In general, conservative media support FTAs, but because of their distinct nature, they tend to highlight "shocking" counterarguments regardless of their logic and rationale. Therefore, audiences are more likely to have favorable attitudes toward such counterarguments than bland supporting arguments. In addition, Korean firms tend to shy away from controversies while expecting the government to complete FTAs. For example, Yong-seong Park, the Doosan Group president and also the chairman of the Korea Chamber of Commerce and Industry, argued for the early ratification of the Korea-Chile FTA but quickly withdrew it a week later when agricultural organizations launched a consumer boycott movement against Doosan products.

Because of the development of SNSs, counterarguments disseminate easily and widely across all segments of society, including youths. This has promoted the government to respond appropriately. Some government ministries formed SNS response teams and tried to block inaccurate information, but they were limited in some ways. In particular, influential SNS users with tens of thousands of followers spread false information, which was then distributed to third parties by those followers. This induced the wide dissemination of unfavorable public sentiment.

In the process of promoting the FTA, exporters and FTA advocates kept silent, whereas the opposition camp started their organizational propaganda and campaigns to halt the FTA negotiations. This led the KORUS FTA negotiations into a blind alley, and large firms started to voice the necessity of concluding the negotiations. With the opposition camp's position on the KORUS FTA overwhelming that of its advocates, industries and firms such as the Federation of Korean Industries (consisting of special interest groups such as exporters), which had withheld

their opinions, started lobbying the government and appealing to the public. Under the slogans "an FTA highway for economic growth" and "a country founded on export growth," they engaged in advertising campaigns in support of the FTA and actively participated in fostering favorable public sentiment.

3. Background for Improving Public Sentiment for Korea's FTAs

3.1 Announcement of the FTA Road Map

President Moo-Hyun Roh's "participatory administration," launched in February 2003, set the guidelines for the aggressive promotion of the FTA. This administration evaluated the FTA promotional schemes for a more comprehensive view than for an individual review and clarified the guidelines for FTAs with major trade partners in the future by announcing the "FTA promotion road map," which organized the medium- and long-term FTA policy guidelines, in September 2003. In the short term, the administration established a phased promotional schedule in which FTAs would be pursued with Singapore, Mexico, and Japan. In the medium-term strategy included the ASEAN-Korea FTA, the China-Japan-Korea FTA, and the East Asia FTA, and the long-term strategy, FTAs with the U.S., China, and the E.U. Afterward, the government announced a revised road map in April 2004, which included FTA negotiations with India and Russia in the future.²

In the late 1990s, which marked Korea's limitations in terms of its knowledge of internal and external promotional strategies for FTA negotiations, the government had considerable difficulty in achieving a consensus among the government, firms, affected sectors, NGOs, the National Assembly, and other various stakeholders. The process of appropriately facilitating diverse opinions into a single voice and engaging in discussions was not smooth even within the governmental agencies. At this time, anti-FTA groups highlighted the problem of closed-door negotiations and asserted the need for "transparent negotiations," making substantial efforts to foster a negative FTA atmosphere.

With negative perceptions of the FTA overwhelming positive ones, trade authorities clearly recognized the necessity of more firmly institutionalizing the process of promoting FTA policies, which then reflected no specific rules. Accordingly, the government implemented "Procedural Rules for Promoting FTAs." These rules were enacted by the presidential decree 224 immediately after the Korea-Chile FTA came into effect in June 2004 and consisted of 6 chapters and 26 articles. These rules were revised in August, 2008. With the FTA negotiations conducted according to these specific rules, the controversy over procedures was reduced to a certain extent, but these rules started to fade with a critical comment on a poorly implemented public hearing on the KORUS FTA negotiations.

In addition, anti-FTA groups fostered a sense of sympathy based on the fact that the public was very interested in exerting their rights to know the content of trade negotiations and particularly that it was necessary to provide affected industries and people with related information and to enhance negotiation transparency. Accordingly, the National Assembly decided to install a trade negotiation advisory committee in which industrial circles, experts, and interested parties could take part in the process of making trade policies by legislating the Law of Trade Procedures (effective July 2012). This committee was mandated to provide government trade organizations with advice on all major phases in the conclusion and implementation of trade

pacts, and the government was required to report major trade issues to the National Assembly. After the conclusion of negotiations, the committee had to provide a comprehensive evaluation of FTA effects on the domestic economy, national finance, industries, and employment, among others, which formed the conditions under which public sentiment had considerable influence on trade policies.

3.2 Establishment of the FTA Promotion System

The turning point in Korea's efforts to promote FTAs may be its decision to promote the KORUS FTA. The U.S. has led economic standards in the global context and has shown a high level of international competitiveness, having considerable influence on the world economy. Therefore, it was natural for affected sectors to voice their concern over the FTA with the U.S. In Korea, a majority of people have favorable attitudes toward the U.S., but a substantial number are against it for various reasons. Therefore, any decision on the initiation of negotiations with the U.S. required serious economic assessments and analyses of various economic and political factors and thus decision making at a high level of government. On the other hand, through the KORUS FTA, Korea expected to construct a system of institutional FTA support. On August 11, 2006, Korea established the KORUS FTA Conclusion Support Committee, and on May 15, 2007, the committee was expanded and reorganized into the "FTA Domestic Countermeasure Committee," which facilitated the formation of favorable public sentiment toward the FTA by taking exclusive charge of providing the public with information on the conclusion and ratification of the FTA. It also gathered opinions, managed social conflicts, supported the National Assembly, and proposed complementary measures, among others.

One of the most important roles of the Domestic Countermeasure Committee was to draw public support for the FTA through public outreach. At the beginning of 2006, an organization opposing the KORUS FTA was established after the decision on promoting the FTA was announced to turn the public against the government's FTA policy. As a result, the government struggled to find ways foster favorable public sentiment and established the "Korea-U.S. FTA Conclusion Support Committee." Therefore, this committee placed great emphasis on public relations programs to get the public to support the FTA but had some difficulty in gathering opinions from interested parties and using personnel and material resources for the private sector's FTA use plans.

3.3 Trade Adjustment Assistance System (TAA)³

In terms of the public's strongly unfavorable opinion on the process by which the FTA with the U.S. was promoted, the Korean government started to consider various countermeasures for affected industries while fostering favorable public sentiment. The discussion on the Trade Adjustment Assistance System (TAA) started in October 2004, and the bill submitted to the National Assembly at the end of 2005 was enacted at the 259th extra session of the National Assembly in April 2006. This law was expected to make the domestic industrial structure more sophisticated and promote the balanced development of the national economy by making it possible to support corporate reorganization and worker job transfer and reemployment. These efforts were seen to address potential damage to trade arising from increased imports as a result of the FTA.

The Trade Adjustment Assistance Law went into effect in April 2007, following the "Special Law on Support of Farmers and Fishermen according to FTA Conclusion," which was enacted in March 2004, and encompassed a support plan for the manufacturing and service sectors, making it possible to minimize losses for firms and workers. Seven firms were designated as TAA firms and received a loan of KRW 2.25 billion won on average from 2008 to August 2012.

3.4 Government's FTA Public Relations

The government understood the difference in opinions on FTAs between supporters and opponents and thus attempted to foster favorable public sentiment by developing extensive FTA public relations campaigns both before and after the initiation of the FTA negotiations with the U.S. in 2006. The government recognized the public's unfavorable attitudes toward its decision to re-import U.S. beef and thus had no choice but to turn to public relations campaigns to secure necessary support for the KORUS FTA. Public opinion became increasingly important during the National Assembly's rushed ratification of the KORUS FTA and the Korea-E.U. FTA.

The FTA Domestic Countermeasure Headquarters, under the Ministry of Strategy and Finance, and trade authorities began engaging in various activities to develop domestic support for the ratification of the bilateral FTAs with the U.S. and the E.U. through public relations campaigns targeting the public, presentations to the National Assembly, and interactions with interested parties, among others. In 2009, after the bill for the ratification of the Korea-E.U. FTA was submitted, they created a foundation for support at the level of the National Assembly by reporting on the FTA to the National Assembly members and their aides (27 times), providing relevant data (62 times), producing detailed data, and supporting the National Assembly, particularly the Committee on Foreign Affairs, Trade, and Unification. In addition, they attempted to secure support for the Korea-E.U. FTA by launching a total of 48 Korea-E.U. FTA public relations campaigns, including regular briefings at the Ministry of Foreign Affairs and Trade and interviews with domestic and foreign media outlets, among others, in 2010. Further, they provided a better understanding of the Korea-E.U. FTA while launching public relations campaigns by contacting E.U.-related business and academic communities a total of 27 times from the submission of the bill to its ratification.

During this period, they explored necessary countermeasures by conducting surveys on the KORUS FTA and evaluating FTA trade statistics by monitoring media and conducting case studies as well as updating and explaining data, among others. After the conclusion of additional negotiations on the FTA with the U.S., they focused their attention on grasping the major controversies by intensifying their monitoring of the media. In addition, they focused more on analyzing daily trends in newspaper articles and broadcast coverage both at home and abroad and paid close attention to online trends by assessing content on Naver, Daum Agora, and various online news sites, among others. Further, relevant authorities under the Prime Minister conducted joint analyses of media reports.

They also collected opinions from interested parties (policy consumers) and experts and combined their opinion-gathering processes to focus on various parties such as firms, scholars, and experts through private advisory councils, debate forums, and meetings. They also improved public opinion on interested parties by engaging activities such as hosting hearings for onsite opinions (through a total of 21 district presentations in 2010), seminars, and meetings with firms. They provided a broader understanding of the KORUS FTA by engaging in various online activities, including the promotion of government websites (e.g., <u>www.fta.go.kr</u> and <u>www.mofat.go.kr</u>), e-People, and Naver "Jisik-In," among others, while making efforts to accept opinions of interested parties (policy consumers) at all times and facilitating two-way communication. In addition, trade authorities faithfully gathered policy consumers' opinions by aggressively launching public relations campaigns targeting the media, providing interviews and meetings with domestic and foreign reporters, contributing to newspapers and magazines, and distributing press releases and publicity materials. In 2011, the Trade Minister's office hosted a total of 74 interviews and meetings on the KORUS FTA. In addition, for the Korea-E.U. FTA, it participated in a total of 27 related interviews with newspapers and broadcast networks and 9 briefings for the media and distributed 12 press releases.



Figure 1. Trends in KORUS FTA support and opposition

3.5 President's Leadership

Public opinion worsened because of the spread of ideological opposition to the FTA with the U.S. and particularly to the four conditions set by the U.S. The opposition camp continued to strengthen its anti-FTA influence by using these four conditions as the core basis for its opposition. In this regard, President Moo-Hyun Roh stated during the exterior economic ministerial meeting on July 21, 2006, that "the 4 prerequisites are wasting truth controversy which is becoming an obstacle to promoting FTA and such a controversy should be ended soon" and clarified his position by stating that "I will declare such an interpretation as a presidential decision."

Then, on August 20, 2006, he made it clear during a special news conference with the Associated Press that "the 4 prerequisites or the 4 pending issues are different only in expression, but actually they were a necessary thing for fostering the atmosphere for FTA negotiations with the U.S." In particular, he emphasized that the screen quota was an issue that he promised and that U.S. beef imports needed to be allowed regardless of the FTA outcome.

The KORUS FTA faced many more controversies than other trade negotiations and sparked a fierce debate over its advantages and disadvantages, and therefore, without the president's determination and provision of necessary authority to the negotiating body, its conclusion would have been unlikely. President Roh himself accurately perceived the necessity of the FTA and finally led to its conclusion by persuading or directing those ministries that held an opposing point of view. The FTA with Chile was the first one for Korea, and therefore it took a long time to conclude and involved a complex trial-and-error process. However, the president failed to make decisions on important issues, leaving them to relevant ministers. As a result, the quality of the

Source: Korea's Ministry of Foreign Affairs and Trade (2012)

FTA was poor, and its negotiations were slow.

4. Conclusion

Within a decade, Korea transformed itself from a country with few FTAs into a representative FTA country. A diverse range of factors enabled this achievement, including the development of countermeasures for affected sectors to address arguments against FTAs, the intensification of public relations campaigns targeting the public, and the president's exertion of leadership. In the process of promoting its FTAs, Korea faced huge social costs while anti-FTA organizations strengthened their ability to systematize themselves and their solidarity.

Accordingly, future FTAs are likely to be determined based on strict economic feasibility standards and require careful analyses of their impacts based on diverse factors. In particular, it is necessary for relevant authorities to determine how they would promote a given FTA by carefully incorporating the opinions of interested parties, civic organizations, and autonomous entities at the local level and making efforts to reflect these opinions even in the process of forming FTA policies and engaging in official negotiations with FTA partners.



Figure 2. Use of Korea's FTAs

Source: Cheong and Cho (2011).

- * Professor, Department of Economics, Inha University. This work was supported by a National Research Foundation of Korea Grant which was funded by the Korean Government (MOEHRD) (NRF-2011-413-B00008).
- ¹ Korea's early FTAs allowed narrow liberalization in agriculture. Refer to Cheong and Cho (2010) for detailed discussion.
- ² For more detailed information on the FTA road map, see Roh and Cheong (2005).
- ³ The discussion on the TAA is based on Cheong (2006, 2010).

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Thoughts on the Industrial Development and Economic Cooperation in the Border Area between China and the DPRK:

From the Perspective of the Liaoning Coastal Economic Zone and the Changchun–Jilin–Tumen Development

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Abstract

Against a backdrop of China and the DPRK implementing new development strategies, the economic and trade relations between the two countries entered a new stage of development with the start of the economic zone cooperation part of the project in June 2011. Industrial cooperation is expected gradually to become the main direction for the development of bilateral economic and trade relations, within which the logistics, infrastructure, resources, energy, manufacturing, technology, tourism, agriculture, and fisheries industries are expected to become the main content of cooperation. At the same time, the current situation for China–DPRK economic and trade cooperation and the reality of the basic conditions make such cooperation more conducive to developing the border regions of both sides first of all, then gradually push it forward, and cooperation in the area of logistics is expected to play the breakthrough role.

Keywords: China–DPRK economic relations, industrial development and cooperation, logistics infrastructure, cross-border economic cooperation, cross-border free trade zone, Liaoning Coastal Economic Zone, Chang-Ji-Tu [Changchun–Jilin–Tumen] development

1. Introduction

The People's Republic of China and the Democratic People's Republic of Korea (DPRK) have maintained traditional relationships of friendship and cooperation with each other since the establishment of diplomatic relations between the two countries in October 1949. Sino-DPRK trade remains one of the external economic and trade relations on which the DPRK places the greatest emphasis, and the bilateral economic and trade cooperation have continued to develop in a stable manner, although it has grown at a moderate rate in recent years. A series of agreements signed by both countries has played an important role in developing the economic and trade relations between the two over the several decades and made remarkable accomplishments as China and the DPRK promoted cooperation in the area of economy and trade.

After thirty years or so of reform and open-economy policy, China produced extremely remarkable results in economic, social and other areas, and in 2010, it became the world's second largest economy. In 2011, with the launch of its development strategy based on the 12th Five-Year Plan (12-5 Plan), China entered a new phase of its economic and social development. Northeast China, which abuts on the DPRK, is a major area for economic and trade cooperation with the DPRK. In its national economic development strategy for the new age, however, China worked out a new development strategy for its Northeast economic district, including the Harbin-Daqing-Qiqihar Industrial Corridor, to lay the solid foundation for economic growth for the coming years while focusing on two national development strategies for the district: the Liaoning

Coastal Economic Zone Development Plan and the Changchun-Jilin-Tumen Development and Opening-up Pilot Area. On the other hand, the DPRK had difficulties achieving economic development because it was long punished by international sanctions in various areas such as economy and technology, but it still managed to attain a certain degree of economic development. In 2012, the DPRK announced its strategic goal "Opening the Door to a Powerful and Prosperous Country," and is attempting to concentrate all its energies on economic development.

As China has continued to achieve rapid economic growth since it launched its economic development strategy for the new age, the DPRK will accelerate its economic development through its development strategy known as "Opening up the Door to a Powerful and Prosperous Country." Therefore, the economic and trade relations between China and the DPRK will be further strengthened, and industrial cooperation will become an important factor for the strengthening of such relations as the content and format of economic and trade cooperation between the two countries undergo changes with the advancement of their respective development strategies. In June 2011, part of the cooperation project for the two countries to jointly develop the Rason Economic and Trade Zone and the Hwanggumphyong and Wihwado Economic Zone began, and it is expected that this will bring Sino-DPRK economic and trade cooperation to a new stage of development.

2. Foundation and the Present Condition of Industrial Development and Cooperation in the Sino-DPRK Border Area

2.1 Sino-DPRK Economic and Trade Relations: "Aid and Cooperation" to "Cooperation and Aid"

Sino-DPRK trade began in 1950, and after the 1970s, the Agreement on Mutual Supply of Critical Materials 1971-1976 was signed. In January 1976, the Sino-DPRK friendship oil pipeline built jointly by the two countries went into operation. After the 1980s, in addition to continuing to provide oil to the DPRK at a preferential price, China offered food assistance each year. It also provided economic assistance mainly for light industries. Major aid programs included (1) the remodeling of power transmission lines at three hydroelectric power plants along the Yalu River; (2) the construction of the 190,000-kW Taipingwan power plant in 1982; (3) the building in Sinuiju of a petroleum refinery with the capacity to annually process two million tons of crude oil provided by China; (4) the construction of the oil fuel plant in Huichon and gear and measuring equipment plants in Pyongyang; and (5) the construction of a paper mill in Haeju, a textile plant in Sinuiju, and pen and radio parts plants in Hamhung, as well as the expansion of power transmission networks in Pyongyang in 1988.

In the early 1990s, Sino-DPRK trade became prosperous. After 1991, China was the most important trade partner of the DPRK. In 1996, the two countries signed the China-DPRK Economic and Technological Exchange Agreement. In addition, the bilateral cooperation produced new results in various fields, and Sino-DPRK trade showed a sign of resurgence. In general, the economic relations between the two countries were extremely active throughout the 1990s.

At the beginning of the 21st century, China and the DPRK started to step up economic and trade cooperation between the two in a completely new international environment. First, investments became market-oriented and came to be underpinned by legislation. In January 2005, when he had a meeting with General Secretary Kim Jong II, Prime Minister Wen Jiabao spelled out the principles of economic cooperation—"government leadership, participation by businesses, market administration, and mutual benefits"—and, based on these principles, attempted to incorporate these market elements into the bilateral investment cooperation initiatives. In the same year, the governments of the two countries entered into the Agreement on Preferential Treatment to and Protection of Investments to provide legal guarantee to the standardization of economic cooperation between the two countries. This helped further increase the attention of Chinese businesses toward investments in the DPRK.¹ In October 2005, with the support of China, the construction of a friendship glass factory in the DPRK economic cooperation in this decade.

Then new progress was made in cooperation in the area of science and technology. In December 2007, the 42nd session of the Joint Committee on Science and Technology took place in Pyongyang. During the meeting, participants from the two countries exchanged opinions about science and technology cooperation projects that would soon be carried out and agreed to promote new cooperation in such fields as agriculture, meteorology, water utilization, computing software development, geology, aquaculture, sanitation and communicable disease control, coal use, and administrative management of science and technology. The Chinese and DPRK governments then concluded the 2008 Protocol on Science and Technology Cooperation Projects, adding a new page to their relationship of cooperation.

Overall, some thirty years have passed since China adopted a reform and open economy policy. The Chinese economy has achieved tremendous growth under the principle of a market economy, obtaining enormous results. The Chinese government has continued to provide extremely important assistance to the DPRK, playing a crucial role in developing the DPRK economy and supporting the lives of DPRK citizens. As mentioned above, the successful completion of a friendship glass factory in Taean, the DPRK, and the commencement of its operation with the support of China epitomize China's support for the DPRK during this period. This is also a major proof of the bilateral industrial cooperation.

2.2 Institutional Bases of Economic, Trade, and Industrial Cooperation: Important Bilateral Agreements

Since the establishment of diplomatic relations between the two countries, China and the DPRK have reached a series of bilateral cooperation agreements to promote cooperation and development to mutual interests in the fields of economy and trade. Major bilateral agreements include:

- (1) China-DPRK Economic and Cultural Cooperation Agreement (1953)
- (2) China-DPRK Friendship, Cooperation, and Mutual Aid Treaty (1961)
- (3) China-DPRK Consular Treaty (1985)
- (4) China-DPRK Economic and Technological Exchange Agreement (1996)
- (5) Agreement on Preferential Treatment to and Protection of Investments (2005)
- (6) Agreement between the Chinese and DPRK Governments on Joint Marine Oil Development (2005)
- (7) Agreement between the Chinese and DPRK Governments on Automobile Transport (2008)

- (8) Economic and Technological Cooperation Agreement, the Agreement on Cooperation in Exchange for Education Organizations, the Memorandum of Agreement on Exchange Cooperation in the Software Industry, and the Memorandum of Agreement on Visits of Chinese Tourist Groups to the DPRK (2009)²
- (9) China-DPRK Maritime Management Agreement on Cooperation in the Valley of the Yalu River (April 2011)³

In short, since the beginning of the 21st century, Sino-DPRK cooperation in the economic and trade areas has constantly gained momentum as both the Chinese and DPRK economies continued to develop.

- 2.3 Economic Bases of Economic, Trade, and Industrial Cooperation between China and the DPRK
- 2.3.1. Continuous and Stable Development of Bilateral Trade

Since they established diplomatic relations with each other, China and the DPRK have seen their bilateral trade continue to grow in a stable manner, particularly in recent years during which their economic exchange, trade, and cooperation expanded. The figures shown below suggest a general trend in the development of the two countries' economies and bilateral trade. In 1999, since China introduced a system to settle accounts in foreign currency, the DPRK ran short of foreign currency, and as a result, the value of trade between the two countries declined. In subsequent years, the bilateral trade continued to rise with the years.

	Unit: US\$100 million
Year	Value
1993	8.99
1999	3.7
2001	7.39
2005	15.8
2007	19.7
2008	27.9
2009	27.0

Table 1. Statistics of Sino-DPRK Trade

Source: This table has been created using each year's edition of the *China Trade and External Economic Statistical Yearbook*

The Sino-DPRK trade during the first half of 2010 reached US\$1.28 billion, a 16.4% increase compared to 2009, when it amounted to US\$1.1 billion. The DPRK mainly imported crude oil from China, and crude oil accounted for 27% of the DPRK's total imports, followed by textile goods and non-metal products. The DPRK, meanwhile, mainly exports coal, iron ore, and other mineral resources, which represent 51% if combined, and non-metal mineral products account for 20%.

2.3.2 Settlement of cross-border trade accounts in the Chinese currency, the yuan

In June 2010, the Chinese government designated Liaoning Province as a test area for "settlement of cross-border trade accounts in the Chinese currency, the yuan" and attempted to expand the range of areas other than the test one from certain regions such as Hong Kong and Singapore to the entire world. On September 19, 2010, the city of Dandong began to settle cross-border trade accounts in the Chinese currency, the yuan, on a trial basis. This meant that the key currency to settle Sino-DPRK trade accounts was switched from the dollar to the renminbi (RMB), an attempt to encourage legal trade between the two countries and prevent private trade activities. Currently, more than 70% of Sino-DPRK trade goes through Dandong.

2.4 Present Condition of Economic, Trade, and Industrial Cooperation between China and the DPRK

2.4.1 Energy Cooperation

Sino-DPRK cooperation in the energy field is concentrated on electricity and petroleum. In terms of electricity, in addition to the power plants located along the Yalu River, which are shared by the two countries, the collaborative development of new power plants is under way, and their construction has already started. On March 31, 2010, the construction of the Wangjianglou and Wenyue [Munak] power plants, which are both built with the cooperation of the two countries, began. The groundbreaking ceremony was attended by Chen Weigen, Vice Governor of China's Jilin Province, Kim Man Su, DPRK Vice Minister of Electric Power and Industry, and other guests. Located in the city of Ji'an in Jilin Province in the valley of the Yalu River, which runs along the China-DPRK border, these two power plants are Jilin Province's priority projects. The construction work spans from 2010 to 2013, and in the future, these hydroelectric power plants from which both countries will benefit will further bolster economic cooperation between the two countries.⁴

Another area of cooperation in this field is ocean oil development. From December 24 to 27, 2005, a government delegation headed by Deputy Prime Minister Ro Tu Chol of the DPRK visited China. Wen Jiabao, Premier of China's State Council, Zeng Peiyan, Deputy Premier, and Tang Jiaxuan, who served on the State Council, had separate meetings with the delegation. Zeng Peiyan and Ro Tu Chol signed the Agreement between the Chinese and DPRK Governments on Joint Ocean Oil Development on behalf of their respective governments.

2.4.2 Distribution Cooperation

The policy of China for cooperation in distribution systems basically agrees with that of the DPRK. In July 2008, the two countries entered into the Agreement between the Chinese and DPRK Governments on Automobile Transport through consultations, providing legal guarantee to develop cooperation in international road transport between the two countries. This arrangement will enable DPRK freight cars and automobiles to head directly for the European Continent through China in the future.

On February 25, 2010, in Dandong City, Liaoning Province, Wu Hailong, Assistant Director-General of the Chinese Ministry of Foreign Affairs, and Pak Kil Yon, DPRK Deputy Minister of Foreign Affairs, signed the Agreement between the Government of the People's Republic of China and the Government of the Democratic People's Republic of Korea on the Joint Construction, Management, Maintenance, and Protection of the Bridge over the Yalu River, Which Constitutes the Boundary between the Two Countries.⁵

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In early October of 2010, Chinese Prime Minister Wen Jiabao visited the DPRK and decided that both countries would agree to build a new large bridge over the Yalu River, a border river, and officially initiate construction-related operations.⁶ A groundbreaking ceremony for the project was then held at the end of the same year.

In addition, the two countries have made progress in cooperation for the integration of roads and railways, ports and harbors, and industrial areas.⁷ China and the DPRK already reached an agreement on the collaborative development and use of Rajin Port, and the construction of Pier 1's Terminal 1 has already been completed. With the capacity to store 40,000 tons of cargo, the new terminal is now capable of loading and unloading 1.5 million tons of coal annually. So far, the two countries have also agreed to build Terminals 2 and 3 on Pier 1 with Phase 2 of the construction project scheduled to begin soon. This will enable the loading and unloading of 300,000 TEU of cargo annually. Phase 3 is expected to give the pier the capacity of transshipping one million tons of food and feed annually.

Therefore, Rajin Port and its distribution facilities have great potential for development, and once they start to develop, they are extremely significant not only for the DPRK's economic development but also for the development of the Changchun-Jilin-Tumen area, which is an integral part of China's development strategy for its Northeast region.

Noteworthy is the construction of the Sino-DPRK Friendship Logistics Center, which was proposed by the DPRK in early 2008, and this large-scale logistics center will be built by Chinese and DPRK enterprises in Sinuiju. The two countries have already discussed and negotiated on this project. The DPRK has already chosen a Chinese investment firm and signed an investment agreement for this undertaking. The logistics center will be constructed with its funds and construction materials provided by Chinese enterprises and its construction site and labor by their DPRK counterpart. Irrespective of the actual progress made so far, the very fact that this project was proposed by the DPRK and its plan are worth taking interest in and paying attention to, and many place great expectations on the project. With the commencement of construction work for a new large bridge over the Yalu River at the end of 2010 and the start in June 2011 of part of the project in which China and the DPRK work with each other to develop the Hwanggumphyong and Wihwado Economic Zone, it is expected that the China-DPRK reciprocal relationship of cooperation in this field will enter a new phase of development.

2.4.3 Promotion of construction of cross-border free trade areas

On August 30, 2009, the State Council approved the "Cooperation and Development Planning Outline of the Tumen River Area of China: Setting Changjitu [Changchun–Jilin–Tumen] as the Development and Opening-up Pilot Area". The planning outline aims to advance the participation by Changchun-Jilin-Tumen in the Tumen River international regional cooperation project and promote step-by-step the construction of a free trade area straddling the Tumen River border while maintaining the principle of "from easy to difficult" and "bilateral to multilateral" based on the Hunchun Frontier Economic Cooperation District. Eventually, it aims to promote cooperation across the Sino-DPRK border, in other words, promote the formation and development of a free trade area straddling the Tumen River border.⁸

So far, the Hunchun Frontier Economic Cooperation District has already developed into a state-level frontier economic cooperation district. On March 9, 1992, the State Council recognized Hunchun as an externally open frontier city and at the same time approved the establishment of the Hunchun Frontier Economic Cooperation District. Hunchun has fully developed and used the Sino-Russia Hunchun Port, China-Russia Hunchun Railway Port, Sino-DPRK Quanhe Port, and Sino-DPRK Shatuozi Port and enlivened trade with Russia and the DPRK.

As described above, China and the DPRK have used each other's gateways as the starting points of important economic cooperation and development routes and promoted the construction of free trade areas across the boundary through cross-border economic cooperation. Furthermore, the two countries are aiming to establish a new phase of bilateral economic cooperation, and this development policy is worthy of note.

3. Industrial Development and Cooperation across the China-DPRK Border

3.1 Logistical Base of Economic, Trade, and Industrial Cooperation across the China-DPRK Border: Ports and Transport

There are twelve major ports between China and the DPRK: Jilin Quanhe Port,⁹ Jilin Shatuozi Port, Jilin Guchengli Port,¹⁰ Jilin Sanhe Port,¹¹ Jilin Kaishantun Port, Jilin Ji'an Port,¹² Jilin Tumen Port,¹³ Jilin Nanping Port, Dandong Taipingwan Port, Dandong Road Port,¹⁴ Dandong Railway Port,¹⁵ and Dandonggang Port.¹⁶ Most of the cargo traded between the two countries uses these ports, and in particular, Dandong Port accounts for a large percentage of the total cargo traded.

The logistics infrastructure between China and the DPRK consists mainly of roads, railways, seaports, airports, and networked communication equipment. Many roads run between the two countries, and the most important of them is one that runs through Dandong Port and leads to one of the DPRK's major trunk roads that connect Pyongyang and Sinuiju.

Another important type of infrastructure between the two countries is railways. Railways are a major means of transport in the DPRK, carrying more than 90% of cargo and more than 60% of passengers. The DPRK has several railway routes for international intermodal transport: Pyongyang-Beijing (international intermodal passenger transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international intermodal passenger transport between the DPRK and the former Soviet Union has been provided since 1955); Sinuiju-Dandong, Manpho-Ji'an, Namyang-Tumen (international intermodal cargo transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international intermodal cargo transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international intermodal cargo transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international intermodal cargo transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international cargo transport between China and the DPRK has been provided since 1954); Pyongyang-Moscow (international cargo transport); and Rajin-Tumen (tourist trains).

Still another important type of infrastructure is trade ports. The DPRK has nine major trade ports: Chongjin, Rajin, Sonbong, Hungnam, Wonsan, and Sinpho on the east coast, and Nampho, Songrim, and Haeju on the west coast. Among these ports, Rajin, Sonbong, and Chongjin are free trade ports. DPRK trade ports handle approximately 35 million tons of cargo annually, and the largest of all trade ports is Chongjin.

The most noticeable of all DPRK trade ports is Rajin Port, located in the southwestern part of Rason City in North Hamgyong Province. The port, 10-20 m deep, has three piers. It became a trade port in 1974 and was designated as a free economy trade port in 1991. It handles four million tons of cargo annually and has grown as a port dedicated to container ships. Russian and Japanese vessels had transshipped cargo only at Chongjin Port. Since the Chinese province of Jilin opened a Yanbian-Rajin-Busan route in 1955, Rajin Port has become part of the important sea route that connects Northeast Asian countries, including China, the DPRK, the ROK, and Japan. Other noticeable trade ports include Sonbong, located in the northeast of Rason City, which is dedicated to oil.

- 3.2 Strategic Base of Industrial Development and Cooperation: China-DPRK Economic Development Strategy for the New Age
- 3.2.1 The DPRK: Construction of a Powerful and Prosperous Country, Opening the Door to a Powerful and Prosperous Country

The slogan "Powerful and Prosperous Country" was first found in a political discussion in the August 2, 1998 issue of the Rodong Sinmun (Newspaper of the Workers), an organ of the Workers' Party of Korea. The article pointed out that the new goal the DPRK should achieve was to construct a powerful and prosperous country. Later, in 1999, the New Year's editorial emphasized again that 1999 was a year of change in which the country should start its efforts to construct a powerful and prosperous country and move all its army forward. This meant that the DPRK entered the new age in which it would build such a country. The DPRK announced three major strategic goals to construct a powerful and prosperous country. Basically, it has achieved the goal of constructing a militarily and politically powerful country, and the current major goal is to construct an economically powerful country.

In 2008, ten years after the announcement of the strategic goal of constructing a powerful and prosperous socialist country, the DPRK designated 2008 as a year of historical change in the New Year's editorial of its labor party's organ and indicated that it would open the door to a powerful and prosperous country in 2012. In the New Year's editorial of 2009, it designated 2009 as a year of high tide for a new revolution and stated that the year's principal task was economic construction. In the New Year's editorial of 2010, it stated that the primary task of 2010 was to call for the offensive to improve the living standards of people, stressing that major efforts should be directed to develop light industries and agriculture.

The main theme of the New Year's editorial in 2011 was to "further accelerate the development of light industries in the future and make it a major turning point to improve the living standards of people and construct a powerful and prosperous country".¹⁷ This was the second time after 2010 for the Rodong Sinmun to take up economy as a theme of its New Year's address. The editorial designated 2011 as a year of light industries, listing coal, electricity, metal, and construction for railway transport, etc. as major industrial sectors that should support light industries. Noteworthy in this context is the frequent use of "light industries" and "improvement of the lives of the people" throughout the editorial: in the newspaper, "light industries" is used 21 times, and "national life" 19 times. These were more frequently referred to than the names of the top echelons of state officials in the DPRK and slogans such as "military first politics."

In early 2011, the DPRK worked out and announced the Ten-year Strategic Plan for National Economic Development and set definite strategic goals for basic industries such as infrastructure development, agriculture, electricity, coal, petroleum, and metals, and for regional development. It also stated that in 2012 it would establish a framework for opening the door to a powerful and prosperous country and that in 2020 it would show an outlook for future development, which was comparable to that for industrialized countries. In order to push forward with this strategic plan, the DPRK government established a new political organization, the National Economic Development Administration, which is responsible for economic construction, and delegated

all its authority to the Korea Taephung International Investment Group to implement all major projects under this plan.

Since it started to implement the "Opening the Door to a Powerful and Prosperous Country" strategy, the DPRK has taken several political measures to promote the opening of the country to the external world. On January 5, 2010, the DPRK designated Pyongyang City as a directly managed city and Rason, Kaesong, and Nampho Cities as special-grade cities through a government ordinance issued by the Standing Committee of the Supreme People's Assembly. This measure—"The Cabinet of the Democratic People's Republic of Korea and related organizations shall decide specific measures based on the government ordinance"—can be interpreted as follows: the DPRK plans to construct Rason as a special district and invite foreign capital investments.

This measure indicates that the DPRK intends to further advance the opening of its economy to the external world, and this area is expected to become a center of economic, trade, and industrial cooperation, particularly logistics cooperation, between China and the DPRK in the future.

3.2.2 New Strategic Arrangement for Development in the Northeast China Economic Area

Currently, China's Northeast region consists of four economic zones called "three horizontal, one vertical." "One vertical" refers to the Ha-Da economic zone, an economic zone formed along the Ha-Da Railway. The first plan for "three horizontal" is to construct the Liaoning Coastal Economic Open Zone, mainly based on the "five points, one line" plan—in other words, construct five province-level development areas along the Yellow Sea and Bohai Sea in an integrated manner. The second plan is to construct the Changchun-Jilin-Tumen Development and Opening-up Pilot Area in Jilin Province, and third is to construct the Harbin-Daqing-Qiqihar Industrial Corridor, a new industrial area along the Heilongjiang River.

On July 1, 2009, the Standing Committee of the State Council discussed and approved the Liaoning Coastal Economic Zone Development Plan. The plan's development strategy positioned the Liaoning Coastal Economic Zone as a new economic growth area that would play a central role in promoting the economic development of Northeast China, and the eventual objective of the strategy is to build a new open, strategic area in Northeast Asia that extends over Northeast China and four cities in the eastern part of Inner Mongolia. The Liaoning Coastal Economic Zone, which includes Dalian, Dandong, Jinzhou, Yingkou, Panjin, Huludao, and other coastal cities, is a key area in the Bohai Sea Rim Region and the Northeast Asian economic zone and has abundant natural resources, high industrial capabilities, and well-developed transport systems. For this reason, it is strategically significant for the Liaoning Coastal Economic Zone to accelerate economic arrangement, promote concerted regional development, and facilitate the opening of its economy to the external world.

According to this plan, the Liaoning Coastal Economic Zone aims to optimize its industrial structure and upgrade its industrial level, strengthen its basically superior machine manufacturing and raw materials industries, and expand its high-tech industries. It also aims to develop modern service industries and modern agriculture, improve traditionally advantageous industries through remodeled information technology, and enhance product quality, thus establishing modern industrial systems centered on advanced manufacturing industries. The primary goal of the plan is industrial development, particularly manufacturing, modern services, and modern agriculture.

Then, on August 30, 2009, the State Council approved the "Cooperation and Development

Planning Outline of the Tumen River Area of China: Setting Changjitu [Changchun–Jilin– Tumen] as the Development and Opening-up Pilot Area". In this outline, it clarified China's basic policy to look for new models for the development and opening of frontier areas and finalized a general framework for action so that China could participate in and promote economic cooperation and development in the Tumen River area.¹⁸ On September 27, 2010, the Hunchun-Tumen Expressway was opened for traffic, and this made the Changchun-Jilin-Tumen route go into full operation, laying the foundation for the development of the Changchun-Jilin-Tumen area as a development and opening-up pilot area.

The main part of the Changchun-Jilin-Tumen Development and Opening-up Pilot Area constitutes the core of the China Tumen River Area,¹⁹ and the important point in accelerating the development of the Changchun-Jilin-Tumen Pilot Area is to construct international sea routes. The outline of the plan describes details of the following three policies: "borrow ports to go out to the ocean"; "go out of the country and connect seas"; and "connect ports to go out to the ocean". In recent years, with the implementation of large-scale projects, the Changchun-Jilin-Tumen Pilot Area produced rudimentary results in relation to the policy "extend domestic trade to overseas countries" and the other three listed above. In March 2010, China acquired the right to lease the DPRK's Rajin Port for ten years, opening the external logistics route for traffic, and this merits attention.²⁰

According to the public announcement of September 2010, released by the customs office, domestically traded cargo in Jilin Province goes through Wonjong in the DPRK after embarkation formalities at Hunchun Quanhe Port, is transshipped at Rajin Port, and enters China again at Shanghai or Ningbo Port. In short, the purpose of "permitting and supporting Jilin Province as a trial area for transporting domestically traded cargo across the border" as announced by the customs office is to facilitate the promotion by the state of former industrial bases in the Northeast region and the strategic arrangement of the China Tumen River Area Cooperative Development Plan, and to further cooperation in the transport of domestically traded cross-border cargo using foreign ports.²¹ At the same time, the designation by the Ministry of Commerce of Yanji and Tumen as today's model cities in the field of logistics contributes to the development strategy of the Changchun-Jilin-Tumen Pilot Area.

3.3 Major Areas of Industrial Development and Cooperation across the Sino-DPRK Border

The foregoing can be summarized as follows: given the current status of economic development and industry, China and the DPRK can promote industrial development and cooperation in the fields specified below:

First is cooperation in the logistics field. There is no doubt that logistics is the most important of all fields of economic cooperation between the two countries. Between China and the DPRK, there is already well-developed logistics infrastructure such as railways, roads, and ports and harbors, which constitute the basis of cooperation between the two countries in the field of logistics. Further strengthened logistics infrastructure will lay the solid foundation for bringing Sino-DPRK cooperation in the logistics field to a new phase of development, and help advance the bilateral economic and trade cooperation in all areas. In light of the present state of affairs, it is realistic and practicable to start by establishing closer cooperation in the logistics infrastructure of frontier areas and later promote and expand the range of cooperation gradually.

What is more important is that from a long-term perspective, this is extremely advantageous

in establishing a logistics network between China and the Korean Peninsula. Linking a logistics network in the Korean Peninsula with that in Northeast China will not only enable promotion of three-way trade and economic cooperation. But it will also be useful in promoting the development and prosperity of the entire Northeast Asian region, including the Korean Peninsula, if this logistics network is connected to Japan, Russia, and Europe. Therefore, from this perspective, it is expected that logistics cooperation between China and the DPRK will bring a breakthrough to build a framework for regional economic cooperation in Northeast Asia.²²

Second is cooperation in infrastructure development. China shares a long land-border with the DPRK, and the Yalu and Tumen Rivers constitute the Sino-DPRK border. There are already many ports in operation along the rivers, but due to delay in the development of infrastructure such as railways, roads, and ports in the DPRK, this region lacks means of transport in relative terms. Little progress has been made in modernizing service facilities, and this and other factors restrict cooperation between the two countries. In fact, the DPRK has shown its stance of extending cooperation to infrastructure development in various ways. The cooperation between China and the DPRK in the Rajin Port Project in the DPRK is an indication of the DPRK's attitude toward this policy. The two countries can establish closer cooperation in infrastructure development will ensure active cooperation in the logistics field, and this will in turn lay the important foundation for further development of economic and trade cooperation.

The advancement of Sino-DPRK cooperation in port operation and use will gradually increase the possibility of building a new logistics route in Northeast Asia, which, connecting China with Mongolia and running north to south through the Northeast economic region, will reach the ROK and Japan via Russia and the DPRK. And at the same time, in China, the construction of regional logistics routes as represented by the Northeast Eastern Railway is progressing smoothly.

Third is cooperation in the field of natural resources. The DPRK abounds in natural resources, and, for example, its reserves of coal, iron, graphite, gold, silver, lead, and other minerals are remarkable. Noticeable is the fact that the DPRK government has agreed to invite foreign capital for resource development and is attempting to consider resource development models using joint ventures. In addition to the cooperation projects already being implemented, China and the DPRK are striving to expand cooperation in the resource field mainly by raising the processing level for natural resources.

Fourth is cooperation in the energy field. Up to now, the cooperation between the two countries in this field has focused chiefly on electricity and petroleum. In the new circumstances of energy development in the world, China and the DPRK must continue to consider and promote the project to reconstruct power plants in the valley of the Yalu River. At the same time, they must pay attention to and advance cooperation in the field of new energy. It is necessary to cooperate in project development for solar, wind, and geothermal energy, too. This will help satisfy energy and electricity demand in the two countries, particularly the DPRK, and meet the trends in green growth as they unfold.

China has already established a favorable foundation in the field of new energy development. Power plants using wind energy in the Northeast economic district occupy a pioneering position, providing a favorable foundation for cooperation between the two countries in this field. On the other hand, new energy development constitutes the core of the ROK's green growth strategy. Therefore, attention is focused on whether or not China and the ROK can work

together to develop new energy in the DPRK.

Fifth is cooperation in manufacturing. The two countries should consider cooperation in light industries (mainly labor-intensive manufacturing), which are closely related to the life of the people. In the DPRK, products from light industries, which are related to the life of the people, are in relatively short supply, but the country has a large, highly capable, and low-cost workforce. Therefore, China and the DPRK should use various methods of cooperation in this field by investing in the DPRK's labor-intensive industries such as processing of products. First, when Chinese enterprises consider investing in the DPRK's labor-intensive industries such as electricity if, taking into consideration the status of power supply in the DPRK, they install enterprises that can cooperate in investment on the DPRK side of frontier areas between the two countries. Then, if they install related enterprises in frontier areas close to the DPRK (development districts, for example), they can employ the DPRK's excellent labor resources using smooth operation systems (for example, commuting and lodging systems).

Sixth is cooperation in the field of tourism. The DPRK abounds in natural landscapes marked by towering mountains and limpid streams and distinctive ethnic cultural attractions. As an increasing number of Chinese tourists visit the DPRK, Sino-DPRK cooperation in tourism is progressing gradually. Revenue from tourism is directed to the development of tourism on which the DPRK places great emphasis. In 2008, the Chinese government designated the DPRK as a destination or country its citizens can visit for tourist purposes, thus opening the way for a new form of tourism cooperation mainly based on frontier tourism and one-day tours, which had been promoted by the two countries.

The favorable development of tourism laid the favorable foundation for expanding and advancing cooperation between China and the DPRK. In the future, based on the tourism projects carried out by the two countries in the past, China and the DPRK will be able to consider cross-border tourism cooperation—mainly ethnic tourism in frontier areas, ecological tourism, and tours by private car. They will also be able to broaden and develop bilateral cooperation constantly by, for example, expanding cultural tourism such as with Arirang.

Worthy of attention is the launch on April 26, 2011 of the first loop-type, cross-border tourism project in which China, the DPRK, and Russia simultaneously exempted their respective citizens from obtaining a visa to enter any of the countries.²³ The loop-type tourism among the three features Northeast Asia's first tourism route for which the obtaining of a visa is simultaneously exempted by the countries involved, and is also the first loop-type, cross-border tourism route offered by China.

Seventh is cooperation in the field of science and technology. The DPRK government places great emphasis on development in the area of advanced technology, and this is evident from the fact that DPRK leaders focus on science and technology when they choose places to visit in China. There is enormous room for growth in the DPRK's information industries such as telephony, networking, and communications, and in recent years, the DPRK has cooperated with Egypt in developing telecommunications in the country. At the same time, the DPRK is cooperating with China in such areas as IT software development—proof that the two countries have great potential for cooperation in the field of high technology.

Eighth is cooperation in the field of agriculture and fisheries. Since the DPRK is relatively behind in agricultural technology, it is essential to apply more science and technology to agricultural production. The two examples of this are to increase the production of food crops per

unit area and improve the production of traditional agricultural products (matsutake mushrooms and Asian ginseng) for export. Other examples of useful cooperation include ecological agriculture and the production and processing of agricultural products. Meanwhile, fisheries in the DPRK have a certain degree of advantage, leaving tremendous room for cooperation in such fields as coastal fisheries, aquaculture, and the processing of marine products.

Noteworthy is the practical progress made in Sino-DPRK economic and trade cooperation in 2011. In June 2011, in order to promote economic and social development in the frontier area between the two countries and advance bilateral practical economic and trade cooperation, China and the DPRK agreed to cooperate with each other in developing the Rason Economic and Trade Zone, located in the DPRK, as well as the Hwanggumphyong and Wihwado Economic Zone,²⁴ and organized a joint guidance committee to cooperate in developing the two economic zones in China and the DPRK.²⁵ At the second meeting of the committee held from June 7 to 9, 2011, the two countries clarified the principles of development cooperation: government leadership, corporate initiative, market administration, and a reciprocal relationship.²⁶ They agreed to build the two economic and trade cooperation with various countries in the world, through joint efforts using the advantages of the respective counties. During the time-period of the meeting, the two countries held a groundbreaking ceremony for part of the two economic zone cooperation projects.

On September 15, 2012, an official ceremony was held in Hwanggumphyong, the DPRK, to celebrate the laying of a cornerstone for the office building of the committee to manage the Hwanggumphyong Economic Zone, jointly developed and managed by China and the DPRK.²⁷ This means the start of the project to develop the Hwanggumphyong Economic Zone, part of the "two-island economic zone" jointly managed by the two countries.

The commencement of part of the two economic zone projects is the embodiment of the principles of cooperation between the two countries. This will certainly have positive effects on the promotion of industrial development and cooperation between the two. At the same time, it means that China and the DPRK have entered a new age of economic cooperation. If this model achieves success, its significance lies in the fact that it has served as a direct contact point for the DPRK to incorporate the experience that China gained from 30 years or so of rapid economic growth into these new economic cooperation, and that this has had positive effects on economic development in the DPRK. At the same time, the significance of the model is that the DPRK has established the most realistic platform to deepen economic and trade cooperation with various countries in the world at close range. This will help the DPRK to lay the foundation for participating in international economic cooperation and contribute to realization of peace and development in the Korean Peninsula.

4. Conclusion

What is discussed in the preceding sections can be summarized as follows: the series of cooperation agreements signed by China and the DPRK provided an institutional basis for further development of economic and trade relations between the two countries; the new economic development strategies of the two countries provided a strategic basis for development of economic and trade relations between the two countries; and the cooperation in the fields of logistics, natural resources, energy, and so forth, established an economic basis for industrial cooperation between the two countries.

Focusing on its two national strategies, the Liaoning Coastal Economic Zone Development Plan and the "Cooperation and Development Planning Outline of the Tumen River Area of China: Setting Changjitu [Changchun–Jilin–Tumen] as the Development and Opening-up Pilot Area", China began to implement the strategic arrangement of economic development for the new age in the Northeast economic district. This will surely lead the Northeast economic district to a new stage of economic development. As it carried out development strategies known as "Constructing a Powerful and Prosperous Country" and "Opening the Door to a Powerful and Prosperous Country," the DPRK has taken strategic measures to advance economic development and establish closer economic and trade relations with the external world. China's Northeast economic district, which borders on the DPRK, is a major area for economic and trade cooperation with the DPRK.

Therefore, it can be said that the economic development strategies implemented by China and the DPRK independently provided a sound platform for, and gave momentum to, further development of economic and trade relations between the two countries. At the same time, the nature and format of the bilateral economic and trade cooperation will change with the advancement of each country's development strategy, and industrial cooperation will gain importance in this process. Major areas of industrial cooperation between the two countries will include logistics, social infrastructure, natural resources, energy, manufacturing, tourism, science and technology, agriculture, and fisheries, and industrial cooperation in these fields will be advanced starting from the frontier areas.

There is a lot of well-developed logistics infrastructure such as ports, railways, and roads between China and the DPRK. The two countries have laid a favorable foundation for logistics cooperation, though some of the facilities slightly lag behind others. As exemplified by the construction of the new Yalu River bridge in particular, the recent improvement of logistics infrastructure is clear proof that both countries have stepped up their cooperation in the field of logistics infrastructure, and this will provide a basis for even closer logistics cooperation between the two countries.

One especially noticeable point is that the cross-border logistics exchange and cooperation between China and the DPRK encourage joint industrial cooperation and development in related economic zones. From the viewpoint of long-term strategy, this will no doubt contribute to establishment of logistics networks and industrial cooperation between China and the Korean Peninsula, cooperation of logistics networks and industrial cooperation in the Korean Peninsula, establishment of huge logistics networks that combine all Northeast Asian countries and link them to Europe and industrial cooperation, and eventually promotion of the development and prosperity of the whole of Northeast Asia, including the Korean Peninsula. From this perspective, future cooperation in the logistics field will bring a breakthrough for building a framework for economic cooperation in Northeast Asia, and Sino-DPRK industrial cooperation will play a pivotal role in making this happen.

Another point is that the parts of the Sino-DPRK projects for the Rason Economic and Trade Zone and the Hwanggumphyong and Wihwado Economic Zone which have already started practically serve as model economic zones. On one hand, these projects contribute to development of China's Northeast economic district, and on the other hand, they contribute to the economic development strategy currently being implemented by the DPRK. This will not only encourage Sino-DPRK economic cooperation to enter a new phase of development but also contribute to establishment of the basis of the economic cooperation structure in Northeast Asia and thus to peace and development in the region.



Figure 1: China-DPRK Boarder Area (reference)

Source: ERINA

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¹ In 2007, over 70 Chinese enterprises participated in the Third International Autumn Product Fair hosted by the DPRK in Pyongyang. China permitted 77 investment projects during the period from January to August alone, and the total value of agreements amounted to approximately US\$380 million. For its part, the DPRK sent 19 scientific research organizations and enterprises to the 2007 Northeast Asia High-Tech Exhibition held in Shenyang.

² These agreements were signed in October 2009, when Prime Minister Wen Jiabao visited the DPRK.

³ On June 15, 2011, the Dandong Maritime Affairs Bureau of Liaoning Province and the North Phyongan Province Maritime Affairs Supervisory Agency of the DPRK conducted their first joint patrols and

inspections in the valley of the Yalu River.

- ⁴ Investments in the Wangjianglou (Imdo) power plant project are expected to total 600 million yuan. The power plant, located on the Chinese side of the river, has a maximum output of 40,000 kW and is capable of generating 154 million kWh of electricity annually. The construction period is from 2010 to 2013. Situated in Wangjiang Village, Qingshi Town of Ji an City, the dam is 36 km away from the center of the city and 1.5 km away from the DPRK s Imdo station. Meanwhile, investments in the Wenyue [Munak] (Changchuan) power station project are expected to total 500 million yuan. The power plant, located on the DPRK side of the river, has a maximum output of 40,000 kW and is capable of generating 154 million kWh of electricity annually. The construction period is from 2010 to 2013. Situated in Changchuan Village, Qingshi Town of Ji an City, the dam is 24 km away from the center of the city and 5.5 km away from the DPRK s Munak Station. The Yalu River, which constitutes the boundary between China and the DPRK, runs through Ji an City for 203.5 km, and provides abundant water resources to its valley. In this area, the river already has two hydroelectric power plants in Yunfeng and Weiyuan.
- ⁵ China Daily website: <u>http://www.chinadaily.com.cn/dfpd/2010-03/01</u>
- ⁶ The total length of the Yalu River Road Bridge, which is waiting for construction work to begin, is approximately 17 km of which 10.9 km is on the Chinese side. The investment budget is approximately 1.8 billion yuan (RMB) of which 1.2 billion yuan comes from within China.
- In February 2008, Donglin Trade Company, based in Hunchun City, Jilin Province, entered into an agreement with the US Murdoch Group for a collaborative project to integrate roads and railways, ports and harbors, and industrial areas in China and the DPRK, and the two parties decide to invest three billion yuan in the first phase of the project. If this project is completed, the Tumen River Transport Corridor will be built, contributing greatly to the development of China-DPRK trade and significantly facilitating the establishment of the Northeast region s second largest route for overseas expansion. This project consists of three major pillars. One is roads and railways. The road in this project refers to one from the DPRK s Wonjong port of entry to Rajin Port (48.75 km), which is repaired and expanded according to China's second-class road standards. The railways relate to the Northeast China Railway, which will be newly built between Dongning, Heilongjiang Province, and Hunchun, Jilin Province (218.8 km), and the port railway from the DPRK s Rajin Port to China s Hunchun Quanhe port of entry (approximately 50 km). The second pillar is ports and harbors, and the project aims to remodel Piers 1, 2, and 3 of Rajin Port and plan and construct new piers based on these existing ones. It also refers to sea routes for passengers and cargoes which lead to ports along China's southeast coast, Japan, the ROK, and Southeast Asia from the DPRK's Rajin. The third pillar is industrial areas, and currently planned and constructed are the DPRK's Rason Chinese Investment Collaboration Area (the 1.3-square-kilometer area is located in Kwan gok-dong, which is situated between the DPRK's Rajin and Sonbong, and focuses on processing for export and business services) and the Harbor Bond and Distribution Area (the 3.7-square-kilometer area is located in Rajin Port s waterfront zone).
- ⁸ The short-term objective is to start an economic cooperation area that bestrides the Chinese-Russian (Hunchun-Khasan) boundary and demarcate certain areas from China s Hunchun City and Russia s Khasan district and manage them in a closed or semi-closed way while referring to the cooperation method used for the Qorghas port of entry on the boundary between China and Kazakhstan. At the same time, the long-term aim is to gradually create and develop a Chinese-Russian free trade area based on an economic cooperation area that extends over the boundary between China and Russia, in other words, an economic cooperation area that straddles the Hunchun-Khasan boundary.
- ⁹ Jilin Quanhe Port provides the best route that allows China to advance to the DPRK s Rajin-Sonbong Free Trade District. So far, Yanbian Shipping Co., Ltd. has used the port to begin scheduled container shipping services for the Yanji-Rajin-Busan route.
- ¹⁰ The port serves as a major route for Yanbian Prefecture s frontier trade with the DPRK s Ryanggang Province.
- ¹¹ The port serves as a major route for Yanbian Prefecture s frontier trade and automobile cargo transport with the DPRK s North Hamgyong Province.
- ¹² The Yalu River Bridge connects China's Mei-Ji Railway and the DPRK's railways, making it one of the three major trunk lines for railway transport between the two countries. Ji an is a first-class port under China's policy for opening its economy to the external world.
- ¹³ Jilin Tumen Port is connected by railways and road bridges. It is currently responsible for handling state, regional, and frontier trade between China and the DPRK as well as cross-border cargo imported from and exported to Russia, East European, and other countries through Tumen. It is also responsible for cargo transported by Chinese and Japanese businesses via the DPRK s Chongjin and immigration services between China and the DPRK.
- ¹⁴ The port permits the passage of Chinese and DPRK citizens with a valid passport, a visa, or a frontier pass, cargo, and means of transport. It also permits the passage of people who have a valid passport or a visa,

cargo, and means of transport from third countries. This is part of the major route used by China-DPRK trade and tourists.

- ¹⁵ Dandong Railway Port is one of China s largest railway ports. It is a first-class national port that was permitted to be opened externally through consultations between China and the DPRK in 1955. It is the only port abutting on China and the Korean Peninsula that allows people from third countries to pass through it.
- ¹⁶ Dandonggang Port is divided into the Dadong port area and the Langtou port area. The former is located in the southern part of Donggang City. Currently, it has six routes for scheduled domestic and international container ships and one international passenger transport route between Dandong and Incheon in the ROK. It has business tie-ups with over 70 ports in more than 30 countries and territories such as Japan, the ROK, the DPRK, Russia, and Hong Kong. It is also the Northeast region s second largest, fully equipped port that provides integrated international cargo, passenger, and container transport services.
- ¹⁷ New Year's joint editorial of January 1, 2011 for the *Rodong Sinmun*, Korean People's Army, and Young Avant-Garde; page 2 of the January 1, 2011 issue of the *Rodong Sinmun*
- ¹⁸ Up to now, this has been the only state-approved regional plan to open a frontier area and the only frontier development and opening-up pilot and model area that was permitted and implemented by the state.
- ¹⁹ The area includes part of Changchun City and Jilin City, Jilin Province (part of Changchun City refers to the urban areas of the city, Dehui City, Jiutai City, and Nongan Prefecture, and part of Jilin City relates to the urban areas of the city, Jiaohe City, and Yongji Prefecture) as well as Yanbian Prefecture (abbreviated as "Chang-Ji-Tu"). It has a total area of about 30,000 km² and a population of about 7.7 million. It accounts for 30% of Jilin Province s total area and population and represents 20% of its economy. According to the outline of the plan, the Changchun-Jilin-Tumen Development and Opening-up Pilot Area will be constructed with Hunchun as a gateway to open the economy and Yan(ji)-Long(jing)-Tu(men) as the area s first openeconomy district. The area will be developed, and its economy opened, by linking it with frontier and inland areas, with Changchun and Jilin Cities as the foundation of development. The Pilot Area will take the initiative in breaking through difficulties, achieving high growth, building a new powerful economic zone, and serving as a model open-economy district, thus accelerating regional development in Jilin Province earlier than any other area.
- ²⁰ On March 7, 2010, Li Longxi (delegate to the National People's Congress, deputy secretary to the committee of Jilin Province's Yanbian Korean Autonomous Prefecture, and the governor of the prefecture) announced in Beijing that Jilin City would accelerate the construction of the Changchun-Jilin-Tumen Development and Opening-up Pilot Area. (See the website of the Changchun City government.)
- ²¹ "Transport of domestically traded cross-border cargo" refers to a method of shipping domestically traded cargo from a port in the area controlled by Chinese customs and transport it to another port in the area controlled by Chinese border.
- ²² Zhang Dongming, "Reflections on the Building of a Cooperation Framework for Northeast Asian Logistics", *Korean Unification Studies*, 2007, (11) [in Korean]
- ²³ Xinhuanet Changchun, April 26, 2011
- ²⁴ The Rason Economic and Trade Zone, located in the northeastern part of the DPRK, borders on the Yanbian areas in the Chinese province of Jilin. The Hwanggumphyong and Wihwado Economic Zone, located in the lower course of the Yalu River, abuts on the Dandong area in China s Liaoning Province.
- ²⁵ Chen Deming, Chinese Minister of Commerce, and Jang Song Thaek, Chief of the Central Administrative Department of the Workers Party of Korea, served as chairman of the Joint Guidance Committee on the Chinese and DPRK Sides, respectively. In November 2010, the first meeting of the Joint Guidance Committee was held in Pyongyang, the DPRK.
- ²⁶ Xinhuanet, June 9, 2011
- ²⁷ Xinhuanet, September 15, 2011

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The Civil Litigation System in the Democratic People's Republic of Korea as a Means of Resolution of External Economic Disputes

Kyongwon Son*

Abstract

In the Democratic People's Republic of Korea, the civil suit system as a means of resolution of external economic disputes has a long history, from immediately after liberation to the present day. In the DPRK, a unified judicial contestation apparatus and judicial organization system was created based on the several laws and regulations enacted between 1945 and 1976. Initially, the civil suit system was limited to maritime affairs regarding quayside handling of cargo, and utilization of a port or shipping agent by a foreign vessel, etc., in open ports. Today, it has become a comprehensive dispute resolution mechanism, which can solve various disputes. The Law of the DPRK on External Civil Relations provides the basic principles for judicial districts in external civil suits. The civil litigation system in the DPRK has established a clear and simplified litigation processing system which has overcome the complexity of legislation in other countries in the technical aspects of the litigation procedures by making all the activities, from the filing of an action to the beginning of litigation, to be "preparation for litigation." In order to protect the rights and interests of the parties to a lawsuit, our system has emergency appeals and retrials, while having a two-tiered judicial system.

Keywords: Civil litigation, International private law, External economic dispute, Korea

In the Democratic People's Republic of Korea (hereinafter referred to as the DPRK), the civil litigation system as a means of resolution of external economic disputes has a long history, from immediately after liberation to the present day.

In the DPRK, a unified judicial contestation apparatus and judicial organization system was created based on the following ordinances: "On the Organization of Law Courts", Decree No. 4 of the North Korean Judicial Bureau, on 23 November Juche 34 (1945); "Basic Principles on the Organization and Duties of the Judicial Bureau, Courts, and Prosecutors' Office of the North Korean Provisional People's Committee", a Decision of the North Korean Provisional People's Committee on 6 March Juche 35 (1946); and "The Court Organization Act of the DPRK", enacted on 1 March Juche 39 (1950) and revised in Juche 65 (1976) and Juche 87 (1998). Based on this system, a comprehensive and specific dispute settlement mechanism, in which external economic disputes as well as domestic civil disputes can be settled, has been developed through the following laws and regulations: "Regulations on the Enforcement of Adjudications and Decisions", Cabinet Decision No. 62, enacted on 29 October Juche 49 (1960) and revised in Juche 86 (1997) and Juche 87 (1998); "Regulations on the Disposal of Debt which Has Exceeded the Statute of Limitations", Cabinet Decision No. 46, enacted on 30 March Juche 50 (1961); "Regulations on Disposal of Property Loss", Cabinet Approval No. 798, enacted on 25 November Juche 50 (1961); the "Civil Proceedings Act of the DPRK", Decision No. 18 of the Standing Committee of the Supreme People's Assembly, enacted on 10 January Juche 65 (1976) and revised on 25 May Juche 83 (1994); the "Law of the DPRK on External Civil Relations", Decision No. 62 of the Standing Committee of the Supreme People's Assembly, enacted on 6 September Juche 84 (1995) and revised on 10 December Juche 87 (1998); and the "Attorney-at-
Law Act of the DPRK", Decision No. 43 of the Standing Committee of the Supreme People's Assembly, enacted on 23 December Juche 82 (1993).

Initially, the civil litigation system was limited to maritime affairs regarding quayside handling of cargo, and utilization of a port or shipping agent by a foreign vessel, etc., in open ports such as those of Sinuiju, Nampho, Wonsan, Hungnam, Songjin, Chongjin, and Rajin. Today, it has become a comprehensive dispute resolution mechanism, which can solve various disputes. It can solve disputes of both substantive law and procedural law related to the delivery of cargo, setting payment, maritime transportation, investment, intellectual property rights and services.

The Law of the DPRK on External Civil Relations provides the basic principles for judicial districts in external civil suits. The jurisdiction over a case which occurs inside the DPRK shall be determined by the agreement of the parties concerned (Article 49 of the Law of the DPRK on External Civil Relations). In the case where no agreement was made, the DPRK acquires the jurisdiction in the following cases: (1) a defendant has an address or a domicile in the DPRK; (2) the loss of property, which is the cause of the said case, was incurred in the territory of the DPRK; (3) the property of the defendant or the object being claimed for by the plaintiff exists within the territory of the DPRK; and (4) the cause giving rise to a dispute is related to any immovable property registered in the DPRK (Article 50 of the Law of the DPRK on External Civil Relations). A civil action going against the abovementioned principles regarding jurisdiction shall be rejected or suspended (Section 1 of Article 56 of the Law of the DPRK on External Civil Relations).

A party wishing to file a lawsuit should submit a written complaint to the court of competent jurisdiction. A lawsuit is deemed to start on the day of acceptance of the written complaint of the plaintiff. However, in the case where the written complaint is submitted by post or a confidential document, the date on which it is forwarded is deemed to be the day of the start of the lawsuit (Article 65 of the Civil Proceedings Act of the DPRK). A litigant juridical person shall conduct an act of litigation through a representative or a procedural attorney, while a litigant individual can do so through a procedural attorney. If a procedural attorney is in charge of a lawsuit, he or she has to submit a letter of attorney to the court. In the case of a party delegating an act of litigation to an agent in a tribunal, the record of the hearing takes the place of the letter of attorney (Article 33 of the Civil Proceedings Act of the DPRK). The name of the court, name, address and other identifying information of the parties in a lawsuit, the object of the lawsuit, substantial reasons, and evidence, which back up the object, should be attached to the written complaint. Copies of the written complaint whose number corresponds to the number of defendants, a letter of attorney in the case where the lawsuit is brought by an attorney, the postage stamps needed for the delivery of the relevant documents, and the receipt of the fee for a civil procedure should be attached (Article 67 of the Civil Proceedings Act of the DPRK).

The court reviews the written complaint of the plaintiff. In the case where the content or attached documents do not meet the requirements of a lawsuit, the court may order the plaintiff to rectify the errors within a specified period prescribed by the court. If the plaintiff rectifies the errors within the specified period, the written complaint is deemed to have been brought on the date of the original date of submission. If the plaintiff does not do so, the court shall send back the written complaint to the plaintiff (Article 70 of the Civil Proceedings Act of the DPRK).

The court shall start the preparation of the trial and that of the hearing to assure a prompt and proper trial and adjudication (Article 74 of the Civil Proceedings Act of the DPRK). In the preparatory proceedings, collection of evidence and procedural matters shall be resolved. In order to perform the preparation the court may meet parties in the lawsuit to ask for an independent valuation, to conduct field investigation and/or to inspect the evidence.

The court may issue an order to hold the property of the defendant, by a ruling, or by the application of one of the parties in a lawsuit or its own discretion. The holding of property shall be made only in the cases for which execution of judgment cannot be made without the property in question. The award on the holding of property shall be made by the executor of the court (Article 81 of the Civil Proceedings Act of the DPRK).

The court may accept an application for the withdrawal of the lawsuit as the result of the abandonment of proceedings or agreement on settlement between the parties in the lawsuit and to issue a ruling for the settlement of the lawsuit (Article 85 of the Civil Proceedings Act of the DPRK and Section 3 of Article 56 of the Law of the DPRK on External Civil Relations).

The court shall reject a lawsuit by a ruling in the following cases: a contentious case should be handled by arbitration or administrative procedures; a final decision or ruling has already been made; a person who is not entitled to be a party of a lawsuit is a plaintiff or a defendant and it is not possible to replace that person with someone who has the authority to be a party to the lawsuit (Sections 1, 2 and 3 of Article 86 of the Civil Proceedings Act of the DPRK); and the same case has already come under the jurisdiction of a court for trial or arbitration in a foreign country (Article 56 of the Law of the DPRK on External Civil Relations).

The court shall make a ruling to transfer the case to trial in the case where it regards the preparatory proceedings have been successfully completed. The particulars such as time, date, place, witnesses, expert witnesses, and whether or not the proceedings shall be open to the public shall be contained in the ruling. The ruling shall be notified to the parties to a lawsuit and other related persons (Articles 88 and 89 of the Civil Proceedings Act of the DPRK). All of the acts conducted during the preparatory proceedings shall be recorded (Article 91 of the Civil Proceedings Act of the DPRK).

A procedure shall be conducted in an order corresponding to the parties in a lawsuit, the witnesses and expert witnesses. The court shall take cognizance of court costs and by whom they are to be borne. When all the proceedings have been finished, the court shall notify the people involved in the lawsuit and go to a council room to conclude judgment. Judgment shall be made on the same day of the end of the proceedings in the name of the Democratic People's Republic of Korea (Articles 132 and 134 of the Civil Proceedings Act of the DPRK).

Judgment shall include acknowledgment or dismissal of the claim of a plaintiff, the applicable law, how to deal with held property, court costs and by whom they are to be borne, and shall be made by majority vote of the court panel (Articles 127 and 128 of the Civil Proceedings Act of the DPRK).

A party in a lawsuit may appeal or file an objection within ten days of receipt of the transcript of the decision if he or she has an objection to the decision of the court of first instance (Article 140 of the Civil Proceedings Act of the DPRK). A written appeal or a letter of complaint shall be submitted to the court of first instance, providing the reasons and the demands. Information which was not submitted to the court of first instance may be attached (Article 141 of the Civil Proceedings Act of the DPRK).

The court of second instance shall proceed with a record of the case in the first instance, the content of a written appeal or a letter of complaint and a record of the hearing of the judge. After reviewing the materials, a hearing of the parties in a lawsuit shall be accorded.

The court of second instance may not make a finding for the case. It shall send back the case to the court of first instance with a ruling to revoke the decision and to review the decision under the following circumstances: the court of first instance went against the law in the composition of the court or did not find substantially important facts; the court of first instance did not find or review the evidence; the court of first instance made a decision on the basis of unproven facts; the court of first instance did not fully safeguard the procedural rights of a plaintiff or a defendant; and the court of first instance processed the case without considering the qualification of a plaintiff and/or defendant (Article 152 of the Civil Proceedings Act of the DPRK). It may issue a ruling to state a point lacking in the decision of the court of first instance, if there is no need to revoke the decision or the ruling of the court of first instance (Article 155 of the Civil Proceedings Act of the DPRK).

The civil procedure of the Democratic People's Republic of Korea has a system to conduct an emergency appeal and retrial in order to assure a party to a lawsuit to be free from defects in the processes of the courts of first and second instance.

An emergency appeal signifies an act of institution by the Chief Justice of the Supreme Court to the Supreme Court in order to adjust the final and binding judgment, if it is against the requirements of the law. An emergency appeal case is dealt with by a tribunal consisting of three Supreme Court judges for cases concerning a judgment or ruling of all courts other than the Supreme Court. For cases concerning a judgment or ruling of the Supreme Court, the judicial assembly of the Supreme Court, which consists of the Chief Justice, Vice-Chief Justices and judges, shall handle them. A retrial signifies an act to adjust the final and binding judgment in the following circumstances: the evidence on which the judgment or ruling was based turned out to be false; facts which would have affected the judgment or ruling became clear after the case had been finalized; it was proved to be true that a party in a lawsuit or a member of a tribunal had committed an illegal act which would affect the case; it was proved to be true that the judgment or ruling had been made based on a judgment or ruling previously revoked. A retrial case shall be instituted to the Supreme Court by the Chief Justice or a relevant court. A retrial case is dealt with by a tribunal consisting of three Supreme Court judges.

In the civil procedure system of the DPRK, a judgment or ruling is executed, upon the application of a party concerned within two months after it was made, by a court execution officer within one month from the issuing date of the writ of execution (Article 176 of the Civil Proceedings Act of the DPRK). If the judgment to be executed is one decided by a foreign court, it is a basic principle to acknowledge such a judgment where a mutual acknowledgement exists with the country in which the foreign court is situated (Article 59 of the Law of the DPRK on External Civil Relations). Even though a mutual guarantee exists, it is still possible to refuse to approve and execute such foreign judgments, as follows: the content of the judgment or ruling is contrary to the fundamental principles of the legal system of the DPRK; the judgment or ruling is related to a dispute coming under the jurisdiction of a court in the DPRK; the content of the judgment is the same as that already approved by a third country; a judgment or decision has been given in the absence of any party concerned for no warrantable reason; and where there is due cause based on the law of the DPRK (Articles 60 and 61 of the Law of the DPRK on External Civil Relations).

As described above, the dispute settling system for external economic disputes in the DPRK subject to a litigation system is superior and cannot be seen in other countries, from the technical aspects of the legislation to the entire process of the litigation procedures.

The civil litigation system in the DPRK has established a clear and simplified litigation processing system which has overcome the complexity of legislation in other countries in the technical aspects of the litigation procedures by making all the activities, from the filing of an action to the beginning of litigation, to be "preparation for litigation." In our system, it is a rigid rule to use the Korean language and the judgment is made in the name of the DPRK. In order to protect the rights and interests of the parties to a lawsuit, our system has emergency appeals and retrials, while having a two-tiered judicial system.

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The demographic development of the Russian Far East

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Abstract

The article deals with current demographic challenges and threats faced by the Far East. Components of the change in population of the Far East are studied in detail. The role of each component and of each factor that has an impact on population is distinguished. The processes of migration and migration throughout the Far East are studied rather detailed, their direction is found and the effect of each component of the migration flow on the formation of the demographic situation is determined. The economic situation in the region is described in brief. In conclusion, possible ways to overcome the effects of the current demographic situation the article were suggested on the basis on the generalization of the results of research.¹

Keywords: Demography, migration, migration policy, the impact of migration, socio-economic processes.

1. Current geopolitical challenges and threats of reduction of population of east regions of Russia

The Far East is the most important region of Russia from the point of view of geopolitics and economics. Geographical location, the presence of the border with the most populous country in the world - China, led to the specific development of the entire region. Today, as it was a hundred years ago, the Far East is a strategic, especially from an economic point of view, region of the country, concentrating up to100% of diamonds produced in Russia, more than 60% of non-ferrous metals, 90% of uranium reserves, more than 80% coal, 75% of domestic hydropower resources. The tourist potential of the Far East is not less important for the economic development of the region, with its unique flora and fauna. Coastal areas of the Far East, providing access to the Pacific Ocean, are the defining element of geopolitical stability in the region. The Pacific Fleet of surface ships and submarines is the guarantor of the security of the eastern borders of Russia. All these factors make the Far East a strategic region of Russia, demanding decent attention from the government and operational troubleshooting.

The problem of adaptation and development of the eastern regions of Russia is not new, but over the decades. It hasn't lost value, but, on the contrary, has acquired a special urgency. For several centuries, with different political systems and different forms of management, the topic of the Far East has always been in the first place, speaking about the geopolitical and economic importance. In the early twentieth century, a prominent Russian activist Petr Stolypin gave crucial migration movement of the peasants in the eastern regions. In this movement he saw that the solution was required not only for a question of shortage of land in the center and the south of Russia. He, as the head of the government, also understood the importance of the development of large Eastern areas of the country.

One of the current threats, not only for Russia, but also for a number of countries, is the growing economic and military power of China. The global expansion of China is primarily manifested in the export of capital, goods, and its population. In recent years, Chinese economy is growing rapidly, incomes are rising and standards of life are increasing. China is now

experiencing another wave of urbanization, cities are growing, and an urban lifestyle is going to villages. New natural resources are necessary to sustain economic growth and welfare growth. There are no problems in China with an investment, and the demographic potential can fully meet the demand for cheap labor. The only thing that China does not have is access to untapped natural resources of its neighbors on the border.

For China, the problem of overcrowding is not new, and the attempts to solve the problem are different, up to the relocation of the population to other areas. Chinese leaders do not conceal this. Being highly dependent on imports of raw materials, the Chinese economy requires more and more resources and space for their growth and development. It does not stop at anything. One of the main conditions for China's expansion is export of labor. China has the strongest labor force potential, which, combined with massive flow of Chinese investment, will be the main instrument of penetration and further fixation of China's ethnic groups in Russia. The global financial crisis has made China one of the main potential "saviors" for the economies of the EU and other developed countries. It's no secret that Chinese investments occupy primary importance to the U.S., whose national debt is growing at the expense of government bonds, as well as several other countries. The lack of liquidity has pushed a number of European countries to make concessions to China to liberalize its laws regarding foreign investment in a number of previously closed economic sectors.

Russia, as a dynamic power, desperately needs an influx of capital and inexpensive labor. Thus we, unwittingly, more and more become addicted to certain countries, such as China and the countries of Central Asia.

We have to admit that, despite the authorities' attention to the problems of the Far East, the number of urgent tasks for immediate action is growing every year. Partly because of it the Ministry of the Russian Federation for the development of the Far East was created.

Basic and fundamental condition to maintain stability in the region and the subsequent gradual development is to get a critical mass of the population in all regions of the Far East, particularly at the border. The Head of the Ministry of Development of the Far East Victor Ishayev called the decision of the problem of fixing and increasing of the Far East population as a primary task of the established Ministry.²

2. Modern demographic situation in Siberia and in the Far East

Russia has long been in a deep demographic crisis. Only recently, due to ongoing population policy, there have been positive trends in fertility and mortality levels in the whole country. At the same time it is too early to speak about the radical change in the demographic situation. Large area, which Russia has, and, as a consequence, significant differentiation of Russian regions in terms of the climatic and socio-economic conditions, could not help but reflect on the differences in the demographic development. The Far East has suffered the greatest loss of population beginning from the end of the twentieth century up to the present day.

The total area of the Far East is 6.2 million square kilometers or 34.6% of the whole Russia, making it the largest district in the country. At the same time, the population of the Far East cannot be compared with the size of its territory. Thus, according to the Federal State Statistics Service, as of January 1, 2012, the population is 6.266 million people, that is 4.4% of the entire Russian population.³ Despite the positive trends in the birth rate, the population of the Far East continues to decline. Last year the population reduced by 19 thousand people. Total population of

the Far East has decreased by about 1.8 million since 1990.



Figure 1. Dynamics of population of the Far East on the 1st of January (Thousands)

As seen on the presented picture, the greatest reduction was observed in the 1990's, which rates were slowed down in the beginning XXI century. As you know, the population is a moment indicator which is influenced by the two time-continuous components: natural and migratory movement of the population. More details are presented in table 1.

Year	Natural Increase	Migrotory	The result of		
		Migratory Increase	Internal migration	International Migration	
2004	-20472	-22609	-22041	-568	
2005	-24890	-21599	-22278	679	
2006	-16350	-22369	-23542	1173	
2007	-7466	-15915	-23570	7655	
2008	-6569	-19199	-26210	7011	
2009	-1790	-17919	-22971	5052	
2010	-3686	-27444	-30439	2995	
2011	-1332	-17766	-32380	14614	
In total	-82555	-164820	-203431	38611	

 Table 1. Components of the Far East population change in 2004 - 2011

Source: Federal State Statistics Service

With the disintegration of the USSR and the subsequent political and economic reforms, which have led to sharp falling of a standard of life of the population, Russia plunged into the deep demographic crisis connected first of all with the sharp reduction of birth rate of the population and the increased mortality (first of all from the external reasons).

	Fertility, for 1000 people		Mortality, for 1000 people		Natural Increase, for 1000 people	
	2010	2011	2010	2011	2010	2011
Russian Federation	12,5	12,6	14,2	13,5	-1,7	-0,9
Far East	13,2	13,2	13,8	13,5	-0,6	-0,3
RespublikaSakha/Yakutiya	16,8	17,1	9,8	9,4	7,0	7,7
Kamchatskiy Kray	12,1	12,5	12,6	12,1	-0,5	0,4
Primorskiy Kray	11,8	12,0	14,3	14,1	-2,5	-2,1
Khabarovskiy Kray	12,9	12,9	14,6	14,5	-1,7	-1,6
Amurskaya Oblast'	13,8	13,6	15,3	14,8	-1,5	-1,2
Magadanskaya Oblast'	11,5	11,6	13,0	13,0	-1,5	-1,4
Sakhalinskaya Oblast'	12,1	11,8	14,9	14,2	-2,8	-2,4
Jewish Autonomous Oblast'	13,6	14,2	15,5	15,5	-1,9	-1,3
Chukchi Autonomous Okrug	14,7	13,6	13,8	11,1	0,9	2,5

Table 2. Indicators of the natural movements in the Far East regions in 2010 -2011

Source: Federal State Statistics Service

The presented table visually shows the current situation. The natural increase is still negative, although the gap between the number of born and died was considerably reduced in recent years in comparison with 2004. It is a consequence of several reasons. The first reason is the demographic policy carried out by the government which stimulates birth (the parent capital⁴ given at the birth of the second child, the land – for the birth of the third child). The second reason is that according to the majority of scientists-demographers the increase in number of births was a consequence of boom in birth rate in the 1980's when this generation came into an active phase. Also a number of scientists considers that the small surge in birth rate, observed during the last 3 years, is a consequence of the birth of the so-called "postponed" children, whose parents planned the birth of children during later periods, but the measures of demographic policy served as the certain catalyst which accelerated implementation of plans on the birth of children.

In 2011 the majority of federal subjects in the Far East Federal District had a negative natural increase. Only in three out of the nine subjects fertility exceeded mortality. The greatest reduction rates were observed in Sakhalin region and Primorsky Krai.

Natural movement is the most important component of change of population. As results of the research carried out by us showed, however, the migratory movement of the population plays the defining role.

Migration is the difficult and ambiguous phenomenon relating all major social and economic aspects of life of the region. In the analysis of migration influence on population, it is necessary to divide the general migratory stream into its two components: internal and external or international. For research of impacts of migration to the considered territories the structural analysis of a migratory stream is crucial since influence vectors of the internal and external migration are opposite. As a whole, population shift is a defining factor of population reduction in the Far East subjects. At the same time, as it was noted, Russian and international movements have different directions. The international migration in recent years is a compensating factor of population reduction caused by internal migration. At the same time intensity of migration in the Far East subjects is unequal.

	2011			2010			
	Total	Divided into		Total	Divided into		
	Migratory Increase	Internal Russian	Interna tional	Migratory Increase	Internal Russian	Interna tional	
Far East	-17 766	-32 380	14 614	-27 444	-30 439	2 995	
RespublikaSakha/Yakutiya	-9 809	-10 493	684	-7 126	-7 607	481	
Kamchatskiy Kray	-1 631	-4 019	2 388	-481	-1 934	1 453	
Primorskiy Kray	1 083	-5 404	6 487	-7 031	-7 486	455	
Khabarovskiy Kray	1 842	-62	1 904	-2 644	-2 971	327	
Amurskaya Oblast'	-6 087	-6 246	159	-3 681	-3 647	-34	
Magadanskaya Oblast'	-1 835	-2 214	379	-1 889	-1 991	102	
Sakhalinskaya Oblast'	-180	-2 482	2 302	-3 124	-3 255	131	
JewishAutonomous Oblast'	-1 664	-1 735	71	-615	-651	36	
ChukchiAutonomous Okrug	515	275	240	-853	-897	44	

 Table 3. Migratory dynamics in 2010-2011

Source: Federal State Statistics Service

Almost all the Far East subjects, except Chukotka, had negative balance of migration in internal Russian movements.

The international migration in 2011 compensated more than 45 % of the internal migratory decrease, while the compensation was only 9.8 % in 2010. At the same time, the Far East has negative balance with all federal districts of Russia.

Since 2011 the group of scientists of the Center of a social demography and economic sociology of Institute of Social and Political Studies, Russian Academy of Sciences with the support of the Russian Foundation for Basic Research conducted a study to identify the factors of a negative demographic situation in regions of Siberia and the Far East⁵. The carried-out research and presented data allow drawing a conclusion that migration throughout the whole studied period is the main component of population decrease. The main tendency of a modern migratory situation in Russia is an expansion of a zone of outflow of the population, reduction of a zone of its inflow and gradual strengthening of polarization of the national territory (the central territory draw population from the eastern territory of the country).

The main problem in Russia, however, is not only in low migratory mobility, but also in negative consequences to which internal migration leads. Internal migration leads to enormous shifts in population placement – to the deformation of structure of moving that was built over the long period of time.

On the whole, internal migration is characterized by the following tendencies. On the

one hand, there are "centripetal" movements of the population, on the other hand - there is depopulation of the Far East and some regions of Siberia.

3. Main trends of the demographic policy of Russia.

Overcoming the negative tendencies of the demographic situation should become a task number one in the comprehensive development program of Russia's eastern regions. The state program of population resettlement and its further fixing in new territories can become one of mechanisms.

In pre-revolutionary and in Soviet period the question of development and settling of east lands was one of the prime strategic tasks. During pre-revolutionary time since Ermak's campaigns to Siberia, the state tried to fix people on new lands. Although it wasn't expressed in a uniform state program, the main objective was to keep the attached territories, rather than to develop them. Only on a joint of XXI and XX centuries Russia approached this question. In the conditions of shortage of lands in the central Russia, Petr Stolypin, being a person with sharp mind and far-sighted strategist, paid attention on the east territory. The offered reform couldn't do without additional lands which were required be transfered to peasants.

Petr Stolypin's resettlement program was the first state target program on development and settling of low-populated territories. The railway wagons for transportation of people and property were specially developed for it. On the whole, according to some information, as a result of reform about 3 million people were moved.

In the 30's of the XX century special value was given to agricultural resettlement of the population to eastern and northern areas. It became the mass and high-organized process. To motivate the population to resettlement, and also to solve the problems of establishment of new settlers, the large-scale state programs directed to development of less populated eastern territories of the country were created and accepted. For the management of these migratory streams at Council of ministers of the USSR the Head Resettlement Department was created in 1953. Throughout all Soviet era some purposeful programs of complex settling of eastern territories were in force.

Disintegration of the Soviet Union, independence of all former federal republics negatively affected demographic tendencies of Russia on the whole, and in even larger degree in its eastern part.

According to demographic forecasts, at preservation of current trends, population of the Far East will continue to reduce, aggravating the difficult situation. Today the only real tool is accurately thought over migratory policy which would be equitable also to interests of eastern regions and the whole country.

Provision of the Far East with considerable stocks of natural resources should be the base of the comprehensive federal program on development of eastern territories. The stored Soviet experience showed and proved all importance of economic tools of migratory policy. At the same time for their effective use, it is necessary to create the corresponding conditions in accepting territories by joint efforts of the state and big business.

The summit of APEC carried out in 2012 in Vladivostok promoted an inflow of investments not only directly to the city, but also to the region. Also lately all main economic indicators of regions of the Far East have positive dynamics. On development of economy and the social sphere of the Far East Federal District it was involved 1013.9 billion rubles (32.7 billion dollars)

of investments into fixed capital in 2011 which was more than the amount for the corresponding period of previous year.

Foreign trade turnover in January-September 2011 was characterized by positive trading balance -12.0 billion US dollars (export -19.1 billion US dollars, import -7.1 billion US dollars) and made 4.8 % of the Russian foreign trade turnover.

The volume of investments into the district amounts to 9.4 % of all investments of Russia. Specific weight of investments at the expense of own funds makes 22.4 %, the attracted funds – 77.6 %, including 15.5 % - at the expense of the federal budget funds.

Total amount of the foreign investments which have directed to non-financial sector of economy of the district in January-September 2011 was 8.7 billion US dollars. The foreign direct investments accounted for 27.9 % of the total foreign investments which have arrived in the Far East for expired period.

Welfare of the population is defined, first of all, by the per capita monetary income of the population, which was 22897.0 rubles (about 738 dollars) a month in the Far East Federal District (as a whole across Russia – 20702.7 rubles (about 668 dollars) a month).

The nominal monthly average salary was 29421 rubles (950 dollars) in 2011, which was increased in comparison with 2010 for 13.2 %, and the real wage - for 5.1 %.⁶

Thus, represented data testify to rather favorable economic situation as a whole in the district. It's necessary, however, not to forget about considerable regional differentiation of the Far East subjects speaking of level of social and economic development.

On the basis of the received results of research, it is possible to draw a conclusion that it is necessary for government of Russia to pay special attention to development of the migratory policy containing mechanisms, directed to fixing of resident population in the Far East and involvement of constant migrants to areas of new development. In this regard it is necessary to develop the mechanism of moving of internal Russian migrants and external immigrants. The main instrument of realization of the developed mechanism, from our point of view, is implementation of the large investment projects of development of transport infrastructure. Foreign experiences show that transport projects are the strong impulse of increase in employment. It is fair not only in construction of objects, but also in the subsequent service that demands a considerable manpower. The USSR also had experience of implementation of large transport projects. Construction of BAM confirmed the importance of such projects. It gave development to a number of branches and territories of the East of the country.⁷ In the XXI century Russia is still in great need of the new transport arteries, meeting modern economic realities and capable to satisfy accrual demand from national economy. Backwardness of transport infrastructure is still a significant constraining factor of sustainable development of eastern territories, and one of the factors pushing out settled population of the Far East.

In this regard the important moment is the state subsidizing of trips of inhabitants of the Far East to the European part of Russia. It is necessary to make every effort, in order that all inhabitants of Russia, irrespective of the place of residence, felt free and protected, knowing that they live in one big country and recognizing that they are a part of it and the integral element of Russian society and Russia as a whole. Since 2009 the program of subsidizing transportations has been functioning. The essence of this program is to provide a discount on the ticket for certain groups in the period from April 1 to October 31 of the year. Citizens of the Russian Federation aged less than 23 years, the aged people of over 55 years for women and over 60 years for men, and also disabled people of the I group of any age and disabled children with one accompanying

person have the right to get tickets at discount prices. The difference between the real ticket price and the price paid by the passenger to airlines is compensated by the state. Within the program, the state subsidized transportations in 33 directions from Moscow, St. Petersburg and Sochi to the cities of the Far East region and back. According to airlines they realized about 400 thousand preferential air tickets in 2012, whereas in 2011 - 372 thousand tickets, in 2010 — 327 thousand, in 2009 — 163 thousand. Due to the subsidizing program the volume of the transported passengers on regional airlines in Yakutia is increased by 28 %, and in the Far East region as a whole for 12 %. Today the government discusses a question of cancellation of age restrictions.

Thus, today, the government began to pay special attention to questions of social and economic development of the Far East. It is especially necessary to note a task of stabilization of population and its subsequent growth. Creation of the special federal ministry (Ministry of Development of the Far East), subsidizing of air transportation of inhabitants of the Far East to the central part and to the south of Russia, the family capital and a number of regional measures have positive impact on demographic and social and economic situations in the Russian Far East. Also the program on payment of a monthly allowance of about \$200 at the birth of the third child is very important. The program starts on the 1st of January, 2013. Though it does not affect all the regions of Russia, it includes most regions of the Far East.

At the same time, despite all taken measures, a range of unresolved tasks is still very high. They include poor infrastructure in the majority of settlements remote from an administrative center, large proportion of shabby housing, low wages and others.

Implementation of large projects should be carried out together with measures of the social and economic character, directed to support of the population, and those who is going to move to the permanent residence. In the field of housing policy the state help is offered as subsidies on housing acquisition, and for some territories, like frontier, as granting houses with the subsequent registration of the property right to it after 10 years of continuous accommodation in this territory. In this regard it is necessary:

- to increase speed of construction of houses at the expense of the federal budget and large corporations, at the same time reducing its cost. Today the paradoxical situation is observed; the construction cost doesn't exceed 30-40% of the total housing price, and construction and real estate companies receive excess profits at the expense of ordinary citizens;

- to create at regional level the program allowing young specialists to buy a house on an installment plan at the minimum interest rates, which assumes that the government of the country should pay the interest, whereas the borrower will pay a principal debt;

- to develop mechanisms of realization an entirely new channel for Russian immigration - business immigration. Business immigration or special immigration programs for the investors, ready to invest in economy of its host countries, is not a new phenomenon for the majority of the developed countries. Russia is an exception.

- it is necessary to develop the full register of experts who are vital for the country, for the purpose of the maximum simplification of procedure of naturalization (for constant immigrants) and procedures of obtaining the work permit (for temporary labor immigrants). Now the Russian legislation provides the simplified mode of obtaining nationality for persons with outstanding abilities, however there are no accurate criteria of reference of foreign experts to the specified category;

- to increase period of validity of visas to scientists and persons with outstanding abilities at least for two years (now, term is limited to one year);

- to develop a complex of the regulations providing immigrants, having a scientific degree, the right to receive the Russian nationality;

- to develop programs for temporary labor immigration of the youth, similar to the American programs "Work and Travel" and "Camp America". Benefit from introduction of such programs is obvious and is shown in the following moments: level of payment of such workers is lower; such immigrants spend the most part of the earned money in the country accepting them, thereby creating additional demand for goods and services; in the period of their stay in Russia they get acquainted with culture and way of life, thus forming certain attitudes about subsequent immigration for permanent residency.

This is not the whole list of tasks to be solved by the efforts of the Russian government. In our opinion, however, realization of at least these actions will allow to reduce negative impact of the demographic crisis that in turn becomes an additional impulse to intensify development of the Far East.

Thus, only the comprehensive approach to problems of the Far East can solve the collected social and economic and demographic problems. Capacity of the region is enormous, and together with the thought-over policy, necessary volume of investments (which certainly will be returned with profits) and the human capital, it will be possible to make this region the economic and financial locomotive of all of eastern part of Russia. Intensive development of regions of the Far East will promote also to strengthening of trade and economic, political and cultural ties with the neighbor countries, and first of all with the leading countries of this area - Japan and China.

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- ¹ The study was conducted within the project of RFBR № 11-06-00498-a
- ² Official Website of the Ministry of the Russian Federation of Development of the Far East http://minvostokrazvitia.ru/
- ³ Official Website of the Federal State Statistics Service http://www.gks.ru
- ⁴ Family (maternity) capital is the Government support of the families, which after 1st January 2007 gave birth or adopted the second child or the third, fourth or subsequent children, if the right to maternity capital was not registered before birth (adoption) of previous children.
- ⁵ Economic tools of a migratory policy in the conditions of modernization and innovative development of regions of new development (on an example of the Far East and Siberia). № 11-06-00498-a. Russian Foundation for Basic Research (RFBR)
- ⁶ Official Website of the Federal State Statistics Service http://www.gks.ru
- ⁷ Ryazantsev S.V. (2011). Migratsiya i migratsionnaya politika Rossiyskoy Federatsii. Nauchniy doklad. Vypusk I., [Migration and migratory policy of the Russian Federation. Scientific report, Edition 1]. pp. 51-52

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