

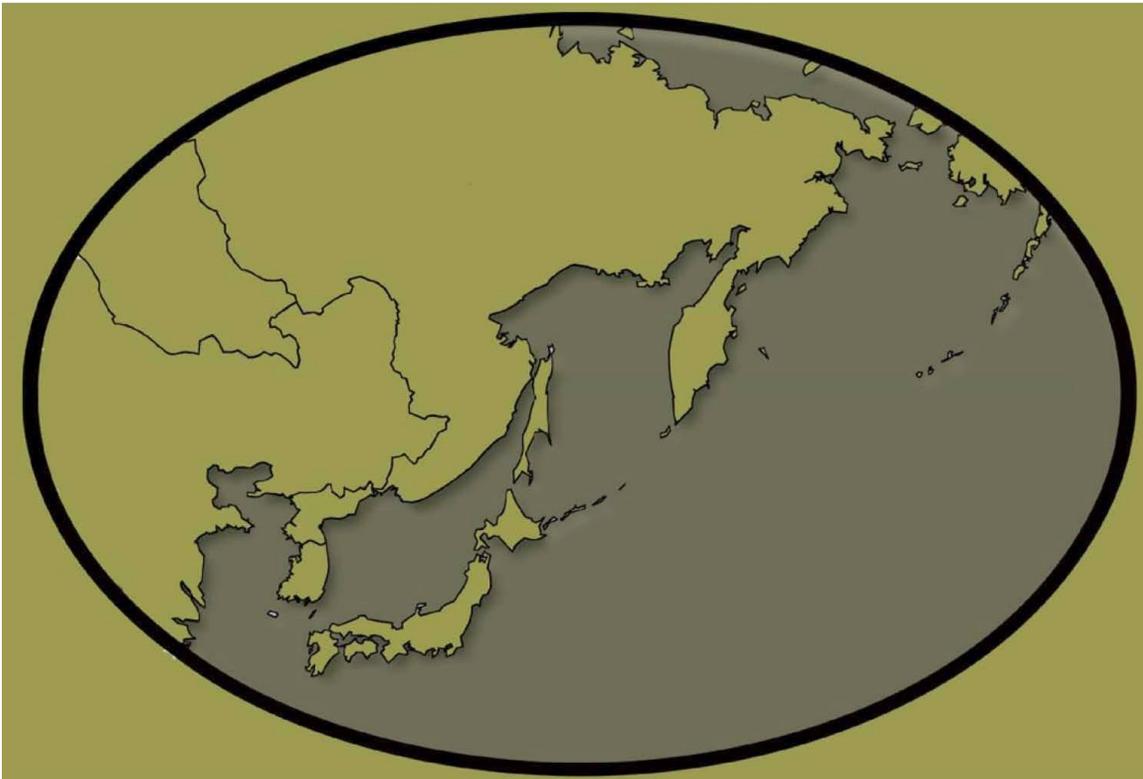


Northeast Asia Economic Forum

Financing Economic Integration and Functional Cooperation for Northeast Asia

A Multilateral Financial Institution

Edited by:
Lee-Jay Cho & Chang Jae Lee



Korea Institute for International Economic Policy



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Preface

The Northeast Asian region continues to have the potential to become one of the most dynamic economic centers of the world, despite recent changes in political leadership and pending contentious issues among the major players: China, Japan, Korea and Russia. With its own increasing capital resources and advancing technology, endowed with vast natural and energy resources in Russia and Mongolia, and with productive linkages to the Pacific and North America, the Northeast Asian region continues to play a pivotal role in the global economy. This is a remarkable development in view of the fact that for centuries and until the later part of the twentieth century, this region suffered from a political environment characterized by military conflict, tension, and territorial rivalry among the major powers of China, Japan, Russia, and the United States.

In spite of phenomenal economic growth in the region in the last half century, regional security and stability remains fragile, in the aftermath of the Cold War era and the resulting geopolitical conditions. In the twenty-first century, for the countries of Northeast Asia to further their developmental goal of creating a region in which peaceful coexistence and common prosperity prevail, functional economic cooperation—that is, harnessing the individual economies of the region together—is essential. This is a challenge for the Northeast Asian countries, and initiating specific functional cooperation projects and initiatives is a concrete and constructive approach toward meeting this challenge.

Northeast Asia is the one region of the world where a formal regional institutional arrangement, such as the European Union or ASEAN, has yet to be developed. Yet, it is crucial for the Northeast Asian countries to continue to promote region-wide cooperative projects leading to a regional institutional mechanism. The Korea Institute for International Economic Policy (KIEP) and the Northeast Asia Economic Forum (NEAEF) have been cooperating in efforts toward achieving closer economic and financial cooperation in the region; this volume presents the results of a project implemented in 2013 to develop a regional institutional arrangement for financing cross-border infrastructure developments and to facilitate regional economic integration.

The northeastern part of China, North Korea, Mongolia, and the Russian Far East together constitute an area that is well-endowed with natural, energy, and human resources.

This sub-region has the potential of becoming a tremendous source of natural resources for the entire region, and what is needed is to realize that potential through cross-border infrastructure developments. Energy security and efficiency, and environmental sustainability and green growth, for example, are important areas of cooperation, as the three major countries of China, Japan and Korea are heavily dependent on energy imports and are highly vulnerable to energy crises. Financing requirements for the necessary cross-border infrastructure are likely to be large, and a regional financial institution is a key to meeting that financing need.

This volume is part of a series of proceedings volumes titled *Financing Regional Economic Integration and Functional Cooperation for Northeast Asia: A Multilateral Financial Institution for Northeast Asia*, it comprises research reports, presentations, and summaries of annual Northeast Asia Economic Forum (NEAEF) conferences and meetings, as well as affiliated activities, that took place under this project. The aim of the project is to contribute to and encourage activities and efforts toward regional economic integration that are carried out in a spirit of cooperation.

KIEP is grateful to Dr. Lee-Jay Cho, Chairman of NEAEF, for his leadership in implementing the project, to the authors of the reports and presentations, conference participants, and discussants who contributed to this volume.

Drs. Lee-Jay Cho and Chang Jae Lee would like to extend their appreciation to Chairman Byungwon Bahk of the Korea Federation of Banks, Drs. Vladimir Kuznetsov and Sergey Sevastyanov of the Far Eastern Federal University, Chairman Zou Ping of China API, and Dr. Liu Ming of Nankai University for their efforts in planning and coordinating the research and meetings and for their contributions to the substance of the research undertaken. Thanks are also due to the staff of NEAEF for their assistance in the course of the successful implementation of this project, and to Drs. Kennon Breazeale and Karla Fallon for their review and editing of this volume.

Il Houngh Lee

President

Korea Institute for International Economic Policy

Contributors

Byungwon Bahk Chairman, Korea Federation of Banks and former Executive Vice Minister of Planning and Finance

Yoshiki Inuma Director, Research Department, Japan Electric Power Information Center

Satoshi Inoue Visiting Professor, National Graduate Institute for Policy Studies

Dmitry A. Izotov Senior Research Fellow, Economic Research Institute Far Eastern Branch, Russian Academy of Sciences, Khabarovsk, Russia

Jae Hyong Hong Former Deputy Prime Minister and Vice Speaker of the National Assembly, South Korea

Jai-Min Lee Professor, Korea Maritime University and Former Vice President, Korea Export-Import Bank

A. B. Levintal Acting Director, Far Eastern State University of Humanities, Russia

Liqun Jin Chairman, China International Capital Corporation Limited, Advisor, Supervision and Guidance Committee of Northeast Asia Financial Cooperation Research Center and Former Vice Minister of Finance, China

Liu Ming Assistant Professor, Nankai University and Deputy Secretary, Northeast Asia Financial Cooperation Research Center

Tony Michell Euro-Asian Business Consultancy Ltd. and KDI School of Policy and Management

Dong-Keun Ryoo Division of Shipping Management, Korea Maritime University

Sergei Sevastyanov Professor, Department of International Relations, School of Regional and International Studies, Far Eastern Federal University

Mitsuho Uchida Former Director, Central Research Institute of Electric Power Industry and Visiting Professor, Chukyo University, Japan

Introduction and Overview

Lee-Jay Cho

The Northeast Asia Economic Forum (NEAEF) is a regional nongovernmental organization created in 1991 to sponsor and facilitate research, networking, and dialogue relevant to the economic and social development of Northeast Asia. The Forum is also committed to promoting understanding and relations among the peoples of Northeast Asia, North America, and Europe.

In collaboration with the Korea Institute for International Economic Policy (KIEP) for the year 2013, the NEAEF continued its focus on research, a conference, and meetings aimed at establishing the Northeast Asian Bank for Cooperation and Development (NEABCD) on the basis of regional financial cooperation that would promote functional economic cooperation in terms of cross-border resources, energy supplies, infrastructure construction for logistics, capital mobilization, and institutional development. The 2013 cooperative project with KIEP resulted in the publication of this volume of conference proceedings, *Financing Economic Integration and Functional Cooperation for Northeast Asia: A Multilateral Financial Institution*. This report volume contains the research outputs, the outlines, and summaries of the meetings and provides valuable materials with new perspectives and ideas for future discussions on institutional developments aimed at economic integration and financial cooperation in Northeast Asia.

NEAEF, as planned for the year 2013, implemented conference and meeting activities in which experts presented their perspectives, views, ideas, concrete proposals and strategies relevant to the issues of a regional financial institution for financial cooperation.

The Planning meeting combined with the Seventh Meeting of the Ad Hoc Committee for Establishing the Northeast Asia Bank for Cooperation and Development (NEAEF) at Nankai University, Tianjin, China, July 1-2, 2013

On July 1-2, 2013, the Seventh Meeting of the Ad Hoc Committee for Establishing Northeast Asia Bank for the Cooperation and Development organized by the Northeast Asia Economic Forum (NEAEF) was held at the Northeast Asia Financial Cooperation Research Center (hereinafter refer to as Research Center), at Nankai University, Tianjin, China. More than twenty former leaders and experts from China, Korea, Japan, and the United States attended this meeting. The meeting was organized by Dr. Lee Jay-Cho, Chairman of NEAEF, and Mr. Wang Shuzu, Former Deputy Chairman of Tianjin People's Congress, Deputy Chairman of the Research Center. Mr. Zhang Xiaoyan, Deputy Secretary of Tianjin municipal government and Research Center Director, Mr. Zou Ping, Research Center Secretary General, Prof. Ma Junlu, Executive Deputy Director of the Research Center, and Dr. Liu Ming, Deputy Secretary of the Research Center all expressed their views. Participants discussed the latest developments on the subject of the proposed Northeast Asia Bank, and exchanged views and ideas on new trends, perspectives and proposals on development financing mechanisms for Northeast Asia.

Full Endorsement of the Establishment of Northeast Asia Bank for Cooperation and Development

References were made to this year's summit meeting of Chairman Xi Jinping and President Barack Obama, with a historic consensus on the need and importance of a mutual and closer relationship between China and the US for the future of the two largest economies of the world and the statement by the US Assistant Secretary for Asian Affairs of the State Department that regional cooperation with Asia is most important in next ten years, and should be vigorously promoted. The former Assistant Secretary of Finance and former Executive Vice President of Asia Development Bank, Dr. Stanley Katz observed that, based on discussions in Washington regarding the BRIC Bank, the proposal lacks basic building blocks and a foundation based on experience and research. However, the US is not opposed to the establishment of the NEABCD. On the proposed Bank, Japan should

portray a clearer attitude, China should release a positive message initially, and then Korea will have a positive response.

The former Japanese Foreign Minister and the Research Center Honorary Chairman, Dr. Taro Nakayama addressed in a written statement that in order to pursue peace and security in Northeast Asia, regional development through economic cooperation should be our goal.

Mr. Byungwon Bahk, the former Executive Vice Minister of Planning and Finance and Chairman of the Korean Federation of Banks, pointed out that the ADB only provides 0.9% of its funds to three northeast provinces in China and Mongolia, there still remains a large gap for establishing a Northeast Asian Bank for future dynamic economic development in Northeast Asia. He also stated that China should take the leadership in the Northeast Asian Bank, and persuade Japan, Korea, Russia, Australia, New Zealand, and other countries to participate. China, Japan, and Korea already have shown a willingness and ability to cooperate evident in their funding arrangements in ASEAN. Why can't these countries cooperate to establish funding arrangements for the Northeast Asia region? Japan and the US will not take the initiative in promoting the establishment of the Bank, but once China proposes doing so, Japan, and the US would not be opposed to it.

The chief representative of the Japan Bank for International Cooperation's Beijing office, Mr. Kikuchi on behalf of the Japanese Cabinet Adviser, JBIC Executive Director, Mr. Maeda stated that the opportunity for establishing the Northeast Asia Bank is ripe and Japan through establishment of the Bank would change the its role from simple investor to beneficiary/partner investor.

The deputy director of China State Development Bank for Research and the Research Center Advisor, Dr. Zou Lixing emphasized that the Northeast Asia Development Bank is important for regional strategic cooperation. It will promote the development of regional infrastructure, economic development and corporation through trade, financial cooperation, cultural exchanges, etc. The establishment of the NEABCD will become a new driving force of economic development in Northeast Asia and a useful compliment to the existing international multilateral financial institutions.

Mr. Kwan-Yong Park, Former Speaker of the Korea National Assembly of Korea, underscored the great significance in the establishment of a Northeast Asia Bank. The

Former Vice Chairman of China's National People's Congress and honorary Chairman of the Research Center, Dr. Jiang Zhenghua stated that, peaceful development and win-win cooperation is not only the world trend, but also China's responsibility. The leaders of China's State Council repeatedly instructed the relevant departments to conduct a study on the establishment of the Northeast Asia Bank, stating that we now have a better vision for establishing the Bank. They stressed that we should not limit ourselves to the region of Northeast Asia, but set a wider framework and be more inclusive. We can start from reality, and consider and envision a long-term strategy. The information, input, and ideas provided by the participants from China, the US, Korea, Japan, and other countries showed that the continued efforts to set up the Northeast Asia Bank rest on a solid social and economic foundation. The meeting concluded that the establishment of the Northeast Asia Bank is currently in a most critical period—it requires that all the relevant countries bolster their confidence and continue their work.

The New 'Orientation' of the Northeast Asia Bank

Liquan Jin, the Chairman of China International Capital Corporation Ltd., Advisor of the Supervision and Guidance Committee of the Northeast Asia Financial Cooperation Research Center, and Former Vice Minister of Finance stated in a written statement that, given Asia's economic growth and its energy and infrastructure investment demands, currently available financing channels are inadequate and therefore, innovative financing mechanism are necessary. Asia should establish a multilateral financial institution that would run parallel to the ADB system, and would help meet the need for infrastructure construction and economic development. China needs to further strengthen financial cooperation with Northeast Asia and Asia. The Northeast Asian Bank represents such an innovative financing mechanism.

Zou Ping, Chairman of the China Asia Pacific Institute and Secretary General of the Research Center for Financial Cooperation in Northeast Asia stated that in accordance with the "open development, cooperative development, and win-win development" requirements, we should insert the establishment of the Northeast Asian Bank into a broad strategy of innovative mechanisms for investment in and financing infrastructure development in Asia. The Northeast Asian Bank would be open to participation by

Northeast Asia and Asian countries with China taking a lead and in Northeast Asia it would principally focus on cross-border infrastructure investments.

Zhang Jianping, Senior Economist and Director of the Department of International Regional Cooperation, Institute for International Economic Research, National Development and Reform Commission (NDRC) argued that China, Japan, and South Korea already work together through the China-South Korea FTA and the China-Japan-South Korea FTA negotiations. The regional trade will increase rapidly after the two FTAs are established and they will need the safeguard and guarantee of the Northeast Asian Bank. The establishment of the FTAs and Northeast Asian Bank share some common ground and thereby the establishment of each will contribute to the other.

The Main Consensus and Suggestions of the Meeting

The meeting endorsed the proposal that the Northeast Asia Bank be conceived as an innovative mechanism for investment and financing for cross-border infrastructure interconnections. The Northeast Asian countries will play the leading role and participation gradually can be expanded to other areas of Asia including Australia and New Zealand.

China is expected to play an important role in the establishment of a Northeast Asian Bank; China is expected initiate the proposal for the establishment of the Bank. South Korea would then respond positively and they would then jointly promote the establishment of the Northeast Asian Bank along with Japan, Russia, Mongolia, the US and other Asian countries.

The Northeast Asia Economic Forum will continue to play a coordinating and catalytic role, by disseminating relevant information and facilitating dialogue with and among policymakers in Northeast Asia. The Tianjin Municipal Government will support and pursue further studies and develop strategies for the Northeast Asian Bank taking into consideration new international circumstances and it will serve as a reference base for policy decisions. We hope each country will encourage their national think-tanks to exert their influence by participating in policy research on the establishment of the Northeast Asian Bank.

The meeting stressed that the Tianjin Municipal Government has and will play a very important role in the establishment of the Northeast Asian Bank. We expect China to

play the leading role in encouraging breakthroughs in financial cooperation in Northeast Asia.

The Twenty-Second Annual Forum in Vladivostok, Russia, on August 14-16, 2013

The Northeast Asia Economic Forum (NEAEF), in partnership with the Far Eastern Federal University (FEFU), School of Regional and International Studies, and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), convened the twenty-second annual forum in Vladivostok, Russia, on August 14-16, 2013. Representatives from the People's Republic of China, Japan, Korea, Mongolia, Russia, the US, the European Union, and UNESCAP met to make further progress toward cooperation and integration among Northeast Asian nations. FEFU's new, consolidated campus on Vladivostok's Russky Island was host to the 2012 Asia Pacific Economic Cooperation (APEC) summit and is the flagship federal campus of East Russia. FEFU's unified home on the Pacific Rim is symbolic of its emerging role as a hub for a multicultural meeting of minds.

Rigorous discussion over energy and environment, transportation and infrastructure, trade, and development of the Northeast Asia Bank for Cooperation and Development (NEABCD), furthered the Forum's mission for continuing cooperation, peace, and prosperity.

The opening session, Regional Economic Cooperation: Perspectives from the Russia Far East, dug deep into the issues of increasing Foreign Direct Investment (FDI) into the Russian Far East by the other countries comprising Northeast Asia. Currently, 93 percent of total direct investment goes into the minerals sector. Over time, Russia would prefer to have increased FDI in areas of the economy that are higher value-added. Issues identified as leading to a poor investment climate include 1) insufficient transportation 2) low-level of energy development in the form of a power grid and old power plants 3) a small consumer market of six million people 4) a shortage of labor resources and 5) inclement weather increasing the cost of building factories and ongoing maintenance in the Russian Far East. To overcome these known challenges, the Russian Far East has prioritized eight areas for investment: transportation; aircraft, shipbuilding, the automotive

industry; aerospace; resource extraction, refining and processing; energy and energy efficiency; petro chemistry; agriculture; and tourism.

The Russian government is making investments in transportation and economic clusters to improve the attractiveness of the Russian Far East as a site for FDI and to improve economic and functional cooperation within the Northeast Asia region.

Two afternoon sessions were co-sponsored by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Incheon. The first afternoon session, Energy and Environment, featured presentations on the vast natural energy resources in the Russia Far East and the dependency of other countries in Northeast Asia on imported energy sources. In particular, Russia has tremendous reserves of oil and natural gas. China recently has become a net importer of coal because of its tremendous consumption of coal as its primary source of base load energy for electricity generation and heating. Already, 10 percent of China's power is generated by renewable sources and the plan is to increase this to fifteen percent by 2020. Korea is 95 percent dependent on imported energy in the form of fossil fuels, this creates energy security and sustainability issues for Korea. This has led Korea to set a national goal of providing 40 percent of its energy domestically by 2030. The presentation on Japan highlighted its shift away from nuclear power following the March 11, 2011 Fukushima disaster. In September 2013, Japan shut down all of its nuclear power plants and shifted to other sources of power generation including increased LNG imports. Japan is in the midst of revamping its electrical supply system including adding an area-wide system operator, liberalizing the retail market, and unbundling the vertically integrated system of electricity generation and distribution within the regions of Japan. This presentation on Japan concluded with the mention of the improvements that could be made to the electric grid by creating an Asia-wide electric supergrid that would have multiple layers of redundancy, greater stability, and could handle more renewable energy sources.

The final session on the first day, Transportation and Logistics: Cross-border Infrastructure Development, focused on increasing investment in creating transportation links throughout the region and also streamlining the administrative process of crossing borders. The region is heavily dependent on maritime transport, but if land transport were developed, this would dramatically help neighboring countries and increase trade into land-

locked countries and inland regions of the countries in Northeast Asia and Southeast Asia for that matter. The focus on spatial development started with transport corridors, led to logistic corridors, trade corridors, and ultimately economic corridors through these new lanes of interaction.

Regarding the issue of containerized cargo within the region, which has grown 14 times in the past thirty years, there are improvements that can also be implemented that will cut the terminal waiting time dramatically by increasing regional cooperation and through the creation of a regional logistics system. Fully 58 percent of the world's container traffic goes through East Asia and improvements in efficiency and processes can make shipping less expensive, better for the environment, and can help harmonize relations. One of the final presentations on transportation resulted in a proposal for port cooperation in Northeast Asia.

The session was followed with a lively discussion on developments within North Korea, cross-border economic cooperation, the attractiveness of the Russian public stock market for investment, and a review of lessons from the integration of countries into the European Union. It was noted that the absence of North Korea from regional economic integration effectively turns South Korea into an island unable to build land transport connections to the rest of the Asian continent. It was suggested that the regional impact of sanctions against North Korea may be reducing the attainable GDP of the greater Northeast Asian region. It was proposed that perhaps sanctions should be reduced or eliminated for specific projects to facilitate trade and development.

The sessions on cross-border functional economic cooperation converged on the main discussion on the proposed establishment of the Northeast Asia Bank for Cooperation and Development (NEABCD). There was broad consensus on the desirability for a multilateral bank to provide long-term capital for regional infrastructure projects. Research has shown that such a bank would be conducive to lasting Northeast Asia cooperation, transforming and restructuring of the economy, filling the gap of financing for large cross-border projects, enhancing the capability of the region to address financial crises, and helping with free trade agreements. The goal of this bank is to increase cooperative development, balanced development, and win-win development in the region. There has been increasing demand for cross-border projects in infrastructure and the energy sectors.

Ultimately, the Bank would raise private sector capital; however, the private sector is looking for guarantees of repayment. Thus, multilateral public financing would act as a catalyst to attract private funds. Given that the creation of the NEABCD will not be immediate, as a start a China-Japan-Korea trilateral bank was proposed. In this connection an Exim bank consortium, of either bilateral or multilateral banks, could be a more practical, feasible, and effective initial step toward financing for sustainable development and investment projects. Sample projects include the Greater Tumen Initiative (GTI) for the interim period, submarine tunnels connecting countries, a regional logistics system, natural gas pipelines, and public-private partnerships such as toll roads. Rather than direct lending, most of the initial participation will be in equity investments and guarantees. There are many appropriate projects that could be developed in the region with the financing and technical expertise provided by the creation of such a bank. The creation of the bank may require improved diplomatic relations in the region, but the work towards such a bank should continue steadfastly nonetheless. Overall, there was a spirit of optimism that much progress had been made during the conference.

Recently, China has taken a much broader perspective and proposed an Asian Bank for Infrastructure Construction which will cover Northeast, Southeast Asia, and the rest of Asia. We believe have conducted essential research on economic integration through cross-border infrastructure construction and physical connectivity that is of great use for this proposal. The research and results stem from our joint efforts with China, particularly, Tianjin and relevant government institutions in Beijing. However, there will be a need for further research and cooperative efforts to examine the numerous relevant issues for this proposal to make progress.

The proposal for the broader ‘Asian Bank’ was made with very little consultation of international experts with substantive experience in multilateral development banks. China did not gauge the implications and repercussions from the important countries in the Asian region, especially, Northeast Asia. Therefore, this proposal will likely be another straw man to be shot at by the experts and country leaders as has been the case with the proposed BRICs development bank.

As proposed—with a majority shareholding by China (51%) may disqualify it as a multilateral regional development bank based on diversified shareholding requirement as

in the ADB and World Bank cases in which the major stake holders, i.e. the US and Japan hold less than 20 percent shares. As the proposal stands, other countries would simply consider it ‘China’s bank.’ It will not be perceived to be encouraging partnership and cooperation among the countries in the region but will be seen rather as an opportunity for the countries like Indonesia and the Philippines to seek financial assistance from China for infrastructure construction linking to China.

The ADB and the World Bank will not be very positive in that both institutions are mandated to fund infrastructure projects—although they have done very little of this in Northeast Asia. We can also expect that Japan and the US will be against the proposal along with other important countries in Asia.

Additional points were made by Dr. Stanley Katz, former Executive Vice President of Asia the Development Bank. Dr. Katz proposed that an infrastructure bank is far inferior as a vehicle for regional development compared with the NEADB, for a number of reasons:

1. Financing would be limited to countries that border China. Most countries that need development assistance would not be eligible.

2. It would tackle the most intractable part of the development spectrum—regional projects. Neither the World Bank nor the ADB have had great success with regional projects. For one thing, they involve the development and integration and then the coordination of regional policies which is usually beyond the capability of most developing countries. Most developing countries have their hands full trying to develop and implement domestic projects, and recognizing the inherent problem they involve, most countries assign low priority to regional projects.

3. Unlike the NEADB, ADB and World Bank, the proposed bank would not provide any advisory or technical assistance in such areas as policy-making and institutional development, both of which are fundamental precursors of successful project development and implementation.

4. The NEADB has been subject to detailed review and analysis for more than a decade. There is general agreement on its parameters and components (e.g., capital structure, share-holding, membership, etc.). The delay in establishing the NEABD has been of a political, not substantive, nature. If political issues could be resolved by the countries concerned, the NEADB could be up and running in a few months.

That is not the case with the new bank proposal. A great deal of detailed analysis and review, and meetings and decisions, would be required to determine the parameters, operations, structure, etc. That could take years, and even if all that is accomplished, it is likely that the same political obstacles will remain.

Conclusion: Progress and Future

The NEAEF through continued efforts has been able to sustain the momentum for developing a multilateral financial institution for the purpose of financing cross-border infrastructure aimed at regional economic integration in Northeast Asia.

For the next year we discussed a proposal for changing the focus towards the Greater Tumen River¹ within a larger geographic framework of Northeast Asian linkages to North America and Europe. The very region that serves the interests of all Northeast Asian countries is the Tumen River Delta Area, where the Korean Peninsula, China, and Russia share borders. Therefore, developing this area holds strategic meaning and the potential to enable peaceful resolution of conflicts in the Northeast Asian region. This is the so called ‘Creative Convergence Effect’ that comes from the Northeast Asia Peace and Cooperation Plan and the Inter-Korean Trust-building Process both of which South Korea’s new government has advocated.

Financing cross border infrastructures in this area will be a great challenge but it also holds potentially enormous benefits for the Northeast Asian region as well as internationally. Peaceful economic cooperation in the Grater Tumen Area is consonant with South Korea’s vision and strategy for inter-Korean economic cooperation and a Northeast Asia economic community.

The 2013 project, through research and meetings: 1) resulted in the examination of important regional and international developments and thus clarification of more concrete and incremental steps toward the financial institutional development for regional economic

¹ For the record, Dr. Lee-Jay Cho in cooperation with Dr. Song Jian, then Vice Premier and Chairman of the State Science and Technology Commission of the People’s Republic of China organized the 1990 International Conference on Coastal Development in Northeast Asia in Changchun, hosted by the Jilin Provincial Government. In the presence of Dr. Song Jian along with Governor Wang Jongyu of Jilin, the proposal for the Tumen River Area Development Program was put forward and the initiative for the Northeast Asia Economic Forum was articulated. The UNDP afterwards undertook the implementation of the Tumen River Area Development Programme (TRADP). Mr. Rong Intu, who served as director of the TRADP-UNDP and later as China’s Trade Representative, participated in this conference.

integration in Northeast Asia; and 2) contributed substantially to clarifying the concept, the need for, and importance of cross-border physical connectivity through infrastructure for regional economic integration as well as the need for government leadership in this.

The meetings and research activities of the NEAEF continued to add to the conceptual framework and documentation generated by financial experts and practitioners. It was again underscored that a mechanism for informal dialogue involving experts and government officials should be arranged to expedite preparations for discussion at the top level of the governments concerned.

We believe that the contents and discussions included in this volume represent this year's achievements, which will provide bases for future discussion and consideration by the leaders of governments in Northeast Asia. More broadly, we believe this project has continued to make important contributions in response to changing international conditions through timely and necessary research, conference activities, and consultations aimed at regional economic cooperation and integration in Northeast Asia as well as the wider Asia–Pacific region.

Part I

**Investment Requirements and Strategies for Cooperation in
Infrastructure and Energy Development in Northeast Asia**

The Socio-Economic Situation in the Russian Far East and Prospects for Developing Investment Cooperation with Northeast Asian Countries

A. B. Levintal

The Government of the Russian Federation lately has been paying close attention to the development of the Russian Far East. The APEC Forum of 2012 in Vladivostok marked a shift in the government's priorities towards the east and the increasing role of the Russian Far East's integration in the Asia Pacific Region. In one of his first decrees of May 2012, Russian President Vladimir Putin set a task for the Russian Government to develop measures for the accelerated socio-economic development of this region.

In order to coordinate the efforts of Russia's ministries, natural resources industries, and regions in the integrated development of the Russian Far East, the Ministry for the Development of the Russian Far East was established. The establishment of a special department within the country's government in order to speed up the development of a particular region was an unprecedented step in Russian history.

In accordance with the President's instructions, the State Program for the Socio-Economic Development of The Far East and the Baikal Region up to 2025 was adopted by Decree Number 466 of the Russian Federation Government. Although the sources of funding are not yet identified, the adoption of this program reflects the priority of the Far Eastern region in Russia's regional policy.

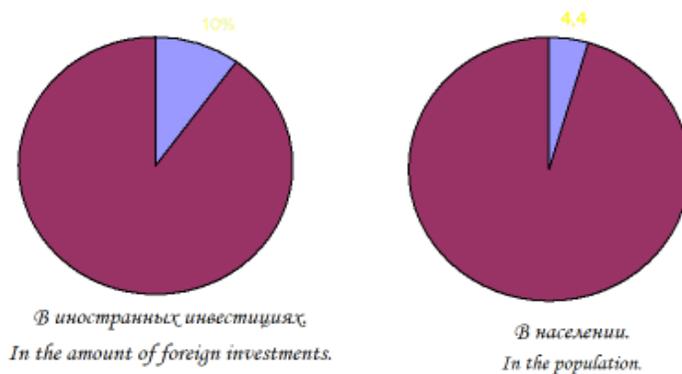
When we look at the recent socio-economic situation in the Russian Far East, judging by statistics, the region has managed to overcome the world economic crises fairly well compared with Russia as a whole. Even in 2009, when the volume of industrial production in Russia fell by nearly 10%, the Far East showed positive growth (+7.6%). Russia as a whole managed to reach the pre-crisis level of 2008 only in 2011 whereas the economy of the Russian Far East continued to grow as shown in Figure 1)

The index of industrial production to 2008, in%.



Figure 1. Index of industrial production to 2008 (in %)

Looking at the situation with investments in fixed assets in the Russian Far East in recent years, it looks quite favorable at first glance. Even in the crisis year of 2009, when total investments in Russia declined by 13.5%, the Far Eastern Region saw a 7.1% growth in investments. In 2011 investments in the Russian Far East amounted to 1.014 trillion rubles (about US\$33 billion); this accounted for over 10% of all investment in Russia. Considering the fact that the share of the Far Eastern region in the country's population makes up only 4.4%, the amount of per capita investments was more than twice as much as the average all-Russian index as shown in Figure 2.



The share of the Russian Far East in the amount of foreign investments and in the population of the Russian Federation in 2012 , in percentage terms.

Figure 2. Share of the Russian Far East in the foreign investment and in the population of the Russian Federation in 2012 (in %)

In 2011 the amount of investments in fixed assets in the Russian Far East exceeded the level of 2008 by 43.7% while in Russia as a whole it only reached the pre-crisis level (101.9%) as shown in Figure 3. However, as early as 2012, the Russian Far East experienced a significant decrease in the amount of investments in fixed assets (almost by 15 %). In the first half of 2013 the amount of investments in the region continued to decline (-25% by the first half of 2013).

Dynamics of capital investments to 2008, in%.



Figure 3. Dynamics of capital investment to 2008 (in %)

A considerable amount of investments in fixed assets in the Russian Far East over the last few years can be connected to decisions taken at the federal level. These include decisions to hold an APEC summit in Vladivostok, as well as such major construction projects as the East Siberia–Pacific Ocean oil pipeline, the Sakhalin–Khabarovsk–Vladivostok gas pipeline, the Chita–Khabarovsk highway, and the Kuznetsovsky tunnel at BAM (Baikal–Amur Mainline) near the Vanino port in Khabarovsk Krai.

The active implementation of these project took place during the crisis period which helped to alleviate the effect of the world crisis in the Russian Far East. As these construction projects were finished they were not replaced by any other projects of the same importance and, consequently, there was a significant decrease in the amount of investments in particular territories of the Russian Far East.

Attracting off-budget investments in the Russian Far East remains extremely complicated because the region is less attractive for investors than other regions of Russia and the neighboring countries of North-East Asia. A similar situation is typical of foreign investments in the Russian Far East.

In 2012 the Russian Far East received US\$13.8 billion, which is 40% more than in 2011. In 2012 the share of the Far Eastern region in investments in Russia amounted to 10% while the share of the region in the country's population made up only 4.4%. Accordingly, the amount of foreign investments in the Russian Far East in 2012 amounted to US\$2,209 per capita which was twice what it was for Russia as a whole (US\$1,074).

Furthermore, in the ten-year period from 2002 to 2012, the amount of foreign investment in the Russian Far East increased 7.8 times. Accordingly, the share of the Far East in the total amount of investments in Russia increased by 4.3 % in the same decade.

At the same time it should be mentioned that the Sakhalin Oblast accounted for 77% of US\$13.8 billion worth of foreign investments in the Russian Far East (these were mostly oil and gas projects) while the other eight territories accounted for only 23%. Even such highly developed territories of the Russian Far East as Primorsky Krai and Khabarovsk Krai received only US\$417.3 million and US\$170.8 million respectively, which is 2.6 and 6.2 times less than the average figure in Russia.

Northeast Asia's investments in the Russian Far East in 2012 amounted to US\$912.2 million that is only 6.7% of all foreign investment in the region. Considering that Japan accounts for US\$788 million out of the total amount of investment from Northeast Asia in 2012 and that 97.6% of this was invested in Sakhalin (mostly oil and gas projects), one can draw the conclusion that the investment presence of Northeast Asian countries in the Russian Far East is relatively insignificant.

If we examine investments in the Russian Far East in 2012 by sector, the extraction of minerals accounts for the largest percent of investments (92.5%), while manufacturing industries account for less than one percent.

Furthermore, direct investments in the Russian Far East in 2012 accounted for only 16% of the total amount of investment and the amount of portfolio investments was 0.1%. It was the so-called "other" investments (mostly loans) that accounted for the largest part of investment (84%). This means that the Russian Far East—except specific oil and gas projects in Sakhalin and some mineral resources—is not attractive enough for foreign investors.

The following factors contribute to the low investment attractiveness of the Russian Far East:

1) The lack of a developed transportation system makes the development of this giant territory more difficult. Railways run only through the south of the Russian Far East, the network of highways is poorly developed as are ports and airports. All this leads to the inaccessibility of most parts of the territory and to considerable expenditures when investment projects are implemented.

2) The poor development of the power industry, the lack of integrated regional electric power systems, worn-out power stations, insufficient development of power grids, and an inefficient fuel mix lead to considerable increases in the cost of electric power in the region.

3) The potential of a Russian Far East consumer market is limited by a small population of less than 6.3 billion people or 4.4% of the Russia's entire population.

4) A shortage of labor force in the Russian Far East is worsening and is exacerbated by a deficit in a qualified labor force.

5) Harsh natural and weather conditions lead to increased costs in investment projects.

In addition, the investment climate in most territories of the Russian Far East is not competitive compared with the country's western territories. Thus, *Expert*, the Russian rating agency, estimates that only Primorsky Krai and the Sakha Republic (Yakutia) are among the top twenty Russian territories with high investment potential, and that here has not been much progress in the growth of investment potential in the Far Eastern region see Table 1.

Table 1. Investment Potential Ranking of the Far Eastern Federal District Territories

	2009-2010	2010-2011	2011-2012
The Republic of Sakha Yakutia	20	20	19
Kamchatka Krai	69	69	70
Primorsky Krai	21	22	20
Khabarovsk Krai	33	32	34
Amur Oblast	67	67	65
Magadan Oblast	73	74	73
Sakhalin Oblast	58	56	51
Jewish Autonomous Oblast	81	81	79
Chukotka Autonomous Okrug	77	77	78

As far as the investment risk index is concerned, most of the territories of the Far East are in the second half of the list of 83 Russian regions (see Table 2).

Table 2. Ranking of Aggregate Investment Risk of the Far Eastern Federal District Territories

	2009-2010	2010-2011	2011-2012
The Republic of Sakha Yakutia	58	54	48
Kamchatka Krai	76	76	79
Primorsky Krai	55	50	30
Khabarovsk Krai	68	44	35
Amur Oblast	65	53	44
Magadan Oblast	80	77	74
Sakhalin Oblast	15	13	22
Jewish Autonomous Oblast	57	56	69
Chukotka Autonomous Okrug	74	78	76

Considering the effect of all the above mentioned factors, it will not be possible to attract sufficient off-budget investment, including foreign investment, for the development of the Russian Far East without removing infrastructure barriers to the development of the economy and a creating favorable investment climate including conditions that attract a workforce and secure its stability.

It should be noted that the elimination of infrastructure barriers (mainly transport and electric power) to the economic development of the Russian Far East is a priority guideline in the Strategy for Socio-Economic Development of the Far East and the Baikal Region up to 2025 adopted in 2009 and in the State Program for the Socio-Economic Development of the Far East and the Baikal Region up to 2025 adopted in 2013.

Most of the State Program (almost 55%) is dedicated to the development of the region's transportation and power industries and, if we consider Federal budget funds allocated to these sectors, 68% will make it possible to secure transport accessibility and reduce the cost of implementing investment projects. In addition, the State Program includes measures for stabilizing the population and labor force for the purpose of achieving development in the Far East.

Apart from considerable funds in the amount of 3.8 trillion rubles allocated from the Federal Budget by 2025 it will be necessary to attract about 7 more trillion rubles of off-budget funds for the implementation of several investment projects and other measures. To create favorable conditions for attracting off-budget investments, including foreign ones, it is necessary to develop “special rules of the game” in the Russian Far East, which should involve fiscal, customs, and price policy measures different from the rest of the country and providing preferences for the region. These preferences may include income tax, property tax, land tax, mineral extraction tax relief, etc.

These “special rules of the game” can be stated in a separate law “On the Development of the Far East”, or by making amendments to specific Russian statutes. In our opinion the law “On the Development of the Far East” should include simplified rules for the implementation of investment projects analogous to those successfully implemented in the process of building facilities for the APEC summit in Vladivostok in 2012.

The adoption of “the special rules” for the Far East will allow us to level, especially on the first stage, the negative aspects connected with the implementation of investment projects in the region (underdeveloped infrastructure, difficult natural and climatic conditions, etc.) We should mention that the necessity for a special approach to the region was already declared in the Strategy for the Socio-Economic Development of the Far East and the Baikal Region up to 2025.

At the present moment, at the instruction of the President of Russian Federation, the Ministry of Economic Development of the Russian Federation, in cooperation with other ministries, is developing a range of normative statutes in order to give the Russian Far East a special status.

Finally, the regional authorities of the Far East should be actively involved in creating favorable conditions for attracting foreign investment to the region. We should implement at the regional level a whole set of measures facilitating solutions for this task, including the following: creating agencies for attracting investment and consultant agencies for informing investors, taking measure to increase investor confidence in local authorities, establishing councils on foreign investment headed by governors, reducing bureaucratic barriers to the implementation of investment projects, simplifying approval

procedures at municipal and regional levels, etc. We also need to rely on the best regional practices in Russia (Kaluga Oblast, the Republic of Tatarstan, etc.).

The main goals of investment cooperation between the Russian Far East and countries of Northeast Asia are the following:

1) Transport Sector

Developing the *Baikal-Amur Mainline (BAM)* further by increasing its capacity to 100 million tons of freightage by 2030. The implementation of fundamental reconstruction and modernization of BAM will create the conditions for multiple growth in transit and foreign-trade shipments via the Far Eastern ports.

New investment projects in mining, forest and coal sectors which stimulate the development of BAM and the adjacent territories will create additional impetus for the development of the Sakha (Yakutia) Republic, the Amur Oblast and the Khabarovsk Krai.

Reconstructing the *Trans-Siberian Railway (TSR)* with the prospect of connecting it to the Trans-Korean Mainline for the development of transit shipments from Asian countries to Europe. The reconstruction of the Trans-Siberian Railway will allow us to increase transit shipments via an East-West intercontinental transport corridor.

Implementing the project connecting the *Trans-Korean Mainline* with the network of Russian Railways with access to the Trans-Siberian Railway will allow us to create the shortest transit corridor in the world, Asia-Europe-Asia, competitive with the sea cargo route via the Suez Canal. The time of delivery could be about two weeks instead of forty-five days by sea.

Implementation of this project will allow us to guarantee a large inflow of cargo from Pacific Rim countries to the Russian Railways, and first of all, to the Trans-Siberian Railway. This especially concerns container shipments.

Constructing a *passage from Sakhalin to the continent* will allow us to guarantee safe all-year-round transport links between Sakhalin and the continent and a reduction in transportation expenses in the region's economy. It will guarantee Russia's railway access to the Pacific Ocean through non-freezing ports in Sakhalin, which will give additional opportunities for organizing international shipments from and to the countries of the Pacific Rim. There's also potential for building a passage from Sakhalin to Japan.

Constructing *airport and seaport infrastructure* in the Russian Far East is another important goal. This includes reconstruction and building of airports in regional centers of the Russian Far East, as well as the development of a network of local airports to guarantee the operation of general purpose aviation.

The construction of seaports along the coast of the Russian Far East will improve their capacity to handle increasing volumes of cargo resulting from the development of a network of railways and highways in the region.

Constructing of both *federal and local highway networks* will result in connectivity between territories of the region, access to zones of advanced economic growth, cargo delivery to major seaports, railway stations, transport and logistics hubs, and access to border checkpoints located on highways of international transportation corridors. These networks are also necessary to facilitate cross- and near-border cooperation between Russian Far East constituent territories and regions of neighboring countries.

Developing the *Northern Sea Route* will allow an increase in the volume of transit shipments from Europe to the countries of the Asia-Pacific Region and vice versa; it will also guarantee cargo delivery to the North and allow exploration of the Arctic zone of Russia.

2) Aircraft, Ship-building, and Car Manufacturing

Another goal is establishing partnerships for the manufacture of competitive aircraft and in implementation of shipbuilding projects. Regarding car manufacturing, the goal is the development of car manufacturing and an increase in attendant car parts production by local plants the Russian Far East.

3) Space Industry

Cooperation in the construction of Vostochny cosmodrome (located in the Amur Oblast) is possible, including the construction of an aerodrome complex, a liquid hydrogen production plant and the necessary infrastructure for these.

4) Resource Extraction Industries

There are good opportunities for foreign investments in the timber, fishery, and mining industries that will facilitate a transition from resource extraction to processing and manufacturing higher value added products.

5) Power Industry and Energy Efficiency

Given South Korea's and Japan's technological advancement in the fields of power industry and energy efficiency, attracting their participation (and the participation of China as well) in the construction of power plants as well as the implementation of measures to increase energy efficiency in economic and social spheres is very important. Notable power industry projects include the construction of Ussuriyskaya CHP Station in Primorsky Krai, CHP Station¹ in Sovetskaya Gavan, Sakhalin Regional Power Station-2, the second part of Blagoveshchensk CHP Station in the Amur Oblast, etc.

In this respect, the project to connect power transmission lines on the Russian Far East–China–South Korea route to secure energy exports from Russia is quite promising. Plans to build power facilities and power systems in the direction of China with the aim of increasing the exports of electric power are also promising. The possibility of supplying electricity from the Russian Far East to Japan also is being considered.

The most important project for investment cooperation, however, might be the construction of a Russian Far East–China–South Korea gas pipeline.

6) Petrochemical and Natural Gas Industries

An important goal is to achieve the active involvement of foreign companies in the construction of natural gas and petrochemical plants in the Russian Far East—resulting in products made for both domestic and foreign markets.

Among the most important construction projects in this field are a large petrochemical plant near Nakhodka with the participation of Rosneft; an LNG complex near Vladivostok in cooperation with Gazprom; natural gas plants in Amur Oblast and Primorsky Krai; and facilities in Khabarovsk Krai, Sakha (Yakutia) Republic, and Sakhalin Oblast.

7) Agriculture

In the field of agriculture, the goal is cooperation in co-processing of agricultural products to supply food to the markets of the Russian Far East, Northeast Asia, and other Asia-Pacific countries. The involvement of foreign investors in the formation of a 'soy cluster' in the south of the Russian Far East—involving everything from seed raising to food production—catering to the Russian domestic market or to foreign markets is

¹ Combined Heat and Power (CHP).

promising. Amur Oblast, Primorsky and Khabarovsk Krai and the Jewish Autonomous Region have the best conditions for the implementation of such a project.

8) Travel Industry

The travel industry is another area with potential. There is a need to build or develop tourist facilities, infrastructure, sightseeing spots, and hotels. Among potential projects, the following are promising: the creation of a special economic zone for tourists and a gambling zone in the Primorsky Krai; creation of an entertainment zone for tourists on Bolshoi Ussuriysky Island in Khabarovsk Krai; and the creation of tourist facilities in Kamchatka, the Sakha (Yakutia) Republic, Sakhalin and Amur Oblasts.

Cross-Border Economic Cooperation: Notes on Creating a Northeast Asian Economy

Tony Michell

1. Economic Cooperation in the Region

As my title suggests, this chapter is not a comprehensive analysis, but an attempt to indicate how cross-border economic cooperation might be restarted and accelerated by concentrating on some of the constraints.

The history of cross border economic cooperation in Northeast Asia since 1990 has stumbled on a series of issues and is well behind the curve of other regions of the world. After a flurry of early activities at the beginning of the 1990s when political barriers were falling, and occasional later bright spots such as KEDO,¹ the Keumgangsan development and then the Kaesong initiatives 1999-2004, the revival of the TRADP as GTI in 2007,² and the cross-border development agreements between China and the DPRK 2010-2011, there has been very limited lasting governmental cross-border interaction, except in the case of Chinese coordination of border crossing negotiations with Russia.³

Equally, private sector market cross-border interaction has been skewed towards a narrow range of areas and activities and massively underperformed compared with their potential. There are three main reasons for this: 1) lack of free land transit through the DPRK; 2) low population along the eastern littoral between the Arctic and Busan; 3) sanctions imposed by the US, then UN, and finally EU on the DPRK impacting the regional economy

A look at the map shows why; the lack of free land transit through the DPRK converts South Korea into an island, like Japan, which makes cross-border economic cooperation less tangible. This does not need to be so, but cross-border economic

¹ Korean Peninsula Energy Development Organization (KEDO).

² Tumen River Area Development Programme (TRADP) and the Greater Tumen Initiative (GTI).

³ I am indebted to Dr Jiang Zhenghua for information on this system.

cooperation would require better ports and highways in the island nations and regional development support from either national or international bodies.

This relies also on the improvement and profitability of shipping lines. There was some movement towards this in 2012 when a Swedish company invested in a ferry service between Sokcho, South Korea and Vladivostok, Russia bringing a modern ferry from Europe for the purpose, and reviving a local shipping company which had been bankrupted by the adverse climate since 2010.

Some areas are proceeding more rationally. Energy cooperation and resource cooperation is proceeding rationally and is likely to accelerate. Investment by Chinese entrepreneurs in Russia, and to a lesser extent in the DPRK also is proceeding (although the type and quality could be improved).

I propose to look at those areas which have not developed so well:

- Land transit through DPRK
- Creating multilateral financial institutions
- Creating economic hubs within the region
- Allowing the region to evolve despite sanctions



Figure 1. Border crossing, North Korea

2. Chinese Investments in the Far East and Siberia

EBRD data says that about 80 percent of Chinese investments in Russia (in terms of numbers—not in terms of value) are in the Russian Far East and Siberia. The remaining 20 percent of enterprises are operating in Central Russia, out of which half, or about 10 percent of total Chinese investments in Russia, are established in Moscow, the Moscow region, and St. Petersburg. In terms of value the Central Russian investments are much more important.

There were more than 1,500 joint ventures with Chinese capital in Russia at the end of 2010. Most of these are trading firms set up in border areas of the Russian Far East and Siberia, although there were over 200 joint ventures in manufacturing.

According to EBRD estimations, half of the enterprises with majority Chinese capital in Russia are in the wholesale and retail trade, 25 percent of which is in trade in wood and construction materials, and another 25 percent in food, clothing, and services (restaurants, letting and traveling agencies, repair services).

The highest share of majority Chinese owned companies, exceeding one-third of the total, is active in wholesale and retail trade—75 percent of which is concentrated in the Russian Far East and Siberia. These are mostly micro and small enterprises active in open markets.⁴

3. Agricultural Development

Agricultural land for lease includes territory in the Primorsky Krai, Amur and Khabarovsk regions of the Russian Far East, where only half of the farmland is cultivated since the collapse of the Soviet Union, leasing will be made for at least five years with no legal obstacles standing in the way. South Korean, North Korean, and Chinese ventures have begun to lease land and bring their labor.

“The plan serves as an advantage for both sides as the Far East region that has been suffering from severe labor shortages can use surplus labor from the Asia Pacific region,”

⁴ Alexander Plekhanov and Asel Isakova, “Region-specific Constraints to Doing Business: Evidence from Russia” at <http://www.ebrd.com/downloads/research/economics/workingpapers/WP0125.pdf> and L. Krkoska and Y Korniyenko, “China’s Investments in Russia; Where Do They Go and How Important Are They?” *China and Eurasia Forum Quarterly* (2008).

a researcher at the Far East branch of the Russian Academy of Sciences said to the local press. “In the past twenty years, the amount of (Russian) central government’s investment in agriculture was small. The government has changed its stance to one that develops agriculture in the Far East by inviting foreign capital,” according to Anatoly Chaika, chairman of the Far Eastern Scientific Center of the Russian Academy of Agricultural Sciences.⁵

Its next-door location to China helped the Russian Far East and Siberia to survive during the harsh 1990s and has helped develop the regional economy. However, Russian scholars before 2011 considered that inhabitants of the region experience the complex of an ‘unloved and abandonment child’ of ‘mother Russia’ and the Kremlin in particular, which is always busy with its Central regions, where the majority of the population lives. There are only 26.144 million (18.3 percent) of the country’s total 142.9 million people living this side of the Ural Mountains.

Opponents, however, say that the region could be dominated by foreign immigrants while environmental pollution can be rampant. While Chinese labor and energy is welcome the fear of being overrun, requires careful social planning and urban investment—a study of territories like Dubai, for example, shows that they have preserved their essential characteristics even where immigrants outnumber the indigenous population by 3 to 1.⁶

4. Multilateral Funding and Day to Day Banking

There have been discussions regarding progress and ideas about the creation of a true multilateral bank, and this do not need to be discussed further by me. However the need for commercial banking cooperation is essential. One of the great steps forward facilitating China-DPRK trade was the operation of commercial banks with branches on both sides of the border. The new range of sanctions in 2013 slowed these down. Between China, South Korea, Japan, and Russia cross-border transactions do not flow so freely.

⁵ “Russia to Lease its Unused Farmland to Asian States,” *Russia Briefing* at <http://russia-briefing.com/news/russia-to-lease-its-unused-farmland-to-asian-states.html/> “Far East Focus: Asian Companies Seek Greener Pastures in Russian Far East,” *Asahi Shimbun* (February 20, 2012) at http://ajw.asahi.com/article/behind_news/Politics/AJ201202200054

⁶ The agreement between China and Russia of October 2013 appears to have passed beyond such fears, “Russia Welcomes More Chinese Investment in Russian Far East: Medvedev” at http://news.xinhuanet.com/english/china/2013-10/22/c_132820817.htm

Between South Korea, Japan, and the DPRK they hardly move. There is an urgent need for either a single cross-border commercial bank, or a negotiated coalition of banks in each country which have coordinated sections dealing with FX transactions, Letters of Credit, and bilateral commercial loan agreements applying securities in one country to investments or trade in one of the other countries. There are a number of financial models which might allow this and greatly simplify trading and branch operations between the different jurisdictions of the region.

5. Why Land Transit Is Important

Land transit is important because: 1) transport corridors become logistic corridors; 2) logistic corridors become trade corridors; 3) trade corridors become economic corridors; and 4) without transport corridors it is difficult to establish economic corridors.⁷



Figure 2. Trans-Siberian Railway Route versus Marine Route

The planned expenditure on the Trans-Siberian Railway (TSR) to achieve a capacity upgrade of 100 million tons requires an overhaul of the levels of economic

⁷ Mikail Kalosha Conference Paper.

cooperation, public and private, within the region. The 10 days rail trip to Europe versus 29-45 days by boat requires smooth execution of shipments to Vladivostok/Nakhodka and establishment of other railheads, or rail routes which can feed the TSR on special purpose exchangeable bogie rolling stock.

A glance at the map shows the weaknesses of linkages in Northeast Asia. While the TSR is shown as branching in eight ways into Western Europe, in Northeast Asia it comes to a single terminal. It needs at least four branches into the region to achieve the same impact.

The basic shape of one of these branches should include the use of the completed, but unopened, East Coast line from Gangneung northwards, the continued improvement of Rason, and rehabilitation of Russian gauge that has run there in the past. The further potential of the agreement between Russia and South Korea signed during Putin's visit to South Korea in November 2013 is an important step in this direction, although it still does not establish a continuous rail route.

6. Road Connections

Rail is not enough, and the opening of 'Berlin corridors' for container trucks and trains through the DPRK should be actively planned as proposals to the DPRK, and not left as possible add-ons at a future time. The practices evolved for the Berlin corridors stood the test of time from the 1940s to 1989 and ought to be easily modified to handle road traffic passing through the longer distances of the DPRK, with the DPRK profiting from transit fees, employment, sale of diesel and supplies and other services. Indeed the new measures to promote tourism between China and the DPRK which allow a 'guide' to ride in tourist's cars would easily be developed into guides riding in trucks (though this was never necessary in East Germany. There is no reason why without violating the DPRK's wish to control access from outside "to prevent dust and mosquitos from coming in," such road corridors should not be instituted.

There continue to be minor improvements—the paving of the road from Hunchun to Rajin last year after twenty years of promises, but no comprehensive planning.

7. Cross-border Cooperation, Hubs, and Clusters

The essence of cross-border economic cooperation is primarily facilitating transport between the major population centers which (apart from those in the DPRK and Vladivostok/Nakhodka lie away from the eastern shoreline. There are eight cities including Niigata with populations in the 600,000-900,000 range between Ulsan and Vladivostok/Nakhodka. None are as big as Ulsan at 1.1 million or Dandong at 2.4 million (in the administrative city area).

Activities which spur population growth in all these centers would increase the attractiveness of investment, most especially some of the plans for Primorsky and the evolution of the Far Eastern Federal University (FEFU) itself. Between Vostochny's port, Nakhodka's free economic zone and Vladivostok's recovery as an international center there seems to be also conflict in respective roles which has worked against what should become a thriving conurbation.

The next hub is clearly the Khasan-Rason (Rajin) area for which both a legal framework and pioneering investments have been made. Logically, clusters at Chonjin, Hamhung, and Wonsan should also be developed with free investment zones, before reaching the Kumgangsan-Sokcho tourism hub. The experience of the Republic of Ireland's Industrial Development Agency (IDA) under the Industrial Development Acts of 1949 and 1993 are important because Ireland had an agency which both encouraged foreign direct investment and local industries (the latter known as Forfás). Creating these hubs or industrial clusters is not necessary in terms of capturing FDI first, but for building up the human resources and local industries which can support foreign invested enterprises.⁸

⁸ For information on Forfás see <http://www.forfas.ie/aboutus/> and for IDA see <http://www.idaireland.com/help/>

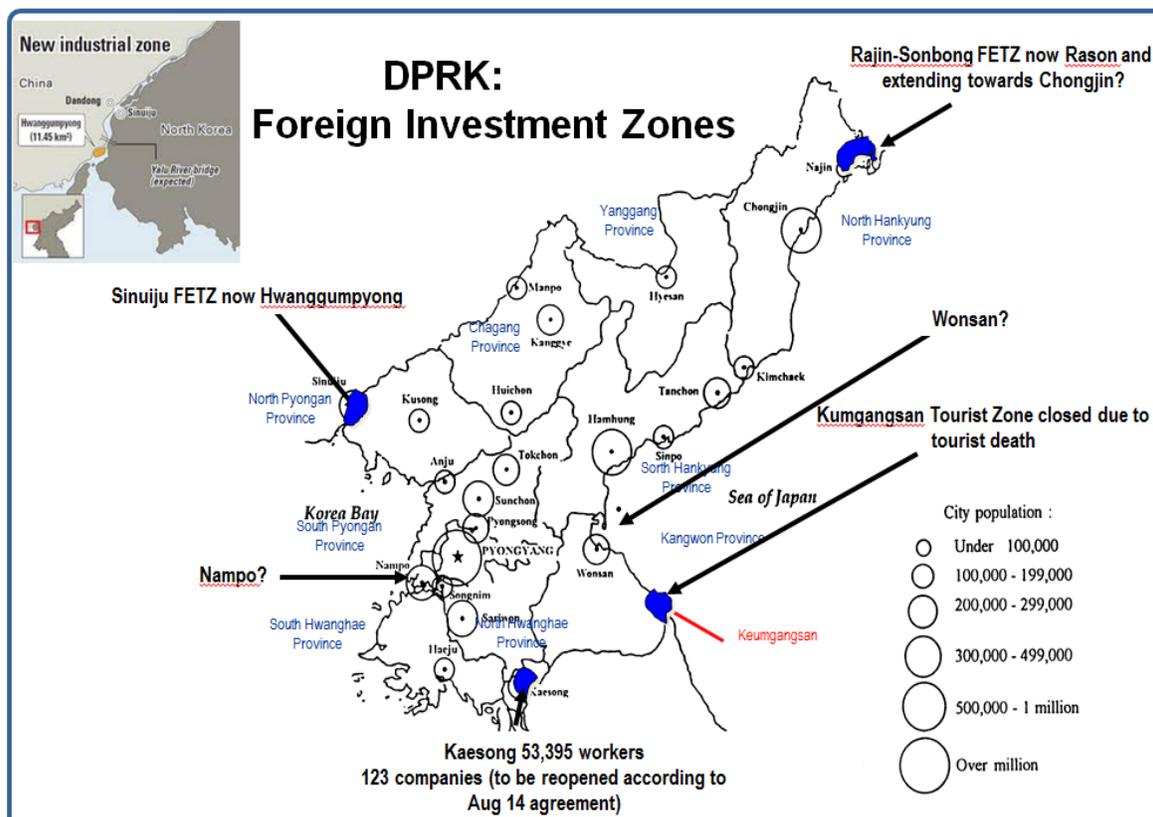


Figure 3. DPRK major cities and free economic zones

Ideally there would not be haphazard development of zones, but a carefully planned integration of national goals and cross-border economic cooperation programs which might be coordinated pending a suitable organization by UN ESCAP.

The experience of each country in the region with respect to industrial estates, and foreign direct investment needs to be pooled to provide the optimum investor friendly conditions. Included in this sharing should be the experience of Kaesong Industrial Complex, now fortunately restarted after its five month suspension.

Indeed the proposals to develop Kaesong need to be incorporated into the perspective of Northeast Asian development. But what I would argue is that the idea of planting industrial estates in barren areas is not really the right way to go. If we take the case of the Republic of Ireland, the energy the host country put into education and support of investors produced a steady deepening of the quality of investment and the sharing of economic benefits between the local population by providing trained support.



Figure 4. North Korean workers in Kaesong Industrial Complex

8. Multilateralizing Kaesong Industrial Estate

In a paper in 2005 Professor Kang Choi of Korea's Institute of Foreign Affairs and National Security (IFANS) touched on a proposal to make Kaesong a multilateral industrial estate which would have Russian and Chinese joint ventures (JVs) which would send goods northwards, not southwards, to their respective countries. While a good idea which seems to have been accepted in the August 14, 2013 agreement, it needs to be replicated throughout the region.

9. Dandong—The Last Frontier

In recent years operating through Dandong became the last way to do free market business with North Korea. After the May 2010 Chonan sanctions were imposed on South Koreans by its government, trading with North Korea via Dandong became more difficult

After the launch of the December 2012 rocket, Chinese customs officials began to crack down on the trans-shipment of luxury goods. From February 2013 even normal cargos had problems. The sanctioning of the Korea Trade Bank in April 2013 by the US meant that even NGOs could not send money to North Korea.

Nevertheless the success of Dandong should be considered as a model for the future of Northeast Asian cross-border economic cooperation in the short term, with other border cities being developed with similar functions. In this respect the development of Sokcho as the entrepôt to the east coast of the DPRK might be an interesting prospect. But none of these developments will get far unless we can develop a more pragmatic sanctions regime.

10. The Disruption of Sanctions on Third Parties—The Need for A Study

I wish to argue that the nature of sanctions imposed by the UN, US, EU place a heavy burden on those communities and natural economic regions bordering on the DPRK. These sanctions patently prevent the natural evolution of cross-border activities, and probably reduce subregional GDP growth by several percentage points, and may cause short-term declines, as in the border areas of Kangwon province in South Korea, after the Kumgangsan tourist area was cut off.

Surprisingly there has been almost no study of the impact of sanctions on third nations since 1997.⁹ Even assessments of the impact of sanctions on affected countries themselves have been poorly conducted and infrequent, perhaps because they bring unpleasant conclusions as to the real impact on the ordinary populations. The best studies of Iraq show that the main effect was on the daily lives and health care of citizens. As a recent study argued: “In contrast to war’s easily observable casualties, the apparently nonviolent consequences of economic intervention seem like an acceptable alternative. However, recent reports suggest that economic sanctions can seriously harm the health of persons who live in targeted nations.”¹⁰ This has been well established and widely accepted in the cases of Iraq in the 1990s and the ongoing US blockade of Cuba. Political scientists John Mueller and Karl Mueller wrote an important paper in *Foreign Affairs*, in which they

⁹ Kimberly Ann Elliott, “Evidence on the Costs and Benefits of Economic Sanctions,” Peterson Institute for International Economics Speech given before the Subcommittee on Trade Committee on Ways and Means, United States House of Representatives (Washington, DC, October 23, 1997).

¹⁰ Tim Beal, “Invisible WMD- the effect of sanctions,” *Pyongyang Report* vol. 9, no. 4 (October 2007) at http://www.vuw.ac.nz/~caplabtb/dprk/pyr9_4.mht; Karine Morin and Steven H. Miles, Position Paper on “The Health Effects of Economic Sanctions and Embargoes: The Role of Health Professionals,” *Annals of Internal Medicine*, vol. 132, no. 2 (January 18, 2000) at <http://www.annals.org/content/132/2/158.abstract>

showed that economic sanctions “may have contributed to more deaths during the post-Cold War era than all weapons of mass destruction throughout history.”¹¹

If we consider the areas affected by the sanctions on the DPRK, the third parties affected, the people living in the border regions are about 30 million people—more than the entire population of the DPRK at about 25 million. The areas affected by sanctions or other related political issues include: 1) in South Korea, Sokcho and the borderlands of east Kangwon-do; 2) in China, the entire border region from Dandong to Honchun; 3) in Russia, the border area of Primorsky and beyond; and 4) in Japan, the impact in Niigata and surrounding areas along the Northwest coast of Japan.

Excluding the impact on North Korea, the impact on the entire region might be (on a back of the envelope basis) US\$90-US\$120 billion in lost annual GDP of which the third parties carry the burden of between 33% and 60%.¹² This may misrepresent the relative impact on those outside and those inside. A recent study by Hyundai Research Institute argued that the cost of the Chonan sanctions alone (prohibition on South Korean entities trading and investing in the North after May 10, 2010) put the direct affect at US\$11.2 billion of which North Korea suffered US\$2.3 billion and South Korean individuals and companies suffered US\$8.9 billion.¹³ In this case, third parties carried 79.4% of the cost of sanctions.

11. The Disruption of Sanctions and the Need for a Fairer Sanctions Regime Development in the Future

I would argue that we need a new kind of sanction regime—assuming that the North is not in a hurry to give up its nuclear weapons for reasons of security—the so-called Libya argument. Sanctions need to be more closely defined and exemptions provided on the basis

¹¹ John Mueller and Karl Mueller, “Sanctions of Mass Destruction,” *Foreign Affairs* vol. 78, no. 3 (May/June 1999).

¹² This calculation is made on the following unsatisfactory basis: The GDP of the DPRK is estimated as US\$30 billion (by the Bank of Korea), and would under non-sanction conditions be at least three times as big, see <http://www.nkeconwatch.com/category/statistics/gdp-statistics/>. This assumes present policies in the DPRK and not a full liberalization. The 30 million inhabitants around the border region lose between US\$1000 and US\$2000 per capita in annual GDP, obviously with a huge variation between those centrally affected and those peripherally. Much more structured analysis is required before any assignable weight can be placed on the number used. For further discussion please contact the author.

¹³ See http://www.hani.co.kr/arti/english_edition/e_northkorea/611786.html

that the current regime not only fails to stop nuclear ambitions but also damages the livelihood and human rights of 55 million people (and peripheral rights of perhaps 200 million more) accepting that the last thing that DPRK would give up is its security, and the last people to suffer from a ban on luxury goods would be the top 50-100 decision makers. The US Treasury's approach as revealed in Juan Zarate's newly published, *Treasury's War: The Unleashing of a New Era of Financial Warfare*, is the very opposite as treasury officials had stated since at least 2009.¹⁴

As the Security Council of the UN is responsible for sanctions along with US Treasury and EU, where bilateral sanctions have multilateral consequences there is a need for a UN ombudsman's office which can receive complaints from those affected, and grant exemptions, and take legal action against unilateral sanctions imposed by single countries where these sanctions are not very precisely defined. The ability to grant sanction exemptions from a single body would be extremely valuable, since although the US Treasury has an admirable flexibility on some aspects of sanctions under the older Control of Foreign Assets measures, the EU apparently can make blanket sanctions but does not have an EU wide transparent exemption process.¹⁵

12. . Sanction Exempt Cross-Border Economic Cooperation

We also need to develop 'sanction exempt' projects perhaps with multilateral guarantee, exempting specific cross-border economic cooperation. This has been suggested by a number of South Korea writers in recent times:

“Thus, a feasible institutional instrument for the amelioration of the regional instability caused by North Korea's economic problems and nuclear standoff would be the establishment of a multilateral framework that would involve bilateral donors and international financial institutions. The setting up of special Trust Funds is a possible option for resource mobilization for and aid coordination in providing development assistance to North Korea. Given the potential benefits

¹⁴ Juan Zarate, *Treasury's War: The Unleashing of a New Era of Financial Warfare* (New York, NY: Public Affairs, 2003). This goal was announced in 2009 at an Asia Society dialogue by Daniel Glazier, see <http://asiasociety.org/policy/strategic-challenges/us-asia/sanctions-north-korean-context>

¹⁵ The hunt for an exemption mechanism continues with the help of various EU representatives.

of such a mechanism, creating multi-donor Trust Funds (MDTFs) for North Korea as denuclearization in the Korean Peninsula progresses could help strengthen relations between Pyongyang and the international donor community.”¹⁶

13. Conclusion: A Cross-Border Economic Cooperation Wish List for 2014

A cross border wish list which would lead to greatly increased cross border economic relations would include:

- Sanction exemption for specific projects
- A dedicated funding mechanism
- A network of local banks that facilitate day to day cross-border transactions
- Transit corridors through the DPRK
- A coordination of bilateral schemes—perhaps through UN ESCAP
- A local multilateral stock exchange (like Calgary used to be)
- Creation of dynamic hubs around the region (think Dubai)
- Freedom of movement (visas and settlement—Singapore rules)
- Support for local institutions from Air Vladivostok to Emirates
- Venture parks and educational institutes (Irish model)

¹⁶ Joung-woo Lee and Hyoungsoo Zhang (KIEP 2012); see also Kang Choi of IFANS, “An Approach toward Multilateral Security Cooperation in Northeast Asia” (Atlanta, 2005).

Challenges to a Northeast Asia Regional Logistics System

Satoshi Inoue

Global trade, in particular maritime trade, has grown tremendously as the world economy has globalized. Over the last thirty years since 1980, the world sea-borne cargo increased by as much as 2.3 times in total. As shown in Figure 1, it grew from 3.7 billion tons in 1980 to 8.4 billion tons in 2010. This closely parallels world GDP growth during the same period. Furthermore, when looking into containerized cargo, the world volume shows an even more striking growth. It increased by as much as fourteen times. It grew from 37 million TEU in 1980 to 503 million TEU in 2010. Today, most if not all industrial goods, finished and intermediate, and agricultural products are transported in containers around the world.

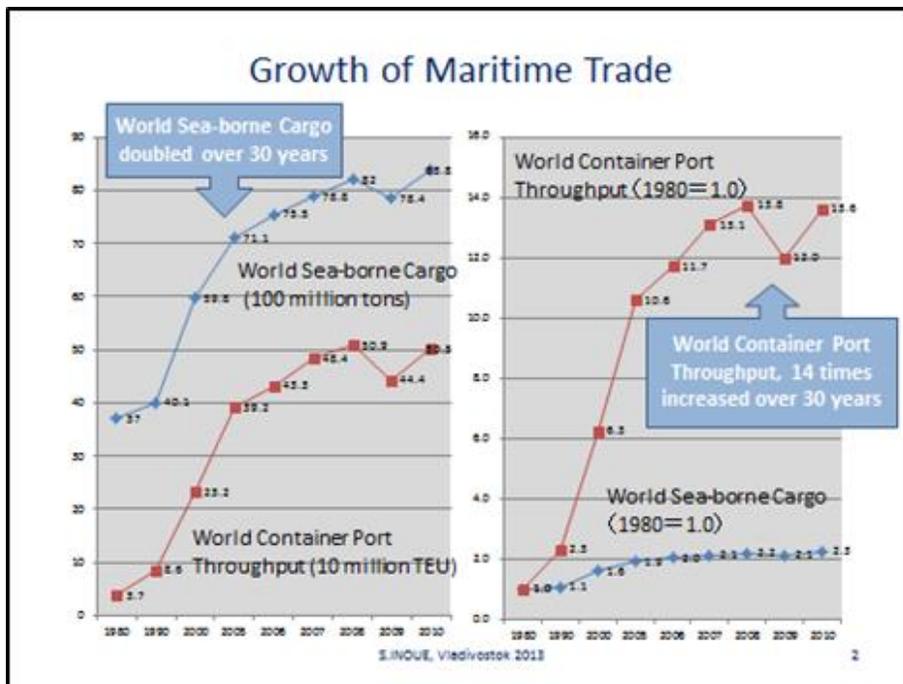


Figure 1. Growth of maritime trade

To cope with such a tremendous growth in maritime trade, the ports of the world have been busy expanding their terminal facilities and introducing innovative technologies in operations. As maritime carriers have deployed ever increasing sizes of ships for the economy of scale, ports have been busy deepening their access channels and expanding berthing facilities to accommodate them safely. Without the continuous hard work of ports, the globalization of the world economy, as it is today, would not have materialized.

Having said that, we tend to focus too much on the growth of global trade. We should not overlook the structural changes taking place behind such tremendous growth. It is East Asia that has been the engine of this global growth. According to the 2013 Maritime Report of the Japanese Ministry of Land, Infrastructure, Transport, and Tourism (which defines East Asia as Japan, Korea, China, Russia, Philippines, Vietnam, Cambodia, Singapore, Malaysia, Thailand, and Indonesia), container traffic in 2011 between North America and Europe was only 6.2 million TEU or 3.8% of the world total, while traffic between North America and East Asia and Europe and East Asia was 21.4 million TEU (13.1%) and 20.0 million TEU (12.1%) respectively (see Figure 2). More importantly, intra-East Asia container traffic was 52.7 million TEU, which is 32% of the world total and is far more than all other trade among the three large economies. As a result, East Asia accounted for 58% of the world container volume in 2011.

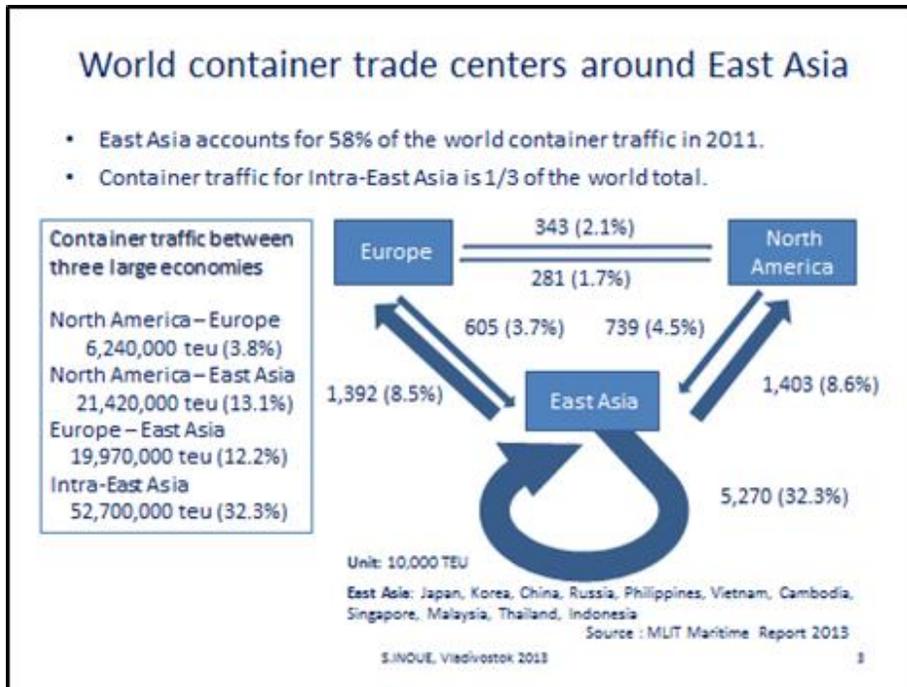


Figure 2. World container trade centers around East Asia

Now let us discuss maritime container trade of Japan. Figure 3 shows the major partners of Japan's container trade in 2011, which was 17.5 million TEU in total. Mainland China alone took 6.6 million TEU accounting for 38% of the total, while Korea took 2.7 million TEU for 15%. With a total of 12.0 million TEU, the combined share of Northeast Asia is as high as 68.9%. If you further add Southeast and South Asia to East Asia, it goes up to 14.4 million TEU and 82.6%. In contrast, the US is 1.5 million TEU and 8.8%, and EU countries 0.7 million TEU and 4.3%. As you can see, Japan's container trade is now dominated by the neighboring countries of Northeast Asia. Therefore it is critical for Japan that an efficient and seamless regional logistics system is developed for Northeast Asia.

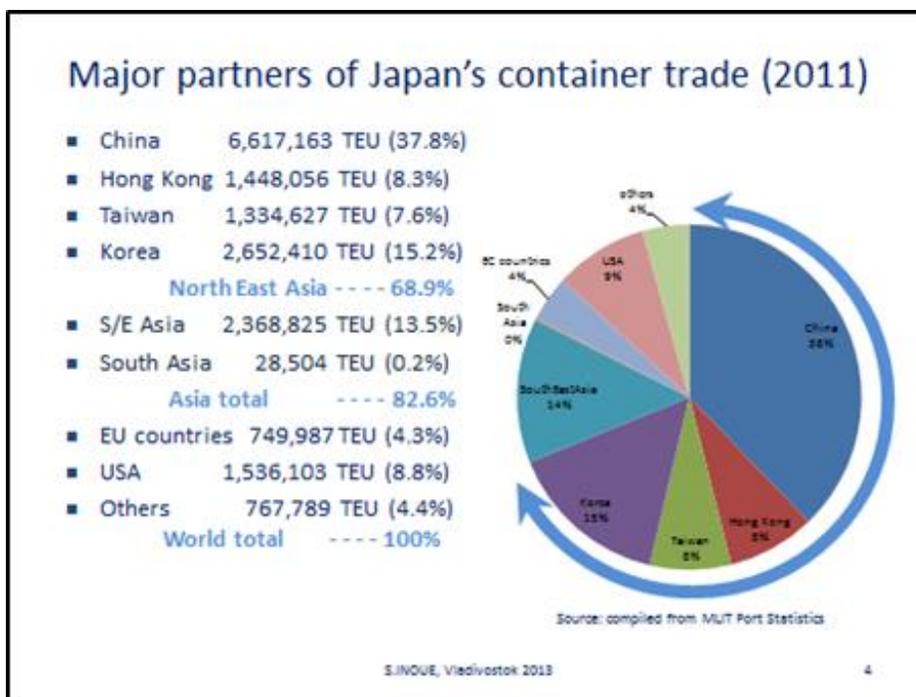


Figure 3. Japan's major partners in container trade

To facilitate this huge volume of containerized trade with China and Korea, extensive networks of container shipping services connecting Japan with these two countries have been developed. As shown in Figure 4, shipping trade with China involves 100 loops per week and 40 ports in Japan. The number of loops more than doubled, from 39 per week in 1992 to 95 in 2011, but somewhat stabilized over the recent ten years. Similarly the number of ports called in Japan also increased from 7 in 1992 to 39 in 2011 with stabilization over the last ten years. Trade with Korea involves 60 loops per week and about 60 ports in Japan. The number of loops doubled, from 31 per week in 1992 to 66 in 2011, but stabilized over the last ten years. The number of ports called in Japan also increased, from 17 in 1992 to 54 in 2011 and stabilized over the last ten years. This reveals that over the last twenty years China shipping service has seen more of an increase in loops per week than in ports of call. Inversely, Korea service shows more of an increase in ports of call than in loops per week. In other words, at present, more extensive loops are in service for China involving a smaller number of ports of call as compared with for Korea.

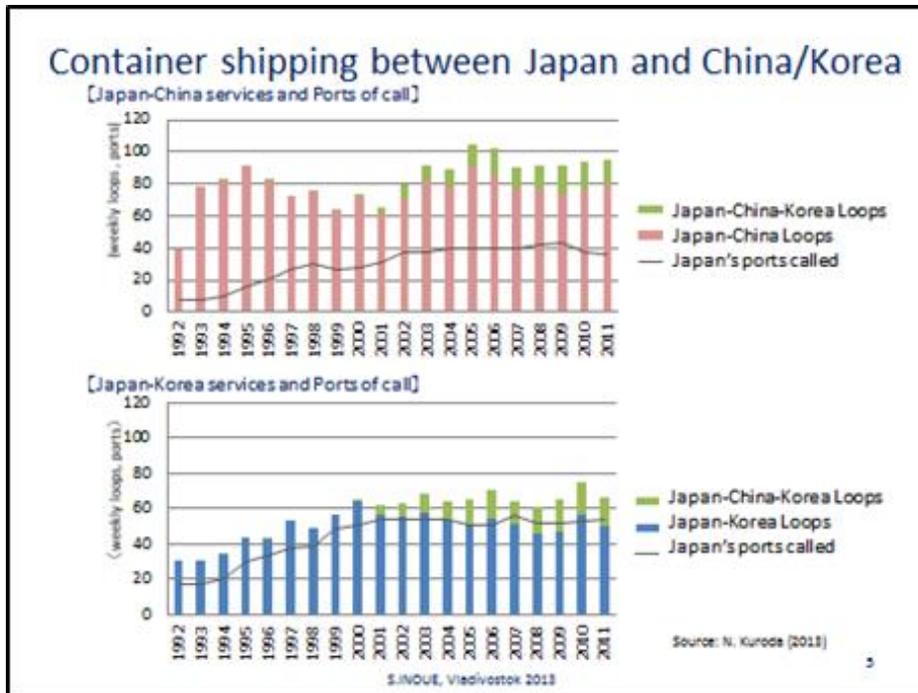


Figure 4. Container shipping between Japan and China/Korea

The map in Figure 5 shows ports called in Japan for China service, while a map on the right shows ports called for Korea service. The size and color of circles on to those ports indicates frequency of calls per week. For instance, the largest red circle indicates that more than 15 calls per week are made to a port. As Figure 5 clearly shows, Korean service involves more ports scattered around the country, especially along the Sea of Japan coast area and western parts of Japan. China service on the other hand, concentrates on the large metropolitan areas of Tokyo Bay, Ise Bay, Osaka Bay, and Northern Kyushu Island. Along the Japan Sea coast, only three ports, Niigata, Toyama, and Kanazawa, are called at a frequency of more than four times a week.

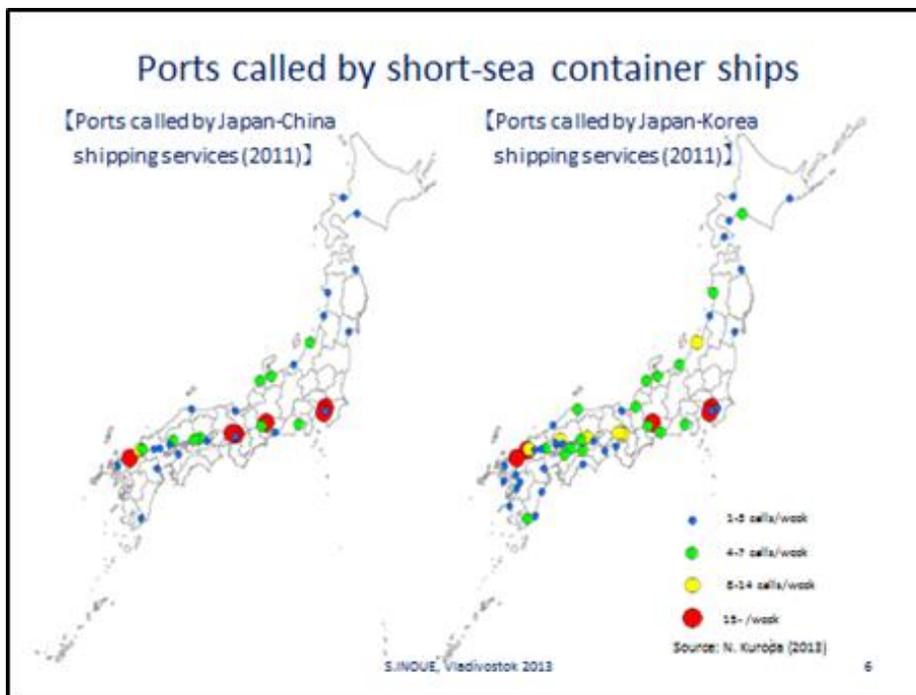


Figure 5. Ports called by short-sea container ships

Now let us look at the container ships plying the China and Korea service routes. Figure 6 shows trends in average ship profiles such as speed, carrying capacity, and age over the last twenty years. The red line indicates ships in use for China service and blue line for Korea service. There are clear differences in terms of average speed, carrying capacity, and age of container ships deployed for the respective trade routes. Ships for China service are generally faster, bigger in terms of capacity, and younger (newer). Over twenty years, China service ships increased in average speed from 14 knots in 1992 to nearly 18 knots in 2010, while Korea service ships also increased from 13 knots in 1992 to 17 knots in 2010. As far as average speed is concerned, the gap between two services is narrowing. The average carrying capacity for China service increased by more than double from 340 TEU in 1992 to 820 TEU in 2010. The carrying capacity for Korea service increased by more than three times from 200 TEU in 1992 to 660 TEU in 2010. Although the gap between the two services is smaller, the capacity for China service is still 25% larger than for Korea. The average age of ships for China service decreased significantly from 13 years old in 1992 to 10 years old in 2010; that for Korea service also decreased

but less (by only one year). Unlike speed and carrying capacity, the difference in ship age between the two services has widened over the last twenty years.

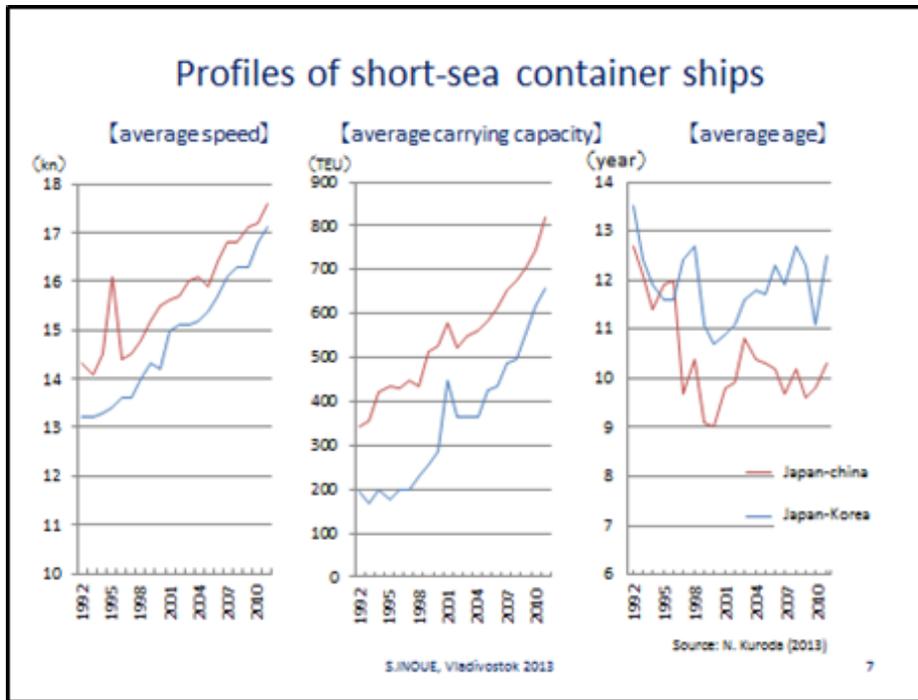


Figure 6. Profiles of short-sea container ships

Today, the logistics system for Northeast Asia relies heavily on short-sea container shipping and Roll-on Roll-off (RORO) ferry networks. To enhance the port-to-port connectivity in Northeast Asia, we have to tackle a number of issues through collaboration among the governments and private sectors of this region. To increase port entry and terminal use efficiency, we need to develop a regional port information system, or at least make the respective countries' systems compatible so that users can enjoy the system as if they were integrated into a single regional system. Furthermore, to facilitate speedy customs clearance, it is critical to develop a harmonized processing system for the entire region. At the same time, an Authorized Economic Operator (AEO) system for supply-chain security should be mutually recognized throughout this region. The governments of Japan and Korea already implemented this 2011.

Utilization of RORO or ferry services is yet to be developed for this region. One such RORO service runs between Hakata, Japan and Shanghai, China. This service, called

Shanghai Super Express, sails for twenty-eight hours and twice a week so that cargos loaded in Shanghai on Monday can be delivered to Tokyo on Thursday through Hakata. This is faster than directly shipped to Tokyo by container ship, and far cheaper than air freight. However, as trucks and chassis of a country are not yet allowed to go into another country of this region, you have to change trucks and chassis at port terminals of both ends when boarding on and off the RORO vessel. This is a huge hindrance not only for the Shanghai Super Express but also for the regional logistics system as a whole in terms of both time and cost. This must be resolved as soon as possible.

The use of radio frequency identification (RFID) will also be useful in improving East Asia container/RORO services. Towards this goal, in March this year, one epoch-making project started through an agreement between the Japan and Korea governments. Auto-manufacturer, Nissan, started to import car parts from Busan, Korea to its assembly factory in northern Kyushu, Japan through an existing ferry system. This chassis carries two country number plates. Chassis are mutually authorized so that they can drive into both countries without any problem. As you can see, car parts are imported without heavy packing usually required for export in container, and it looks as if they were transported from one town to another in Japan. By doing so, Nissan reduced the total lead time from seven days to four days, and also costs involved because there is no need for double handling at port terminals and export packing. As mentioned earlier, as both the government of Japan and that of Korea mutually recognize AEO systems, the speed of customs clearance is also increased thereby further helping to shorten the total lead time.

There is no doubt of the critical importance in developing an enhanced regional logistics system for Northeast Asia. I hope all the stakeholders of the region will work together to make the regional logistics system much more efficient, easier to use, more resilient to risks, and more environmentally friendly.

Port Cooperation in the Northeast Asia

Dong-Keun Ryoo

1. Introduction

In recent years, the market power of large shipping companies is intensifying amidst the emergence of mega-carriers through coalition and mergers between shipping companies. Due to globalization and liberalization of shipping and ports industries, container terminal operators are making every effort to raise port competitiveness through building a collaborative system between ports. As the center of world economy is migrating to the Northeast Asian region thanks to the high-growth of Chinese economy, the shipping service pattern of major large shipping companies is changing and competition of neighbor ports is deepening due to aggressive port development. With the intensified competition between terminal operating companies, the world-class terminal operators are forming collaborative relations and horizontal integration through strategic alliances and mergers and acquisitions (M&A) between major terminals. On the other hand, in order to promote vertical integration, terminal operators are establishing strategic alliances with inland and railway transport operators. With the changes of shipping and port environment at home and abroad, port authorities have commenced a new management strategy pertaining to port development and operations, such as port cooperation. This chapter examines the concept of port cooperation and some cases of port cooperation in the world; it is intended to present policy implication for port cooperation in Northeast Asia.

2. Concept of Port Cooperation

Port cooperation, which is formed in order to secure competitiveness by sharing common resources, is a strategic tools for port authorities to augment bilateral interest. The maximization of economic benefits by eliminating inefficiency in port activities from both parties is the key intention of port cooperation. Ryoo *et al.* (2009) point out the ultimate

goals of cooperation in port operations are to increase profits through sales enhancement for port operators and to acquire economies of scale for port authorities.

Port cooperation can be classified into three groups, namely institutional, industrial, and commercial. The first type, institutional cooperation occurs with common interests which create dedicated regional institutions. Substantial port development activities may result from this type of institutional cooperation. For example, the Association of South East Asia Nations (ASEAN) has been working toward development of the port sector in ASEAN member countries based on a “Roadmap towards an Integrated and Competitive Maritime Transport System.”

Under industrial types of cooperation, exchange of ideas and information among cooperative parties such as port authorities, port operators, and port related firms is developed on an industrial basis. For this type of cooperation, there are three different groups of associations: international associations (e.g., the International Association of Ports and Harbors—IAPH), regional associations (e.g., ASEAN Port Association—APA), and technical associations (e.g., International Association of Cities and Ports—IACP). The third type, commercial cooperation, is inspired by profit and commercial benefits and this type of cooperation has been formalized in contracts based on business law. Concessions may also be made in bilateral agreements especially between a port authority or terminal operator and shipping line companies.

With the globalization in trade and transport, ports are vital links in international transport chain. The global alliances and cooperation among the various players of the maritime industry are the evidence of the development of the integration amongst suppliers of logistics services. From the logistics and supply chain point of view, alliances have become one of the most important business strategies.

Integration and cooperation in the maritime industry can involve a wide range of businesses, different levels, and separate activities. Horizontal alliances can be formed between shipping companies, terminal operating companies, logistics providers, hinterland transport companies, and between other inland carriers. Alliances are formed through mergers or agreements. Vertical integration and alliances are increasing year by year; these occur within the different players of the maritime industry through ownership or leasing. Shipping companies have continued to work towards controlling port operations

themselves as terminal operators or by engaging in joint activities with terminal operating companies.

This form of port cooperation can be classified into formal and informal port cooperation. Formal port cooperation has a strong impact on the institutional structure of the port authorities concerned. Examples include the creation of joint-ventures, equity swaps (port authorities give a minority shareholding to each other), mergers, acquisitions, or take overs, the setting up of a joint holding company to invest in the hinterland or in overseas ports, etc. There are also more informal forms of coordination, for example, sister port schemes and information exchanges—these do not require any real change in the institutional structure of the port authorities concerned.

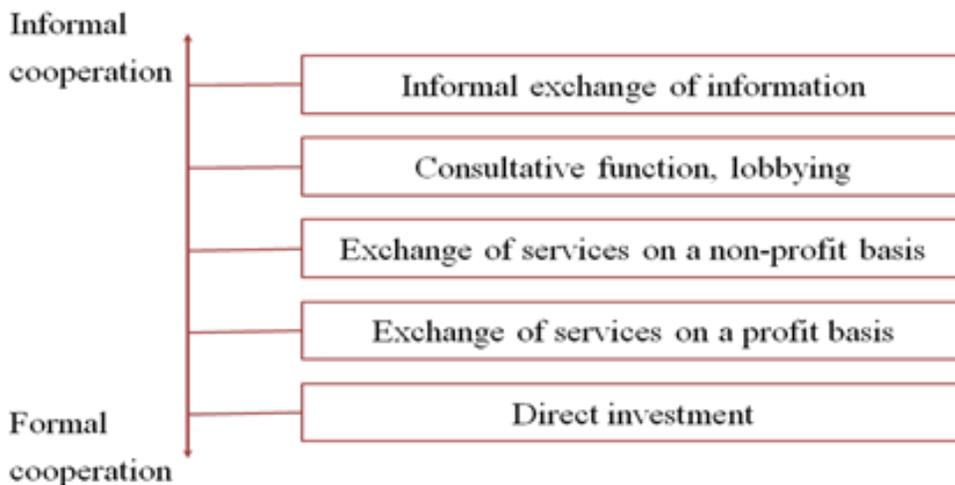


Figure 1. Formal cooperation vs. informal cooperation

Source: UNCTAD, 1996.

After analyzing the annual reports of the port authorities which contains information on the extent of cooperation between ports, Langen and Nijdam (2009) classified the cooperation for all port authorities into three categories:

- Strategic cooperation within neighboring port authorities with joint investments, joint holdings, or joint acquisitions
- Cooperation within neighboring port authorities without reaching the strategic level
- No form of cooperation within neighboring ports or port authorities

Table 1. Some Form of Cooperation by Port Authorities

Port	Description
Port of New York and New Jersey (US)	Cooperates with inland port of Albany to provide good multimodal links
Port of Baton Rouge (Louisiana, US)	Has initiated container barge services with other Lower Mississippi ports and Memphis
Port of New Orleans (Louisiana, US)	Cooperation with other Lower Mississippi ports, e.g. in marketing. Not very strategic (yet)
Shanghai (China)	Cooperation with other ports in Yangtze delta.
Rotterdam (Netherlands)	Stake in port development company for Zeeland Seaports.
Amsterdam (Netherlands)	Cooperation between North Sea canal ports (Amsterdam, Zaandam, Beverwijk en IJmuiden), Joint master plan for port development.
Ports of Stockholm (Sweden)	Stockholm, Sodertalje and Malarhamnar cooperate and develop a joint strategy

Source: Langen and Nijdam, 2009.

Hwang and Chaing (2010) also point out that cooperation between adjacent container ports has emerged due to an increasingly competitive environment and enhancement of the overall competitiveness of ports in a region.

3. Cases of Port Cooperation

In 2005, the port and airport logistics authority of Kitakyushu City, Japan and The Transportation Committee of Tianjin City, China, concluded a ‘Logistics Partner Port Agreement,’ which promotes revitalization of passenger traffic and ports and airport logistics between the two cities. The agreement facilitated collaboration in the following areas: container route, container shuttle route, new installation of Roll-on Roll-off (RORO) facilities, an express route, and creation of an automobile logistics system between the two ports.

Hong Kong Port and Shenzhen Port, in China have set up collaborative relations through a joint venture. Through the collaborative strategy of the two ports, they were able to connect the hinterland of Shenzhen port to Hong Kong port.

The Port of Tauranga, New Zealand and Brisbane port in Australia concluded an agreement to ensure the competitive edge of these ports and the establishment of an efficient network. The agreement was concluded as part of a port unification strategy that includes sharing of port technology, marketing, trading information, and expertise.

In 2000, the Ports of Hamburg and Bremen in Germany commenced joint operation through private companies for the purpose of raising port efficiency and competitiveness, as well as service expansion. For this, Euroka, the operator of the port of Hamburg and BLG (Berman Lagerhaus Gasellschaft), the operator of the port of Bremen established a new Eurogate and has become the best terminal operator in Europe through sharing core competence and technological know-how.

Antwerp Port and Zeebrugge Port in Belgium mutually agreed to jointly process container cargo in a specific region. This agreement promoted the establishment of an economic collaboration organization.

Copenhagen Malmö Port was consolidated in early 2000. The Departments of Transportation of the two countries permitted the establishment of Copenhagen Malmö Port (CMP)—a merged enterprise between Denmark and Sweden and it was officially launched on January 1st, 2001.

In 2006 Zhejiang Ningbo Port and Taizhou Port (both in China) established the Ningbo-Zhoushan Container Terminal Limited Co. for consolidated operation. The consolidation of the two ports can be interpreted as an effort to raise port competitiveness in conformity with the logistics capability of Shanghai Port (which includes Yangshan Deep Water Port).

The Port of Rotterdam, in the Netherlands, concluded a strategic alliance for joint development of the region of Flushing (Vlissingen) Port. In 1996, the French ports of Le Harve and Rouen directly and indirectly collaborated in integration and port activities, such as construction, technology and economic research, logistics, hinterland shipping, EDI (electronic data interchange) and ferry services.

Table 2. Examples of Port Cooperation

Port	Goals	Fields of Collaboration
Tauranga/Brisbane	Build network Raise port competitiveness	Port technology & marketing Information processing systems
Hamburg/Bremen	Raise competitive edge and efficiency Service expansion	Joint cargo handling
Antwerp/Zeebrugge	Promote economic cooperation	Joint cargo handling
Rotterdam/Flushing	Pursue economic profit	Port sector joint development
Le Harve/Rouen	Raise port efficiency	Port technology and EDI Hinterland transport connection and pilotage
Ningbo/Zhoushan	Offer integrated services	Joint port processing Sharing terminal resources
Vancouver/Fraser	Offer integrated service Raise competitive edge	Joint port operation Sharing terminal resource
Hong Kong/ Shenzhen	Build network Secure competitive edge	Sharing new technology & know-how Sharing terminal resources

Source: Sim, G. S., et. al. (2006)

4. Conclusion

Northeast Asia has emerged as one of the three most important trade zones along with the EU and NAFTA. Over the last decade, seaborne trades in this economic region have grown rapidly due to economic development in Korea, China, and Japan and also the increase in the international trade of these countries. However, dramatic changes surrounding container ports, such as the advent of large size containerships and the hub-and-spoke concept has led to keen competition among the ports in Northeast Asia.

Ports have responded with a proactive attitude towards cooperation to benefit from the new trade and transport environment. This cooperation is not restricted to a region but extends worldwide. Port cooperation in Northeast Asia can strengthen regional connectivity and could yield the following benefits: first, port cooperation can enhance smoothness of operations within the transport chain in Northeast Asia. Second, cooperation allows sharing resources and costs, and reduces uncertainty and risks. Third, cooperation can improve relationship between the parties involved and help obtain first-hand information at low cost. Fourth, cooperation between ports encourages self-regulatory behavior by port professionals. Finally, cooperation can diminish the negative impact of competition. Therefore, ports in Northeast Asia need to cooperate in order to achieve the development of and overcome the challenges in a global transport chain.

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Japan's Sustainable Electric Future

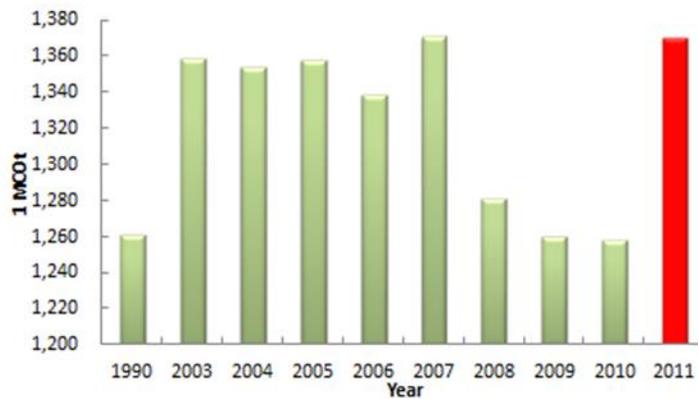
Yoshiki Inuma

Japanese electric utilities have confronted enormous challenges since the Great Earthquake of 2011. The nature of these challenges is short, middle and long-term; and even very long-term. Some of these challenges are unique to us while many of these challenges are common in Northeast Asia.

In the short-term, we face problems associated with the Fukushima Nuclear Accidents. The consequences of the accidents were formidable, including an estimated cost of US\$100 billion for decontamination. It is said that it will take at least forty years to decommission those damaged plants. As a result of the accidents, as of August 2013 there were only two nuclear plants in operation in Japan. In September 2013, however, those two units were shut down for inspection, leaving Japan with no nuclear power plants in operation. There are fifty nuclear power plants in Japan.

The loss of nuclear power resulted in several consequences including a sudden increase in CO₂ emissions in 2011. As shown in Figure 1, greenhouse gases (GHG) increased suddenly in 2011. Japan is supposed to decrease emissions by 6% in comparison with levels of GHG in 1990. The electric utilities account for about 40% of total GHG. To compensate for the loss of nuclear power generation, utilities have increased the use of thermal power generation, in particular LNG-fired power generation.

GHG in Japan



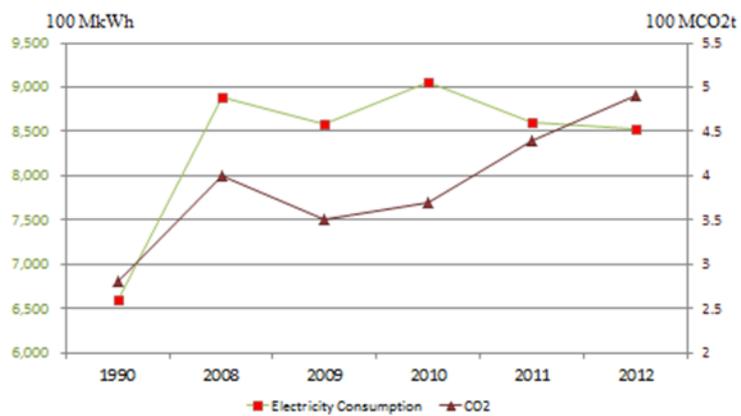
Source: Ministry of Environment

2

Figure 1. GHG in Japan

The vertical axes on the left and green line in Figure 2 show electric consumption from 1990 to 2012. While the level of electric consumption does not change, CO₂ emissions increased by 30% in 2011 when the earthquake struck Japan compared to the level of 2010.

CO₂ Emission by the Electric Power Sector



Source: FEPC

3

Figure 2. Electric power sector CO₂ emissions

Historically, since the first oil crisis of 1973, Japan has made efforts to diversify fuel sources as it is poorly endowed with natural resources. As a result, Japan succeeded in reducing dependence on fossil fuels, and particularly oil. However, March 2011 suddenly changed the whole picture of Japan's energy generation mix. As of 2011, thermal power generation using fossil fuels has accounted for 81%. Among others, an increase in LNG use is significant.

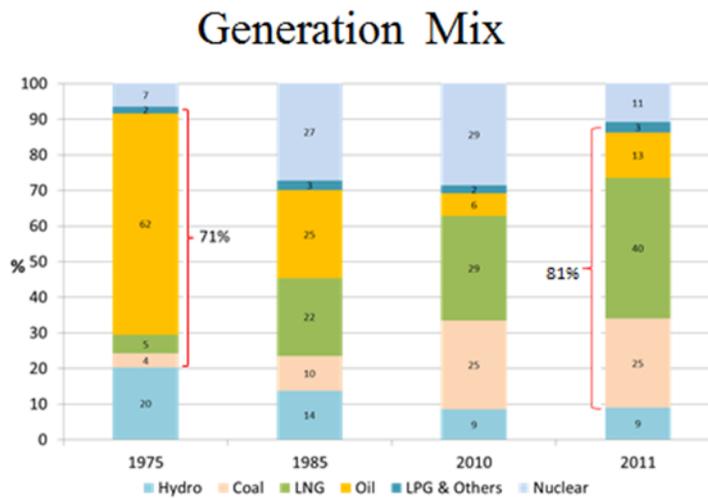
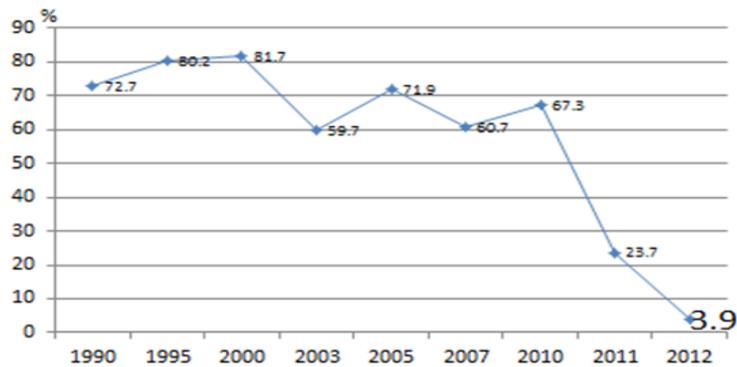


Figure 3. Generation mix

As shown in Figure 4, the capacity for nuclear power plants plummeted. It was only 3.9% in 2012. This is to be expected given that only two plant out of fifty were in operation.

Nuclear Capacity Factor



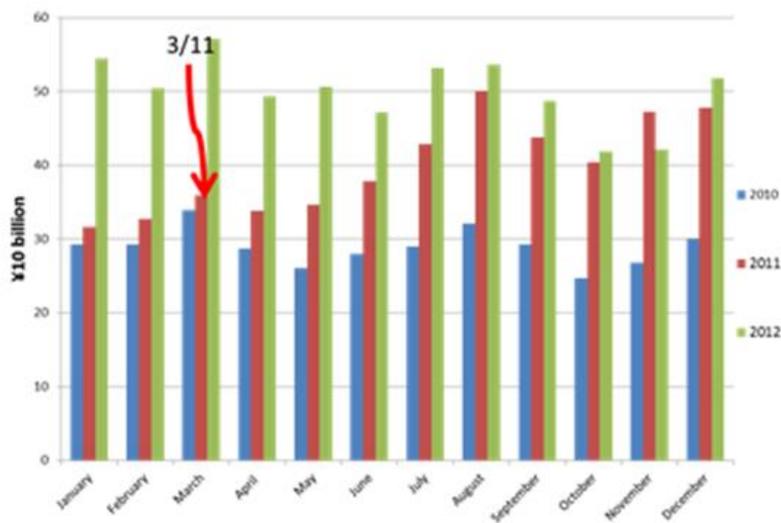
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Figure 4. Nuclear capacity

Soon after March 2011 the cost of LNG imports rose from 3.5 trillion yen (US\$35 billion) in 2010 to 6.0 trillion yen (US\$60 billion) in 2012, as shown in Figure 5.

LNG Import

\3.5 trillion (2010) → ¥6.0 trillion(2012)



6

Figure 5. LNG imports

One reason why utilities are so expensive is because the import price of LNG is simply very high. Figure 6 shows that the price of LNG in Japan is more than US\$16/MMBTU. Meanwhile, the Henry Hub gas price was approximately US\$3 in 2012. The LNG price for Japan is pegged to the price of crude oil which has been very high over the years.

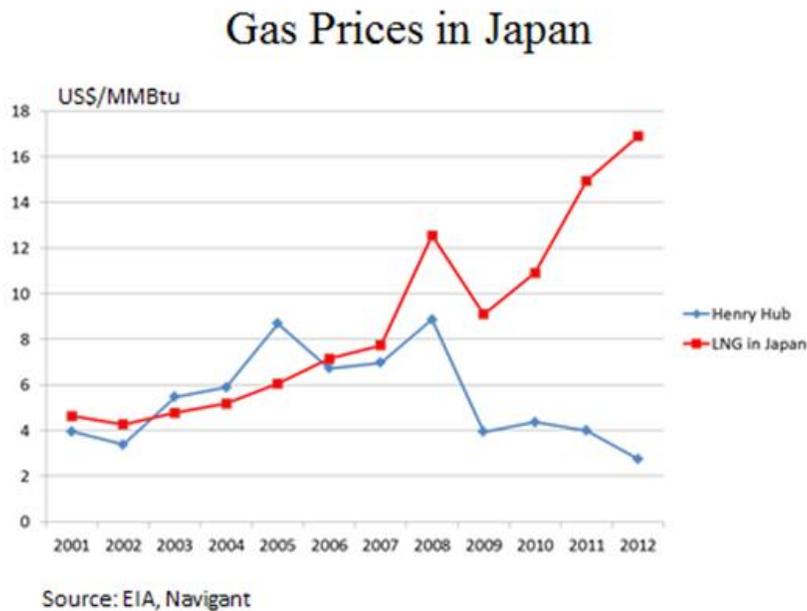


Figure 6. Gas prices in Japan

Japanese utilities are trying to purchase cheaper gas. However, even if the gas price is cheap, Japan still needs to pay for the transport and liquefying of natural gas. According to some estimates, the cost of transport and liquefying natural gas will be US\$6 per MMBTU. Therefore, if the gas price itself is US\$3 per MMBTU, the total price will actually be US\$9 per MMBTU.

Although gas is a relatively clean energy source, it is a fossil fuel and thus does emit CO₂, as shown in Figure 7.

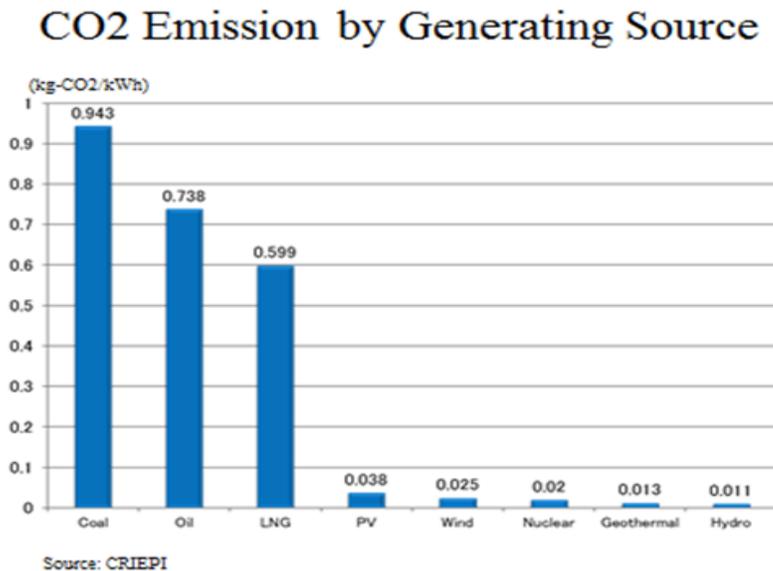


Figure 7. CO2 emissions by generation source

Under such a chaotic situation, the government of Japan is now planning to restructure the electric utility industry. Currently, Japan has nine regional electric power companies and the Okinawa electric power company. In addition, there are wholesale companies like JPower and Japan Atomic Power Company. Each regional electric power company is vertically integrated. The Japanese electricity transmission system is unique because it is divided into two hertz regions. One runs at 60Hz (US) and the other at 50Hz (Europe)—this reflects the import (historically) of US-made generators for the Western Japan or German made generators for Eastern Japan. The configuration of the power system is comb-like in contrast to the mesh-style system in the EU or the US as shown in Figures 8 and 9.

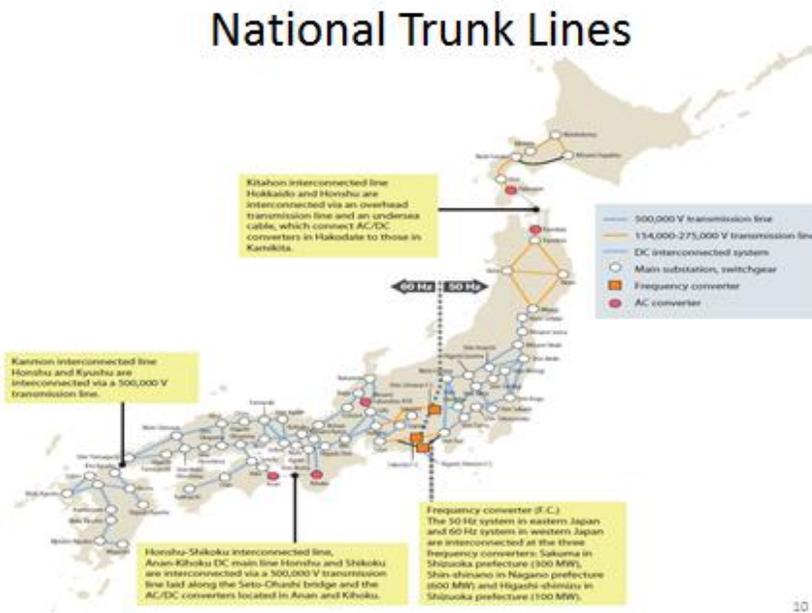


Figure 8. National trunk lines of Japan

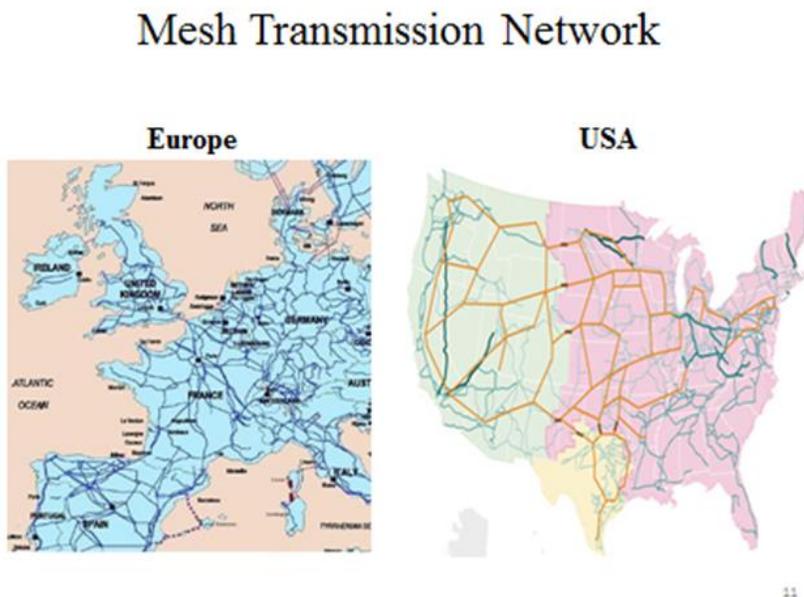


Figure 9. Mesh transmission networks: Europe and US

There are only a few players involved in Japan's electricity supply, and the regional electric power companies are the dominant players. These power companies own the

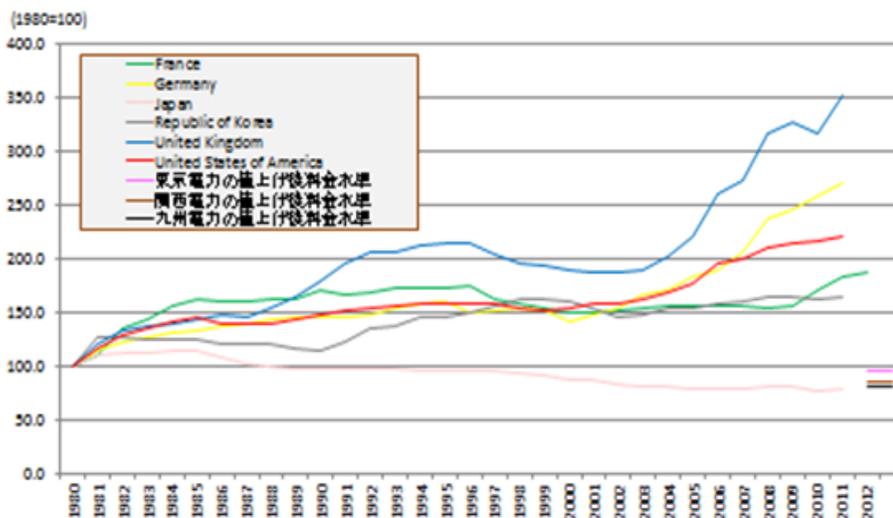
system from generation to distribution. There are some non-utilities but their share is negligible. The power system was built on the premise that autonomous power systems were better though each system is connected through transmission lines for emergency and somewhat for economic interchange. It can be said, therefore, that interregional transmission capability was limited and this became even more obvious in light of the March 2011 disaster.

Electricity restructuring in Japan was ‘evolutionary.’ Japan’s approach was not of a big-bang type. Japan introduced competition in the 1990s and continued deregulating the electric power sector step by step since then.

Since the great earthquake of March 2011, Japan has embarked on a more concerted reform of the electricity supply system. There are three phases of the reform. First, Japan intends to establish a wide-area system operator. Second, Japan will be liberalizing the retail market in order to allow retail choice. Third, Japan probably will be required to unbundle its contentious vertically integrated system.

Regarding retail competition, Japan has attempted to gradually open up the market since 2000. Soon, small customers will be able to choose a retail supplier—the target for this is 2016. However, it remains to be seen what will happen with regard to the level of electricity rates for households. The introduction of competition does not necessarily lower electricity rates, as experienced in liberalized overseas markets (see Figure 10).

Electricity Rates for Household (1980=100)



17

Figure 10. Household electricity rates

There are two potential directions in the future of Japan's electricity system. The first is the smart grid system, which uses distributed and efficient technologies on both the supply and demand sides. The so-called smart power system is a system that can integrate a large amount of renewable energies, energy saving efforts, and improve the efficiency and reliability of the power system (see Figure 11).

Smart Power System

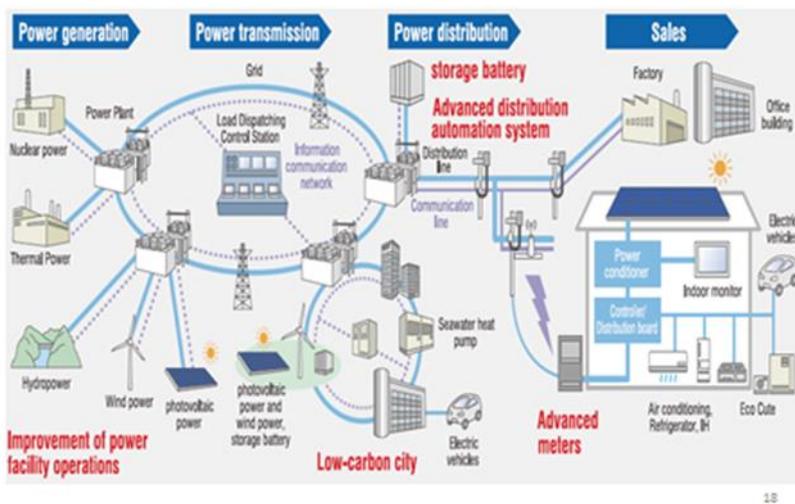


Figure 11. Smart power system

Another potential direction, as shown in Figure 12, involves creating a cross-border grid in Asia connecting the entire Asian region through a super grid.

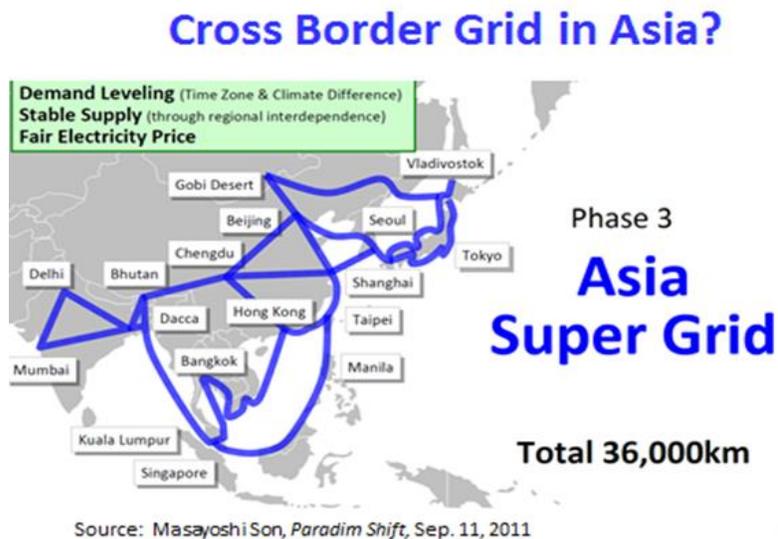


Figure 12. Cross-border grid in Asia

If this vision is realized, economic and political relations in Northeast Asia might be quite different from the existing ones and more similar to the relationship between Germany and France in the European Union. However, the operation of this kind of complicated system by multilateral power system operators is technically arduous. If we are to choose from two options—either centralized or decentralized—for the future of our system, I would choose the decentralized system represented by distributed energies.

A Note on Power Grid Interconnection in Northeast Asia

Mitsuho Uchida

Junichiro Koizumi, a former prime minister of Japan, strongly suggests that Japan should move away from nuclear power generation. He also says, “Most business leaders say it is irresponsible to call for zero nuclear plants, but it is even more irresponsible to promote nuclear power without any prospect of constructing disposal sites for nuclear waste.” Shinzo Abe, prime minister of Japan, brushes aside the suggestion by Koizumi by saying that Japan is losing nearly 4 trillion yen (\$41 billion) in national wealth a year, because of additional fuel costs for thermal plants. This is true, because Japanese electric utilities have been compelled to purchase natural gas from overseas to fuel power stations at higher costs than usual. Abe also says that Japan, as an island country, cannot import electric power from foreign countries. At this moment his comment is correct, because Japan does not have transmission lines either between Japan and Korea or between Japan and China.

The Northeast Asia Economic Forum (NEAEF) has long proposed an interconnected power grid systems for Northeast Asian countries. If it were available, Abe likely would have different opinion on Koizumi’s suggestion.

International trading of electricity is not a new concept. International power grid networks already exist in many regions including Europe (see Figure 1), North and South America, and South Asia. These cross-national border interconnections were developed to provide benefits such as lowering of electricity production costs among the regional trading partners, increasing the quality and reliability of electricity service, reduction of the level of required reserve capacity in the connected grids, and improvements in national energy security.

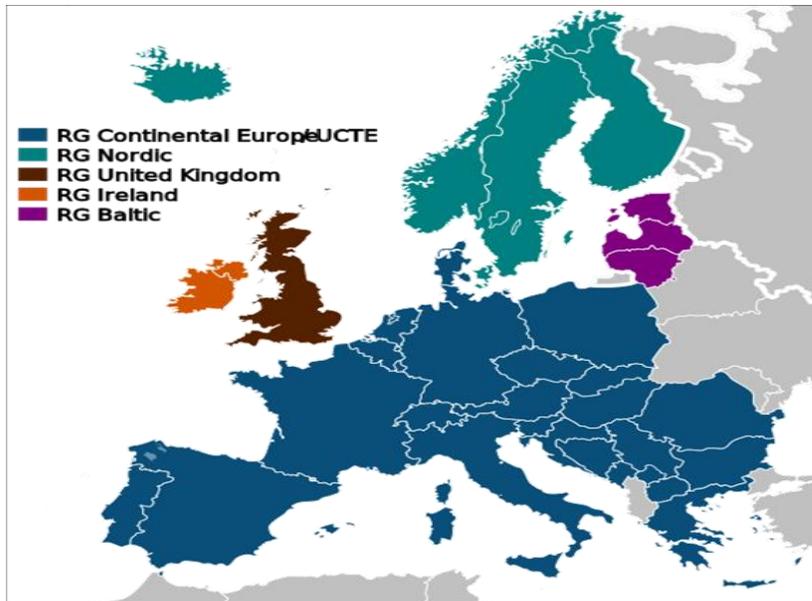


Figure 1. Wide area synchronous grid in Europe

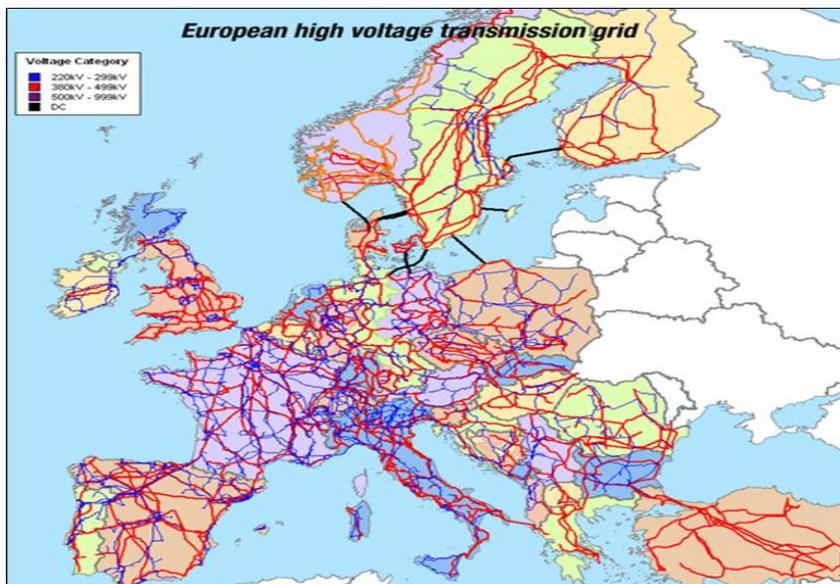


Figure 2. European high voltage transmission grid

About thirty years ago, electric power could be economically transmitted only 600 kilometers because of transmission losses. Now, this transmission distance is extended to 2,500 kilometers thanks to breakthroughs in materials science. This allows utilities to interconnect across time zones and compensate for variations in seasonal demand. The buying and selling of power is now common, because utilities wish to level the peaks and

valleys of energy demand. Today, ultra-high voltage (UHV) transmission is available. Research¹ shows that the efficient distance for ultra-high voltage (UHV) transmission is 7000 kilometers for direct current, and 4000 kilometers for alternating current. This would allow for power interchange between the North and South hemispheres, as well as the East and West.

A conceptual plan for a European super grid linking renewable energy projects like Desertec and Medgrid across North Africa, the Middle East, and Europe could serve as the backbone for a hypothetical super smart grid.

According to plan, it is envisaged that the European super grid will:

- 1) Lower the cost of power in all participating countries by allowing the entire region to share the most efficient power plants;
- 2) Pool load variability and power station unreliability, reducing the margin of inefficient spinning reserve and standby that have to be supplied;
- 3) Allow for wider use of renewable energy, particularly wind energy, based on the concept that “it is always windy somewhere”—in particular it tends to be windy in the summer in North Africa, and windy in the winter in Europe;
- 4) Allow wide sharing of the total European hydro power resources, which is about six weeks of the full load European output.

¹ L. Paris, G. Zini, M. Valtorta, G. Manzoni, and N. De Franco, “Present Limits of Very Long Transmission Systems,” Global Energy Network Institute at <http://www.geni.org/globalenergy/library/technical-articles/transmission/cigre/present-limits-of-very-long-distance-transmission-systems/index.shtml>

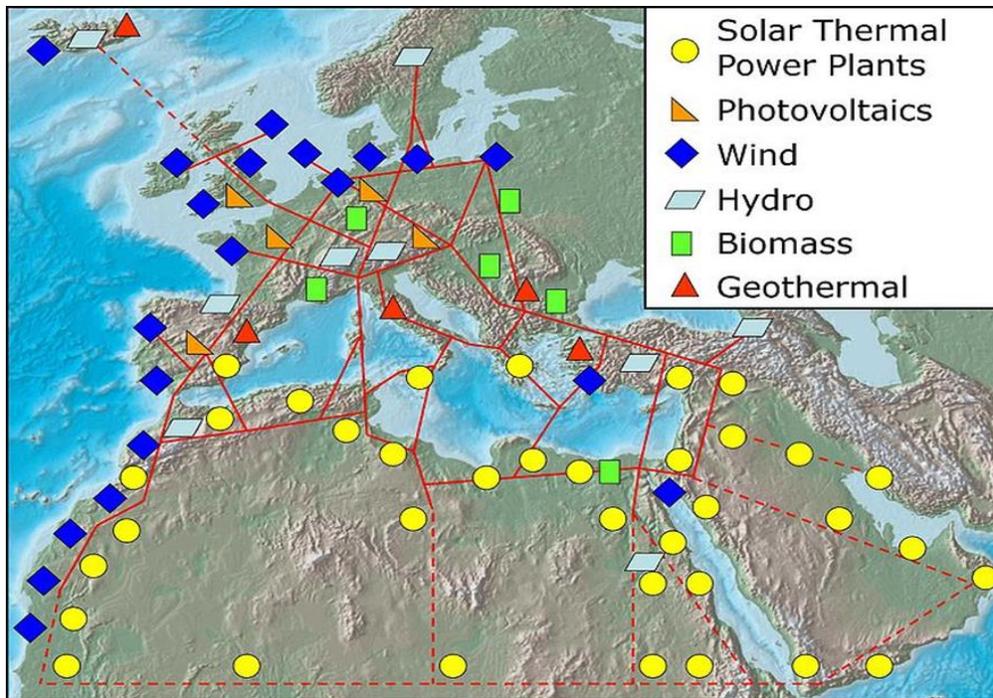


Figure 3. European renewable energy grid

Japan is the most prone to earthquakes country in the world because it is surrounded by the Sea of Japan, Pacific Ocean, East China Sea, and Sea of Okhotsk—that is, it lies at a tectonic plate boundary. Japan is a volcanic territory composed of 6,852 islands and the majority of land is spread over mountains and forests. These geographical factors and the recent earthquake and nuclear accident suggest Japan does not hold a comparative advantage in building nuclear power generation within its territory.

Masayoshi Son, president of Bank Corp, a Japanese telecommunications giant, has been battling to overhaul Japan’s electric power supply-demand systems following the accident at the Fukushima No. 1 nuclear power plant. He advocates that Japan should utilize more renewable energy sources immediately after the 3.11 accident. He is keenly interested in the Gobi Desert in Mongolia, where a dry wind howls all the year round. According to Son, this wind could be harnessed to generate electricity and transmit it around 3,000 kilometers to Tokyo via cross-border grids in Asia—an “Asia Super Grid.” Son also envisages sending electricity generated by different energy sources such as solar power in Mongolia and hydropower in Russia, through this vast super grid.

Russia and Northeast Asia Energy Security

Sergei Sevastyanov

1. Key Findings

Due to high growth in energy demand, China will remain a key factor defining Northeast Asia (NEA) energy security, and Russia, as the only significant regional supplier of energy, is capable of making a critical difference in terms of achieving energy security. Taking into account the composition and quantity of proved reserves of natural resources in Russia, it is quite possible that in future NEA countries will be able to import substantial amounts of Russian oil and (especially) gas in both piped and liquefied natural gas (LNG) forms.

To hasten the realization of international projects in NEA, and to contribute to the development of the Russian Far East (RFE), for the last several years the Russian Government has made large scale financial investments into natural resources extraction and transportation in the RFE, and announced immediate plans to construct several new oil and gas processing plants in this part of the country. Thus major Russian state companies (Gazprom, Rosneft, Transneft) consider the NEA energy market as an important destination that will help them to achieve the ambitious aims of the Russian Government's energy strategy for the next twenty years.

An important feature of the NEA energy market is an increased role of the state national companies that are investing heavily in buying and exploiting new oil and gas deposits abroad. Thus regional energy security problems are becoming not purely economic, but hot political issues.

China in many cases has agreed to allocate substantial financial credits to guarantee the long term supply of Russian energy resources. Because of that and other geopolitical factors (geography, politics, demography, etc.), Beijing has become Russia's main partner in NEA energy cooperation. Nevertheless Moscow is interested in multinational

cooperation in the energy sector to diversify regional exports, and in foreign countries' (Japan, South Korea, US) contribution in the form of financial investment, new processing technologies, etc. In this context the APEC 2012 summit meeting represented a unique opportunity for Russia.

2. Introduction

The twenty-first century will likely see the center of world economic and political activities move to the Asia-Pacific region where Northeast Asia (NEA) plays a critical role. Currently, world primary energy consumption is 12.3 million tons of oil equivalent with China and the US as the main consumers at 21 percent and 18 percent respectively. Following these two are Russia with 6 percent, India with 5 percent, and Japan with 4 percent (see Figure 1).

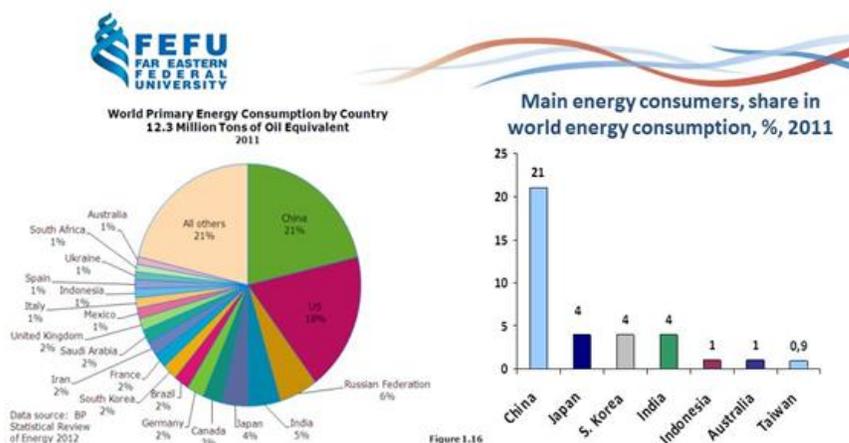


Figure 1. World energy consumption and share of main energy consumers

While North America lead in world petroleum consumption from 1980 to the beginning of the twenty-first century, in 2010, the Asian region became the top global consumer using about 25 million barrels per day.

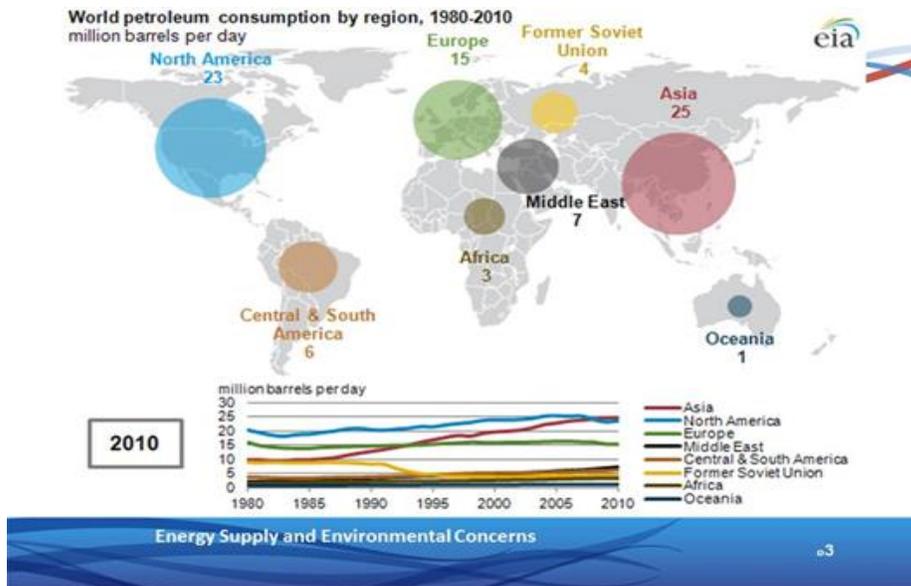


Figure 2. World petroleum consumption by region, 1980-2010

North America retains its dominance in consumption of dry natural gas using almost 30 trillion cubic feet in 2010. Since 1980 it has been the largest global consumer of natural gas except for the period in the mid-1980s to the early 1990s when the Former Soviet Union consumed about 2-3 trillion cubic feet more.

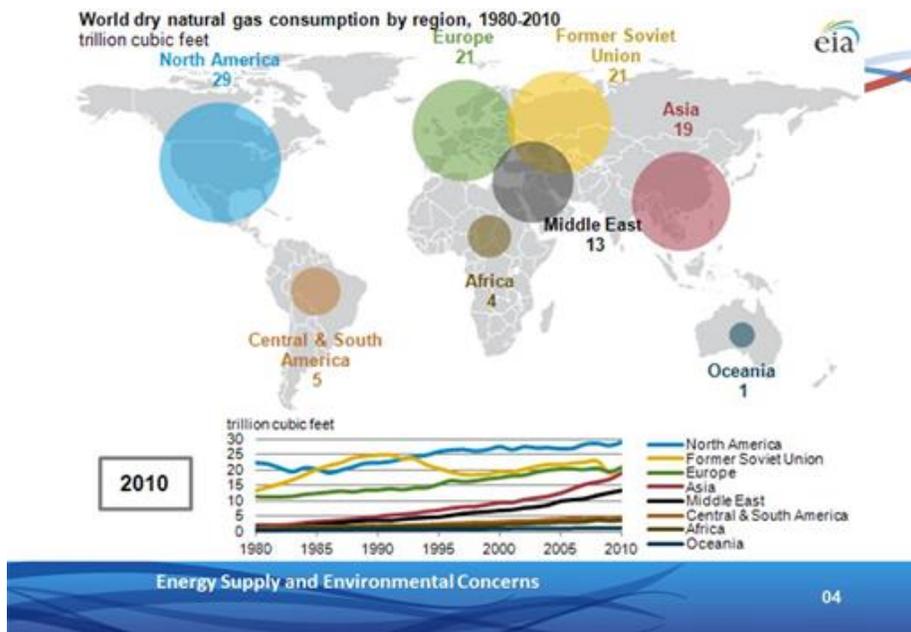


Figure 3. World dry natural gas consumption by region, 1980-2010

In 2010, the largest global consumer of natural gas and oil was the US. Russia was the second largest consumer of natural gas and fourth in oil consumption while China was the second largest oil consumer and fourth in natural gas consumption.

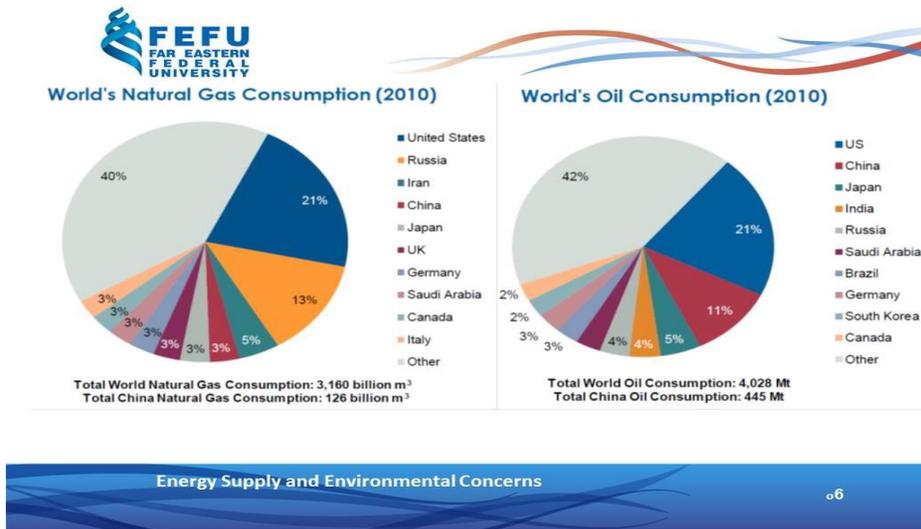


Figure 4. World natural gas and oil consumption, 2010

In terms of world coal consumption, Asia was the largest consumer and this usage spiked quite tremendously in the twenty-first century from about 2 billion short tons in 2001 to 5 billion short tons in 2010. The second closest user was North America which in 2010 only used about 1 billion short tons of coal.

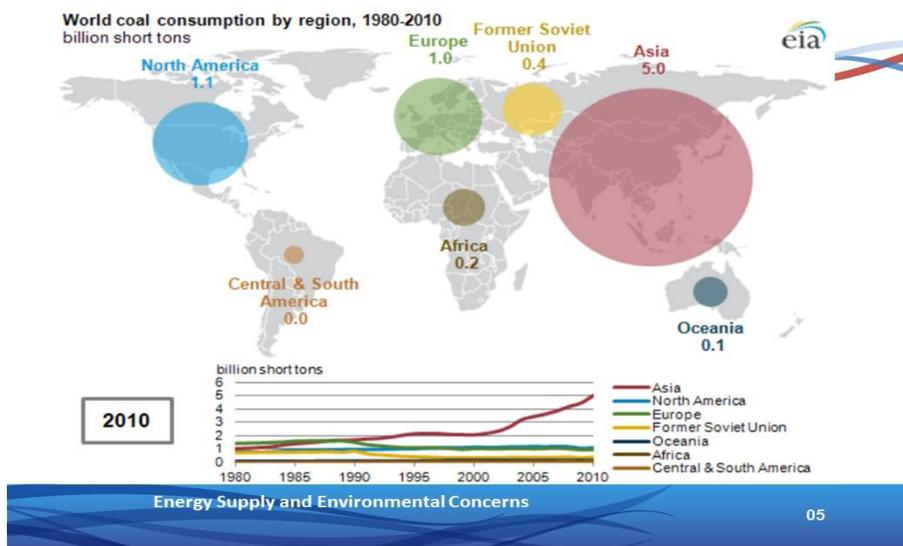


Figure 5. World coal consumption by region, 1980-2010

In the NEA energy sphere there are four main actors (China, Russia, Japan, and South Korea). So far two NEA countries remain on the periphery of regional energy cooperation: Mongolia (under pressure from Beijing, Moscow agreed to bypass Mongolian territory while constructing oil and gas pipelines from Russia to China) and the DPRK (North Korea). However, the role of the latter is of paramount importance, because unsolved security problems on the Korean Peninsula are blocking realization of several key energy and infrastructure development projects in NEA. The NEA energy equation also includes external actors such as the US. Recently India, interested in gaining access to regional energy resources, has joined this group.

Energy security—a stable, cost-effective, and sustainable supply of energy—is a precondition for the continued economic growth of NEA at a tempo that will surpass other world regions. On the other hand, a lack of energy resources will constrain the economic and social development of NEA. In addition, energy insecurity can lead to vicious competition for resources among energy importing countries; this might further increase political tension and hold back economic cooperation in the region.

Sizable amounts of natural resources are located in East Siberia and the Russian Far East (RFE). Thus Moscow is able to make a critical input into NEA energy security. Natural gas is particularly attractive, because, in comparison with coal and oil, its use

causes less environmental damage. Besides, the coordinated development of natural resources would benefit the economic development of those remote Russian regions.

3. The Main Principles of Russia's New Energy Policy

Gas usage is expected to grow three times as fast as that of oil. While oil will remain the dominant fuel even in 2030, gas will become the world's second largest source of energy (32% and 26% of the global needs, respectively).¹ Exxon forecasts that the world will consume about 35% more energy in 2030 than in 2005, driven by the rapid enrichment of developing nations, especially in the Asia-Pacific region. In 2011, Russia had about 7.1 million bbl/d of oil available for export. Germany, the Netherlands, and Poland were the top three importers of Russian crude oil in 2011.

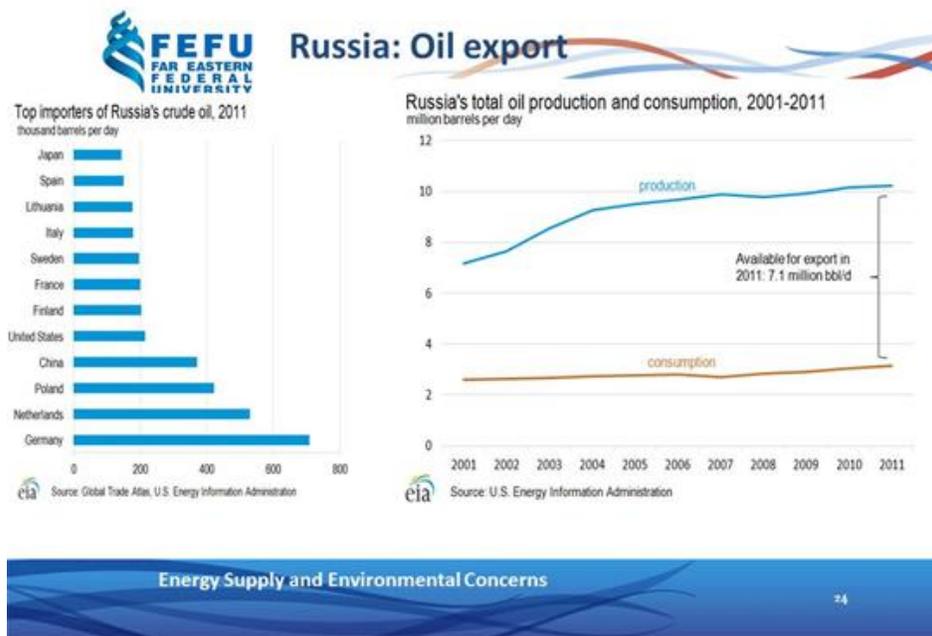


Figure 6. Russia: oil Exports

During his second presidential term (2004-2008), Vladimir Putin introduced the New Energy Policy (NEP), which is based on the following principles: diversification of

¹ "Exxon Predicts Gas Use Will Surpass Coal's," *The Wall Street Journal* (January 27, 2011).

the energy supply market, sustaining sovereign control over strategic decisions on oil and gas exploration and transit routes, signing long-term contracts with foreigners to develop Russian natural resources, and regulating foreign access to them. According to the NEP, Russia would only agree to invest in energy infrastructure projects if consumer states sign 20-30 year contracts.² Russia plans to diversify its energy supply market by increasing exports of natural resources to Asia. In July 2006 Putin made a commitment to increase the Asian share of Russian energy exports in fifteen years from the current 3% to 30%. This means that Russia would sell to Asia at least 60 million tons of oil and 65 billion cubic meter of gas per year.³



Figure 7. Russia oil exports: pipelines and fields

4. Energy Security and Energy Market in Northeast Asia

The combined influence of several negative factors and trends threatens Northeast Asian energy security, these are: Rapid growth in demand (particularly in China where by

² S. Sevastyanov, "The More Assertive and Pragmatic New Energy Policy in Putin's Russia: Security Implications for Northeast Asia. East Asia," no. 25 (2008,): 35-55.

³ Proceedings of President Putin's third meeting with the international discussion club 'Valdai' members, Moscow (September 9, 2006) at President of Russia Official Web Portal site (English) <http://www.kremlin.ru>.

2020 oil consumption is projected to increase more than twofold and gas consumption more than fourfold); high dependence on Middle East oil (Japan depends on it for 88% of its imports, the ROK for 82%, and China for 45%); and environmental vulnerability—high dependence on coal (China 70%, Mongolia 78%) and oil (Japan 47%, South Korea 46%).⁴

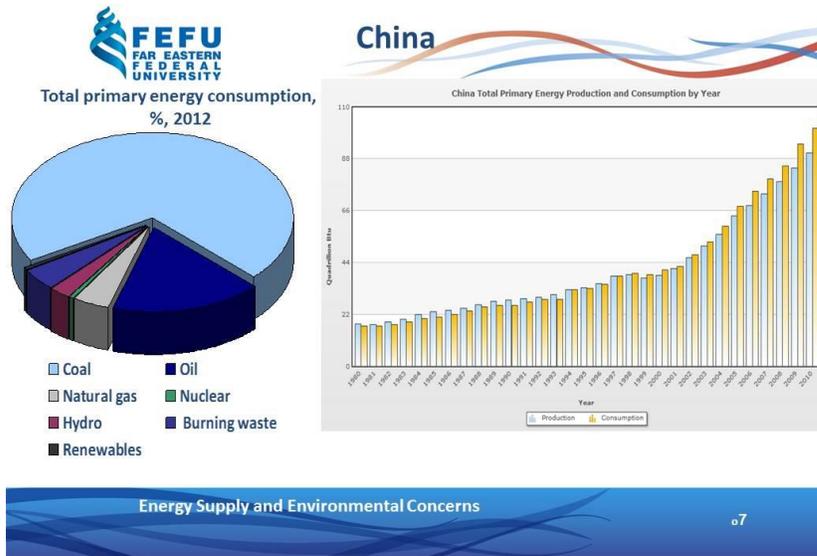


Figure 8. China's total energy consumption

⁴ Korea Energy Economic Institute (KEEI), "Baseline Study for Energy Cooperation in Northeast Asia." Seoul: KEEI (2007).

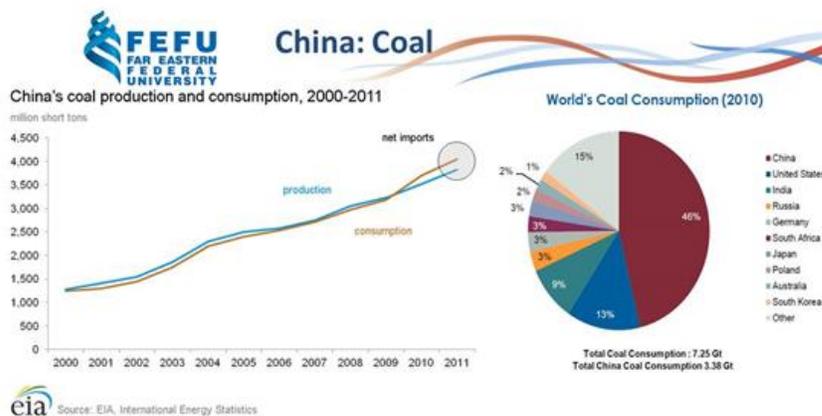


Figure 9. China's coal production and consumption, 2000-2011

Recently state companies have started to undermine the dominance in NEA of such giant private companies such as Exxon Mobil, BP, Total, and Royal Dutch Shell. China, India, Japan, South Korea, and Russia are subsidizing the activities of state-owned companies that are investing huge amounts of money into buying and exploiting new oil and gas deposits abroad. The main driving force of such strategies is Beijing. During the last several years three leading Chinese state companies (CNPC, Sinopec and CNOOC) have made huge financial investments, and signed numerous long-term contracts in all regions of the world (about two hundred projects in fifty countries) aimed at importing oil and gas with borrowed money from Chinese state banks. There are no state oil and gas companies in US, and Washington considers Beijing's energy policy as a threat to free access to natural resources by other importers. However, it is important to note a new trend—from 2006 the US drastically has increased gas extraction from development of shale gas deposits.

China

In 1993, China's consumption rate of oil matched its production rate and since then the consumption rate has exceeded China's production rate. The forecast of net imports of crude oil for 2013 is about 6 million barrels per day. China's main source of imported oil

comes from Saudi Arabia, followed by Angola, Iran, and Russia in descending order. In 2007, Chinese consumption of natural gas exceeded production. In the years 2010 and 2011, the difference was significant. China mainly imports natural gas from Australia, Indonesia, Qatar and Malaysia.

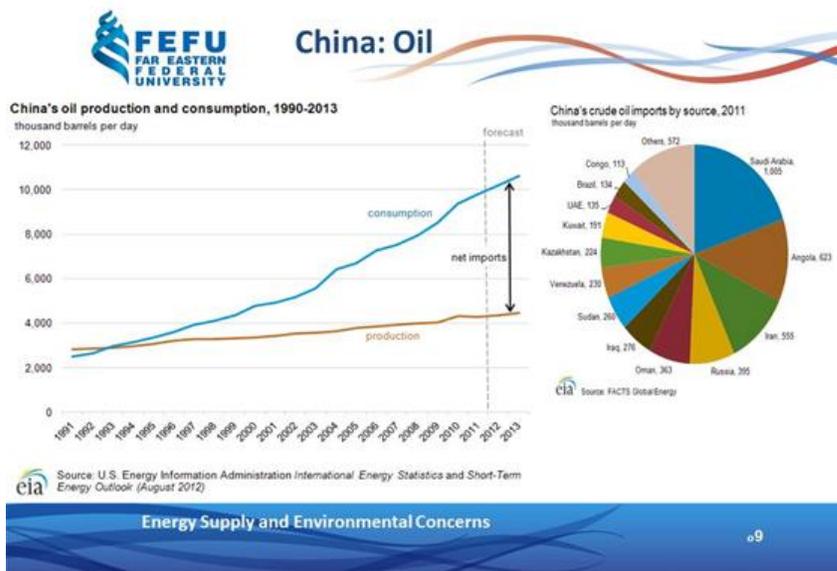


Figure 10. China's oil production and consumption

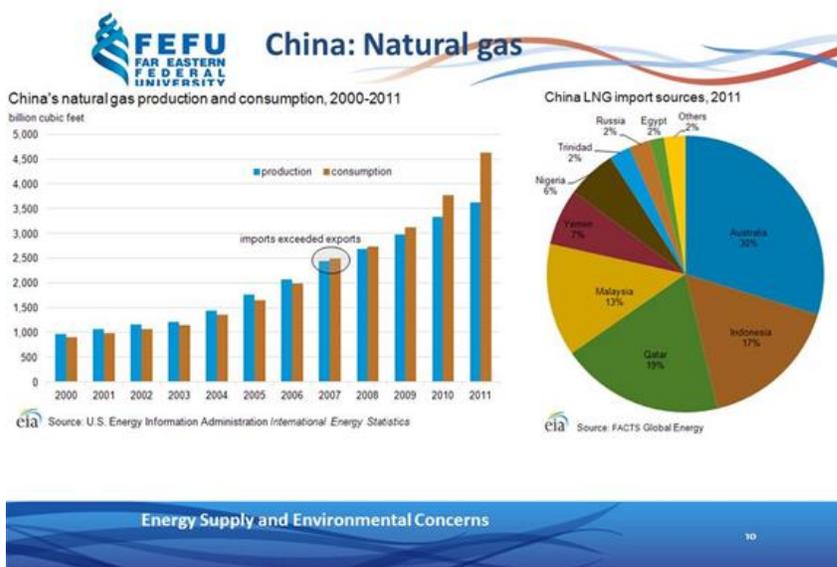


Figure 11. China's natural gas production and consumption

Japan

Japan is 100% dependent on imported oil, gas, and coal, and to secure foreign delivery of natural resources it relies on large state companies. In the international energy market they compete with Chinese state companies, and recently the latter has been the winner when bidding for contracts against Japanese or Korean companies. The NEA energy security situation is also aggravated by the territorial dispute between China and Japan over the Senkaku/Diaoyu islands in the East China Sea.

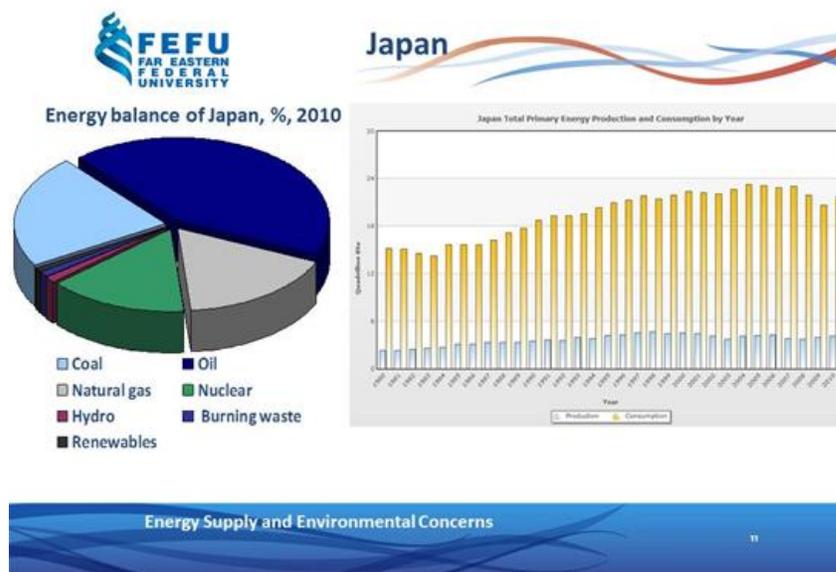


Figure 12. Energy balance of Japan

Japan is a heavy consumer of oil and coal followed by nuclear energy and natural gas. Japan imports most of its crude oil from Saudi Arabia, the United Arab Emirates, and Qatar. In 2011, Japan's import of crude oil was about 4.5 million barrels per day. Japan imports its natural gas mainly from Malaysia, Australia, Qatar, and Indonesia. In 2012, Japan's main coal source came from Australia, which accounted for almost three-fourths of Japan's coal imports. This is followed by imports from the US, Russia and China.

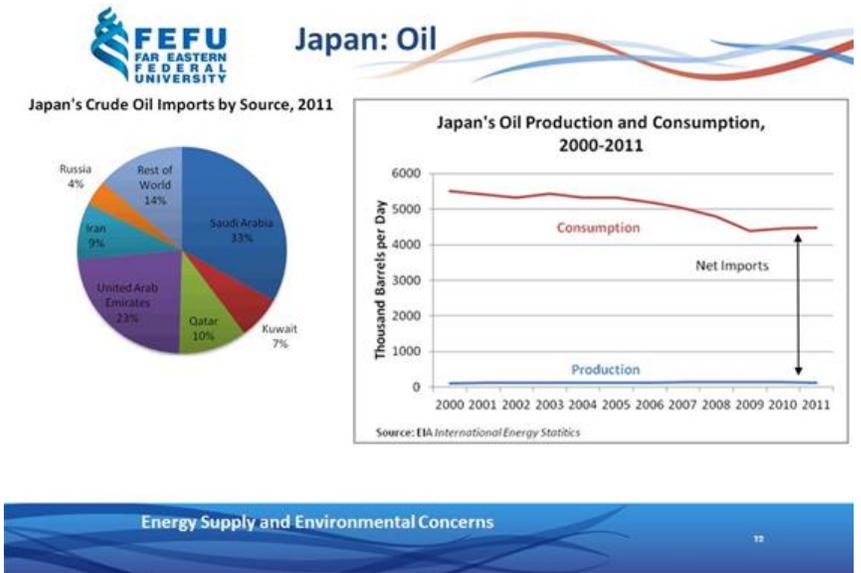


Figure 13. Japan's oil imports and consumption

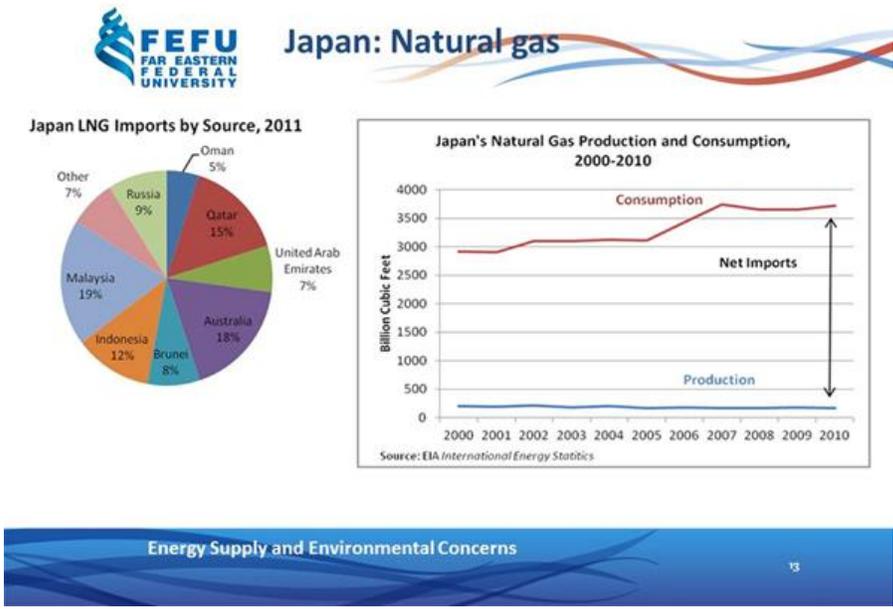


Figure 14. Japan's gas imports and consumption

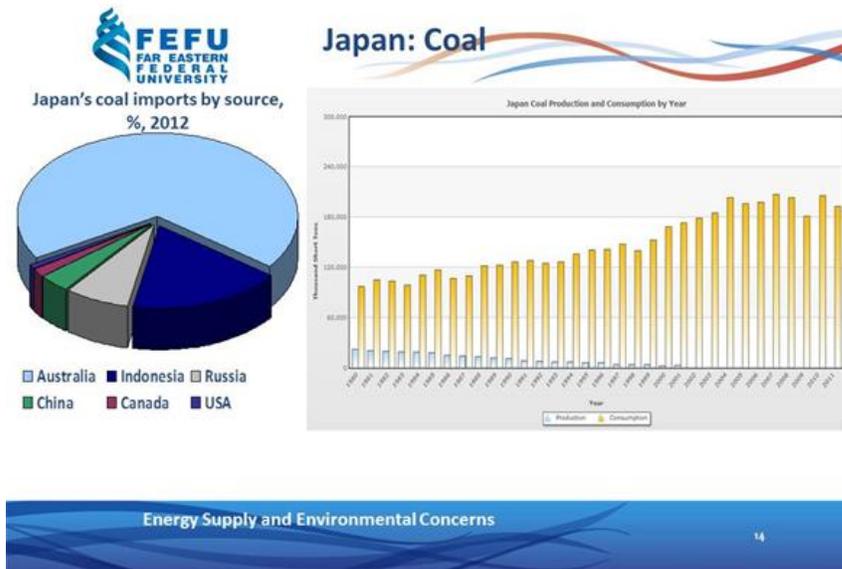


Figure 15. Japan's coal imports and consumption

Recent events at Fukushima nuclear power station have dampened enthusiasm for using nuclear power energy in Japan and several other countries. Liquefied natural gas (LNG) has become much more affordable in price, and it now represents the most promising substitute to compensate for the decreasing share of nuclear energy in the Japanese energy balance.

South Korea

In 2010, the primary sources of energy imported into the South Korea (Republic of Korea/ROK) were oil, coal, natural gas, and nuclear. From 1999-2011, South Korea saw a fairly consistent consumption of crude oil. Thirty-three percent of oil imports come from Saudi Arabia, followed by 14 percent from Kuwait and 10 percent from Iran.

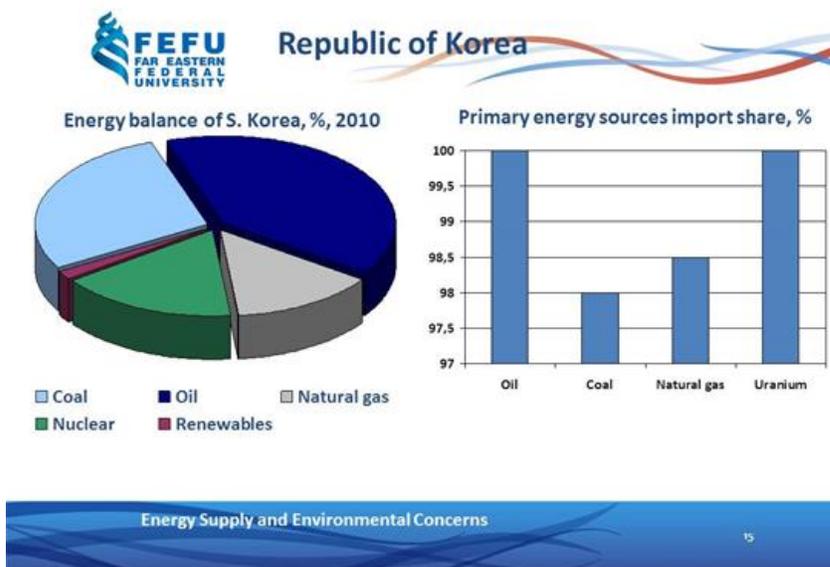


Figure 16. South Korea's energy balance and energy imports

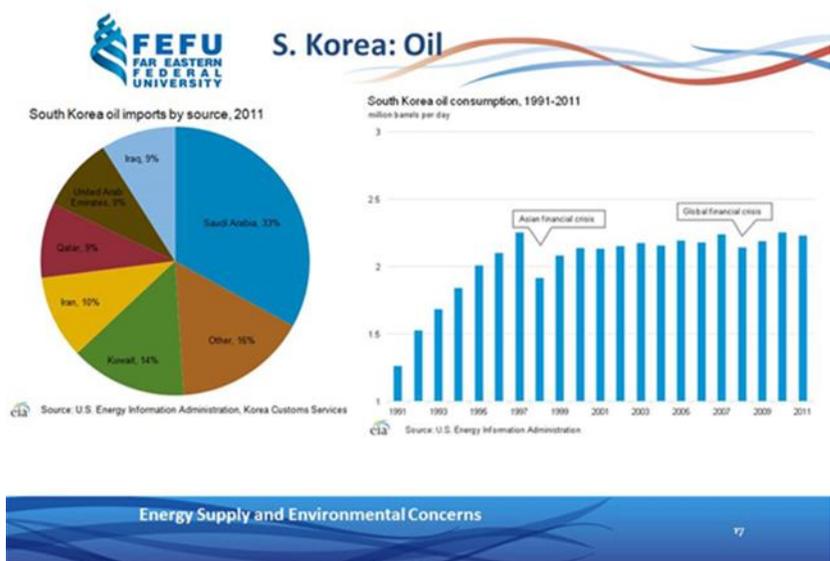


Figure 17. South Korea's oil imports and consumption

In 2010, South Korea's consumption of natural gas saw a spike in relation to 2009 and it steadily increased in 2011. South Korea mainly imported natural gas from Qatar, Indonesia, Malaysia, and Oman in 2011. South Korea's coal consumption reached 140 million short tons per year and it mainly imports from Australia, China, Canada, and Russia.

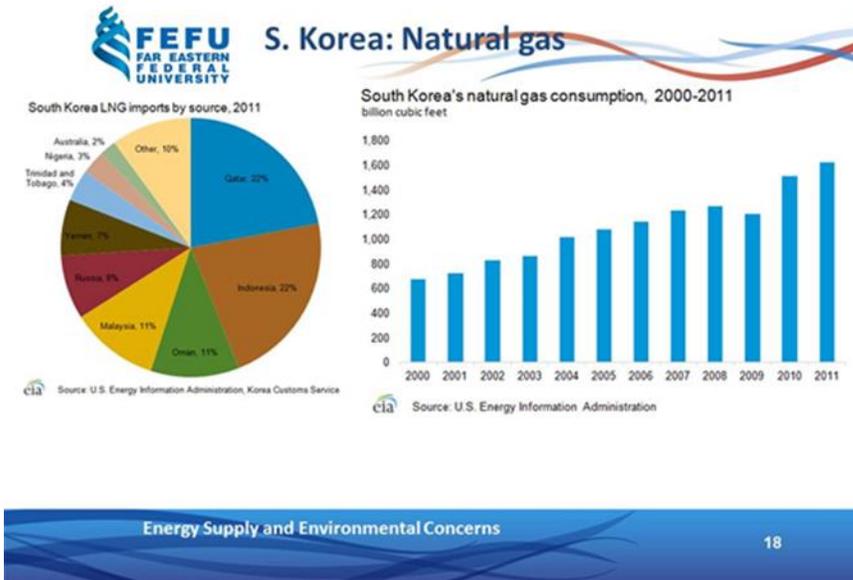


Figure 18. South Korea’s natural gas imports and consumption

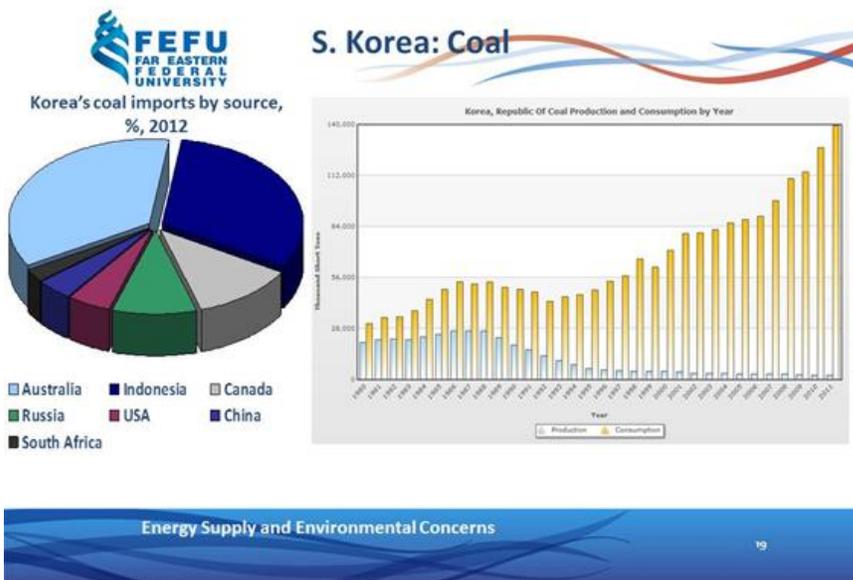


Figure 19. South Korea’s coal imports and consumption

Korea National Oil Company (KNOC) and Korean Gas Company (KOGAS) are the two largest South Korean state companies buying rights to extract and deliver oil and gas all over the world. However, they are not as competitive as the Chinese state companies because 1) they have less amounts of state money and 2) are more concerned with securing

financial profits when engaging in projects. The Chinese companies are more oriented toward maximizing *access* to natural resources.

Mongolia

In 2012, over half of Mongolia's energy sources were from coal, followed by crude oil. While Mongolia's production of oil saw a great rise from 2002 to 2011, the consumption of oil far exceeds production. Mongolia imports an estimated 12,000 barrels per day. On the other hand, since 2003 Mongolia's production of coal has exceeded its consumption rate with the difference in 2011 being about 24 million short tons per year.

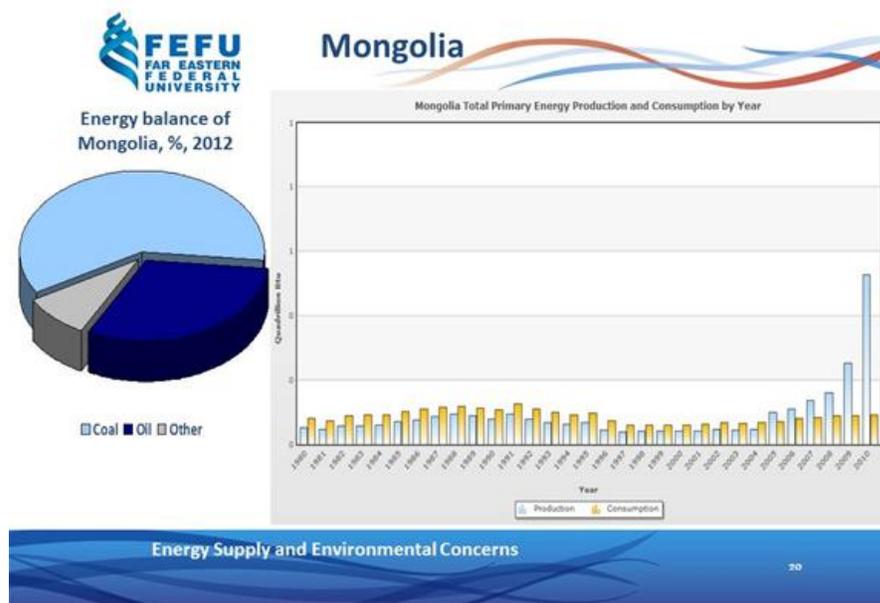


Figure 20. Mongolia's energy balance and consumption

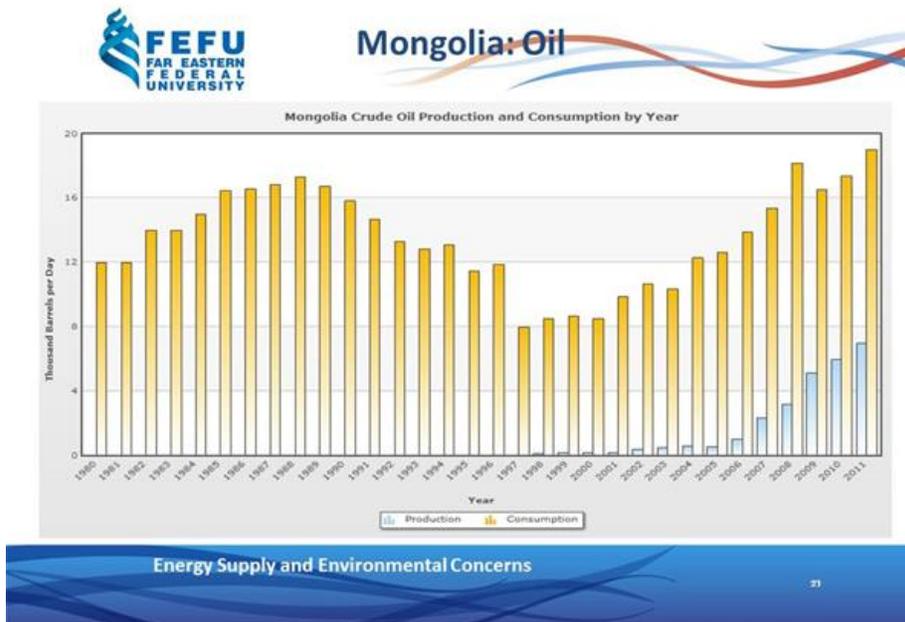


Figure 21. Mongolia's oil production and consumption

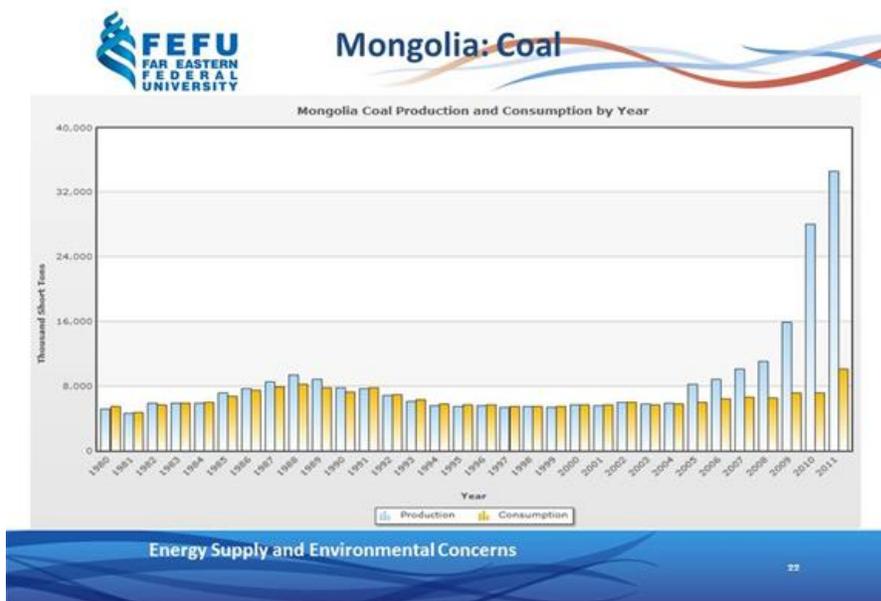


Figure 22. Mongolia's coal production and consumption

5. Russia's Activities and Vision for Energy Policy in Northeast Asia

In 2007 Putin approved a proposal granting two state-owned companies (Gazprom and Rosneft) the exclusive right to develop oil and gas extraction projects on the Russian

continental shelf. This decision effectively blocks foreign companies, as well as Russian private companies, from getting a major share in these projects, and in the future the only option for them would be to seek an invitation from Gazprom or Rosneft for joint development of oil and gas shelf deposits. The Russian Far East (RFE) is a critical area for Gazprom's expanded investment activities. The first gas exports from the RFE occurred in 2009 when Gazprom began selling LNG to Japan and South Korea from the Sakhalin-2 project. Overall gas extraction at Sakhalin in 2011 reached 25,5 billion cubic meters: Sakhalin-1 contributed 9,1 billion cubic meters, and Sakhalin-2 contribute 15,4 billion cubic meters.

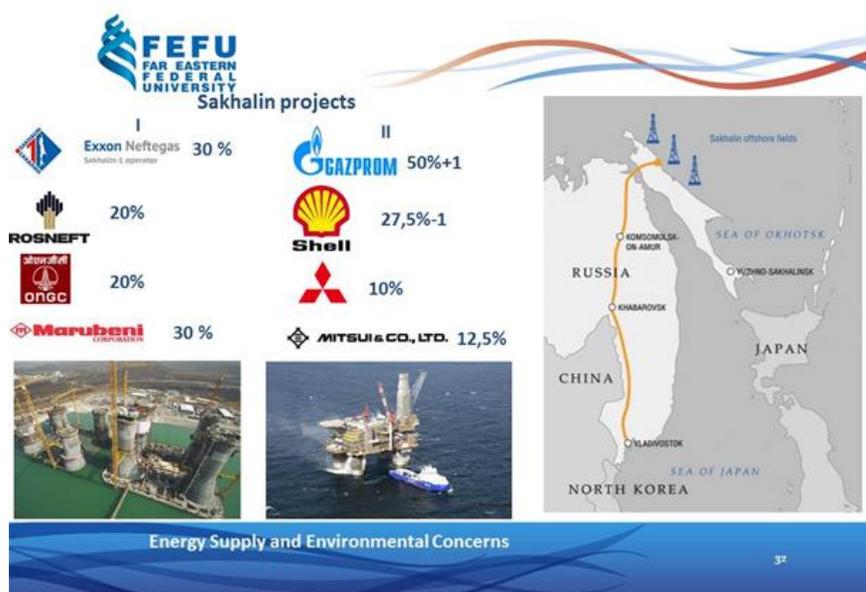


Figure 23. Sakhalin projects

In September 2011 Gazprom finished construction of the first part of the gas pipeline—Sakhalin-Khabarovsk-Vladivostok—with an annual capacity to deliver 6 billion cubic meters of gas (at the final construction stage this pipeline capacity will reach 30 billion cubic meters). This will make it possible to achieve Gazprom's goal of making gas available to the residents and industries of the RFE as well as NEA countries.

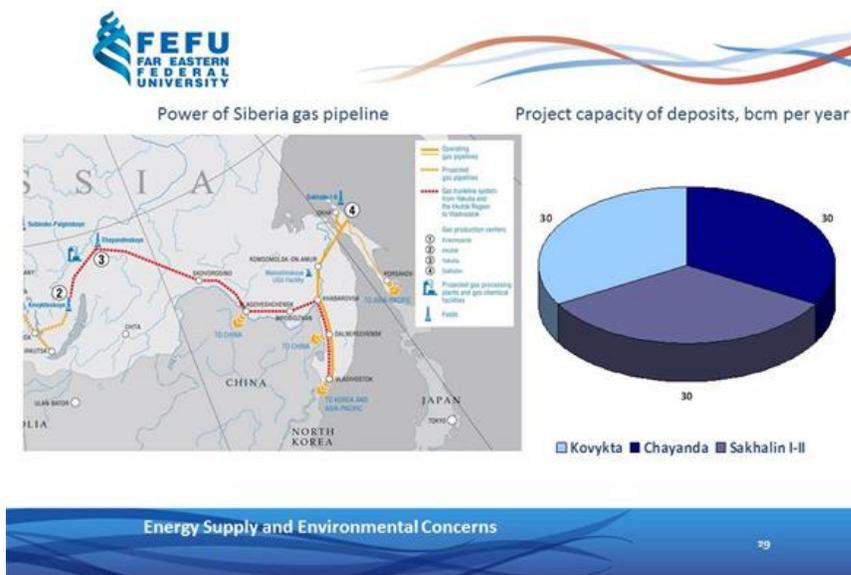


Figure 24. Siberian gas pipeline and project capacity

Gazprom chose to rely on gas from the Sakhalin-3 project as a main source to supply domestic and foreign customers in the near future. This project consists of four gas and oil fields producing more than 700 million tons of oil and 1.3 billion cubic meters of gas. Gazprom's selection of Sakhalin-3 as its principal source of gas indicates the priority it places on the Sakhalin projects, while developing the gas from the Kovykta field in eastern Siberia appears to be a more distant goal.

Current prospects for large-scale foreign investments in eastern Siberia and the RFE differ by country. The only example of substantial American investment is the Sakhalin-1 venture. However, Exxon Neftegas clashed with the Russian side over cost overruns for the project and the right to determine the primary customers for the resources produced. In February 2012 Exxon made an offer to Gazprom to transfer to this state company a gas component of the Sakhalin-1 project on 'certain conditions' that remain undisclosed thus far.⁵

Although the two Japanese companies had to sell part of their shares in Sakhalin-2 project, Tokyo is still interested in Russian resources. Japan's Osaka Gas signed a contract with Sakhalin-2 operator Sakhalin Energy to buy annually 200,000 tons of liquefied natural

⁵ "Exxon Neftegas predlaegaet Gazpromu gas Sakhalin-1" *Vesti economica* (February 8, 2012 at <http://lenta.ru/news/2012/02/08/exxon/>)

gas produced at a plant in southern Sakhalin and then shipped to Osaka. The Japanese contract will account for 98% of the LNG plant's productive capacity and, according to the contract terms, Sakhalin Energy will provide Japan with this amount of LNG for twenty-three years.

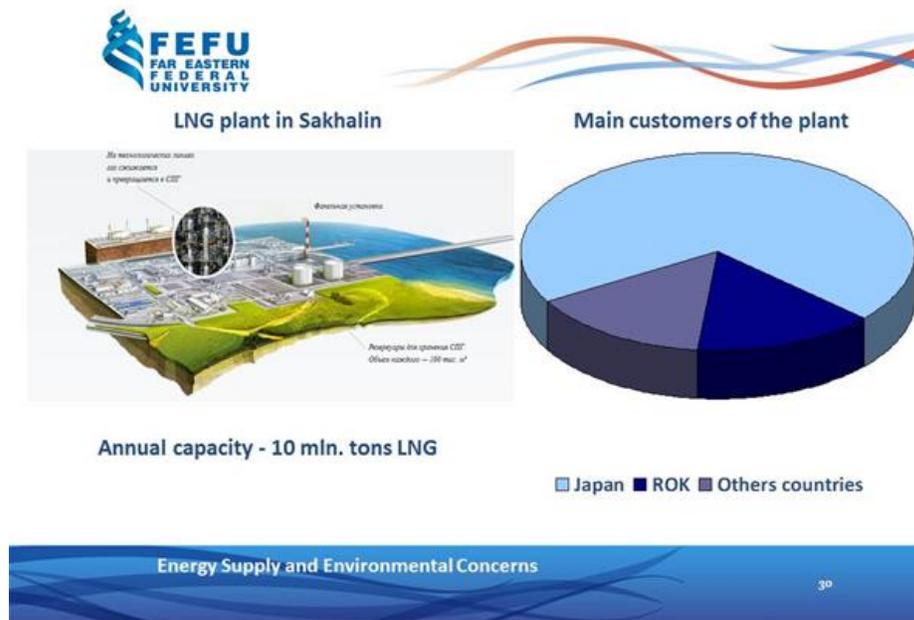


Figure 25. Sakhalin LNG capacity and customers

Due to the lack of non-contracted LNG resources, Russia could not immediately help Japan to compensate for its energy deficit after the Fukushima accident. Nevertheless, Japanese companies reached a preliminary agreement with Gazprom to construct a new LNG production plant in Vladivostok aimed at selling LNG mostly to Japan, and in early 2012 a plant construction proposal was presented to Gazprom for approval.⁶

⁶ Rossiya-i-Yaponiya-planiruyut-postroit-zavod-spg-vo-vladivostoke, *Forbes.Ru* (Moscow, January 8, 2012) at <http://www.forbes.ru/news/78214>

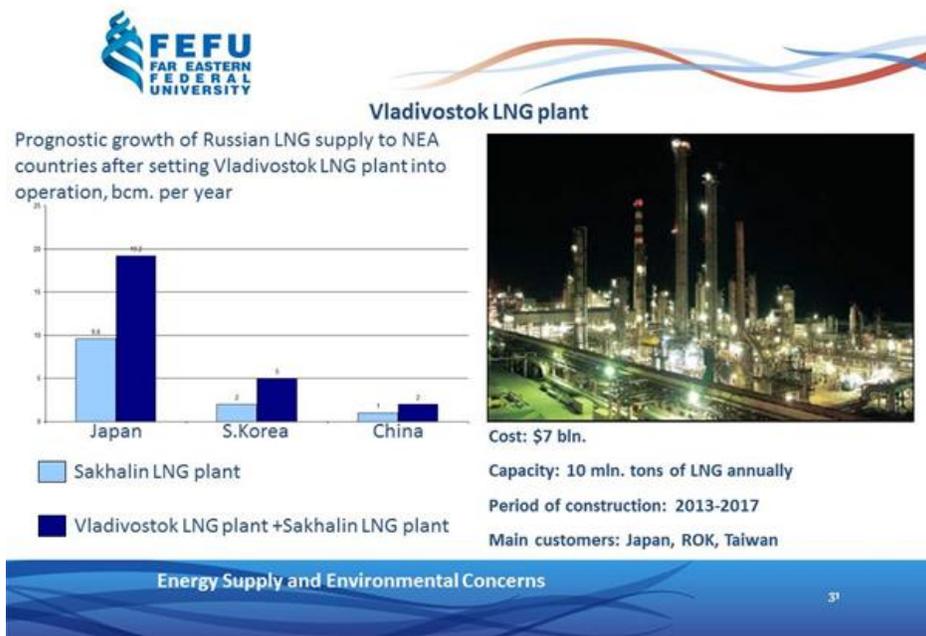


Figure 26. Vladivostok LNG plant

From 2010 South Korea has imported oil from eastern Siberia through the new Russian oil port Kozmino. Furthermore, the Korea National Oil Company (KNOC) is exploring oil off the Kamchatka Peninsula. Strategic energy cooperation between Russia and South Korea will lead to win-win results: growth through commercial, geopolitical, technological, and environmental collaboration.

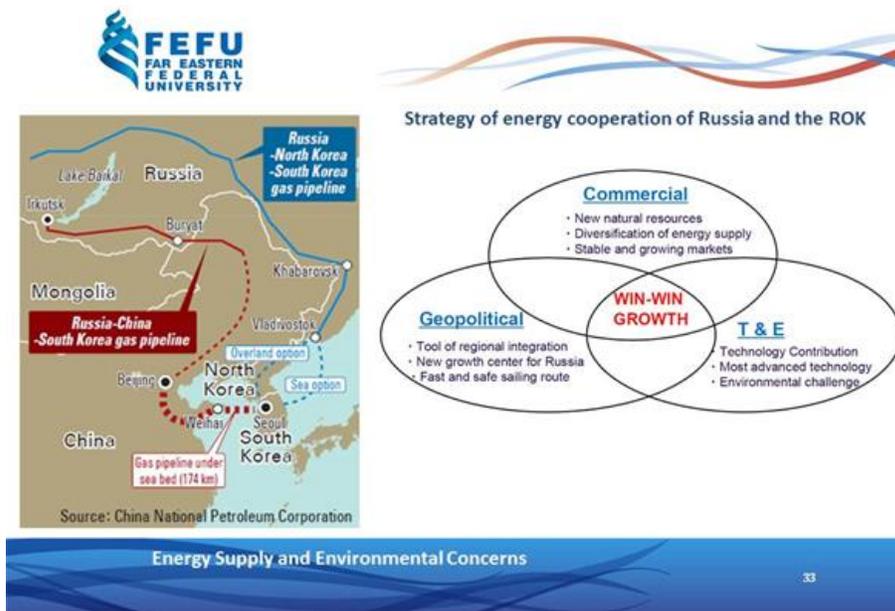


Figure 27. Russia-South Korea energy cooperation strategy

In June 2009 the world's number one LNG importer, Korea Gas Corporation (KOGAS), established a 100% subsidiary—KOGAS-Vostok—to take part in gas businesses and to seek potential projects in the RFE. This company is interested in increasing its Russian LNG annual imports from the current 1.5 million tons to 7.5 million tons in 2017. These projected numbers include gas that would be produced at the new LNG plant to be constructed in Vladivostok in the next several years.

In August 2011 North Korean leader Kim Jong-il visited Russia and met with President Dmitry Medvedev. The two leaders agreed to develop a Russia-DPRK cooperation plan to arrange for an initial annual transit of about 10 billion cubic meters of Russian gas to South Korea through North Korean territory. This would become a trilateral project, including Russia, South and North Korea, aimed at constructing a gas pipeline from Russia to South Korea (with an overall length of more than 1,100 kilometers, 700 kilometers of this would pass through the North Korean territory). To date it is not clear whether this project will be implemented due to political, technical and other obstacles. Seoul suggests that it is not attainable unless bilateral ties between North and South Korea are improved. Moreover, the US is opposed to the transit route through North Korea as it does not want to see it compensated for this transit. North Korea does not have its own

natural gas distribution system and Pyongyang is interested in receiving payments in cash for transit. However, there is a risk that Pyongyang may use this money to further develop nuclear armaments.⁷ KOGAS has an alternative to access Russian gas by taking part in the construction of a new LNG plant in the RFE.

Active exploitation of the Chinese energy market is a key condition for Moscow to achieve its energy strategy aims. In 2004 Russia proposed building a new complex gas transportation system to deliver gas to China through two (western and eastern) pipelines. The western pipeline would go from the Altai territory in western Siberia to the Xinjiang Uighur Autonomous Region in China supplying up to 30 billion cubic meters of gas annually. The eastern pipeline (projected annual capacity up to 40 billion cubic meters) would go from eastern Siberia and from Sakhalin island to northeast China and also to Vladivostok, and then possibly to the Korean Peninsula. Moscow and Beijing have agreed on the main aspects of a long-term contract to deliver Russian pipeline gas to China. However, an agreement is still not signed due to remaining disagreements over gas delivery prices.

6. Evaluation of Russia's Input into Northeast Asia Energy Security

Russia holds the world's largest natural gas reserves, the second-largest coal reserves, and the ninth-largest crude oil reserves. Russia was the largest producer of crude oil in 2011. During the year, crude oil production averaged about 9.8 million bbl/d. With the largest natural gas reserves in the world, Russia is the largest producer and exporter of dry natural gas. Despite sizeable coal reserves, production of coal in Russia is relatively low. The main consumer of Russia's oil and gas is Europe. The share of Russian companies in the Asian market is relatively small.

⁷ S. Sevastyanov, "The Role of New Russian Infrastructure Development Projects in Supporting Energy Security of Northeast Asia," *Oikumena* 1 (2012): 48-60.

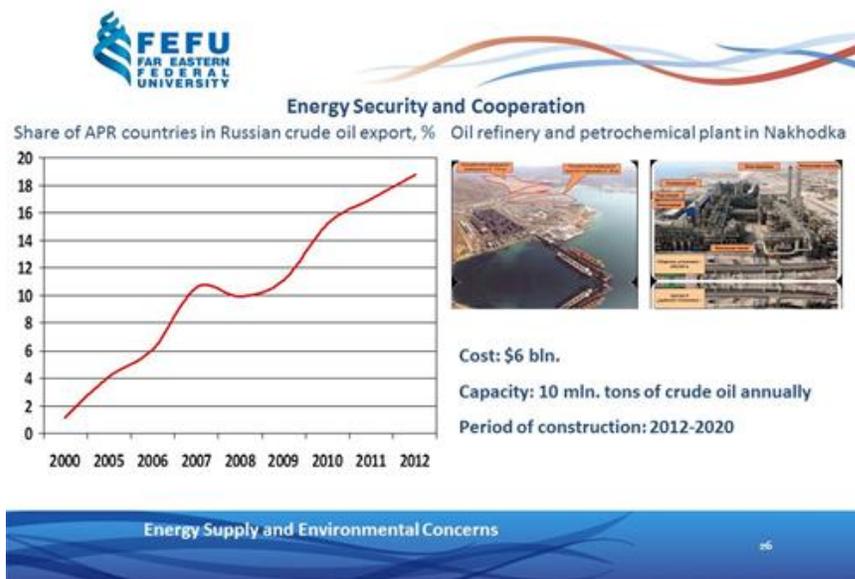


Figure 28. Russian oil exports

To evaluate Russia's future input into NEA energy security we should analyze the RF Government's latest financial commitments and plans in oil and gas extraction and export. In October 2010 Prime Minister Putin attended two important meetings devoted to the discussion of plans to develop the Russian oil and natural gas industry. He stated that during the next ten years Russia would maintain annual oil output at its current level of 500 million tons. This means that Moscow has no plans to increase oil extraction because oil reserves in Russia are already worked out by 50%, and there are no new deposits around with easy access to them.

In 2010, Russia exported natural gas largely to the Commonwealth of Independent States, Eastern Europe, Germany, and Turkey. At another meeting, Putin declared that in the foreseeable future natural gas has no alternative as a main source of energy. Thus over the next twenty years Russia would increase annual extraction output from 650 billion cubic meters of gas (extracted in 2010) to one trillion cubic meters (about half of this huge amount should be exported).

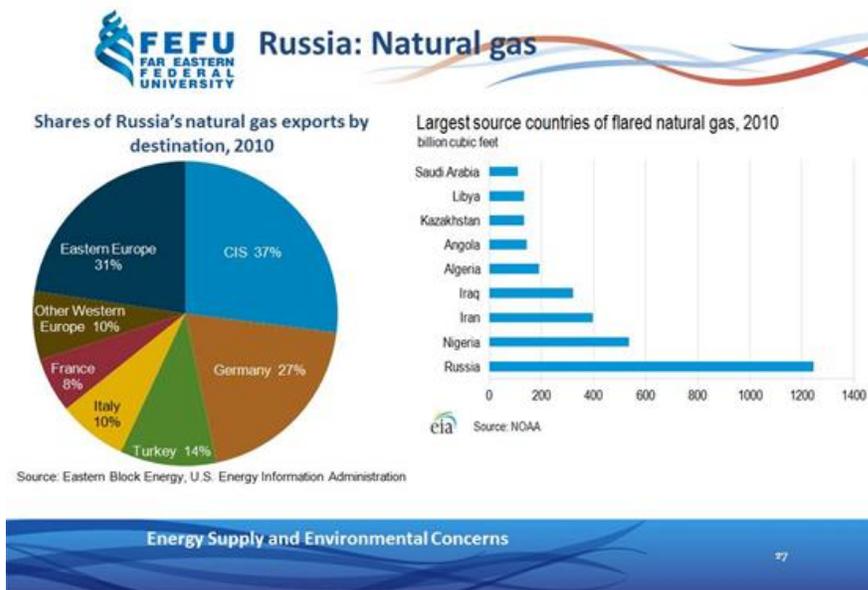


Figure 29. Russian natural gas and exports

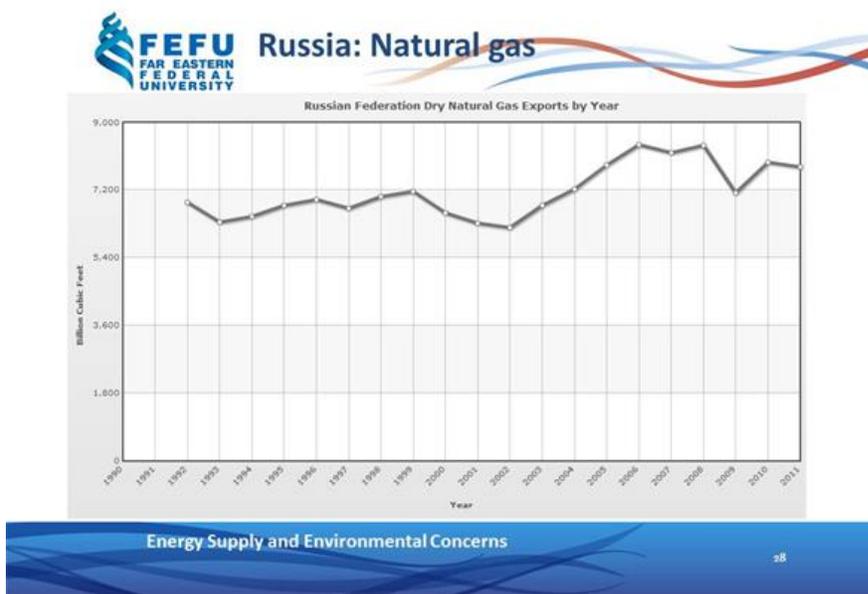


Figure 30. Russian natural gas exports by year

To achieve this strategic aim new gas extraction areas will be developed on the Yamal Peninsula, in eastern Siberia, and on the continental shelf, and more than 25 thousand kilometers of pipelines will be constructed. The share of private gas producers in Russia should increase from the current 20% to 30%. Russian natural gas is practically an

inexhaustible source of energy given the total gas reserve forecast for Russia is about 165 trillion cubic meters.

7. Recommendations and Conclusions

I suggest that due to high growth in energy demand, China will remain a key factor defining NEA energy security. By 2030 Russian annual deliveries of oil to China could reach 30-35 million tons. In 2011 Gazprom extracted 520 billion cubic meters of gas (overall Russian gas output reached 671 billion cubic meters). For 2014 the extraction plan for Gazprom is 570 billion cubic meters of gas, and for the whole Russian gas industry it is 741 billion cubic meters. This means that Russian gas exports to NEA should be growing.

The Russia-China energy partnership has developed a firm intergovernmental and business foundation, and the allure of Chinese proposals in developing bilateral cooperation has become insurmountable for Moscow. Interestingly enough, Beijing accepted one of the principal features of the Russian NEP: during the last several years China either signed or achieved principal agreements on contracts with Russia in oil, coal, and gas using the same model—allocating very substantial financial loans as a guarantee for long-term supply of Russian energy resources.

However, to avoid placing Beijing in the position of a buyer's monopoly in price negotiations, Moscow should find ways to deliver a substantial part of energy resources to Japan, South Korea, the US, and other countries. In this context a multilateral approach to energy cooperation in NEA has considerable advantages for Moscow. That was why Russia became one of the founding members of the Intergovernmental Collaborative Mechanism on Energy Cooperation in NEA. As far as the wider Asia-Pacific is concerned, Russia is an active participant of the APEC Energy Working Group (its 10th Energy Ministerial annual meeting took place in St. Petersburg in June 2012), and regional energy cooperation was discussed at APEC summit in Vladivostok in September 2012.

To increase Gazprom's abilities in realizing international projects in NEA, this company should establish closer ties with foreign companies to share production capabilities, the financial burden, and new technologies. To make the eastern gas pipeline a sustainable project, Gazprom plans to construct a new gas transportation system from

Yakutsk area deposits all the way to Khabarovsk, and to connect it with the Sakhalin-Khabarovsk-Vladivostok pipeline. To implement these projects Gazprom will have to borrow money from the Russian Government or on international financial markets. However, to speed up realization of these formidable projects Gazprom has a better alternative—to invite foreign companies not only as gas consumers but as direct investors. Such an approach, especially in a multilateral format, would be very helpful in developing trust between regional countries and facilitating NEA energy security.

The Yellow River and Cooperation in Northeast Asia

Liu Ming

Globalization has changed the world significantly. The WTO, the major symbol of globalization, provides the basic framework for global cooperation. However, in recent years, this globalization trend has slowed down. It's proved difficult to reach a general agreement in the Doha round of negotiations. The economic crisis in the US and EU has added uncertainty to the future of global development. As a result, a so-called new trade protectionism is rising. Regional cooperation that promotes 'relative easily' trade and investment has become more important. NAFTA and ASEAN are good examples of the positive effects regional cooperation can have for member countries.

Although Asia plays a very important role in global economic development, regional cooperation in Northeast Asia remains limited. Currently, the Northeast Asian region is the only one without any regional trade agreement arrangements. In fact, Japan and South Korea's industrial structure is highly complementary and industry cooperation has an extremely promising future. There's been much investment and industrial transfer from South Korea to China, especially in the Bohai economic zone and its hinterland (the yellow ring area). China too has begun to increase investment in South Korea. Even so, there remain, in South Korea for example, strong domestic political forces that wish to reverse this economic tide, to curb the rise of China, and to reduce investment in China—they wish to prevent rather than accelerate economic and trade cooperation. History, however, is bound to prove that it is necessary and important to create a regional trade agreement.

At the end of 2011, Japan and South Korea began FTA negotiations. Although due to various factors, the negotiation process for a Japan and South Korea free trade area is unlikely to be smooth, Northeast Asia economic cooperation will definitely move forward. In this environment of challenges and opportunities, the Yellow River and the Tianjin Binhai New Area in China has great potential as an area for the promotion of regional

economic cooperation and development. Economic development based on the Yellow River to Tianjin Binhai New Area can be seen as a three-tier platform that includes: the Yellow River basin provinces; the development of Binhai New Area (which would bring huge economic benefits to Northeast Asian region. It involves three domestic industries to develop trade and economic cooperation and fosters three new international regional competitive advantage areas that provide strategic development.

Regarding trade, according to Japanese customs statistics, in 2011 the Japanese import and export trade in goods reached US\$1.67897 trillion, an increase of 14.7% over 2010. Among this, exports accounted for US\$823.65 billion, an increase of 7.0%; imports were US\$855.31 billion, an increase of 23.2%. From a sub-national and regional perspective, China and South Korea are the first and third largest export trading partners, exports were US\$162.04 billion and US\$66.08 billion, an increase of 8.3% and 6.1%, Japan's total exports accounted for 19.7% and 8.0%. In addition, China is Japan's largest source of imports, in 2011, Japan imported US\$184.06 billion from China, an increase of 20%.

Similarly, according to Korea Customs statistics, in 2011 South Korea's trade in goods and exports was worth US\$1.08089 trillion, an increase of 21.2%. Among this, exports accounted for US\$556.51 billion, up 19.3%; and imports US\$524.37 billion, an increase of 23.3%. China and Japan are the first and third ranked countries in terms of Korea's exports—US\$134.21 billion and \$ 39.71 billion and accounting for 24.1 percent and 7.1 percent of South Korea's total exports, an increase of 14.9% and 40.9%. China was South Korea's largest source of imports in 2011, South Korea and China's bilateral trade amounted to US\$220.63 billion, an increase of 17.1%. South Korea imported US\$86.43 billion worth from China, an increase of 20.8%.

Although Russia's economy continues to be more directed towards Europe, Russia's economic linkages with Asia and particularly Northeast Asia are growing. This is especially evident in Russia-China trade which has continued to grow in recent years. According to Russian customs statistics, in 2011 Russian trade in goods amounted to US\$657.38 billion, an increase of 17.4% over 2010. Exports accounted for US\$378.69 billion up 8.7%; imports were worth US\$278.69 billion, an increase of 31.8%. The result is a trade surplus of US\$100 billion, a decrease of 27.1%. From a sub-national (regional)

perspective, in 2011, Russia's biggest trading partners were the Netherlands, Ukraine, and China.

As Russia's third largest export market, China is also Russia's largest source of imports, and it has become Russia's largest trading partner. Sino-Russian bilateral trade for 2011 amounted to US\$72.33 billion, an increase of 26.8%. China imported US\$45.45 billion, an increase of 20.3%. Moreover, in the past ten years, Japan has also made inroads into the Russian market. Japan's exports to Russia increased from US\$970 million in 2002 to US\$11.8 billion in 2011, an annual increase of about 10%. Japan's imports from Russia increased from US\$3.15 billion in 2002 to US\$19 billion, an average annual increase of 15.8%. Japan has become Russia's second largest trading partner in Asia, second only to China.

The above data shows that bilateral economic cooperation in Northeast Asia has made remarkable strides. Economic ties between countries in Northeast Asia continue to strengthen, deepening economic inter-dependency. However, Northeast Asian economic integration has not yet made truly substantial progress. It remains the only area of the world with no established regional system for economic cooperation, with no established economic cooperation organization. The economic cooperation potential, however, remains.

From an investment perspective, investment cooperation in Northeast Asia has gradually strengthened, especially in Japan and South Korea's investment relationship which is constantly being enhanced. This will serve to promote mutual investment and bring more opportunities for most regions of China as well. Overall, Japanese and Korean investment in China is highly concentrated in the manufacturing industry. The electronics and communications equipment manufacturing industry have the highest concentration of investment from Japan and Korea. This is the result of dramatically increased labor costs in Japan and South Korea since the 1980s and an improving investment environment in China.

From the 1980s, Japan began to outsource its industries to China. However, this was done quite tentatively at first in order to gauge China's investment. Thus the terms of investment in China were very short. After ten years of development, however, the 1990s saw a rapid growth of Japanese investment in China, particularly in the proportion of

investment in the manufacturing sector. After the Asian financial crisis, with China's accession to the WTO there were further improvements to the domestic investment environment and gradual relaxation of restrictions on foreign investment, Japanese companies now occupy a favorable position in the global competition for increased investment opportunities in China. Beginning in 2006, Japanese enterprises started to increase investment in the service sector of China; investment in China's non-manufacturing sector has experienced great growth. However, since 2005, generally speaking, Japan itself has been affected by the economic downturn and thus Japanese investment in China has started to slow down. Nevertheless, in the long-term we can expect diversified investment by Japanese companies in China will continue.

There's been a sharp increase in Korea's direct investment in China since the two countries established diplomatic relations. Korea's investment in China goes to labor-intensive and processing industries of a low technological level, mainly small and medium enterprises located relatively close to South Korea. The Asian financial crisis affected Korea's investment in China, but these effects have been gradually eliminated since China's accession to the WTO. China's improved market environment has led to a larger scale of Korean investment every year and to China taking in a larger share of total foreign investment from Korea. Investment has been accompanied by structural adjustments. Korean investment in China mostly targets labor-intensive industry sectors, mainly manufacturing. Investment by Korean small and medium manufacturing enterprises allow them to avoid domestic competition, to access cost advantages, and to build factories in China. The geographical distribution of investment has expanded. Korean companies gradually expanded direct investment from the northeastern region to the southeast coastal region especially the yellow triangle and inland.

Since China's reform and opening up, a large portion of its foreign direct investment (FDI) has come from the Japanese, the FDI from Japan mainly is targeted to the import and export trade sectors, food and retail, business services, computer software outsourcing, and other fields. In recent years, investment in the manufacturing sector has increased, but the number of investments is still small.

As a developing country, China's industrial structure is still at a relatively lower level compared to Japan and Korea. While in some areas such as, aerospace, nuclear

energy, and other cutting-edge technologies China has become a leader, in the main industries—those seen as engines of economic development and social progress—such as, information technology, automobiles, financial services, logistics, medical and health services, etc. China is still at a lower level. Thanks to a huge population and relatively cheap labor costs, the main feature of Chinese industry is labor-intensive production. In addition, the advantage for Chinese industry still remains its vast territory, rich natural resources, and huge domestic market.

Japan's industrial structure is at the highest level of the three. Its industries are technology-intensive and developed and its main advantage is in information engineering, biotechnology, environmental protection, medicine, multimedia, and other high-tech industries as well as automobile, steel, shipbuilding and other traditional manufacturing industries. Korea's industrial structure is at the mid-level of the three countries. As a newly industrialized country, South Korea has mainly export-oriented, capital-intensive, and technology-intensive industries. Korea is a world leader in the information industry, shipbuilding industry, tire industry, the production of synthetic fibers and textiles, automobile manufacturing, and steel industry. Hyundai, Samsung, Daewoo, LG, and other major *chaebols* occupy an important position in the international market.

Overall, China is most competitive in labor-intensive industrial products and agricultural products, such as food, animal and plant products, wood products, footwear, umbrellas, textiles, and other miscellaneous low-tech products with relatively low added value. In these products, China has obvious advantages compared to Japan, this is less obvious relative to Korea, however. Japan occupies a leading position in technology, an advantage in terms of high-tech value-added industries such as telecommunications, auto parts, electronic products, and so on. Korea has developed these high value-added industries quickly, they already rival Japan in these areas. Japanese companies Sony, Toshiba, and others are losing market share to Korea's Samsung, LG, etc. There is thus varying levels of complementarity as well as competition amongst these three countries of Northeast Asia.

The main features of industrial cooperation in Northeast Asia have been: first, industrial transfers and cooperation between Japan and Korea focused on manufacturing and construction, and since the 1980s transfers to China; second, industry transfer and

cooperation driven by conglomerates in Korea and Japan such as Mitsui, Panasonic, Hyundai, Samsung, LG, etc.; third, outsourcing became a new bright spot in Japanese and Korean industrial cooperation. Demand has risen in Japan and Korea for software and services and the service sector in China has gradually improved, attracting multinationals and investment to China's business sector.

These trends are likely to continue. Japanese and South Korean companies will continue to invest in China because of its lower labor and operating costs. However, we will likely see more and more Japanese companies join hands with Chinese enterprises to make high-end products in China for export to global markets and for the Chinese domestic market. Ensuing rising investment costs in the eastern coastal areas of China, however, will prompt Japanese and Korean companies to look elsewhere in China. The vast inland provinces of the Yellow River basin provides a good opportunity for development.

The Yellow River basin is the birthplace and cradle of Chinese civilization, the economic development of this area is an important component of the economic development of China as a whole. It is especially important as a transcontinental corridor and for access to hydropower resources, coal, oil, and gas. Therefore, the economic development of China's Yellow River basin has special significance in terms of optimizing China's productivity. However, it must be pointed out that the economic development of the Yellow River basin provinces is uneven. Although after implementing China's western development strategy the foreign trade of the western part of the Yellow River basin area has improved, compared with the eastern region the level of foreign trade is still very low. The export commodity structure is irrational, the geographic structure of export commodities is in serious imbalance. In particular, the rich mineral resources of Gansu, Inner Mongolia, Ningxia, Qinghai and four inland provinces are inaccessible and poorly developed. The foreign export-orientation of Shaanxi, Hebei, Henan, Shanxi also in not satisfactory.

Table 1. FDI in Shandong Province from Korea and Japan (unit: 10k USD)

Year	Korea	Japan	Russia
2000	56,744	33,382	
2001	88,426	34,305	
2002	155,713	49,465	
2003	283,958	46,133	
2004	359,194	56,157	
2005	338,538	68,063	
2006	371,372	70,275	
2007	372,069	68,612	801
2008	126,483	40,164	565
2009	120,565	30,396	653
2010	95,056	31,937	778

Table 2. FDI in Shanxi Province from Korea and Japan (unit: 10k USD)

Year	Japan	Korea	Total FDI	Share of Korea and Japan FDI in total
2003	783	20	803	3.64%
2004	340	52	392	4.35%
2005	621	432	1,053	3.83%
2006	13	239	252	0.53%
2007	33	1,803	1,836	1.37%
2008	141	24,524	24,665	24.11%
2009	59	2,473	2,532	5.13%
2010	358	397	755	1.06%

Table 3. FDI in Shaanxi Province from Korea and Japan (unit: 10k USD)

Year	Japan	Korea	Total FDI	Share of Korea and Japan FDI in total
2004	2953	670	52664	6.88%
2005	1957	110	62839	3.29%
2006	969	0	92489	1.05%
2007	1310	895	119516	1.84%
2008	385	294	136954	0.50%
2009	630	3765	151053	2.91%
2010	4976	58	182006	2.77%

The above tables provide examples for the cooperation between Korean, Japan, and the Chinese provinces of Shandong, Shanxi, and Shaanxi. All these provinces belong to the Yellow River region but the FDI from Korea and Japan are much lower in inland provinces than in Shandong. Considering the abundant natural resources in Shanxi and Shaanxi province, there is great potential for cooperation.

The main reason for the underdevelopment of the inland provinces is natural conditions and the restriction this has imposed, historically, on transportation. The Yellow River Water flows through the whole territory, but due to hydrological conditions it did not act as a transport axis the way the Yangtze River has. Therefore, the provinces of the Yellow River basin have not benefitted from an interconnected area-wide economy. This means that a broad strategy to create a Yellow River basin economic zone requires development of land and sea transport (including rail). The Yellow River area must also promote export-oriented development and cooperation through connections to Northeast Asia. In so doing the Yellow River basin should take advantage of its rich resources and market itself as vital link in the Eurasian Continental landbridge—thereby linking the nine provinces of northern China's largest industrial belt to the longest industrial and transportation corridor. The Tianjin Binhai New Area will play a huge role in this process.

Because of geographic location and cultural traditions, the Chinese provinces in the Yellow River basin have had relatively close economic and frequent trade exchanges with Northeast Asian countries (especially Japan and South Korea). A concerted effort to link the Yellow River Basin to the Northeast Asia region would act as leverage for a faster and better economic development and integration process of the Northeast Asian region as a whole.

Regional economic integration has been growing worldwide trend since the 1990s. Since China's initial opening we have witnessed the opening and rapid development of many areas in China including the Yangtze River Delta and Pearl River Delta. China's northern region lags behind in this process. The Binhai New Area is representative of China's strategy for opening up, upgrading, and expanding economic exchange. Along with the Tianjin Binhai New Area, the regions in northern China, the Yellow River basin as a whole represents a golden opportunity for development and economic cooperation. A grand yet rational vision takes Beijing and Tianjin as core areas (recognizing the pivotal

role of Tianjin port) that are connected by economic ties and infrastructure to a larger radius encompassing the economy to Liaodong and Shandong Peninsulas as well as the hinterland of the Yellow River basin.

*Part II***Financing Economic Integration and a Regional Multilateral Bank:
Research Papers on the Northeast Asian Bank for Cooperation and
Development (NEABCD)**

Creation of a Joint-Venture Bank by China, Japan, and Korea

Jai-Min Lee

1. Introduction

Northeast Asia has great potential for development. Many research institutions have estimated the cost of development projects in this region from US\$16 billion¹ to US\$140 billion² a year, implying that the demand for development projects would be huge. Especially, there is increasing demand for cross-border projects in infrastructure and energy. For example, cross-border road, railway, gas pipeline, and marine tunnels need to be built so that both capital transfer and trade can be increased within the region.

Unlike other economic blocs such as the EU and NAFTA, the Northeast Asian countries have not cooperated actively with each other due to historical issues and differences in economic level and economic system. However, the Northeast Asian region has a greater development potential than any other region in the world.

To see such development potential materialize, financing is indispensable; and the financing demands of the region are indeed large. We have discussed for many years how we might raise the fund for the development of Northeast Asia (NEA). However, fundraising has not been improved yet in this region. This is one of reasons why development projects in NEA have not been actively implemented. In this regard, the purpose of this paper is to propose an idea for increasing the financial liquidity of this region.

2. Challenges for development finance in Northeast Asia

In general there are financial sources for development projects: commercial finance and policy finance. The best way to raise a large amount of money is to mobilize funds

¹ Estimate of the Japan Institute of International Affairs (JIIA) in 2003.

² Estimate of the Korea Development Bank (KDB) in 2004.

from private sector, in the form of investments and loans. The private sector, however, is not willing to inject money in large-scale projects without security for repayment. Private enterprises are very tentative in their participation in developing country projects since those projects are risky in many respects. In Northeast Asia in particular, certain social and institutional issues tend to be viewed as impediments to private participation in projects.

Given these political and institutional constraints on commercial finance, public finance sources will have to play a catalytic role so as to attract private funds into this region.

Public finance sources used by developing countries consist of bilateral official development assistance (ODA), official export credit by agencies (ECAs), and multilateral public finance through multilateral development banks (MDBs). These sources have their own nature and merits. Among them, MDBs are the most reliable sources since ECAs and ODA providers consider their own national interests preferentially.

Among existing MDBs, the Asian Development Bank (ADB) has provided financial support for a large number of Asian development projects. However, it has not supported actively NEA development projects because of regional specifications. For example, Russia and North Korea are not members of the ADB, and Japan and Korea are not eligible for MDB loans.

Thus, we have discussed the idea of establishing a new MDB, the so-called 'Northeast Asian Development Bank' (NEADB)³, which would be designed to provide financial support only for projects in the NEA region. In particular, The Northeast Asian Economic Forum (NEAEF) has dealt with the issue of the establishment of a Northeast Asian Development Bank for over twenty years. Thanks to NEAEF's constant efforts, government authorities of China, Japan, and Korea have begun to take interest in the NEADB. This is significant, and we hope that the Bank's establishment will be discussed on a governmental basis as soon as possible.

³ The term of 'Northeast Asian Bank for Cooperation and Development' (NEABCD) is also used.

Table 1. Major proposals or discussions on the NEADB

Year	Place	Event
1991	Tianjin, China	Duck Woo Nam (former prime minister of South Korea) proposes establishment of the Northeast Asian Development Bank (NEADB) in a presentation at the 1st Northeast Asia Economic Forum (NEAEF).
1993	Yongpyong, S. Korea	Campbell and Kakazu present feasibility study report at fourth NEAEF. The report elaborates the need for the NEADB, estimated capital demand in the region, capital investment from possible member countries, organization and operation of the Bank.
1997	Ulaanbaatar, Mongolia	Stanley Katz (former Vice President, ADB) presents the paper “Capital Demand for Infrastructure Development in Northeast Asia – Necessity of the NEADB” at 7th NEAEF. His paper has since been referred to as the “Katz proposal”.
1999	Tianjin, China	Tianjin City Government proposes headquarters of the NEADB be located in Tianjin
2002	Osaka, Japan	Tokyo Foundation supports research for the establishment of the NEADB. The results are reported at the development finance session of the NEAEF.
2011	Hawaii	Emphasis is placed on the potential role of NEADB in cross-border cooperation and energy infrastructure. Countries in Northeast Asia are encouraged to work with their government institutions to expedite the process toward achieving consensus for policy action establishing the NEADB at the 20th NEAEF.

Source: Takashi Yamamoto, “Analyzing a Strategy for Development Finance Cooperation in Northeast Asia” (2010).

Because of many political issues and procedural problems, however, we are not sure when the establishment of NEADB will be realized. Considering the demand for development projects in the NEA region, we need to do something to materialize finance cooperation before launching the NEADB. In this regard, creation of a joint-venture bank by China, Japan, and Korea could be an effective alternative.

3. Creation of a Joint-Venture Bank by China, Japan and Korea

Since China, Japan, and Korea would be major contributors for any new MDB, cooperation and agreement among them in this regard is indispensable. Considering that an inter-governmental agreement presents great procedural challenges and would likely be a protracted matter, it would be much simpler for the governmental banks in the three countries to establish a joint-venture bank.

We may call this the ‘CJK Bank’ temporarily. The CJK Bank could facilitate the implementation of development projects in NEA and act as a stepping stone or precursor to the NEADB.

Formation of the CJK Bank

The envisioned joint-vent bank is formed by governmental banks in China, Japan, and Korea. The shareholders would be the China Development Bank (CDB)⁴ or the Exim Bank of China, the Japan Bank for International Cooperation (JBIC) in Japan, and the Exim Bank of Korea. These banks play an active role as governmental banks in providing long-term loans for overseas development projects.

They would contribute the same amount of capital as equity to form a joint-venture bank. Supposing that the initial capital of the CJK Bank is US\$600 million, each bank pays US\$200 million. Considering their capital size and finance volume, these amounts would not be that much.

Table 2 shows in brief the financial profiles of the three banks. In terms of capital size, the CDB holds US\$49.2 billion, JBIC US\$23.3 billion, and the Exim Bank of Korea US\$8 billion. The outstanding loans of the CDB are over US\$1,000 billion, and JBIC and Exim Bank of Korea have a loan volume of over US\$80 billion, respectively.

They all have high credit ratings. Moody’s rating for all three is Aa3. The CJK Bank could raise large sums of money by issuing global bonds under the guarantee of these mother banks. That is, the CJK Bank could have a large multiplier effect on capital, which means it has a high leverage effect.

⁴ The CDB provides financial support to overseas projects as well as domestic projects.

Table 2. Profiles of CDB, JBIC and Exim Korea (US\$ billion)

	CDB (2012.12)	JBIC (2012.03) ¹	Exim Korea (2012.12)
Capital	49.2	23.3	8.0
Loans outstanding	1,029.4	82.2	81.1 ²
Moody's ratings	Aa3	Aa3	Aa3

Note: 1) FY 2011 is 2011.04~2012.03; 2) Including guarantee (US\$ 39.4 bil.)

Source: Annual Reports of the three banks

The joint-venture bank will be managed by an independent CEO under a board of directors formed by the three mother banks. The staff will consist of experts in long-term development finance from existing MDBs, ECAs, and international commercial banks.

Sectors Supported by CJK Bank

The objective of the CJK Bank is to promote economic development in the NEA region by expanding the financial liquidity for development projects in NEA through equity investment, direct loans, and guarantees. Specifically, it could promote cross-border projects among China, Japan, and Korea. There is a high demand for cross-border development projects involving these three countries.

Looking back at the past, the cross-border development program in the Tumen river area was started from early 1990s. Since then, some regional cooperation programs have been suggested regarding other cross-border areas including the Yellow Sea Rim, East Sea, and Korea-Japan Strait.

Submarine tunnel construction between China and Korea and between Japan and Korea are promising projects. There has been substantial work done on studies and discussions on building a submarine tunnel between Japan and Korea. One such example is the Busan-Fukuoka JEA Agreement reached in 2008.⁵

Developing a regional logistics system would be of great benefit to trade expansion among the three countries. Such a logistics system needs the construction of innovated terminals, logistics parks, ICT systems, etc.

⁵ See Jung-Duck Lim, "New Regionalism across the Korea-Japan Strait: Cross-Border Region between Busan and Fukuoka" (2009).

In addition, gas pipeline construction passing through the three countries from Russia and offshore energy development projects would contribute to the energy sectors of the three countries.

Green growth sectors including energy efficiency, emissions reduction, low carbon and environmental protection projects also represent potential and important areas for cooperation and investment to achieve sustainable growth.

The construction of cross-border projects will facilitate trade and investment among the three countries and promote personal exchanges. It is certain that these projects will help strengthen economic and political cooperation among the three China, Japan, and Korea.

Meanwhile, the CJK Bank could encourage private investors from the three countries to participate in NEA's public sectors by supporting public-private partnership projects in NEA. Public-private partnership or PPP indicates a government service or private business venture which is funded and operated through a partnership between the public sector and private firms. Many infrastructure projects are implemented in the form of PPP, a typical example would be a toll road project. Private developers provide financing and construct the infrastructure, while governments grant a right to own and operate the project to private developers for a fixed period. Then the project ownership transfers to the government at no cost after the concession term. Recently private capital participation in development projects (which in the past was solely the purview of the public sector) has been on a dramatic increase owing to the PPP program.

Multilateral development banks, export credit agencies, and commercial banks participate in PPP projects. For example, the Asian Development Bank has increased financial support for PPP projects. It provided US\$23,609 million for 175 projects from 1998 to 2008. It operates a separate department to deal with PPP projects.

JBIC and the Exim Bank of Korea also actively provide loans and guarantees to PPP projects. Specifically, Exim Bank Korea supports PPP projects through a linkage of ODA loans and export credits.

The CJK Bank would provide loans or guarantees for private parties that have PPP agreements with public institutions in NEA. Project finance (P/F) techniques will be employed to mobilize the funds for those projects.

PPP could be an efficient vehicle for the construction of infrastructure and energy development in the NEA region. NEA has a great demand for infrastructure development in the public sector. In particular, a number of cross-border infrastructure projects could be promoted on a large scale. In addition private developers from Japan, Korea, and China are experienced in such development projects.

Nevertheless, PPP projects have not been actively promoted in this region due to the lack of financial support. Although the ADB provides a large amount of funding to PPP projects, very little has reached NEA. Thus, the CJK Bank is expected to contribute to realizing PPP in the NEA region.

Financing Scheme of CJK Bank

The CJK Bank would provide financing by way of direct lending, equity investment, and guarantees. The main types would be equity investment and guarantees because the capacity of the Bank for direct lending would be limited considering its small capital size in the initial stage.

Figure 1 shows the financing scheme of the CJK Bank. It provides equity for project companies along with private investors, or it provides guarantees for commercial banks so that they can provide loans for the project company implementing the project. If the CJK Bank participates in the project as an equity investor, it could enhance policy leverage, and private investors might then have more confidence in their investment in the projects.

Through guarantees (taking on political risk), the CJK Bank would induce large commercial loans for NEA development projects. Direct lending would be provided through co-financing with MDBs, other ECAs, and commercial banks, as well as the three mother banks. If a project is profitable, it could attract a large sum of money from both private and public sources by utilizing the project financing scheme. Since the CJK Bank provides the financial support on a project basis, it could deal with large scale projects.

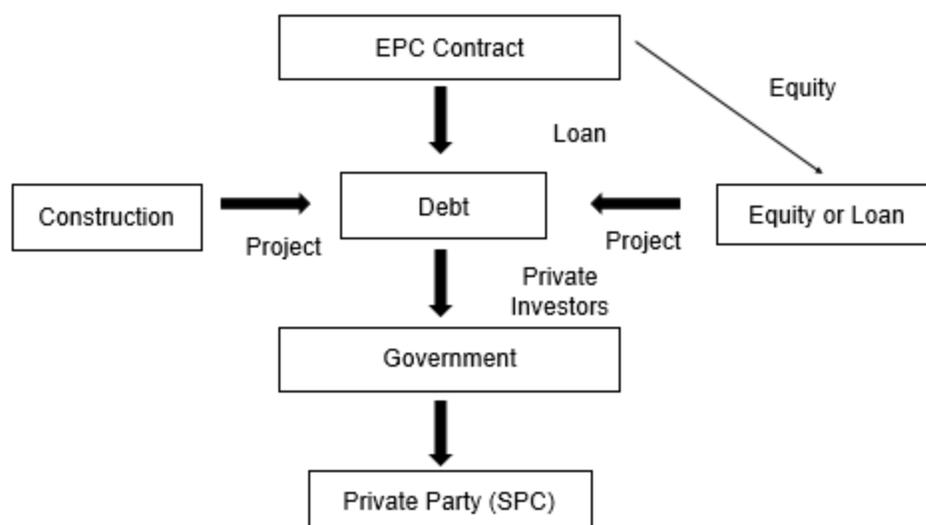


Figure 1. Financing scheme of CJK Bank

Comparison with Existing MDBs

What is the difference between the CJK Bank and MDBs? The most significant difference is that MDBs provide financial support for only developing countries, however, the CJK Bank would participate in projects implemented in developed countries as well as in developing regions. For example, Japan which has participated in all the MDBs only as a donor, would be a beneficiary of the finance. Korea and developed Chinese regions would also be beneficiaries of the finance.

In addition, contrary to the MDBs which provide financing on concessional terms, the CJK Bank provides financing on commercial terms and conditions. It would accumulate profits and utilize them for the capital base of the NEADB in the future. The other merit of the CJK Bank is that it would potentially reduce political obstacles because its business activities are based on private sector principles.

The CDB (or Exim Bank of China), JBIC, and the Exim Bank of Korea—the envisioned shareholders of the CJK Bank—have extensive experience in long-term development financing and include many financing experts and funding capabilities. The CJK Bank would be able to take advantage of this experience and the knowledge of financing experts immediately, from its foundation.

Obstacles to the CJK Bank

Because there is no precedent for an international joint-venture bank among governmental banks, difficulties in creating the CJK Bank are anticipated. Above all, as they are all governmental banks, they need to obtain approvals from their governments for the contribution of capital to a joint-venture bank. However, the procedure for its establishment would be much simpler and speedier than would be the case in establishing a new MDB

The Exim Bank of China, JBIC, and the Exim Bank of Korea are involved in financial cooperation through many fields. In fact, there is already a precedent for trilateral cooperation. The three banks contributed capital to form an international financing facility; they participated as major shareholders in an Asian bond facility, the so-called Credit Guarantee Investment Facility (CGIF).

The CGIF was launched in 2012 to activate the bond market in ASEAN+3 countries (China, Japan and Korea).⁶ It provides guarantees to member countries' corporations when they issue corporate bonds. Due to the guarantee of the CGIF whose credit rating is triple A, the companies can save the issuing cost and extend the maturity of bonds.

For the initial capital of US\$700 million dollars, the Exim Bank of China and JBIC each contributed US\$200 million and the Exim Bank of Korea contributed US\$100 million dollars. The ten ASEAN member countries provided US\$70 million and the ADB US\$ 130 million. The three banks from China, Japan, and Korea are included in the board of directors and they are cooperating with each other to operate the CGIF.

The CGIF is a new multilateral development entity established in order to achieve specific purposes and to cover specific areas even though ADB can fulfill such activities. In this sense, the CJK Bank can follow the CGIF model in both rationale and procedure for its establishment.

In addition, the three banks have experience operating a cooperation council. In 2005, the Exim Bank of China, JBIC, and the Exim Bank of Korea formed the Northeast Asia Export Credit Agency Association. Since then they have exchanged development project information and promoted personnel exchanges. JBIC and the Exim Bank of Korea have held annual meetings since 2001. Exim Bank of China and the Exim Bank of Korea

⁶ It was established in 2010 and began business in 2012.

signed an agreement to support overseas projects run jointly by Korean and Chinese companies in June 2013. Such experience would facilitate the creation and efficient operation of the joint-venture bank.

4. Conclusion

We are well aware of the need for a Northeast Asian Development Bank in the NEA region, and we have made many efforts for its establishment over the years. Thanks to the constant efforts of the Northeast Economic Forum (NEAEF), we've seen many achievements, including the fact that government authorities in China, Japan, and Korea have begun to take on the issue of the NEADB.

However, the establishment of the NEADB remains uncertain due to procedural, institutional, and political obstacles (including a lack of political consensus). At this moment we need to promote a more specific form of financial cooperation in this region, while at the same time continue to pursue the NEADB. A joint-venture bank involving China, Japan, and Korea is a feasible suggestion.

First, the formation of a CJK Bank involves only three banks as shareholders, and is thus more immediately achievable. That is, its establishment procedure would be much less complicated than in case of the NEADB.

Second, it would provide financing for projects implemented in developed countries such as Japan, as well as expanding substantial financial liquidity for NEA development projects.

Third, it could utilize the funding capability, loan experience, business networks, and human resources and expertise—necessary for long-term development finance—of the three mother banks. The three banks have close relationships with many and experienced developers in their countries and could encourage them to participate in NEA infrastructure projects in PPP form.

Finally, the CJK Bank could contribute to strengthening economic cooperation among China, Japan, and Korea more generally by increasing trade and personal exchanges among three countries.

In short, the accumulated experience of financial cooperation through the CJK Bank could come to represent a solid foothold in the course of establishing of NEADB.

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Economic Development of the Russian Far East and the Northeast Asian Development Bank (NEADB)

Dmitry A. Izotov

1. Introduction

The Russian Far East (RFE) is the largest federal district of Russia. Its area is 6.2 million square kilometers which is equal to about 40% of the Russian territory. To compare, it is more than 70% of the territory of the US, 60% that of China, seventeen times more than Japan, and sixty-three times more than South Korea. It's indeed one of the largest areas in the world. In spite of this, the size of the Russian Far Eastern economy is not so great. Two of the main reasons for this is the severe climate and underdeveloped infrastructure. At present, the district is home to over 4.6% of all the population of Russia, it produces 5% of Russia's GDP, about 4% of the country's exports, and its economy assimilates 7% of Russia's investments.

The economic development of the Russian Far East is subject to the established foreign economic relations, which in turn shape the region's foreign economic specialization. The RFE's export structure is rather conservative, being represented mainly by primary goods supplied to Northeast Asian countries. The challenges of economic transition of the RFE is widely discussed in the federal ministries charged with regional and economic development and in the Far Eastern regions. The solution to this problem of economic transition presupposes a move away from a reliance on exports of raw-materials. This implies participation of the RFE in Northeast Asian integration processes, specifically in transport corridors, and the formation of production-cooperation and investment zones in border regions. Of course, this requires large investments in the fixed assets of the RFE.

2. Economic Development Prospects of the Russian Far East and Foreign Economic Activity Alternatives

The long-term economic development strategy of the Russian Far East envisages several trends for the region's foreign economic specialization:¹

The Raw Materials Scenario. If current trends persist, the RFE's economy will continue to be oriented towards exports of raw materials, and imports composed primarily of highly processed investment and especially consumer goods. The main export load in this case will be carried by oil-and-gas projects from the Sakhalin and Yakutia. For the rest of the RFE, in the long-term, foreign economic specialization will be realized through growing trade and investment cooperation with provinces of Northeast China. In the near future Chinese business activity will be aimed at maintaining a significant presence in specific segments of interest in the RFE market. Implementation of development programs for industrial bases in Northeast China will result in more competitive products from Chinese industrial enterprises in that region; in turn this will lead to an increase in imports to the RFE of these Chinese products. Maintaining current Russian institutional measures for regulation of foreign economic activity will not provide an incentive to develop production-cooperation and broad cross-border investment zones that include the RFE. In the raw material scenario, border cooperation zones will be focused mainly on the Chinese near-border territories, which will lead to the establishment of an economic complex based on processing raw materials from the RFE.

Cooperation in Transport with NEA Countries. The prospect for economic growth of the Russian Far East is linked both with the strengthening of its role in the Russian economy, and with its more intensive involvement in the integration processes taking place in the Asia-Pacific region. It is also linked to the implementation of a number of large-scale transport infrastructure development projects. The major one is the inter-continental bridge between Northeast Asia and Europe across Russia's territory. Upgrading and development of the Russian Far East's transport infrastructure could provide a powerful impetus to this

¹ P. A. Minakir, ed., *Economic Cooperation between the Russian Far East and Asia-Pacific Countries* (Khabarovsk: Economic Research Institute, Russian Academy of Sciences, Far Easter Branch and the Sasakawa Peace Foundation, RIOTIP, 2007): 208 and D. A. Izotov. "Characteristics and Significance of Socio-economic Development of the Far East and the Baikal region of Russia until 2025" in Heungcheong Kim, ed., *2009 CRES Visiting Scholar's Paper Series* (Seoul: KIEP, 2010): 177-211.

process in the interest of not only Russia but all the adjoining states. Another element of transport cooperation among the RFE and Northeast Asian countries is the construction of a network of oil and gas pipelines. This includes the East Siberia–Pacific Ocean oil pipeline with a branch line running to Daqing and an extension to the ports of Primorsky Krai from which oil and oil products are to be exported to the Asia-Pacific region; it includes also the transit of natural gas from Sakhalin to China and South Korea.

The Intensive Development Trend. The key to intensive development of the Russian Far East's foreign economic activity is the availability of institutional measures that will limit exports of unprocessed raw materials. Therefore, 'local' special economic zones in the RFE are envisioned to process primary goods and export value-added processed products. This involves establishing an economic 'contact zone' encompassing the Russian Pacific coast and neighboring Northeast Asian economies. Such an arc would rely on industrial and service centers in Blagoveshchensk, Khabarovsk, Komsomolsk-on-the-Amur, Ussuriisk, Vladivostok, Nakhodka, and Yuzhno-Sakhalinsk. This represents a natural geographic area for local free economic zones. Under the appropriate institutional conditions, a real opportunity will arise to convert these industrial-service 'centers' into a kind of 'filter' for transportation and energy flows. This filter would transform a portion of exports into products and services, which in turn will largely be exported to Northeast Asia, producing an increased profit in the region itself. Imposing certain restrictions on raw materials export may attract large investments, domestic and foreign, to the process industries of the RFE. In the long term, the RFE's trade relations will undergo diversification, which will keep the RFE's export market from being oriented only towards exports of raw materials. Restrictions on raw material exports supplemented by restrictions on imports of a number of consumer goods, will lead to the creation of assembly plants both in cross-border regions and in major cities of the RFE. This will mean the opening up of new, including innovative, operations. In this scenario, in the long-term, RFE would gain significant momentum for infrastructure, social, and economic development.

The most significant factor for maintaining regional economic growth is the promotion of investment activities. During the process of investment generation, however, a host of issues can arise that might only be solved through direct governmental

intervention. Federal purpose-oriented programs constitute one form of government regulation of investment activities.

3. Development Programs of the Russian Far East and the Northeast Asian Development Bank (NEADB)

In the Russian Far East, long-term economic development plans have been implemented in many phases over a long period of time. The government has always set aside large budgets for these plans in order to allow them to reach their specific targets, even though they were not official initiatives formulated at the national level.

Among the plans mentioned above are: the industrial-military complex formation program (1930); the program for complex development of production forces of the Far East economic region and Chita region (1967, 1972); the long-term state program for development of production forces to 2000 (1987); the federal purpose-oriented program, “economic and social development of Far East and Transbaikalia for the period of 1996-2005” (1996); and the federal purpose-oriented program, “economic and social development of Far East and Transbaikalia to 2013” (a revision of the 1996 version). Those regional development plans of the past and the present are differentiated from one another in purpose, time period, and the scale of budget.

Special federal plans for regional development also have been in place throughout the 2000s despite Russia’s economic crisis. The Russian Ministry of Regional Development sees as the obligation of the federal government the expeditious approval of plans for socio-economic development of the RFE, Buryatia, Trans-Baikal, and Irkutsk regions (Baikal region) until 2025 (Program). The strategic goal of regional development in the RFE and the Baikal region is to accomplish the geopolitical task of providing its residents incentives to settle down. To that end, the development plans need to enhance the economy and socio-economic status of the region to levels on par with federal averages and create a comfortable living environment. Furthermore, the development plan includes the strategic goal of reforming economic structure and constructing comprehensive infrastructure in transportation and energy.

A feature of the RFE economy (in addition to its raw specialization) is the lack of infrastructure, especially concerning transport communications. From 2005 increasing

investment in the construction of infrastructure facilities in the RFE was observed (see figure 1). Compared with the beginning 2000s, the bulk of these investments were achieved at the expense of the federal budget (see figure 2).

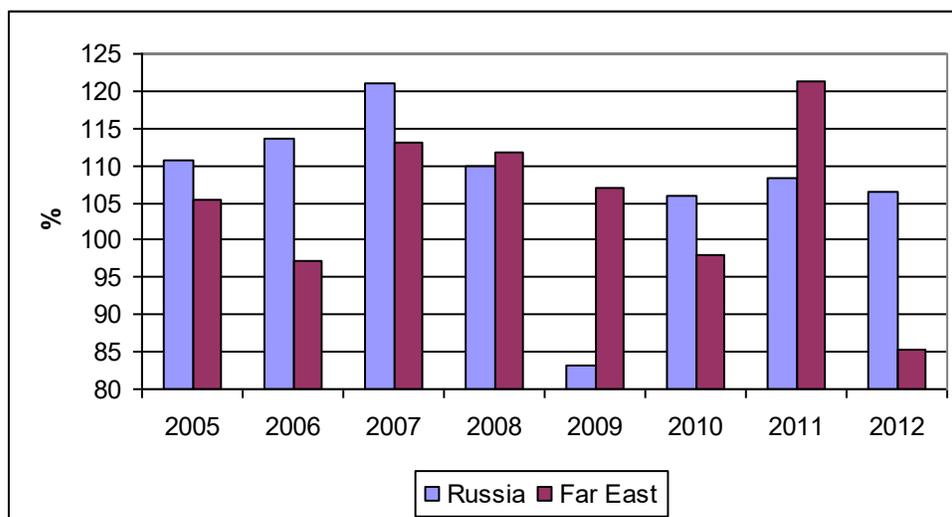


Figure 1. Investment in fixed assets (previous year = 100%)

Source: Rosstat

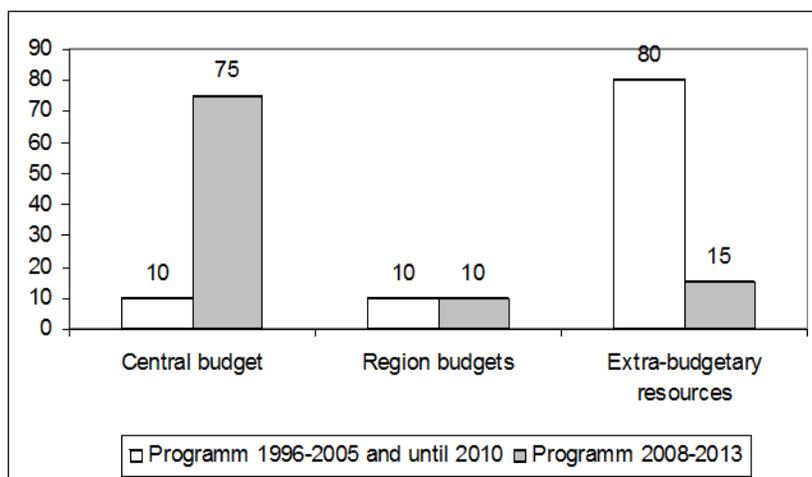


Figure 2. Distribution of investment by financial sources, %

Source: Федеральная целевая программа «Экономическое и социальное развитие Дальнего Востока и Забайкалья на период до 2013 года».

<http://www.assoc.fareast.ru/fe.nsf/pages/program.htm>

In 2013, the government adopted the next program of development for the RFE and Trans-Baikal region until 2018-2025. It requires almost four trillion rubles of capital investment from the federal budget (see figure 3).

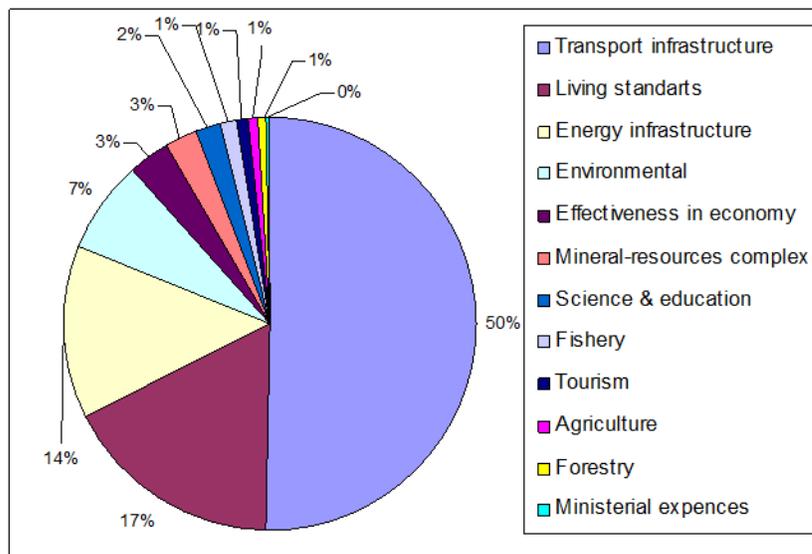


Figure 3. Structure of financing of the state program 2018-2025

Notes: Infrastructure (88%): transport (50%), social (17%), energy (14%), communal and ecological safety (7%). March 2013 = 3.8 trln rub \approx 120 bln \$

Figure 4 shows the main infrastructure projects in the RFE from the program for the year 2025. There are: traffic arteries, which shift to the north of the RFE; mining projects, characterized by large initial costs for development; creation of port, rail and engineering infrastructure in the south of the RFE; and energy facilities that will be built for export supplies to the Pacific market.



Figure 4. State program long-term infrastructure projects

Source: Перспективы социально-экономического развития Дальнего Востока уложились в 12 подпрограмм at http://dvkapital.ru/specialfeatures/dfo_23.05.2013_5264_perspektivy-sotsialno-ekonomicheskogo-razvitija-dalnego-vostoka-ulozhilis-v-12-podprogramm.html

Tourism and recreational infrastructure, social infrastructure, and the construction of zones of intensive development represent other areas for potential investment:

Russian section of the Big Ussuri Island (Khabarovsk Territory);

International Business, Education and Tourist Center in Vladivostok;

Development of the South-East Region of Buryat Republic;

Tourist Cluster in Buryat Republic;

Tourist Cluster in Kamchatka;

Development of South Yakutia;

Development of Western Yakutia and the northern region of Irkutsk oblast;

Development of the Zabaikal region of the Zabaikal Krai;

Development of Ust-Kut as the center of the North-Siberian Industrial Belt;

Development of the Bratsk-UstIlinsk Industrial Zone;

Southern Innovation Zone of the Irkutsk Agglomeration;

Development of the Chaun-Bilibino Industrial Zone (Chukotka);
 Development of the Anadyr Industrial Zone (Chukotka);
 Transportation Complex: Vanino-Sovetskaya Gavan;
 Logistic Complex: south of the maritime;
 Space cluster in the Amur Territory;
 Urgal-Chegdomyn energy cluster;
 Sakhalin energy cluster.

However, the Russian federal budget will be unable to provide for the realization of these projects. In 2013 the expected federal budget deficit is nearly 700 billion rubles². Under a negative scenario not only would the flow of money to the reserve fund stop (the reserve fund accrues revenue from high oil prices on world markets), but funds would be withdrawn from it (about 250 billion rubles) to cover the deficit. The federal budget deficit in 2014 could reach 400 billion rubles and in 2015 and 2016 it could reach 500 billion rubles. In this case it will be important to optimize of expenses and concentrate resources in implementing key projects (see figure 5).

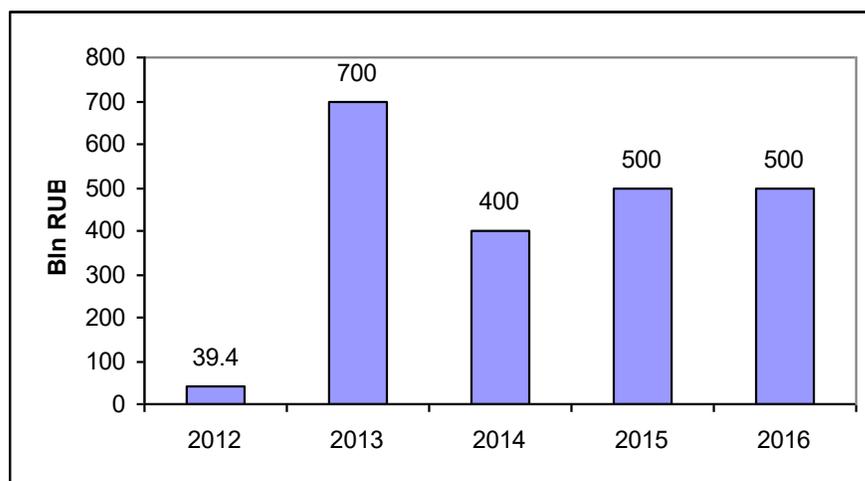


Figure 5. Russian federal budget deficit forecast

Source: Минфин снизил прогноз дефицита бюджета РФ на 2014 и 2015 годы.
<http://www.finmarket.ru/news/3394756/>

² Дефицит бюджета может достичь 1 трлн руб.
http://www.vedomosti.ru/finance/news/10426241/tvorchestvo_na_trillion

Due to insufficient funds, obviously, the development program of the RFE and Trans-Baikal will have to be significantly reduced.³ However, the reduction in funding programs from the federal budget will encourage the search for alternative sources of investment. One possible option is to attract foreign investment.

A possible source of investment may be loans from multilateral development banks. There is some leeway for increases in Russia's external debt because the Russian economy is characterized by a small proportion of external debt to GDP compared with other countries. One of the main reasons for this is the high price on crude oil (see figure 6). However, some forecasts predict that the price of oil on the world market will fall. Certainly, this is one of the main challenges for the Russian economy.⁴

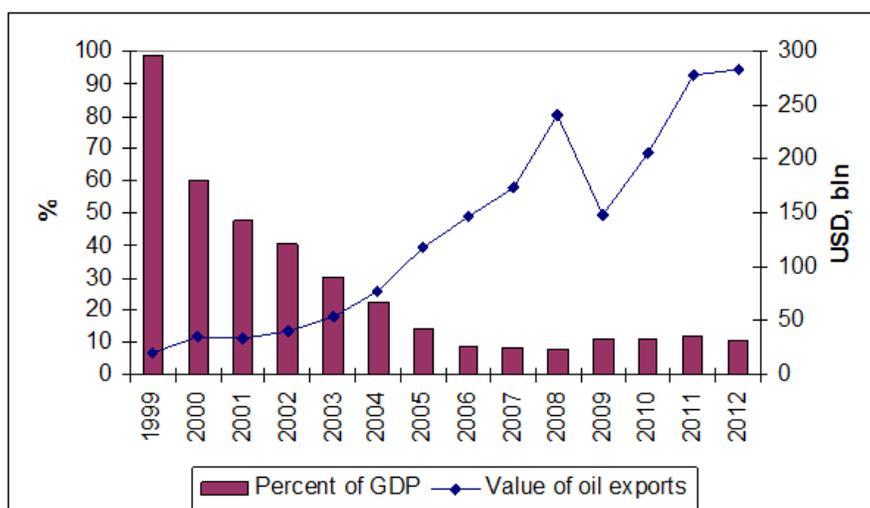


Figure 6. External debt and value of oil exports of Russia
Source: IMF.

At present, Russia is one of the main recipients of European investments. The share of APEC is small. The creation of a Northeast Asia Development Bank (NEADB) may lead to an increase in borrowed funds for infrastructure projects in the RFE. Russia's role in the establishment of an NEADB, however, is yet to be determined, in terms of capital share as well as participation in management of the financial institution (see figure 7).

³ Невозвраты в крупном размере. <http://kommersant.ru/doc/2307521>

⁴ Нужно меньше нефти. <http://expert.ru/2013/06/13/nuzhno-menshe-nefti/>

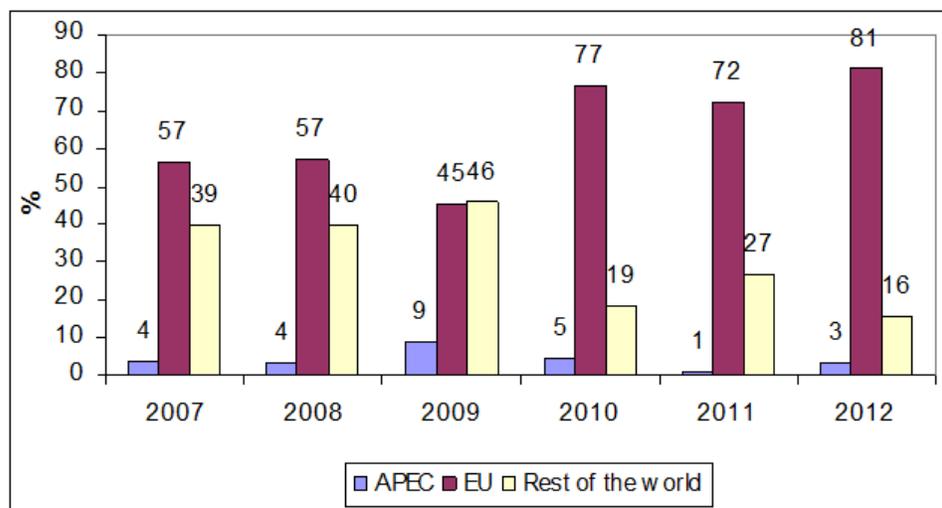


Figure 7. Structure of Russian inward direct investment by global regions
Source: Russian Central Bank statistics

Providing capital for the NEADB from Russia's federal budget is almost surely impossible due to the deficit, however, major Russian state-owned banks (Sberbank, VTB, and VEB) could be seen as potential participants in such a financial entity.

There is another challenge to Russia's participation in the NEADB now and in the near future and that is situation of the rate of Russia's national currency (see figure 8). The ruble is overvalued in terms of the ratio of Russia's huge domestic inflation. This prevents the long-term restructuring of the Russian economy because it blocks export manufacturing industries and stimulates imports (see figure 9). There is strong probability, therefore, of a ruble devaluation.⁵ This could complicate the participation of Russian commercial banks (in terms of providing capital) in the establishment of the NEADB.

⁵ Девальвация во имя роста. <http://expert.ru/2013/06/18/devalvatsiya-vo-imya-rosta/>

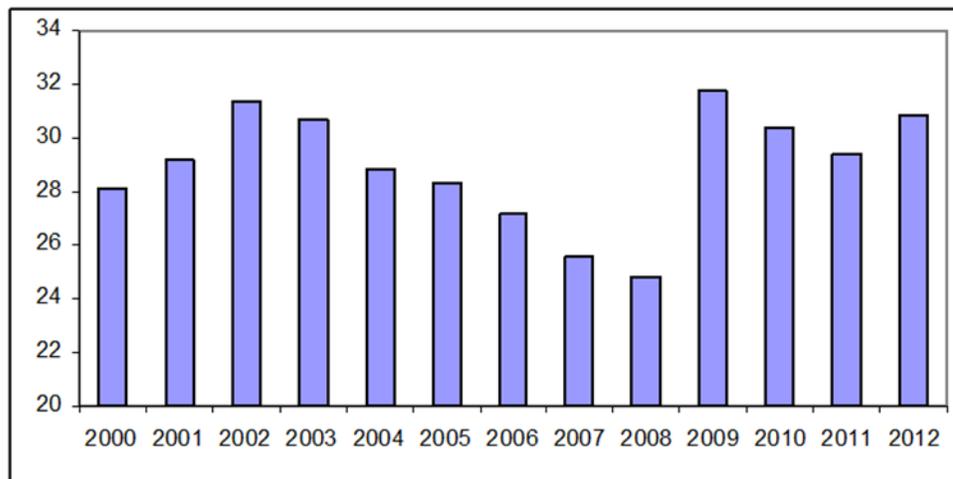


Figure 8. Rate of ruble rate against US dollar

Source: IMF

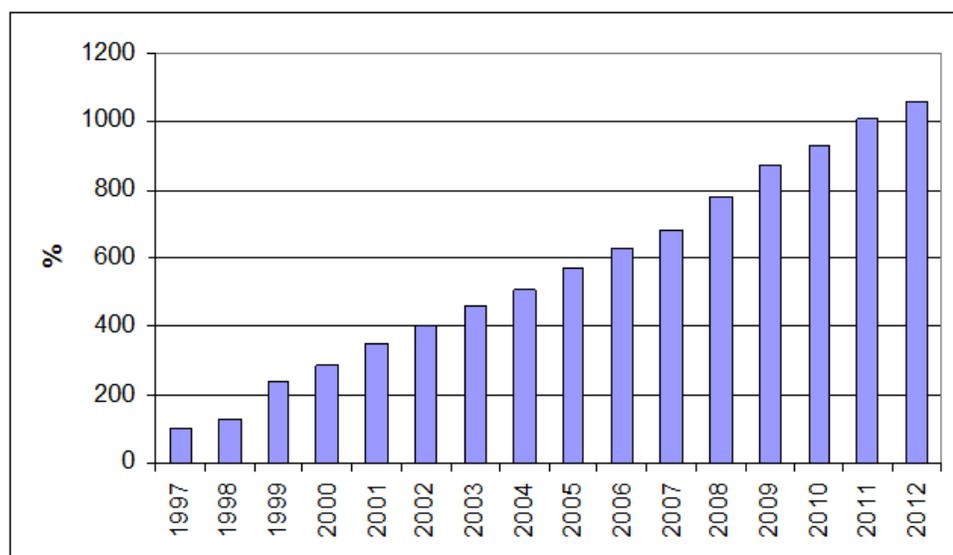


Figure 9. Inflation of Russia, average consumer prices (1997=100%)

Source: IMF

4. Conclusion

Russia's economic specialization and place in world trade is being determined within the context of different scenarios of long-term economic development of the Russian Far East. Each scenario will help determine the Russian Far East's foreign economic strategy. The scenarios of specialization of RFE are competitive in terms of economic efficiency, the most competitive being the raw materials scenario and the

intensive development scenario. It is obvious that for the RFE's economy the intensive path of development is the most promising in the long-term. However, because of contracts with foreign partners, the raw materials/resources scenario of specialization will remain the primary scenario in the medium term even if measures to restrict raw materials exports are established. To launch deep processing operations of raw materials in the RFE will certainly require quite a long period of time. However, the main factor restricting the intensive scenario of foreign economic specialization in the RFE is the extremely limited number of skilled workers in the region. Solutions to this problem include raising the migration quota for the region (including from NEA countries), creating or enhancing systems for training qualified personnel, and creating comfortable living conditions. The alternative would be turning Russia into a base of raw materials supply for East Asia with the RFE becoming a transport segment for the movement of raw materials within a unified Northeast Asian market. This would result in an outflow from the Russian Far East of its working age population.

The restructuring of the Russian economy is more important than the realization of the development Program of the Russian Far East. This fact highlights the need for special negotiations according to a schedule for the financial participation of Russian banks in the creation of the NEADB and provision of equity.

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Re-analysis of Innovation in Asian Infrastructure Financing Mechanisms

Liqun Jin

1. Demand for Innovation in Asian Infrastructure Financing Mechanisms

Economic Growth Requires New Impetus in Asia

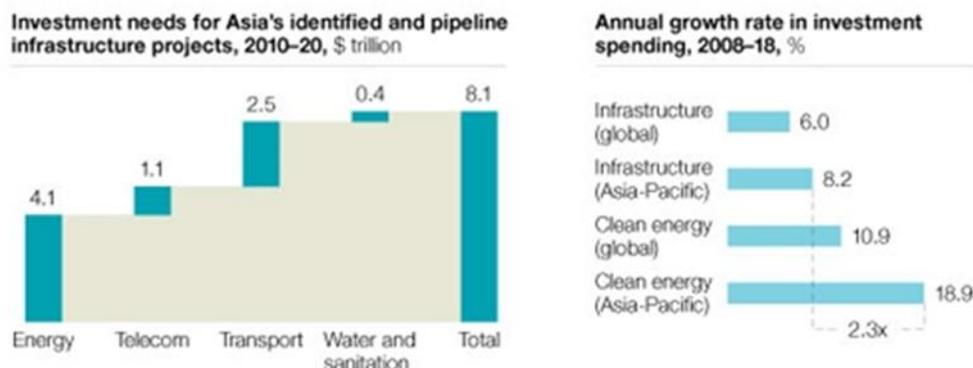
We can expect continued turmoil in the global economy coupled with low economic growth and continued decline in demand from foreign markets (in the short to medium-term at least). Asia needs a new breakthrough in transition and a new economic growth point; it needs enhancements in infrastructure investment as a response and approach to this situation.

Infrastructure investment plays an important role in economic growth, and its effect is comprehensive. It doesn't only just improve employment in the short-term, but it also increases national income and social demand, it builds confidence in the market, it fills in real funding gaps in infrastructure investment, it eliminates developing bottlenecks, increases labor efficiency, and has a pull effect on economic growth, which builds a stable foundation for long and lasting economy growth.

Infrastructure investment has a notable multiplier effect, one dollar of initial investment will create a total social demand of three to four dollars. Also, each billion dollar creates eighteen-thousand jobs. Therefore, infrastructure investment plays a pivotal role in national economic development in the long and short term.¹

¹ See for example, OECD, "Massive Infrastructure Investment Needed to Meet Future Demand, Says OECD (May 3, 2012) at <http://www.oecd.org/newsroom/massiveinfrastructureinvestmentneededtomeetfuturedemandsaysocd.htm>

Energy and transport sectors will provide much of the demand for infrastructure investment.



Source: Asian Development Bank; Clean Edge; World Bank Private Participation in Infrastructure (PPI) Database; McKinsey analysis

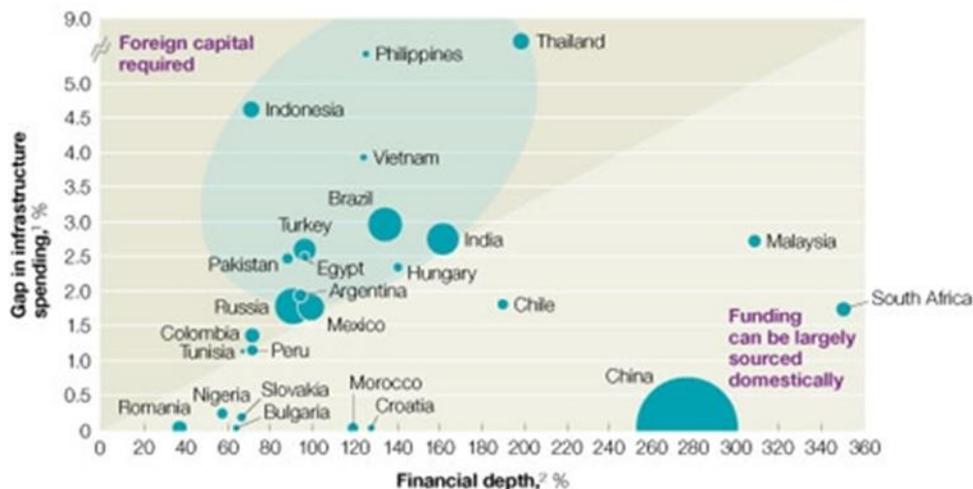
Figure 1. Investment needs for Asia and spending
 Source: Asia Development Bank and McKinsey & Company

Demand for Infrastructure Investment is Extraordinarily Strong

High speed of economic growth in developing countries leads to huge demands of infrastructure investment. One paper from the World Bank suggests developing countries need US\$1.25 trillion to US\$1.5 trillion for infrastructure, which leaves a gap between US\$177 billion to US\$700 billion. From 2010 to 2020, Asia will need about US\$8 trillion for infrastructure construction, plus US\$290 billion for regional infrastructure investments. There is a huge financing gap of about US\$13 trillion dollars—this represents a good investment opportunity in terms of potential returns.²

² Natasha Brereton-Fukui, “World Bank to Set up Global Infrastructure Facility,” *The Wall Street Journal World* (September 6, 2013) at <http://online.wsj.com/news/articles/SB10001424127887324577304579058660663794356> and Naveen Tahilyani, Toshan Tamhane, and Jessica Tan, “Asia’s \$1 Trillion Infrastructure Opportunity.” *Insights and Publications*. McKinsey & Company March 2001) at http://www.mckinsey.com/insights/financial_services/asias_1_trillion_infrastructure_opportunity

In much of Asia, demand outstrips financing.



¹Gap in needed vs actual infrastructure spend as % of GDP, 2009.

²Value of bank deposits, bonds, and equity as % of GDP, 2009.

Source: McKinsey Global Institute

Figure 2. Investment demand vs. financing

Source: McKinsey and Company

Limits of Existing Infrastructure Financing Approaches

Asia faces many bottlenecks in infrastructure financing. First, infrastructure investment from public finance is not enough, many countries were deeply affected by the financial crisis which lead to cuts in public financing and a more limited investment ability, therefore public finances can't meet infrastructure financing demand.

Second, countries in Asia lack infrastructure financing from the international market. An effect of the financial crisis in the US and debt crisis in Europe has been a quiet withdrawal from Asia by American and European investors such as, banks and insurance companies. Given this situation, many banks in Asia are becoming more and more active, but they are still restricted to domestic investment and are unable or unwilling to meet regional demand.

Third, local bond markets can't fill the gap of infrastructure financing, and most countries in Asia don't have bond markets for new projects.

Fourth, the legal system is not perfect in many Asian countries. Government regulatory policy frequently changes and transparency in the approval process is low. Communication and coordination is difficult. The return on investment is so uncertain that

private investors dare not make long-term investments of the kind required for infrastructure.

Fifth, the government and multilateral financial institutions cannot meet the huge local demand for funds of infrastructure investment due to a lack of capital, and the Asian Development Bank is seemingly powerless in this regard. Many developing countries face obstacles in international capital markets. The problem of a shortage of infrastructure investment in Asia is a difficult to solve.

2. Feasibility of Innovation in Asian Infrastructure Investment

Demand from Asian Countries

Asia should establish an organization for the purpose of infrastructure and economic development and not simply to reduce poverty. Some Asian countries have proposed the concept of an Asian Investment Bank as well as the proposal for the Northeast Asian Development Bank. These proposals have many supporters and if China and other major economies respond positively the matter should not be protracted.

Innovation and the ADB System

Once new infrastructure investment and financing mechanisms are established and a more flexible and efficient operation system is adopted, the Asian Development Bank (ADB) will feel more pressure, but this will not have a deleterious effect on the ADB. On the contrary, it will increase competition and provide incentives that will promote the reform of the ADB's existing management system and operational mechanisms of comprehensive reform.

From the Perspective of Business Returns

Institutional investors increasingly favor investments in infrastructure because they provide a stable income, they represent a hedge against inflation and they offer opportunities to diversify risk. Infrastructure investment has become an important part of the portfolios of institutional investors. Infrastructure is now seen as a sound investment that is stable and upon maturity provides a good rate of return.

China needs to strengthen financial cooperation with Northeast Asia and Asia. Tianjin has devoted over a decade to research on the Northeast Asia Development Bank. In cooperation with the Northeast Asia Economic Forum, Tianjin is prepared to provide research and expertise that will assist in the promotion and innovation of financing mechanisms for infrastructure investment in Asia.

Review and Strategy for the Proposed Northeast Asia Bank for Cooperation and Development

Byungwon Bahk

The geo-political landscape of Northeast Asia has changed drastically—it is becoming the center of world economic growth. Nevertheless, our long aspiration of establishing a Northeast Asian Bank for Cooperation and Development (NEABCD) has not seem much progress.

After the former prime-minister of Korea Dr. Duck Woo Nam proposed an International Development Bank for Northeast Asia in a seminar by the Dong-a Daily newspaper and the University of California at Berkley in February 1990, and after we, at the NEAEF, formally adopted this idea as a main part of our agenda at the Forum in 1999, too much time elapsed without any significant progress. In May 2010, we presented a formal proposal to the governments of China, Japan, and Korea, the three potential primary member countries, to urge them to more seriously consider the establishment of the NEABCD—we have seen no significant response from the governments up to now.

The necessity for and rationale for the NEABCD, in my view is clear. However, I would like to add one more reason for the NEABCD to make our proposal more persuasive: increased infrastructure investment in NEA through the Bank is the best way to alleviate the effects of the current worldwide economic recession.

The fundamental problem the world economy faces now is the lack of effective demand. Most industries including iron and steel making, petrochemicals, automobiles, ship building, electronics, and telecommunication, are experiencing an over-supply. Advanced countries, suffering from excessive private and public debt and balance of payment deficits, have depleted their capacity to spend on debt. Developing countries do not have enough income to spend. Price hikes of major natural resources have also contributed to a decrease in the purchasing power of most countries. In light of this

situation, we desperately need new engines of demand and an increased supply of natural resources to stabilize prices.

The capital concentrated and accumulated in oil producing countries in the Middle East and in China, continuously accruing a huge surplus of balance of payment, should be invested in the development of regions left behind, but with rich in natural resources. The development of Northeast Asia, specifically, the Russian Far East, Mongolia, and the northeastern three provinces of China is a case in point.

In spite of the rationale and the need for it, the existing international financial institutions (IFIs) still does not provide sufficient funds for this region. For the Northeastern three provinces of China and Mongolia, in 2011, the ADB allocated only 1.5% of its loans and the IBRD only 0.6%. The average is 0.9%. This area, in spite of its vast potential, cannot get its share.

The IBRD has shifted its principal goal to poverty reduction in Africa and Latin America and the ADB is focusing on Central Asia, South and Southwest Asia, allocating only 4% of its total investments to Northeast Asia.

This is the very reason why we have to find some way to invest in infrastructure in our region. We need the NEABCD not because we cannot raise the funds necessary for investments in this region—China, Korea, Japan, and Russia have sufficient funds to invest—but because we need international cooperation and political guarantees. These are vital because *most of the potential infrastructure projects in this region are mega projects and transnational in their geographic scope*. International financial institutions are regarded as the best tool for these purposes. This is the reason why those of us involved in the research and promotion of the NEABCD cannot give up.

Unfortunately, the current global conditions are not necessarily favorable. First, is the worsened financial environment in the potential donor countries such as, the US, Japan, and the EU. At the beginning of 2013, when China and India proposed an increase in capital for the ADB to facilitate infrastructure investment in Asia, most of the ADB donor countries were opposed and thus the proposal was not adopted. Many other proposals to increase the capital of the IFIs, such as IDA, have also been aborted.

Even in the past, donor countries have proven reluctant to increase the capital of IFIs. This reluctance stemmed from donor countries fearing they would lose their

hegemonic power within the IFIs if other countries were to contribute more. This is the reason why the IFIs were very slow to reflect global changes in economic power in IFIs capital allocation and voting power. The ruling donor countries cannot afford the additional investments necessary to maintain their portion of shares (and their voting power) in the existing IFIs.

Second, one of the three potential initiators of the NEABCD—Japan—recently appears less interested in economic cooperation with neighboring countries, based on recent political moves such as, raising controversial political and diplomatic issues (territorial disputes, history textbooks) and its intentional depreciation of the yen through financial and fiscal easing. At least for the time being, we might not expect ready cooperation from Japan for the establishment of the NEABCD.

North Korea represents another obstacle. Given North Korea's recent activity regarding nuclear weapons and long-range missiles, one can argue that the country is not qualified for or open to help from the international community. When we exclude North Korea, we have too few 'recipient' countries left in the region, weakening the rationale for the NEABCD. Should North Korea agree to open (and maintain this opening) of the Gaesung Industrial Estate for South Korean SMEs, promising stronger legal protection for the investments in the Estate, and should this lead to the changes in the attitude of North Korea toward the international community, then we can expect improvement of the situation.

There are, however, also some changes favorable to the establishment of the NEACBD. The first, is the fact that Mr. Zhang Guali, the former party secretary of Tianjin, is now the Vice-Premier in charge of financial matters, and one of the seven most powerful men in China. If Tianjin can persuade the central government of China to make a proposal to establish the Bank, it would represent a great step forward.

Arguably, no other country than China can take the lead in establishing the Bank. But as far as I know, Chairman Xi did not mention the Bank in the most recent summit meeting with President Park of Korea. This is the reason why I must ask my Chinese colleagues what is the real position of the Chinese central government.

Most countries, including Korea, do not have a strong enough interest or more importantly, a strong enough justification to take the initiative in the establishment of the

Bank. However, they also have no strong reason to oppose it. I propose that now is the right time for China to begin efforts towards persuading countries such as Korea, Russia, the US, Australia, and New Zealand of the need for, interest in, and viability of the NEACBD. China should take this role. I remember that in 2011 China proposed the establishment of an Asian Investment Bank, an Asian version of the European Investment Bank, at the ASEAN+3 financial ministers' meeting. *Why not the NEABCD?*

Another interesting happening is the establishment of the ASEAN Infrastructure Fund (AIF) which will be administrated by the ADB for the time being. I do not yet have detailed information about the positions taken by China, Japan, and Korea in the process of accepting the idea of establishment of the AIF, but I cannot understand why the three Northeastern Asian countries would allow the ADB to contribute capital for the AIF without asking the ADB to consider establishment of a similar infra fund for the Northeastern Asia region. We should have collected an equivalent compensation as the price for acquiescing to the AIF fund.

Recently we have made a lot of advances in financial cooperation within the ASEAN+3 scheme, such as the 'multilateralization' of the Chiang Mai Initiative, the establishment of the Asian Macroeconomic Research Office, and the Asian Bond Markets Initiatives. *Why not the NEABCD?*

It's not too late. We can ask for the establishment of a similar infrastructure fund for Northeast Asia and for the ADB's contribution in this.

In this vein, the Northeast Asian countries should consider whether we should stick to the concept of the NEABCD or contemplate alternatives. *Why not an infrastructure fund? Why not a development corporation? Why not a guarantee fund for infrastructure development?*

Why not a new bank that focuses on infrastructure investments in the region, such as the Macquarie Group of Australia, with the participation of most of the leading private banks in the region. More and more infrastructure projects are financed by private capital or through the PPP schemes. Infrastructure investment from public funds is becoming more difficult to attract everywhere in the world.

Why not begin by focusing on a single transnational project in the region such as the completion of the trans-Siberian railroad running through North Korea with participation of several private financial institutions in the region?

We need to improve the visibility of the benefits we can expect from the establishment of the Bank. A successful single project might help to persuade skeptics, and lead to the realization of a fund, a corporation, and in the end, a bank for infrastructure investment for the region. It is better to aim for tangible results as a step towards the Bank rather than see no achievement at all.

A few months ago, the Korea Development Institute (KDI), Korea's most authoritative economic research institute (affiliated with the Ministry of Finance and Economy), published a report concerning the economic development of North Korea and the establishment of a NEA development corporation. When I asked for confirmation, both KDI and the Ministry told me that the conclusion of the report does not necessarily show the official position of the Ministry. But we can see the idea of having *some type of development investment institution* for the region has a wide base of support in Korea.

To conclude, I would like to advise that we should aim to realize whatever we can do, instead of sticking to any specific form of institution, such as our original idea of the NEABCD. I would also suggest that, initially, we should *not* attempt to include as many countries as possible. Rather, we should begin with the minimum number of donor countries—those with the strongest interest in the region. It is better to achieve progress step by step than to waste time without achieving anything.

A Perspective from the Republic of Korea

Jae Hyong Hong

We often refer to the twenty-first century as the era of Northeast Asia because of its great achievements and continued potential. During the last two decades, Northeast Asian countries have experienced outstanding economic growth and national development. Northeast Asia has proven to be most dynamic region, and with the advances of the Chinese economy the region has emerged as one of the main pillars of the world economy, along with NAFTA and the EU.

Nevertheless, we have failed to translate numerous discussions on Northeast Asian integration into reality. Why? The biggest reason remains the legacy of the Cold War, which remains in the form of the division of Korea into North and South. Fundamentally, building a joint development framework for the region seems out of reach unless inter-Korean relationship is improved.

However, intra-regional cooperation and integration may result in opening a path for inter-Korean trust and reconciliation. Inversely, facilitating economic cooperation between the two Koreas will further accelerate Northeast Asia's integration. That is the 'creative convergence effect' that is to come from the Northeast Asia Peace and Cooperation Plan (동북아평화협력구상) and the Inter-Korean Trust-building Process (남북한신뢰프로세스) advocated by South Korea's new government.

Jean Monnet, father of European Integration, consistently drew on non-political economic joint activities such as the European Coal and Steel Community, in an attempt to build reconciliation and trust between Germany and France and pursue higher levels of European integration.

Now, what can we do for the sake of Northeast Asian integration? I think we can learn from such examples. In other words, we need to launch major projects that can link

South and North Korea, China, Russia, Japan, and Mongolia all together, and take these as a first step towards Northeast Asian integration.

And the very region that serves the interests of all Northeast Asian countries is the Tumen River Delta Area, where the Korean Peninsula, China, and Russia share borders. Therefore, developing this area holds strategic meaning, enabling peaceful resolution of conflicts in the Northeast Asian region and further advancement of the Tumen River Delta Area as a new free trade zone.

The idea of a Northeast Asian Economic sphere first began to gain momentum with the 1988 Niigata Conference on the Sea of Japan, organized by former Japanese Minister of Foreign Affairs Dr. Saburo Okita and Dr. Lee-Jay Cho, then of the East-West Center. Around the same time, Dr. Song Jian, Vice Premier and Chairman of the State Science and Technology Commission (SSTC) of the People's Republic of China, was considering the possibilities of developing the Tumen River Basin. As a first step, Dr. Cho, in cooperation with Dr. Song Jian and the SSTC, organized the 1990 International Conference on Coastal Development in Northeast Asia in Changchun, hosted by the Jilin Provincial Government. In the presence of Dr. Song Jian along with Governor Wang Jongyu of Jilin, the proposal for a Tumen River Area Development Program (TRADP) was inaugurated and the initiative for the Northeast Asia Economic Forum was articulated. The UNDP subsequently undertook the implementation of the Tumen River Area Development Programme. Mr. Rong Intu, who served as director of the UNDP-TRADP and later as China's Trade Representative, participated in this conference.

In this sense, we have to pay special attention to the future of the Greater Tumen Initiative (GTI)—evolved from the TRADP, the only Northeast Asian Consultative body with a Secretariat that dedicated specifically to the development of this area.

Major projects in Northeast Asia can range from infrastructure such as roads, railways, and ports to energy, resource development, agriculture, electricity and transnational tourism.

The Russian government created the Ministry for Development of Russian Far East in 2012, and plans to make investments worth about US\$160 billion for construction of a gas pipeline for the Far East region and to reinforce infrastructure such as railway, roads and ports.

Under this renewed effort, if there is progress in the inter-Korean relationship, the TKR (Trans-Korean Railway)-TSR (Trans-Siberian Railway) connection project could also be implemented, leading to significant changes in cargo and commodity flows in Northeast Asia.

Successful integration of the region heavily depends on the development of trans-national organizations that can undertake intra-regional projects, and on the launch of international financial institutions that can support the projects. Against such a backdrop, I believe we could open discussion on the creation of the Northeast Asian Development Bank, as a framework to support cooperative projects for greater integration of the region.

With that in mind, I view that launch of an organization that deals with the region's political and economic cooperation as well as funding as the most ideal approach. The organization will play a coordinating role by helping countries reach political consensus, and at the same time financing development projects for the region.

As a matter of fact, an initiative for an integrated Northeast Asia has a longer history. This initiative was once aspired to by An Jung-geun (안중근), a Korean independence activist. He was the first person to insist, in a preface to his unfinished essay *On Peace in East Asia* (동양평화론) that Korea, the Qing government (청나라), and Japan establish a joint bank in Lushun (여순), China and issue a common currency to seek mutual advancement in terms of both finance and the economy.

For now, however, rather than to create a new cooperative organization for Northeast Asia, I believe the more practical and reasonable approach is to use the GTI as a conceptual framework and platform for discussion on cross-border infrastructure development aimed at economic integration. The member countries of the GTI include four Northeast Asian countries: South Korea, China, Russia, and Mongolia. North Korea was a member country until 2009, and Japan is now taking part in the GTI Local Cooperation Commission. I believe that we could open discussion on the creation of the Northeast Asian Development Bank, as a framework to support cooperative projects for greater integration of the region.

Taking all this into consideration, I think the GTI has the potential to become the platform for evolving economic integration in Northeast Asia, as well as a viable entity for inviting and encouraging North Korea towards a path of multilateral cooperation.

North Korea is in the process of sending experts to the GTI Secretariat, and in my view, it may return to the GTI when we propose an attractive project. Indeed, the GTI has various sectoral committees including transport, energy and tourism.

There is also the Exim Banks Association. This association was bolstered by the recent participation of the Russian Exim bank and it has the potential to become a parent body for a future Northeast Asian Development Bank.

The GTI, for itself, can fully take advantage of development finance from various partnerships with the World Bank and Asian Development Bank.

In this context, it was all the more meaningful to see the two heads of state from China and South Korea clarify their stronger cooperation in the GTI, during the recent Korea-China Summit talks. I hope that consultations between Russia and Korea in an upcoming summit generate a more concrete outcome for the GTI as a platform for an integrated Northeast Asia.

Making Northeast Asia an integrated political, economic, and cultural zone may be within our reach in the years ahead. The idea of a Northeast Asian Development Bank, envisioned by An Jung-geun a hundred years ago and promoted many scholars for the last two decades, has not yet materialized but the possibility of bringing it to life seems more likely than ever.

Now, we must move beyond thinking about the initiative. Rather, we have to take small but steady step towards realizing the idea through inter-governmental discussions. I hope that consultations between Russia and Korea or Russia and China will generate a more concrete outcome, and encourage the GTI to become a vehicle for an integrated Northeast Asia, as both a Northeast Asian Cooperative body and as a step towards establishment of a Development Bank. In that way, making Northeast Asia an integrated political, economic, and cultural zone would be within our reach in the years ahead.

Appendix

Appendix A: The 7th Meeting of Ad Hoc Committee for Establishing Northeast Asia Bank for Cooperation and Development: Update and Planning*

Tianjin Meeting on Financial Cooperation, China-Japan-Korea

Tianjin, China, July 2, 2013

Organized by

The Northeast Asia Economic Forum

Tianjin Municipal Government

The Research Center for Financial Cooperation in Northeast Asia

Nankai University

In Cooperation with

Korea Institute for International Economic Policy

Japan Bank for International Cooperation

Opening Dinner Reception will be held on July 1 at TEDA International Club Tianjin (address indicated below)

The meeting will be held on the Campus of Nankai University at the Research Center for Financial Cooperation in Northeast Asia (to be guided by staff)

Major topics for presentations and discussion of the Meeting:

1. Recent Progress on Establishing the Northeast Asia Bank for Cooperation and Development and Financing the Cross-Border Economic Integration in Northeast Asia : Chinese Perspective
2. Perspective and Prospects from Korea and Japan and others

NEAEF, in cooperation with Tianjin Municipal Government and other cooperating institutions, will bring together a group of distinguished participants including the leaders of Tianjin as well as Beijing and experts on topics pertinent to Northeast Asia economic cooperation. The focus of the meeting will be on functional economic cooperation and financing economic integration, cross-border infrastructure developments.

*In combination with the meeting of the Board of Directors of the Research Center for Financial Cooperation in Northeast Asia

Foreign participants will stay at:

TEDA International Club, Tianjin

Address: No. 7-2 Fukang Road, Nankai District, Tianjin, China 300074

Tel. (022) 5869 5555

Fax. (022) 2306 5555

Email: tc_info@tedahotels.com

Web: <http://www.tedatjclub.com.cn/eindex.asp>

Summary

The Seventh Meeting of the Ad Hoc Committee for Establishing the Northeast Asia Bank for Cooperation and Development

Nankai University, Tianjin, China

July 1-2, 2013

On July 1-2, 2013, the Seventh Meeting of the Ad Hoc Committee for Establishing Northeast Asia Bank for the Cooperation and Development (NEABCD) organized by Northeast Asia Economic Forum (NEAEF) was held at Northeast Asia Financial Cooperation Research Center (hereinafter refer to as the Research Center), at Nankai University, Tianjin, China. More than twenty leaders and experts from China, Korea, Japan, and the US attended this meeting. Prior to the meeting, Dr. Jiang Zhenghua, Former Vice Chairman of National People's Congress of China and Honorary Chairman of the Research Center, and Mr. Cui Jindu, Executive Vice Mayor of Tianjin Municipal Government and Honorary Chairman of the Research Center met Dr. Lee Jay-Cho, NEAEF and Research Center Chairman and all the foreign participants. The President of Nankai University, Dr. Gong Ke, attended this meeting as well. The meeting was organized by Dr. Lee Jay-Cho and Mr. Wang Shuzu, Former Deputy Chairman of Tianjin People's Congress and Deputy Chairman of the Research Center. Mr. Zhang Xiaoyan, Deputy Secretary of Tianjin Municipality and Director of the Research Center, Mr. Zou Ping, the Research Center Secretary General, Prof. Ma Junlu, Executive Deputy Director of the Research Center, and Dr. Liu Ming, Deputy Secretary of the Research Center all expressed their views on the theme of the meeting. All the participants together discussed the latest developments on the subject of the proposed Northeast Asia Bank, and exchanged their views on new trends, ideas, perspectives and proposals. They agreed on the major issues summarized below.

I. Fully endorse the establishment of Northeast Asia Bank for Cooperation and Development

In Dr. Lee Jay-Cho's remarks, he stated that at this year's summit meeting of Chairman Xi Jinping and President Barack Obama, there was a historic consensus on the need and importance of a mutual and closer relationship between China and the US for the future of the two largest economies of the world. The Assistant Secretary for Asian Affairs of the US state department believes that regional cooperation with Asia is utmost importance in the next ten years, and should be vigorously promoted. Former Assistant Minister of Finance and Former Executive Vice President of the Asia Development Bank, Dr. Stanley Katz observed that, based on discussions in Washington regarding the BRIC Bank, the proposal lacks basic building blocks and a foundation based on experience and research. However, the US is not opposed to the establishment of the NEABCD. On the proposed Bank, Japan should portray a clearer attitude, China should release a positive message initially, and then Korea will have a positive response.

The former Japanese Foreign Minister and the Research Center Honorary Chairman, Dr. Taro Nakayama addressed the meeting in a written statement saying that in order to pursue peace and security in Northeast Asia, regional development through economic cooperation should be our goal. If the cross-border gas pipeline from Siberia all the way to China, Busan Korea, and Fukuoka Japan, can be constructed, it can promote mutual understanding among these countries and people, and it might serve to prevent war and strife and build a system of mutual cooperation. Large-scale cross-border infrastructure requires huge capital and funding. Therefore, it is necessary to establish a regional development bank for Northeast Asia. Dr. Nakayama expressed his willingness to work with meeting participants to realize this vision.

Mr. Byungwon Bahk, the former Executive Vice Minister of Planning and Finance and Chairman of the Korean Federation of Banks, pointed out that the ADB only provides 0.9% of its funds to three northeast provinces in China and Mongolia, there still remains a large gap for establishing a Northeast Asian Bank for future dynamic economic development in Northeast Asia. He also stated that China should take the leadership in the Northeast Asian Bank, and persuade Japan, Korea, Russia, Australia, New Zealand, and other countries to participate. China, Japan, and Korea already have shown a willingness

and ability to cooperate evident in their funding arrangements in ASEAN. Why can't these countries cooperate to establish funding arrangements for the Northeast Asia region? Japan and the US will not take the initiative in promoting the establishment of the Bank, but once China proposes doing so, Japan, and the US would not be opposed to it.

The chief representative of the Japan Bank for International Cooperation's Beijing office, Mr. Kikuchi on behalf of the Japanese Cabinet Adviser, JBIC Executive Director, Mr. Maeda stated that the opportunity for establishing the Northeast Asia Bank is ripe and Japan through establishment of the Bank would change its role from simple investor to beneficiary/partner investor.

Dr. Zou Lixing, Deputy Director of China State Development Bank for Research and the Research Center Advisor, emphasized that the Northeast Asia Development Bank is important for regional strategic cooperation. It will promote the development of regional infrastructure, economic development and cooperation through trade, financial cooperation, cultural exchanges, etc. The establishment of the NEABCD will become a new driving force of economic development in Northeast Asia and a useful compliment to the existing international multilateral financial institutions.

Mr. Kwan-Yong Park, Former Speaker of the Korea National Assembly of Korea, underscored the great significance in the establishment of a Northeast Asia Bank. He stated his belief that most important is to promote the cooperation and collaboration of all countries involved and his hope that we can work together for a common understanding of our goal.

The Former Vice Chairman of China's National People's Congress and honorary Chairman of the Research Center, Dr. Jiang Zhenghua stated that, peaceful development and win-win cooperation is not only the world trend, but also China's responsibility. The leaders of China's State Council repeatedly instructed the relevant departments to conduct a study on the establishment of the Northeast Asia Bank, stating that we now have a better vision for establishing the Bank. They stressed that we should not limit ourselves to the region of Northeast Asia, but set a wider framework and be more inclusive. We can start from reality, and consider and envision a long-term strategy.

The information, input, and ideas provided by the participants from China, the US, Korea, Japan, and other countries showed that the continued efforts to set up the Northeast

Asia Bank rest on a solid social and economic foundation. The meeting concluded that the establishment of the Northeast Asia Bank is currently in a most critical period—it requires that all the relevant countries bolster their confidence and continue their work.

II. The new connotation and orientation of the Northeast Asia Bank

Liqun Jin, the Chairman of China International Capital Corporation Ltd., Advisor of the Supervision and Guidance Committee of the Northeast Asia Financial Cooperation Research Center, and Former Vice Minister of Finance stated in a written statement that, given Asia's economic growth and its energy and infrastructure investment demands, currently available financing channels are inadequate and therefore, innovative financing mechanism are necessary. Asia should establish a multilateral financial institution that would run parallel to the ADB system, and would help meet the need for infrastructure construction and economic development. China needs to further strengthen financial cooperation with Northeast Asia and Asia. The Northeast Asian Bank represents such an innovative financing mechanism.

Zou Ping, Chairman of the China Asia Pacific Institute and Secretary General of the Research Center for Financial Cooperation in Northeast Asia stated that in accordance with the “open development, cooperative development, and win-win development” requirements, we should insert the establishment of the Northeast Asian Bank into a broad strategy of innovative mechanisms for investment in and financing infrastructure development in Asia. The Northeast Asian Bank would be open to participation by Northeast Asia and Asian countries with China taking a lead and in Northeast Asia it would principally focus on cross-border infrastructure investments.

Zhang Jianping, Senior Economist and Director of the Department of International Regional Cooperation, Institute for International Economic Research, National Development and Reform Commission (NDRC) argued that China, Japan, and South Korea already work together through the China-South Korea FTA and the China-Japan-South Korea FTA negotiations. The regional trade will increase rapidly after the two FTAs are established and they will need the safeguard and guarantee of the Northeast Asian Bank. The establishment of the FTAs and Northeast Asian Bank share some common ground and thereby the establishment of each will contribute to the other.

III. Main consensus and suggestions at the meeting

1. The meeting approved in principle “The report in 2013 on setting up the Northeast Asia Bank for Cooperation and Development” drafted by the research center. After modification and improvements, the report is scheduled to be submitted for discussion at the twenty-second annual Forum Conference in Vladivostok, Russia in August 2013, aimed at obtaining a broader consensus and further extending the international thrust. The Northeast Asia Economic Forum will submit it to the relevant policy institutions of the Chinese, Japanese, and Korean governments at an appropriate time.

2. The meeting endorsed the proposal that the Northeast Asia Bank can be put into an innovative mechanism of investment and financing for developing cross-border infrastructure interconnections. The most important task is to act as soon as possible. The Northeast Asian countries will play the leading role and the participating countries can be expanded to other areas of Asia, including Australia and New Zealand.

3. Expecting China to play an important role in the establishment of the Northeast Asia Bank, we suggest China could initiate the proposal for the establishment of the Northeast Asian Bank initiatively. South Korea will give a positive response and jointly promote the establishment of the Northeast Asia Bank with China as well as leading the way for Japan, Russia, Mongolia, the United States and other Asia countries to participate in it.

4. The Northeast Asia Economic Forum will continue to play a coordinating and catalytic role, by disseminating relevant information and promoting dialogue with policymakers in Northeast Asia. Tianjin Municipal Government, according to the needs of an innovative mechanism for investment and financing Northeast Asian infrastructure interconnections, will pursue further studies and develop strategies for the Northeast Asian Bank taking into consideration any new international circumstances. This will serve as a reference base for policy decisions.

5. It is hoped that the participants will make timely report on the meeting results to the relevant government institutions, in order to obtain the support of central governments. At the same time, we hope each country will encourage their national think-tanks to exert

their influence by participating in policy research on the establishment of the Northeast Asian Bank.

The Seventh Meeting of the Ad Hoc Committee finds that, through the exchange of communication, we can further understand what should be done and how, and we can promote mutual understanding to reach a necessary consensus for further achievements. The meeting stressed that the Tianjin Municipal Government has and will play a very important role in the establishment of the Northeast Asian Bank. We expect China to play the leading role in encouraging breakthroughs in financial cooperation in Northeast Asia.

List of Participants

Lee-Jay Cho: Chairman of Northeast Asia Economic Forum and Chairman, Board of Directors of Northeast Asia Financial Cooperation Research Center

Kwan-Yong Park: Former Speaker of National Assembly of ROK

Jae-Hyong Hong: Former Speaker, National Assembly of ROK and Deputy Prime Minister for Economic Planning, Honorary Chairman, Northeast Asia Financial Cooperation Research Center

Byungwon Bahk: Chairman, Korea Federation of Banks, Former Deputy Minister of Planning and Finance of Korea

Baolan Lee: Research Fellow, Korea Institute of International Economic Policy

Taro Nakayama: Former Foreign Minister for Japan, Honorary Chairman of Northeast Asia Financial Cooperation Research Center

Yo Kikuchi: Chief Representative of Beijing Office of Japan Bank for International Cooperation (JBIC)

Taisin Sato: Deputy Director, Department of Infrastructure Financing of Japan Bank for International Cooperation (JBIC)

Jiang Zhenghua: Former Deputy Chairman of Standing Committee of the National People's Congress, Honorary Chairman of Northeast Asia Financial Cooperation Research Center

Wang Shuzu: Former Deputy Chairman of Standing Committee of Tianjin People's Congress, Deputy Executive Chairman of Northeast Asia Financial Cooperation Research Center

Jin Liqun: Chairman of China International Capital Corporation Limited, Advisor Supervision and Guidance Committee of Northeast Asia Financial Cooperation Research Center and Former Vice Minister of Finance, China

Zhang Xiaoyan: Deputy Secretary General of Tianjin Municipal Government, Director of Northeast Asia Financial Cooperation Research Center

Zou Ping: Chairman of China Asia Pacific Institute, Secretary General of Northeast Asia Financial Cooperation Research Center

Zou Lixing: Vice-President for Research of China National Development Bank, Advisor and Research Fellow in Supervision and Guidance Committee of Northeast Asia Financial Cooperation Research Center

Zhang Jianping: Director of Academy of Macroeconomic Research of National Development and Reform Commission, Research Fellow, China

Ma Junlu: Former Dean, School of Economics of Nankai University, Deputy Director of Northeast Asia Financial Cooperation Research Center, Professor

Liu Lanbiao: Deputy Director, National Strategic Development Research Institute in Nankai University, Deputy Director of Northeast Asia Financial Cooperation Research Center, Professor

Li Wenjia: Deputy Director, Tianjin Foreign Affairs Office in Asia

Zhang Jianbao: Principal Staff Member, Department of Finance of Tianjin Development and Reform Commission

Liu Ming: Associate Professor, School of Economics of Nankai University and Deputy Secretary and Associate Director, Northeast Asia Financial Cooperation Research Center

**Appendix B: Twenty-Second Annual Conference of the Northeast Asia
Economic Forum**

Organized by
Northeast Asia Economic Forum

Hosted by
Far Eastern Federal University (FEFU)
Vladivostok, Russia

Cooperating Institutions

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP),
East and Northeast Asia Office, Incheon

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Primorsky Krai Government
Primorsky Krai Legislative Assembly

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Korea Institute for International Economic Policy (KIEP)

Korea Telecom (KT)

Korea International Trade Association (KOTA)

Korea Asia Pacific Institute

••

Japan Bank for International Cooperation (JBIC)

••

College of Social Sciences, University of Hawai'i at Mānoa

••

China Asia Pacific Institute
Tianjin Municipal Government

••

Economic Research Institute, Far East Branch, Russian Academy of Science, Khabarovsk
Far Eastern Marine Research Institute (FEMRI), Vladivostok

••

“Slavda” Management Company, Vladivostok

••

Friedrich-Naumann-Stiftung für die Freiheit, Germany

AGENDA

THURSDAY, AUGUST 15, 2013

Check-in

Far Eastern Federal University, Russky Island

18:30 – 20:00 Reception Dinner

FRIDAY, AUGUST 16, 2013

Far Eastern Federal University, Russky Island, Building 20, Hilltop (Sopka) Hall

8.30 – 9.00 Participants’ Registration

9:00 – 10:00 Opening Ceremony

Chair: Lee-Jay Cho, Chairman, Northeast Asia Economic Forum

Welcoming Remarks

Sergey Ivanets, Rector of Far Eastern Federal University

Vladimir Miklushevsky, Governor, Primorsky Krai, Russia

Victor Gorchakov, Speaker of Duma, Primorsky Krai, Russia

Remarks by Country Representatives

Jiang Zhenghua, Former Vice-Chairman, Standing Committee of the National People’s Congress, China

Park Kwan-Young, Former Speaker of the Assembly, Republic of Korea

Nakayama Taro, Former Minister of Foreign Affairs, Japan

Stephen Cowper, Former Governor of Alaska

Ganhbold Baasanjav, Ambassador to the Republic of Korea, Mongolia

Shin Bong-kil, Ambassador, Trilateral Cooperation Secretariat (TCS), Secretary General

10:00 – 10:30 Group Photo

10:30 – 10:45 Coffee Break 10:45 – 12:15

Session 1: Regional Economic Cooperation: Perspectives from the Russian Far East

Chair:

Vladmir Kuznetsov, Director of School of Regional and International Studies, Far Eastern Federal University

Presenter:

Alexander Levintal, Rector of the Far Eastern State Humanitarian University, Khabarovsk

Discussants:

Viktor Larin, Director, Institute of History, Archeology and Ethnography of the People's of the Far East, Far Eastern Branch, RAS, Vladivostok

Andrey Aksenov, Director, Agency for Attracting Investments into Primorsky Krai

Artem Isayev, Sector of Economic, Scientific and Technical Policy, Economic Research Institute, RAS, Khabarovsk

12:00 – 13:15 Lunch

The two afternoon sessions on economic and physical integration are co-sponsored by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Incheon.

13:15 – 15:00 Session 2: Energy and Environment

Afternoon Opening Remarks

Kilaparti Ramakrishna, Director of UNESCAP Sub-regional Office for East and Northeast Asia

Co-Chairs:

Denise Konan, Dean, College of Social Sciences, University of Hawai'i at Mānoa and **Stephen Cowper**, Former Governor of Alaska

Presenters:

Igor Svetlov, Director, Center for Strategic Studies of the Far East's Fuel and Energy Complex, Vladivostok

Zhang Jianping, Senior Economist and Director, Department of International Regional Cooperation, Institute for International Economic Research, National Development and Reform Commission

Kim Kyung Sool, Senior Fellow, Korean Energy Economics Institute

Yoshiki Inuma, Director, Research Department, Japan Electric Power Information Center

Discussants:

Terry Surles, Advisor, College of Social Sciences, University of Hawai'i at Mānoa

Toshiyuki Tsuge, General Manager, Hitachi Moscow Office

15:00 – 15:15 Coffee Break

15:15 – 17:15 Session 3: Transportation and Logistics: Cross-border Infrastructure Development

Co-Chairs:

Semenichin Yaroslav, Far Eastern Marine Research Institute, Vladivostok and
Ha Dongwoo, Head of Transportation, UNESCAP

Presenters:

Evgeny Novoseltsev, Deputy Director, Far Eastern Marine Research Institute;

Mikhail Kholosha, Department Head, Far Eastern Marine Research Institute, Vladivostok

Elena Zaostovskikh, Economic Research Institute, Khabarovsk

Satoshi Inoue, Professor, National Graduate Institute for Policy Studies, Japan

Ryoo Dong Keun, Professor, Korea Maritime University

Discussants:

Anna Bardal, Chief, Sector of Regional and Global Transportation Infrastructure
Economic Research Institute, Economic Research Institute, Khabarovsk

18:30 – 20:00 UNESCAP-sponsored Reception Dinner

SATURDAY, AUGUST 17, 2013

**9:00 – 10:25 Session 4: Regional Multilateral Financial Institution: Proposed
Northeast Asian Bank for Cooperation and Development**

Co-Chairs:

Lee-Jay Cho, Chairman, Northeast Asia Economic Forum and **Wang Shuzu**, Former
Vice Mayor of Tianjin, China

Presenters:

Zou Ping, Chairman, China Asia Pacific Institute

Lee Jai-Min, Prof. Korea Maritime University and Former Vice President, Korea
Export-Import Bank

Bahk Byungwon, Chairman, Korea Federation of Banks; Former Senior Advisor to the
President, Republic of Korea

Tatsuhiko Takesada, Executive Officer for Regional Headquarters for Asia and Pacific,
Japan Bank for International Cooperation (JBIC)

10:25 – 10:40 Coffee Break

**10:40– 12:00 Session 4 (Continued): Regional Multilateral Financial Institution:
Proposed Northeast Asian Bank for Cooperation and Development**

Co-Chairs:

Lee-Jay Cho, Chairman, Northeast Asia Economic Forum and **Wang Shuzu**, Former
Vice Mayor of Tianjin, China

Discussants:

Lee Chang Jae, Senior Fellow Emeritus, Korean Institute for International Economic
Policy

Ma Junlu, Professor, Nankai University

Hong Jae Hyung, Former Vice Speaker of the National Assembly and Deputy Prime Minister, Republic of Korea

Dmitriy Izotov, Economic Research Institute, RAS, Khabarovsk

12:00–13:00 Lunch

13:00 – 15:00 Session 5: Panel Discussion on Cross-border Economic Cooperation

Co-Chairs:

Glyn Ford, Former Chair of Asia Policy Committee, European Union Parliament and **Vladmir Kuznetsov**, Director of School of Regional and International Studies, Far Eastern Federal University

Panelists:

Maksim Krivelevich, Associate Professor, School of Economics and Management, FEFU, Vladivostok

Toshiyuki Tsuge, General Manager, Hitachi Moscow Office

Tony Michell, President, Korea Associates Business Consultancy

Julius von Freytag-Loringhoven, Project Director, Russia and Central Asia, Friedrich-Naumann-Stiftung für die Freiheit

15:00 - 15:15 Coffee Break

15:15 – 17:00 Closing Session

Chair: Lee-Jay Cho, Chairman, Northeast Asia Economic Forum

Vladivostok Declaration

Closing of the Twenty-second Annual Conference of NEAEF

SUNDAY, AUGUST 18, 2013

NEAEF Conference Outdoors Session

MONDAY, AUGUST 19, 2013

Check-out and departure from Vladivostok

The Vladivostok Declaration

Summary

The Twenty-Second Annual Conference of the Northeast Asia Economic Forum

Vladivostok, Russia

August 15-19, 2013

The Northeast Asia Economic Forum (NEAEF), in partnership with the Far Eastern Federal University (FEFU), School of Regional and International Studies, and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), convened the twenty-second annual forum in Vladivostok, Russia, on the 15th and 16th of August 2013. Representatives from the People's Republic of China, Japan, Korea, Mongolia, the Russian Federation, the United States, the European Union, and UNESCAP assembled to drive progress toward cooperation and integration among Northeast Asian nations. FEFU's new, consolidated campus on Vladivostok's Russky Island was host to the 2012 Asia Pacific Economic Cooperation (APEC) summit and is the flagship federal campus of east Russia. FEFU's unified home on the Pacific Rim is symbolic of its emerging role as a hub for multicultural meetings of minds. It served as an excellent location for the 22nd annual NEAEF.

This year's conference built upon the twenty-one year legacy of engaging the pressing issues and forward-looking debates facing Northeast Asia. Rigorous discussion over energy and environment, transportation and infrastructure, trade, and development of the Northeast Asia Bank for Cooperation and Development (NEABCD), furthered the forum's mission for continuing cooperation, peace, and prosperity.

An energetic opening ceremony featured welcoming remarks by FEFU Rector, Sergey Ivanets; The Honorable Vladimir Kuznetsov, former governor, Primorsky Krai; and The Honorable Victor Gorchakov, speaker of the Duma, Primorsky Krai.

Remarks were also delivered by country representatives, including: The Honorable Jiang Zhenghua, former vice-chairman of the standing committee of the National People's Congress, PRC; The Honorable Park Kwan-Yong, former speaker of the assembly, ROK; The Honorable Nakayama Taro, former minister of foreign affairs, Japan (written

remarks); The Honorable Stephen Cowper, former governor of Alaska; Mongolian Ambassador to the Republic of Korea, The Honorable Ganbold Baasanjav; and The Honorable Shin Bong-kil, ambassador, Trilateral Cooperation Secretariat (TCS), secretary general.

The opening session, Regional Economic Cooperation: Perspectives from the Russian Far East, dug deep into the issues of increasing Foreign Direct Investment (FDI) into the Russian Far East by the other countries comprising Northeast Asia. So far, 93 percent of total direct investment goes into the minerals sector. Over time, Russia would prefer to have increased FDI in areas of the economy that are higher value-added. Issues identified as leading to a poor investment climate include 1) insufficient transportation 2) low-level of energy development in the form of the power grid and old power plants 3) a small consumer market of 6 million people 4) a shortage of labor resources and 5) inclement weather increasing the cost of building factories and the ongoing maintenance in the Russian Far East. To overcome these known challenges, the Russian Far East has prioritized eight areas for investment: transportation; aircraft, shipbuilding, automotive industry; aerospace; resource extraction, refining, and processing; energy and energy efficiency; petrochemistry; agriculture; and tourism. All of these are the “hard” sectors for investment, in addition it was highlighted that further economic integration and cooperation will require development of “soft” infrastructure including political will, institutions for cooperation, people diplomacy, and psychological readiness. Companies looking to invest in the region can benefit from tax breaks and government agencies providing consulting help to facilitate the initial investment and ongoing business enterprise. The Russian government is making the investments in transportation and economic clusters to improve the attractiveness of the Russian Far East as a site for FDI and to improve the economic and functional cooperation within the Northeast Asia region.

The two afternoon sessions and evening gala, were co-sponsored by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Incheon. The first afternoon session, Energy and Environment, featured presentations on the vast natural energy resources in the Russia Far East and the dependency of other countries in Northeast Asia on imported energy sources. In particular, Russia has tremendous reserves of oil and natural gas. China recently has become a net importer of coal because of its

tremendous consumption of coal as its primary source of base load energy for electricity generation and heating. Already, China has 10% of its power generated by renewable sources and is planning on having 15% by 2020. Korea is 95% dependent on imported energy in the form of fossil fuels, this creates energy security and sustainability issues for Korea. This has led Korea to create a national goal of providing 40% of its energy domestically by 2030. The presentation on Japan highlighted its shift away from nuclear power following the March 11, 2011 Fukushima disaster. Next month, Japan will have shut down all of its nuclear power plants and shifted to other sources of power generation including increased LNG imports. They are in the middle of revamping the electrical supply system including adding a wide area system operator, liberalizing the retail market, and unbundling the vertically integrated system of electricity generation and distribution within the regions of Japan. This presentation on Japan concluded with the mention of the improvements that could be made to the electric grid by creating an Asia-wide electric super grid that would have multiple layers of redundancy, greater stability, and could handle more renewable energy sources.

The final session on the first day, Transportation and Logistics: Cross-border Infrastructure Development, focused on increasing investment in creating transportation links throughout the region and also streamlining the administrative process of crossing borders. The region is heavily dependent on maritime transport, but if land transport were developed, this would dramatically help neighboring countries and increase trade into land-locked countries and inland regions of the countries in Northeast Asia and Southeast Asia for that matter. The focus of spatial development started with transport corridors, led to logistic corridors, trade corridors, and ultimately economic corridors through these new lanes of interaction. When building these new transportation links, the importance of public-private partnerships was highlighted and the differences in public-private partnerships in the different countries in the region were also mentioned. In addition to the hard infrastructure, an improvement in soft infrastructure is required to include a new legal framework and coordination of federal and regional governmental agencies both within countries and across borders. Much work has been done already, with great opportunity for improvement still remaining. On the issue of containerized cargo within the region, which has grown 14x in the past 30 years, there are improvements that can also be implemented

that will cut the terminal waiting time dramatically by increasing regional cooperation and through the creation of a regional logistics system. Fully 58 percent of the world's container traffic goes through East Asia and improvements in efficiency and processes can make shipping less expensive, better for the environment, and can help harmonize relations. One of the final presentations on transportation led to the proposal of port cooperation in Northeast Asia.

All of these sessions on the first day had information and recommendations to improve cooperation, synchronization, and harmonization between the countries, companies, and institutions of Northeast Asia and would lead to an improved quality of life for the people of each of the countries.

Saturday morning's discussion centered on the proposed establishment of the Northeast Asia Bank for Cooperation and Development (NEABCD). There was broad consensus on the desirability for a multilateral bank to provide long-term capital for regional infrastructure projects. Research has shown that such a bank would be conducive to lasting Northeast Asia cooperation, transforming and restructuring of the economy, filling the gap of financing for large cross-border projects, enhancing the capability of the region to address financial crises, and helping with free trade agreements. The goal of this bank is to increase cooperative development, balanced development, and win-win development in the region. There has been increasing demand for cross-border projects in infrastructure and the energy sectors. Ultimately, the bank wants to raise private sector capital; however, the private sector is looking for security for repayment. This will lead to multilateral public financing acting as a catalyst in order to attract private funds. Given that the creation of the NEABCD will not be immediate, there was a proposal to start with a China-Japan-Korea trilateral bank. Sample projects could include the Greater Tumen River Initiative, submarine tunnels connecting countries, a regional logistics system, natural gas pipelines, and public-private partnerships such as toll roads. Rather than direct lending, most of the initial participation will be in equity investments and guarantees. There are many great projects that could be developed in the region with the financing and technical expertise provided by the creation of such a bank. The creation of the bank may require improved diplomatic relations in the region, but the work towards such a bank should continue steadfastly nonetheless.

The afternoon session continued with a healthy discussion on developments within North Korea, cross-border economic cooperation, the attractiveness of the Russian public stock markets for investment, and a review of lessons that can be learned from the integration of Europe countries into the European Union. On the matter of South Korea, it was noted that the absence of North Korea from regional economic integration effectively turns South Korea into an island unable to build land transport to the rest of the Asian continent. A study of the regional impact of sanctions against North Korea may reveal that the sanctions are reducing the attainable GDP in the greater region. Sanctions should be reduced or eliminated for specific projects to facilitate trade and development.

Overall, there was a spirit of optimism that much progress had been made during the conference. The abundance of ideas gave everyone the opportunity to return home with the ability to implement greater harmony and cooperation in the region.

Forum participants expressed appreciation for the support provided by the Freeman Foundation and other cooperating institutions for the Young Leaders Program, now in its eighth year. The Young Leaders Program features Fellows from the People's Republic of China, Japan, Republic of Korea, Mongolia, the Russian Federation, and the United States. The Fellows' attendance contributed to the Forum's goal of ensuring a long-term future of cooperation and integration in Northeast Asia.

The NEAEF offered its deepest gratitude to the Far Eastern Federal University for its generous support in hosting the forum. NEAEF extended further thanks to UNESCAP, Incheon; the Primorsky Krai government and legislative assembly; Korea Institute for International Economic Policy; Korea Telecom (KT); Korea International Trade Association; Korea Asia Pacific Institute; Japan Bank for International Cooperation; College of Social Sciences, University of Hawaii at Manoa; China Asia Pacific Institute; Tianjin Municipal Government; Economic Research Institute, Far East Branch, Russia Academy of Science, Khabarovsk; Slavda Management Company, Far Eastern Marine Research Institute, Vladivostok; Friedrich Naumann Foundation; and to other cooperating institutions for their assistance with the Forum conference and sincere appreciation to the Freeman Foundation for the Young Leaders Program in Vladivostok.

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