

KIEP

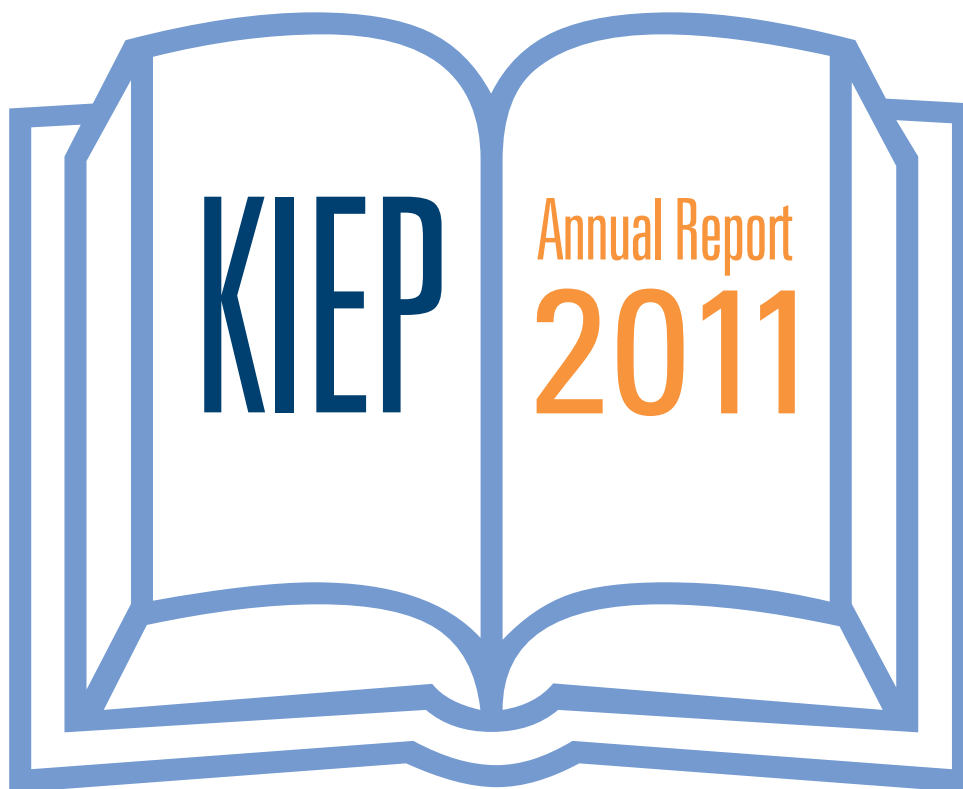
Annual Report 2011





Korea Institute for
International Economic Policy

Annual Report





KIEP...

Helping Korea Rise to Global Prominence Through International Economic Policy

We study International Macroeconomics/Finance and Trade & Investment Policies.

We investigate the International Regional Environment and International Economic Relations.

We conduct research for Economic Cooperation in APEC and Northeast Asia and
explore issues in International Cooperation for Korean Unification.



*KOREA INSTITUTE FOR
INTERNATIONAL
ECONOMIC POLICY*



On Publishing The 2011 KIEP Annual Report

In 2011, the Eurozone fiscal crisis and economic slowdown in the U.S. increased overall global uncertainty, casting a shadow over the Korean economy as well. Against this backdrop, the Korea Institute for International Economic Policy (KIEP) seeks to play a pivotal role in actively responding to the fast-changing global economic environment and helping our country overcome instability caused by the world wide financial crisis. In addition, as a major economic research institute, KIEP has endeavored to conduct research and analysis of changes in global economic structure, while presenting international economic policies along with mid- and long-term strategies.

Specifically, KIEP has made efforts to examine external risk factors and explore countermeasures. It has also analyzed the economic costs from protectionism in the globalization era; conducted research on North Korea's policy changes to attract investment and the overall direction of inter-Korean economic cooperation; explored the necessity of new international monetary systems and other alternatives; while carrying out comprehensive research on the impact of economic policies currently being enforced at home and abroad, such as regulations on short-term capital flow.

Internally, KIEP has overhauled its organizational structure in a bid to improve efficiency in executing international economic research and presenting better policy proposals. As a result, it has created the Department of International Economy and Department of International Cooperation Policy along with the Center for Emerging Economies Research that will lead research on Southeast Asian countries, Russia, the Commonwealth of Independent States (CIS), Latin America, Africa, the Middle East and other emerging economies. Also created were two supporting bodies, Knowledge Information Services and Research Planning and Coordination. Each part of KIEP is focused on trade, investment, international finance, international development cooperation, regional trade, along with its efforts to analyze economic trends of major countries, present policy responses, and execute joint research with academia and other research institutes.

Currently, activities carried out by KIEP's various research divisions, in conjunction with their macroeconomic research activities; include the operation of the KIEP macroeconometric model, construction of an international macro-financial database and the coordination and hosting of the Asian Economic Panel. Meanwhile, to foster more effective research in international trade, we operate both



the Center for DDA Research and the APEC Research Consortium Secretariat; we are also building a trade model and constructing a trade database. Lastly, we are boosting our competitiveness in regional studies, having established the KIEP Beijing Office and the Korea Economic Institute in Washington DC. These branch offices and affiliates enable us to stay interconnected with the global economy and at the same time allow for training new regional experts, conducting in-depth research on strategic regions, strengthening the research network in Northeast Asia and holding talks on policy planning in anticipation of Korean unification.

The KIEP Annual Report 2011 details our accomplishments from in-depth research we carried out in 2011, on diverse and broad subject areas. Basic research by KIEP and key research accomplishments in 2011 are presented in this report, organized in such a way as to provide a comprehensive overview.

KIEP, as a representative economic research institute, will continue its efforts to play an important role in helping establish national economic policies. We look forward to the continued support and interest in our activities and of Korea as a whole, as we move forward towards an exciting new future.

Wook Chae
President
Korea Institute for International Economic Policy

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Mission and Brief History

→ Founding Objectives

- KIEP seeks to contribute to Korea's international economic policymaking through the investigation, study, and analysis of issues related to the global economy.

→ Areas of Research

- Investigation, research, and analysis of trade policies, international financial markets and investment, and other issues related to international economic policy, as well as development of policy instruments.
- Research and analysis of matters pertaining to the global economy as well as on economic trends and policies in major regional economic zones
- Conducting joint research projects with scholars and research institutions at home and abroad
- Research services on commissions related to the global economy and major regional economic zones
- Education, training, and public relations activities pertaining to the global economy and major regional economic zones
- Other activities associated with the achievement of KIEP objectives

→ History

- August 1989 Establishment of the KIEP Research Foundation
- December 1989 Passage of a special law authorizing the establishment of KIEP (dissolution of the foundation)
- January 1990 Establishment of KIEP as a government-funded economic research institute Responsibility for supervising the Korea National Committee for Pacific Economic Cooperation transferred from the Korea Development Institute
- October 1992 KIEP Center for Northern Area Studies renamed the "KIEP Center for Area Studies"
- March 1995 Founding of the KIEP Beijing Office
- April 2000 Center for Regional Information reorganized and re-established as the Center for Regional Economic Studies
- March 2002 Establishment of the DDA Research Center
- December 2005 Establishment of the SNU-KIEP EU Center
- May 2008 Inauguration of Wook Chae as the 7th President of KIEP
- June 2008 Center for Northeast Asian Economic Cooperation reorganized and re-established as the Center for International Development Cooperation
- February 2010 Regional and Provincial China Research Division established
- May 2011 Inauguration of Wook Chae as the 8th President of KIEP
- August 2011 Restructuring of the Research Center into 2 divisions in 1 center



KIEP Annual Report

Overview of KIEP's Projects

① Overview of Projects

➤ Research Project Summary and Status

KIEP seeks to contribute to the formation of government policies and provide possible mid- to long-term directions in policy-making through a wide range of activities that includes in-depth analysis of core issues, formulation and assessment of relevant policies, development of international negotiation strategies, drafting of summit and ministerial meeting proclamations, participation in diplomatic delegations, and the public promotion of policies.

- The contributions made by KIEP reports are assessed based on the extent to which the core suggestions provided in each of them are subsequently reflected in government policy making.
 - The contents of our reports have been used as references for legislative activities to assist in the making of new laws, Presidential Decrees and development of other forms of legal instruments, as well as official government documents. The analyses and insights contained in our reports also assist the government in devising international trade strategies.
- Equally significant have been the contributions of KIEP reports to research in such areas as FTA/DDA policy, regional economic studies and case studies, Northeast Asia and regional economic cooperation, international macroeconomics and finance, green growth/resources development, FDI/ODI policy, and official development assistance (ODA).
- Promote advancement of the Korean economy by establishing policies for entering foreign markets, resource development, development and cooperation, and discovering excellent policies, through in-depth research on foreign regions.

► Instances in which KIEP reports were consulted by the government for policy-making projects in 2011

Field	FTA/DDA	International cases and policy	Strategy Research on Entering Foreign Markets	International macroeconomics and finance	Northeast Asia/regional economic cooperation	FDI/ODI	Green growth/resources development	ODA	Other	Total
Number of times reports were cited	39	17	10	15	16	3	4	5	8	117

→ FTA/DDA Policy

- Analysis of DDA/WTO trends and the development of possible government response strategies
- Analysis of the economic influence and spillover effects of the FTA/DDA agreements
 - Preparation of basic plans for negotiations and draft schedules
 - Provision of policy support for the FTA negotiations currently being carried out with the EU, India, Canada, Mexico, Australia, New Zealand, and GCC nations.
- Study of ways to use FTAs in a manner that maximizes their benefits: with focus on tariff administration, trade adjustment support programs and rules of origin
- Study ways to operate under FTAs in a manner that maximizes their benefits and aids strategic research, with a focus on tariff administration, trade adjustment support programs, rules of origin, and realization of fair society.

→ International cases and policy

- International cases and policy establishment trends in policy research
 - Analysis of international cases related to current major domestic issues and their explicit implications
 - Analysis of major bilateral economic issues
- Provision of in-depth analysis and information on other countries officials of other countries that are to be visited by the president or other high-level officials.
- Risk analysis of world regions based on recent political and economic changes and the development of support strategies

→ Strategy Research on Entering Foreign Markets

- Policy trends in establishing strategies for entering foreign markets
 - Comprehensive regional research on newly emerging markets with highest growth potential
 - Provide guidance for Korean companies to penetrate foreign markets through analyzing industrial structure and conducting system analyses of emerging countries
- Research on entering target markets using Korea's previously concluded FTAs with other countries
- Research on economic cooperation with emerging countries

International Macroeconomics and Finance

- Introduction of measures to facilitate the internationalization of the Korean Won and the development of the financial industry
- Discerning international macroeconomic trends and analyzing the policies adopted in response to the global financial crisis
 - Analysis of the exchange rate system and exchange rate predictions
 - Analysis of global research trends in the field of macroeconomics and finance
- Strategic response to the G20 Summit and study of related agendas
 - Exploration of ways for financial cooperation in East Asia
- Analysis of the impact of, and prediction of, changes in the international economic conditions

Northeast Asia/regional economic cooperation

- Formulate Policies related to Northeast Asian economic cooperation
- Study of the major items on the agendas of APEC, ASEM, and ASEAN+3
 - Development of Korea's basic stance toward regional economic cooperation, its participation therein and its support for related meetings
- Analysis of major issues affecting North-South economic relations and the establishment of policies based on the outlook for the future
 - Assessment of international assistance policies and the introduction of measures to strengthen the efficiency thereof

FDI/ODI

- Analysis of the results of FDI-related efforts of Korean enterprises and the introduction of measures to facilitate access to foreign markets for Korean enterprises.
- Development of strategies to promote investment in the East Asian region
- Development of strategies to promote inward FDI and free economic zones in Korea

→ Green growth/Development of Overseas Resources

- Analysis of international environmental agreements related to the achievement of low carbon green growth, analysis of environmental policies of major countries, and research to develop Korean response strategies
- Suggestion of measures to facilitate the development of overseas resources and activation of plant construction projects
- Development of environmentally-friendly policies to enhance Korea's international image
 - Provision of directions for external development projects through environmental policy research

→ ODA

- Analysis of ODA trends based on case studies to better understand their implications
- Development of Korean response strategies to geopolitical changes in Northeast Asia
- Assessment of overseas aid policies and proposals for increasing capacity for aid
 - Analysis of trends in overseas ODA and actual cases; eliciting policy implications
 - Research on strengthening Korea's status through provision of foreign aid

→ Other Policy Research Activities

- Provision of support for the government's international negotiations
- Analysis of various other international economic issues in order to identify policy implications for multilateral cooperation
- Assessment of the economic feasibility of hosting international conferences in Korea

➤ Publications on Key Current Issues

- KIEP conducts analyses on major current issues in the global community and provides up-to-date analytical information on these issues through its website so as to assist the government with its policy-making process and help keep Korean economic experts abreast of the latest international trends.
- World Economy Update, the best-known current issue-related publication by KIEP, providing indepth analyses of key international issues along with their implications to Korea and its response strategies. Regional Economic Focus, meanwhile, is a great source of information on the latest international issues and allows Korean economic experts to stay up-to-date. Articles are organized by themes to create a highly reader-friendly journal.
 - To better meet the research demand for topics related to the Chinese economy, KIEP's Beijing Office is putting out a newsletter titled Current Issues of the Chinese Economy. In 2010, KIEP added a new member to its list of current issue publications: Provincial Economic Trends in China.
 - All current issue-related articles and reports by KIEP are accessible through its website and are delivered to 19,000 subscribers through KIEP Webzines.

➤ VIP Report

- KIEP makes monthly reports to the president of Korea through its VIP Report, which contains selected issues of importance to Korea's international economic policy. As of 2011, 14 such reports have been submitted to the president.
- Aside from its analysis of key current issues, VIP Report also provides ideas that can be directly reflected in future international economic policies. It thus serves as a source of policy insights and advice.

② Affiliated Bodies and Research-Related Activities

→ Regional and Provincial China Research Division

- Analyze major economic policies, including the 12th5-year plan of the Chinese government, by region and province, to help Korean companies uncover business opportunities
 - Focus mainly on economic trends, investment environment, industrial structure, characteristics of the domestic market, local government structure, urbanization, and other mid- to-long term development strategies
- As the Chinese investment environment has undergone vast changes, such as a rise in wages and a rapid shift in the relationship between management and labor, China has become recognized as a global market, rather than an international factory site. This recognition is encouraging new market comers to China to establish new strategies.
- The building of local networks and the timely execution of regional research and analysis is extremely crucial to support Korea-China business, since such related information is limited in Korea.

→ Studies in Comprehensive Regional Strategies

- KIEP has sought to strengthen Korea's foreign economic policy capacity by expanding the available regional studies in the main industrial fields and economic systems associated with strategic economic countries (regions), in a concrete and practical manner. Moreover, by implementing strategic regional studies and expanding the domestic and international networks in a manner that reflects Korea's actual circumstances, it has attempted to establish a foundation for longterm economic exchanges and cooperative relationships with strategic countries (regions). Furthermore, in its capacity as a part of the infrastructure responsible for the implementation of national policies, KIEP has set out to collect and accumulate information, materials, and studies related to key regions (countries), as well as to establish a network system that makes it possible to share such information amongst researchers.
- Network establishment and preparation of strategy reports by Korean Asia experts

- Publication of extensive strategy reports on in-depth analysis and political implications, including the political and economic development potential of a specific country (region), the possibility of transferring Korea's economic development experience, in addition to areas of economic cooperation (such as trading, investment, resources, energy, and logistics)
- Building of online database and expert website for major Asian countries (regions)
- Prepare foundation for accumulating and spreading Asia-related data in Korea by building database covering vast range of topics from industry, corporate, resource and economic strategies of major Asian countries (regions) such as India, Southeast Asia, and Central Asia

→ Mid- and Long-term Trade Strategy Research

- Based on dynamic interpretation of the international financial order, which has fluctuated greatly since the global financial crisis, chart changes in trade between advanced and newly emerging countries, providing mid-to-long term trade strategies for Korea
- Publication of research reports on changes in the post-crisis international financial order and Korea's counter-measures
- Hold international seminars on changes in the international economic order and appropriate counter-measures

→ Reinforcement of the Regional Economic Studies Project

- KIEP has established a 'regional study infrastructure and network' to facilitate the implementation of regional studies around the world. As part of its efforts to integrate its regional studies DB and increase the amount of available information on a national scale, KIEP expanded its BRICs Information Center to EMERICs, which features information on 60 newly emerging countries. KIEP also provides systematic information about regions where an interest in research and investment has been expressed, supports the education of human resources specializing in regional studies, and maintains networks between regional specialists in order to facilitate the sharing of new information and studies on individual regions.
- Fostering of world regional experts
 - Strengthen national competitiveness by fostering private-sector regional experts through providing training sessions on regional economies
- CRES Visiting Fellows Program
 - Enhance Korea's capacity for regional studies through various exchange activities, such as inviting foreign scholars and experts to seminars

Comprehensive Research on Trade Liberalization

- Publication of short-term series of research reports on WTO/DDA and open economy (to enhance people's understanding of DDA and open economy), as well as case reports
- Initiate research collaboration on international trade laws and WTO standards
- Provide government support for DDA and FTA
 - Analyze economic benefits, trade strategies of major countries, changes in industrial policies, and industry-specific effects in order to provide guidance for domestic policies. Also, hold meetings with concerned government bureaus and suggest measures for providing compensation and aid to groups negatively affected by FTAs
- KIEP Society for International Trade Research
 - Strengthen research capacity and build international trade research network by holding seminars for international trade issues to facilitate knowledge exchange between foreign and domestic university professors and trade experts

National Center for APEC Studies

- The National Center for APEC Studies has implemented APEC-related research, provided support for participation in international academic conferences and government involvement in the related meetings, and published relevant study materials. In addition, the Center has also kept the public abreast of its activities through its APEC/PECC Korea Newsletter. The Center has stimulated APEC-related studies through such means as the provision of support for government participation in the ASC International Conference, APEC Summit, meetings of economic and trade ministers, as well as senior officials (SOM).
- In charge of KOPEC related tasks for PECC, representing Korea
- Build a network for scholars, governments and private sector specialists in Asia-Pacific region
- Propose potential targets for suggested businesses from APEC summit in 2011

KIEP-Trade Model and the Establishment of a Trade DB

- By supplementing existing models, such as the International Macroeconomic Model, CGE Model, and the International I-O Model, through the establishment of a basic trade-related DB, KIEP provides basic analytical data that can assist in the process of forging governmental policies. In addition, KIEP has established customs-related statistics and made these statistics program-

mable so that they may be utilized in future policy research. KIEP also makes use of the CGE Model to measure the effects of the FTAs concluded with major powers, and to establish key political and economic statistics to assist research on trade with the US and the EU.

- Implementation of dynamic CGE models, introduced in 2010, for current FTA and DDA research
- Organization of Korea's product trade
 - Organize data for policy studies related to preferential tariffs and customs refunds for Korea's trading partners
- Organize data on trade barriers for major countries

➡ Expansion and Upgrade of the KIEP Macro-econometric Model

- KIEP has introduced a new Economic Analysis Model that effectively expands the one developed in 2007 by including China and Japan. It also takes into account elements that were not properly addressed by the past model. As importantly, a Korea-U.S.-China-Japan-RW model was formulated, with special attention being paid to the upgrade of the assets market. Based on this model, the results of a quantitative analysis involving the economic effects that Korea, China, Japan, and the United States would incur should a macro-economic shock of global proportions come to pass were calculated.
- Make better use of models by providing reports on research results and basic tasks
- Build measuring models for forecasting mid-term balanced exchange rate and won/dollar exchange rate

➡ Asian Economic Panel (AEP) and the Publication of Related Academic Journals

- In collaboration with Columbia University's Earth Institute (EI) and Keio University's Global Security Research Center, a number of think tanks and scholars in the Asian region got together to establish an Asian version of North America's Brookings Papers on Economic Activity (BPEA) and Europe's Economic Policy (EP). Known as the Asian Economic Panel (AEP), the body has contributed not only to the conduct of research on major economic issues affecting Asia but has also put forward potential policy options where these issues are concerned. As part of its mandate, the AEP invites researchers from throughout the Asian region to take part in panel discussions twice a year. It also publishes a series called Asian Economic Papers on a triennial basis (MIT Press).

→ Research Exchange with Concerned Foreign Organizations

- Propose appropriate economic counter-measures for Korea through accurately analyzing the rapidly-changing world economic order, establishing system of research cooperation in major economic regions, and foreseeing its possible influence on Korea.
 - Analyze foreign economic relationships and economic cooperation issues in the major regions, assess new business environments for large economic regions such as China and India, and evaluate conditions of regionalism and FTAs. Also establish strategies for entering newly emerging markets and strengthen development cooperation in relation to regional research.
 - Seek ways to promote economic integration for Northeast and East Asian countries, examine inter-Korean economic cooperation after inter-Korean summit, and promote multilateral cooperation for regional development in Northeast Asia.

→ Korea's Official Pool of International Economists (KOPIE)

- As part of its ongoing efforts to organize international economic research teams (panel sessions) and provide support for international conferences, KIEP has established and made active the use of Korea's Official Pool of International Economists (KOPIE) Database whenever petitioned to do so by the government. While each research team consists of up to twenty economists, the panel sessions carried out, under the auspices of various regional research groups, involve up to fourteen researchers. In order to maintain a certain level of consistency in terms of work duties, each research group designates one or two secretaries. KIEP seeks to have the Korean position represented by dispatching, through its KOPIE system, specialists to unofficial international meetings in which Korean participation at the government level is deemed essential.
 - Propose analytic results on discussions or negotiation trends by international organizations on global economic order and economic management through joint research with foreign economy experts. Also, propose appropriate measures to Korean government based on this analysis.

➤ Strengthening the East Asian Research Network

- Through such means as the invitation of foreign scholars with expertise with respect to East Asia, research exchanges, and the formation of human networks, KIEP has been at the forefront of the establishment of a hub for research activities related to East Asia. It has also collected and classified information produced by KIEP and other domestic and foreign research institutions, related to trends in East Asian economic cooperation, academic materials, and specialized research. The above information is disseminated through its website.
 - Joint study on East Asia Economic Cooperation (to be published as Northeast research series)
 - Launch joint research based on seminar results from annual East Asia Economic Integration seminars and Northeast economic cooperation seminars

➤ Joint Training of Regional Specialists through Graduate Schools of International Studies

- As part of its efforts to develop networks with regional economic specialists, specialized research institutions situated abroad, and foreign specialists; KIEP offers, in conjunction with a number of graduate schools of international studies, regional specialist education programs. Two options are offered as part of this program. While the 'Full Package' focuses on the training of specialists in lesser-known regions, the 'Special Package' revolves around the training of specialists in major regions. To date, the graduate schools of international studies of five universities have participated in this specialist educational program, namely those from Korea University, Hankuk University of Foreign Studies, Chung-ang University, Hanyang University, and Seoul National University. This project is designed to help train specialists who possess comprehensive knowledge of various regions. All in all, this project has sought to meet the demand for regional studies that has emerged at both the national and educational institution levels.
- Hold thesis contest on regional studies for graduate students
 - Evaluate research theses that examine and forecast economic trends of major countries and regions amidst the change in international economic order, and propose measures to expand Korea's exchange with these countries.

→ Joint Research Projects on South Korea-US Relations, North Korea and Issues Pertaining to the Korean Peninsula

- The Korea-U.S.A. Research Association of Johns Hopkins School of Advanced International Studies is a REN-type research center that carries out policy research, education and the building of regional studies research centers in the long term. It is also charged with solidifying Korea-U.S.A relations and helping diplomatic experts and scholars in Washington to recognize the strategic importance of Korea-U.S.A. alliance. Its three core businesses include fostering of Korean peninsula experts, assisting policy studies, and building networks for regional studies.
- Foster Korea-U.S.A. relations and Korean peninsula experts
- Support policy research business on current issues regarding Korea-U.S.A. relations and the Korean peninsula
- Build regional research networks
 - Build SAIS-KIEP global Koreanetwork
 - Promote North Korea Economic Forum designed for understanding actual conditions of North Korean economy and study policy alternatives

→ Seeking Korea's ODA policies and strategies

- Understand the actual state of ODA provided by Korea and comprehensively evaluate its outcomes
- Research how ODA is used to define economic and diplomatic relationships with developing countries by analyzing ODA strategies of Japan and China
- Strategically select countries to benefit from Korea's ODA and categorize these regions and nations
- Establish efficient evaluation system for individual EDCF and KOICA projects

→ Support for the Establishment of a Northeast Asian Development Bank

- KIEP has carried out theme-based research projects designed to facilitate the activation of international discussions, since 1990, on the subject of the establishment of a Northeast Asian Development Bank.
- Efforts have been made toward this end, to ascertain the desirable direction for the establishment of the Northeast Asian Development Bank and to achieve necessary international consensus.

● Research Assistance

➡ Information Management

- As part of its ongoing efforts to strengthen its support of research activities, KIEP operates a Digital Library. The Digital Library offers individual researchers information related to their research topics and provides an online list of research materials contained in the KIEP library. The Digital Library also offers two webzines (weekly/occasional) that contain summaries of research reports collected from foreign research institutes, economic research centers associated with universities, and international economic organizations. The Digital Library also collects statistical materials, such as those pertaining to major countries, in order to facilitate regional projects.
- KIEP has also expanded its cooperation with Korean and international academic societies and associations and frequently offers educational courses related to the practical use of information and its core DB.

➡ Operation of Computerized DB Systems

- While the KINIS system has enabled KIEP to combine and disseminate the contents of its various research databases, its information management system has helped to improve overall work efficiency.
- In addition, KIEP has made efforts to create a user-friendly website and to strengthen its computational infrastructure.
- Strengthen information security and protection of private information
- Maintenance of data processing equipment

→ Publications

- KIEP publishes various theme-based research reports and research materials. It also regularly releases analyses of topical matters related to the economy through web-based magazines, such as KIEP World Economy Update and Regional Economic Focus. KIEP also publishes Journal of International Economic Studies, which includes outstanding papers, written both by Korean and international researchers, on a semiannual basis.
- All of KIEP's publications are available online, and active exchanges of such publications take place with Korean as well as overseas institutions.
- Promotion of research results and related information
 - List published data on academic information database of KIEP website, IKIS and other related organizations
- Distribution and sales of published data based on membership system

→ Public Relations

- KIEP has actively conducted public relations work through such means as contribution of articles to media outlets and publication of special articles. Meanwhile, the results of its studies and its latest news are made available through KIEP web magazines. It has also increased the accessibility to its newsletter, the KIEPzine. To forge an image as the "World's Leading Think Tank", KIEP publishes a variety of PR literature whilst making simultaneous efforts to improve its PR system to enhance the efficiency of related activities.
- Reinforce online promotion
- Launch integrated promotion in a strategic manner

● Management of Foreign Offices

→ Korea Economic Institute (KEI) in Washington, D.C.

- The Korea Economic Institute (KEI) in Washington D.C. is engaged in activities designed to promote the Korean economy and policies in the United States, as well as analyzing the current trends in the latter. More to the point, KEI seeks to activate the exchange of opinions through such means as organized discussions involving leading opinion makers, Korea-U.S. policy seminars, and Korea-U.S. joint academic conferences. KEI also implements academic and policy-related projects on behalf of the government as well as playing a facilitating role for the active exchange of human resources.
- KIEP's active promotion of the Korean economy in the United States through KEI is designed to contribute not only to the establishment of Korea's international economic policy, but also to the creation of a broader base of support for Korea abroad.
- Development of Korea-U.S.A. business in relation to North Korea
- Promotion of the Korean economy and economic policy in the United States
- Academic discussions and seminars

→ KIEP Beijing Office

- The KIEP Beijing Office analyzes the current trends in China, and seeks to promote Korea's economy and policies in the latter. The KIEP Beijing Office is able to provide important information in a timely manner through its series known as China Economy Briefing. The Office also facilitates the exchange of opinions between Korea and China through the Korea-China Economic Forum.
- The KIEP Beijing Office's provision of objective and practical information has contributed greatly to China-related policymaking in Korea. Moreover, by strengthening the networks between Korea and China, the Office has actively promoted the conduct of China-related research in Korea. It has also carried out activities designed to promote the Korean economy in China and provided support to Korean enterprises desiring to enter the Chinese market.
 - Management of Chinese economy and Korean peninsula expert pool
 - Management of Korean peninsula expert pool
 - Reinforce local networking business in line with the establishment of Chinese regional and provincial research association

● International Seminars

- The 5th Trilateral Workshop of KIEP-PRI-CASS (2011. 1 ~ 2011. 12)
- KIEP-IMF-ADB Conference (2011. 1 ~ 2011. 12)
- Asia Economic Community Forum (2011. 1 ~ 2011. 12)
- The 9th KIEP-AMR Seminar (2011. 1 ~ 2011. 10)
- The 5th KIEP-ERI Seminar (2011. 5 ~ 2011. 10)
- The 15th Korea-South Central America Cooperation Forum (2011. 1 ~ 2011. 12)
- North Korean policies for liberalization of North Korean economy (2011. 3 ~ 2011. 7)
- Korea-Russia Policy Council: GTI development trends and Korea-Russian collaboration (2011. 8 ~ 2011. 9)
- 7th Annual International Seminar on East Asian Economic Integration (2011. 1 ~ 2011. 10)
- KIEP-International Organization Joint Seminar (2011. 1 ~ 2011. 9)
- KIEP-Northeast Asian Economic Association Joint Seminar (2011. 7 ~ 2011. 12)



KIEP Annual Report



**Review of
2011 Projects**

① Research Trends in 2011

- In the area of international macro-finance, the objective of the research is to find ways to increase the resilience of the Korean economy in the face of external shocks and provide policy directions allowing Korea to respond proactively to changes in the post-crisis international financial order.
 - One of the main lessons of the global financial crisis has been that external shocks can spread to and weaken the real economy and finances. Research in 2011 will focus on ways to protect the Korean economy from various structural vulnerabilities.
 - Proposing policy alternatives to the Korean government amid post-crisis debates about a new international financial order, including the overhaul of the international monetary system while China's influence is grows rapidly, is also an important objective.
 - Major changes that occurred in the wake of the financial crisis included those affecting global governance, such as the consolidation of the G20, scheduled to meet on a regular basis in the future. Changes in the international financial and trade order and the shift in the relationship with emerging market countries will be closely monitored so as to develop medium and long-term trade policies for Korea, that are aligned with the emerging environment.
- In 2011, amid the accelerating pace of recovery in the world economy and trade, two of the top issues receiving the attention of observers both here in Korea and abroad are likely to be economic stimulus measures heavily centered on protectionist measures (in particular, NTB-based measures) and developments in DDA negotiations. Hence, Korea's response to maximize the beneficial effects of market-opening will constitute the focus of this research.
- Conducting in-depth analysis of the shifting world economic order since the outbreak of the global crisis and related trends, proposing directions for international economic policy vis-à-vis strategic economic cooperation partner regions and countries, in addition to disseminating the results of these studies will also be important objectives.

- Study of developed countries, China and large emerging market countries and other emerging market countries by region; identification of potential strategic partners for economic cooperation regions; strategic in-depth regional analysis aimed at promoting economic cooperation.
- Dissemination of the results of the above-described studies for the benefit of the government and private sector, through various channels, including publication as research reports and research materials or through the World Economy Update, Regional Economic Focus, China Briefing: Trends by Province, or sharing through expert pools, forums and seminars.
- In the area of international development cooperation, research will be conducted to assist the establishment of Korea's South-South cooperation strategy, and efforts will be made to gain greater insight into FTA and FDI activities in the East Asian region, while analyzing how the changing economic relationship between North Korea and China may affect North-South relations, and discovering related research tasks.

② Basic Research Tasks

- China in International Finance: Present and Future
- Economic Costs of Protectionism and Its Policy Implications
- Analysis on the Effectiveness of 2000's Capital Controls
- New International Monetary System: Necessity and Alternatives
- The Macroeconomic Effects of International Risks on the Korean Economy in a Medium-Term Perspective
- Evaluation and Future Tasks of the East Asian Development Model: Focusing on the Comparison with the Anglo-American Model
- APEC Economic Integration and Rules of Origin: Economic Impacts and Policy Implications
- A Study on Competitive Structures to Maximize Effects of Openness
- A Study on the Determinants and Productivity Spillover Effects of Korea's Intermediate Goods Trade
- The Study on Introduction of Korea's GSP Scheme
- The Impact of Technical Barriers to Trade (TBT) on Bilateral Trade: A Case of Korea
- China's Subsidies and Major Trading Partners' Countermeasures
- Analysis on the Competitiveness of Japanese Manufacturing Industry
- CIS Economic Integration and Policy Implications for Korea: Focusing on the Customs Union
- Korea's Trade Policy and Strategy toward the EU after Korea-EU FTA
- The Rise of Brazil: Ways to Expand the Industrial Cooperation between Korea and Brazil
- Firm Level Productivity and Survey Results for Korean Firms in Vietnam and Indonesia
- India State-Wise Growth Pattern Projection and Policy Implications
- Strategies of Major Nations for Economic Cooperation with Africa and their Implications
- Change in North Korea's Policy for Foreign Direct Investment and Future Direction of the Inter-Korean Economic Cooperation
- South-South and Triangular Cooperation: Trends and Implications for Korea
- Analysis on FDI in Services among Korea-China-Japan and Strategies for Mutual Cooperation
- The Determinants of Price Volatility in Food Crops and Policy Implications for Korea
- U. S. and Canada's Green Growth Strategy and Its Implications

China in International Finance: Present and Future

Bokyeong Park *et al.*



China's financial market has grown fast since the beginning of the 2000s although it is obviously less developed compared with its real sector yet. As measured in the ratio of total financial asset to GDP as of 2009, China is about 70% as developed as the U.S. in financial deepness. While the indirect financing via banks still accounts for three fourths of total financing in China, the direct financing through capital market is in the early phase of development.

The non-performing loan problem and the financial weakness of commercial banks, which were mentioned as major lingering concerns in China's finance, have been improved due to the financial support from its government in the early 2000s. Despite this quantitative growth and better statistics, there are still many obstacles to further financial development in China. They include strong government intervention in finance such as state ownership of banks and interest rate control, low financial competitiveness and underdevelopment of capital market and investment banking industry. Therefore, it is hard to predict that China's financial institutions would be competitive enough to lead the global financial market in the foreseeable future. The recent global financial crisis and thereafter China's massive stimulus measures created additional risks in its financial sector.

This low competitiveness of banks and extensive financial interventions by government work as impediments to greater flexibility of exchange rate and more liberalized capital flows in China. It is theoretically proper to sequence policies in the order of domestic financial reform including interest rate liberalization, greater flexibility of exchange rate, capital account liberalization, and currency internationalization. Currently China's policies, however, are under way in a mixed order. After the global financial crisis renminbi internationalization policy started to be driven with priority. Although renminbi internationalization is the ultimate goal of China, it would face difficulties in making further progress without prior measures for financial openness, which in turn calls for exchange rate flexibility.

This logic leads to the prediction that China will increase its exchange rate flexibility sooner or later. Such a decision possibly would be prompted by the recognition that the

flexibility is a crucial precondition for the ultimate goal, namely internationalized renminbi. Greater flexibility of exchange rate would be also beneficial to China because it needs to deal with both appreciation pressure from outside and inflation pressure from inside. Moreover, China is likely to make progress in capital account liberalization, albeit slow and limited.

In particular, it may loosen regulations on portfolio investment including larger investment ceilings, while maintaining strict restrictions on short-term capital flows and financial derivatives. However, it would take long time to achieve full-fledged convertibility of renminbi because China has a long way to go to fulfill its preconditions such as domestic financial reform. In conclusion China is very likely to push forward internal financial reform, greater exchange rate flexibility, capital account liberalization, and currency internationalization in a gradual manner simultaneously rather than in a relevant order.

Economic Costs of Protectionism and Its Policy Implications

Nakgyoon Choi *et al.*



Many countries/regions including the US, the European Union, and China have implemented a wide variety of protectionist measures since 2008 when the global economic crisis occurred. As major economies are afraid of the devastating impacts of competitive protectionism, they have been warning against the strengthened protectionism at the G20 and the WTO meetings. When we review the tariff rates from 1996 to 2010, the applied tariff rates dropped from 10.5% on average in 1996 to 7.0% level since 2006. However, it turned out that the number of trade remedy measures including the anti-dumping duties, safeguards, and countervailing duties increased rapidly since the late 1990s.

In addition, we have also seen non-tariff measures including TBTs and SPSs becoming more widespread in recent years. This study investigates the level of protection in 2000 and 2010 implementing the two-stage approach suggested by Helpman *et al.* (2008) and Kee *et al.* (2009) to address problems involving endogeneity and sample selection. The

empirical results reveal that the level of protection dropped from 19.7% in 2000 to 11.0% in 2010. It implies that the level of protection decreased mainly due to the Uruguay Round concessions and the spreading Free Trade Agreements. When we analyze the economic costs of protectionism by types, it turned out that the trade remedy measures have a negative effect on trade, which is statistically significant. New types of non-tariff measures including TBTs and SPSs, which have been spreading rapidly all over the world, turned out to have depressing effects on trade. However, older types of non-tariff measures including price and quantity measures which have been kept under effective control by the WTO system, turned out to have mixed effects.

This study also investigates the impacts of protectionism on employment in the Korean manufacturing industries between 1991 and 2006, employing the GMM (the Arrellano-Bond dynamic panel estimation technique) system to account for potential endogeneity arising from the inclusion of the lagged dependent variable into explanatory variables. It finds that the effects of protectionism on employment depend on the wage level. In particular, protection measures such as high tariffs result in reduction of employment in industries paying higher wages. We also find that tariffs in Korean manufacturing industries have significant impact on employment of blue collar workers, whereas its impacts on the white collar workforce are not significant.

Analysis on the Effectiveness of 2000's Capital Controls

In Huh, Jiyoung An and Dayoung Yang



We analyze the effectiveness of capital control in 2000's by using EPFR merging Portfolio Fund Research) dataset. In the chapter 2, we first summarize the status of emerging countries' capital control before and after 2000. International capital flows have been increased since 1990's. The global financial crisis after Lehman Brother's collapse has interrupted the international capital flows since 2008. The capital flows to emerging markets,

however, have resumed after the global financial crisis. The two main reasons of increasing capital flows to emerging markets are the increased liquidity due to monetary easing during crisis and the relative resiliency of emerging countries' growth. Brazil, Chile, Columbia, Malaysia and Thailand introduced capital controls in 1990's and Brazil, Columbia, Croatia, Thai, Indonesia and Korea has used capital controls in 2000's. In particular, the number of countries, that is imposing, capital controls, increased after the Global financial crisis due to emerging concerns about sudden stop's of foreign capital flows.

In chapter 3, we analyze the capital flows before and after capital controls imposed in selected countries. We select the countries with enough timeseries data after the capital controls in order to have meaningful analyses. They are Brazil, Columbia, Thailand, Indonesia and Korea. We find that capital inflows in our sample countries do not show any statistically meaningful changes after imposing the capital controls in general. The capital flows to bond funds of Columbia has been contracted after capital control, but the capital flows to other countries have even been increased after capital controls.

In Chapter 4, we analyze the effectiveness of capital controls with the controlling variables including international capital markets' variations and domestic macroeconomic and financial market variations. We could not find the statistically meaningful effects of capital controls on the capital flows or the capital market variations. As an exception, the forward position regulation of Korea has reduced the capital flows to bond funds. All capital controls have not affected the volatility of stocks or foreign exchange markets. The international capital markets' volatility has affected the capital flows in most countries. If the domestic capital market is less volatile than the international markets, then the international capital flows into that country. The capital controls in general could not have not affected the capital inflows, so it is more important to reduce the domestic market's volatility. We only find 2 cases of statistically meaningful regulations of capital controls out of 7 cases. Therefore, we recommend to focus on policies of the domestic market stabilization in order to stabilize the capital flows.

New International Monetary System: Necessity and Alternatives

Deok Ryong Yoon, Seung-Hwan Oh, and Seung-Kwan Baek

● This report analyzes the problems of the current international monetary system under given circumstances of a weakening dollar and the decreasing weight of the US Economy in the world. This study tries to figure out whether there will be changes in the current international monetary system and, if so, the possible picture of new system. As alternative international key currencies, EURO and Yuan are proven, in diverse aspects, as international key currencies.

This report suggests the introduction of an Asian regional currency and makes the case for a multi-polar international currency system, starting with the East Asian Currency Unit between Korea, China and Japan. The first issue concerns the search for a possible alternative international monetary system. SDR has been regarded as a substitute for the dollar, as it already has worked as an international currency since the launch of the Bretton-Woods system. SDR's advantage is that the currency is not bound to specific national interests. However, there is no private market where the SDR might be traded. SDR also requires an international central bank, which the IMF is not likely to become. Another alternative may be a multi-polar international monetary system in which the dollar, Euro and probably the Yuan would compete with each other.

The result of this study shows that the dollar still dominates other currencies with regard to GDP, volume of financial assets, size of the financial market as well as military power. The EURO has a strong potential to be a key currency considering trade volume, well-developed financial markets and internationalized financial institutes. The Yuan, however, will take quite a while before coming onstage as a global key currency. The major weaknesses of the Yuan are capital control, a shallow financial sector, financial depression, inefficient financial system and relatively high political risk.

This result implies that the international monetary system will be dominated by the dollar for the foreseeable future. Then a bi-polar system with the dollar and EURO may slowly emerge to replace the current system. A tri-polar system with the dollar, Euro, and the Yuan will only emerge after a relatively long time. The tri-polar system may be easier to establish if Asian countries introduce a regional currency instead of a national currency, the Yuan, as

that regional currency will not be subject to vicissitudes of China's domestic conditions. An Asian regional currency will get the credit on the market more easily than the Yuan. The fastest way to introduce an Asian regional currency will be to start in a small but influential group involving China, Japan, and Korea. The three countries account for over 80% of Asia's GDP and cooperate with each other institutionally. They have already established the trilateral cooperation secretariat, and are connected by a currency swap arrangement. If the three countries would initiate efforts to establish an Asian regional currency, other countries will join afterwards. In addition to the factors explained above, this study shows how the three countries may create a regional currency and how that currency can be used.

A set of exchange rates beginning in 2000 to November 2011 is calculated and attached as an example in the appendix.

The Macroeconomic Effects of International Risks on the Korean Economy in a Medium-Term Perspective

Dong-Eun Rhee, Young-Joon Park, and Eun Jung Kang

● This study examines various potential international risk factors for the Korean economy in a medium-term perspective. The report highlights the different characteristics of the risk factors between the 1990s and 2000s in particular.

First of all, the effects of oil price shocks on the Korean macroeconomy are investigated. Since Korea is an oil-importing country, it is natural that an oil price hike increases imports. However, VAR analysis found that an oil price rise raises exports as well as imports, since Korea imports crude oil and exports petroleum products. An export increase after the oil price shock was not observed in 1990s, since the ratio of petroleum product exports to total exports was relatively low in the 1990s but it has been increased in 2000s. Due to the fact that an oil price rise increases the exports, we also found that an oil price rise increases Korean industrial production in the short-run. Considering the asymmetry of the oil price

shocks, the analysis shows that an oil price fall also increases industrial production, and moreover the impact is greater than in the case of an oil price rise.

Second, we empirically investigate the effects of exchange rates on Korean trade. It is widely believed that exchange rate depreciation would promote exports and reduce imports. However, we cannot find the evidence that the depreciation of exchange rates does boost exports, while it is found that depreciation decreases imports. Moreover, it is found that the volatility of exchange rates deters exports after the Asian currency crisis. Therefore, the stabilization of the foreign-exchange market is important for Korea to promote exports.

Third, the effects of the Chinese economy on the Korean economy are investigated empirically, focusing on exports and price levels. An empirical analysis found that the appreciation of the Chinese Yuan promotes Korean exports to China, by enhancing the price competitiveness of Korean products. Chinese exchange rate appreciation raises all three kinds of Korean exports: final goods, intermediate goods, and capital goods; while the impact of the final goods is the biggest among overall. It has also found evidence that Chinese inflation can be transmitted to Korea through rises in Korean import prices. Empirical analysis reveals that Chinese inflation had no significant impact on Korea's inflation rate in the 1990s, while it became one of the main external causes of Korea's inflation along with oil prices in the 2000s.

Lastly, we analyse the potential regional risk factors which can be realized in the medium-term. We considered the deterioration of the Eurozone fiscal crisis, US double-dip, and Chinese hard-landing as the risk factors. If the Eurozone sovereign debt crisis results in the disorderly defaults of some member countries, the world's economy may experience recession like the global financial crisis of 2008. In the worst scenario of the Eurozone crisis, the world's GDP will fall to 0.7%p in 2012 and 2.0%p in 2013. With regard to the US economy, it is not very probable that it faces a double-dip in 2012, but the recovery process from the subprime mortgage crisis could be longer than expected. If a US double-dip is realized in 2012, the world's GDP may fall to 0.9%p in 2012 and 0.5%p in 2013.

Finally, China's hard-landing scenario does not seem to be happening in the near future. However, it is needed to carefully monitor the China's bubble problem of asset markets and banking sector stability. If China's hard-landing scenario becomes realized in 2012, the world's GDP may fall to 0.4%p in 2012 and 0.9%p in 2013.

Evaluation and Future Tasks of the East Asian Development Model:

Focusing on the Comparison with the Anglo-American Model

Jonghwa Cho, Young-Joon Park, Hyong-Kun Lee, and Da Young Yang



The East Asian countries-Japan, Taiwan, Korea, and China-have shown better economic performance than any other region in the world with respect to increased income and reductions in poverty during the last half century. There have been thoughtful debates on whether their performance was due to a development model specific to the region which could be differentiated from development models in other regions. After the East Asian crisis of 1997~98, in particular, several economists indicated the serious problems of the development strategies in East Asia. However, the swift and strong recoveries from the East Asian crisis and the more recent global financial crisis of 2007~08 have raised the need for reevaluation of East Asia's development model.

First, this study shows the economic performance of the East Asian countries during the last half century compared to that of other countries and regions. Then we discuss what the unique development strategies were that can be differentiated from the traditional Anglo-American model. Higher government intervention, more emphasis on exports and manufacturing, and higher saving-investment ratios are commonly understood to be the major components of the East Asian model. We compare and evaluate them with those of the Anglo-American model. In the early stage of economic development, the governments of the East Asian countries placed their priorities on resource allocation because of their limited physical, financial and human resources.

The most important criteria on which governments selected and supported industries and firms were their ability to export, because sizes of domestic markets were limited and foreign currency was badly needed for imports of technology and capital goods. They also understood that export promotion could only be accomplished through the development of their manufacturing sectors which are better suited to a trade economy than the service sector. Through this process the East Asian model put more emphasis on the export and manufacturing sectors than the Anglo-American model. However, the East Asian crisis of 1997~98 revealed to us that the traditional East Asian model could not guarantee a sustained, long-run growth of the East Asian countries. They thus modified traditional development

strategies by accepting several components of the Anglo-American model. It would be necessary for East Asian countries to make compromises in the future and harmonize their development models with those of the west, including the Anglo-American model, to obtain robust growth that can be sustained over the long-run.

The balance of emphasis between government intervention and market mechanism, the balanced growth of manufacturing and service sector, more emphasis on domestic demand, the maintenance of appropriate saving ratio, and the strengthening of East Asian economic cooperation are suggested as examples of ‘harmonized’ development strategies for the future.

APEC Economic Integration and Rules of Origin: Economic Impacts and Policy Implications

Sangkyom Kim *et al.*

For the past 20 years, APEC has worked on a wide range of Regional Economic Integration (REI) activities with sustained efforts for establishing the Asia-Pacific Economic Community. In order to follow up Leaders’ instructions to implement the REI agenda, various activities related to trade and investment including Rules of Origin (ROO) have been addressed. More specifically, APEC-wide efforts for harmonizing ROOs are being made, aiming to minimize administrative costs caused by complex ROOs. In this regard, the purpose of this research is to provide policy makers and academics with solid and tangible policy implications and recommendations based on qualitative and quantitative analysis on APEC’s ROO activities. To serve this purpose, this research first examines characteristics of both preferential and non-preferential ROOs. It then endeavors to explore ways to enhance the trade creation effect of FTAs/RTAs, while minimizing trade cost, when we employ ROOs as policy tools. Quantitative and qualitative analyses are attempted to derive policy implications and suggestions.

Chapter 2 provides a general outline and characteristics of ROO followed by review/

examination of non-preferential Harmonized Rules of Origin (HRO) and preferential ROOs including ASEAN, EU, NAFTA, MERCOSUR and TPP. Major findings in this chapter can be summarized as follows: HRO which represents non-preferential ROO, features consistency with general rules. Meanwhile, preferential ROOs are complex with a number of exceptions, that is, product-specific rules. However, the recent preferential ROOs have fewer exceptions and reinforce general rules with regional value content. In light of the pros and cons of the non-preferential and preferential ROOs, we draw the implication for APEC ROO. A more consistent and coherent general rules with fewer exceptions should be established by making the best use of de minimis and cumulation.

Chapter 3 presents APEC-wide discussion and activities relevant to ROO and provides theoretical basis for the need to harmonize and simplify ROO. ROO was included in the REI agenda since the mid-1990s. However, it was not regarded as an independent policy tool for promoting free and open trade. Compendium of Rules of Origin published in 1997 containing preferential trade initiatives and non-preferential ROOs of 16 APEC economies can be regarded as one of APEC's several earlier achievements in ROO. Since the end of the 1990s, FTAs/RTAs in the region have increased sharply and the region deteriorated into a spaghetti bowl situation. It entailed high administrative costs for application of preferential tariffs, which hampered economic benefits of free trade. In 2008, as a part of REI activities, APEC has agreed on a working plan for the harmonization of ROOs and the simplification of documents and customs procedures. APEC has developed Model Measures for RTAs and FTAs to encourage a coherent and consistent approach to the design and content of such agreements. ROO-related activities and analytical studies have been undertaken to promote greater convergence and build capacity. In February 2009, APEC Senior Officials identified Rules of Origin as a priority agenda for 2009, and tasked the Committee of Trade and Investment (CTI) and its various sub-fora to look into making ROOs more business-friendly. They sought to undertake work related to harmonization, cumulation and simplification of documentation and procedures. In 2009, Leaders instructed that Pathfinder Initiative on Self-Certification of Origin be set to reduce administration costs and capacity-building projects be promoted to induce more economies' to participate. Also, they instructed that global supply chain activities be conducted aimed at 10% improvement by 2015. In 2011, APEC Leaders instructed to enhance SMEs' participation in global supply chains. In terms of reducing costs at the border, behind the border, and cross the border, ROO is closely linked with next generation trade and investment issues, trade transaction costs, supply chain, SMEs, and ease of doing business. In this regard, APEC-wide activities and efforts will give greater focus to the simplification and harmonization of ROOs.

Chapter 4 examines the impact of ROOs on trade through theoretical analysis, case

studies, and test them empirically by utilizing the gravity model. To reduce the trade diversion effect caused by spaghetti bowl effects, regime-wide ROOs, such as cumulation, de minimis and certification, are examined as policy tools. Analysis on bilateral/diagonal/full cumulation is made to estimate the economic impact. The empirical analysis reveals that full cumulation creates 18.8% increase in trade, followed by 5.53% increase by diagonal cumulation and 3% increase by bilateral cumulation. De minimis results in a 6.8% increase in trade. However, the economic efficiency of a system of self-certification compared to public-certification remain unproved in statistical terms. This may imply that, in practice, self-certification requires more burdensome documentation and additional procedures.

Building on the major quantitative as well as qualitative findings, Chapter 5 delineates several principles/directions and policy recommendations for effective promotion of APEC's ROO activities. First, standardization and simplification of ROOs should be attained to promote greater utilization of FTAs/RTAs and create a business-friendly policy environment. The recently established WebTR provides customs procedures, tariffs, and ROO-related information. Its function should be developed further and made more user-friendly with respect to APEC REI activities. For instance, it should be a diversified database that can guide APEC business specifically towards understanding the complicated ROOs of various FTAs/RTAs in APEC. Its role as a network hub needs to be strengthened further for it to contribute to the reduction of administration costs and time, and promotion of transparency and predictability of APEC ROOs. Second, adoption of the Pan-Asian Pacific Cumulation System (PAPCS) should be considered a pathway to achieving an FTAAP. As proven in the quantitative analysis, diagonal or full cumulation lead to increased trade. Hard work is required to identify economic impacts and challenges of diagonal and full cumulation through policy dialogue and analytical study. Also, a study for best practices should be undertaken on a consistent basis. Third, further efforts to promote regulatory cooperation and convergence should be made. Relevant regulations should be realigned for simplification and harmonization of APEC ROOs. The application of ROOs requires both strictness and flexibility in laws and regulations of individual economies. The self-certification procedures greatly differ from economy to economy-rigidity and heterogeneity of laws and regulations undermines the benefits of self-certification of ROOs. To facilitate better application, 'Simplification of Documents and Procedures Relating to ROOs' should be developed and advanced through regulatory cooperation and convergence. It will enable a more efficient process of self-certification of ROOs.

Finally, all the work of simplification and harmonization of ROOs covers not only regulations but also cross-cutting and trade facilitation issues. For APEC's establishment as a single market, more APEC economies should participate in discussions for a single cumu-

lation zone and APEC-wide capacity building programs for better utilization of ROOs, and APEC economic integration.

Since 2010, Korea proposed and conducted the Regional Economic Integration Capacity Building Needs Initiative (REI CBNI), aimed at expanding opportunities for participation in APEC REI projects including an FTAAP. The REI CBNI will be in operation for 5 years starting in 2012. Under this initiative, tailor-made programs including ROO capacity building will be developed and implemented. Supply of expertise and financial resources are important factors for a successful REI CBNI. For expertise and financial resources, utilization of Official Development Assistance (ODA) or APEC-wide business participation under Corporate Social Responsibility (CSR) can be considered.

A Study on Competitive Structures to Maximize Effects of Openness

Young gui Kim, Hyeri Park, and Hyeyoon Keum



Korea has achieved rapid economic growth through export-oriented strategy. As a result, people place high value on exports but have a negative perception on imports. However, it is well known that promoting competition through imports also brings significantly positive economic effects. We study the effects of market openness on competition structure of the market and how economic effects of the openness vary depending on the market structure and competitive structure. Based on these, we identify whether market openness itself roles as a competition policy, and we draw industry liberalization strategy by exploring in which market structures the effects of market openness are maximized. For these purposes, we analyze the effects of the openness measured by imports and investments on market structure and market performance using six countries' industry-level data since 2000. Also we study how differently the effects of the openness depends on market structure and competition structure by using computable general equilibrium (CGE) model allowing

imperfect competition assumption.

According to the empirical results for the relationship between the openness and market concentration, foreign direct investment lowers the degree of market concentration, while import penetration's effect is not statistically significant. This is because market concentration is measured as companies' market shares, however, import does not increase the number of firms in the market. To explore the effects of trade liberalization on firms' profit, the equation for profit performance indicators is estimated. The estimation results show that market concentration increases profit but imports lower profit. we cannot find a statistically significant effect of foreign direct investment on profit performance. We analyze how the effects of openness depend on market structure by using a imperfect competition CGE model. If there is a severe product differentiation, the effect of openness measured as real GDP growth rates is relatively small. If the technology of an industry has economies of scale, the effect of openness is very large because of a decline in average cost of production. Especially in an oligopolistic market, the effects are from 2.5 to 6 times larger than other market structures because of the presence of excess profit. Also we study the effect of openness in the case where the openness affects the degree of competition in an oligopolistic market. if the degree of competition increases by 10 percent due to trade liberalization, real GDP growth rate increases by 4.63 percent. As the degree of competition is intensified, real GDP growth rate increases.

Based on the results, three policy proposals were drawn. First, in the case of Korea, the competitive structure improvements by trade liberalization have been relatively minimal. Thus, more active policy efforts toward trade and investment liberalization are required in order to increase domestic consumers' welfare and the degree of competition. Also industry-differentiated liberalization strategies should be made by taking competitive structure and characteristics such as technologies into the consideration. Because particularly in industries with an oligopolistic market structure, the effect of openness is expected to be greatest, the effort to open these industries should be considered. Opening by itself can serve as competition policy, but institutional complements is also required to promote and enhance competition through trade liberalization.

A Study on the Determinants and Productivity Spillover Effects of Korea's Intermediate Goods Trade

Young gui Kim, Jungu Kang, Hyuk Hwang Kim, and Hea-jung Hyun

● World has grown so rapidly and the amount reached to \$ 27.2 trillion. This is not only because of the multilateral or regional efforts toward free trade but because of global production networks and global outsourcing. Korea's trade volume continues to grow, and achieve \$ 1 trillion and becomes the world's ninth country in 2011. About 50% of total exports and 70% of total imports are intermediate goods trade. Korea's intermediate goods trade is closely related to changes in division of production structure with China, Japan, ASEAN, and other Asian regions. Various researches have been conducted about total trade, while comprehensive studies on Korea's intermediate goods trade is very rare despite of its importance and weight.

The purposes of this study is to increase the overall understanding on trade in intermediate goods and to present relevant policy implications by analyzing the trends, current situations, the determinants, input-output structure, and productivity spillover effects of Korea's intermediate goods trade. According to the results of determinants for World's intermediate goods trade, not only traditional explanatory variables but comparative advantage variables and institutional variables turn out to be significant determinants. Moreover, geographic factors, customs duties, shipping costs, and comparative advantage factors play more important role in intermediate goods trade than final goods trade. We found similar results for Korea's trade data. Korea mainly exports capital-intensive goods and relation-specific goods. Also Korea imports capital intensive goods from capital abundant countries and does relation-specific goods from countries with high levels of legal and institutional system. We analyze input structure of imported intermediate in Korea's industrial production by using industry linkage analysis. For analysis period (from 2000 to 2009), the share of imported intermediate is increasing. On average, each industry requires imported intermediate by 0.03 billion won in order to produce final goods by 0.1 billion won. More imported intermediates are used to produce goods for exporting than for domestic consumption or investment. We study the productivity effects and spillover path of imported intermediates by using a computable general equilibrium (CGE) model considering endogenous international technology spillover effects. The effects of imported intermediate on domestic competitive

sectors depend on technology types and the trade relations with exporting countries. The productivity effects of imported input on final sectors using the imported intermediates are affected not by shares of imports but by amounts of imports. The greater the industry linkage relations of industry affected by imported intermediates' productivity are, the greater the real GDP growth rate and welfare improvement are.

Based on this analysis, we make three policy proposals. First policy proposal includes domestic technology development for replacing imported inputs, aggressive FDI promotion, and raising concern for producer services as intermediate goods to mitigate the dependency on imported intermediate goods. Second, we propose investment in human capital, enhancement of institutional level, and improvement of investment environment to strengthen the comparative advantage. Last, we recommend to develop trade policy strategy taking intermediate goods trade into consideration. The strategies include inducing high-level concessions for industry with comparative advantage, open strategy considering technology types and industrial characteristics, increasing efforts toward exporting to enhance learning by exporting effects, and raising interest in opening intermediate service sectors.

The Study on Introduction of Korea's GSP Scheme

Mee Jin Cho, Young Gui Kim, Ji Hyun Park, and Junha Kang

● The Generalized System of Preferences (GSP) was established to promote the exports of developing countries to developed countries in order to support their economic growth and development. The European Community (EC) was the first to implement their GSP program in 1971, and Japan and the U.S. introduced their GSP programs in 1971 and 1976, respectively. The GSP focused exclusively on creating incentives for access to larger markets of developed countries. In fact, Korea was one of the beneficiaries of the GSP. In the 1980s, Korea had graduated from the trade preference programs due to its remarkable progress in terms of economic development and improvements in trade competitiveness. Considering

Korea's achievements, including Korea becoming the chair and host of the G-20 summit, and also became the first country in the world that emerged from the status of aid beneficiary to become a donor, it is the right time for Korea to consider the introduction of a GSP scheme.

The purpose of this study is to discuss the strategic approaches for the introduction of the GSP scheme into Korea. In doing so, existing GSP programs of major developed countries and Korea's relations with developing countries are explored. Also, the economic effects of the introduction of the GSP on Korea and other developing countries are analyzed.

Firstly, Chapter II reviews and compares the GSP programs of the major industrialized countries such as the U.S., Canada, EU, and Japan. Notice that the GSP program should be unconditional and create no discrimination between developing countries. However, it turns out that existing GSP programs become more complex in terms of country- eligibility and product-eligibility requirements, graduation rules, rules of origin, and so on. That means the effects of GSP are actually debatable. Nonetheless, it appears that the GSP scheme influences the export performance of developing countries in a significant and positive way, facilitating development and poverty reduction. In this sense, there is an increasing need to maintain and extend preferential market access through the GSP to developing countries. Recently, the EU published a proposal to revise the current GSP scheme. The draft proposal aims to raise the effectiveness of the GSP by focusing GSP preferences on countries most in need. The major changes would involve reducing GSP beneficiary countries and refining graduation rules, GSP+ related procedures and criteria, and making rules of origin less complex. Lessons can be drawn for Korea from these changes and also experiences of other countries, that it is more important to establish and operate the GSP scheme in a way that helps developing countries develop their economies than just to grant the tariff preferences under GSP. In other words, it is crucial to operate the GSP preferences in accordance with the original intent and purpose of the GSP. However, the lack of reciprocity in the GSP program could harm domestic producers who compete with imports that receive preferential treatment under the GSP. Thus, it is necessary to have a safeguard mechanism to protect the interests of domestic producers and workers as well as a review mechanism to operate the GSP treatments properly.

Chapter III covers Korea's relations with developing countries, which was explored by analyzing Korea's tariff phase-out programs under its preferential trade agreements and its importing structure vis-a-vis developing countries. Korea's preferential agreements with developing countries include FTAs with ASEAN countries and Chile, the Asia Pacific Trade Agreement (APTA), and the Global System of Trade Preferences (GSTP). Most importantly, the new round of APTA and GSTP agreements have not yet been initiated. But increases in their existing level of concession under APTA and GSTP will limit the scope of GSP treat-

ments in Korea. In particular, the issues related to ‘redundancy in preferences’ and ‘preference erosion’ should be carefully considered when introducing the GSP scheme into Korea.

Chapter IV then examines the economic effects of the GSP on Korea and beneficiary countries. Clearly, the GSP program will affect trade flows and production patterns in both Korea and developing countries. However, it is not clear whether Korea and beneficiary countries would benefit from the introduction of GSP into Korea because GSP tariff cuts could result in not only efficiency gains but also welfare losses. In this regard, we use a CGE model to see how real GDP and welfare will be affected by tariff preferences under the GSP. The results show that economic benefits are expected in both Korea and developing countries, but the scale of the economic impact depends on the range of beneficiary countries which receive benefits from the GSP and the degree of openness in sensitive sectors. This suggests that Korea needs to consider the introduction of GSP in the strategic context.

Chapter V concludes by discussing the policy directions for the key components of the GSP program such as the determination of country-eligibility and product-eligibility requirements, graduation rules, rules of origin and so on. This study proposes a gradual implementation of the GSP program as an effective and feasible approach for introducing GSP schemes into Korea. In the mid to long term perspective, Korea needs to make sure that its GSP scheme to cover the wide range of beneficiary countries and extend preferential market access to sensitive products.

The Impact of Technical Barriers to Trade (TBT) on Bilateral Trade: A Case of Korea

Yong Joon Jang, Jeongmeen Suh, Minsung Kim and Jooyoung Yang

● Since WTO has been established in 1995, trade liberalization has led multilateral and interregional corporation to reduce the world’s average tariff rates by an active and robust movement. Hence recently the key issue in the field of international trade is moving from tariff barriers to no-tariff barriers as the latter is not transparent, complicated and not esti-

mated virtually unlike the former. Especially, the importance of Technical Barriers to Trade (TBT) among various non tariff barriers is gradually increasing as many developed and developing countries have started to adopt many technical regulations and relevant systems since 2004. Analyzing the TBT notifications that have been reported to WTO, the number of the member country's new technical regulation has constantly increased. Especially the TBT notifications have drastically increased since 2004 and hit the peak in 2009. This recent trend is mainly from the increased intervention of developing country. In addition, the recent increase in the number of specific trade concerns (STCs) implies that new technical regulations are more and more likely to be trade barriers to other trading partners. TBTs in the U.S, EU, China, and Japan which are Korea's major trading partners have also been increased since 2004. By industry, the increased reports are shown under mainly rubber and chemical, general machinery and electrical equipment among these countries. These sectors have the high percentage of bilateral trade between Korea and them. By objective, there are many TBT notifications for environmental protection among these countries. A technical regulation for environmental protection is more likely to be adapted by each country's subjective criterion. It is remarkable that these countries record top rankings of the country list which is brought STCs by other trading partners. Theoretically, the economic effects of TBT can be various and different based on its type.

First, viewing TBT from producer and consumer's perspective, it can be classified by production cost and consumer utility. The TBT which increases just production cost is more likely to be trade barriers to foreign exporters, especially when it applies to only foreigners unequally. On the other hand, The TBT which increases consumer utility renders a consumer's intention for expenditure. In this case, exporters with high technology are more likely to gain higher profit due to the TBT so that it promotes international trade.

Second, depending on the norms of TBT level it can be divided into horizontal and vertical one. The vertical TBT can be defined as the intensity of rigor on regulation, while the horizontal one exists within the cultural and geographical difference. The technical regulation for gas emission can be an example of the former, while the standard voltage for home appliances can be of the latter. It is clear that the vertical TBT is more likely to be barriers to trade. However, domestic producers can also use the horizontal TBT as useful instrument to protect from import penetration although the horizontal TBT is naturally formed from the demand side.

Theoretical analysis on TBT with its economic effects is supported by empirical results from previous researches. Previous researches result in opposite side of TBT's economic effects depending on national, industrial and periodical property. The opposite results are influenced by the trade-off relationship between an increase in adjustment cost and a

decrease in transaction cost and/or demand-stimulating effects. Again, the trade-off relationship can be differentiated by national, industrial, periodical properties. Based on the theoretical analysis and previous researches, this paper empirically tests the effects of TBT on bilateral trade among Korea and its major trading partners, using the WTO TBT IMS and the UN COMTRADE datasets over the period 1995-2009. The empirical results show that overall there are negative effects of TBT on trade between Korea and its major trading partners. However, these negative effects persisted just in the short run generally: in the long run, the negative effects are disappeared or even transferred to positive effects in some situation. By country, the negative effects persisted longer in Korea's bilateral trade with EU and Japan. By industry, the negative effects of TBT on exports are less prominent in sectors with comparative advantage and/or higher international competition, but more prominent in high technical-intensive sectors. These various effects of TBT on trade can be explained by the trade-off relationship which we mentioned above.

China's Subsidies and Major Trading Partners' Countermeasures

Wolla Park, Sherzod Shadikhodjaev, Suyeob Na, Jina Yeo, and Ma Guang

● Subsidies are financial contributions by the government or public bodies which confer benefits to their recipients. China has provided various grants, preferential loans, tax incentives and other forms of subsidies to promote the production and export performance of its industries. With its accession to the World Trade Organization (WTO) in 2001, China has fallen under the regulatory framework of the multilateral trading system. As a result, China's industrial policy is subject to both WTO's general subsidy disciplines, and specific commitments and tailor-made provisions laid down in the accession package. The latter include a partial recognition of the developing country status, special provisions on Chinese state-owned enterprises, transparency obligations, the use of out-of-country benchmark prices in countervailing investigations against Chinese products and others.

Composed of six chapters, this study examines the state of play on China's subsidization practice and counteractions taken by its major trading partners, as well as to explore possible implications for Korea. In particular, Chapter II considers the application of WTO rules to China's subsidies. Chapter III shows major trends in the use of subsidies by industrial sectors on the basis of China's declared policies, WTO notifications and relevant laws and regulations. Chapter IV examines how Chinese subsidies have been addressed in the WTO's political and judicial "control" mechanisms, such as the Transitional Review Mechanism, the Trade Policy Review Mechanism and dispute settlement procedures. Chapter V discusses the practice of individual countries - basically the United States and Canada - of countervailing Chinese subsidies. Finally, Chapter VI considers what lessons and implications Korea can draw from other countries' anti-subsidy measures against China. Over the past ten years, China has been criticized in WTO political forums for the lack of transparency in its subsidization practice. In the judicial track, Chinese subsidies have been complained of in 9 out of 23 dispute cases initiated against China as of November 2011. Most of them centered on prohibited subsidies and ended with mutually agreed solutions. The countervail mechanism vis-a-vis China has been used mainly by developed countries such as the United States, Canada, Australia, and the European Union of whom Canada was the very first user. Unlike these and some other countries, Korea has so far maintained a passive stance toward Chinese subsidies. It has usually kept silent in WTO forums, never resorted to the WTO dispute settlement or countervailing mechanism against China. However, given the increasing role of China as a trading partner, Korea should first of all strengthen its monitoring capacity with respect to both China's subsidization policy and other countries' anti-subsidy measures.

Countervailing investigations and WTO dispute cases are initiated by the government normally upon the requests of domestic industries. In choosing between these two tracks, the government should weigh all the pros and cons in terms of the time consumption, costs, the actual effect of remedies etc. and then decide which track to resort to. On the other hand, the case study on anti-subsidy measures demonstrates that it is important for the Korean government and companies to minimize the possibility of being targeted by such measures and, in any event, to be well prepared for such challenges.

Analysis on the Competitiveness of Japanese Manufacturing Industry

Gyu Pan Kim, Hyong Kun Lee, and Eun Ji Kim



This policy paper aims to analyze the competitiveness of Japanese manufacturing sector since the 1990s, focusing on the crisis of Japanese electronic sector, which is often called as the Galapagos Syndrome.

Based on the analysis, we derive various implications for the Korean manufacturers and the government from the Japanese experiences. Chapter two reviews the factors that affected the competitiveness of Japanese manufacturing sector, for example, the rising of Asian emerging markets, the appreciation of Yen since Plaza accord of 1985, and the digitalization and standardization of manufacturing technology. Chapter three analyzes the competitiveness of Japanese manufacturing sector since the 1990s using indexes such as Total Factor Productivity (TFP), Intra-Industry Trade Index (IIT), and Value Added Rate. According to the TFP measurement, It is clear that the productivity of Japanese manufacturing sector has fallen apparently from 1995. And, according to IIT measurement, the export competitiveness has weakened in electronics, general machinery, metal and textile industry. In particular, the Japanese manufacturing sector has lost its competitiveness by the ratio of value-added to sales amount which has fallen even during the depreciation of Yen in the 2000s. Chapter four examines the crisis of Japanese manufacturing sector from the perspective of business management (in Japanese, Monozukuri). We are emphasizing that modularization of manufacturing architecture has deprived Japanese electronic manufacturing firms of comparative advantages based on integral manufacturing technology. Moreover, the earthquake in the northeastern Japan in March 2011 has revealed the fragility of Japanese manufacturer's supply chain, which used to be considered as one of the major strong points. Chapter five discusses the strategies and the policies of the Japanese government to strengthen the manufacturing sector. We are focusing on how the Japanese government supported the R&D sector with R&D Partnership and fostered the cooperation between the government, the industry and the academia. The Japanese government has tried to increase R&D expenditure, stabilize employment, and assist growth of ecological enterprises and small businesses. However, the Japanese government's policies have been ineffective in that

its R&D expenditure has not contributed much to the profit growth of the enterprises, nor has the R&D Partnership induced active participation from many firms, not to speak of the unachieved innovation outcomes from the cooperation between the government, the industry, and the academia. Chapter six discusses the lessons and the policy implications we could obtain from the Japanese experiences to strengthen the Korean manufacturing sector, so that the Korean manufacturing firms would not repeat the Japanese electronic manufacturer's experiences. The Korean government should support the growth of the higher value-added industry such as parts and materials manufacturing sectors. Moreover, it is necessary for the Korean manufacturing firms to be more active in business cooperation with their Japanese counterparts, especially when expanding to the new emerging Asian markets.

Finally, the Korean government should further actively engage in the R&D investment of the small businesses in basic science technology. In this respect, the Japanese R&D partnership and cooperation between the government, the industry, and the academia could be a good example for the Korean government.

CIS Economic Integration and Policy Implications for Korea: Focusing on the Customs Union

Jae-Young Lee, Sherzod Shadikhodjaev, Soonchan Park, and Jeeyoung Hwang

● 20 years have passed since the Commonwealth of Independent States (CIS) was established in the aftermath of the dissolution of the Soviet Union in 1991. It was initiated by 12 newly independent states, excluding the 3 Baltic republics, in order to discuss issues of common interest and cooperate with each other based on independent and equal status. However, due to the non-binding nature of the CIS, most of the agreements among member states were concluded in vain. Nevertheless, they kept up efforts to form various integration schemes, such as the Customs Union of Russia, Belarus and Kazakhstan. The Customs Union was basically the first successful case of economic integration among CIS countries.

The formation of the trilateral union was completed by introducing a common customs tariff on 1 January 2010 and removing internal border controls on 1 July 2011. The overall GDP of the Customs Union amounted to USD 1,677.5 billion in 2010, or 86% of the GDP of the CIS and 2.66% of world GDP. Since the weight of the three economies in the CIS is considerable, it is expected that the Customs Union will have some repercussions for Korea, as well as its neighboring countries. In addition, increase in membership is likely to have greater impact.

Currently, Kyrgyzstan and Tajikistan have applied for membership in the union. At this moment, an analysis of the 2 year-old Customs Union and the search for its implications for Korea has great meaning. Composed of five chapters, this study provides an overview of the developments of economic integration in the CIS region, followed by an in-depth analysis of the main components of the Customs Union and its economic impact on Korea. Based on this analysis, this study puts forward a number of recommendations for Korean policy towards the Customs Union. With no internal duties, the Customs Union imposes common customs tariffs towards third countries. Only Kazakhstan is granted a five-year transitional period for levying a different customs tariff for some 400 tariff lines. As for external non-tariff barriers, the legal regime of the Customs Union, such as quantitative trade restrictions, technical regulations/standards, sanitary/phytosanitary measures and trade remedies, is based largely on relevant World Trade Organization (WTO) rules. Simply put, the Customs Union is a single market, which shares trade remedies and other regulatory measures. If a product passed, for instance, a sanitary/phytosanitary test of a member country, it is automatically permissible in other member nations.

Following Russia's accession to the WTO, the common customs tariff will be aligned with Russia's bound rates. Also, WTO rules will become an integral part of the Customs Union's legal system. For now, the regional integration agreements (RTAs) including free trade agreements (FTAs), the existing agreements and documents among the three countries do not provide sufficient details on the Customs Union's policy concerning RTAs with third countries. Nevertheless, the Customs Union countries have been jointly involved in the FTA negotiation process with CIS countries, New Zealand, EFTA, Vietnam and Mongolia. Meanwhile, the share of the Customs Union in Korea's overall trade is relatively marginal, representing only 1.8% (USD 8.4 billion) of exports and 2.4% (USD 10.3 billion) of imports. According to the CGE-model analysis, Korea's welfare level falls by USD 4-6 million. This implies that the ripple effect of the Customs Union on Korea is insignificant. Regarding the impact on industrial sectors, manufacturing of textiles/apparel and automobiles/transportation equipment will shrink slightly, by 0.17% and 0.08% respectively.

The effect of the enlargement of the Customs Union in the near future and establishment

of the Single Economic Space, a higher form of integration, in early 2012; on Korea will increase. Therefore, the Korean government needs to reconsider its economic cooperation policy towards the CIS region in general and the Customs Union in particular. We recommend the Korean policymakers to take following implications into account. As the economy grows and consumer incomes rise, demand for imports will also rise. It will also lower common customs tariffs and WTO accession can intensify the trend. All these add up to opportunities for Korean companies to increase their exports to the Customs Union. To fully utilize this chance, the Korean government and industries should jointly develop marketing strategies to diversify exports. In addition, larger membership of the Customs Union can lead to a bigger trade creation effect within the union while trade with non-members would not rise at the same rate.

This implies higher costs for market access for non-member countries, such as Korea. For industries that face export reduction, expanding direct investment toward the member countries can offer a solution. Thus, the study recommends Korean companies to increase outward direct investments to the Customs Union in order to compensate for loss of exports. Regarding investment, the Customs Union has removed a number of intra-state economic and administrative restrictions such as customs control, which will contribute to improvement of the overall investment environment there. Therefore, the Korean government and the private sector should collaborate more closely to study Korea's competitiveness and the investment climate in the three economies, to extend ODIs to the Customs Union.

Briefly speaking, Kazakhstan has a favourable tax system with the lowest VAT and income/corporate tax rates in the Customs Union. However, this is overshadowed by comparatively high transportation costs, which is borne by Korean producers based in the region. In the case of Belarus, investors have developed great interest in the country owing to its cheap labor and real estate, as well as the potential to become a logistical hub between the European Union and Russia. Yet its overall investment climate is quite unsatisfactory. Thus CIS-based Korean companies are advised to consider the possibility of relocating production sites in light of these and other relevant factors, including those stemming from the launch of the Customs Union and future developments (e.g. the common tariff, common market etc.). Attractive investment sectors for Korea, firstly, in Russia would be consumer goods, transportation and medical equipment, plants business and others. As for Belarus, the promising sectors are IT (software), commercial vehicles, chemicals, potassic fertilizers or construction materials, and agriculture. Attractive industries for Korean investment in Kazakhstan include petroleum refining, petrochemistry, agriculture (inc. livestock), renewable energy, and innovation. Meanwhile, Korea needs not only to boost its direct investment to the countries, but also to make efforts to induce ODIs

from Russia and Kazakhstan. ODI from the two countries has been rising rapidly owing to energy export surpluses. Increasing bilateral investment can potentially create good grounds for horizontal investment cooperation. After accession of the Customs Union to the WTO, competition for market entry among other countries will become fierce. That is because the Union ensures reduction of tariff and non-tariff barriers over time and that the legal base of the Customs Union comply with rules for multilateral trade. Particularly, Russia's entry to the WTO is expected to provide a momentum for revitalization of a Korea-Russia project on the Bilateral Economic Partnership Agreement (BEPA), although it is very likely it will proceed in a new format involving the Customs Union as a whole.

Korea's Trade Policy and Strategy toward the EU after Korea-EU FTA

Yoo-Duk Kang *et al.*

This study focuses on implementing strategies for the Korea-EU FTA at government and firm levels, and reviews EU's recent trade policy for suggesting policy responses in the post-FTA era. Korea-EU FTA has entered into effect since July 2011 and it is de facto Korea's first FTA with large trade partners. It is expected that this FTA will have tangible economic effects on the Korean economy. However, an FTA is only a framework which defines trade relations between two countries and it would be more important to develop appropriate strategies on how to actually utilize the FTA. This study has four purposes.

First, it reviews potentially important trade issues between Korea and the EU in the post-FTA era. For that, this study analyzes EU's trade policy since 2000. Particular attention is paid to recent institutional change in the EU's legal system since the implementation of Lisbon Treaty and EU's new trade policy in the period 2010-2015.

Second, this study tries to forecast how the FTA will influence sectoral trade flow between Korea and the EU. In order to answer this question, this paper analyzes trade specialization

and complementarities between the two trade partners.

Third, this study presents in-depth analysis on FTA implementation procedures, potential trade conflicts, non-tariff barriers and implications of EU's competition policy on Korean firms. In addition, market penetration strategy for the government procurement market is also discussed.

Fourth, this paper tries to invite policy makers and business stakeholders to revisit existing FTA policies that Korea has pushed forward since late 1990s. Korea will have more than 20 FTAs with different trade partners and over 90% of Korea's total trade will be covered by FTAs by 2020. Considering this development, this paper suggests coordination of different FTAs and how to respond to this development at the firm level.

The Rise of Brazil: Ways to Expand the Industrial Cooperation between Korea and Brazil

Ki-Su Kwon *et al.*



World's 7th largest economy in 2010, 5th in population and territory, Brazil is emerging as a new center for economic growth fostered by successful reform policies based on abundant natural resources. Also fueled by upcoming events such as the 2014 World Cup and the 2016 Olympics, infrastructure and investments in oil production, Brazil is expected to continue its stable growth, at 4 to 5 % annually. Reflecting on this growth, Global Insight, a world-renowned economic organization, expects that in 2011, Brazil will become the world's 5th biggest economy after the USA, China, Japan and Germany. If Brazil becomes one of the world's 5 largest economies, it will achieve the status of the so-called "Triple Big-5" country, meaning top 5 in economic scale, territory and the population.

Aiming at Brazil's high potential for economic growth, Korea has been making efforts to expand industrial cooperation with Brazil. However, due to lack of understanding concerning Brazilian industries and industrial development level, absence of industrial

cooperation strategies in the medium and long term, lack of efforts to discover schemes for specific industrial cooperation and etc., there was no tangible achievement. In particular, the problem is that Korea has not yet discovered any intriguing flagship projects for Brazil. Maintaining a critical eye on this situation, this study first analyzes the following topics: how industrial competitiveness of Brazil is changing as its economy is emerging, what policies Brazil has implemented, how competing countries are cooperating with Brazil in order to take advantage of the opportunities, and the level of industrial cooperation between Brazil and Korea. This study then suggest several strategies for industrial cooperation with Brazil in the medium and long term, and also specific schemes for industrial cooperation.

The main results of the study are as follows. Brazil's economic emergence is manifest in five paradigm shifts. After the official launch of former administration in 2003, Brazil has gone through five important changes: it has ① entered into a stable economic growth cycle ② stemmed the high inflation rate ③ become a net creditor country for the first time in its history ④ ended the vicious cycle of excessive government expenditure ⑤ resumed the medium and long term industrial policy. Prompted by this paradigm shift, Brazilian economy has doubled its size in 10 years and joined the ranks of the world's seven biggest economies in 2010. It is expected to become the fifth largest economy in the world by 2013, but such success was not without side effects. Supported by the primary product boom, exports have increased and hence drew in dollars which led to large trade surpluses. Also, portfolio investment as well as foreign direct investment has surged dramatically. Consequently, this has raised the value of the real and eventually diminished competitiveness in exports.

Even though the exchange rate effect burdened the manufacturing sector, the overall industrial competitiveness in Brazil has improved, according to the study. First, we studied Brazil's competitiveness in terms of industrial technology in infrastructure. As a result, the R&D expenditure relative to GDP has been rising continuously, reaching 1.2% in 2010, the highest figure in 20 years. The size of Brazil's R&D expenditure is slightly lower compared to the rest of the OECD but it is not small relative to other BRICs countries. The size of the work force in the R&D sector has doubled in the past 10 years (2000-2009). Especially, Brazil has showed outstanding performance in producing papers in science & technology over the past 30 years (1981-2009). More specifically, Brazil made contributions in fields such as Agriculture, Plants and Animals, Microbiology and etc. worldwide. Britain's noted research institute "DEMOS" used the term "Natural Knowledge Economy" in order to refer to the Brazilian economy which is very competitive in technology utilizing natural resources. At the same time, Brazil is estimated to have high competitiveness in some manufacturing sectors such as airplane, automobile, steel, and petrochemicals. The Council on

Competitiveness of the U.S. forecasted that Brazil's competitiveness in manufacturing will become the 4th most competitive by 2014 in the world, surpassing the U.S. Despite the positive evaluation shown in forecasts for Brazil's industries, there is still much work to do to improve Brazil's overall industrial competitiveness.

In particular, while Brazil is relatively competitive in the basic sciences, its competitiveness is quite low in applied and industrial technologies. For instance, Brazil has not been performing well in the patent area. It also ranked nearly at the bottom among countries compared in technical infrastructure sector of the IMD report 2011. Brazil's low ranking in the applied technology sector was again seen in the Technology Achievement Index 2009. One of the biggest changes observed in Brazil's recent economic policy is that it has resumed overall industrial policy planning which has been at a standstill for the last 20 years. In fact, the Brazilian economy had been driven by government-led industrial policy. The import substitution industrialization policy maintained through the 1970 is a good example. For the past 20 years, Brazil was mired in macroeconomic instability marked by high inflation rates, debt crises, foreign debt crises, and unstable foreign exchange rate; meaning there was no room for Brazil to push ahead with medium and long term industrial policies. Until the end of 1990s, Brazil's economic policy was focused on addressing this macroeconomic instability. However after Luiz Inacio Lula da Silva was inaugurated as president in 2003, the inflation, foreign exchange rate and other economic indicators have stabilized, allowing the government to turn its attention to industrial policy.

From the Lula administration to the Rousseff administration, there have been 3 industrial policies that were put into action, namely the PITCE (2004. 3), PDP (2008. 5) and PBM (2011. 8). Although there were several changes in their goal setting based on the starting period, their goals remained similar: to improve Brazil's competitiveness in the manufacturing sector by enhancing competitiveness in technology. Specifically, the Rousseff administration has pursued an industrial policy focusing on restoring competitiveness in manufacturing, seeing the world economy in a bad situation such as global economic crisis, currency war, etc. In order to achieve its goal, the Rousseff administration has implemented an industrial policy with three main pillars: investment in production and promotion of innovation; protection of domestic industry and markets; encouragement of exports and trade protection. We also had a close look at industrial cooperation between Brazil and other competing countries - the EU, USA, Japan, China, etc. In case of EU, countries within EU are cooperating individually with Brazil but the EU is cooperating as a single unit as well. Until EU and Brazil signed their agreement on science technology cooperation in 2005, EU's industrial cooperation strategy towards Brazil was affixed to multilateral cooperation such as through MERCOSUR. But industrial cooperation between EU and Brazil is facing

a turning point as their relationship has been elevated to a strategic partnership in July 2007. Germany is cooperating most actively with Brazil out of all Latin American countries in industrial technology. From 2007, it has been working on Sustainable Solutions-Science for Sustainability, “Dialogue 4s,” with BRICs countries. France has adopted 2+2 cooperation scheme in relation to Brazil. This is to overcome their existing relationship which has been limited to scholastic cooperation between research institutes. According to this scheme, one French research institute and one French company have established a partnership and are cooperating with their Brazilian counterparts (one research institute/one company). There is also CYTED, where Spain conducts joint research on scientific technology with Latin American countries including Brazil, and applying the result of the study on industry. Japan’s industrial technology cooperation with Brazil is focused on business, mostly aid in the form of consultation for high-ranking personnel, training of Brazilian technicians and also technology transfer. The most success that Japan had recently in cooperation with Brazil was made in the digital broadcasting sector. As a result of active Japanese efforts, Brazil chose to adopt Japanese standards for its Digital Terrestrial TV in 2006. After Brazil introduced the Japanese standard, other eleven countries opted for the Japanese standard consecutively.

Unlike the cases of Europe or Japan, marked by provision of aid, cooperation between Brazil and USA is characterized as “horizontal,” within the each country’s competitive sector. For example, USA has concluded a bioenergy alliance with Brazil, which possesses advanced knowledge in this area in order to form a global market in bio-ethanol. Their cooperation is focused on the development of bio-ethanol and its expansion. China, itself a constituent of BRICs, has worked mostly on strategic cooperation with Brazil. The strategic area in which the two countries have engaged in cooperation is in aerospace, and among others, remote-sensing satellite sector. These two countries reached an agreement on the China-Brazil Earth Resources Satellite (CBERS) Joint Research and Development in 1988 and have been working together until now. As a result of this agreement, two countries have launched their first CBERS-1 in 1999 successfully and are now planning to work on CBERS-3 and CBERS-4. That brings us to the question of the current state of cooperation between Korea and Brazil. With greater emphasis placed on the strategic importance of the Brazilian economy, Korea-Brazil relations has become closer rapidly. Especially in terms of trade and investment, their economic cooperation has undergone significant development. Due to drastic increase of exports, Brazil has now become one of Korea’s top ten export countries. Investment, which had been relatively sluggish compared to exports has surged, with Brazil becoming Korea’s eighth largest investment destination in 2010. Despite such progress, however, their technological cooperation, which is a very critical in international cooperation in the 21st century, is still in infancy.

Why is industrial technology cooperation so important in economic cooperation with Brazil? One reason is that Korea and Brazil possess complementary technologies and that there is a high potential for synergy: Korea has high competitiveness in applied technology and industrial technology while Brazil is very competitive in the basic sciences. Therefore, high technology from Korea combined with basic science from Brazil backed by abundant natural resources will dovetail nicely. Another reason is that industrial technology cooperation can be the most proper method to ease the asymmetric economic relationship. Korea currently has a trade surplus with Brazil, which is expected to increase. However, Korean firms investing in Brazil will be able to decrease that deficit by increasing local content, expanding cooperation with local firms or R&D organizations. The third reason is that technological cooperation with Brazil is a very promising area for firms. There are big opportunities for them as Brazil has comparatively low level of industrial technology. Therefore, it would largely depend on their efforts to enter the Brazilian market. For the last and the most important reason, Brazil is very much interested in technical cooperation with Korea.

More specifically, the Brazilian government is paying a lot of attention to Korea's technology and education sector. Therefore, strategic cooperation in technology could represent a new breakthrough between the two countries. Based on the necessities mentioned above, industrial cooperation with Brazil should place greater focus on the following points. First, as Brazil is emerging as a major power, cooperation should be strategic and forward-looking. To achieve this goal, the relationship between these two countries should be upgraded to a "strategic partnership," which so far has remained a comprehensive partnership, the lowest level of partnership. Second, cooperation should be reciprocal, even, and horizontal. Third, cooperation between the two countries in the high technology sector should have strong basis on complementarity. Fourth, as Korea is one step behind compared to other countries in industrial cooperation with Brazil, it should work to find a "mega project" which creates a larger synergy effect. Lastly, considering that Brazil has a federal system, cooperation should not be limited to central government, but diversified to include local governments as well. But there are several hold-ups in industrial cooperation with Brazil for Korean firms and research institutes. According to the survey and the interview, the greatest difficulty was the lack of understanding concerning the strategic value of Brazil in the domestic market. Also, this was followed by the budgetary deficit in cooperating with Brazil. Under the budget limit, the cooperation has consisted of rush efforts by individual government departments. Furthermore, long distance, cultural difference and language barriers were pointed as obstacles that were also significant. Moreover, concerns over leakage of technology and the piracy due to the vulnerable intellectual property right protection system surfaced as another reason for Korean firms avoiding industrial cooperation.

In the last part, this study suggests a specific action plan for the enhancement of cooperation. First, setting up a large-scale R&D cooperation fund would be necessary. To build a strong institutional cooperation base and to lay the foundation for entering the Brazilian market, it is important that two countries push ahead projects on a strategic basis. In this sense, a large R&D fund raising activities could provide groundbreaking momentum for the two countries. Second, the two countries should build a technical innovation center. The importance of this center lie in the fact that it could support smaller firms with high technical skills in spite of their lack of funds and human capital. Third, industrial complex exclusively for Korean companies is needed. Korea should spread the Korean system of Export Processing Zone (EPZ) operation through shared experience. It also has to give positive consideration to the industrial complex plan in the northeast area within the EPZ which is still in the incipient stage. Fourth, vocational school that educates expert technicians should be founded. This could help Korean firms that already entered Brazil to find suitable workers. At the same time, it coincides with the current policy of Brazilian government, which involves much effort in cultivation of human resources. Fifth, Korea should occupy a dominant position in the Brazilian rail market by winning the high-speed rail business contract. This could be a chance for Korea as cooperation with Brazil has hitherto been relatively sluggish.

Korea and Brazil are now promoting various businesses but there are no projects of great consequence between the two countries as of yet. In this sense, the aforementioned high-speed rail can become a flagship project for Korea-Brazil cooperation. In ending, Korea and Brazil should create a consensus for a strategic cooperation in industrial technologies. Tentatively named “Korea-Brazil R&D Summit,” that consists of CEOs from both countries, could be a good channel to achieve this.

Firm Level Productivity and Survey Results for Korean Firms in Vietnam and Indonesia

Taeyoon Kim, Jaeho Lee, Jae-Wan Cheong, You Jin Baik, and Dae Chang Kang

Investment into Indonesia from Korea had already begun in the 1980s, while Vietnam became an investment destination for Korea beginning in 1992 following the establishment of diplomatic relations. The scale of investments into Indonesia remained far larger than those into Vietnam in the 1990s, with investment into the latter picking up during the 2000s. Investment into Vietnam, for its part, was concentrated in the materials industry such as textiles and clothing. Over half of Korean investment into each country goes into the manufacturing sector: the majority of investments into Vietnam is received by primary metals and textiles industries; whereas food processing, electronic parts, computer, visual/audio/communications equipment manufacturing are the major recipients of Korean investments into Indonesia. Mining is second after manufacturing in terms of level of investment in both countries. Mining is followed by real estate/rentals and construction in Vietnam; and wholesale/retails and agriculture/forestry/fisheries for Indonesia. A summary of the results of an in-depth survey for Korean companies in Vietnam and Indonesia in 2011 are as follows.

On the question of areas of local policy with the most impact on business operations, labor and tax administration were selected for Vietnam, whereas labor stood out in the case of Indonesia. In order to deal with ‘deteriorating labor situations’ firms induce competition among workers through disbursement of regular incentives as well as holding fast to the principle of annual negotiation for wages. The annual negotiation for wages was also an important principle among Korean firms in Indonesia, while also fostering loyalty to the firm through CSR activities. Also, whenever labor costs rise, they are offset by increased productivity in both countries. In cases where inflation causes costs of raw materials to rise, firms in both countries combat rising costs through corporate campaigns to economize and reduce waste, system of rewards, and raising factory prices. On the other question of an area where ‘information is most necessary for domestic market entry,’ firms in both countries pointed out taxes and labor. In Vietnam, such information is provided by the Korean government agencies and related organizations, the local Korean community, and the local government. In Indonesia, firms acquire the needed information mostly through the local Korean community and the internet.

There also calls by firms in both countries for the Korean government to work with the local government to create opportunities for procuring information on a more frequent basis, as well as set up a system for exchange of information between Korean firms and the government. The survey also shows that companies are engaged in earnest efforts at localization, by involving local personnel in decision-making, in addition to improving their perception among the public through community activities as part of fulfilling their CSR. But when conflicts arise in spite of all effort, Korean companies in Vietnam usually resolve them through agreed settlements with the parties concerned or Korean law firms; while companies in Indonesia also make attempts at agreed settlement, or seek help from a local legal firm. In terms of ‘strengthening operational capability’, firms in Vietnam pointed to securing a professional workforce and labor management as the most important. Professional personnel were also considered important among companies in Indonesia, in addition for competitiveness in prices.

Plans for expanding the organization among companies in Vietnam were general and across the board. Companies in Indonesia were more specific, with expansion planned for such departments as production, design, R&D, and marketing; whereas departments related to raw materials procurement, accounting/taxes, and labor management would be maintained at present levels for the most part. The majority of the requests among companies above for government assistance were made during the planning stages for making investments, or at the very early phases following entry into each country. In terms of average annual total sales for Korean companies in each country during the 2009 fiscal year, Korean companies in Indonesia outperformed their counterparts in Vietnam by 3.9 times, and recorded 3.5 times the amount in cost of goods sold. Cost of sales and administration were also higher in Indonesia, by approximately 2.7 times; but non-operating expenses were at similar levels. Non-operating expenses, however, were higher than cost of sales and administration in Vietnam, pointing to greater expenses from loan interest payments, loss in value of local currency, and losses from investment into liquid and real assets; compared to Indonesia. Corporate taxes were much higher in Indonesia than in Vietnam. The average number of local workers employed in manufacturing firms were similar, about 770 in both countries.

According to Data Envelopment Analysis on Korean manufacturing in both countries, firm’s efficiency is increased with ① greater length of sales operation ② location in Central regions - Ho Chi Minh area - Hanoi (Vietnam, in order) and regions other than Jakarta Jakarta region (Indonesia, in order). However, the impact from ③ the presence of local executive/management on efficiency of operations was not significant. Eliciting implications for Korean government policy would mean continued efforts for ① the establishment

and strengthening of the system of information exchange between firms and local governments ② provision of an in-depth analytical/systematic information on local macroeconomic policy and economic trends ③ creation and active promotion of a local professionals database ④ construction of a production network and survey of corporate S&D related to entry into service markets ⑤ survey of time and location of entry and training programs. Corporate strategies should include the following consideration: ① earnest desire for entry into the domestic market ② maintaining sound labor relations and prompt response to rising wages ③ securing professional workers ④ experience in the local market and sound location.

India State-Wise Growth Pattern Projection and Policy Implications

Choong Jae Cho, Yun-Jeong Choi, and Young Chul Song

● As Korea-India economic cooperation has been gaining momentum in recent years with increasing institutionalization of relevant mechanisms, there is a growing need to further promote the entry of Korean companies into the Indian market and enhance the synergy in economic cooperation between Korea and India. Yet, vast differences in the investment environment and disparities across states present both opportunities and risks, which in turn calls for a strategic approach based on a proper understanding of the growth patterns of different states. It is in this context that the current study seeks to project long-term growth rates and patterns of Indian states, and examine policy implications accordingly. The present study employs the growth accounting model as a tool to estimate the growth patterns and long-term growth rates at the state level.

To begin with, the study categorizes Indian states into fast-growing, average, slow-growing states. The fastest growing states include Gujarat and Maharashtra; average states are Kerala and Karnataka; and Bihar and Assam are among the slow-growing states. A cross-examination of the past state-level growth patterns based on the factors of production

and the total factor productivity revealed that states in which the contribution of total factor productivity has increased substantially saw an equally substantial rise in the GDP growth rate. On the other hand, in other states where the contribution of total factor productivity has declined, the GDP growth rate has fallen short of the national average, which indicates that Indian states' growth rate is determined by factors other than the increase in capital and labor. In addition, states are classified based on long-term growth rate projections into fast-growing/high-income, fast-growing/low-income, slow-growing/high-income, and slow-growing/low-income states: Fast-growing/high-income states are Gujarat and Maharashtra; fast-growing/low-income states include Orissa; and slow-growing/low-income states include Bihar and Madhya Pradesh.

While effecting changes in the factors of production and the total factor productivity had little impact on the economic conditions, provided the investment rate is changed, it increased the disparities in the GDP growth rate and GDP per capita. On the other hand, in accordance with the neoclassical economic growth theory that the growth rate in the total factor productivity increases rapidly in a backward state, changing the total factor productivity yielded significant changes in the growth rate, income levels, and growth patterns of states. Maharashtra, Tamil Nadu, Kerala, and Gujarat, which were initially classified as fast-growing/high-income states, were regrouped as slow-growing/high-income states; slow-growing/low-income states such as Karnataka, Madhya Pradesh, Andhra Pradesh, Uttar Pradesh, Bihar, Rajasthan, and Assam moved to the fast-growing/high-income group.

A comparison of the nominal GDP of fifteen states of India with that of other countries, provided that the growth rate in total factor productivity will continue in the future, indicated that the nominal GDP of Maharashtra, Gujarat, and Tamil Nadu will surpass that of Poland, Turkey, and Thailand by 2026. Notably, the nominal GDP of Maharashtra is projected to exceed that of Korea by then. In addition, the projections of the nominal GDP per capita revealed that the figures for Maharashtra and Gujarat will be similar to that of Mexico, while Tamil Nadu, Kerala, and Haryana will be on par with the Republic of South Africa by 2026. Based on the analysis of the growth patterns of Indian states, the following policy implications can be provided. First, forward-looking and more focused strategies need to be formulated with a particular focus on the states of Maharashtra and Gujarat which are to develop into leading economic hubs in India. At the same time, an approach geared toward domestic demand rather than manufacturing bases for exports is needed, taking into account unique attributes and medium/long-term development plans of Indian states. Second, a close watch should be kept over such states following closely behind the fast-growing/high-income group as Punjab, Orissa, Karnataka, and Madhya Pradesh; and accordingly, appropriate strategies targeting those states should be prepared. On the other hand, as for slow-growing/

low-income states such as Bihar which carry high-growth opportunities as well as risks, close monitoring should be undertaken on their policy and business environments. For these states, an incremental strategy should be adopted for the medium/long-term, while targeting niche areas in the states in the near term. As Indian states' economic growth accelerates and income levels rise at a pace much faster than developed countries and other emerging economies, the industries and consumption demand will likely keep up a similar pace of change. In particular, infrastructure projects are likely to expand substantially, and as such, there is a need to capitalize on the immense demand for infrastructure development. Furthermore, it must be also noted that the consumption pattern will change fast with rising income levels in Indian states. Therefore, efforts are needed to respond flexibly to the changing trends and patterns of economic growth in Indian states, while paying particular attention to the metropolitan cities of India.

Strategies of Major Nations for Economic Cooperation with Africa and their Implications

Young Ho Park *et al.*



With the arrival of the 21st century, Africa, long derided as a basket case, is now seen as a promising market full of opportunities. With new-found political stability and enormous natural resources, Africa has gone from a continent rife with conflict and without global economic presence, to a new economic frontier fueling competition among the world's great powers. The most active of all the major powers in Africa is China, which has entered Africa after realizing its dynamic economy could stall for want of natural resource. China's now looms large in Africa, involving itself in the continent with large-scale aid and a variety of other means. Though the initial motivation came from natural resources, China has not limited itself in Africa, becoming active in all sectors from infrastructure to small-scale retail. China is not a newcomer, as Communist China was already in Africa beginning in the 1950s, offering generous aid to African countries despite economic difficulties at home. Chinese presence in Africa increased further as a result of recent visits by China's

top leadership, who promised more aid, and established personal ties with many African leaders. In addition to such political leverage, Chinese firms seeking to enter Africa are taking advantage of financial assistance afforded by public financial institutions including the China Ex/Im Bank, 40% of whose total grants are earmarked for Africa; the China Development Bank (CDB), which has created the 5-billion dollar China-Africa Development Fund (CADF) to provide support for Chinese companies in Africa; there are also the Industrial and Commercial Bank of China (ICBC), China Construction Bank (CCB), and China Agricultural Bank (CAB). Support from China's public finance institutions allowed China's public corporations to step into high-risk areas in Africa.

Chinese activities in Africa are motivated primarily by their need for natural resources. The most often-used approach used by China in securing resources from Africa is through 'package deals,' which links promises of grants and building of large-scale infrastructure in exchange for resources. This has become known as the "Angola Approach," after deals that secured for the Chinese oil from Angola. Being a latecomer in the competition for Africa's natural resources, China is targeting politically unstable countries or new producers of vital resources where competition is not fierce. Such countries include Sudan, DR Congo, and Zimbabwe; countries that are usually shunned by the west due to civil wars or human rights abuses. Aside from utilization of 'hard' power including monetary assistance, China is also working hard to spread its 'soft power' in Africa, in the form of government-led development emphasized in the Beijing Consensus and welcomed by authoritarian regimes in Africa who chafe at demands for reform by the west or international organizations. China has disavowed all 'interference in internal matters,' and Africans believe cooperation with China will expedite their development needs. Given the lack of domestic capital or infusion of capital from the west, many countries of Africa have created opportunities for renewed growth through cooperation with China. The belief that its activities offer tangible benefits for Africa has caused friction between China and west, which emphasize such values as transparency and good governance. Africa thus represents a test case as to whether China can indeed attain global influence.

Increasing Chinese presence in Africa has elicited concern from the US, seeking to increase its own presence in Africa through development aid, increased trade, and creation of security frameworks. Once a 'national interest backwater' for the US, Africa has returned to prominence in US foreign policy due to rising terrorist threats and as an alternative source of oil imports that can reduce America's dependence on the Middle East. Aside from its prominent position in US energy security, Africa is also witnessing a rise in US military presence, namely in the form of the US Africa Command (AFRICOM). AFRICOM is charged with elimination of terrorist threats and is also a strategic set piece designed to limit the spread of Chinese influence on the continent. US efforts to increase economic exchange

with Africa is highlighted by AGOA (African Growth and Opportunity Act), which has led to a growth in US-Africa trade. There is a caveat, however, in that oil and other energy products constitute over 80% of items traded via the AGOA framework.

Given the fact that a significant portion of China's oil imports now come from Africa and is likely to increase in the future, US-China competition for African oil is expected to heat up, especially in the oil-rich Gulf of Guinea in the west coast of Africa. As former colonial powers that virtually divided Africa between them-selves, the UK and France are mainly concerned about maintaining presence in their former colonies and zones of influence, in the face of increasing competition from China, the US, and India. Aside from forging new partnerships for economic cooperation, the UK has increased aid to Africa by diverting the bulk of its aid money that previously went to South Asia, concentrating on issues of 'development' including the attainment of UN MDG's. The slight drop-off in UK's attention towards Africa following the end of the Cold War has picked up after issues of development came to the fore, with most of the abovementioned aid geared toward poverty reduction. The 1990s also spelled hard times for UK companies, many of whom withdrew from Africa after rising exchange rates made their African business unprofitable, but many have since returned following a relatively long period of stability that made business in Africa profitable again. France, like the UK, makes full use of networks and the information base it created during the colonial era. This has created enormous benefits for French corporations, who have secured extensive business interests. Summit meetings, high-level visits and business fora are just some of the diplomatic means at France's disposal in increasing economic cooperation with Africa. Case in point, over 200 meetings between businesspersons were made possible by the 2010 Franco-African Summit, and a France-Cote d'Ivoire Business Forum in 2011 attracted over 30 large businesses. France also showcased its political/military/diplomatic potency in Africa, by taking the lead in air raids on Libya (Operation Odyssey) in the summer of 2011, after which France became the prime player in Libya's post-war reconstruction. Japan is also picking up the pace in terms of approaching Africa, in spite of a past relationship that was intermittent. New ties are being forged through the creation a new forum, TICAD (Tokyo International Conference on African Development). TICAD embodies the comprehensive nature of Japan's efforts toward African development, through which the Japanese government channels large-scale financial assistance, from both public and private sources, for African development. Japan is currently the fifth-largest donor of development aid for Africa, which will enhance its diplomatic influence and positively impact international support for Japan. This is especially true regarding Japan's efforts to become a permanent member of the UNSC, for which votes by African countries in the UN General Assembly would be crucial. However, given Japan's comparative lack of influence in Africa, Japan prefers joint entry with large corporations from

developed countries, mostly to African countries with large economies or reserves of natural resources. The recent rise in Japanese activity in Africa's BOP market has led the government create additional incentives to exploit that new market. India, a newcomer to the scene, is attempting to engage Africa both in political (through summits) and economic fronts, the latter consisting of aid and financial assistance, increased trade and investment. While there is deep historical and political links between the two, recent relations have been highlighted by economic exchange (energy resource, trade, investment). India's recent efforts are similar to China in that they involve so-called package deals: exchange of grants for infrastructure.

In this regard, over half of grants disbursed by the India ExIm Bank goes to Africa. not to mention increasing export finance to promote exports of Indian products. In an attempt to set itself apart from rivals such as China, India utilizes its competitive advantage in such fields as ICT to facilitate development cooperation and entry of Indian firms to Africa. Presently, there are also efforts to increase cooperation with west African countries, with whom economic exchange has been lacking compared to its traditional partners in East Africa. India's rapid growth has meant more demand for energy from overseas, the main reason behind India's generous financial assistance in approaching West African countries. Africa is no longer the mysterious backwater of old, but an arena for fierce international competition.

As a latecomer, Korea lags far behind its competitors in all areas including experience, financial resources, diplomatic influence, and cultural links. Korea will have to take different approaches as well as cooperate with other countries if it wishes to make headway. The first will involve a process of selection and concentration, meaning choosing African countries to focus on and using them as bases to move on to countries in the vicinity. Instead of apportioning different sectors to different countries, Korea needs to focus on creating systematic linkages between sectors within a country to maximize the positive impacts from economic cooperation. Second, Korea needs to develop its own approach to economic cooperation, drawing from its own experiences while taking the unique conditions in Africa into account. As Africa has yet to extract itself from poverty despite package deals with China and aid from the West, a new approach is vitally necessary. An approach modeled after Korea's Saemaul (New Village) Movement tailored to African circumstances might be in order, as many rural areas in Africa contain tribal, homogenous communities. Saemaul's success, made possible by local ties, cohesion, and traditional leadership, could serve as an important benchmark. Third, more funds need to be secured through cooperation with foreign financial institutions. Abundant financial resources is the key to the current position in Africa enjoyed by companies from the major countries. The Korea Ex/Im Bank will need to arrange co-financing involving foreign banks, as African countries generally have low credit ratings, thus making projects risky and making financing by Korean banks alone difficult. The level of financial support

needs to be raised significantly by working with foreign export credit institutions and such multilateral development and international investment banks as the World Bank, International Finance Corporation, African Development Bank, and the European Investment Bank.

This was the method which enabled Korea to finance several major projects in the Middle East. Last but not least, there is the option of joining hands with foreign corporations. Any potential Korean entry into the African market will be extraordinarily difficult, given the dominance of major country firms in the African market by virtue of their history, financial resources, and experience. Cooperating with these firms might allow Korean companies to share the burden while compensating for their lack of capital, technology and several other areas. Thus formation of consortiums remain a viable option for reducing risks and securing more capital. Advanced countries could also provide diplomatic influence that could decrease potential risks even further for Korean firms, and the Ambatovy mining project in Madagascar provides a prime example of this approach.

Change in North Korea's Policy for Foreign Direct Investment and Future Direction of the Inter-Korean Economic Cooperation

Hyung-Gon Jeong, Jiyeon Kim, Jong-Woon Lee, and Ihk Pyo Hong

North Korea, experiencing chronic economic hardship, has been attempting to make partial policy changes to expand external economic relations and to attract foreign investors since the early 2000s. For the expansion of trade and foreign investment, the North Korean regime attempted to establish special industrial zones in 2000s and took some reform measures in their legislations and administrative system. In 2002, North Korea announced expansion of special economic zones as a follow-up measure from the 'July 1st Economic Reform Measures.' Starting with the announcement of Sinuiju Special Administrative Zone in September of 2002, the country designated and announced the Mt Kumgang Tourism District in October and the Gaesong Industrial Zone in November as new special industrial

zones in the same year. In June 2011, North Korea and China's joint development plan was announced with the groundbreaking ceremony for Rasun Special Zone and Hwanggeumpyeong area near Sinuiju. Indeed, since the mid-2000s, legislation related to foreign investment was revised. For example, International Trade Arbitration Committee was first formed under the trade department in 2004, and law firms were opened for foreign legal consultancy within North Korea, which in turn is for resolving legal issues regarding investment in North Korea.

In addition to the changed attitude and increased interest of the North Korean regime towards foreign direct investment, foreign companies' interest in investing in North Korea grew in the 2000s with such reasons of development of natural resources, utilization of cheap labor and/or sales of their products in North Korea. Although the volume of foreign investment flow into North Korea has been very low compared to most transitional economies like Vietnam and Third World developing countries, both quantitative and qualitative change has taken place in North Korea's foreign investment attraction since the early 2000s. Centered on resource development area, North Korea attracted foreign investments in such areas as manufacturing, finance, product distribution, telecommunications, and construction. Foreign companies including Chinese, European, and South Korean, not only moved into special industrial zones of Gaesung Industrial Complex and Rajin Seonbong District, but also to major cities such as Pyeongyang, Nampo and Cheongjin. Because of the increase in the volume of investment, number of foreign companies and investment area, the impact of foreigners' investment on the North Korean economy has increased. The most significant feature in North Korea's recent foreign investment policy and performance is that Chinese investment in North Korea has largely increased and North Korea's economic dependence on China has further deepened. Chinese investment in North Korea, which remained in operations of restaurants and retail shops by small businessmen and traders in the past, emerged as the largest foreign investing country since the full-scale advance into the development of natural resource by Chinese state-owned enterprises in the mid-2000s. Chinese companies also invest in such areas as manufacturing, domestic sales and service industry. Moreover, in the connection of the development plans of the three Northeastern provinces in China, China's investment in industrial infrastructure of Sino-North Korea border area has recently been visualized. In 2011, North Korea and China announced their plan for the joint development and management of Rasun and Hwanggeumpyeong districts as special economic zones. As a part of implementing Changjitu development plans by Jilin Province of China, China seeks to secure the right to use the Rajin port and Chongjin port in North Korea. In return, North Korea pursued to construct and develop the infrastructure facilities within Rasun area. China is developing Hwanggeumpyeong district in connection with economic development projects of Liaoning province as well, and in return, North Korea has

provided development rights of its Hwanggeumbyeong district to China.

There are both positive and negative aspects in the increase in China's investment towards North Korea and the expansion of North Korea and China's bilateral economic cooperation. When the transportation infrastructure of North Korea and China's border is improved through China's investment in Rasun and Sinuiju areas, the potential for regional development in these areas will increase significantly. In addition, when the Rasun and Sinuiju areas become developed through a joint management with the Chinese authority, there is a possibility that the economic cooperation of North Korea and China will bring positive impact to the recovery and marketization of the North Korean economy.

However, North Korea's large reliance to China's investment has taken place during the ongoing deterioration of North Korea's foreign relations due to its nuclear problem. The close economic relations between North Korea and China could create negative consequences by subordinating the North Korean economy to China in terms of its economic structure. In the early 2000s, the North Korean regime attempted to promote partial economic opening and pushed for diversification in economic cooperation by improved relations with South Korea and several European countries. But, due to its continued nuclear ambition, North Korea's international isolation has once again intensified. Moreover, inter-Korean relations became idle with series of incidents like North Korea's Yeonpyeong Island shelling. As a consequence of the decreased investment in North Korea by the South following the worsened relations in the late 2000s, North Korea's dependence of foreign investments to China has been growing. North Korea's heavy reliance on China has caused the problem of limiting North Korea's political and economic cooperation with one particular country, China.

Foreign investment environment in North Korea is still very poor. Foreign companies' movement into North Korea is being limited due to North Korea's absence of reform in the internal economic system, outdated industrial infrastructure, poor legal system, rigid administrative system, etc. Though there has been an increase in the investment by foreign companies in 2000s, North Korea's system of attracting foreign investors shows problems. It is known that foreign companies who considered or implemented investment in North Korea often experienced conflicts with North Korean partners. The reasons behind the deferred or withdrawal of investments by South Korean, Chinese, and European companies who have entered into contract with North Korean mining companies was found to be excessive payment demands by the North Korean authority in the return for the exclusive rights for the development of mines, and incidental expenses for foreign companies entering into North Korea. In addition, there have been several cases where investments were terminated or investing foreign companies withdrew from North Korea with such reasons as conflict with related North Korean agencies, limitation of communication and transportation, and low

production quality. Above all, North Korea's delay in resolving nuclear problem and the economic sanctions from the international community are the major obstacles in expanding and diversifying foreign investments in North Korea. Therefore, the most urgent issues that remain as a challenge for North Korea, the country in need of foreign investments, are the improvement of foreign relations through North Korea's resumption of six-party talks and denuclearization.

There is limit in specific and comprehensive study on current North Korea's policy for foreign investments even with the greater academic and policy interest in changes in North Korea's policy for attracting foreign investors and its implications for inter-Korean economic cooperation. An analysis of the current status of North Korea's investment policies and the current status of foreign investment in North Korea is important as it is closely connected to the future reform orientation of North Korea. This study examines the changes and characteristics of North Korean policies for foreign investment during the 2000s. It analyzes North Korea's current management system, legislations and government organizations related to foreign investments. This study then evaluates the status and performance of foreign companies who entered North Korea in the 2000s. In addition, this report specifically examines the actual conditions of Rasun District and Hwangguembyeong of Sinuiju, the areas that China will implement development projects and discuss its future prospects, which are the forefront areas in North Korea's promotion for foreign investments. The last part of the report studies the future direction of North Korea's promotion for foreign investments, and it discusses the direction and tasks of inter-Korean economic cooperation. This study on North Korea's policies in foreign investment could contribute to the increase in our understanding of the North Korean economy and to the development of inter-Korean economic cooperation.

South-South and Triangular Cooperation: Trends and Implications for Korea

Jione Jung, Yul Kwon, Jisun Jeong, Sukyung Park, and Jooyoung Lee

● In recent years, as several developing economies have built up significant financial and technical capacities, new patterns of economic partnership as well as development cooperation among the Southern countries are emerging. This presents a substantial opportunity to change the landscape of international development that has so far been largely a North-South phenomenon through the addition of a complementary and growing South-South Cooperation (SSC). The financial surpluses available to some developing countries such as China and Brazil made possible transfer of some of the resources amid the global financial crises and concerns over the possible decrease in aid volume from traditional donors. As a new source of development finance and knowledge transfer, the role of Southern countries as a development partner is being highlighted more than ever.

This policy paper is to examine the role of Korea as a donor to contribute to raising the effectiveness of development cooperation through South-South Cooperation. As the newest donor who has retained memories of its own development, Korea has substantial potential to work as a partner in South-South Cooperation. To better facilitate and participate in SSC as a new donor, Korea needs to understand the current picture of SSC through a comprehensive and systematic review and this research is expected to serve this requirement.

This research first reviews the history and background of SSC in a broader context and analyzes the current discussion of SSC at a global level. Furthermore, it presents a series of case studies of various aspects of development cooperation among developing countries in three different regions of Asia (China, India and Thailand), Africa/Middle East (South Africa, Turkey and Middle East) and Latin America (Brazil and Chile). In addition, the contribution of international organizations including the UN, regional development banks and other major regional organizations in SSC was reviewed.

Based on that research, this paper concludes by suggesting a few policy options for Korea as a partner in SSC, focusing on triangular cooperation in particular. They include strengthening cooperative mechanism with emerging donors such as China, India, Brazil and South Africa to complement Korea's current bilateral development cooperation. Also the paper suggests that Korea should utilize this new approach to enhance its aid effec-

tiveness and synergy of its efforts in progress by adopting the knowledge and knowhow of its Southern partners.

In order to fully realize this potential, Korea needs to build up institutional foundations to set the direction of South-South and Triangular Cooperation and to provide policy guidelines. It also needs to identify appropriate level of technology and policy applicable to developing countries in partnership with pivotal countries and organizations in the South. To best grasp the comparative advantages of developing countries, it will be useful to set up a platform to share the specific knowledge and know-how of developing countries based on their extensive experience in collaboration with partner countries and multilateral organizations. This means that the functioning of feedback mechanisms to monitor and evaluate the program as well as information sharing would be very important. Lastly, Korea should further strengthen the partnership with multilateral organizations and other donors to learn from practices of SSC that are effective and combine the lessons with Korea's efforts to cooperate with developing countries.

Despite the ongoing global financial and economic hardship, the long-term prospects for continued expansion of SSC remain high. There is also a growing expectations and interest amidst Southern partners concerning the role of Korea as an SSC partner. Given Korea's potential position as a bridge between the developing countries and established donors, Korea should move towards greater participation and involvement in discussions in the SSC.

Analysis on FDI in Services among Korea-China-Japan and Strategies for Mutual Cooperation

Hyung-Gon Jeong *et al.*



Services industry facilitate vertical and horizontal integration between industries, and make significant impact on productivity by effective use of a given nation's internal resources. That also makes developing countries more vulnerable to impacts from pening

its services market. But, as the opening of services markets has recently become a standout issue in WTO DDA and bilateral FTA negotiations, studies about international trends in opening of the services sector and strategies for coping with a more open market is being conducted actively.

Among Korea, China, and Japan, several issues about opening of the services market is being discussed through the trilateral Joint Research Project for CJK FTA. In addition, diversification of sectors for investments into China is necessary, in light of China's recent industrial policies involving greater focus on development of high-tech industries and services. As interest on opening of services rises, various research about this issue is being conducted. Previous studies have focused mainly on characteristics of existing FTA's of the 3 countries (Korea, China, and Japan) and status of China's service market. This study focuses on finding actual obstacles through research on institutional and non-institutional market entry barriers, and proposing various policy suggestions for promoting mutual intra-regional investment, especially about the three major service sectors; namely wholesale/retail trade, finance/insurance, and construction.

According to assessment of international organization such as the OECD FDI regulation index and the World Bank FDI & Business Environment analysis, China maintains relatively high levels of regulation on investment in services. Various surveys, evaluations and analyses point out that China also has severe restrictions on the scope and type of foreign investment. On the other hand, Korea and Japan have relatively favorable business environments; however, there still exist hidden obstacles for businesses such as negative public views concerning foreign investors, inconvenient distribution structure and commercial customs.

The numerous obstacles to mutual intra-regional investment among the three countries cannot be tackled with institutional remedies such as FTAs or investment agreements alone. While an FTA can be utilized to lower China's high institutional restrictions on foreign investment, greater effort is necessary to lower unofficial obstacles such as commercial customs and negative public views on foreign investors in Korea and Japan.

Accordingly, this study suggests policy issues for stimulating mutual intra-regional investment among the three countries. First, common commercial customs, practices and regulation status classified by industry must be shared among three countries by constructing an active information exchange network. Second, a Korea-China-Japan FTA should be utilized as a strategic instrument for stimulating mutual intra-regional investment. Third, governments should make various efforts to encourage domestic firms to invest abroad via M&As, which is an effective means by which industries can bypass the entry barrier of service markets in each country. Fourth, in order to attract investment into Korea's service

market, the market needs to become more specialized and competitive through SME(Small and medium enterprises) support, human resource development, and reform of domestic market regulations.

The Determinants of Price Volatility in Food Crops and Policy Implications for Korea

Jin Kyo Suh, Jun Won Lee, and Hanho Kim



International prices of major crops rose dramatically from late 2006 through mid 2008. Price collapsed dramatically in the second half of 2008 with the onset of the financial crisis. This episode is often referred to as the “2008 agflation”. It seems that such a price swing appears again. Between early June 2010 and February 2011, the price of grain increased sharply, surpassing the 2008 peaks that had spread anxiety among policymakers and low income consumers around the world.

A number of studies have discussed the factors which lie behind the 2008 agflation. A large number of potential explanation is available. Those given greatest prominence are i) rapid economic growth, particularly in China and other Asian economies, ii) decades of underdevelopment in agriculture, iii) low inventory levels, iv) depreciation of the US dollar, v) speculative influences.

However, there is still in debates of whether grain prices have become more variable. When looked at in the long term, there is little or no evidence that volatility in international agricultural commodity prices, as measured using standard statistical measures is increasing and this finding applies to both nominal and real prices. Volatility has, however, been higher during the decade since 2000 than during the previous two decades and this is also the case of wheat and rice prices in the most recent years (2006~2010) compared to the nineteen seventies.

To answer a basic question has grain price volatility risen? this study sets up GARCH (Generalized Autoregressive Conditional Heteroscedasticity)-type models and measures exact volatilities for rice, wheat, corn, and soybeans, which are important for food security

of net food importing countries. The GARCH model is now the standard procedure for modelling volatility in financial markets. GARCH specifies an ARMA (AutoRegressive Moving Average) process for the variance scedastic process followed by a time series to yield an estimate of the conditional variance of the process at each date in the sample. To summarize, this analysis has generated three conclusions;

- a) International rice and wheat price volatility was generally higher over the past two decades than in the nineteen seventies and eighties, the major exception being soybean.
- b) Although many grains exhibited high volatility over three year periods 2006-08, and this volatility persists to the present, these volatilities are generally in line within historical experience, except rice.
- c) There is weak evidence that volatility levels may be increasing relative to historical levels across the grains. However, we will need to wait for a few more years to now whether this is indeed the case.

There is also considerable empirical evidence that the volatility in agricultural prices has changed over the recent decade. It is not only the levels of prices which have had powerful effects, but also their volatilities. Increasing volatility is a concern for agricultural producers and for other agents along the food chain. Price volatility can have a long run impact on the incomes of many producers and the trading positions of countries, and can make planning production more difficult. Moreover, adequate mechanisms to reduce or manage risk to producers do not exist in many markets and/or countries. Therefore, an understanding the nature of volatility is required in order to mitigate its effects, particularly in developing countries.

In order to examine the nature and determinants of volatility in food crops, this study sets up both the dynamic panel model and the system equation models. The dynamic panel regression approach is useful for catching a number of key variables which can explain grain volatility as a whole, while the system equation approach has advantages of considering the interrelation among each crop. The results of the analysis can be summarized as following.

There is convincing evidence that many of the candidate variables have an impact on grain volatility. Inventory-use ratios have significant effects on grain volatility, being negatively affected. For some individual commodities, the relationship does appear to be stronger, with wheat the clearest example. Oil price volatility has a positive impact on grain price volatility. Thus, the recent coincidental high volatility in oil and grain prices is symptomatic of a connection between grain price volatility and oil price volatility. The link between oil prices and grain prices is likely to arise through the impact of energy prices on the costs of production, along with the alternative use of some crops for biofuel production. Therefore, we would expect the link between oil price volatility and grain prices to continue

or strengthen as the biofuels sector grows. Likewise, exchange rate volatility was found to influence the volatility of agricultural prices. Thus, perhaps unsurprisingly, if the global economy is experiencing high levels of volatility these will also be reflected in agricultural prices.

Higher inflation volatility tends to increase grain price variation. The sensitivities vary quite widely across commodities, but in most cases the relationship is highly significant. Higher levels of the U.S. inflation, also have a consistent impact to most grains, being significantly and positively affected. Higher futures market volumes increase the volatility in grains. The effect is statistically significant, but economically small. Policy options to reduce the grain price volatility

- a) Emergency food reserves Relatively smaller food security emergency reserves can be used effectively and at lower cost to assist the most vulnerable. Unlike buffer stocks that attempt to offset price movements and which act as universal subsidies benefiting both poor and non-poor consumers, emergency food reserves can make food available to vulnerable population groups in times of crisis. In addition, emergency reserves of relatively small quantities of staple foods will not disrupt normal private sector market development which is needed for long term food security.
- b) International safety nets In times of crisis, contingent and compensatory financing facilities are important mechanisms assisting countries to avoid major fiscal deficits, and lower the cost of imported food, while maintaining key social assistance programmes. The World Bank is currently helping countries deal with the food crisis through instruments to help manage short-term impacts, including grant funding for rapid response in the poorest and most vulnerable countries and expedited use of International Development Assistance (IDA) and International Bank for Reconstruction and Development (IBRD) funds under programs such as the Global Food Crisis Response Program (GFRP), as well as increased Regular IDA and IBRD lending, policy advice and technical assistance.
- c) Risk management for governments For price risks, the principal instruments that could be used to manage the price volatility of food import bills are futures and options contracts (financial instruments) or over the-counter (OTC) contracts (physical instrument). The main difference between them is that financial instruments can provide a country with a cash payout to enable them to offset higher food prices for physical imports, whereas physical instruments seek to manage price and supply risk and provide for the physical import of the food. Both types of instruments are offered by financial institutions and traders.

By buying futures contracts, a government which wishes to protect itself against a

possible grains price surge “locks” in a price agreed at the time the contract was concluded. With futures contracts the country will obtain greater certainty over the price, but not flexibility. Call option contracts “lock” in a maximum price, but with no obligation to buy at that price if market conditions are favourable for the government (i.e. if prices have moved lower). The country will still be able to benefit from lower prices after the agreement, as they do not have to purchase at the agreed price. This approach provides certainty about a maximum price and flexibility.

Significant investment is needed to overcome the lack of technical expertise on the use of these instruments in developing countries. Experience has shown that engaging developing and emerging countries on risk management takes a sustained effort to build capacity to the point where decision-makers are comfortable with the use of risk management tools. Globally there is a need to learn lessons from countries such as Mexico that have become sophisticated in developing a framework for analyzing risks and taking innovative steps to manage those risks.

Finally, it is important to recognize that there is no single risk management tool that will meet the diverse needs of countries exposed to price volatility, particularly given the complexity of local market and policy environments. Solutions need to be highly customized, drawing on a mix of different tools and responses. A successful approach to strengthening risk management frameworks in low income countries will need to build on existing capacities, create platforms which allow private sector market participants to be part of the solution, and find ways to overcome the major constraints to greater use of risk management tools: weak legal/regulatory frameworks, poor credit standing, and a lack of knowledge, understanding, and confidence about how to use these tools.

U. S. and Canada’s Green Growth Strategy and Its Implications

Heechae Ko, Junkyu Lee, Minah Oh, and Boram Lee



The world’s economies are actively promoting “green growth” as the way to overcome

the global economic crisis, the energy crisis, climate change, and to gain momentum for new growth.

First of all, the effects of climate change intensifying around the world has given urgency to the task of coordinating global action among countries. Also the volatility seen in wildly fluctuating energy prices is fueling fears of a global energy crisis due to temporary energy imbalance and energy speculation. Until now, world economic development was based on overwhelming dependence on fossil fuels. However, the limited fossil fuel reserves and environmental pollution are putting this type of development to an end. Furthermore, the current global financial and economic crisis provides legitimacy for a more active investment in the green energy sector for many countries, to boost growth momentum and reduce dependence on foreign fuels. Meanwhile, despite the withdrawal from the Kyoto Protocol, the United States acknowledged the need to develop the clean energy sector since the late 1980s. Accordingly, the U.S. government established a national energy strategy supporting research and technology development in clean energy and eco-friendly cars as a potential source of industrial growth.

Energy technology is a combination of a diverse range of technologies, which necessitates long-term, massive investments. In case of developed countries, federal/central governments can play a leading role by implementing national energy plans to support energy technology development until its commercialization and employment. In case of the United States, the Department of Energy is in charge of the “National Energy R&D Portfolio.” In February 2003, the Bush administration announced the “Hydrogen Fuel Initiative” which provided \$1.7 billion to develop hydrogen-powered fuel cells, hydrogen infrastructure and advanced automotive technologies over the next five years. The Bush administration continued its efforts to reverse America’s growing dependence on foreign oil. In the 2006 State of the Union Address, President Bush announced a 20% increase in clean-energy research and revealed his plan to make ethanol practical and competitive within six years.

President Obama, in the wake of the global financial crisis, is continuing US efforts to develop clean energy technology. The climate change bill could reset the US government’s approach on green growth, being one of the legislations President Obama heavily advocated. In June 2009, the bill had passed in the House of Representatives. However, its chances of passing the Senate vote are slim.

Despite setbacks in enacting the climate change bill, President Obama fully recognizes “green growth” as America’s new engine of growth. In the 2011 State of the Union address, President Obama showed a firm determination to continue investment in clean energy technologies. In doing so, President Obama set a new goal: that by 2035, 80% of America’s electricity will come from clean energy sources such as wind, solar, nuclear, clean coal

and natural gas. Detailed measures to achieve this goal was outlined, which includes introduction of 1 million electric vehicles on the road by 2015 and the elimination of \$4 billion subsidies to oil companies.

Canada already recognized that low-carbon green growth is essential to sustainable growth. Since 2005, the Canadian government actively began investing in clean energy and technology. Specifically, the Canadian government is implementing policies related to greenhouse gas reduction, environment technology development, infrastructure investment, and environmental protection. Above all, the Canadian government is focusing on the renewable energy development, such as achieving international competitiveness in hydrogen production technology and fuel cell technology. In the 2007 budget, \$2 billion was allocated for renewable energy development alone. Considering Canada's dynamic low-carbon green growth action, close attention to Canada's growing clean energy market is needed for better cooperation in the near future.

In addition, Canada is a well known eco-friendly country, its attitudes towards the environment driven by the close attention of its citizenry to environmental problems and backed up by strict government regulations. Environmental issues tend to be the major campaign issues during the election period, and federal and local governments have systematic evaluation processes to prevent environmental pollution from fossil fuel exploration. Recent opposition on the oil sand development by native Canadians and strict federal government regulations have given rise to much uncertainty in the Canadian oil industry. Yet, there are assumptions that the Conservative Party of Canada, the majority party, is implementing Canada's 'ecoAction' plan. Canada's national energy plan to merely avoid criticisms that the party is not attentive enough on environmental issues. But regardless of the ruling party, it is the direct support to the citizens which the Canadian government has aimed at, while simultaneously reducing industries' dependence on government support.

In tandem with the green growth movement in the global community, Korea is also adopting policies to adapt to climate change and implementing "green growth" for sustainable development. As in the case of the US and Canada, major economies are designing national green growth strategies for sustainable growth with special focus on renewable energy industries. Green growth has now become vital for development of the world's nations, and is no longer a matter of choice. Considering that Korea has not yet reached the levels of the developed countries in renewable energy in terms of technology and power-generation capacity, the Korean government should continue to provide full support to Korea's renewable energy industry via tax credits and investment incentives under sustainable national development plans.

③ Research on Current Issues

World Economy Update

- 1 Outlook for North Korean Economy Based on 2011 New Year Editorial
- 2 Challenge for Free Economic Zone to Strengthen Competitiveness of Korean Economy
- 3 2011 Outlook for World Economy: Regional Economies
- 4 Content and Implication of EU's New Trade Policy
- 5 Possible Spread of Egypt's Anti-government, Pro-democracy Protest in Middle East and Evaluation of its Impact
- 6 Recent ODA Reform Measures by Major Aid-Giving Countries and their Implications
- 7 Economic Impact and Implications of Japan's Earthquake
- 8 Natural Disasters and Macroeconomy in light of Japan's Earthquake
- 9 Impact of Japan's Earthquake on East Asia's Production Network
- 10 The Prospect and Transmission Dynamics of China's Inflation to Korea
- 11 China's Economic Policy Direction and Implication in light of Two Major Political Gatherings in 2011
- 12 Analysis of 2011 Economic Policy Direction and North Korean Budget based on Discussion at Supreme People's Assembly
- 13 Analysis and Implications of Korean Part of '2011 USTR TBT Report'
- 14 Background for Holding UN Conference on Least Developed Countries and Future Challenges
- 15 Main Content of DDA Chairman's Report and Future Outlook
- 16 Main Agenda and Features of 2011 G20 Meetings

17	Outcome of 4th Korea-China-Japan Summit and Future Challenges
18	Kim Jong-il's Visit to China and Outlook of NK-China Economic Cooperation
19	Main Content of Opinion Poll on ODA and its Implications
20	Analysis and Implications of Verification Methods for Country-of-Origin under Korea-U.S. FTA and Korea-EU FTA
21	Trends and Policy Implications for DDA December Package Discussion
22	Damage Restoration Efforts in Eastern Japan after Earthquake and Implications
23	Implications of Korea-Peru FTA and Effective Utilization Methods
24	Trends and Assessment of Property Markets in U.S. and China
25	Assessment and Prospects for Risk Factors in Global Economy
26	Impact Analysis of Fiscal Austerity and Credit Downgrade of U.S.
27	Major Countries' Response to Libya Crisis and its Implications
28	Implications of Passage of Korea-U.S. FTA Implementation Bill in U.S. Congress
29	Comparison between Global Financial Crisis and Causes of Recent Oil Price Movement and its Implications
30	Case Study for ISD Disputes and Implications
31	Analysis of Cause of Capital Flow Volatility and Policy Implications
32	Two Years On: Achievements and Challenges in Trade Sector of Korea-India CEPA
33	Implications of Korea's Expanded Currency Swap with Japan and China
34	Russia's Entry to WTO: Economic Impact and Korea's Response
35	Main Agreements at 8th WTO Ministerial Meeting and their Policy Implications
36	Spread of Europe's Fiscal Crisis and Future Outlook
37	2012 World Economic Outlook

Regional Economic Focus

- 1 Formation of Coalition Government following General Election in Kyrgyzstan and Future Outlook
- 2 Economic Issues Discussed at U.S.-China Summit and Assessment
- 3 Outcome and Implications of China's '2nd National R&D Resources Survey'
- 4 Trends and Outlook of Recent Inflation in India
- 5 Main Issues for Debate on Raising Debt Ceiling in U.S. and Future Outlook
- 6 Turkmenistan's Decision to Establish Private Mobile Carrier and its Implications
- 7 Possible Spread of Anti-government, Pro-Democracy Protest in Middle East following Libya Crisis :
Review of Each Country
- 8 Analysis and Implications of EU's Green Procurement System
- 9 Assessment of India's 2011 Budget Proposal and its Implications
- 10 China's Strengthened Control over Rare Earth Resources Industry and Future Outlook
- 11 Trends of Inflation in Britain and Outlook for its Economic Recovery
- 12 Zeroing Dispute on Steel between Korea and U.S. and Implications
- 13 Assessment of Presidential Election Results in Kazakhstan and Future Outlook
- 14 Policy Directions for Major Countries on Nuclear Power Plants after Japan's Nuclear Crisis
- 15 Reasons for Re-invigorated German Economy and Future Outlook
- 16 Impact of High Global Oil Prices on Russian Economy and Future Outlook
- 17 Financial Bailout of Portugal and Outlook for Eurozone Fiscal Crisis
- 18 WTO's Ruling on 'Duplicated Imposition' Disputes between U.S. and China and its Implications
- 19 Inauguration of New Government in Myanmar and Western Countries' Possible Move to Ease
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- 20 Assessment of U.S. Anti-Dumping and Countervailing-Duty Probe into Korean Refrigerators
- 21 Financing Reality for China's Regional Governments and Assessment of Overall Financial Condi-
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24	India's Trade Surpassing \$500 bln and Future Outlook
25	Review of 3rd U.S.-China Strategic Economic Dialogue and its Implications
26	Discussion on Revision of Europe's Travel Liberalization Treaty and Future Outlook
27	Review of Recent Discussion on U.S. Trade Adjustment Assistance System and Future Outlook
28	Review and Assessment of 「China's White Paper on Foreign Aid」
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4	China's Tax Reform Direction during 12th 5-Year Plan
5	Overview of 12th 5-Year Plan for National Economy and Social Development (Draft) 1: Volume 1-2 of 16
6	Overview of 12th 5-Year Plan for National Economy and Social Development (Draft) 2: Volume 3-4 of 16
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9	2011 Chinese Economy Outlook
10	Review of China's Two Major Political Gatherings in 2011
11	Overview of 12th 5-Year Plan for National Economy and Social Development (Draft) 5: Volume 9-10 of 16
12	Overview of 12th 5-Year Plan for National Economy and Social Development (Draft) 6: Volume 11-13 of 16
13	Overview of 12th 5-Year Plan for National Economy and Social Development (Draft) 7: Volume 14-16 of 16
14	China's Key Economic Policies of Each Government Ministry in 2011

15	Features of China's Economic Management and Growth Outlook until 2015
16	Trend Analysis of China's Financial Management
17	Review of Human Resources Development in China and its Nurturing Strategy
18	Review of China's Strategy to Build Self-Reliance Districts
19	Analysis of Economy and Inflation for China during First Half of 2011
20	Review and Trends of Private Property Market in China
21	Features and Problems of New-Generation Farmers-Turned-Factory Workers in China
22	China's Economic Development and Growth Outlook 2030
23	China's Regional Development Strategy for Each Province and City during China's 12th 5-Year Plan
24	Analysis of 2011 Chinese Economy and 2012 Outlook
25	Key Points and Problems of Affordable Housing Policy in Each Province and City of China during China's 12th 5-Year Plan
26	Current Debt Situation and Future Outlook of China's Regional Governments
27	Review of China's Efforts to Nurture New Strategic Industries in Each Province and City during China's 12th 5-Year Plan

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1	Overview and Evaluation of China's 12th 5-Year Plan for Major Provinces (1): Sichuan
2	Wenzhou Suspends Enforcement of Overseas Direct Investment Policy for Individuals: Overview and Outlook
3	Overview and Evaluation of China's 12th 5-Year Plan for Major Provinces (2): 3 Northeastern Provinces
4	Overview and Evaluation of China's 12th 5-Year Plan for Major Provinces (3): Beijing, Tianjin and Hebei
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8	Overview and Evaluation of China's 12th 5-Year Plan for Major Provinces (7): 6 Central Provinces
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11	Evaluation of China's 12th 5-Year Plan for Each Region
12	Workforce Shortage in China and Future Outlook: Focus on Liaoning Province
13	Analysis of Operation of Foreign Universities in Yangtze River Delta Region and Future Outlook
14	Analysis of Growth Factors for E-Commerce Market in Hangzhou and Appropriate Countermeasures
15	Review of Industrial Complex Development in Henan and its Implications
16	Review of China's Chengyu Economic Zone Development Plan for Western Region and Future Outlook
17	Overview of Chinese state-run companies' investment in Guangdong and Future Outlook
18	Overview of Mineral Resources Development in Neimenggu and Future Outlook
19	Reform Experiment for Hukou System in Guangdong: Adoption of 'Point Saving System' and Future Outlook
20	Challenges for Small and Medium-sized Companies in Zhejiang and Future Outlook
21	Overview of Restructuring of Coal Companies in Shanxi and Future Outlook
22	Comparison and Evaluation of China's 3 Nurturing Areas to build Maritime Economy (Shandong, Zhejiang, Guangdong)
23	Trends of Logistical Infrastructure Construction in China's Northeastern Region: Logistical Infrastructure Connecting Land and Water
24	Cause of Electricity Shortages in China and Future Outlook: Case Study Focusing on Guangdong
25	Overview of Cooperation in Pan Pearl River Delta Area and Future Outlook
26	Policy of Restricting Vehicle Registration in Beijing: Impact and Assessment
27	Review and Assessment of Shanghai's Reform of Value-added Tax

Introductory Report of China's Provinces

1	Industrial Map of Guangdong: Focus on Pearl River
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④ Periodical Publications

Journal of East Asian Economic Integration (Quarterly)

● 2011 Spring Vol. 15, No. 1

Trade Liberalization, Economic Growth, Energy Consumption and the Environment: Time Series Evidence from G-20 Economies	Jungho Baek, Hyun Seok Kim
Correlations-Adjusted Export Market Diversification	Jung Joo La
Foreign Exchange Exposures of Korean Firms	Sungbin Cho, Min-Kyu Song
Output Volatility and Growth in Korea, China and Japan Jong	Ha Lee, Jinyoung Hwang

● 2011 Summer Vol. 15, No. 2

Investing in Port Infrastructure to Lower Trade Costs in East Asia	Kazutomo Abe, John S. Wilson
Structural Breaks and Long Memory Property in Korean Won Exchange Rates: Adaptive FIGARCH Model	Young Wook Han
The Role of Altruism in Sending and Spending Remittances	Akira Shimada
Investigation of Global Imbalances Based on a Gravity Model	Hyun-Hoon LEE

Journal of East Asian Economic Integration (Quarterly)

● 2011 Autumn Vol. 15, No. 3

Intellectual Property Protection Strategies of Foreign Companies in Korea	Boo-Young Eom
Changes in China's Influence on Korean Exports by Production Phase	Wanjoong Kim
Was 2008 Crisis Predictable in Korea?: A Signal Approach	Won-Am Park
Alternative Monetary Policy Rules in a Small Open Economy with Financial Frictions: The Case of Korea	Yongseung Jung
Decomposition into Tradables and Nontradables and the Purchasing Power Parity (PPP) Hypothesis of the Real Won-dollar Exchange Rate	Deockhyun Ryu, Heechae Ko

● 2011 Winter Vol. 15, No. 4

Special Paper: New Developments in EU's External Trade Policy and Implications for Asia-Europe Relations	Cae-One Kim
The Determinants of Korea's Terms of Trade: The Real-Side Approach	Hongshik Lee, Hyuk-Hwang Kim
The Global Financial Crisis and the Integration of Emerging Stock Markets in Asia	Sang Hoon Kang, Seong-Min Yoon
The Stable Equilibrium of Preferential Trade Agreements under Technology Asymmetry	Young-Han Kim, Jae-Duck Kim

KIEP Annual Report



Research Plan
for 2012

① Research Plan for 2012

- Assessing post-crisis potential risks that could threaten sustainable global economic growth and providing ways to minimize their impact on our economy.
 - Assessing how much the global crisis has been overcome or whether any risk factors remain while drawing lessons from the process of overcoming the crisis.
 - Focusing on establishing countermeasures to cope with risks stemming from the Eurozone fiscal crisis, currency market volatility and increased investment by foreigners in the domestic bond market.
- Analyzing economic trends in North America, the EU and other advanced countries, monitoring the fiscal conditions in the EU, in particular, and providing directions in drawing up countermeasures by analyzing causes for the crisis and responses by each country.
 - Analyzing economic trends in advanced countries, reviewing changes in EU governance following the Eurozone fiscal crisis, evaluating financial reforms made by the U.S. in the wake of the global crisis and analyzing Japan's cooperation policies toward China.
- Conducting research on "the impact of market opening and countermeasures" in response to expanding free trade, triggered by implementation of FTAs with the EU, the U.S. and trade negotiations with China.
 - Conducting research to find appropriate ways for Korea to provide help to least developed countries and looking into the possibility of a regime change in North Korea and other challenges by analyzing the extent of its marketization and possible regime changes in other countries.
- Carrying out basic research on major issues in each region (or each country) for emerging economies and making KIEP's Center for Emerging Economies Research a domestic hub for such study by effectively conducting "in-depth research on strategic regions" and other research projects.

- Conducting a timely analysis of pending issues including political events scheduled in 2012 not just for Korea but also for other major countries.
 - Expecting possible simultaneous leadership changes in the U.S., China, Russia and Korea and analyzing the impact of ensuing economic policy directions in those countries on the domestic market.

- Conducting research that will help devise a main framework for foreign economic policy directions of a new government that will take office in 2013 and helping establish the new government's cooperation plans and strategies in accordance with individual countries.
 - Analyzing policy directions and strategies for Korea in its cooperation with such major emerging economies as China (including strategies for each region), Southeast Asia, India, Russia, CIS, Middle East, Africa, Latin America.
 - In particular, providing visions and cooperative directions between Korea and China as both countries mark the 20th anniversary of establishing diplomatic relations.

② Basic Research Tasks

1

Changes in Eurozone governance after sovereign debt crisis

● Objectives of the Study

- The Eurozone fiscal woes triggered by the crisis in Greece in early 2010 served as a chance to review existing structural weaknesses of the Eurozone economies.
- Fiscal deficit amid weak economic structures and increasing sovereign debt cast doubt over the sustainability of the fiscal status of PIGS countries and the fiscal crisis spread quickly into the whole Eurozone region through its interconnected debt network.
- The EU is currently pushing to reform its economic governance to stall the spread of fiscal crisis and prevent such a crisis from taking place again.
- This research will evaluate the EU's reform of its economic governance following the fiscal crisis and look into discussion, policies and stances that each country has taken in the course of the reform effort.
- This research will assess reform efforts in the Eurozone and review policy coordination and other efforts to narrow differences between regional leaders such as Germany and France and their southern debt-ridden neighbors.
- As some expect that the Eurozone will likely fall apart in the long term, this research will focus on discussing the rationale behind the forecast and what conditions and measures would be necessary to keep the Eurozone alive.

● Expected Benefits

- Providing an empirical base for the formation and operation process of a single currency community by analyzing the root cause for the financial crisis in Europe.
- Contributing to research about Europe in Korea by analyzing the reform process for the EU economic governance, stances of each country and related discussion.

► Project Manager *Yoo-Duk Kang*

2

Gains from Trade Liberalization: Consumer Benefits

● Objectives of the Study

- Despite increased welfare for the whole society thanks to trade liberalization, serious debate is underway about the economic impact of FTAs and trade liberalization
 - A major sticking point is the difficulty in finding evidence to prove that trade liberalization actually increased benefits to consumers in their daily life.
- Most research has focused on the impact of trade liberalization by looking into changes in macroeconomic figures such as GDPs, exports and imports. Even some quantified consumer benefits are just abstract concepts that consumers cannot easily recognize in real life.
 - This research will help provide empirical evidence to prove the impact of trade liberalization centering on major consumer products, contributing to generating social consensus on the issue.
- If trade liberalization does not lead to more consumer benefits or if the outcome is unclear, this research will present the reason and find solutions for the government to set its policy directions for easing the negative image and concerns attached to trade liberalization.
- This research will quantify consumer benefits from trade liberalization and provide policy directions for the government to resolve problems revealed in the process of this study.

● Expected Benefits

- Helping generate social consensus on the impact of trade liberalization by securing detailed data related to income growth and other benefits from free trade.
 - In the case that trade liberalization results in a negative impact, this research will explain the reason and help the government to draw up appropriate countermeasures.

► Project Manager *Jin Kyo Suh*

3

Russia's FDI and FDI promotion strategy of Korea

● Objectives of the Study

- Russia has posted strong economic growth since mid-2000 on the back of high crude oil prices and is now tapping into its reserved capital to actively expand direct investment in overseas markets.
 - Russia used to focus its overseas direct investment on CIS but is now investing much more in Europe, the U.S. and other major Western countries and its invested areas are also expanding from oil, gas and steel to communications, manufacturing and finance.
- Russia is actively expanding its overseas direct investment in an apparent bid to commercialize its original core technologies and nurture new value-added industries as well as to secure natural resources that are feared to be dissipating quickly.
- As Russia modernizes its economy, a growing number of its companies are expected to become multinational enterprises. Still their investment in Korea remains very small, which raises the need for Korea to intensify its efforts to attract direct Russian investment.
 - It is important for Korea to attract more investment from Russia not just from the economic perspective but also from a diplomatic and security perspective as Korea could win full support from Russia for the peace and stability on the Korean Peninsula
- This research will review the trends and motives of Russia's overseas direct investment and take a close look into its investment trends for individual countries and industries as well as its investment strategies, thereby providing detailed policy directions for Korea to lure or expand investment by Russian companies in the future.

● Expected Benefits

- By analyzing the trends and traits of overseas direct investment by Russia, this research will provide academic data needed to evaluate its most promising industries that will be globally competitive in the future.
- This research will help draw up detailed policy measures needed to upgrade the quality of cooperative ties in the investment arena between Korea and Russia by looking into overseas direct investment trends of the major emerging country.

► Project Manager *Jae-Young Lee*

4

Effective FX-hedge policy using financial market

● Objectives of the Study

- Since the 1997 financial crisis, Korea has opened its capital market, a move that led to a sharp increase in foreign capital flow in and out of the country and increased the overall exchange rate volatility. But there have not been enough ways for market players to adequately cope with risks from currency volatility, highlighting the need to provide more tools to respond to ups and downs in the currency market.
- Unlike previous research, this research will look into whether currency risks can be resolved through financial markets, not by the government, and if so, it will provide detailed methods. In case the risks cannot be resolved through the market, this research will give alternatives and pinpoint what needs to be rectified in the market.
- This research could provide basic data needed to stabilize the domestic currency market and help draw up policies to mitigate such risks by delving into whether each economic player can cope with currency risks through the market.
- As sovereign risks from exchange rate volatility do not affect a single group of market players but affect all interactions among all participants, the government has usually taken the responsibility for final action. But this research will present ways that each player can use to react beforehand through the market.
- This research will conduct microeconomic analysis of responses that each player can take through the market in the face of currency fluctuations while at the same time carrying out macroeconomic analysis to propose comprehensive policy alternatives.

● Expected Benefits

- To stave off chaos caused by steep exchange rate fluctuations, this research is expected to provide government-led preventive measures, eventually contributing to stabilization of our trade-focused economy.
- By providing evidence for a changed market environment due to the overall increase in exchange rate fluctuations and their resulting impact, this research will present appropriate countermeasures and contribute to having a broader discussion on issues related to exchange rates.

► Project Manager *Deok Ryong Yoon*

5

Analysis on National Debt and Sovereign Credit Rate

● Objectives of the Study

- In the wake of the financial crisis, sovereign credit ratings of the U.S., Japan and European countries have been downgraded and the chaos in the financial market sparked by the Eurozone fiscal problems persists.
- It is unclear what kind of relations they have between fiscal crisis-struck countries and other countries from the perspective of their respective debt volumes.
- Though the sovereign credit ratings of Japan and the U.S. were downgraded, it is not fair to say that the downgrading was the cause for the fiscal crisis because other countries, whose debt volumes compared to GDP were relatively small, also suffered crises.
- Therefore, it is necessary to analyze factors other than debt volumes such as macroeconomic variables and differences in financing methods to know what impact these had on the fiscal crisis or on credit downgrading.
- In terms of sovereign debt volumes of major countries, macroeconomic variables and their financing methods excepting taxation (mostly bond issuance), this research will look into what impact foreign capital had on the fiscal crisis and the credit rating downgrading.

● Expected Benefits

- There has been much debate over debt volumes but little analysis has been done that reflects foreign investment in state bond markets. This research is expected to contribute in this regard.
- Given that foreign capital is an important factor that sets the direction of bond market development, this research is a basic study that will provide related guidelines.
- In addition, by analyzing debt structures of major countries, this research is expected to help reevaluate their credit status.

► Project Manager *In Huh*

6

Evaluation and Policy Implications of the Process of Overcoming the Global Financial Crisis

● Objectives of the Study

- Economies of advanced countries were expected to rebound and overcome the crisis from the second half of 2009 bolstered by some improving real economic indicators. But after mid-2011, slowing indicators and deepening fiscal problems have cast a dark shadow over their short- and mid-term outlooks.
- Given high unemployment and vulnerable financial systems, it is unclear whether additional economic stimulus measures by monetary policy makers would lead to recovery of the real economy.
- Despite efforts by Germany and other countries to overcome the crisis prompted by their European peers including Greece, the outcome will not likely be positive.
- Emerging countries including East Asia have registered faster recovery than advanced countries following the financial crisis, but it is worth noting that their sustainable growth cannot be guaranteed if advanced countries fail to overcome the crisis and post a strong recovery.
- Inappropriate financial supervision by the U.S. and other major countries are regarded as a main culprit for the global financial crisis so it is necessary to review how they have improved their supervision policies in the process of coping with the crisis.
- This research will look into the crisis-stricken global economy of the past few years and in particular determine whether advanced countries have overcome the crisis as of the end of 2012, while drawing lessons for both the global and domestic economies.

● Expected Benefits

- This research will review the underlying causes of the 2008 financial crisis and explore academic platforms needed to overcome and prevent such a crisis in the future.
- This research will determine whether the global economy has overcome the crisis as of the end of 2012 and provide policy agendas for the economies of Korea and other major countries.

► Project Manager *Jonghwa Cho*

7

Effects of Large Disasters on Macroeconomy and Financial Markets

● Objectives of the Study

- Large-scale disasters such as economic crisis, war and natural catastrophes seriously affect asset prices and macroeconomic conditions.
 - Since 2000, when the financial market rapidly began to become globalized, large-scale disaster in one country was shown to have great impact on other countries, raising the need to brace for such external shocks.
- In particular, large-scale external disasters have direct and indirect impact on asset prices of small and opened economies such as Korea by influencing the cross-border capital flow.
 - Opinions are divided over whether the impact of external disasters on macroeconomic conditions is positive or negative.
 - Sufficient research has not been done to investigate – both theoretically and empirically – the impact of not just an economic crisis but also the impact of war and natural disasters on asset prices and macroeconomic conditions.
- Though large-scale disasters do not take place frequently, it is still necessary to recognize that the possibility of such external shocks could be a major factor that determines asset prices and macroeconomic conditions. It is also necessary to conduct research on the relations between external disasters and asset prices and macroeconomic conditions.
 - This research will provide the definition of a large-scale external disaster that could influence financial markets, while looking into how the market reacts to different disasters based on cases in the past.
 - This research will analyze how the relations between external disasters, international capital flow and asset prices affect each other by taking into account the different natures of individual countries.

● Expected Benefits

- Establish relations between large-scale external disasters and asset prices theoretically and empirically.
- Verify the impact of economic crisis, war and different types of natural disasters on financial markets.

► Project Manager *Jiyoun An*

8

Japan's Economic Relationship Situation with China in the period of G-2 and It's Implication for Korea

● Objectives of the Study

- As China outpaced Japan in terms of GDP in 2010, Korea has been interested in Japan's strategies for economic cooperation with China. Consensus has also been building that we should learn from Japan in drawing up cooperation strategies with China.
- Most previously-conducted research on China-Japan ties has been focused on diplomatic relations and even some analyses on economic relations have failed to shed light on the Japanese government's strategies or specific cooperation patterns in the private sector.
- While talks over Korea-Japan FTA and Korea-China FTA are actively underway, negotiations over Japan-China FTA and Korea-China-Japan FTA have made little progress.
- Against this backdrop, it is timely to conduct research on the strategies Japan has been taking to improve cooperation with China and which direction Korea should move in terms of cooperation with China including its FTA.
- This research will help our government and local companies craft cooperation policies and strategies for China by reviewing Japan's cases both at government and private-sector levels.
- Based on the study of "broad-sense" cooperation, this research will analyze the Japanese government's direct economic support for China and its support for the private sector entering the Chinese market. It will also look into Japanese companies' cooperation with China in terms of trade and investment.

● Expected Benefits

- Japan's case will be useful for our government in its efforts to draw up economic cooperation strategies for China.
- Japan's case will also be useful for our businesses to establish investment strategies for China.

▶ Project Manager *Gyu Pan Kim*

9

Linkage strategies for Korean ETS in the Post-Kyoto regime II - Searching for unified mechanisms for mitigation and transfer

● Objectives of the Study

- After 2012 when the Kyoto protocol is set to expire, talks about the climate change framework are expected to take place both bilaterally and multilaterally based on the level of consensus from the "Cancun Agreement plus."
- In 2011, negotiations will be mostly about reducing greenhouse gas emissions and extending the Kyoto protocol, but a substantial agreement on the two fronts would not be possible without special momentum. Instead, countries could make a realistic choice to draw an agreement on the basic framework for the post-Kyoto protocol era.
- There are two areas where additional headway is expected for the post-Kyoto protocol era by the end of 2012 ① A flexible mechanism to ease the burden from cutting greenhouse gas emissions ② A financial support mechanism for developing countries to adapt and reduce greenhouse gas emissions.
- Our negotiation strategies and responses have been focused mostly on reduction of greenhouse gas emissions but given that we are under pressure for cutting greenhouse gas emissions and that the support issue is becoming an important topic of climate change talks, the need will grow to establish negotiation strategies that touch upon not just reduction but also support issues.
- This research will explore interaction between reduction and support (financial support and technology transfer) and provide our country's negotiation strategies and counter-measures by reviewing alternative mechanisms that touch upon the two issues.

● Expected Benefits

- Providing basic reasoning needed to design a comprehensive mechanism both for reduction and support.
- Helping secure alternative mechanisms that could be accepted under the post-Kyoto protocol era, while providing basic direction and logic for policy responses to any globally-accepted mechanism

► Project Manager *Jeongmeen Suh*

10

Green Growth Policy and Multilateral Trade Rules: Harmonization Issues and Policy Implications

● Objectives of the Study

- Green growth is sustainable growth that reduces greenhouse gas emissions and eases environmental degradation. Green growth is also a new paradigm for national development that focuses on creating new growth engines and jobs by using green technologies and clean energy
- Korea enacted the Low Carbon, Green Growth Law and related enforcement ordinances in 2010.
 - Adapting to climate change and establishing strategies for energy self-reliance: effective reduction in greenhouse gas emissions, less reliance on oil, stronger energy self-reliance and better adaptation to climate change
 - Creating new growth engines: creating green technologies, green industries, upgrading industrial structure and making a better environment for a green economy
 - Improving quality of life and strengthening national status: building green land, green transportation, green revolution in daily life, and realization as an exemplary country for green growth
- Some enforced green policies have relevance to a multilateral trade system
 - The Low Carbon, Green Growth Law of Korea was mentioned in the list of trade policies taken by each country. The list was announced by the WTO Director General at the Trade Policy Review Body (TPRB) in June 2010 as part of reports on trade developments.
 - Many green projects have relevance to WTO regulations, particularly with regards to national treatment, MFN and agreements on subsidies and TBT.
 - Many green policies have relevance to trade and environmental areas being discussed under the DDA.
- This research will look into the possibility that trade areas for green policies could run counter to the multilateral trade system or WTO regulations, and draw lessons that could be used in carrying out future green policies.

● Expected Benefits

- Providing reference for green policies in harmony with WTO regulations
- Encouraging discussion on possible amendment of existing laws and enforcement regulations

► Project Manager *Sherzod Shadikhodjaev*

11

Analyzing the Impact of Trade on Employment and Value-added Trade

● Objectives of the Study

- Expanding trade is not an objective itself. What is more important is to find detailed methods to achieve the policy goal of generating jobs and raising added value through trade.
- Following the credit downgrading of the U.S., the Eurozone fiscal crisis and the process of overcoming economic recession, major countries have placed top policy priority on creating jobs and recovering growth engines.
 - As the trade of intermediate goods account for more than two thirds of global trade due to deepening globalization, the need is growing to increase the ratio of “value added trade” rather than merely expanding the volume of exports.
- Demand is growing for inclusive growth in which trade expansion and its economic benefits can be shared by many industries and many parts of society.
 - As a result, there is a growing need to capitalize on the positive aspects of trade and market opening, while minimizing their negative effects such as industrial and social polarization.
- This research will analyze the impact of trade on employment and added value and provide methods to capitalize on the positive aspects of trade and market opening.

● Expected Benefits

- Analyzing the impact of trade on employment and “value-added trade” based on the international input-output matrix
- Presenting directions in utilizing the positive aspects of trade in job creation and other government policymaking

► Project Manager *Nakgyoon Choi*

12

The Impact of FTA on Economic Performance in Korea: Productivity, Export and Employment

● Objectives of the Study

- Korea has steadily pursued free trade agreements since the mid-1990s under the “we-pursue-FTA-simultaneously” strategy and it is now regarded as almost reaching a point of establishing a global FTA network.
 - As of September 2011, Korea has eight FTAs, of which seven have gone into effect.
- However, some experts raise worries about possible negative impact of the government actively seeking FTAs.
 - They express concerns mostly from the mercantilist perspective, saying that if trade account worsens due to FTAs, it would result in cutting domestic jobs and eventually driving up unemployment rates.
- In order for the government to have the logical grounds and justification for pushing for FTAs, it is necessary to conduct comprehensive and empirical analysis into the impact of already-enforced free trade pacts on the economy.
 - There have been some research that analyzed the impact of individual FTAs on the economy or looked into their impact on specific industries but little has been done to conduct a comprehensive analysis into all of these.
 - No research has been done reflecting the nature of individual industries and businesses in analyzing the economic impact of enforced FTAs due to restriction on use of related data.

● Expected Benefits

- Providing logical and empirical evidence that will support the government’s justification to push for additional FTAs
- In the case that there is an area where the positive economic impact of enforced FTAs is substantially high, free trade will need to be pushed for more actively in that area.
- In the case that there is an area where the positive economic impact of FTAs is not as significant as expected or FTAs have negative impact, compensation measures in that area will need to be drawn up.

► Project Manager *Chankwon Bae*

13

A Study on Assessment and Implications for the Interaction of Economic Openness and R&D Policy

● Objectives of the Study

- Korea has been evaluated as a role model for opening and development policies for its rapid economic development over the past 5 decades.
 - Korea's economic growth has been analyzed from many perspectives. In particular, its main industries bolstered with competitiveness thanks to the government support along with active export-driven growth strategies have served as driving forces for growth.
- Prior to full-fledged opening of the nation, it is time to evaluate what benefits so far opening has brought.
 - There have been many attempts to analyze how opening influences growth. However, what is needed is analyses on effectiveness from a comprehensive perspective, as open policies and industry policies influence each other to stimulate economic advancement.
 - This research aims to draw thought-provoking points to establish more efficient policies by looking from various perspectives at the effects of R&D policies in the economic development that comes from opening, such as new technology development and technology absorption.
- It is necessary to set new R&D policy directions to respond to the new international trade environment, including rapid opening, development of the Korean economy, and possible disputes resolution through WTO. This research aims to suggest R&D policies that can raise efficiency brought by opening under the paradigm shift in the economic development and new international trade environment

● Expected Benefits

- Presentation of the theory model that considers strategic behavior and divides R&D policies into technology innovation and absorption of advanced technology in order to analyze the interaction between opening and R&D policies in Korea's economic development.
 - Drawing distinct thought-provoking points for efficient R&D policies based on the theoretical model in accordance with opening.
 - Drawing thought-provoking points on policy through research in R&D policies in major developed nations and their effects.

► Project Manager *Young gui Kim*

14

Role of Korea's ODA for Development of Least Developed Countries

● Objectives of the Study

- Underdeveloped economic structure, absolute poverty, vulnerability to external shocks, natural disaster, and infectious diseases of the Least Developed Countries are problems that have caused their weak development, which are challenges for these countries to overcome.
 - This research aims to grasp major development challenges that face LDCs, such as infrastructure, food security, environment, trade, and capacity development, and to find support and cooperation directions that can appropriately address these challenges.
- Korea needs not just to continuously increase the scale of its aid but to design aid projects proper to the characteristics of LDCs, and establish aid measures tailored to each country and each region, since aid for LDCs accounts for only 20% of its total amount of foreign aid.
- Korea needs to take a strategic approach to LDCs, regarding them as future partners, not just as aid recipients but from a political and economic cooperative standpoint.
 - This research shows mid- and long-term cooperative directions based upon analyses of assistance trends of the international community as well as Korea's competitive edge towards important LDCs on strategic and economic cooperation levels.

● Expected Benefits

- Presentation of theoretical argument and main issues about poverty and development theory changes, and analyses on the structural elements of poverty situations in LDCs.
- Understanding of unique situations and development demands of LDCs to help reveal policy directions so this research can be rigorously used to direct aid strategy for LDCs or Country Partnership Strategy.
 - Making various cooperative plans for not just ODA but trade as well as investment, after reviews on related policies in areas other than climate change and trade for policy consistency.

▶ Project Manager *Yul Kwon*

15

Study on the Idea of Establishing the Korea-China-Japan Economic Consultative Organization

● Objectives of the Study

- As economic cooperation among Korea, China and Japan intensifies and efforts are underway to create a regulatory platform to support a trilateral FTA and other ties, it is time to think about establishing the “Korea-China-Japan Economic Consultative Organization.”
- This research will review cooperative efforts between Korea, China and Japan in not only trade and investment but also in such fields as manufacturing, agriculture, fishery, energy, environment, finance, transportation, logistics, tourism and culture.
- This research will go beyond government-level cooperation to look into dialogue channels among municipalities, academia and civic groups of the three countries, providing a comprehensive analysis of how they exchange views on economic cooperation.
 - Comparison between these dialogue channels and actual ongoing economic cooperation in each sector will also be carried out.
- Based on its findings, this research aims to pinpoint dialogue channels that need to be improved to expand economic cooperation among the three Asian countries.
- This research will also try to help systematize the operation of dialogue channels and propose the idea of establishing the “Korea-China-Japan Economic Consultative Organization,” a body that will serve as a stimulus for economic cooperation between the three countries.

● Expected Benefits

- Analyzing and systematizing dialogue channels for economic cooperation between Korea, China and Japan
- Helping strengthen cooperation between Korea, China and Japan through the trilateral consultative body.

► Project Manager *Chang-Jae Lee*

16

Research on the Current Status and Levels of North Korean economy's Marketization

● Objectives of the Study

- 10 years have passed since the announcement of the July 1 Economic Management Reform Measure to partially accept the market mechanism. So, it is necessary now to precisely assess the current status and levels of North Korea's economy marketization.
- Research on the current status and levels of North Korean economy's marketization can contribute to a precise assessment of the North Korean economy and important points in establishing our government's economic cooperation policies toward North Korea.
 - Accurate status analyses of North Korea's marketization should be a prerequisite in order for our government's economic cooperative policies targeting regime change and normalization of the North to be more substantially and efficiently executed.
- Conducting comparison analyses between the marketization process of Eastern European nations as well as China and that of North Korea would provide numerous policy points for analyzing the trends and development forecast for the North's marketization, which would in turn help to identify the challenges and policy direction for economic cooperation with North Korea necessary for inducing its marketization.
- Given the inevitability of regime shift through market reform and opening, this research also aims to review and suggest policy challenges and plans for international cooperation by the South Korean government to support regime change in the North, to build the North Korean economy and to incorporate the economies of the two Koreas.

● Expected Benefits

- Raising awareness of the economic situation in North Korea through research on the current status and levels of North Korea's economy marketization.
- Presentation of effective aid provision plans and policy challenges by analyzing the expansion possibility and the restrictive elements of North Korea's economy.
- Presentation of policy challenges and possibilities for mid- and long-term economic integration of the two Koreas through North Korea's movement towards a market economy.

► Project Manager *Hyunggon Jeong*

17

R&D of Chinese Firms: Characteristics and Implications

● Objectives of the Study

- China's economic growth leads to rapid industrial advancement and company growth, so it is expected that there will be fiercer competition between the main industries of China and Korea.
 - Accordingly, it is necessary to closely monitor the corporate competitiveness of China's various sectors which can be regarded as Korea's competitors
- Among other factors, R&D is a crucial variable in deciding long-term corporate competitiveness. Since the Chinese government changed its industrial policies from technology introduction to domestic development, there has been rapid investment in R&D.
 - This research aims to present thought-provoking points for Korea by analyzing policies related to the R&D investment of enterprises in China, their current status, deciding factors and results.
- Fiercer competition is expected between China and Korea, in particular, in highly-advanced industries, since China is pushing to highly advance its industries and nurture 7 new strategic industries. So this research aims to enhance domestic industries' response capabilities by analyzing the R&D investment characteristics, trends, and strategies of enterprises operating in China in order to seek ways they can work with us.

● Expected Benefits

- Being used as basic information with a summary of the R&D policies of the Chinese government, and R&D investment patterns and characteristics based on company type.
- Contribution to Korea-China industry cooperation and trade policy by coming up with measures to associate R&D investment with the partnership between companies of the two countries, and Korean companies' business expansion into the domestic market of China.

► Project Manager *Ik Joon Moon*

18

China's Urbanization and its implication for Korea

● Objectives of the Study

- With the rapid urbanization of China, urban and rural communities are home to 700 million people. It is expected that this urbanization will continue until another 300 million, which is assumed as the proper number engaged in agricultural activities, live in rural communities.
- The expansion of China's cities means not just the creation of new markets for consumption but a generation of demand accompanied by increasing infrastructure, requiring policy responses from Korea's industry and trade sectors.
- The urbanization will also trigger changes, caused by the structure of labor supply and demand as well as logistics networks, in the overall production environment, including the geographical location for the manufacturing sector. Korean companies will need to keep an eye on and respond to these changes.
- On the other hand, urbanization comes with social challenges, such as energy and water supplies, loose structure in family registration and control, rising population movement, increased burden of job creation, extended social security system, and reform in land property systems. So, it is necessary to properly assess and respond to the risks related to these challenges.
- This research aims to draw policy implications by analyzing China's urbanization centering around three issues: market creation, environment changes in the manufacturing field and risk management.

● Expected Benefits

- Contribution to Korea's active trade investment in China in accordance with China's rapidly changing situations.
- Contribution to policy-making and main industries related to Korea-China FTA negotiations.

► Project Manager *Pil Soo Choi*

19

How Korea Can Contribute to Mekong Subregional Development in Agriculture, Infrastructure and Human Resource Development?

● Objectives of the Study

- Korea has mostly participated in bilateral ODA-led regional development projects, except the GMS program through ADB, while Japan, the U.S., EU, Australia and China have increased their influence through their regional development projects.
- The Korean government aimed to strengthen its regional cooperation in the mid- and long-term through the meeting in August 2011 attended by foreign ministers from 8 countries near the Mekong river (Thailand, Myanmar, Vietnam, Laos, and Cambodia).
- The countries near the Mekong river, in particular among the South East Asian countries, lack social infrastructure and have unstable investment environments. However, the economic growth stemming from raised efficiencies in agricultural production and distribution is an important national policy, requiring the Korean government and companies to participate.
- When Korea shares its development experience, the Mekong river areas will be important places to help reduce poverty and improve regional productivity, and also important targets in strengthening international cooperation.
- Participation in the regional development of the Mekong river area, seeking mid- and long-term cooperation plans in agriculture, infrastructure as well as human resources will meet the demand of the Korean government and the private sector, and satisfying the development demand from Southeast Asian countries will help upgrade Korea's national status.
- Taking a look at regional development status, in particular, cooperative status in agriculture, infrastructure as well as human resources of the countries near the Mekong river, helps Korea to seek mid- and long-term cooperative plans for its participation in regional development.

● Expected Benefits

- Contribution to the mid and long-term strategy establishment with efforts from the Korean government to develop human resources and increase agricultural cooperation in the countries near the Mekong river.
- In particular, contribution to the cooperation with ASEAN and other various organization for regional development in making participation strategies in agricultural cooperation and human resource development.

► Project Manager *Taeyoon Kim*

International Labor Migration in Southeast Asia: A Focus on Sending Countries and Implications for Bilateral Migration Agreements

● Objectives of the Study

- Emerging economies in Southeast Asia have a better understanding of the benefits of exporting labor as it has helped ease local unemployment problems and bring in money from foreign countries, so they are pushing for labor exports as part of their government policies. If economic cooperation deepens with those countries, there is a possibility that they will ask for the opening of our labor market to their workers.
- Better understanding of trends and backgrounds for Southeast Asian countries' export of workers, related policies and their impact on individual local economies will serve as basic data for a possible expansion of trade between Korea and these Southeast Asian countries.
 - Most Southeast Asian countries send workers not only to Korea but also to their regional neighbors on a large scale so that a broader analysis of such patterns will help better understanding of the respective country's labor exports.
- By analyzing labor export trends of ASEAN members and their related policies, this research will help our government better understand the background of the demand for labor market opening at its bilateral talks with Southeast Asian countries.
 - Through analysis of scale and fields of labor exports, this research will help understand manpower-exporting structures of individual countries and to categorize their national policies.
 - Based on this understanding, this research will explore responses tailored to each individual country.

● Expected Benefits

- There has been little research done on the cause and effect of labor export strategies of ASEAN members and, in this regard, this research is expected to make an academic contribution to study involving migrant workers.
- By analyzing structures and policies related to labor exports and remitted money from workers of ASEAN countries, this research could provide basic data the government can use to craft policy responses in the area during its future FTA and other economic cooperation talks.

► Project Manager Yoonah Oh

21

Economic Cooperation between India and Major Asian Countries and Implications for Korea

● Objectives of the Study

- At a time when economic cooperation with India, an emerging giant, becomes more and more important, Singapore has taken the lead in not only direct investment but in drafting an FTA for economic cooperation with India.
 - Since it surpassed America in foreign investment into India in 2006, Singapore has continuously increased its investment percentage in India.
- Japan, Korea's biggest competitor in trade as well as overseas investment, has accelerated its investment in India since 2005 while tightening its cooperative ties with the nation as shown by its FTA deal with the second-most populous nation that came into effect since 2011.
 - Japan and India have held annual summit meetings since 2005, and jointly executed super-giant projects, such as the recent Delhi-Mumbai Industrial Corridor DMIC.
- China has surged in its exports to India since 2000 with the largest market share in India. It has recently led operation advancement in India's power plants, communications and construction fields.
- This research on the economic cooperation strategies of Singapore, Japan, and China towards India aims to be utilized to help the Korean government develop its support policies for companies expanding their operations into India and to aid companies to make their investment strategies.
 - This research aims to analyze the vision for advancement into India, the purpose, execution, results, as well as upgrade strategy, investment field strategy, and a detailed case study on success and failure in moving toward an FTA deal.

● Expected Benefits

- Systemic analyses and presentation of the policies, strategies, and cases of Singapore, Japan and China in successfully carrying out economic cooperation with India.
- Suggestion of related policies and strategies and highlighting the points necessary for our strategy for economic cooperation with India

► Project Manager *Choong Jae Cho*

22

Ways to Expand Economic Cooperation with Resource-Abundant Andean Countries: Focusing on Venezuela, Ecuador, and Bolivia

● Objectives of the Study

- Central and South America have become more and more important as an alternative resource development market in the wake of the global food crisis and the Middle East crisis. Among many Latin American countries, the 3 countries in the Andes, Venezuela, Ecuador and Bolivia, draw particular attention as resource development targets.
- The 3 countries have relatively low business operation of foreign countries compared to other Latin American countries due to their image as markets with high political and economic risks stemming from radical policies to nationalize their own natural resources since the start of their left-leaning governments.
 - Against this backdrop, several countries, including China, Spain, India and Japan, carry out active and diverse cooperation policies to secure their resources in advance.
- Currently our government as well as domestic companies recognize their high potential for resource development and seek ways to advance into these countries. However, we have not reaped any visible results due to the lack of understanding of the local environment for resource development as well as the lack of a systematic and comprehensive cooperation strategy from the government.
 - It is urgent to advance to Venezuela, Ecuador, and Bolivia with full-scale cooperative strategies, given their status in the international resource development markets.

● Expected Benefits

- Presentation of more tangible and viable cooperative alternatives for our government which is currently seeking more diverse means of economic cooperation with resource-rich countries.
- Presentation of various ways to minimize possible risks in the resource development process given the high political and economic risks of all 3 countries.

► Project Manager *Kisu Kwon*

23

Policy Direction in Entering the African Construction and Industrial Plant Markets

● Objectives of the Study

- As interest is growing over construction and industrial plant markets in Africa, many are seeking to enter the markets as part of their business diversification.
- Our construction policy authorities and builders are taking notice of the African markets and busy preparing to enter them in a bid to diversify their business portfolios which currently concentrate in the Middle East and Asia.
- This research will provide diverse effective policy options on how to enter the African markets by closely looking into their nature and business potential, major policies, development projects and strategies taken by major countries to advance in Africa.
- This research will analyze the nature and business potential of construction and industrial plant markets mostly in Africa's resource-rich countries and shed light on diverse ways for us to expand our market horizon.
- As a late comer, Korea should admit that it has very little experience in Africa and lags behind other countries in terms of financing capability. It is necessary to find policy options needed for joint projects in natural resource development, cooperation with businesses from China, Japan and Turkey and other former colonial powers and to partner in financing with foreign financial institutes.

● Expected Benefits

- Providing data that could be used as references for the government to establish policies and set its policy direction in encouraging businesses to enter into African construction and industrial plant markets.
- Providing help for companies seeking to advance to construction markets in Africa or to diversify their business portfolios with basic data and ways to enter the African markets.

► Project Manager *Young Ho Park*

24

Post Revolution Korea-MENA Economic Cooperation

● Objectives of the Study

- It is judged that the recently collapsed Tunisian and Egyptian regimes will be a starting point for changes to the authoritarianism and patriarchal values widespread in the Middle East countries.
 - The study aims to review and analyze changes in the political as well as economic systems of major Middle East countries, and to look into how the changes influence the nations in the aftermath of the democratization movement.
- In the long-term, weakening economic authoritarianism accompanied by declining political authoritarianism is expected. In particular, a shift from the state-led economic system to a private-led and diverse economic system can be expected.
 - If wealth generation and distribution were mostly led by specific groups in the past, the private sector is to increase their participation in the wealth generation and distribution process emphasizing job creation and welfare policies for the vulnerable.
 - In particular, more focused policies for industry diversification and job creation will bring more focus on several industries, such as the manufacturing industry, that do not have sufficient investment.
- Existing economic relations between Korea and China are centered around unilinear cooperation focused on specific areas, such as energy trade, construction and industrial plants.
- Diagnoses on the rapidly changing economic environment in the democratization process, and presentation of new economic cooperation plans that broaden the frame in the energy-led Korea-Mideast economic cooperation.
 - It is necessary for us to maintain tight political and economic relations with the Middle East countries, since the Middle East is strategically highly important as an energy supplier as shown by the fact that we import more than 80 % of crude oil from the region.

● Expected Benefits

- It is anticipated that this research will help set a new stage for Korea's economic cooperation with Middle Eastern countries, as rapid changes in the local economic environment are expected.
- This research aims to present new economic cooperative plans that broaden the frame in energy-led Korea-Middle East economic cooperation.

► Project Manager *Baran Han*

25

Assessment of DDA Negotiations and Policy Implications

● Objectives of the Study

- Expectation is growing high that the DDA negotiations started in 2001 will be concluded in 2012.
- DDA negotiations are intended to create new international trade rules not just in agriculture, non-agriculture, service and other market access-involved areas but also comprehensive areas such as regulations, trade facilitation, environment and development. In this regard, the DDA talks are expected to have a significant impact on our economy.
- There has been a great deal of research done on DDA negotiations but nothing has been done to evaluate what was settled and to point the direction of future policymaking based on the agreements.
- This research tries to analyze compromises to be reached through DDA talks and present policy directions for each sector based on the outcome.

● Expected Benefits

- Providing analysis of ripple effect of DDA compromises.
- Providing data for use by the government in promoting what was agreed upon during DDA talks and explaining its significance to the general public.
- Providing references for use by the government to effectively implement the conclusions of the DDA talks and to establish relevant policies.

► Project Manager *June-Dong Kim*

26

The Reinforcement of Economic Cooperation among China-Taiwan-Hongkong and its Implications

● Objectives of the Study

- Increased economic cooperation between China and Taiwan, which has been getting attention since the ECFA was signed in June 2010 and went into effect in September of the same year, will likely have a significant impact on neighboring countries.
 - It is necessary to analyze the influence that economic integration between China and Taiwan would have on trade, investment and industrial competitiveness.
- China and Hong Kong are expanding the range of their economic cooperation as both have signed the 9th supplement to their CEPA.
- It is necessary to craft responses to the emerging economic block that links China with Taiwan and Hong Kong.
- This research explores possible responses to the increasing influence of the pan-Chinese economic block by analyzing its economic impact.
 - Besides the ECFA between China and Taiwan and the CEPA between China and Hong Kong, China is emphasizing its commitment to unifying and integrating the economic block linking itself with Taiwan and Hong Kong under the slogan of "ethnic unity" as part of its 12th five-year economic plan. Against this backdrop, the influence of the China-centered economic block is expected to grow at a fast pace.

● Expected Benefits

- By analyzing changes in economic ties among China, Taiwan and Hong Kong, this research seeks to look into possible changes in the market landscape and provide basic data needed to establish our economic policies for China.
- This research will offer policy advice needed to craft diplomatic measures for a "new Asia" by forecasting likely scenarios for when the Chinese economic block increases its market influence.

► Project Manager *Seungshin Lee*

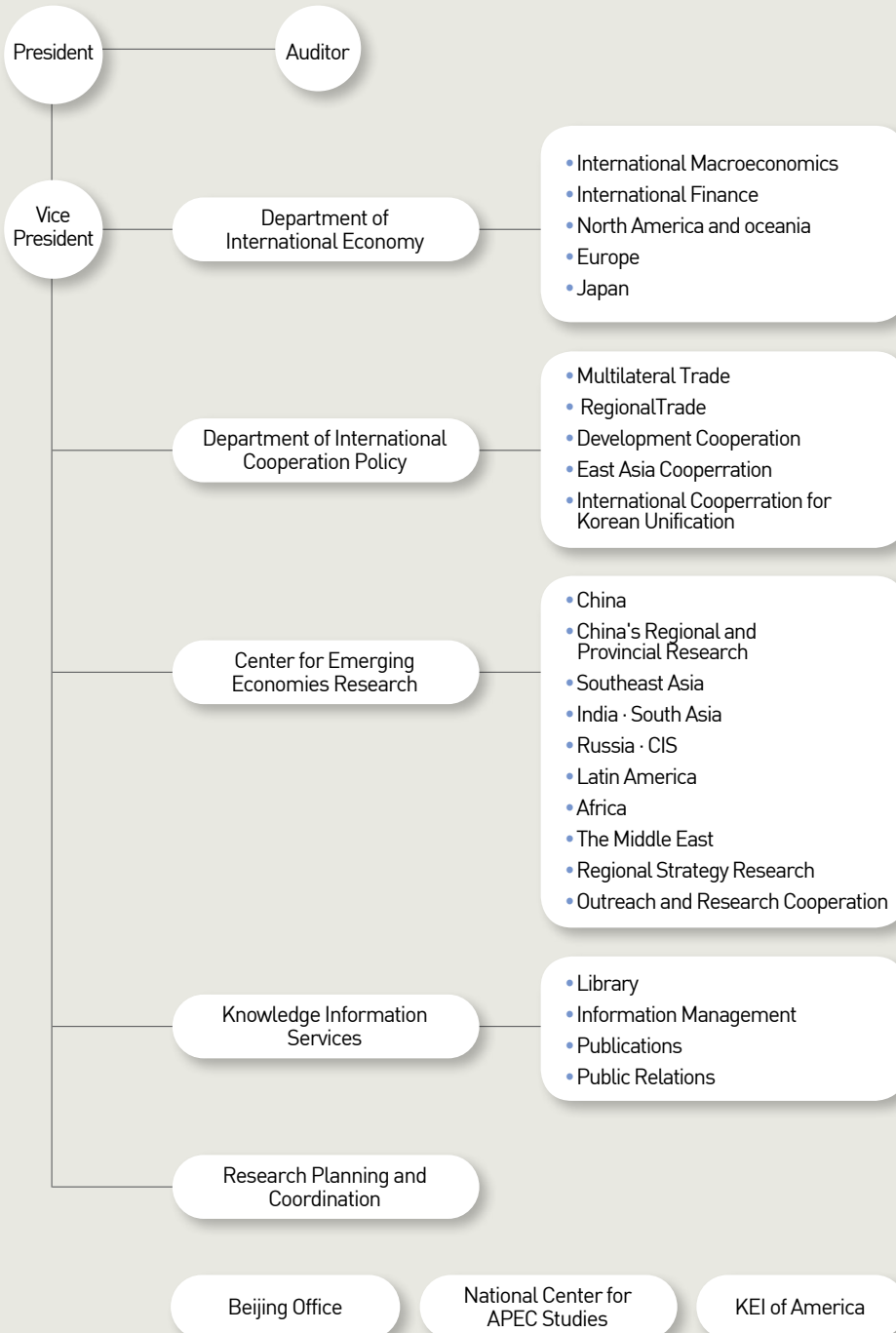


Appendix



A Glimpse at KIEP

● Organizational Structure





A Glimpse at KIEP

● Main Research Focus

Department	Research Focus
Department of International Economy	<ul style="list-style-type: none"> • Current issues related to international macroeconomics and finance • Regional financial and currency cooperation • Exchange rate and foreign exchange policy • Liberalization of financial services and opening of financial industry • Reorganization of international financial system • South-North Korean financial and currency cooperation <ul style="list-style-type: none"> - Research on economic policies and external economic relations of North America as well as Oceania, the European areas, and Japan
Department of International Cooperation Policy	<ul style="list-style-type: none"> • Korean trade policy - export, import, and trade structure • Establishment of an international trade order at the WTO and at multilateral levels • The impact of DDA negotiations and negotiation strategy • Tasks related to the secretariat of the DDA Research Center • Trends in regional trade agreements and the impact thereof • Strategy for the implementation of regional trade agreements • Asia-Pacific economic cooperation and APEC related research • Provision of assistance to the secretariat of the National Center for APEC Studies in the conduct of its work duties • ODA research associated with regional studies, such as aid strategy for each nation and examination of each necessary part
Center for Emerging Economies Research	<ul style="list-style-type: none"> • Study of regional economic trends: Japan, China and Russia, Central and Eastern Europe, Central and South America, Southeast Asia, the Middle East and Africa • The current state of the economic relations of the major regions and their economic relations with Korea • Regional economic policy and institutions, and economic integration • Training of regional specialists and DB project <ul style="list-style-type: none"> - Planning and operation of programs to nurture domestic experts on emerging economies. - Planning and operation of web sites on information for emerging countries (EMERiCs)
Knowledge Information Services	<ul style="list-style-type: none"> • Selecting, gathering, searching as well as managing information data; DB building for information data and holdings; establishment and operation of digital library as well as information systems. • Management of information systems • Making and execution of comprehensive computer information plans; obtainment and operation management of computer equipment as well as application programs. • Publication of research results and management of publication process; editing and publication of researcher PR materials as well as history books; KIEP Webzine arrangement and publication management • Tasks related to public relations, external affairs coordination, online newsletter, and magnifying research results.
Planning and Research Coordination	<ul style="list-style-type: none"> • Project planning, assessment of research projects, seminars, and research services • Personnel, assignment of work duties, document delivery, security, contracts, and assets management • Budgets, accounting, national assembly, board meetings, regulations, insurances, field trips, and audits



A Glimpse at KIEP

● Staff

President	Research staff		Support staff			Total
	Research fellows	Researchers	Specialized staff	Administrative staff	Technicians	
1	43	35	8	10	15	112

Position	Name	Main research field
Vice President	Yeo-Cheon Jeong	Russian & Eastern European Economies (Germany, München University)
Director of Planning and Research Coordination	Heung Chong Kim	European Economy, Economic Integration and Growth (Korea, Seoul National University)
Director of Department of International Economy	Bokyeong Park	International Finance (Korea, Seoul National University)
Director of Department of International Cooperation Policy	June Dong Kim	Trade in Services, FDI (US, University of Chicago)
Director of Center for Emerging Economies Research	Chang Kyu Lee	Chinese Economy (US, University of Pittsburgh)
Director of Knowledge Information Services	Yunsil Kim	Library and Information Science (Korea, Yonsei University)
Senior Research Fellows	Sangkyom Kim	APEC, International Economics (US, University of Pennsylvania)
	Jin Kyo Suh	Agricultural & Resource Economics (US, University of Maryland at College Park)
	Deok Ryong Yoon	International Economics, North Korea Economics (Germany, Kiel University)
	Chang-Jae Lee	Northeast Asian Economic Cooperation, East Asian Economic Integration (France, University of Paris I)
	Hyung-Gon Jeong	North Korean Economy, Transition Economy, Northeast Asian Cooperation (Germany, University of Cologne)
	Myung Chul Cho	North Korean Economy, International Cooperation for Korean Unification (North Korea, Kim Il Sung University)
	Jonghwa Cho	International Finance (US, Washington State University)
	Nakgyoon Choi	Trade Policies, Tariffs, Empirical Studies (US, University of Texas at Austin)
Research Fellows	Yul Kwon	Southeast Asian Economy, Development Cooperation (Korea, Sogang University)
	Kyu Pan Kim	Japan Economy (Japan, Keio University)
	Wolla Park	Chinese Economy (China, Chinese Academy of Social Science)
	Seung-Shin Lee	Chinese Economy (Taiwan, National Cheng Chi University)
	Jae-Young Lee	Russian & CIS Economies and Management (Russia, Moscow State University)
	Junkyu Lee	Macroeconomics/American Economies (US, University of Southern California)
	Chul Chung	International Trade (US, University of Michigan)



A Glimpse at KIEP

Research Fellows	Sung Chun Jung	Japanese Economy, Environment Economics (Japan, Hitotsubashi University)
	In Huh	Econometrics, Financial market (US, University of Rochester)
Assistant Research Fellows	Kang Daechang	Southeast Asian Economy (US, Washington State University)
	Yoo-Duk Kang	European economies, Trade policy (France, Institut d'Etudes Politiques de Paris)
	Kwak, Sungil	Development, Poverty, Public Policy (US, George Washington University)
	Kisu Kwon	Latin America Economy, MERCOSUR (Korea, Hankuk University of Foreign Studies)
	Furong Jin	Chinese Economics (Korea, Seoul National University)
	Young gui Kim	International Trade, Industrial Organization (US, Michigan State University)
	Jong Duk Kim	International Trade, Environmental Economics (US, Michigan State University)
	Tae Yoon Kim	Southeast Asian Economy (US, University of Oklahoma)
	No Suyeon	Chinese Enterprises/Shanghai, JiangSu Province, Zhejiang Province (China, Fudan University)
	Ik Joon Moon	Chinese Economy (China, Tsinghua University)
	Young Ho Park	Africa and ODA (Korea, Hankuk University of Foreign Studies)
	Chan Kwon Bae	Trade and Knowledge Spillovers (US, Indiana University)
	Sherzod Shadikhodjaev	International Law, WTO Law (Korea, Korea University)
	Suh Jeongmeen	Trade and Environment, International Trade (US, Boston University)
	Jiyoun An	Financial Economics, International Finance, Empirical Asset Pricing (US, Cornell University)
	Pyoungh Seob Yang	Chinese Economy (Korea, Hankuk University of Foreign Studies)
	Yoonah Oh	Southeast Asian Economy (US, Ohio State University)
	Sung Hak Yoon	CIS Research, Invest and Development (Korea, University of Yonsei)
	Woong Lee	Economic History, Macro-Labor (US, University of California, Irvine)
	Dong-Eun Rhee	Monetary Policy, Financial Economics, International Finance (US, Indiana University Bloomington)
	Sanghun Lee	Chinese Economy (China, Chinese Academy of Social Sciences)
	Yong Joon Jang	FTA (US, Indiana University Bloomington)
	Jione Jung	WTO, Antidumping rules (US, University of Florida)
	Jihyun Jung	Chinese Economy (China, Chinese Academy of Social Science)
	Mee Jin Cho	FTA, IPR, RoO, Competition Policy (US, Brown University)
	Young Kwan Jo	Central Asia, Russian Economy (Russia, University of Moscow)
	Choong-Jae Cho	India Economy, Service Economy (Korea, Hankuk University of Foreign Studies)
	Pil Soo Choi	Chinese Economy (China, Tsinghua University)
	Ba Ran Han	Middle East Economy (US, Cornell University)
Invited Research Fellows	Bak Soo Kim	EU Research, Trade and Development (France, University of Grenoble)
Total	53	



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- 10-01 4rd KIEP Regional Studies Graduate Student Paper Award-Winning Papers



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Editorial Designed by Jae-Yong Lee

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- APEC • ASEAN • ASEM • International Finance
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- International Cooperation for Korean Unification

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The journal is published every March, June, September and December of each year and submissions are accepted for review on an ongoing basis (no specific deadline).

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