KIEP

Annual Report

2012

KIEP Korea Institute for International Economic Policy

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International Economic Policy

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KIEP ANNUAL REPORT 2012

Korea Institute for International Economic Policy

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.

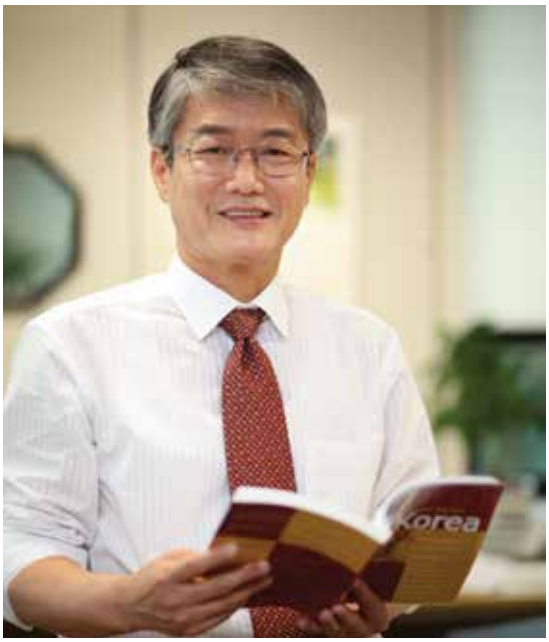
On Publishing The 2012 KIEP Annual Report

The global economy witnessed growing uncertainties in 2012, with the Eurozone fiscal crisis as well as the QE3 and fiscal cliff in the U.S. In the same year, however, Korea surpassed USD 1 trillion in trade, moving past Italy to become the world's eighth largest trading nation. Such achievements take on more significance given that they were made in times when international trade was on a downturn due to the global recession. A closer look at Korea's achievements in global trade show that KIEP's research efforts have made a considerable contribution.

The purpose of KIEP's foundation was to wisely overcome external challenges, especially in the form of sudden changes in the international economy, and to establish the Korean economy's role and standing in the international community. The year 2012 was an especially memorable year, as KIEP played a key role in actively responding to rapidly changing global economic conditions and overcoming economic uncertainties brought about by the global financial crisis. KIEP was also faithful to its role as Korea's leading economic research institute, researching and analyzing the constantly shifting global economic structure and providing economic policy suggestions on the global level along with mid- to long-term strategy proposals.

Thanks to such efforts, KIEP has twice been selected as an outstanding institute, in 2011 and 2012, in the Public Research Institute/Institute Leader Evaluation conducted annually by the Prime Minister's Office. The institute was also designated as Korea's top global think tank in 2012 by the TTCSP (The Think Tanks and Civil Societies Program) of the University of Pennsylvania, proving its reputation as a world-class research institute.

To look at KIEP's accomplishments in 2012 in more detail, the institute examined potential risk factors that could threaten the global economy's sustainable growth in the wake of the global financial crisis, and provided measures to minimize the impact of such risks on the Korean economy; monitored and analyzed economic trends in developed regions such as North America and the EU, providing the background for an in-depth understanding of the cause behind the fiscal crisis and policy responses by nation, and based on this, suggested appropriate policy measures for the Korean economy; made a



timely preparation for the rising number of FTAs, represented by the Korea-EU FTA effectuation and the commencement of Korea-China FTA negotiations, by initiating the research on "Evaluating the Effects of Opening Up the Economy and Response Measures"; conducted significant research that contributed to building the framework for the new administration's foreign economic policy direction, as well as cooperation and response strategies in dealing with major countries.

The KIEP Annual Report 2012 details the many achievements the institute made through expert, in-depth research conducted on diverse subject areas. The report includes basic research conducted by KIEP as well as key research accomplishments and activities carried out in 2012, organized to give a clear, concise overview of the institute's operations. KIEP, as Korea's leading economic research institute, is determined to continue playing an important role in helping the government, in this case the new administration, establish national economic policies. We would appreciate your continued support and encouragement.

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
- Jan. 29, 1999 Applicable Act for institute's establishment amended (Korea Institute for International Economic Policy Act: Law on establishing, operating and fostering government-funded research institute)
- 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
- 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
- 2011-12 Chosen as outstanding institute in Public Organization/Organization Leader Evaluation Awards for two years in a row
- January 2013 Designated as Korea's top global think tank in 2012 by the TTSCP (The Think Tank and Civil Society Program) of the University of Pennsylvania

Overview of KIEP's Projects and Activities

1 Overview of KIEP's 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).

▶ Instances in which KIEP reports were consulted by the government for policy-making projects in 2012

Field	Trade Policies	International cases and policy	Policies on Entering and Investing in Foreign Markets	International Macroeconomics and Finance	Northeast Asia/regional economic cooperation	Environment/ Resource Development	ODA	Feasibility Studies	Other Policy Research Activities	Total
Number of times reports were cited	24	25	22	12	11	5	10	13	10	132

Trade Policies

- Analyzed DDA/WTO trends as well as the economic impacts and spillover effects of the FTA/DDA agreements
- Provided policy support to key sectors in FTA negotiations: Korea-China, Korea-Japan, Korea-China-Japan FTAs and RCEPs, etc.
- Studied ways to maximize and complement FTA benefits: focused on tariff administration, trade adjustment support programs and rules of origin

International cases and policy

- Analyzed international best policy practices on current key domestic issues and associated implications
- Provided risk analysis and countermeasure proposals based on assessment of political and economic changes by region

Policies on Entering and Investing in Foreign Markets

- Conducted comprehensive regional research on emerging markets with high growth potential
- Set directions for economic cooperation with and entering markets of emerging countries, based on analysis of economic policies and industrial structures
- Studied ways to enter target markets by utilizing concluded FTAs such as the KORUS, Korea-EU and Korea-ASEAN FTAs

International Macroeconomics and Finance

- Analyzed international macrofinance trends and policies
- Studied ways to engage in financial cooperation with East Asian countries
- Studied counterstrategies and agendas of issues discussed by global consultative groups (e.g. G20)

Northeast Asia/regional economic cooperation

- Devised policies on economic cooperation within Northeast Asia (Korea-China-Japan, APEC, ASEAN+3)
- Provided basis for Korea's stance toward regional economic cooperation and attended/supported related conferences
- Analyzed key issues affecting North-South economic relations and established policies based on future prospects

Environment/Resource Development

- Analyzed international environment treaties and environmental policies of major countries, and devised domestic counterstrategies
- Proposed project initiatives for overseas development utilizing environmental policies
- Proposed measures on developing overseas resources and supporting the plant construction sector in entering overseas markets

ODA

- Evaluated ODA policies and proposed measures to strengthen capacity
- Studied measures on raising Korea's national status through ODA provision
- Analyzed ODA trends and case studies to suggest implications for Korea

Feasibility Studies

- Conducted feasibility studies for government agencies and local government bodies
- Assessed economic feasibility of hosting international conferences

Other Policy Research Activities

- Analyzed other international economic issues and prepared countermeasures
- Supported government's international negotiation activities
- Carried out policy services for multilateral organizations (OECD, ADB, AfDB, etc.)

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.
- Since 2011, a portion of the above materials are being published in English so as to improve the international standing of the Korea Institute for International Economic Policy (KIEP).
- KIEP's Beijing Office has been publishing a newsletter titled "Current Issues of the Chinese Economy", and has also issued in-depth reports titled "Provincial Economic Trends in China" and "Introductory Report of China's Provinces".
- 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

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

- Asian Economic Panel (AEP): Hosted the first (Mar. 22-23, Seoul), second (Sept. 10-11, Sweden) and third (Oct. 5-6, Japan) international conferences for the AEP
- Asian Economic Paper: Issued three times a year by the MIT Press, and in 2012 consisted of the Winter/Spring 2012 (Issue 1), Summer 2012 (Issue 2), and Fall 2012 (Issue 3) issues
- Issued academic journals, formed/operated panels and hosted international conferences for relevant discussions
- Enhanced standing as research institute and contributed to academic development by strengthening networks with world's top scholars and publishing economic journals on the Asian economy

Expansion and Upgrade of the KIEP Macro-econometric Model

- Used the Oxford Economics Global Model in the 2013 World Economic Forecast
- Designed an empirical testing model to calculate balanced exchange rates, and used this to assess whether the KRW real exchange rate is overvaluated
- Expanded research manpower in 2012 by allocating multiple researchers per each sector
- Reinforced research capacity by encouraging researchers to participate in educational programs, and by hosting in-house seminars and writing up model manuals
- Enhanced capability of research staff to handle and operate models
- Enabled analysis of whether the KRW exchange rate is being overvaluated, this model expected to be further utilized

Comprehensive Research on Trade Liberalization

- Provided negotiation strategies and countermeasures in preparation for WTO/DDA and FTA negotiations
- Published papers such as "A Study on Systemic Issues of WTO Governance and Korea's Policy Options" and "Public Awareness on the Korea-China/Korea-Japan FTAs and Policy Implications" as a result of commissioned research
- Invited domestic and foreign scholars, policymakers and working-level experts specializing in trade liberalization to make presentations on relevant topics and hold discussions
- Requested commissioned research to widen network with domestic researchers specializing in international trade
- Supported WTO/DDA negotiations by attending government meetings and business trips to Geneva, Switzerland
- Held seminars targeting the general public on current issues such as the Korea-China FTA
- Contributed to setting policy directions for the government in preparation for the WTO/DDA and FTA negotiations
- Established channels for exchanging information and formed networks among domestic and foreign institutes and researchers
- Provided the basis for gathering public consensus on opening up the domestic market, for instance in the WTO/DDA and Korea-China FTA negotiations

National Center for APEC Studies

- Held a workshop on the topic of rules of origin as part of the capacity-building program for APEC's regional economic integration
- Attended APEC-related conferences and provided support to the government
- Joined the ASCC (APEC Study Centers Consortium) to analyze research trends by sector with a focus on priority agendas for 2012
- Issued the APEC Study Series
- Held two rounds of APEC expert pool meetings with the aim of discussing ways in which Korea can significantly contribute to APEC projects as well as areas expected to reap tangible results
- Managed the ASCC website, published e-newsletter and formed plans for a webzine
- Held three rounds of the KOPEC Asia-Pacific Strategy Forum
- Attended the PECC executive committee conference call

- Hosted the PEO Structure Subcommittee Meeting and CTPECC, both PECC projects, and attended related seminars
- 2012 State of the Region: Conducted SOTR survey
- Represents Korea on the PECC standing committee and at the PECC-SINCPEC Conference
- Conducted APEC-related research through basic policy studies and commissioned research
- Issued APEC/PECC Korea e-Newsletter
- Provided support to the government for the 2012 APEC Summit, Trade Ministers' Meeting and Senior Officials' Meeting
- Hosted APEC expert pool meeting
- Attended ASC international conference
- Utilized and improved the APEC website
- Expanded APEC-related research by overseeing and conducting relevant studies, and holding symposiums
- Reviewed outcome and tasks of the APEC Summit and key relevant meetings, and discussed ways to enhance Korea's position within APEC

KIEP-Trade Model and the Establishment of a Trade DB

- Conducted one ad-hoc task on the reanalysis of the Korea-China FTA's economic impact, held two seminars, including one on Korea's trade and logistics in 2012, and 12 commissioned tasks including an analysis of the economic effects of RCEPs (Regional Comprehensive Economic Partnership)
- Purchased the GTAP DB and Fortran programs to effectively utilize the Dynamic CGE Model
- Conducted 16 cases of research using trade models
- Attended educational session for GTAP and GAMS (one GTAP session, two GAMS sessions) and held an expert pool meeting (one session)
- Built an extensive trade-related DB with the support of interns
- Actively responded to diverse policy demands by running the CGE model (analyzed economic effects of diverse discussions regarding regional integration such as the Korea-China FTA, Korea-China-Japan FTA, RCEP, etc.)
- Encouraged discussions on future research plans, supported by a better understanding of the GAMS basic model and the expert pool meetings and educational sessions on using the GTAP DB on the GAMS model

Strengthening the East Asian Research Network

- Discussed challenges in regional economic cooperation and integration within East Asia, by inviting key figures from similar foreign research institutes to international seminars and conferences on major issues in the area, hosted by KIEP
- Posted a total of 1,718 (aggregate) papers related to East Asia's economic cooperation and integration on the English website as of the end of 2012, and used these to share and promote views on current issues and as reference material for research
- Enabled the government and academia to share key issues and hold in-depth discussions on regional integration in East Asia by hosting international seminars, for instance the Nagoya International Conference on Economic Integration and Industrial Globalization in Asia and the EU-Korea and Economic Integration of East Asia Conference
- Posted reports on key trends in East Asia's regional economic cooperation and East Asia's FTAs, and from 2013, resumed posting the World Economic Update (KIEP current issue research) that deals with East Asian issues
- Improved chances for strategic cooperation by building overseas human networks and increasing research exchanges
- Heightened KIEP's standing in economic cooperation with Northeast and East Asia by enabling foreign research institutes and researchers to easily access high-quality data

Analysis and Forecast of World Economic Trends

- Published 101 current issue research papers in 2012 (World Economy Today, 29 / Regional Economic Focus, 42 / Provincial Economic Trends in China, 16 / Introductory Report of China's Provinces, 11 / World Economy Update, 3)
- Published JEAI Vol.1-4 in 2012
- Published World Economy Forecast
- Department of International Economy held 19 rounds of meetings on economic trends
- Center for Emerging Economies Research held 22 rounds of meetings on economic trends
- Published World Economy Today, Regional Economic Focus, Provincial Economic Trends in China, Introductory Report of China's Provinces, and World Economy Update
- Started translating the Journal of International Economic Policy Studies into English (title changed to Journal of East Asian Economic Integration)
- Listed on the EconLit DB of the American Economic Association

- Published the JEAI (Journal of East Asian Economic Integration), a quarterly economic journal issued on the 30th of March, June, September and December every year
- Built JEAI database and journal distribution channel (undertaken by Sonjo, an IT solution company, which builds a user website and metadata DB for JEAI)
- Provided in-depth analyses of the world economy, ultimately contributing to government policy formation and knowledge-building among financial officials
- Research information was widely disseminated through major academic DBs and portals
- Enhanced utilization of research papers on the international economy and regional economies through international standardization
- Formed economic forecasts for major countries and analyzed key global economic issues through the Economic Outlook TF
- Analyzed global economic trends and reinforced response capabilities through biweekly trend meetings

Korea's Official Pool of International Economists (KOPIE)

- Held 71 expert pool seminars hosted by 25 research teams, such as the international macroeconomic research team and the macro-model/exchange rate research team
- Listed on website the presentation material and work reports discussed by each research team
- Provided support for international conferences upon government request
- Held quarterly meetings involving a pool of experts, comprised of 436 economic experts divided into 25 research teams by sector
- Enabled swift responses to global economic issues
- Provided the expertise of international economists for major international negotiations

Research Exchange with Concerned Foreign Organizations

- Special leave of absence: Utilized special leave of absence system for Ph.Ds to help them improve research capabilities and strengthen human networks at other research facilities
- Dispatch training
- Job performance enhancement training: Built research capacity by conducting domestic and overseas training and education programs for developing knowledge, technology and application capabilities relevant to job duties

- Built and sustained research cooperation networks with internationally renowned research institutes, with the purpose of creating international economic policies and visions conforming to the global era, based on in-depth analyses of global economic changes, domestic economic and social conditions and economic forecasts
- Sought to introduce an global and advanced perspective to research papers, through research exchanges with world-leading research institutes
- Contributed to enhancing Korea's national image by promoting the global economy, and by providing support to overseas projects undertaken by domestic companies

Mid- and Long-term Trade Strategy Research

- Published three Korean volumes and one English volume of compiled reports
- Process involved literature studies, statistical analyses and industry-academia joint research
- Conducted comprehensive analysis on and evaluation of international changes since the global financial crisis
- Benchmarked cases of developed countries so as to recover from economic recession and to provide new policy measures, and used this to propose the future direction for Korea's trade strategies

Regional research network strengthening business world

Fostering World Regional Experts

- Offered expert courses on the Russian Far East and Southeast Asia, and intensive courses sorted by issues in Indonesia and Malaysia
- Conducted preliminary research by gathering press releases, research reports, relevant institute reports on emerging economies (target countries for education) / Held expert meetings to decide on final selection of target countries following discussions between KIEP research staff and outside experts
- Designed the domestic education curriculum to be based on a general understanding of the relevant country, and then to build on this understanding by exchanging information and learning about key industries and recently emerging issues
- Formulated local training program schedules with the active cooperation of local agencies and diplomatic offices

- Provided information on emerging economies that have gained importance in terms of economic cooperation but are lacking in terms of the available information or data
- Trained SME management and staff as well as small business owners to become regional experts, and reinforced support to SMEs entering overseas markets
- Formed a cooperative network with the private sector and relevant public agencies to expand the basis for regional studies

Visiting Scholar Programs

- Offered a visiting scholar program
- Targeted scholars and experts affiliated with research institutes in emerging countries (10 participants)
- Visiting scholars were selected through a screening process within KIEP
- Reinforced exchanges between KIEP research staff and visiting scholars through a mentor system
- Strengthened research capabilities and improved quality of KIEP's research on emerging economies by inviting scholars and experts working in relevant areas to share research findings and information as well as form a close human network
- Promoted KIEP to overseas research institutes and researchers in emerging economies, cementing the institute's position as the 'center of research on emerging economies' and a 'global think tank'
- Published and distributed yearly issues of the 'KIEP Visiting Scholar's Paper Series,' helping promote research papers

Expanding Cooperation with Domestic and Overseas Regional Research Institutes

- Concluded seven MOUs
- Sought out leading research institutes in emerging countries and discussed and concluded MOUs after internal review and approval
- Shared new information and research findings by region through the establishment of a cooperative system connecting MOU-partner agencies and relevant institutes in Korea and in other countries
- Provided the basis for inter-agency cooperation and human exchanges by continuing to make mutual visits over the long term

EMERiCs

- Operated the EMERiCs website, which is based on a database consisting of information on the trends, key figures, academic material, business and statistics of 73 emerging economies with high growth potential
- Formerly the 'Information Portal on Emerging Countries,' the name of the website was changed to 'Comprehensive Portal on Emerging Regions'
- Consecutively built specialized sections for each region, starting with the opening of the India/South Asia and Southeast Asia sections (April 2012), and moving on to Russia/Eurasia, Africa/Middle East, Central and South America and Central and Eastern Europe
- Serves as the hub for information on emerging regions, as the only portal site that offers comprehensive search functions and at the same time covers all emerging regions
- Upgraded search functions to enable one-stop information searching, by grouping content provided by relevant institutes into regional and national categories
- Expanded potential user base by providing distinctive content on emerging regions, obtained from subscription-based information sites
- Stabilized operation of expanded/restructured website
- Reviewed contents, functions, design
- Expanded domestic and foreign information sources through business agreements
- Linked projects on reinforcing networks for regional research on the global level with other projects on regional research
- Maximized project effectiveness through the online distribution of offline project results
- Encouraged on- and offline exchanges by hosting offline seminars
- Facilitated wider participation by experts, reinforced specific regional contents, and promoted website
- Enabled the extensive accumulation and distribution of information and analyses on regions with high growth potential (India/South Asia, Southeast Asia, Russia/Eurasia, Africa/Middle East, Central and South America, Central and Eastern Europe), for further utilization in policy formation and by domestic companies entering overseas markets

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

- Policy research on Korea-US relations and issues on the Korean Peninsula: Drafted the Working Paper Series, Special Report, and Annual Report on Korea-US Relations led by students taking the SAIS masters course
- Conducted joint research on the North Korean economy
- Drafted US-Korea Annual Report
- Project on building Korea-US human and intellectual networks: Established and expanded Korea-US intellectual network through discussion panels, symposiums and cultural events attended by Korea/US foreign affairs experts, former and incumbent officials, experts and scholars (both open and closed seminars held due to the unique circumstances of Washington and the sensitivity of certain issues)
- Worked to expand research basis by increasing number of Korean studies majors
- Utilized foreign affairs and intellectual networks by inviting lecturers, for instance former and incumbent State Department officials and US experts on Korea
- Studied ways to mobilize human resources through the expansion of Korean studies majors
- Held Korea-US expert discussions through the Visiting Scholar Program, High Level Discussion and Policy Dialogue Program
- Contributed to increasing favorable public opinion following the rising number of US experts specializing in Korean issues
- Contributed to the development of Korea-US relations
- Boosted academic research on Korea within the US and vitalized intellectual networks

Joint Training of Regional Specialists through Graduate Schools of International Studies

GPAS

- Reviewed and confirmed 2012 operating plan
- Reviewed 2011 operating plan (including external audit)
- Reviewed 2012 first semester operating results and second semester operating plans
- Jointly operated programs on expanding regional research with eight graduate schools of international studies on 18 regions (four full package programs, 14 special package programs)
- Reviewed and confirmed operating plans for each graduate school

- Conducted review and external audit of operating results (once a year)
- Reviewed and confirmed other key issues

Regional Research Thesis Contest

- 5th Thesis Contest: Awarded five winners in total, including one for first place, two for outstanding, two for encouragement, published collection of dissertations and held awards ceremony
- Promoted 6th Thesis Contest
- Judged and awarded 5th Thesis Contest
- KIEP ventured beyond regional research focused on certain areas and instead fostered comprehensive regional experts covering diverse regions.
- KIEP met research demand from government agencies and educational institutions, and expanded regional research in graduate schools of international studies managed by the institute.
- KIEP actively responded to changes in the global landscape, provided sustainable national development strategies by analyzing policies in other countries and contributed to the globalization of the Korean economy by supporting companies entering overseas markets.

Support for the Establishment of a Northeast Asian Development Bank

- Held video conference to discuss multilateral development banks and the Northeast Asian Bank for Cooperation and Development (NEABCD)
- Held workshop on intra-regional financial cooperation
- Held 21st Annual Northeast Asia Economic Forum
- Submitted comprehensive report on the establishment of the NEABCD at "The Track II Meeting on Northeast Asian Cooperation"
- Invited key figures from government agencies and similar research institutes in Korea, China, Japan, Mongolia, Russia, the US and EU to hold international seminars and workshops on finding the right direction for the NEABCD and to discuss economic integration in Northeast Asia
- Promoted the necessity and feasibility of establishing the NEABCD
- Concluded the justifiability of and appropriate direction for establishing the NEABCD
- Reinforced research networks with cooperating institutes, and increased access to material used in basic reach and external research staff

Studies in Comprehensive Regional Strategies

- Published 24 volumes of research papers and materials discussing the politics, economies, industries and resources of India, Southeast Asia, Russia, Mongolia, Central Asia, Africa, Central and South America and the Middle East
- Published 39 contest-winning theses in the form of four collection volumes
- Built network by inviting foreign experts on regional research and economics through a short-term visiting program
- Concluded MOUs with research institutes in Kazakhstan, Turkey, India and Sri Lanka
- Hosted and supported 19 rounds of seminars held in Korea and other countries
- Conducted joint research for in-depth papers with the participation of Korean and foreign scholars and experts
- Raised interest in relations with emerging economies by hosting contests and commissioning research in diverse areas of regional studies and publishing collections of dissertations
- Built an extensive database covering a wide scope of topics, such as industries, businesses, resources and economic policies, in key Asian countries and regions including India, South Asia, Southeast Asia and Central Asia
- Concluded MOUs with major research institutes
- Provided venues for experts from Korea and emerging economies to exchange research findings and information by holding regular international seminars
- Reinforced Korea's international economic policy research capabilities by largely expanding comprehensive and in-depth research on emerging regions
- Established network shared between domestic and foreign regional researchers

Regional and Provincial China Research Division

- Concluded cooperative MOUs with seven institutes as of December 2012 with the purpose of forming an effective network with major research institutes in China
- Held three international seminars and one seminar targeting the domestic audience on key issues related to China's regions and provinces
- Operated the China Specialist Forum (CSF), the largest, most sophisticated domestic portal specializing in the Chinese economy which combines information and human networks
- Focused on providing information on China by topic, running special bulletin boards dealing with matters such as the 20th anniversary of Korea-China diplomatic relations and China's 12th Five-Year Plan
- Operated a website for the research team specializing in China's provinces and regions (http://csf.kiep.go.kr/cprg) and provided up-to-date information on China by region
- Undertook external activities upon the request of outside clients in need of regional information on China
- Operated a research team exclusively dealing with relevant topics
- Built a network with domestic and foreign researchers
- Supported policy-making in relevant government agencies by providing in-depth research on China on both the provincial and regional level
- Helped Korean companies enter the emerging Chinese market
- Improved the response system to China-related issues by running the CSF website and the website for the provincial/regional research team

Research Assistance

Information Management

- Operated the Digital Library
- Collected information material
- Managed data
- Contributed to economic development by providing research information necessary in devising international economic policies for the Korean economy
- Provided basic information to researchers working in the field of international economy by gathering relevant information in a swift, comprehensive manner, allowing for the production of up-to-date research findings

Operation of Computerized DB Systems

- Shared database information by improving the KINIS knowledge information system
- Provided access to research findings online, and created a user-friendly website
- Strengthened information security and personal information protection
- Carried out maintenance on computers and other electronic equipment
- Prevented overlapping research, produced high-quality findings and flexibly responded to organizational changes by accumulating and sharing research-related knowledge and information
- Heightened public understanding of economic policies and developed tasks based on user opinions
- Maintained system security and continuity by strengthening information security functions
- Enhanced research efficiency by improving data processing infrastructure

Publications

- Published material on current issues, research papers and periodicals
- Managed the dissemination and copyrights of research findings
- Distributed and managed publications
- Contributed to the development of international economic policies for the government, academia and businesses, as well as to the formation of public opinion, by providing diverse publications suited to the purpose of the research findings
- Contributed to enhancing the role and status of researchers by facilitating research activities and publishing research findings

Public Relations

- Maximized the promotion impact of research findings by focusing on efficiency when providing information and conducting promotional activities in a strategic, comprehensive manner
- Promoted KIEP projects and research findings through new media such as QR codes, Bizring (ringback tone) and applications
- Strived to provide tailored information and to make information providing more efficient by categorizing KIEP clients online and conducting customer approval surveys
- Implemented strategic PR plan, by conducting aligned promotional activities across the media, including newspapers, television and the internet, and holding preliminary discussions among departments and teams
- Raised overseas recognition levels of KIEP by expanding overseas distribution of research findings
- Spread communication channels by taking a strategic promotional approach toward new media
- Further expanded research findings by reinforcing online client management
- Maximized promotion impact by designing project-based report strategies as well as promotional strategies
- Contributed to increasing overseas usage of research findings by upgrading overseas promotion activities

Research Planning Business

- Key Agenda
  - Conducted demand surveys on research projects
  - Ran a research adjustment/evaluation committee
  - Ran a research consultation committee
  - Ran a task selection committee
- Business Procedure
  - Planning/selection: Selected a timely issue for a research project and conducted demand surveys
  - Adjustment/management: Efficiently managed research projects by analyzing progress and performance and through the allocation and adjustment of research resources
  - Conducted basic surveys and demand surveys, held working-level policy research conference, task development/selection committee meeting and KIEP research consultation committee meeting
  - Evaluated research tasks to improve research performance and quality
- Desired Effects
  - Enabled professional, systematic research management by carrying out research projects in an efficient manner
  - Contributed to systematic, efficient research activities and to quality improvement
  - Appropriately concentrated research capacity through the efficient planning and adjustment of research projects
  - Enabled the production of competitive research findings and improved policy reflection levels

Management of Foreign Offices

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

- Contributed to developing Korea-US relations through the Korea-US Opinion Leader Seminar, which was attended by key figures from the press and businesses as well as former high-level public officials and politicians, and involved private discussion meetings, presentations and frank opinion sharing among panelists
- Hosted nine rounds of the Academic Paper Series
- Hosted ad-hoc programs on diverse topics
- Hosted or participated in seminars and programs held in the US and dealing with Korea or Asia, collected relevant material and sent or reported an analysis of the material to KIEP
- Held numerous Korea-US expert discussion meetings
- Hosted forums in diverse formats, sometimes taking nationwide tours in the US, and gathered opinions from US government officials, diplomats in the US Korean embassy, etc.
- Contributed to strengthening Korea-US ties
- Made Korea's economic circumstances known in the US, according to national interest, and served as a bridge for bilateral negotiations and enhancing mutual interest
- Further expanded the intellectual network in the US
- Contributed to increasing public awareness of the Korean economy in the US by forming positive public opinion and enhancing Korea-US relations

KIEP Beijing Office

- Published 24 issues of the "Current Issues of the Chinese Economy"
- Hosted six rounds of the Korea-China Economic Forum
- Supported seminars such as the economic cooperation seminar between Korea and China's three northeastern provinces
- Engaged in research networking activities (60 with China, 90 within Korea, four with others)
- Provided supporting activities for KIEP (60, including 24 business trips), the government (12), the private sector (29) and the press (18)
- Conducted promotional activities related to the Korean economy by sending out the "Korea Eco-

nomic Bulletin" (11 times), writing reports for international bulletin boards (on issues concerning the global and Korean economies in 2011), through the interview by Yang Pyeong Seob, Head of the KIEP China Team, for China's "Legal Daily", the interview by KIEP President Wook Chae for "China Business News" on Korea's East Asian cooperation policies, etc.

- Drafted and distributed reports on China's current economic issues
- Hosted the Korea-China Economic Forum
- Maintained and utilized pool of Chinese economic experts
- Maintained and utilized pool of experts on the Korean peninsula
- Provided preparation and on-site support for international seminars
- Contributed to improving effectiveness of China-related policies by providing objective, timely information
- Supported domestic research on China by strengthening Korea-China research networking
- Helped enhance national image by promoting the Korean economy

International Seminars

- Hosted a total of 38 international seminars, and supervised large international seminars such as the "2012 KIEP CEER International Conference" and the "Asia Economic Community Forum"
- Hosted international seminars on international economic issues with world-leading research institutes and organizations such as the ADB, IMF, PRI, AMR, Nottingham University, etc.
- Devised optimal strategies for Korea by gathering opinions from international organizations and foreign experts on key policy issues

Policy Discussion Meeting

- Hosted three rounds of policy discussions and conferences
- Hosted seminar participated by experts from government agencies, academia, research institutes and industries
- Devised optimal strategies for Korea by gathering opinions from various experts on key policy issues

II

Review of 2012 Projects

1 Research Trends in 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 polices 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

- Economic Effects of Trade on Employment and Value Added
- The Analysis of the Factors for the Stalemate of the Doha Development Agenda Negotiation and Implications for its Completion
- The Impact of Free Trade Agreements on Economic Performance in Korea
- Empirical Analysis of Trade Liberalization: The Benefits to Korean Consumers
- A Study on Interaction between Economic Openness and R&D Policies
- Korea's Green Growth Policy and Multilateral Trade Rules: Harmonization Issues and Policy Implications
- Designing New Climate Change Regime: A Unified Approach for Mitigation and Finance Mechanisms
- Effects of Government Debts on Sovereign Credit Rate
- Macroeconomic Policies during the Global Financial Crisis: Lessons and Policy Implications
- Effective FX-hedge Policy Using Financial Market
- Impacts of Large Disasters on Macroeconomy and Financial Markets
- Causes of the European Debt Crisis and Reform of the European Governance
- Trilateral Economic Cooperation: Proposal for Enhancing Economic Cooperation Dialogue Channels among China, Japan, and Korea
- The Least Developed Countries: Key Challenges and the Way forward for Korea's Development Cooperation
- Japan's Economic Cooperation with China in the Era of G-2 and Its Implications for Korea
- China's Urbanization: Consumption, Construction and Risks
- R&D of Chinese Firms: Characteristics and Implications

- The Reinforcement of Economic Cooperation among China-Taiwan-Hongkong and its Implications
- Russian ODI and FDI promotion strategy of Korea
- Korea's Development Cooperation with the Mekong Region Countries
- Southeast Asian Labor Migration to Korea: Origin-Country Factors and Policy Implications
- Economic Cooperation between India and Selected Asian Countries: Current Status and Policy Implications
- How to Promote Economic Cooperation with Resource-abundant Andean Countries: Focus on Venezuela, Ecuador, and Bolivia
- Cooperation with the Middle East after the Arab Spring: Circumstantial Changes and Implications
- Trends in the African Construction/Plant Building Market and Implications for Korea
- The Current Situation of Marketization in North Korea and Prospects for Change of its Economic System

Economic Effects of Trade on Employment and Value Added

Nakgyoon Choi and Chin Hee Hahn

Recently, the production processes from material procurement to marketing have been split up into many stages and the value added from the production was divided among various countries. We need to approach the international trade in terms of value added rather than gross value. This study investigates the share of employment and value added of each industrial sector, utilizing the World Input-Output Tables and the Socio-Economic Accounts.

In the Korean case, notably, the employment share of the industrial sector has changed rapidly, compared to exports and the value added. When we analyze the correlation among export, employment, and value added, it turned out that manufacturing export and employment are correlated by -0.82 which is statistically significant. However, the correlation between export and value added is not statistically significant, while the statistical relationship between value added and employment is not supported by the data.

This study also analyzes the effects of final demands such as export, investment, and consumption on the value added, based on Meng et al.(2006), WTO and IDE-JETRO (2011), Stehrer (2012), Stehrer et al.(2012). The results indicate that the share of value added induced by export to the total value added has increased since 1996, while the value added inducement coefficient of export has decreased consistently.

When we investigate the effects of final demands such as export, investment, and consumption on employment, it yields similar results to the value added. It turned out that the share of employment induced by export to the total employment has increased steadily, while the employment inducement coefficient of exports tended to decrease during the period from 1996 to 2009.

Utilizing a plant-level panel dataset on Korean manufacturing, this study estimates the effects of exporting on the relative employment and wage of the skilled workers, as well as on the absolute levels of employment and wages of the skilled and unskilled workers. We find clear evidence that exporting increases the employment and wages of both skilled and unskilled

workers, which implies labor reallocation from less productive, domestically-oriented producers to more productive exporters.

More importantly, we also find that exporting increases the relative demand for skilled workers. Specifically, exporting is found to increase both the relative employment and wage of the skilled workers, with the former effect more pronounced than the latter. The results found in this study are broadly consistent with the view that trade liberalization brings about not only benefits but also costs: the increased disparity between skilled and unskilled workers in the labor market outcomes.

This study also investigates the determinants of trade in value added, after analyzing the trade in value added of 40 countries and 35 industries contained in the World Input-Output Tables. Specifically, it incorporates the gravity model, the Heckscher-Ohlin model, and the Ricardian model to explain bilateral trade as a dependent variable. It applies the panel data methodologies including the least squares dummy variable, the unequally spaced panels with AR1 disturbances, the Heckman's two stage approach, and the Poisson Pseudo Maximum Likelihood.

The empirical results indicate that the test statistics have improved substantially when we take into consideration trade in value added as a dependent variable, compared to trade in gross value. It is because the gravity model was used to include the GDP into the right-hand side of equation as an explanatory variable. The net value such as the GDP can explain the value added better than gross value.

According to the results for Korean trade, the higher the share of high-skilled persons to the total employment is, the more the trade in value added tends to increase. In addition, the medium-skilled products turn out to occupy a greater portion of the current Korean trade than the high-skilled products, while the share of value added to trade tends to decrease steadily.

This study provides the following policy implications for the Korean economy. First, Korea needs to prepare employment policies that considers the fact that the effects of trade on employment may differ by the skill levels of labor. Second, Korean export strategies need to focus on the products with a high share of value added, strengthening the competitiveness of material and intermediate goods in case of the industries with a low value added inducement coefficient. Third, the globalization process in general strengthens the case for active labor market policies, such as re-training and re-education, in order to ease the adjustment burden of those who become unemployed. Fourth, it is also necessary to strengthen, and improve the effectiveness of, the social safety net in general. This approach is considered to be better than strengthening the trade adjustment assistance (TAA) program, which target only workers displaced by FTA-related increased import competition, and hence discriminates against those who become unemployed due to other causes. Finally, given the interdependence among exporting, innovation, skill upgrading, and the disparity between skilled and unskilled workers, the policies related to the employment and technology development at the industry level, in particular, should be closely linked to the strategies aimed at upgrading the trade in value added.

The Analysis of the Factors for the Stalemate of the Doha Development Agenda Negotiation and Implications for its Completion

June Dong Kim, Jin Kyo Suh, Backhoon Song, and Dukgeun Ahn

The Doha Development Agenda (DDA) negotiation which was launched in November 2001 has been at stalemate for more than eleven years. As many empirical studies has shown, the progress of the multilateral trade liberalization is crucial for the continuous growth of the global economy. The stalled DDA is expected to impede on the continuous growth of the world economy.

Against this backdrop, this study intends to analyse the factors which have led the stalemate of the DDA negotiation and to present some implications for its completion. In particular, this study tries to analyse the delaying factors in the three major market access areas, namely, agriculture, non-agriculture market access (NAMA) and services. And this study aims to present some international cooperation plans as Korea alone cannot solve the problems.

The overall reasons that the DDA negotiation has not been progressed are as follows: Firstly, the US has not shown its political leadership. President Obama has not delivered his leadership in international trade policies under the circumstances that his approval rating has been falling.

Secondly, In the EU where its member nations have suffered the fiscal crisis, the economic conditions do not support the policies for market opening and reduction of subsidies in the agricultural sector. Thirdly, FTA as a substitute for the DDA negotiation has been proliferating. As major member countries are actively pursuing FTA negotiations, the effectiveness of the DDA negotiation with regard to market opening is declining.

Meanwhile, if we analyse the delaying factors in the three key market access sectors, the agricultural sector can be divided into domestic supports and market access areas. In the domestic supports, developing countries are confronting with the US in that excess benefits are given to the US. In the market access area, special products and special safeguard mechanism for the developing countries are the key issues. In particular, it is accepted that special safeguard mechanism is necessary, but India is confronting with the US and EU on its conditions for exceeding the UR concessions.

In NAMA, the sectoral liberalization is the major issue. And on this issue, whether China will participate or not is the key. The participation of the emerging developing countries such as China is crucial to reach the critical mass in order for the sectoral liberalization to be taken into effect. China is opposing the mandatory participation, arguing that the participation in the sectoral liberalization must be on the voluntary basis.

In the service sector, the developing countries do not have interests in the multilateral liberalization negotiations due to their worries about the possible market failures. Accordingly, the trade-off negotiations have not been tried. Furthermore, the lack of progress in agriculture and NAMA also affect the service negotiation. This is because that the deadline of the submission of the second revised offers is linked to the deadline of the modalities of agriculture and NAMA.

Under these circumstances two scenarios can be considered as the overall international cooperation plans for the completion of the DDA negotiation. For the optimistic scenario, it can be proposed that duty exemptions be provided to the LDCs' products as well as the trade facilitation issue be linked to the aid for trade. In addition, IT service agreement can be proposed because it can be considered as a precondition for the success of the ITA II negotiation.

As the pessimistic scenario, in the market access side, it can be considered to adopt the most conservative version among the various proposals put forward so far in the goods area and also to adopt the revised offers in the services area which have been submitted since May 2005. In addition, as a way to alleviate the oppositions from the developing countries, the linkage between trade facilitation and the aid for trade as well as the duty-free and quota-free treatment for LDCs can be considered. As the compromise plans in the major sectors, firstly in the agricultural sector, it can be summarized as developing countries accept the position of the US in the domestic supports while they can attain concessions from the developed countries in the area of special products and special safeguard mechanism.

In NAMA, the US and China should agree on the sectoral liberalization negotiations. For example, the US can have China participate in one of the sectors which it prefers and instead the US should participate in the negotiation for the textile and clothing and allow China can select another sector voluntarily. Otherwise, it can also be considered to conclude the NAMA negotiations abandoning the sectoral liberalization negotiations since the benefit by doing so will still be greater than the loss from the failure of the overall NAMA negotiations.

In the service area, it is inevitable that its progress is tied with the progresses in the agriculture and NAMA. In the service area alone, it is necessary to have enhanced prudential regulations and pro-competitive regulations in order to alleviate the worries of the developing countries about the possible market failure. As a method of attaining this objective, a 'services knowledge platform' has been proposed, where sectoral regulators, trade negotiators and interest groups can discuss the assessment of the current policies and possible reforms to bring benefits.

The Impact of Free Trade Agreements on Economic Performance in Korea

Chankwon Bae, Jeong-Gon Kim, Hyeyoon Keum, and Yong Joon Jang

Korea has steadily expanded its FTA network since the Korea-Chile FTA in 2004. Currently, Korea has FTAs with 45 trading partners including the world's top three economic blocs, the U.S., EU, and ASEAN plus India. It is expected that nearly half of Korea's total trade volume will be carried out with its FTA partners, taking into account of the Korea-China FTA, under current negotiation.

This study sheds light on the economic impact of FTAs in Korea, focusing on the agreements with Chile, Singapore, ASEAN, and EFTA. In particular, the study aims to identify how the FTAs affect exports and imports, outward and inward FDIs, and productivity and employment as the channels through which they ultimately lead to economic growth in Korea.

The findings from this study are as follows: first, the FTAs have promoted trade between Korea and its FTA partners by fostering closer bilateral economic relations as well as reducing bilateral tariff rates. Korea has diverted its suppliers of raw materials and capital goods to its various partner countries such as Chile, ASEAN, and EFTA through the FTAs.

Second, the number of firms, particularly SMEs, that newly enter the export market has rapidly increased since the FTAs, and the new entrants and SMEs experienced a higher export growth rate than the existing large exporters during the post-FTA periods. Hence it is revealed that the FTAs have played a significant role in the extensive margin of exports.

Third, there has been an upsurge in overseas investments made by Korean companies through the FTAs. The FTAs have encouraged vertical investments in the developing countries as cheap manufacturing bases and horizontal investments in the services sectors of the developed countries. Meanwhile, this study shows that the FTAs have stimulated the inflow of FDIs to Korea, mainly from the high income partners.

Fourth, it is estimated that the FTAs have contributed to the increases in productivity and employment of firms that export to the FTA partners. In particular, the impact on productivity of the FTAs tended to be magnified over time while their impact on employment was mostly delivered in less than 3 years after the inception of the FTAs.

Empirical Analysis of Trade Liberalization:
The Benefits to Korean Consumers

Jin Kyo Suh, Chul Chung, Joun Won Lee, and Yoon Seon Jeong

Trade liberalization benefits consumers because it gives them access to a larger number and a wider variety of products, at lower prices, than their home country could supply. The principals of comparative advantage and specialization are well known. Competition from the increased availability of imported goods to domestic consumers also forces domestic firms to offer competitive prices, to improve production efficiency, and to innovate. Trade liberalization also presents domestic firms the opportunity to export their products and services to other countries, stimulating domestic growth.

While consumers as a whole are winners from free trade through lower prices and greater varieties, however, certain groups such as displaced workers in the import competing sectors are adversely affected due to increased imports. Much of the existing literature concerning trade liberalization focuses on the impact of trade on aggregate variables, such as the growth of GDP and GDP per capita, or net welfare effect on the economy as a whole. Although there is a general recognition that trade liberalization benefits consumers, there is only a handful of empirical research that investigate the direct impact of trade liberalization on consumers.

In this study, we examine the economic impacts of trade liberalization and estimate the impact of increased variety on the consumer welfare. In particular, within a CES framework, we develop an import price index that is corrected for new and disappearing varieties, by employing Feenstra (1994)'s approach and using Korea's trade data. New varieties lower the unit-costs depending on their substitutability with other varieties and their expenditure shares. Further, a case study on major consumer goods that are imported by Korea was conducted in this paper. We have investigated the marketing margin of these consumer goods from the border to final consumers and estimated the margin stage by stage for each marketing channel.

Key findings of this paper are summarised as follows:

- Korea has continuously liberalized its domestic market since the mid 1980s. During the Uru-

guay Round (UR) negotiation and subsequent implementation process, Korea has reduced its bounded tariff voluntarily. As a result, the level of a weighted average tariff was reduced to 5.1 percent in 2011 from 11.3 percent in 1995. The reduction of import tariffs has contributed to the reduction of import prices denominated in domestic currency (Korean won). Nonetheless, final consumer prices do not show any trend of decline according to simple data plots in our investigation despite the reduction of import prices measured at the border. This tells us that there must be some price deteriorations in the process of domestic marketing channels for imported consumer goods.

- Although increased product variety is generally believed to bring welfare gains, standard national measures of welfare and prices do not assess how much better off consumers are when a new variety of an existing good or a new good becomes available. Both the import price index and the consumer price index (CPI) largely fail to capture the introduction of new varieties and the increase in the standard of living that new varieties bring about.Our recalculation of the import price index using Korean data suggests that the variety-adjusted index fell 20 percent faster than the conventional index between 1992 and 2011. To calculate the impact of variety growth on consumer welfare, we have to make an additional assumption about how the increased availability of foreign varieties affects domestic production. With the assumption that the number of domestic varieties is unchanged, we can proceed to estimate the impact of variety growth, due to the continuous expansion of trade liberalization on the well-being of Korean consumers. We found that the official import price index understates the rate of decline in import prices by 20 percent over the two decades from 1992 to 2011. If we take the average import share of Korean GDP for the past 20 years, which is 30 percent, then the value to consumers of the increase in global variety is in the range of 8.3 percent and 21.7 percent of GDP in 2011, or roughly 93 to 243 billion US dollars depending on the estimates of elasticities of substitution. This sum represents what consumers would be willing to pay to have access to the expanded set of varieties available in 2011.
- We have further investigated the domestic marketing channels of some major imported consumer goods. Main findings of the investigation are summarized as follows:

- Most of imported manufactured goods, in particular, small household appliances are supplied by only one company. In other words, an overseas affiliate has virtually the monopoly power on household appliances in the Korean market.
- The marketing margin of imported goods is in general two or three times higher than that of domestic products.
- The marketing margin generated at the retailing stage is higher than that at the wholesale stage.
- Fair competition is one of the effective ways to reduce marketing costs of the imported goods including the marketing margin.

Policy implications derived from these findings are as follows:

- Fostering fair and competitive environments in the domestic market of the imported goods would be one of the most effective ways for reducing the marketing margin of the imported goods on the whole, and resulting in a decrease in consumer prices of those consumer goods, and hence ensuring gains from trade entertained by final consumers.
- Organized efforts by civil organizations and NGOs or consumer groups such as frequent consumer price reviews on imported goods and relevant monitoring activities should be encouraged for the benefits of consumers themselves.

A Study on Interaction between Economic Openness and R&D Policies

Young Gui Kim, Jong Duk Kim, Jungu Kang, and Hyuk Hwang Kim

In this paper, two issues are discussed. First, considering the interaction between economic openness and R&D investment, we investigate their effects on economic growth. Second, we analyze R&D policy directions under the new international trade environments such as deepening trade liberalization, Korea's fast economic growth, and potential dispute under the WTO.

As the competition in the world market has been intensified because of trade liberalization, OECD countries have focused on technology and quality competitiveness rather than price competitiveness for exports. Also expansion of foreign direct investment induced increasing R&D activities by foreign companies in domestic markets.

We analyze the effects of economic openness on R&D investment using country-level data. According to the results, private R&D investments are affected by trade liberalization but not by investment liberalization. Government R&D investments increase as the volume trade increases, but decrease when foreign direct investments increase.

The effects of R&D investments on export performance are estimated by using Korean firm-level data. We fail to find significant effects of firms' R&D investments on their total amount of exports, but decision on export, export shares, and the timing to start export turn out to be positively affected by firms' R&D shares. Estimating the same regression models after dividing total R&D into product innovation R&D and process innovation R&D, we find only product innovation R&D has significant effects on export performance. This implies that technology and quality competitiveness is a more important factor for exporting.

Also we analyze the interactions among R&D, economic openness, and economic growth by using Panel VAR approach. The results show that foreign R&D increases domestic R&D, and domestic R&D brings value-added growth. Foreign R&D does not have direct effects on value-added in the short run, but increase it gradually in the long run.

To discuss effective R&D policies under new trade circumstances, we examine major countries' R&D policies and the Agreement on Subsidies and Countervailing Measures under WTO. In addition, policy experiments are conducted by using computable general equilibrium model based on theoretical models of strategic trade policy. The results suggest international R&D cooperation and differentiated supports on industries considering their comparative advantages.

Korea's Green Growth Policy and Multilateral Trade Rules:
Harmonization Issues and Policy Implications

Sherzod Shadikhodjaev, Jeongmeen Suh, Minsung Kim, and Jaehyoung Lee

In his address marking the 60th anniversary of the founding of the Republic of Korea in 2008, President Lee Myung-bak declared 'Low Carbon Green Growth' as the country's new vision to lead the country's development for the next decades. Since then Korea has taken active measures to combat climate change on both legislative and executive front. A number of 'green' measures have an impact on trade and may thus be subject to global trade rules administered by the World Trade Organization (WTO).

This study examines Korea's green measures - relevant laws, regulations, and programs - from the perspective of WTO law, and explores possible ways of harmonization of the green growth policy with multilateral trade disciplines. The concept of harmonization within the meaning of this study has both internal and external aspects. More specifically, the authors first considered the harmonization at an internal level and suggested that Korea ensure WTO-consistency of its domestic green measures. For this purpose, they examined green measures in three domestic policy areas, such as market opening, industrial subsidies, and technical barriers to trade. Then, they proceeded to see how the global climate regime and the multilateral trade regime could be harmonized on an international plane, and what Korea's contribution to this process should be.

With respect to the market opening policy, the authors considered, inter alia, GATT-based implications of a carbon tax, import restrictions arising from the emissions trading system and the Bonus-Malus system for car purchasers - the measures that are not currently applied in Korea, but are used by other countries. As for the industrial support policy, Korea's green subsidies have not yet been complained of in WTO disputes, but were targeted by US countervailing measures - something that should be paid attention to by Korean policy-makers when designing green incentive schemes for domestic producers. As far as technical regulations and standards are concerned, a few WTO members have raised specific trade concerns in the TBT Committee in relation to some Korean green measures.

With respect to the external harmonization issue, the authors focused on two approaches, such as 'greening' the WTO and making the global climate regime more 'WTO-friendly'. In order for the WTO to become more 'environment-friendly', the current Doha negotiations on trade and environment should be successfully completed. The authors here proposed that Korea put forward the idea of plurilateral negotiations in the WTO based on APEC's initiatives on trade and environment. Korea could also initiate discussion among WTO members aimed at rendering climate change subsidies non-actionable under current WTO subsidy disciplines. Moreover, the authors suggested that the Korean government establish environmental impact assessments for its trade treaties so as to ensure that, inter alia, WTO agreements entered into by Korea reflect environmental concerns. In this way, Korea could have an indirect influence on the greening of the WTO. Finally, with a view to making the global climate regime more WTO-friendly, Korea should support a proposal of several countries to discuss within the UNFCCC framework the impact of climate-related response measures on trade, but oppose the idea of introducing a total ban on unilateral response measures. Such a ban would come into conflict with the GATT general exception clause (Article XX) - a WTO provision that can be invoked to justify environment protection measures.

Designing New Climate Change Regime: A Unified Approach for Mitigation and Finance Mechanisms

Jeongmeen Suh *et al.*

In 2011, COP17, Parties agreed to launch a new process, called Ad Hoc Working Group on the Durban Platform (ADP), to negotiate a new climate agreement after 2020. The most distinguishable feature of the expecting new agreement is that it will be 'applicable to all' Parties. Though 'applicable to all' does not imply applicable to all in a symmetrical fashion, Parties' positions on legal form will not be fall along developed and developing country lines any more. This critical change asks COP to develop new aspects of operating mechanisms under UNFCCC, accordingly. Especially to Korea which has been non-Annex I member so far, the change requires her to engage more actively in the climate negotiation process with suggesting constructive ideas to design the new regime, rather than simply to express her own position.

The purpose of this research is to lay out a basic theoretical and logical foundation which may help to design key mechanisms in new climate regime. To do this, in Chapter III, we first develop a model of a new climate agreement which satisfies key characteristics of Durban Platform. Then, we identify limitations of an old approach which can be summarized into (a) national reduction target and (b) international emission trading. The main result is that when a degree of heterogeneity in benefit from mitigation between countries is high enough, the old approach cannot achieve a social optimal mitigation level, though emission trading contributes to a broad participation. In this sense, relaxing the heterogeneity will be the key for the new regime. And that is the reason financial and/or technology transfer is necessary, besides mitigation efforts.

In this study, we focus on a specific issue among possible alternatives in designing the new regime, which is integrating market mechanism and financial mechanism. In Chapter IV, we survey the current and prospecting relevant mechanisms and investigate issues needed to be tackled for each mechanism. In Chapter V, we discuss interactions between two mechanism spheres in general and the importance of an integrating approach. A relationship between two mechanisms can be simplified as follows. The most fundamental element of market mecha-

nisms is the demand for mitigation such as reduction targets and energy security. The demand induces flows of climate finance and they enable mitigation actions to be scaled up. Based on these observations, we qualitatively explore what expecting challenges to overcome will be. For the developing countries in general, lack of voluntary mitigation incentive is the basic problem. Supported NAMA type financial mechanisms, which requires corresponding mitigation actions, may be in a right direction to solve such incentive problems. The developed and the advanced developing countries may have voluntary mitigation incentives with seeking a new economy growth engine. For them, the key question is how to scale up the private resources in mitigation investments. A solution can be found with answering how to connect effectively the mitigation incentive into financial incentive, and vice versa. A necessary condition to construct those incentive schemes is to have transparent and objective MRV systems.

In Chapter VI, we present several possible tasks to develop both market and finance mechanisms in an integrated way. First, it needs to expertise best practice of the 'inter-mechanism' MRV system which is about coordination between a market mechanism and a financial mechanism. Various mechanisms in each market and finance sphere are expected to appear within and out of UNFCCC in near future. In the short run, more attentions will be paid to develop the 'intra-mechanism' MRV system which is about coordination among mechanisms within each sphere. However, having inter-mechanism MRV system will be very effective in the long run. Before a certain system without the integrating consideration becomes status quo, noting its importance and pursuing the best practice of them will be desirable. The other two are about how to provide more incentives toward environmentally more friendly private investments while the developed countries fulfill their financial contribution obligations. Depending on a type of private financial flows, its impacts on recipient country's mitigation actions are different. Thus, a more environmentally favorable type of private financial flows needs to be more appreciated. To reflect this on incentive mechanisms, a more volatile financial flow can be discounted more in accounting financial contributions by developed countries, besides evaluation on environmental consequences of each investment. Also, we may consider to develop the technology spillover effect index which can differentiate private investments into the degree of mitigation technology spillover. Treating private investments with a higher index as the one with a more marginal contribution can help to create incentives.

Effects of Government Debts on Sovereign Credit Rate

In Huh, Jiyoun An and Dayoung Yang

We analyze the relationship between the government debts and credit rates of OECD countries between 1995 to 2010.

In the chapter 2, we first summarize the OECD countries' credit rates history and the definition of sovereign credit rates. We also report the relation between the credit rates and macroeconomic variables. The credit rates drop quickly in case of downgrading, but they rise steadily otherwise. The countries with international currencies get the better credit rates but the credit rates are affected by the debts. The countries' credit rates drop when they get the bailout from IMF, they recover very slowly due to stigma effects. The countries which has the stable macroeconomic conditions have the better credit rates and the lower interest rates and CDS premiums.

In chapter 3, we analyze the how the OECD countries' credit rates are determined by using linear panel model and ordered logit model. We focus on the total debts, foreign debts, short-term debts, foreign currency debts, international currency status and difference between upgrading and downgrading. When the debts increase, the credit rates get down. The effect has magnified, if the debts are supplied by foreigners or foreign currencies. If the countries have the international currency, their credit rates are not sensitive to governments's debts and other determinants.

In Chapter 4, we look into the four countries' cases with the most volatile credit rates changes. In Greece and Iceland cases, their credit rates are downgraded due to the sudden increase of debts. In Slovakia and Poland cases, the debts do not play as a key determinant in upgrading their credit rates. In every cases, the per capita income and the frequencies of financial crises are the main determinant of credit rates' changes.

In Chapter 5, we look into the credit rates history of Korea and how the determinants work in Korean credit rates' changes. We also suggest how to manage the government debts in terms of maintaining the desirable credit rates. The Korea's credit rates are upgraded during the global financial crisis due to diminishing the stigma effects from Asian currency crisis. The increase of per capita income and current account surpluses contribute the upgrading. We suggest to maintain governments debts, foreign debts, foreign currency debts and amounts of issuance in order to keep or improve the credit rates. And we also suggest to internationalize won.

Macroeconomic Policies during the Global Financial Crisis:
Lessons and Policy Implications

Dong-Eun Rhee, Ju Hyun Pyun, and Da Young Yang

It has been more than four years since the outbreak of global financial crisis. However, instead of moving along the road to full recovery, the world economy is continuously being challenged with new crisis such as European financial crisis and the fiscal cliff issue of the U.S. Although major advanced countries have mobilized yet the most aggressive macroeconomic and financial policies during the process of recovering from the global financial crisis, this rather resulted in causing another crisis due to the possible side effects of such economic policies. Based on this fact, it is likely that the world economy from now on will enter the phase of preparing countermeasures for those underlying side effects. Thus, the purpose of this research is to study the effectiveness and appropriateness of the economic policies carried out by the major advanced nations under the global financial crisis. And the paper also aims to project future world economy from an understanding on the consequences of policies.

Chapter 2 analyzes bailout plans that were implemented by major developed countries during financial crisis and attempts to assess them. It is true that the bailout programs carried out for financial institutions in the midst of financial crisis played a positive role in coping with the crisis by preventing its dispersal and intensification. On the other hand, however, side effect of such bailouts is predicted to become a burden on the economy of developed countries. This is because there is a concern that 'too big to fail' controversy will be led to a moral hazard, which may bring about the repetition of financial industry's risk seeking behaviour. Another reason can be pointed to the possibility of prolonging the poor performance of financial system by regenerating the institutions that deserve restructuring according to the market principles. Therefore, in order to have instability among financial field under control, which may arise from the bailout plans, it is considered that advanced countries need to supplement financial regulations through reinforcing management and supervision over financial market and put in a great deal of effort for reforming financial system.

In Chapter 3, major economies' monetary policy as a countermeasure for crisis is analyzed.

The United States and the United Kingdom have been implementing the most aggressive monetary policy in history whereas Euro Area seems to be mobilizing the monetary policy that is more faithful to its target of stabilizing inflation. It can be criticized that such policies of European Central Bank bear some responsibility for prolonging the recession and intensifying a few member countries' financial crisis. U.S. non-traditional monetary policy, which lowered various interest rates, was very effective on moderating tight-money market in the beginning, but it can be said that its effect is gradually reducing over time. According to our Event Study, we found that the impact of first quantitative easing (QE1) was the largest, QE2's effect was about one third of QE1, and impact of operation twist was even less than that of QE2. Hence, continuing quantitative easing after escaping from the serious stage of crisis may not have satisfying benefit. Moreover, financial market participants' disappointment with the impact of such policies that fall short of their expectation may cause crisis of a larger scale.

Chapter 4 compares pre- and post-global financial crisis fiscal multiplier of developed countries through empirical analysis. According to the result of Dynamic Panel VAR Estimation, major advanced countries' fiscal multiplier during the global financial crisis was higher than that of pre-crisis. This reflects the fact that major advanced nations' policy to increase government spending was effective. If the fiscal multiplier is to be analyzed based on each country's government debt, it is assumed that in case of a country with higher government debt, short-term multiplier is near zero and long-term multiplier is in negative range. Thus, it may be said that the aggressive expansionary fiscal policies of developed countries during global financial crisis had a notable impact, but it seems that in case of advanced nation whose government debt surged, it is hard to expect additional effect of expansionary fiscal policy and is thought that they need to accompany fiscal consolidation policy.

Based on the previously mentioned results of our analysis, this paper projects future world economy as follows: First, there is a high possibility for financial industry in advanced countries that are avoiding crisis through bailouts and quantitative easing to experience prolonged risk due to moral hazard and delay in liquidating insolvent institutions. Second, expanded global liquidity, a by-product of major advanced countries' quantitative easing process, may cause instability of developing countries' foreign exchange market and capital market. Third, the effect of major nations' macroeconomic policy is expected to remain unobserved for several years from now on and hence when a new shock that causes economic downturn takes place, there is possibility for the economy of advanced countries to show larger fluctuation.

Effective FX-hedge Policy Using Financial Market

Deok Ryong Yoon, Eunseon Park, and Sammo Kang

Since the global financial crisis, inflows and outflows of foreign capital increased greatly and this resulted in higher volatility of exchange rate. In addition, each country ended up implementing quantitative easing in order to overcome the Eurozone financial crisis and the global recession. However, the value of their national currency declines as a consequence and this triggered the concern for global currency war. Under such situation, as Korea is constantly exposed to the risk of foreign exchange market due to its small open economy limitation, we need to be always prepared for the foreign exchange risk that fluctuate depending on the condition of global economy. With this in the background, we try to study the current state of Korean companies' foreign exchange hedging activities, find out whether or not such hedging is required by analyzing the currency exposure, and if it is needed, seek for the most efficient measure through studying international cases.

Generally, Korean firms hold economic structure that appears to be vulnerable to foreign exchange volatility. This is because of the low awareness among companies regarding foreign exchange risk management and the fact there are not enough derivatives that allow firms to hedge foreign exchange risk via financial markets. Also, the companies' lack of understanding about foreign exchange risk management methods exists and the fear for derivatives as an aftereffect of KIKO situation is just as influential to hinder market access. The Foreign Exchange Risk Insurance, a typical exchange risk hedging product, is exclusively provided by Korea Trade Insurance Corporation (K-sure). However, it does not fully meet the consumer's demand and it even gets taken off the market in times of crisis.

According to the findings in this paper, we were able to suggest the following policies for Korean firms' efficient foreign exchange risk management. For short-term, the information sharing system of financial derivatives, the knowledge sharing system of exchange risk, institutional demand on companies' foreign exchange risk management, and finally the disclosure system need to be introduces in order to vitalize the functioning of financial market for for-

eign exchange hedging activities. Moreover, exchange risk position on external debt should be strictly supervised as well as carrying out the policy that promote internationalization of Korean Won in mid-to long-term.

An introduction of information transmission and disclosure system of derivatives should be regarded as priorities for the transparent management of derivative's price or value in particular. In Sweden, foreign exchange risk hedging through financial markets has been relatively easy since companies fully understand the value or price of financial commodities that can hedge foreign exchange risk. On the other hand, South Korea considered the difficulty of evaluating price and value of derivatives as the most significant obstacle. Therefore, South Korea, too, needs to improve derivatives management system so that information on financial commodities can be sufficiently opened and explained to the firms.

Just as Israel, we need to pursue the drastic privatization of insurance industry and the aggressive regulatory reform. The most used foreign exchange risk insurance by Korean firms is monopolized by Korea Trade Insurance Corporation(K-sure). Although it is being provided in the form of public goods by the public enterprise, there was a time when Range Forward was taken off the market due to a sudden increase in stress levels following 2008 financial crisis. To cover all the possible risks and diverse market conditions, there must be more providers as well as more financial commodities. Thus, the market completeness needs to be enhanced by diversifying Foreign Exchange Insurance products and letting other public or private enterprise to enter the market.

Furthermore, we need to consider promoting the internationalization of Korean Won as the case of Australia shows. It was the internationalization of Australian currency that allowed Australia to sell derivatives to the foreigners in order to hedge foreign exchange risk. Of course, the existence of foreigners demand on the possession of Australian Dollar affected as an important factor, but the internationalization of currency was the prime groundwork. The cost of hedging activities can be cut substantially if the hedging through national currency is possible. Hence, it is advisable to seriously consider promoting the internationalization of Korean Won.

Impacts of Large Disasters on Macroeconomy and Financial Markets

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

This paper analyzes how large-scale disasters (such as large-scale natural disasters and terrorist acts) influence the macroeconomy and financial markets. According to the findings, the large-scale disasters does affect the economy of nations where the outbreak of disaster took place, resulting in a 2% drop in economic growth (in the case of the Great East Japan Earthquake) and 6% decrease in exports (ex. Great East Japan Earthquake and the 9□11) compared to the global average of each category. And the result also shows that the cumulative abnormal stock return can fall by 10% (The Great East Japan Earthquake). However, the degree of negative impacts from external shock can vary depending on the nature of the disaster, how it is dealt with, and the country's economic condition.

First, although immediate harm from both 2008 Sichuan Earthquake and the 9□11 came mostly in the form of human lives lost, these two cases had different economic impacts. The Great Sichuan Earthquake took many lives but its impact on the Chinese economy appears to be insignificant. It is sometimes considered that the Sichuan Earthquake was actually helpful to the development of the local economy, in that it spurred reconstruction of the disaster-stricken region. On the other hand, the 9□11 attack hit hard not only US but also global financial markets since most of the lives lost or affected during this tragedy were of professionals in finance-related fields. In fact, the decline of stock prices in the global markets was larger than that of the US stock market.

Second, an instance of poor response to disaster-aggravated economic situation can be clearly seen in the case of Hurricane Katrina. Hurricane Katrina only caused a 1% drop in exports in the quarter it occurred, but the government's inadequate response and increase in fiscal deficits brought about an average of 0.5% fall in economic growth.

Third, the pace of recovery can vary according to economic conditions prior to the outbreak of a disaster. Before the 9□11 terrorist attack and the Great East Japan Earthquake, the US and Japan found themselves in a slump in terms of economic growth trends. Such large-scale

disasters became the main causes that worsened economic conditions; and Japan's economy, in particular, has yet to show signs of recovery. Moreover, it seems that disasters can have a major impact on neighboring countries. The Great East Japan Earthquake, especially, impacted negatively neighboring states and countries that Japan held extensive trading relationships with for as long as one year.

Furthermore, according to the results from the theoretical model and simulation analysis, if the potential for disaster rises--for instance, when possibility for the outbreak of war in Korea goes up or climate change causes higher frequency of natural disasters--damage and side effects are to impact capital markets first and then eventually have a negative influence on the overall economy.

However, the significance of economic impacts of such disasters should be carefully interpreted. The effects of disasters identified in this paper were determined based on our empirical and theoretical models which may not account for all fundamental factors related to disasters. Analyzing stock price indexes by industry allowed us to see the industries that experienced significant impact after external shock were primary industries hit by the outbreak of disaster (e.g. electric power-related public enterprise sector during the Great East Japan Earthquake), disaster-related industry that suffered harm due to their failure to properly predict the disaster (e.g. insurance sector during Hurricane Katrina), industry exporting to countries where disaster occurred (e.g. South Korea's health care sector during the Great East Japan Earthquake), and so on. In overall industry, a temporary decline following the shock were valid only for about a day or two. Hence, policy makers and practitioners should keep in mind that analysis based on the relevance to the real economy is necessary in order to reduce market uncertainty arising from massive disasters. Policy enforcement as a precaution should be realized via constructing various safety nets and disaster prevention systems in order to minimize the negative economic impacts once large-scale external shock takes place.

Causes of the European Debt Crisis and Reform of the European Governance

Yoo-Duk Kang, Kyuntae Kim, Tae Hyun Oh, Cheol-Won Lee, and Hyun Jean Lee

This study analyzes the causes of the European debt crisis and reviews reforms the eurozone has pushed for in order to solve the crisis. It also focuses on the future prospect of economic governance of the eurozone. European debt crisis has spread over the entire Eurozone despite the bail-out of Southern European countries. Starting from Greece, Ireland and Portugal were bailed out and since the second semester of 2011, Italy and Spain have been under pressure of a potential debt crisis due to their soaring bond yield rate. During the early period of the crisis, the Eurozone focused on providing liquidities to Greece. However as the crisis affected other countries one after another, Eurozone's responses have become more comprehensive, recognizing that the crisis is related to insolvency beyond liquidity crisis.

The causes of the debt crisis can be analyzed in two parts: macroeconomic factors of individual countries and structural default of the European Monetary Union (EMU). The fiscal stimulus measures used during the global financial crisis caused serious damage to fiscal sustainability of the individual eurozone countries. In addition, a failure in economic governance (Greece) and a distorted growth strategy based on asset bubbles (Spain and Ireland) provided a cause for the crisis. Since the debt crisis, the financial market has been increasingly doubtful of the integrity of the eurozone as a monetary union and this lack of confidence has turned up as diverging yield rates of government bonds. With regard to the structural problems of the eurozone, it seemed that eurozone countries adopted the single currency without serious budget disciplines and coordination mechanisms for fiscal policies. The ambiguous role of the European Central Bank (ECB) as a "lender of last resort" is also pointed to as the reason that the crisis has spread. Political factors acted strongly from the early stage of the debt crisis and the latter has an aspect of a political crisis about the European integration. Major actions were slow and ill-coordinated due to lack of leadership at the EU level. Germany and France did not share views in tackling the crisis from the beginning.

In order to tackle the debt crisis and reform economic governance, the eurozone has advanced various measures in strengthening the fiscal discipline and reducing macroeconomic

imbalances. First, the European Commission initiated economic governance and surveillance structures, along with two dimensions, 1) strengthening the Stability and Growth Pact (SGP) and 2) preventing and correcting macroeconomic imbalances within the EU and Eurozone. The European commission introduced successfully the European semester which intend to exert peer pressure for relevant budget control for each members. The new economic governance set a mechanism for correcting macroeconomic imbalances based on an early warning system. In addition, 25 members of the EU signed the new fiscal pact which set up debt brake in each members' legal system and strengthen sanction in case of violation.

The ECB's responses have been increasingly active. In order to keep financial markets stable, the ECB has intervened in lowering base interest rates to the lowest level, buying more sovereign bond in secondary markets and providing massive low-interest loans to European commercial banks. In October 2012, its president announced the ECB would purchase sovereign bonds of short maturity without limit, if the crisis spreads further. This announcement has been interpreted as a willingness of the ECB as a lender of last resort.

There is a consensus that the Eurozone needs strong reforms in order for the euro to survive in the future. Firstly, it will be inevitable to push for a certain level of fiscal integration to sort out the current crisis. However, this will require a high level of political compromise, as well as efforts of debt-ridden countries for structural reforms and budgetary discipline. Progress towards fiscal integration will depend highly on political agreements between Eurozone Member States. Secondly, correcting macroeconomic imbalance between members will be a key issue in the medium and long-term, because the debt crisis is regarded as a consequence of diverging competitiveness between members. Thirdly, it will be increasingly necessary to develop a close coordination mechanism of economic policies between members. This mechanism will have to address not only budgetary behavior of Member States, but also comprehensive economic policies including labor market reforms and industrial policies.

In the historical perspective, however, the EU has been developed through multiple crises, repairing its structural problems and resolving the differences among members. These precedents provide optimistic expectations for EU and Eurozone's institutional reform. However, given the recession in real economies and de-leveraging in the financial market, the Eurozone may encounter a low-growth period for next few years.

The European debt crisis has attracted a lot of attention from Korean media and policy makers, because the crisis provides various policy lessons in several areas. Particularly, some insist that Korean government needs to be careful regarding management of its public finances, given the future demand in social security and pensions. The others argue that the debt crisis of the Southern European countries did not result from excessive social spending, but from failure in creating a positive relationship between the welfare system and economic growth. At this point, we can elicit some policy lessons as follows. First, it is necessary to consider future fiscal demand in setting up a social security system. Population aging will be a more salient issue in Korea than any other OECD members in a couple of decades. Second, it is necessary to monitor development of household debt, because increasing private debt can exert indirect impact on credibility of fiscal sustainability. Third, Korea should develop domestic demand as well as maintaining competitiveness of its export industries.

Trilateral Economic Cooperation: Proposal for Enhancing Economic Cooperation Dialogue Channels among China, Japan, and Korea

Chang Jae Lee *et al.*

In terms of regional institutional economic integration, East Asia lags behind other major economic regions, and within East Asia, Northeast Asia lags even further behind. However, on November 2012, the 16 East Asian countries agreed to start the negotiations for the region-wide FTA (RCEP); and the trade ministers of China, Japan and Korea officially announced the launch of the CJK FTA negotiations. Thus, a significant first step seemed to have been taken toward both the East Asia Economic Community and the Northeast Asian Economic Community.

Under this historic context, this study aims to propose the establishment of a consultative entity to enhance economic cooperation between China, Japan and Korea, named "the Trilateral Economic Cooperation (TEC)," which could serve as the mid-term goal in the pursuit of both the Northeast Asian Economic Community and the East Asian Economic Community.

Before describing the main characteristics and expected implications of the TEC and the strategies to achieve it, this study analyzes the status of China, Japan and Korea in the world economy as well as the economic interdependency among the three countries. In addition, various existing policy dialogue channels at the central government, regional government, and business levels are examined.

On the basis of assessment of existing policy dialogue channels and comparative studies on existing regional consultative entities such as APEC, ASEAN+3 framework and ASEAN, the main characteristics and expected positive effects of the TEC as well as the gradual strategy to realize it are suggested.

Being a regional consultative entity for economic cooperation, the structure of the TEC is likely to be similar to that of APEC. However, since it has only three members, it would be much easier to agree on the agenda and to operate effectively. In addition, the possible areas of cooperation would be more extensive than other regional consultative entities, because the three countries share many commonalities such as strong manufacturing sectors, weak service sectors and agriculture, high external energy dependency, and usage of Chinese characters.

Apart from its contribution to regional institutional economic integration, the TEC could provide the three countries with various benefits such as new engines of economic growth, enhancement of mutual understanding and confidence building resulting in the improvement of overall relations, effective voice in international economic arenas, and stronger regional political leadership.

Given the current political relations among the three countries, however, the TEC cannot be pursued right away. Therefore, this study proposes a gradual approach to accomplish the establishment of the TEC. At the first stage, one has to consolidate the current Trilateral Summing Meeting framework by aligning and synchronizing the existing Ministers' Meetings to the Trilateral Summit Meeting, so that it could function more effectively. Having achieved the basic institutional framework necessary for the TEC at the first stage, only sufficient political would be necessary to establish formally the TEC at the second stage.

In the meantime, all three countries should strive to build the consensus on the need for the TEC, which would be instrumental in forming not only the Northeast Asian Economic Community but also the East Asian Economic Community.

The Least Developed Countries:
Key Challenges and the Way forward for Korea's Development Cooperation

Yul Kwon, Jione Jung, Jisun Jeong, and Ju Young Lee

The Least Developed Countries (LDCs) are the poorest and the most disadvantaged members of the international community that face a broad range of socio-economic, geographical, political and environmental challenges. The United Nations defines LDCs based on three criteria: low gross national income, weak human development indices (ex. nutrition, health, education and adult literacy), and high level of economic vulnerability. Currently forty-eight countries, 33 in Africa, 14 in Asia and the Pacific and 1 in Latin America, are designated as LDCs by the United Nations. With only three countries having graduated from LDC status, the number of LDC countries has leaped from 24 in 1971 when the category was first officially established by the UN General Assembly to 48 in 2012.

Amid the growing interdependency in the global economic system the international effort to reverse the trend of socio-economic marginalization of LDCs officially began at the first UN Conference on Least Developed Countries held in Paris in 1981. In the realm of development, the adoption of Millennium Development Goals in 2000 has led to major donors targeting LDCs as their key aid recipient group. Nevertheless, despite global efforts to support LDCs, there has been growing concern over the deepening vulnerability of LDCs as they were stricken by the impact of the global economic recession, food crisis and climate change in the last several years.

In this context, this paper attempts to identify main development challenges facing LDCs and provide policy recommendations for South Korea as an emerging donor; to enhance its cooperation with LDCs in terms of aid, trade, debt relief and climate change. The paper begins by reviewing the UN criteria for LDC, defining socio-economic and geographical features of LDCs and also post-recession economic trends. The main challenges and priorities of the LDC group were assessed, with specific focus on limited production capacity and market access, lack of development resources, debt burden, and climate change vulnerability followed by the MDG progress and post-MDG needs. Then it moves on to examine the UN-led international efforts to

support LDCs outlined in the Istanbul Program of Action adopted in the fourth UN Conference on the LDCs and suggests actions that should be taken by LDC governments and donors. The DAC donors' aid to LDCs, their allocation patterns and quality of aid were analyzed along with bilateral and multilateral initiatives targeting LDCs such as the Tokyo International Conference on African Development (TICAD), the Forum on China-Africa Cooperation (FOCAC), the African Growth and Opportunity Act (AGOA) and the Extractive Industries Transparency Initiative (EITI). The trends and examples of South-South Cooperation and triangular cooperation with LDCs were also presented. Moving beyond aid, the following chapter develops its analysis further on international and Korean support in related areas such as trade facilitation through the Special and Differential Treatments, debt relief and climate change.

The paper concludes by suggesting policy measures for the Korean government to improve its support to LDCs through ODA, trade facilitation, debt relief and climate change assistance. Firstly Korea needs to improve the quality of its aid to LDCs by expanding its aid untying ratio to LDCs and HIPCs. It is advised that Korea needs to strength its capacity to actively participate in local and international tender, to expand the use of local procurement systems and to promote co-financing with Multilateral Development Banks (MDBs). Secondly, it is recommended that Korea should extend the level of non-tariff Special and Differential Treatments (SDTs) to LDCs. The importance of the technical and financial cooperation to help LDCs combat effects of climate change is also highlighted. As for aid, Korea needs to reduce the number of priority countries, enhance the selection criteria and use the existing regional cooperation platforms more actively. Finally, in order to improve development effectiveness and policy coherence for development, there should be further efforts to strengthen the whole-of-government approach through policy-level partnership among related ministries in charge of aid, trade, debt and climate change.

Japan's Economic Cooperation with China in the Era of G-2 and Its Implications for Korea

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

During the last decade China has boosted its international recognition as an emerging economic powerhouse. Deeply integrated into the global economy, China has risen to become an international power second only to the United States, and it is often regarded the eras of the US-China G2 has come. China has been pursuing bilateral and regional trade agreements with neighboring countries such as FTAs within ASEAN, along with its WTO entry in 2001 and globalization of the Chinese currency Yuan. Under the circumstance Japan's international economic position has weakened in proportion to the increasing level of dependence on Chinese economy. Both Japanese public and private sectors recognize that economic cooperation with China has become one of the most important international agendas. This paper is aimed at introducing the structure of Japan-China trading system and analyzing Japan's government policy along with corporations' management strategies on Chinese market, providing a broad picture of growing economic ties between the two countries. This paper also derives several policy implications from the Japanese experiences on how Korea should build and implement its economic cooperation schemes with China.

Chapter two exhibits the rising of China in the global economy. We use indices such as GDP, trade volume, and foreign exchange reserves to review China's burgeoning economy in detail. We also analyze China's growing prominence in the world by taking a closer look into the globalization of the Chinese currency Yuan, bilateral FTA negotiations between East Asian countries, and regional financial cooperation in East Asia with the emergence of a new global financial governance system.

In chapter three, the structure of Japan-China trading system is analyzed in terms of trading items, process stages, and domestic market shares in China using indices such as Revealed Comparative Advantage Index, Trade Specification Index (TSI), and Marginal Intra-Industry Trade Index (MIIT). According to the study, it is clear that the Japan-China trading system has developed competitive yet complimentary interregional relations. Even the very competitive

industries between Japan and China maintain their parts and materials sectors mutually beneficial cooperative relationships.

In chapter four, three points are examined in the perspective of Japanese firms' business management activities in the Chinese market. First, we analyze investment strategies classified by period, industry, and region. Second, we conduct business performance assessment. Increasing sales and net profit figures shows that the business strategies of the Japanese firms are paying off in China. Finally, we analyze how Japanese firms handle China risk. Japanese firms intend to include East Asia as a whole on their standard of prospective investment area to reduce country risk via diversification while focusing on the Chinese market at the same time.

Chapter five discusses the economic cooperation policies of the Japanese government in specific areas. We look into policy evaluation and prospect in two sectors; Energy Efficiency and Environmental Industry, and Monetary and Financial Market.

Some implications for the Korean government and manufacturing firms are drawn from the paper in the above analysis. First, the Korean government needs to work out effective ways of carrying forward FTA negotiations with East Asian community. Under the circumstances of both Chinese and Japanese governments attempting to take the initiative in East Asian community, it is necessary for the Korean government to take into account the ongoing Korea-China bilateral FTA negotiations, the resumption of Korea-Japan FTA negotiations, the launch of joint Korea-China-Japan FTA, and RCEP all together.

Second, we could obtain from the Japanese experiences that the Korean government should come up with the corresponding strategy with the increasing level of Korea's dependence on Chinese economy. We suggest four options; follow the changes in consumption patterns and demand prediction on Chinese domestic market; pay close attention to the new emerging markets in Asia to diversify export regions other than China; facilitate trade flows of parts and materials manufacturing sectors by reinforcing our industrial competitiveness; foster the business cooperation with the Chinese counterparts.

Third, in order to boost Korean firms' investments in China, the Korean government needs to be alert to the changes in Chinese foreign investment policy. The Korean government should continuously provide updated information on Chinese government policy to Korean firms while discovering cooperation fields with China to pursue mutual advantages.

Finally, the Korean government needs to take support measures to certain domestic companies armed with high technological prowess but lack of overseas expansion strategy. In this respect, the government should further actively engage in the partnership and cooperation methods by inviting China experts on training sessions, conducting Korean experts' seminars across China, holding private and public joint forums, and creating a fund development plan if necessary.

China's Urbanization:
Consumption, Construction and Risks

Pil Soo Choi, Sang Hun Lee, Ik Joon Moon, and Su Yeob Na

After the establishment of the People's Republic of China in 1949, urban migration caused by the heavy-industrialization policy initiated China's early urbanization. The Great Leap Forward and the Cultural Revolution which generated reverse migration, however, delayed the earnest onset of urbanization until the end of 1970s. Since the Reform and Opening, rural industrialization by TVEs and land reform expedited urbanization. In the 2000s, urbanization accelerated with deepening reform. Expansion of fixed assets investments led to development of urban areas and the increase in urban population.

Immediately following the start of the Reform and Opening, urbanization in China occurred among small cities and townships. From the 2000s, urbanization began to be perceived as one of the national strategies for economic development. The 11th five year plan had focused a city-cluster strategy which materialized in the 12th plan as 'Two Crosses and Three Ordinates' and the 'Self Functioning Region.' It is expected that China's urbanization rate will increase steadily albeit at a lower rate. Various calculations made in different researches reveal that China's urbanization rate would reach 60% in 2020 and 70% in 2030.

In Chapter 3, we analyzed the relationship between urbanization and economic growth in China using regional data. Specifically, the Williamson Hypothesis which states that conglomeration into large cities could accelerate economic growth in the low income states, but actually slow it above a certain level of income, is verified. Cross section, dynamic and spatial econometrics models are adopted as methodologies. The empirical analysis results in policy implications as follows. First, the largest city in the region negatively impacts economic growth. For economic development, Chinese government would be better off creating several big cities rather than focus on one mega city. Second, urbanization itself obviously propels economic growth. In the cross-section and spatial econometric models, urbanization as a whole contributes to growth. In the dynamic model, however, only urban areas with a population of more than 750,000 do so. In sum, if we do not consider the spatial spillover effects among cities, hub

and spoke urbanization would be the most favorable scenario; if we do consider it, increasing urbanization as a whole could be applied for growth.

In Chapter 4, we examined the Chinese consumer market from the perspective of urbanization. The total size of the consumer market in 2011 had increased by 4.7 times since 2000. The consumption rate, however, had decreased steadily. During the same period, the urban share in the total consumption increased much, indicating that urban areas have led the growth in consumption as a whole in China. Observing changes in consumption according to income levels, we found that the upper 40% has contributed the most. We also found that as income increases, the share of basic consumption declines while service consumption grows. The share of service consumption is higher than that of Korea in 1990 when the income level was similar to China today.

Estimating urban consumption items in 2020, we found that basic consumption would be larger while new growth would mainly come from service. Based on comparison of consumer durables between China's average and Shanghai, we found that fastest growth would occur in potential markets in air-conditioner and color TV among other home appliances; and in computers, mobile phones and passenger cars. On the other hand, it is pointed out that the main obstacles in developing the urban consumption market are declines in labor's income share, deepening income gap, insufficient social security, and high housing and education costs.

In Chapter 5, we examined the construction market related to urbanization. Urban construction investment grew steeply every year, reaching 19 trillion yuan or 41% of GDP in 2011. Shares of the individual sectors are: real estate 43%, transportation infrastructure 21%, irrigation/environment/public infrastructure 16%, and electricity/ gas/water 10.7%. Share of foreign investment takes up 4.7% in average; 9% goes to real estate.

It is expected that urbanization rate would reach at 70% in 2030, and we estimate that more than 5 trillion yuan will be invested in urban real estate every year until 2020 if the current level of investment per capita is sustained. In terms of space, urban areas occupy 4.71 million km2, or about the half of total land area in China. In the 2000s, the administrative urban area basically remained unchanged, while actual urban districts increased steadily, accounting for 13.4% of the total urban area. Real estate investment per building site has also increased, reaching 1.2 trillion yuan/10 thousand km2 in 2010.

Penetration rate of tap water and gas are relatively high, 96.7% and 92%, and road density is not low relative to the international standard. However, sewage disposal rate is a rather low at 82.3% and much investment is expected in this sector. Refuse disposal rate is 90.7%; another area with room for improvement. Observing region by region, an inverse correlation is revealed because the regions with higher penetration rates are investing more. This is because maintenance and upgrading require as much investments as building new ones.

In Chapter 6, we investigated potential risks of urbanization in labor supply, land management, municipal finance and migrant workers. Until 2010, the productive population has

increased rapidly, with abundant labor for the workforce. Surplus labor in rural areas moved to cities and supplied labor for workforces in manufacturing and services. Although labor shortage has appeared recently in some coastal areas, it will not become a general phenomenon for China as a whole in the short term, as there is still a labor surplus in the primary industry and the urban population will keep increasing for the time being. The labor shortage reported recently is actually the result of the imbalance of labor supply and demand between regions and businesses. It is expected that enterprises' share in financing social welfare will increase and wages will also rise due to government policy, thus transferring the cost of urbanization to the enterprises. If that happens, the production environment would eventually worsen.

As for the supply of urban land for construction, the 'requisition-selling' system has been established as the predominant mode. But the current system cannot be sustained for long because the amount of land available is limited, thus putting land finance in jeopardy. As of 2010, about half of the funds for urban infrastructure building were produced by selling land and the share has been increasing since. This means shortage of land would likely result in shortages in municipal budgets. The current system allow farmers whose lands are requisitioned only marginal compensation while local governments and land developers enjoy excessive profits, leading to shortsighted maximization of income via land sales. By doing so, the increase in urban land under construction outpaces the increase of urban population. Recently, several changes have occurred such as introduction of the property tax, development of collectively-held farmland, auctioning of manufacturing sites, and legalization of unregistered property/houses. Hence, compensation for requisitioned farmers would rise, land auction for business would become widespread and the land cost would increase. However, the current land selling system will not be substituted easily and the local government would likely resist the central government plans to introduce property tax. In addition, self-development by farmers would become widespread, resulting in diversification of land management units.

Local governments' account balance in building urban infrastructure has generally been profitable. However, high percentage of land sales and ambiguous loans by various financing platforms reveal very significant risks. It is expected that high rates of land sales in certain areas would eventually decline to the level of Beijing or Shanghai. Naturally, the amount of ambiguous finances in big cities will decrease in the future. At the same time, the rate of land sales in underdeveloped regions could still increase.

As of 2011, more than 20 provinces have announced consolidation of the rural-urban family register system. The perfectly equal treatment, however, has yet to emerge. Most advanced cities would not dare to begin the process of consolidation, as it would mean 250 million migrant workers will become official city residents, and cost the cities about 20 trillion yuan which represents up to one-half of China's total GDP in 2010. However, the central government is not likely to retreat in the reform in migrant worker and will force the issue in efforts to suppress their total numbers.

Based on the analyses above, we deduce the policy implications as follows. Core consumption class in China's consumption market in China is the upper 40% and they should be considered as the main targets in marketing. Until 2020, the basic consumption market would expand by 2.4 times whereas the service market will expand by 3.6 times, implying the importance of the service market. To access the 'large consumption market' in coastal regions for which competition is fierce, careful analysis on income/class composition and popular items is warranted. In this respect, 'potential consumption markets' in inland regions with large populations could also become a major target.

Central and local governments in China have shown interest in designing the cities utilizing advanced foreign concepts and technologies, and these represent important elements in accessing China's urban development market. The Korean government can establish and diversify inter-government cooperation channels. The Korea-China FTA could be the stepping stone for access into China's construction market. Korean-style urban models such as environment-friendly cities, smart grids, and administrative capitals could have some appeal. New investments in sewage among others are expected and would draw the attention of city planners. Different regions should be accessed differently with respect to their urban infrastructure market, as investments would likely be for maintenance in China's east coast, for new construction in mid-west regions while western regions have yet to witness the initiation of full-scale building.

Urbanization and increase of income would lead to increases in production costs. But this does not necessarily mean the manufacturing sector would eschew China. Alternative production sites such as inland, mid-western regions or specialized industrial complexes could be sought. Considering that the productive population would decrease and the pace of urbanization will experience a slowdown around 2020, responses must be in advance.

R&D of Chinese Firms:
Characteristics and Implications

Ik Joon Moon, Su Yeob Na, Jina Yeo, Min Suk Park, Jonghak Eun

Recently, China is facing limitations in economic growth driven by the expansion of factor-inputs which allowed China to achieve economy of scale, using its abundant labor and capital. Therefore, China now is seeking to change its paradigm of economic growth into an innovation oriented one where knowledge increases economic productivity. As a result, investment in research and development (R&D) and patents have sharply risen. This would be a good time to assess the policies and strategies for R&D in China to draw up some meaningful implications. This study contains Chinese government policies for R&D, current state of Chinese firms' R&D, characteristics of Chinese patents according to the new method of patent classification and Chinese firms' reverse-innovation and globalization strategies.

This study is made up of six chapters. The introduction is followed by Chapter 2, an overall review of Chinese science/technology and innovation policy. Chinese policies on science and technology formed the basis of 'Deng Xiaoping Thought' after the era of reform and openness began. In 1985 the "Decision on the reform of science- technology system" presented a basic direction for reforming the science-technology system and policy. This led to more specific reforms of the science-technology system, and various policies have been implemented at each stage of market reform in accordance with long-term strategy. Chinese government has since formulated a medium and long-term science and technology policies for innovative nation building to achieve sustainable and harmonious economic growth. The government bodies and agencies are leading the way in implementing such policy including diverse R&D promotion programs.

It is undeniable that these efforts produced remarkable improvements in China's scientific/technical capacity in general, yet more time and greater enhancement are needed for self-sustained innovation. In the end, the extent of China's science/technology development hinges on effective policy management and the government's determination to improve its institutions. A desirable direction for China's medium-long term science-technology policy would be to build

up its market competition system, to expand investment to support R&D of private firms; and to establish networks and enhance the quality of education for development of human capital.

Chapter 3 deals with the current state and characteristics of Chinese R&D activities. In the past, the role of firms as agents of innovation was underestimated in China. However, the domestic entities, especially innovative firms and high-tech enterprises have lately emerged as the main applicants of Chinese patents. This chapter features an empirical analysis of the relationship between Chinese R&D and productivity. The analysis finds that the increase of trained personnel in high-tech industry R&D is contributing significantly to increase in the number of patents and productivity.

In Chapter 4, the changes in the environment for Chinese patents are described by examining the three revisions of patent laws, and a micro-analysis on the patent distribution and patentees in order to assess the capacity and growth potential for Chinese innovation. China enacted its first patent law in 1985, and modified the patent-related systems by revising the patent laws three times by 2008. The first and second revisions were, to some extent, forced by external factors such as the international pressure of intellectual property rights protection, and the necessity for WTO entry. In contrast, the third revision was initiated by the internal need to enhance the level of patent right protection. There are certain limitations in effective intellectual property rights protection in China because of remaining legislative and legal problems, but the application and registration of patents in China in real term is very active given such institutional circumstances.

The convergence of technical knowledge portfolios between Chinese domestic firms and the multinational enterprises in China were identified in the analysis of patent statistics according to a re-classification of Chinese patents. Also, improvements in technical knowledge by Chinese domestic firms and localization and adaptation by foreign companies to China are simultaneously in progress; the former being dominant over the latter. In addition, the proportion of Chinese domestic firms or the university/research institutions that has risen to within the top 10 of each 35 industrial technology areas has increased. The result implies that the Chinese domestic firms have, for the most part, succeeded in catching up in terms of technological capacity.

Chief findings of the micro-analysis on the main entities of invention patentees in China are as follows; first, Chinese domestic entities of invention patent applications increased conspicuously in IT sectors including in electronics, computers, facility hardware sectors including machinery, civil engineering and measures/standards. Second, the top three petroleum firms, that is, the main state-owned enterprises (SOEs) directly controlled by the Chinese central government possess considerable patent technology. Third, some foreign-investor firms including Taiwanese firms are operating affiliated companies that have applied and registered invention patents in China. These companies are able to utilize the abundant engineering manpower in China and strengthen the protection of intellectual property rights of their affiliates regarding

production processes, and products produced and sold in China. Fourth, in China, the universities and research institutions are the main agencies that possess patents, especially in high-tech areas where industrialization has yet to kick into high gear, in addition to science-based industries where the application of primary research to industrialization is easily implemented; and general purpose technology areas such as measurement, controlling and analysis methodology etc.

In Chapter 5, the internationalization strategy of five types of emerging multinational enterprises (MNEs) as described by Ramamurti was referred to in analyzing the innovation factors and reverse-innovation among Chinese firms, by classifying the Chinese R&D firms into 5 types. Also, case studies for each type were performed to assess the main contents and characteristics of technological innovation strategies of these firms.

The first type is state-owned Natural-resource vertical Integrators that include most SOEs which secure technological capacity by strategic integration to develop foreign resources. Large-scale support from the government allows these enterprises to catch up with the leading firms rapidly. The second type is local optimizers that engage in market-oriented innovations to develop the products to be optimized according to customers' needs in the local markets. It is very possible that these firms became familiar with reverse innovation by exporting products optimized for the local market to developed countries. The third type is the low-cost partners that MNEs of developed countries utilize to reduce production costs. Reverse innovation can take place when MNEs receive the spillover effects of technological innovation from Chinese firms. The fourth type is global consolidators that attempt to carry out the strategic consolidation to enhance the technological capacity up to the international level. The strategy, of course, is to innovate through the process of technological catch-up by consolidation. This has potential to spread out the results of innovation from interactions among consolidated enterprises in the domestic venue into the developed world. The fifth type is a global first-mover, which is the most typical reverse innovator. In this instance, independent of external effects, local Chinese firms achieve independent R&D outcomes and the results spread into the global level.

The implications of R&D by Chinese firms and measures in response are suggested as follows:

First, the main response measures for dealing with the Chinese R&D policies would be to promote the technological cooperation with focus on the 7 strategic emerging industries, formulate strategies to cope with the growth of Chinese firms in the high-tech industries, and support joint R&D by the small and medium enterprises with Chinese companies. The technological cooperation with China should be reinforced in energy-saving, environmental protection, bio technology and new energy areas that overlap with Korea's new growth engine industries. Also, it is imperative that specific and novel innovation strategies be established to minimize the impact of technological catch-up of China in high-tech industries, along with settlement solutions in case of patent disputes. The policies are needed for supporting SMEs that lack the capacity to

establish R&D centers in China so that they may conduct joint R&D or take advantage of R&D centers established by conglomerates or government bodies.

Second, another measure that Korea can enact to counter globalization of Chinese firms would be to set up strategies to develop the technologies through Korean companies' affiliates in China. Just as many foreign firms including Taiwanese firms are applying and registering patents in China, Korean firms also need to create effective portfolios of local patents in China. Furthermore, we need to deal with various challenges from Chinese global firms in accordance with their types of firms: firms that achieve growth by taking country specific advantages (CSAs), catch-up through innovative progress and self-innovation.

Third, policy measures related to R&D cooperation should include strengthening R&D cooperation with universities and research institutions in China, establishment of R&D cooperation models between the governments and providing directions for cooperation in technical standards. Cooperation should be concentrated in universities and research institutions that dominate in terms of the proportion of invention patents in high-tech areas where industrialization is still in its infancy, or in general purpose technologies. As for R&D cooperation between the governments, it might take the form of mutual funding frameworks as in the case between China and Germany, and should be focused on core industries later on. Lastly, the cooperation in technological standard between Korea and China should continue in areas that the new technologies have been introduced and the industrialization has just begun.

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

Pyeong Seob Yang, Seung Shin Lee, Ik Joon Moon,
Jina Yeo, Su yeon No, Jihyun Jung

As China has rapidly risen, it became the most important trade and investment partner, and the formation of Greater China bridging China-Hong Kong-Taiwan as China is its center. 15 years have witnessed its successful reunification with China since Hong Kong returned to China in 1997. Especially, China-Hong Kong Closer Economic Partnership Arrangement(CEPA) concluded in 2003 played a role as the key to expanding the economic cooperation through 9 times supplementary agreements to CEPA. On the other hand, China-Taiwan Economic Cooperation Framework Agreement(ECFA) which was concluded in June, 2010 and came into effect in September, 2010 is expected to strengthen the economic ties between the two countries and to enormously affect the neighbor countries in the region. Therefore, this report firstly examines the historical background, development and the main issues of economic integration among greater China. Then, the economic integration will be scrutinized in terms of trade and investment between China-Hong Kong, and China-Taiwan. The institutional integration will be analyzed by comparing the commitments in CEPA and ECFA with those in the other Chinese FTAs concluded with other countries. Also, Guangdong and Fujian as the two main regions in China to cooperate with Hong Kong and Taiwan respectively will be the case study to present the economic cooperative programs and cases that may provide the meaningful implications for us.

Main findings in this study are as follows;

First of all, it is essential to analyze and to set up with a plan to deal with the mid and long term impacts of ECFA on Korea's export to China. According to the analysis on the short term impacts of ECFA EHP(Early Harvest Program) coming into effect, the detrimental effect on Korea's export to China turned out to be limited. In the medium and long term, however, the full-scale ECFA agreement in trade of goods will do considerable harm to the export of Korean products that are competing with Taiwanese goods in Chinese market. The competitive edge will be given to Taiwanese products, especially in the highly protective (with high tariff rates) industries for the domestic demand. As for the highly protective industries for the external demand, on the other hand, the proportion of processing trade is relatively high so that the short term effect may be insignificant while the Korean market share in China will be encroached owing to the price disadvantage in the long term. In the industries for the domestic demand with

relatively low tariff rates, probably the Taiwanese products will erode the Korean market share in China to a certain degree. The industries for the external demand with low tariff rates such as telecommucation equipment and machine, electronic parts, and computer related products will be comparatively safe from the damage caused by ECFA. Still, these products see the keen competition with the Taiwanese in Chinese market, and China has the strategy to change its economic growth engine from export to domestic consumption where the possibility cannot be completely excluded that the Korean market share in China will be pinched by Taiwanese products in the long term.

Second, the general policy of the economic cooperation with Greater China should be redirected; the biased trade policy only toward mainland China into a balanced trade policy for the whole Greater China considering the strategic importance of Hong Kong and Taiwan. Otherwise, the economic cooperation with mainland China should become more refined and subdivided. As the reinforcement of economic cooperation among Greater China grows, the focal points of growth will be multipolarized. Therefore, the economic cooperation with the mainland China should be changed from the one that too much importance has been given only to the coastal areas into the one that diverse interests are reflected according to the multipolarized system of Chinese regional economic development.

Third, the implications for the Korea-China FTA are as follows;

i) Korea and China will also be able to broaden the liberalization through regular negotiations in the KCFTA framework as the China-Hong Kong CEPA. ii) As for opening trade in goods, we should aggressively negotiate the early tariff reduction for the intermediary goods that are severely competing with Taiwanese goods in Chinese market because Korea and Taiwan along with Japan are playing a role in providing the intermediary goods in China. This approach is positively necessary in order to prevent the market share erode by ECFA and to reap the fruit of Korea-China FTA in early stages. iii) For the service negotiations, we may request China's further liberalization in the sectors where China is more likely to open because in the FTAs with other countries China has already made commitments in GATS plus or DDA plus level, and also made additional commitments in CEPA. iv) the pilot basis liberalization measures included in CEPA also can be adopted in Korea-China FTA. That is to say, in the CEPA agreement, the trial liberalization measures were tested first in Guangdong province in the vicinity of Hong Kong and have been expanded in other provinces after they prove to be successfully implemented in the tested region. Also, the interactions and cooperation with Fujian province adjacent to Taiwan have been strengthened after ECFA. Therefore, further liberalization and cooperation on the pilot basis, in the framework of Korea-China FTA, can be made first in the regions where the trade and investment are vigorously made between the two countries. v) The joint feasibility study of Korea-Taiwan FTA may be initiated on non-governmental basis in terms of protecting the Korean market share in Taiwan from other countries and diversifying the trade strategy toward Greater China. The mainland China's opinion on Korea-Taiwan FTA negotiation should never be given too much consideration based on the "One China" principle. vi) It seems desirable to have more active cooperation with Hong Kong service enterprises and Taiwan manufacturing firms by utilizing CEPA and ECFA in order to effectively advance into Chinese market.

Russian ODI and FDI promotion strategy of Korea

Jae-Young Lee, Seong Bong Lee, Alexey Kuznetsov, and Jiyoung Min

Russian Overseas Direct Investment(ODI) has been increasing rapidly in recent years. It has been on an upward trend since the early 2000s and rose more steeply from the mid 2000s. The total amount of Russian ODI in stock was 362.1 billion dollars at year-end 2011, or 15th in the world. The volume grew more than 18 times that of 2000.

However, Russia's direct investment toward South Korea is rather trivial. Until the end of 2011 Russia invested 54.57 million dollars (in stock), which is a mere 3% of the amount of Korea's direct investment toward Russia. This implies that Korea is not yet an attractive investment destination among Russians. In fact, Russian direct investment to Korea is important because it brings not only economic benefits but also regional security, along with stability and peace in the Korean peninsula and in Northeast Asia with strong support from Russia. Therefore, investment cooperation between Korea and Russia needs to be strengthened in the future. Of course, both Korean direct investment toward Russia and Russian direct investment toward Korea should proceed in parallel.

The purpose of this study is to review the current status and motivations of Russian overseas direct investment at different levels; namely country, region and industry base. After an in-depth analysis of Russian overseas direct investment, the study will provide specific measures for attracting and expanding Russian direct investment to South Korea.

The study focuses on patterns and recent condition of the increasing Russian ODI since 2000, and Korea's investment promotion policy toward Russia and its achievements. The study is conducted with many methods including document research, statistical analysis, survey on Russian businesses and experts interviews.

The study consists of five chapters. In the second chapter following introduction, theoretical and statistical analyses on Russian ODI will be presented, with Russian direct investment since 2000 being the main focus. The study also attempts to demonstrate the main features of Russian overseas direct investment by highlighting Russia's motives for overseas direct investment.

After reviewing changes and trends of Russian ODI, the authors selected regions and industries of greatest interest to Russian investors and added useful information for Korea's investment promotion policy.

In chapter three, motivations and strategies of Russian ODI is analyzed. The authors carried out a survey of Russian businesses about their sectors and regions of interest for investment and possibilities for investment in Korea. With the result of the survey, we suggest promising investment sectors for Russian investors and desirable directions for Korea's investment policy toward Russia.

In chapter four, Korea's current foreign direct investment and its major features are reviewed. Then, the focus is narrowed to Russia's recent direct investment trends in Korea, and the reasons for the lack of progress in Russia's direct investment in Korea is discussed. Based on these, Korea's investment promotion policy is evaluated.

In the last chapter, attractive sectors for Russian investors and measures for increasing Russia's investment to Korea is suggested.

According to our study, Russia's defense industry holds promising investment potential. It contains comparatively high technological competitiveness among Russian businesses, and with its abundant capital resources, foreign direct investment is likely to result in success. Agreements at the government level should precede any technical and investment cooperation with Russia's defense industry, as it requires approvals from technology-related government agencies in Russia.

Second, investment promotion should proceed through market oriented joint-ventures. Korea's investment promotion agencies such as Invest Korea should sort out particular sectors with prominent market share effects in Russia, in order to develop a business model that will accelerate mutual investment between the Korean and Russian industries. Such a business model could be implemented in prospective investment counseling programs for businesses of both countries, and the launch of such programs needs to be actively considered.

Third, investment promotion targeted at Russia's energy sector is promising. Korea needs to participate in Russia's resource development projects to establish cooperative ties between the energy sectors. This may open the way for further joint investment cooperation between the businesses of both countries in a third-party energy resource development. Moreover, energy efficiency technology of Russia's leading energy enterprises can provide opportunities to launch joint investment projects in Korea.

Fourth, investment promotion targeted at the research development and education sector. In case of the medical sector, Korea may convert Russia's science technology for commercialization, in the form of medical devices. Such a strategy fits in the broader objective of establishing a Korea-Russia joint enterprise for global markets in the territories of Korea. In case of information and communication sector, leading enterprises of both countries could consider reaching an agreement for strategic technology partnerships and joint investment cooperation. In case of the

education sector, investment promotion through increased cooperation in the higher education and science technology should be actively considered.

As such, in order to expand Russia's foreign direct investment in each of these respective sectors, the Republic of Korea should place more effort in the following areas.

First, mutual cooperation with Russia's government agencies needs to be expanded. Building cooperation channels to promote Russia's foreign direct investment to Korea necessitates omnidirectional contact with the Ministry of Economic Development, the Agency for Export Credit and Investment Insurance and the Chamber of Commerce and Industry of the Russian Federation. Regarding such processes it would be better for the Korean government and related agencies to replace the current individual channels of contact with the so-called 'control towers' that would allow more comprehensive and systematic control for continuous and consistent policy for investment promotion to Russia.

Second, the present investment promotion system should be modified through increased interests on all of Russia's regions. It would be necessary to strongly reinforce investment promotion affairs conducted at KOTRA. Concurrently it would be important to develop 'Korea-Russia investment cooperation MOU' signed in 2011 between Invest Korea and Moscow Investment Agency, to provide expanded investment opportunities and information exchange.

Third, Korea's economic success should be more vigorously advertised to Russian businesses. It would be rational to promote Korea's image as a developed country through diverse exhibitions, while modifying incorrect stereotypes via published works containing comparative country analysis. In particular, it would be vital to effectively employ the internet and mass media outlets, while providing the abundant information in the Russian language through the embassy, consulates, business related institutions, and conferences.

Fourth, Russian businesses require more active provision of information on investment to Korea. Korea should expand channels of interaction among business people of both countries, and reinforce cooperation with the Chamber of Commerce and Industries of the Russian Federation and Moscow Entrepreneurs' Association. In addition, it is necessary to further activate the annual Korea-Russian Business Forum hosted by the Korea Chamber of Commerce and Industries, and the annual Korea-Russia Business Dialogue hosted by the Korea International Trade Association, and setting as the main agenda Korea's investment promotion issues.

Fifth, cases of successful Russian investment to Korea need to be created. A single case of Russia's large scale project successfully executed in Korea would motivate the Russian Federation to spread the information concerning Korea's investment environment.

Sixth, joint investment with third parties should be more aggressively sought. For instance, merging Korea's technical skills and Russia's capital for a joint entry to Russia's neighboring CIS region and other former allies of the Soviet era would be an opportunity to fully implement Russia's resources while reducing potential risks.

Lastly, Korea and Russia need to establish a joint investment fund to promote further investment. It could be a utilization of the already established 'global new growth engine fund' between Korea and Russia, or creation of a similar joint investment fund.

Korea's Development Cooperation with the Mekong Region Countries

Kim, T., J. W. Cheong, J. Lee, M. Shin, and N. R. Park

A regional cooperation project centered on a long riverway passing through several nations, in addition to ensuring agreement between the nations involved, requires cooperation from the international community as a whole. This is because of potential friction that may inevitably arise during the course of such a project; types of friction that the states involved may not be able to resolve on their own. The Mekong's upper reaches located in China, and five developing nations of Southeast Asia sharing its middle and downstream sections, and this has made mutual agreement quite difficult. But due to the high and vocal demand for development in the region, the actors have continued to make adjust their positions accordingly and cooperate with each other in spite of the difficulties involved in developing the Mekong region.

Support from multilateral development agencies and advanced nations have kept development moving forward up to this point, in terms of hardware infrastructure. Nations in the region have been active participants in the ADB-sponsored GMS program that began in 1992, which resulted in rapid build-up of physical infrastructure in the region. They are also cooperating through the Mekong River Commission for projects to develop the Mekong's water resources, and also bolster human capital in the region through the Mekong Institute. Connectivity between different regions around the Mekong have been strengthened recently, to promote the flow of people and materials that would expedite development in the region.

In October of 2011, Korea announced its intentions for earnest participation in the development of the Mekong region through the First Korea-Mekong Foreign Ministers' Meeting. During the meeting, Korea pledged active consideration to increased connectivity with ASEAN, sustainable development, and human-oriented development in six major issue areas. Korea also announced it would pursue several pilot projects at the Second Korea-Mekong Foreign Ministers' Meeting in July of 2012. At this point, Korea must formulate a basic strategy, direction of cooperation and measures for mid-to-long term cooperation in participating in the regional development.

In this regard, the question of how we should look at Korea's participation in the development of the Mekong region is an important one. Countries comprising the region including Vietnam, Cambodia, Laos, and Myanmar are already major cooperative partners receiving significant ODA from Korea. This means that if viewed solely from a bilateral standpoint, Korean involvement in these development efforts would create much overlap with pre-existing ODAs and would be, in essence, simple repetition.

However, the development of the Mekong region is actually a level-up, from bilateral to multilateral cooperation. The claim could be made that it constitutes Korea's first multilateral development project after Korea became a member of the OECD DAC. It should be noted that the Korean government and the private sector will be involved together in various projects pursued by the Mekong regional bodies, which will serve to enhance Korea's potential capacity with respect to development.

In order to ensure continued development, private sector participation is indispensable along with cooperation between governments, for which programs that enable public-private partnerships must be created. In the middle to long term, Korea should take a leading role in the Mekong development and come up with a system that would strengthen Korea's capacity for multilateral development cooperation. Moreover, the strategy for development cooperation in Asia must be established from the larger framework of Korean development cooperation.

This research thus proposes the following measures for cooperation, with respect to creating overall plans for Korea in developing Mekong region.

First, the Korea-Mekong foreign ministers meeting must be elevated to summits, while simultaneously organizing economic ministers' meetings as an intermediate phase to enhance economic cooperation. Following its foreign ministers' meetings with the Mekong region countries in 2008, Japan subsequently elevated it to a meeting of economic ministers and eventually summits, which could serve as a point of reference.

Second, an ODA base for multilateral cooperation must be established. The Mekong Subregional Development was made possible by converting previously bilateral cooperative relationships into a multilateral channels for cooperation. A firm foundation in the form of multilateral ODAs is vitally necessary for the continuation of such multilateral cooperation. The government-wide ASEAN Connectivity Task Force that was launched on September 2012 will focus on strengthening the connection between Korea and countries in the Mekong region. The Korean government ODA, set to be doubled by 2015 (relative to 2012), could be put to active use for the endeavor.

Third, all efforts should be expended for keeping the cooperation with donor states and regional cooperative organizations moving. The nature of each organization must be assessed and understood as well as the strategies of major donor states, to ensure amicable cooperation with those organizations/states. Korea should also seek to take leads in certain projects, circumstances permitting, and must not shrink from taking advantage of diverse, pre-existing

networks. This would contribute immensely to enhancing Korea's capacity for development in the long term.

Fourth, formulating an action plan for Korean engagement in development projects in the Mekong region is necessary. These engagements should take place separately in the six major areas of cooperation, instead of in an overarching manner. As these projects move forward, the so-called Korea Special Fund needs to be set up, so that Korea can evaluate, from the earliest stages (feasibility studies), how those funds should be spent. This allows an accumulation of data as well as provide opportunities for Korean corporations. Also, the participation of the private sector should be encouraged by establishing joint public-private programs, which would include public-private partnerships (PPPs) and other diverse formats. To further stimulate exchange in the private sector, the 'Korea-Mekong Business Forum' should continue to be organized. Last but not least, a system should be arranged in a manner that would bring in more small and mid-size businesses into the fold.

Southeast Asian Labor Migration to Korea:
Origin-Country Factors and Policy Implications

Yoon Ah Oh, Jai-Joon Hur, Daechang Kang, Yoomi Kim, and Mingeum Shin

Like many migrant-receiving countries, South Korea has pursued the dual policy goals of restricting the inflow of low-skilled workers while trying to attract and retain highly-skilled workers. Yet after twenty years of labor immigration, the foreign labor force in Korea is largely made up of low-skilled workers whereas the number of highly-skilled, professional foreign workers remains decisively small. Such challenges are compounded by the existence of a large number of undocumented migrant workers, which has persisted due to complex economic and political reasons.

This study approaches such challenges faced by Korean immigration policy makers from origin-country perspectives with a focus on Southeast Asia. Southeast Asia is a major region of origin for labor migrants in Korea. Understanding the "supply side"— the structural forces and policy factors that contribute to labor emigration—will certainly improve bilateral labor cooperation between Korea and origin countries in the region. By doing so, this study also addresses the scarcity of research on labor migration from the origin-country perspective in Korea's policy and academic circles.

A survey of several structural factors of major Southeast Asian economies; including their wage gaps with Korea, levels of economic development, sectoral composition, and labor market conditions; suggest that these countries have strong, although varied, incentives to promote labor emigration such as reducing unemployment and securing overseas remittances. Reflecting the importance of overseas employment and remittances to their economies, some countries in Southeast Asia have developed policies and institutions to promote labor migration and protect their workers abroad. The priorities of labor migration in their external economic policy as well as government capacity to promote labor migration in bilateral cooperation with Korea vary from country to country, but some countries have come to see Korea as a highly important destination of their labor migration and to actively pursue the labor mobility agenda with Korea.

In view of Korea's policy challenges in controlling the influx of low-skilled migrant work-

ers and to increase high-skilled worker migration, this study of Southeast Asian origin countries suggest a number of policy recommendations. First, while Korea needs to strengthen its efforts to reduce the entry of low-skilled workers and the number of undocumented workers across the board, it can better achieve such goals by concentrating on countries with largest potential impact. Bilateral labor flows into Korea are highly uneven in their distribution among countries, so improvement with major labor cooperation partners can have disproportionate effects on overall foreign labor outcomes. In addition, this will also help diversify the labor flows from the origin countries, which is another important recommendation this study makes. The reliance on a limited number of origin countries can lead to an inflexible policy environment with adverse implications for bilateral labor cooperation. Second, Korea needs to pay more attention to high-skilled workers from Southeast Asia. Considering fierce global competition for talent, Korea is most likely to secure highly-skilled migrant workers in the form of foreign students. The close relationship between Korea and Southeast Asia should work as an advantage, and Korea could design scholarship and employment programs for Southeast Asian graduate students based on a brain return platform where after a period of employment in Korea they should return home to contribute to the development of human resources in origin countries. Attracting foreign talent and graduate students from Southeast Asia needs to focus on countries with relatively good math and science education, such as Thailand, the Philippines and Vietnam.

Economic Cooperation between India and Selected Asian Countries:
Current Status and Policy Implications

Choong Jae Cho, Young Chul Song, Yoon Jung Choi, Woong Lee, and Hye-won Jung

The center of the global economy has been gradually shifting to emerging economies with developed countries hit hard by the global financial crisis that started in the United States in 2008 and the recent Eurozone crisis. Since 2012, the GDP growth rates of even those emerging economies have been declining; yet, at the same time, the role of emerging economies like India as the pillar of global economic growth is becoming more important, and so is economic cooperation with emerging economies. According to Global Insight, the average GDP growth rates of the U.S, EU, and OECD countries for 2011~2015 are projected to be 2.4%, 0.9%, and 1.9% respectively, while that of India for the same period is estimated to be 6.7%.

The present report seeks to examine economic cooperation between India and the three selected Asian countries, and offer policy recommendations for Korea's economic cooperation with India. Japan, Singapore, and China are selected for purposes of the present research, given their high level of economic cooperation with India. The study undertakes comparative analysis of the current status of economic cooperation including policies and strategies focusing on trade, investment, and the FTA. In recent years, Japan, Singapore, and China have been stepping up economic cooperation with India, capitalizing on their comparative advantages and strengths. In particular, FDI flows from Japan and Singapore to India have been increasing at a rapid pace since the late 2000s; Japan and Singapore are ranked India's 4th and 2nd largest foreign investors in terms of accumulated FDI for the period of April 2000~August 2012, while Korea is ranked 13th. Apart from FDI, Japan, the only country from which India receives ODA(Official Development Assistance) among the three countries, has also been actively utilizing ODA to participate in large-scale infrastructure projects in India. It has also helped build industrial parks exclusively for Japanese companies operating in India. In the case of Singapore, the country signed the FTA with India early on, benefiting from long-standing historical ties and a large Indian community within the country. In addition, Singapore has been utilizing state-linked companies to enter the Indian market, mainly focusing on sectors wherein it enjoys

comparative advantages. In the case of China, while its investment in India has lagged, the country has emerged as the largest trading partner for India. In addition, it has been playing a significant part in infrastructure development in India.

Based on the analysis of the three countries' economic cooperation with India, the following policy implications/recommendations are offered for Korea's economic cooperation with India. First, it is recommended that bilateral cooperation mechanisms between Korea and India be enhanced. As in the cases of the three countries' relations with India, regular high-level meetings need be established. Enhancing the Korea-India strategic partnership established in 2010 would be a good starting point to upgrade bilateral intergovernmental mechanisms to a summit level. Cooperation should not be limited to the central government level, as cooperation with India's state governments should also be further promoted. In addition to intergovernmental cooperation, ties between private sectors of the two countries should also be expanded.

Second, it is necessary to increase the impact of Korea-India CEPA (Comprehensive Economic Partnership Agreement). Tariff concessions in both goods and services need to be increased, as they are currently lower than those of India-Japan CEPA, and India-Singapore Comprehensive Economic Cooperation Agreement(CECA). To that end, the Korea-India CEPA joint committee would have to play a more active role. In addition, ways should be sought to expedite the utilization of certain provisions of CEPA such as the movement of IT professionals, and co-production of audio-visual materials. In addition, with regard to a provision concerning the opening of bank branches, the allotted time frame would have to be extended.

Third, assistance from the government should be scaled up for Korean investors bound for India to help increase their access to the Indian market. Korean investment in India has been lagging far behind that of Japan or Singapore. Korean companies need to be more aggressive in penetrating the Indian market, for which effective policies are needed. In particular, in order to facilitate the participation of Korean firms in large-scale infrastructure projects that have been increasing recently in India, Korea needs to formulate its own strategies, but without tools such as Japan's ODA or Singapore's state-linked companies at its disposal.

Lastly, building industrial parks for Korean companies in India could help enhance Korea-India economic cooperation. As Korea does not have experience in building industrial parks in India, joint efforts with Japan or Singapore should be given consideration. However, should Korea decide to go in alone, forming joint ventures with India's state governments or development corporations under state governments would prove to be wise.

How to Promote Economic Cooperation with Resource-abundant Andean Countries:
Focus on Venezuela, Ecuador, and Bolivia

Kisu Kwon, Jin-O Kim, Misook Park, and Siun Yi

The purpose of this study is to provide suggestions for the enhancement of economic cooperation between Korea and the resource-abundant Andean countries including Venezuela, Ecuador, and Bolivia. These three countries have been deemed risky due to political unstability and therefore have remained as a major challenge for Korean companies in terms of cooperation despite their great resource potential.

In this sense, this study offers practical ways to enhance comprehensive economic cooperation with these three countries that are not limited to resource development cooperation. These include creating a friendly environment for Korean companies to encourage their entry into the resource development sector of the region, and building a sustainable model for economic cooperation. Also additional emphasis is put on finding measures to minimize the risks of doing business locally.

This report details the objectives outlined above in 6 chapters. The first introductory chapter lays out the necessity and the purpose of this study, methodologies, literature review, and the future work.

In the second chapter, the importance of economic cooperation with the three countries is analyzed, along with political and economic aspects of the cooperation environment. Here the three 'values' that underlie the economic importance of these three countries are described: one as a rich repository of natural resources, another as a market, and the last as target countries for development cooperation.

Chapter three is an in-depth analysis of the mid/long-term national development plans of the three countries and their priority sectors which have great potential to promote and enhance cooperation. The analysis of the national development plan concentrates on “the Government Plan 2010-2015(Programa de Gobierno 2010-2015 in spanish)” for Bolivia, “the National Well-being Plan(PNDBV 2009-2013)” for Ecuador, and “the Simon Bolivar National Development Plan 2007-2013(PNDSB 2007-2013)” and “the Second Socialist Plan of the Nation

2013–2019" for Venezuela. As a result, it is found that there is high demand from the Bolivian government for support of plans for the development of its natural gas□railroad□electricity sectors, and the electricity□petrochemical plants sector. The Ecuadorian government has made higher education, technology transfer, IT, and transportation infrastructure high priorities. Lastly, with the Venezuelan government, resource development, oil refining□gas□electricity plant, and common fund raising seem to be promising areas for cooperation.

In chapter four, specific cases of major countries such as China, Spain, India, Brazil, Canada and the US are analyzed in order to find some implications for Korea. Firstly, in the area of development cooperation, an introduction is made regarding Spain's support for national development plans, Canada's "Think Tank Initiatives," Brazil's economic development experience sharing. Secondly in industrial technology cooperation, China's communication satellite development, and also China's information and communication sector cooperation are described in detail. Thirdly, in resource development cooperation, India-based JSB's worst practices in the mining sector in Bolivia and US-based Chevron's case of successful CSR (Corporate Social Responsibility) activities in Venezuela are introduced. Lastly in financial cooperation, Brazil, China and Italy's electricity generation business, China's entry to the natural resource development sector, and Korea's oil refinery construction are presented as good examples.

Chapter five examines the current state of economic cooperation between Korea and the three Andean countries particularly in trade, investment, resource development, plant construction, development cooperation, and institutional cooperation. Based on this analysis, this study proposes some agendas for economic cooperation that Korea should be looking at. In particular, SWOT analysis is conducted in order to review those three countries' environments for the economic cooperation.

Finally in chapter six, based on analyses in the previous chapters, several suggestions are made for economic cooperation with the three countries. At the government level, △ building and strengthening the cooperative network, △ promotion of partnership for industrialization strategy, △ risk management system construction, △ reinforcement of cooperation with CAF (Development Bank of Latin America), △ development of the triangular cooperation model, △ public awareness or the image improvement efforts related to Korea are suggested. At the corporate level, △ utilization of government/public channels, △ establishment of strategic partnerships with Chinese companies, △ enhancement of CSR activities, △ Hub&Spoke strategy, and △ diversification of financial methods are proposed.

Cooperation with the Middle East after the Arab Spring:
Circumstantial Changes and Implications

Baran Han *et al.*

The year 2011 witnessed unprecedented political change in the Middle East. Citizens took to the streets in mass protest against deepening poverty, high youth unemployment rates, corruption and longtime dictatorship. Tunisia, Egypt, Libya and Yemen underwent regime changes, while there is an ongoing full-fledged civil war in Syria.

It remains to be seen whether such political changes in the Middle East will bring about significant social and economic transformation. The Arab Spring seem to have shaken the deep-rooted patriarchal and Islamic authoritarianism that has long been rampant in the region. The civilians of the Middle East could too question the legitimacy of the State and demand political change. The governments in turn are actively addressing issues causing social discontent, raising wages, and increasing investments for social infrastructure in the areas of housing, road construction, education and health and medical care.

This book summarizes the changes in the Middle East since the Arab Spring from an economic cooperation point of view and draws implications for Korea. More specifically, we look at how Saudi Arabia, Egypt and Libya have fared since the Arab Spring and how their major economic partners, the US, China, Japan, and France have reacted to circumstantial change. We then examine the nature of economic cooperation between Korea and each of the three middle eastern country,

Four prominent political and economic features seen currently in the Middle East as of 2012 are identified: contention among preexisting and newly emerging political forces, increased public spending, strengthened protections for domestic labor force and firms, high unemployment and corruption, and rising regionalism. We suggest that the Korea focuses on strengthening non-governmental linkages, reevaluate and revise trade and investment agreements with middle eastern countries, and reinforce development cooperation.

Trends in the African Construction/Plant Building Market and Implications for Korea

Young Ho Park, Sungil Kwak, Hyelin Jeon, Jong-Moon Jang

Africa is the poorest continent in the world in terms of public infrastructure. In any country with functioning public infrastructure, roads form the backbone of transportation, responsible for the 80-90% of movements of people and goods. In Africa, however, only 20% or so of existing roads have been paved. The vast majority of existing railways was laid during the colonial era and is now obsolete, unable to function properly. Much of its port and airport facilities are similarly outdated becoming, in effect, major obstacles to the continent's economic development. Particularly conspicuous as well is the absence of proper electricity infrastructure. Almost 800 million Africans live in the sub-Saharan region, but the aggregate power generation capacity of the region lags behind the capacity of Spain (with a population of 45 million). If South Africa is not counted in with Sub-Saharan Africa, the region's power capacity is lowered to the level of Argentina. Nearly a quarter of the existing power facilities are out of order and obsolete. Thirty or so African countries, therefore, experience power outages on a daily basis, and serious economic losses as a consequence.

The increasing measure of political stability and signs of significant economic growth in Africa, coupled with activities in resource extraction market and the increasing influx of infrastructure development funds from the international community, have led to the explosive growth of the construction industry on the continent. The growth rate of the construction sector in numerous African countries hovers well above the average economic growth rate. This pattern is especially evident in such resource-rich countries as Angola, Sudan, Algeria, and the Democratic Republic of Congo. The public investment plans of these African states, notwithstanding differences in detail, mostly focus on expanding the social overhead capital (SOC), such as the infrastructure for transportation and electricity. Oil-producing countries now actively channel the wealth they have gained from the rise in international oil prices toward expanding their industrial infrastructure, fueling the growing demand for the development of various plants.

The explosive economic growth of Africa is expected to continue its trajectory for the time being with the concomitant rise in the demand for construction and real estate development. The Economist has speculated that Africa would soon outdo Asia in terms of economic growth. Seven of the ten countries that the magazine predicted to achieve the fastest rates of economic growth over the next five years (2011-2015) are African countries.

The rapid growth of demand for public infrastructure also stems from urbanization. The rate of urbanization in Africa is well ahead of those in other developing regions. By 2040, the continent is expected to boast at least 100 cities with a population of over one million. Another major source of the rising demand for infrastructure expansion is resource extraction. As the international competition over securing access to greater reservoirs of natural resources continues to ramp up, the resource extraction market in Africa is booming. With the continued influx of foreign capital, Africa may well grow to produce more than 30% of all petroleum in circulation worldwide by 2020. The activity of the resource extraction market has consequently led to growing demand for the expansion of transportation infrastructure, including roads, railways, and port facilities. It is also fueling the rising demand for the development of plants including power plants, oil refineries, oil pipelines, and offshore plants. The International Energy Agency projects that the public infrastructure development market in Africa, formed and sustained by the exploitation of petroleum and natural gas in the region, would grow to USD 2.1 trillion (or USD 83 billion annually) in total value between 2010 and 2035.

The most aggressive suitor in pursuit of Africa's abundant natural resources is China, which has effectively come to dominate the African infrastructure development market by promising and delivering massive amounts of aid. European companies have mainly led construction in Africa in the past, but the power of Chinese capital is now rapidly replacing these traditional leaders. The aggregate revenue that Chinese investors earned from construction in Africa increased 21 times between 2002 and 2011, with their share of the region's construction market exceeding 40% in 2011.

Notwithstanding the impressive accomplishments of China, France still continues to exert major influence over Africa, thanks to the political and economic connections that trace their origins to the French colonial rule over the region. Africa accounted for 13% of the total revenue that French construction companies earned in 2011. This means that Africa, aside from Europe, is the biggest market for French construction businesses. These French investors are actively expanding their share of the African market by launching consortia and advertising their sector-specific expertise. They have recently begun to diversify their portfolio, to include clients in such nontraditional markets as South Africa, Nigeria, Angola, and Kenya.

The United States, along with Europe, has traditionally played a leading role in the African infrastructure market. Its market share, however, fell from 15% to 5% between 2000 and 2011 due to the increasing vigor with which Chinese investors have been expanding their presence in Africa. The United States no longer claims leadership in the transportation infrastructure

market. Instead, it has begun to focus increasingly on the petrochemical market in order to take better advantage of the comparative advantage it has over that area.

The presence of Japanese businesses can barely be felt in the African construction market. Nevertheless, since the Japanese government introduced a new policy in 2008 for increasing support for companies entering the African market, coupled with the sluggish domestic construction industry and effects of the recent major tsunami earthquake that hit Japan, Japanese construction firms are increasingly eyeing Africa as the next major base of their businesses. The number and volume of orders that Japanese companies have secured for the development of buildings and plants in Africa are noteworthy in their rate of growth, increasing by 2.3 times in just one year from 2010 to 2011 to USD 4.26 billion in total.

The construction market in Africa is still in a nascent stage and lags far behind the counterparts in other developing regions. Due to the absolute shortage of African companies capable of meeting increasing demand on their own, however, much of the rising demand in Africa now must be satisfied by foreign and international businesses. In 2010, Africa represented 16% of the international construction demand, well ahead of South-Central America (9%) and North America (12%). These indicate ample opportunities for success from the perspective of international construction companies. There are, nevertheless, still a number of risks complicating the prospects of success, including political instability, pervasive corruption, inconsistent policies of African governments, and the lack of mutual trust between investors and investment-seeking governments. In particular, the low sovereign credit ratings of most African countries also make it quite difficult for investors to secure the needed financial resources from the international financial market. Long-term financing is crucial, however, to the success of public infrastructure development projects, as these capital-intensive projects tend to require much investment and a long time before they begin to yield tangible returns. Africa still lacks the structural and systemic conditions to support the financing projects it requires. Many of these risks are more or less repeated in other developing countries. It would be unwise to be blinded by these risks and lose sight of the great potential for success that Africa has. While one must avoid overestimating Africa's potential, one must also awaken to the waves of hope and expectations sweeping across the continent and that demand us to eschew our biases against the continent's capability for development. Obstacles and risk factors persist, but the potential of emerging African construction market is real and warrants thoughtful appraisal.

In light of sizable opportunities that Africa presents, this study examines the potential that the incipient construction and plant development market in the region has. This study then identifies directions that Korean businesses, relative latecomers to the African boom, may take in order to ensure the success of their endeavors. The findings and conclusions of this study can be summarized as follows.

First, Korean investors may seek and find the financial resources they need from international financial institutions. With the exception of a few petroleum-producing countries, most

African countries are suffering from extreme fiscal deprivation and are unable to fund development projects on their own. As most African countries have low sovereign credit ratings and present serious risks, it is not so easy to secure the financing they need in the international financial market, either. The chronic difficulty of securing financial means is the major reason that makes investors avoid infrastructure development projects in Africa in spite of the high returns they promise. The export credit agencies in Korea thus need to become more proactive, and enhance financial capacity of Korean companies by securing the required financial means in the forms of cofinancing projects with multilateral or bilateral development financial institutions (DFIs). Such financing partnerships are especially important because Korean financial institutions alone cannot handle the development projects of the size and scope that Africa needs. Increasing the network and cofinancing opportunities with these international DFIs will be also beneficial because it will allow Korean investors to make use of the abundant amounts of information, expertise, and experience that these institutions can offer with respect to Africa.

Second, strategic alliances will also be helpful for entering the African market. At present, the African construction market is in effect dominated by Chinese and European companies. Backed by massive amounts of financial and capital assistance from the central Chinese government, Chinese companies almost exclusively in their ability to meet the new demand across Africa for construction and development projects. Former European colonial states also continue to exert significant influence over the construction market in Africa by taking advantage of well-established political and economic "connecting" with these established leaders would indeed be an uphill battle. It is thus crucial to seek strategic alliances with European companies that boast extensive historical and financial presence in Africa by launching consortia or organizing other forms of partnership. Such strategic alliances would allow Korean investors effectively to overcome their relative lack of information, capital, and experience in the region, and significantly mitigate the risks facing new market entrants.

Forming strategic alliances is also important to spreading out the multiple, complex risks Africa presents by virtue of its political and economic circumstances. Partnership with companies backed by the governments of states that hold significant diplomatic sway over African countries can help Korean investors to lessen their risks, especially associated with unexpected changes or cancellations of their projects. To this end, partnership with Chinese companies is also advised. While Korean investors will have to differentiate themselves from their Chinese counterparts in the long run, they cannot remain blind to the realistic necessity of forming partnerships with these rising leaders of the African construction market. An example of effective partnership would involve a consortium between Korean and Chinese companies in which different partners handle different aspects of the project, such as designing and engineering, technology, financing, and construction. Korean contractors of construction projects may also consider hiring Chinese subcontractors.

Other key candidates for strategic alliances in Africa include major players in resource

extraction. Multiple petroleum companies have established their presence in oil-producing African countries. These corporations are in effect the main source of the rising demand for various construction and development projects. Cooperation with these international petroleum companies will allow Korean investors to take better advantage of the growing demand for the development of petrochemical plants and other components of the expanding petroleum infrastructure.

Also, Korean investors need to consider securing loans from multilateral development banks. Over the last 12 years, from 2000 through 2011, Africa was the second-largest regional recipient, after Central-South America, of World Bank loans, receiving USD 160 billion or 21% of all the loans provided during the period. In terms of the number of loans provided, Africa claimed triple the number of loans provided for South Asia or 30% of the total number of loans the World Bank provided. The World Bank provides financial means for various projects in social infrastructure building for eradicating poverty, funding development projects in the areas of energy, transportation, public sanitation, and so forth. Loans for energy development represent the biggest share (22.5%) of all loans provided, attesting to the poor status of electricity infrastructure in Africa. The World Bank will continue to provide increasing amounts of loans for Africa in the coming years, as part of the increasing official development assistance (ODA) the region will be attracting.

With the international society resolved to achieve the Millennium Development Goals by increasing, among others, the amount of ODA to 0.7% of the gross national income of each contributing state, the World Bank is expected to expand the scope and range of the loans it provides significantly. Loans from the African Development Bank (AfDB) may not be comparable to the loans from the World Bank in amount, but they provide intensive support for the development of core infrastructure, including power plants, waterworks, public sanitation, transportation, and communication. While the number of development projects in Africa backed by funding from multilateral development banks (MDBs) is steadily rising, Korean investors make almost no use of such increasing financial support. Ever since Korea began to provide ODA for Africa, it has so far secured only a single project supported by a World Bank loan for Africa. While Korean investors have secured six loans so far from the AfDB, the total amount of those loans amount is a relatively small USD 137 million. The procedures for securing MDB-backed projects tend to be quite complex and time-consuming, and the dearth of records of Korean investors working on such projects only adds to the difficulty of securing such projects. MDBs, however, are appealing sources of financing in that success in an MDB-backed project can more or less guarantee continued, secure relations with the given MDB for some time to come. MDB-backed projects are also attractive because they minimize the risks of corruption. In addition, MDBs guarantee payments for construction projects and carry no foreign exchange risks.

Therefore, in order for Korean investors to benefit from MDB loans, it is vital to establish a comprehensive and integrated service system that can systematically collect, analyze, and

provide information on pertinent MDB projects for Korean investors. Furthermore, it may also be useful to form a pool of experts on MDBs to encourage Korean companies, investors, and participants in MDB projects to share their experience and information. In particular, an important precondition for effective access to MDB-backed infrastructure project market are: good grasp of MDB inner workings, policy, procedures, and project cycles. This means that Korean investors need to participate as consultants from the very beginning of each project they want to secure, including its preparation. Participation in the preparatory stage will enable these investors to contribute to the decision of the project's purposes, characteristics and the related components, thereby allowing them to develop a workable blueprint regarding the requirements of the project, including the services and equipment it needs.

Equally important is the need to form a network of exchange and information with other countries. The MDB-backed projects involve the submission of development and project plans from each participating country, MDB approval, and bidding. Networking with MDBs and recipient countries from the first phase of this process will help Korean investors gain greater information, and thus strengthen their chances of winning the bids. The bidding information announced on the Internet is already too public and obsolete according to experts. A well-functioning network with the officials of MDBs and recipient countries will be crucial to collecting the information necessary to draft effective project proposals.

Another key factor that must not be overlooked is the need to build and maintain an effective network of human exchange. The African market entails high levels of uncertainty, unpredictability, and risks. Close working ties with officials of African governments and clients are therefore vital for securing development projects in the region. Most African countries remain unfamiliar markets for Korean investors. It is therefore strongly recommended that the Korean government facilitate these investors' activities in the region by forming and fostering active exchange with representatives of local governments and clients.

The Current Situation of Marketization in North Korea and Prospects for Change of its Economic System

Hyung-Gon Jeong, Byung-Yeon Kim and Suk Lee

The changes taking place in North Korea's political, military and economic aspects since Kim Jong-un came to power, are drawing the world's attention. In particular, as the Kim Jong-un regime places greater emphasis on the economy, there is growing international interest as to whether the new economic measures will bring about positive changes in North Korea. Current policies of the North bear many startling resemblances to reform policies of past socialist countries. At present, the time might not yet be ripe for predicting North Korea's full transition to a market economy. However, the Stalinist state has been placed in an abnormal situation where a planned economy and markets coexist in the country. As it is not likely that the socialist planned economy would prosper in such a situation, for North Korea, the transition to a market economy is almost inevitable.

This report studies the marketization of North Korea and seeks to forecast the possibility of change in its economic system in commemoration of the advent of the new Kim Jong-un regime and the tenth anniversary of the "July 1st Economic Reform Measures" this year. The advances in marketization is likely to lead to weakening of state control of North Korean authorities. In addition, the spread of markets suggests the high possibility of transition to a market economy, which occurred previously in socialist states in Eastern Europe and China.

Most of the existing studies on estimations of market scale in North Korea depended on surveys, involving North Korean defectors. These surveys can be distorted by the economic and social bias of the defectors, or by macroeconomic data which can be inappropriate to estimate the informal economy of the country. As a result of these distortions, there appeared a significant gap between the estimations through surveys and macroeconomic data. This study utilized the "2008 Census of Population of DPR Korea" in an attempt to overcome the limitations of such data.

Through an analysis of census questions, the study found that almost 83 percent of the North Korean population are involved in household economic activities, most related to raising of

vegetables, livestock or poultry. This participation rate in household economic activities can be deemed the same or very similar, in the least, with that of informal economic activities. The study also found that the rate is affected by income and other market-related variables.

Additionally, this research studies further the relationship between the progress of marketization and the pace of transition to a market economy. According to this study, at the early stage of transition, the two factors reveal a positive correlation, but turns into a negative correlation as time passes. In the case were the informal economy is small, there tends to be an official institution, robust governance and low corruption in place, thus leading to a rapid transition. In contrast, in the case of a large informal economy, households or businesses, which benefited from the informal economy, tend to be at the forefront of introducing a change towards capitalism. In addition, a large informal economy facilitates businesses at the early stage of transition. These effects, however, disappear with time. Therefore, it is important to come up with polices to promote transition in the early stages.

The study goes on to divide 27 transition countries, including China and Vietnam, into three groups, into outstanding, fine and poor reform groups, through discriminant analysis based on the outcomes of economic reforms over the past two decades. According to the discriminant analysis, North Korea fell into the poor reform group. Most of the countries in the same group with North Korea belong to the Commonwealth of Independent States (CIS) which had strong planned economies and whose states showed a slow transition to market economies. These states share similarities in that their former governments remained unchanged or they retained a government even after a new system was introduced. North Korea is similar in that it has a political structure unfavorable for reforms, hence, the North is likely to follow in the footsteps of the CIS states. Also, North Korea has an unfavorable initial condition in that the level of economic development at the early stage of transition is low. However, what is more significant is how the North sets up a favorable environment for reform with given initial conditions and how actively and efficiently it promotes its reform. Fortunately, North Korea is situated in the most dynamic geoeconomic location in the world, where neighboring countries like South Korea, China and Russia can play a positive role in supporting Pyongyang to step forward toward transition to a market economy. This is a critical moment for Pyongyang, and Seoul, along with the international community, in moving forward to assist North Korea in a bid to bring about better and faster reforms.

Research on Current Issues

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10	Key Agendas and Implications of the 2012 G20 Summit
11	Shale Gas Development Trends in Major Countries and Suggested Implications
12	The International Community's Economic Sanctions on Iran: Significations and Impact
13	Outcome of the Rio+20 and Political Implications
14	The Recent Reinforcement of Russia-China Economic Cooperation: Characteristics and Implications
15	The First Year after the Korea-EU FTA and Its Prospects
16	20 Years of the Korea-China Economic Relationship: Retrospect and Prospect
17	Cooperation Tasks for Korea and Russia in the Wake of the Vladivostok APEC Summit
18	Effects of U.S. Unconventional Monetary Policy and Implications for QE3
19	Recent Trends in Global Protectionism and Implications for Korea's Trade Policy and Strategy
20	2013 World Economic Outlook

21	China-Taiwan ECFA Investment Agreement and its Implicatons for the Korea-China FTA Negotiations
22	Employment and Value Added Induced by Final Demands
23	The Effect of Korea's Macro-Prudential Measures
24	The Commencement of FTA and RCEP Negotiations between Korea, China and Japan and Korea's Response Measures
25	Effects of Chinese Yuan's Volatility on Korea's Export to China
26	The Relaxation of U.S. Economic Sanctions on Myanmar: Recent Developments and Implications
27	Prospects for the New Chinese Leadership's Economic Policy
28	Food Shortage in North Korea and International Assistance
29	Outcome of the Doha Climate Change Conference and Implications of Hosting the GCF
30	How the U.S. Fiscal Cliff Will Affect the Korean Economy

Regional Economic Focus

1	Sanctions on Iran by Major Countries: Recent Trends and Implications
2	Canada's Withdrawal From the Kyoto Protocol and Outlook of Future International Climate Change Negotiations
3	International Dispute over the EU Extending ETS Compliance to Foreign Airlines: Verdict and Implications
4	Japan's Trade Deficits in 2011: Cause and Future Prospect
5	An Analysis of North Korea's Foreign Economic Policy Developments in 2011 and Forecast for 2011
6	Regulations by EU Credit Rating Agencies: Background and Future Prospect
7	The Expected Direction of the Putin Administration's Economic Policy After the Russian Presidential Election, and What It Means for Korea
8	Development Plans and Future Prospect of Tadjikistan's Transportation Infrastructure
9	The Current State of the Asia Development Bank-Uzbekistan Solar Energy Cooperation and Lessons for Korea
10	Hungary Asks for Bailout: Background and Future Prospect
11	Recent Trends and Implications of India's Foreign Investment Policy
12	Major Points of Chile's National Power Development Strategy and their Significance
13	Major Revisions in the Trade Adjustment Assistance Program and Implications
14	2012 Budget of India: Overview and Implications
15	The Recent Eurozone Economy: Evaluation and Outlook
16	Myanmar's Adoption of Managed Floating Exchange Rate System: Its Meaning and Significance

17	Background of Recent Sudden Surge of FDI in Indonesia and their Implications
18	M&As Recently Carried Out By Korean Companies: Key Characteristics and Implications
19	The Development of Global Imbalances After the Financial Crisis (1): U.S.
20	The Development of Global Imbalances After the Financial Crisis (2): China
21	Uncertainties Associated With Spain's Fiscal Crisis: Analysis and Forecast
22	Prolonged Syrian Conflict: Background and Prospects
23	The Background and Main Characteristics of the Recent Surge in the FDI Inflows into Latin America and the Caribbean
24	Cases and Implications of CSR Practices in Developing Countries
25	Slowdown In Korea's Export Growth Rates to China and Japan in 1H 2012: Causes and Implications
26	Outcome of the EU Summit (June 28-29) and Prospects for Implementation
27	Indonesia, Strengthen Nontariff Barriers and It's implications
28	Key Issues and Implications of Georgia's Economic Development Strategy
29	Key Issues and Implications of the 'New Moscow' Plan
30	How the European Fiscal Crisis Affects Emerging Economies
31	An Analysis of the Relation Between the European Fiscal Crisis and Trade Account Imbalances
32	Economic Integration in the Asia-Pacific Region: Discussions and Implications
33	FTA Trends and Implications in Major Countries
34	Fiscal Consolidation in Crisis-Ridden Eurozone Countries in 2012: Recent Developments and Outlook
35	China Joining the WTO Government Procurement Agreement: Recent Developments and Implications
36	National Social Security Fund of China: its Management and Implications
37	The U.S. Election and Expected Changes in Foreign Economic Policies
38	Environmental Issues in North Korea and Support From the International Community
39	Revisions to Myanmar's Foreign Investment Law and Implications
40	The Arctic Ocean Dispute: Recent Developments and Implications
41	Oil Industry Policies by Chavez's Fourth-Term Government in Venezuela: Outlook and Implications
42	Economic Policies of Japan's New Liberal Democratic Party Government and Future Prospect

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1	China's Economic Development and 2012 Macroeconomic Policies
2	China's "12th Five-Year Plan for Foreign Trade Development" With a Focus on Services Trade
3	Growing Risks in China's Shadow Banking Sector and Response Measures
4	China's 2012 Economic Policy Direction Analyzed From Provincial Government Reports
5	China's Fiscal Management and Tax Reform
6	A Decade of China's WTO Lawsuits: A Case-by-Case Analysis of Background, Progress and Verdict
7	China's Current Economy and Future Prospect: A Focus on the "Two Meetings" Outcome
8	China's 12th Five-Year Plan on Environmental Protection and Future Policies
9	Recent Developments of the TPP and China's Stance Toward the Agreement
10	China's 12th Five-Year Plan on Improving the Chinese People's Wellbeing
11	China's 12th Five-Year Plan on Promoting the Cultural Industry
12	Summary of China's 2012 "Two Meetings" Report
13	China's 12th Five-Year Plan on Western Development
14	2010/2011 Progress Report on Top 500 Chinese Companies
15	China's Regional Development Strategies and Regional Economic Structure
16	China's Wenzhou Financial Reform Project
17	Forecasting Debt Burdens for China's Local Governments During the 12th Five-Year Plan Period
18	The Chinese Economy: Recent Developments and Outlook
19	The U.S.-China Trade Dispute Over Solar-Energy Equipment and China's Reactions
20	Relaxation of the QFII and RQFII Systems: Overview and Implications
21	Overview of "2011 Report on the Development of China's Floating Population"
22	China's 12th Five-Year Plan on Job Promotion
23	The Chinese Economy's Structural Imbalances and Rebalancing Efforts
24	China's 12th Five-Year Plan on Domestic Trade Development
25	Trends and Problems in China's Credit Card Market
26	Problems in China's Foreign Economic Trade and Policy Direction of Economic Trade in 2013

Provincial Economic Trends in China

1	The Zhejiang Property & Stock Exchange: Recent Developments and Future Prospect
2	Global IT Businesses Entering China's Chongqing Municipality and Sichuan Province: Current Trends and Future Prospect
3	Strategic New Industries in Guangdong: Development Plans and Progress
4	Overview and Recent Developments of Construction Plan for Shanghai International Financial Center During the 12th Five-Year Plan Period
5	Development Plans for the Coastal Area in Hebei Province: Overview and Outlook
6	Transition of China's Foreign Trade Policies and Foreign Trade Developments by Region
7	Labor Environment and Suggested Implications in the Three Northeastern Provinces of China
8	China's White Paper on Rare Earth Resources: Overview and Future Prospect
9	The Zhejiang Local Government's U-Turn Incentives for Locally-Based Businesses and Suggested Implications
10	The Chinese Central Government's Control Policies on Overheating in the Real Estate Market and Response Measures By Region
11	Economic Cooperation between China's Local Governments and Singapore: Current Trends and Implications
12	20-Year Retrospect and Prospect of Korea-China Economic Cooperation: Three Northeastern Provinces
13	20-Year Retrospect and Prospect of Korea-China Economic Cooperation: Shandong
14	20-Year Retrospect and Prospect of Korea-China Economic Cooperation: Huadong
15	20-Year Retrospect and Prospect of Korea-China Economic Cooperation: Comprehensive Overview
16	Jiangsu Province Solar Energy Industry: Recent Trends and Suggested Implications
17	Progress and Implications of the Changzitu Development Project: Focus on Hunchun

Introductory Report of China's Provinces

1	China City Guide Series: Liaoning and Dandong
2	Industrial Map of Zhejiang: Focus on the Four Major Industries
3	Consumer Trends in Shenzhen and Major Commercial Areas
4	China City Guide Series: Jinan City, Shandong Province
5	China City Guide Series: Wuhan City, Hubei Province
6	Consumer Trends in Guangzhou and Major Commercial Areas
7	Analysis of the Consumer Market in Chengdu City, Sichuan Province
8	China City Guide Series: Hefei City, Anhui Province
9	Specialty Markets in Zhejiang: Development Trends and Case Studies
10	China City Guide Series: Xi'an City, Shaanxi Province
11	China City Guide Series: Ningbo City, Zhejiang Province

4 Periodical Publications

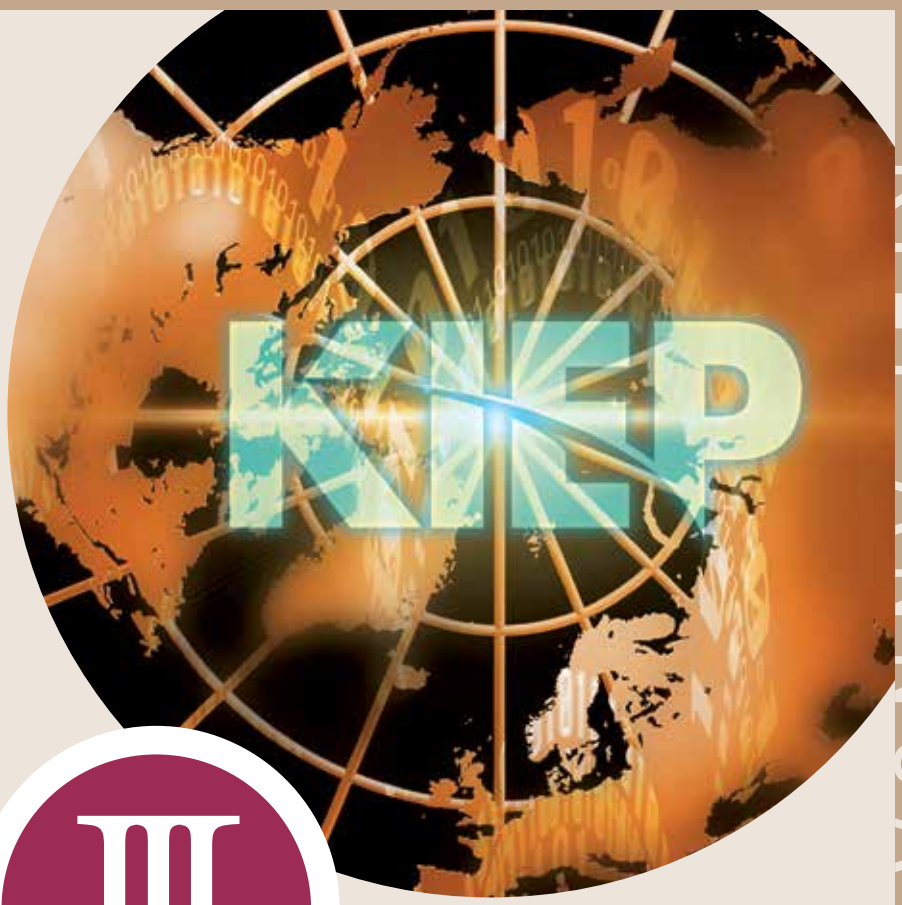
Journal of East Asian Economic Integration [Quarterly]

2012 Spring Vol. 16, No. 1	
Global Economic Governance Reform and the Roleof Asia: Opportunities Offered by the G20	Yoon Je Cho
Strategic Foreign Direct Investment in Developing Countries under Demand Uncertainty: Commitment vs. Flexibility	Hea-Jung Hyun
The Impact of Trade Facilitation on the Extensive and Intensive Margins of Trade: An Application for Developing Countries	Hyo-young Lee Chong-Sup Kim
Financial Development and Output Growth: A Panel Study for Asian Countries	Sangjoon Jun

2012 Summer Vol. 16, No. 2	
Idiosyncratic Features of the Contemporary Regional Economic Architecture in Asia	Dilip K. Das
Protection of Intellectual Property Rights and Subsidy Policy for Foreign Direct Investment	Moonsung Kang
Liberalization of Trade in Services under ASEAN+n FTAs: A Mapping Exercise	Hikari Ishido
The Effects of Trading Blocs on U.S. Outward FDI Activity: The Role of Extended Market Size	Hyejoon Im

2012 Autumn Vol. 16, No. 3	
Does Specialization Matter for Trade Imbalance at Industry Level?	E. Young Song Chen Zhao
Asymmetric Price Differential between Medium and Small Class Cars across Countries: A Case Study-Korea and the U.S.	Woong Lee Hyung Ju Hong
An Empirical Study of the Impact of China's Export Tax Rebates on RMB Appreciation	Degong Ma Hyun-Jun Cho
International Trade in Services and the Role of English	Kyounghee Lee

2012 Winter Vol. 16, No. 4	
Firm Heterogeneity and Location Choice: The Case of South Korean Manufacturing Multinationals	Jae-Joon Han Hongshik Lee Insu Lee
A Comparative Study on Characteristics of ODA of China-Japan-Korea to Cambodia	Sereyvath Ky Cheon-Woo Lee Peter J. Stauvermann
Expansion of the Government Procurement Agreement : Time to Concentrate on Depth as well as Width	Junsok Yang
Northeast Asian Energy Corridor Initiative for Regional Collaboration	Hoon Paik



III

Research Plan for 2013

KIEP ANNUAL REPORT

Research Plan for 2013

▶ The international macroeconomics and finance teams plan to set the direction for East Asian financial cooperation in the post-Eurozone crisis era, by analyzing how global liquidity expansion affects the global economy, global capital flows and the Korean economy, and seeking appropriate policy measures.

- There has been an excess of liquidity provision due to QE policies in the US and Japan, as well as policy measures designed to overcome the European debt crisis. This is expected to affect the international financial market in various manners.
- If developed markets fail to adequately absorb this excess liquidity, capital flows may be redirected to emerging markets, and this may act as a confounder in the Korean financial and foreign exchange markets.
- Moreover, the European debt crisis has been pinpointed as a new risk factor in regional financial cooperation, which gives rise to the necessity to identify a new direction for financial cooperation in East Asia.

▶ The teams covering developed regions like North America, Japan and the EU plan to review and analyze measures put in place to sustain fiscal soundness in the face of fiscal problems, so as to identify policy implications for Korea's fiscal management.

- The fiscal cliff issue is now a matter discussed not only in the Eurozone, but also in the US and Japan, displaying how since the financial crisis, fiscal problems have emerged as the next big challenge in developed economies.
- Countries involved are expected to pursue fiscal soundness by restructuring pension and welfare systems, etc., and modifying industrial and trade policies, which calls for the necessity to conduct relevant studies and to draw implications for Korea's fiscal management.

▶ Korea and China are expected to commence full-fledged FTA negotiations in 2013, and this has

led to research plans on "policy challenges following economic integration and policy measures in response to economic inequality in the free trade era," in preparation for increased economic integration and open markets.

- KIEP also plans to formulate more detailed support strategies by nation and sector for key ODA partners, and identify key targets for the successful operation of the GCF.

- The Kim Jong-un leadership started governing North Korea from 2012, while South Korea welcomes a new administration in 2013.
  - As the launch of the new administrations in both Koreas will lead to changes in inter-Korean policies and cooperative frameworks, KIEP plans to analyze North Korea's new economic development strategy, and also review North-South economic cooperation polices, directions and achievements for the past 20 years, so as to design a new model for inter-Korean cooperation.

- One of the key targets of the Center for Emerging Economies Research in 2013 is to assess the transformations occurring in China, the world's second largest economy and Korea's biggest trade partner, and analyze appropriate response measures to be taken by Korea.
  - Despite projections that China's economic growth rate was unlikely to reach 8% in 2012, rather than immediately roll out economic stimulus measures, China turned to growth led by domestic demand. This inevitably calls for corresponding adaptation measures in the Korean economy.
  - The future economic relationship between Korea and China will depend not on division of labor in production, based on processing trade as in the past, but on how Korea enters China's vast domestic market.
  - China's domestic market cannot easily be assessed as a single concept, rather being a mass of numerous markets differing by province or region. This is therefore the basis upon which strategies to enter the Chinese market should be established. Accordingly, the Center for Emerging Economies Research has designated "Characteristics of and Advancement Strategies into the Chinese Market by Region and Province" as its key project for 2013.

- The roughly ten years leading up to 2012 could be dubbed the "golden age" for emerging economies, during which they achieved rapid economic growth. Since 2012, however, there has been an overall shift toward economic slowdown. Therefore, the important task at hand would be to make a timely analysis of economic trends and short-term/long-term policy

measures in key emerging economies.

- There is a growing possibility that developed economies will continue to struggle, while the global economy will be unable to find a distinct growth engine and enter a period of low growth. This has led to a heightened interest in what these developments imply for emerging economies and how these countries should respond policy-wise.
- In particular, analyzing how China's low growth will affect East Asia, a region with a highly developed production network, will make a significant contribution to understanding the future course of the East Asian production network and regional trade patterns. In addition, East Asia is faring relatively well amid low-growth trends across the global economy, and this serves as the basis for Korea's heightened interest in the region.

▶ Research on emerging economies should not be limited to cyclical, short-term trends but include in-depth studies on long-term, key economic issues by country and region in times of low growth. The institute also plans to continue researching global issues involving energy, resources and the environment in a low-growth context.

- In order to delve more deeply into such issues, developments should be made on the quality of relevant policy research by carrying out comparisons between emerging countries and regions, an area that has previously been neglected.
- The institute aims to enhance the practicality of policy research by conducting research on emerging economies led by demand (from policymakers, etc.), focused on local circumstances and timeliness, and in conjunction with similar domestic and overseas research institutes.

▶ In terms of regional research infrastructure, the institute will expand its domestic and overseas research network, and continue building and operating a comprehensive information portal site on emerging economies, while looking to promote economic cooperation between Korea and emerging economies through joint projects with major Korean graduate schools of international studies on fostering regional experts.

▶ The institute plans to conduct research on Korea's strategic emerging economy partners, and expand human networks with these areas to build the foundation for long-term economic exchanges and cooperation.

Analysis of the Impact of Financial Liberalization and Exchange Rates

■ Objectives of the Study

- While Korea is, as a rule, a free floating exchange rate regime, the government's smoothing operations implemented to avoid sudden fluctuations tend to gravitate toward undervaluation, raising criticism that this leads to high prices and a consequent burden on the working class.
- Since the 1997 foreign exchange crisis, Korea's exchange rate volatility increased considerably, causing the exchange rate to affect prices by a larger degree, and giving rise to a higher probability of changes in domestic macroeconomic variables triggering conflict among domestic economic players.
- Despite this situation, there has been no comprehensive analysis on how exchange rates affect the Korean macroeconomy.
- This makes it necessary to make an empirical analysis of the relation between the exchange rate and macroeconomic variables in Korea, in detail, so as to use the findings as a basis for policy decisions.
- This paper will analyze how KRW exchange rate fluctuations affected key macroeconomic variables and the correlation between the two, focusing on the period after the 1997 foreign exchange crisis, and suggest implications and policy alternatives for policy measures needed to stabilize macroeconomic variables.

■ Expected Benefits

- Take a close look at how Korea's growing exchange rate volatility, following recent changes in exchange rate policies and the opening up of the market, affects domestic macroeconomic variables, with the purpose of producing new research findings and verifiable reference material
- Produce empirical research findings that will serve as reference material that minimizes conflict between economic players on Korea's exchange rate policies, and will provide policy direction to keep exchange rate policies well-balanced

▶ Project Manager *Deok Ryong Yoon*

The Impact of Global Liquidity Expansion on the International Economy and Associated Policy Measures

■ Objectives of the Study

- Since the global financial crisis, major economies have been implementing quantitative easing policies, which led to the rapid expansion of global liquidity. This has given rise to three key concerns, which require examination and analysis.
  - Exchange rates of countries carrying out quantitative easing are being depreciated, while exchange rates of emerging economies face appreciation pressure.
  - The expanded global liquidity is flowing into international commodity markets, for instance oil and crop markets, and is causing inflation and price instability.
  - The rising inflow of international capital into emerging countries is leading to instabilities in emerging asset markets and local prices.
- This leads to a necessity for research on monetary and macro-prudential policies designed to respond to global liquidity expansion.
- This paper will demonstrate and analyze how global liquidity expansion affects exchange rates, international commodity prices and capital inflow and prices in emerging economies.
- Suggestions for monetary policies dealing with global liquidity expansion and analyses on the validity of macro-prudential policies will serve as the basis for seeking policy implications.

■ Expected Benefits

- Make considerable academic contributions, since there is a lack of empirical analyses on the impact of global liquidity expansion on international commodity markets and the macroeconomy
- Offer a better understanding of the global economy through the analysis of the effects of global liquidity expansion
- Seek policy implications through the analysis of the validity of relevant policies

▶ Project Manager *Dong-Eun Rhee*

How Changes in China's Bond and FX Markets Affect Korea

■ Objectives of the Study

- China has freed its exchange rate system to allow more market determination, widening the daily floating band of the RMB to 1%, and is also pushing for the internationalization of its currency, taking advantage of the RMB's large share in global trade.
  - This makes it necessary to look into how China's move to free its exchange rate system is affecting China's trade with Korea.
  - Since Korea maintains a large surplus in trade with China, building the capacity to invest in RMB capital will enable the country to serve as a RMB hub in the long term.
  - Dependency on China, however, is growing not only in trade but also in finance, and this calls for prudent policy response measures with consideration to associated risks and the possibility of damaging relations with other neighboring countries.
- In spite of China's bond market being underdeveloped, it has considerable influence on East Asian bond markets since the country accounts for a large part of trade in the East Asian region.
  - If China decides to free its bond market and interest rates, this influence will grow even further, which makes it necessary to analyze expected effects.
- Since China is a formidable player in the Asian and global economy, policies aiming to free China's financial market are expected to affect the Asian financial market as well as Korea's. This also calls for in-depth research on the matter.
- This paper will take a close look at the changes in China's financial system, and analyze the following impact on the international financial market and the Korean economy so as to forecast expected effects and suggest the appropriate direction for policy response measures.

■ Expected Benefits

- Contribute to devising policy measures in response to the development of China's financial sector by analyzing how the rising influence of China in the global financial market will affect Korea's macroeconomy and financial sector

▶ Project Manager *In Huh*

How Financial Integration Affects Financial Crises

Objectives of the Study

- International capital movements are growing more active, and financial integration among countries is moving at a faster pace. The global financial crisis and the Eurozone debt crisis, however, have made it necessary to reconsider the impact and effectiveness of financial integration.
  - It has become necessary to analyze whether financial integration in times of crisis helps absorb shock, or actually has the adverse effect of spreading the shock even further.
  - It would also be timely to analyze what we can learn from the crisis in the Eurozone, which served as the model for financial integration in East Asia, in terms of the prerequisites for maximizing the positive effects of financial integration.
- The purpose of this study would be to discuss the policy implications of East Asia's financial integration, which was initiated as a vehicle for overcoming crises and facilitating cooperation.
- The paper will study the implications of East Asia's financial integration by analyzing how financial integration within regions or among countries may disperse or amplify financial shock.

Expected Benefits

- Contribute to the development of empirical analyses on financial integration, by studying indicators related to financial integration
- Provide new momentum to financial integration among ASEAN+3 nations
- Propose policy measures linked to crisis prevention programs underway, and utilize the research findings when designing future crisis prevention programs

▶ Project Manager *Juhyeon Pyeon*

A Study on the Fiscal Sustainability and Fiscal Discipline of Japan

■ Objectives of the Study

- As of 2011, Korea's national debt to GDP ratio stood at 34%, still relatively lower than other countries. There is much concern, however, about mid- to long-term fiscal deterioration due to low fertility rates and aging.
  - In the case of Japan, from 2012, when baby boomers started reaching the age of 65, private savings dropped sharply, leading to growing concerns over the sustenance of issuing government bonds.
- Despite Japan's massive amount of debt, the country has yet to experience a severe financial crisis. However, circumstances in Korea make it necessary to analyze the causes behind the deterioration of Japan's fiscal structure and shed light on associated policy implications from various perspectives.
  - With rising controversy over "welfare populism" in Korea, it has become necessary to study the lessons that can be learned from the case of Japan.
  - There is a need for comprehensive research, with a focus on fiscal soundness, on the fiscal sustainability and fiscal discipline of Japan, stretching back to the early 1990s, right after the bubble burst.
- This paper will take a look at Japan's fiscal sustainability, especially at the possibility of a future crisis, and analyze the fundamental reason why fiscal discipline did not function accordingly, from a policy perspective.

■ Expected Benefits

- Provide theoretical and empirical analyses on fiscal sustainability
- Identifys implications that should be taken into account in the course of devising Korea's fiscal policies by examining the cause behind Japan's fiscal crisis
- Contribute to forming social consensus on the importance of fiscal discipline by studying the Japanese government's fiscal management
- Pinpoint which fiscal discipline issues should be of particular interest to the Korean government

▶ Project Manager *IKyu Pan Kim*

Balancing Welfare and Growth - Lessons from Europe

■ Objectives of the Study

- Reckless government spending has been pointed out as one of the causes behind the European fiscal crisis, giving rise to controversy over the appropriateness of the large share of welfare expenditures.
- Meanwhile, North European countries are sharply in contrast with South European countries, for although they boast high welfare standards, this is also backed by fiscal soundness, competitive industries and relatively low unemployment rates.
- Since North European countries maintain a much higher government spending to GDP ratio compared to Southern Europe, and have higher or similar welfare levels, welfare spending cannot be the single explanation for economic inefficiency and high jobless rates. This calls for a discussion on the content of the welfare policies, as well as on past reforms and efficiency in terms of fiscal management.
- Although there are growing concerns about expanding welfare, as a means to resolve polarization in Korea, there are also arguments that this may cause fiscal deterioration. It is therefore necessary to form a long-term vision that balances welfare policies with competitiveness.

- There is a need to learn from the case of Europe how to combine competitiveness with welfare, and more closely understand the appropriate policy directions and measures that could be applied to Korea.

- This paper will compare and analyze the policy directions and examples of reform in the welfare policies of Northern and Southern Europe, and by doing so seek to introduce a welfare system that is sustainable and can contribute to enhancing industrial competitiveness.

■ Expected Benefits

- Contribute to theoretical development on welfare models and social capitalism by analyzing the correlation between welfare systems, economic efficiency and industrial competitiveness
- Identify implications for Korea, particularly relevant at a time when the government is placing a priority on sustainable welfare

▶ Project Manager *Yoo-Duk Kang*

Changes in Welfare Levels by Income Class in an Open Economy

■ Objectives of the Study

- As of recent, growth trends have been moving toward inclusive growth, which has emerged as a key policy goal that aims to enhance welfare and embrace all social classes. Such developments make it necessary for research on the structural causes of income inequality and polarization, as well as the effects of an open economy on household income and welfare levels, and on the following changes in distribution structures.
- There have been growing social demands, especially in recent times, for policy measures that ease social conflict such as income inequality and polarization, and pursue inclusive growth by facilitating balanced development among different classes. However, there is a lack of research to serve as the basis for devising such policy measures.
- This paper will analyze the structural correlation between changes in Korea's household income distribution and an open economy from a theoretical and empirical perspective. The purpose is to use the research findings to seek policy implications that embrace the positive effects of trade liberalization and open economies, while easing social conflict derived from income inequality and polarization and pursuing balanced growth.

■ Expected Benefits

- Assess real household income in Korea, taking into account the fact that Korea is an open economy, and theoretically and empirically analyze the changes in welfare levels by income class under such circumstances
- Re-examine changes in Korea's household income distribution structure in terms of income inequality and polarization, in relation to the openness of the Korean economy
- Suggest policy measures that ease social conflict induced by changes in household income distribution and at the same time further expand the positive effects of trade liberalization and open economies, based on the research findings

▶ Project Manager *Chul Chung*

The Effects of an Open Economy on the Skills Formation Structure of Korea's Labor Market

■ Objectives of the Study

- Ever since the foreign exchange crisis, the Korean labor market has been witnessing increasing polarization in the employment conditions and wages between skilled and unskilled labor.
- There have been growing demands to resolve polarization in the Korean labor market, and opening the market has been pointed out as one of the key causes of polarization.

- Opening the market has led to unequal benefits, and the resulting conflict between social classes bring about massive social costs. This defeats the purpose of opening the market, which is to boost the economy and pursue sustainable growth.

- To minimize the negative effects opening the market has on the income distribution structure, it is necessary to examine specifically in what manner an open market affects polarization in the domestic labor market.
- This research aims to provide the necessary basic research for policies aiming to minimize the side effects and maximize the benefits of opening the Korean market by analyzing the correlation between open markets and polarization in employment and wages.

- This paper will analyze specifically how an open market polarized employment conditions and wages between skilled and unskilled workers, and offer implications for government response strategies.

■ Expected Benefits

- Discern the channel through which an open market affects the skills formation structure in the labor market in terms of employment conditions and wages
- Provide basic research material for devising policies that aim to remove social instabilities triggered by opening the market that maximize associated positive effects

▶ Project Manager *Chan Kwon Bae*

The Value Chain Structure in East Asia and the Economic Benefits of Intra-Regional FTAs

■ Objectives of the Study

- Korea has concluded FTAs with the US, EU, ASEAN and has commenced negotiations for the Korea-China FTA. There are also plans for an FTA with major East Asian countries, aside from the Korea-China-Japan FTA.
- If Korea, along with China and Japan, succeeds in concluding an FTA with East Asian countries, it will be the only country in the world to have concluded FTAs with all major economic blocs, and effectively become the center of a global FTA network.
- It is therefore necessary to conduct CGE analysis and compare trade, tariffs and industrial structures, analyzing production networks between East Asian countries and providing the basic research necessary for setting the direction for Korea when proceeding with the East Asia FTA.
- Mutual trade and investment between East Asian countries has recently been growing more active, while institutional integration has made considerable progress. There have also been notable qualitative changes in the global value chain, on the back of trade in intermediary goods and investment.
- This research will serve as reference for the government's plans for the East Asia FTA negotiations, by analyzing East Asia's value chain structure, and by conducting a CGE analysis on the economic benefits an East Asia FTA will bring according to case scenarios of how the FTA negotiations may pan out.

■ Expected Benefits

- Analyze various scenarios of economic integration through an East Asia FTA, against the backdrop of a continuously tightening global value chain
- Present a blueprint for the East Asia FTA, by analyzing which of the Korea-China, Korea-Japan, Korea-China-Japan and East Asia FTAs will maximize economic benefits

▶ Project Manager *Nakgyoon Choi*

Improving the Effect Estimation Methodology for Economic Benefits of FTAs

■ Objectives of the Study

- Thanks to continuous efforts toward trade liberalization, Korea concluded FTAs with large developed economies such as the US and EU, and with emerging economies including the ASEAN and India. It will be necessary to continue on this path, so as to secure future growth engines.
- In future negotiations with potential FTA partner countries, a focus should be placed on issues such as services, investment and regulations rather than tariff barriers. An estimation of the economic effects that this implies is crucial for designing effective FTA negotiation strategies and for providing accurate information to interested parties in Korea.
- A partial equilibrium analysis would be the appropriate method of approach, since trade with certain emerging economies mostly consist of items in small quantities, but there is a need to complement the limitations of this approach and asses the macroeconomic effects of FTAs.
- It will be necessary to formulate an effect estimation methodology that evaluates the economic benefits of an FTA in aspects other than tariff reduction, such as non-tariff barriers, services and investment liberalization, with consideration to the FTA partner country's distinct circumstances. On this matter, there is demand for research that finds middle ground between the partial equilibrium and general equilibrium analyses.
- This research will identify and organize the methodologies that were previously used for evaluating the economic benefits of an FTA, and improve on this for future application to the Korea-China-Japan FTA and seek associated policy implications.

■ Expected Benefits

- Operate a model combining the partial equilibrium and general equilibrium analyses
- Organize and improve quantifying methodologies for FTA components other than tariff barriers
- Provide comprehensive FTA economic effect estimations, allowing for future utilization in forming FTA negotiation strategies and policy promotion to the general public

▶ Project Manager *Young gui Kim*

The Impact of Trade and Investment Liberalization on FDI

Objectives of the Study

- Trade liberalization through FTAs and trade growth following globalization directly leads to Korean companies deciding to enter (or invest in) overseas markets, and the topic requires continuous research.
- As a rule, trade volumes rise when transaction costs are cut due to the elimination of trade barriers, which mainly occurs through tariff reduction, or lower transportation costs. Patterns may differ, however, according to the nature of vertical or horizontal FDI, and therefore require different policies.
- Since the expansion of trade liberalization impacts FDI in the domestic market, it is necessary to pay heed to this when devising policies, but there is currently a great lack of research in this area.
- This paper aims to analyze how trade liberalization affects export patterns and FDI.

Expected Benefits

- Analyze how trade affects FDI
- Suggest more strict and effective policy measures on exports and FDI in relation to globalization and trade liberalization
- Provide policy suggestions that maximize the benefits and minimize the side effects of FTAs by closely examining how opening markets through FTAs affect the domestic economy by industry

▶ Project Manager *Jong Duk Kim*

How Asia-Pacific Intra-Regional Production Networks Affect Economic Integration in the AEPC Region

■ Objectives of the Study

- With the recent spread of regionalism, the global economy has become more open and interconnected, and this has been accompanied by the rapid globalization of production networks.
- Major APEC member countries are implementing strategies to advance their domestic industrial structures, by using the global network to become specialized hubs in specific industries such as R&D, skilled production or simple assembly production.

- Rising international labor division and technology transfers following the development of the global network helps boost activity in the logistics supply chain, and also increases exchanges in the investment and service sectors, ultimately contributing to intra-regional integration.

- There is a need for research on changes in the global production network caused by global outsourcing, considering the implications related to Korea.

- It would be especially timely and relevant to study changes in the international production network in the APEC region, since most of Korea's trade is with APEC member countries.

- This paper will analyze the characteristics and current trends of global networks in major APEC countries, and examine the effects on relevant activities on the APEC level (Regional Economic Integration: Supply Chain, Service Connectivity, etc.), ultimately designing regional participation strategies and seeking policy implications.

■ Expected Benefits

- Analyze proof data on the characteristics and current trends of global networks in major APEC member countries
- Study key trade partners' strategies on advancing domestic industrial structures in line with the development of global networks
- Provide suggestions for industrial policies and economic integration strategies that deal with changes in global networks

▶ Project Manager *Chul Chung*

Challenges for the GCF and Related Policy Measures

Objectives of the Study

- The GCF (Green Climate Fund) Board selected Korea as the host country for the GCF secretariat.
  - At the 2010 UNFCCC COP16 held in Cancun, developed countries agreed to support climate change response efforts in developing countries by providing long-term finance in the form of USD 100 billion each year until the year 2020.
  - Funds for the package would be raised through various channels, including bilateral and multilateral methods, the public and private sectors, and other innovative methods, while a considerable portion would be raised by the GCF.
- The GCF secretariat supports the Board's activities, is in charge of operating and managing the fund, and is responsible for monitoring and evaluating the Fund.
  - The independence of the secretariat was a key concern emphasized in the course of designing the GCF, and this calls for a systematic organization and expertise that can support the secretariat in duly carrying out its functions.
- It has become highly necessary to analyze key issues relevant to the GCF, including its main purpose, business model, fund-raising and operating methods, candidates for priority support, monitoring and evaluation methods, and seek policy measures corresponding to Korea's role as host of the GCF secretariat.
- This research will conduct in-depth analyses on key issues to identify challenges for the GCF, and provide policy suggestions suited to Korea's role as GCF host.
  - This paper will identify, by analyzing interested parties, key issues that should be addressed to ensure the successful operation of the GCF, and seek measures that would maximize the benefits of hosting the secretariat, with a focus on policy coherence and national interest.

Expected Benefits

- Present a development model for the GCF and climate finance
- Closely examine relevant issues as host of the GCF secretariat, and form appropriate response measures

▶ Project Manager *Jione Jung*

North Korea's New Economic Development Strategies and the Establishment of a New North-South Economic Cooperation Model

■ Objectives of the Study

- Entering the millennium, North Korea started to place a priority on economic development, and shifted away from its adherence to a self-supporting national economy to focus more on developing international economic cooperation and the science technology sector.
- In light of the newly inaugurated governments in both North and South Korea, it has become necessary to organize and analyze North Korea's new economic development strategies as well as South Korea's policies on dealing with the North, and to assess the achievements of North-South economic cooperation for the past 20 years, and based on the findings, to suggest the future direction for economic policies dealing with North Korea and to present a new model for economic cooperation.
- It would also be timely to conduct an in-depth analysis on North Korea's recent economic situation and the mid- to long-term economic development strategies it is pursuing, so as to identify possibilities for growth, development potential, constraints and limitations.
- This research will analyze South Korea's policies toward the North for the past 20 years, evaluate the achievements of North-South cooperation, and based on this, present a new starting point and cooperation model for future economic cooperation.

■ Expected Benefits

- Improve understanding of the North Korean economy through in-depth, comprehensive analyses on the North's macroeconomy and economic circumstances by sector
- Re-examine past North-South economic cooperation and present a new policy direction at a turning point for both North and South Korea as well as neighboring countries
- Suggest economic policy challenges and cooperation measures for the South Korean government in dealing with North Korea, based on an analysis of the North's new economic development strategies and goals

▶ Project Manager *Hyung-Gon Jeong*

Analysis of the Economic Benefits of the DDA Early Harvest Programme and Relevant Policy Measures

■ Objectives of the Study

- Amid the continued stalling of the DDA negotiations, the 9th WTO Ministerial Conference is set to be held in Bali, Indonesia in late 2013. A key talking point when major countries clarify their stance toward the DDA negotiations is expected to be the "Early Harvest Programme (EHP)," which was discussed as a small package.
- The EHP discussions up until now have involved largely five issues.

- The issues can be divided into 'trade facilitation' and 'early tariff elimination on environmental products,' advocated by developed countries, and 'Duty Free, Quota Free for LDCs', 'improved market access and subsidy elimination concerning cotton', and 'eliminating export subsidies for agricultural products', all demands from developing countries.

- There is a lack of research on the economic effects of the five issues involved with the EHP, aside from trade facilitation, and there is no research that conducts empirical analyses, taking all five issues into account, to evaluate the economic gains and losses of major DDA-participating countries.
- It is necessary to quantify, through empirical analysis, the gains and losses of DDA-participating countries and groups by studying the economic effects of the EHP, and based on the findings, to suggest an EHP compromise measure to push forward DDA negotiations.
- This research will review key aspects of the EHP, and by conducting an economic effects analysis, quantify the benefits and losses for major DDA-participating countries so as to form an EHP compromise measure that could be accepted by all interested parties.

■ Expected Benefits

- Contribute to empirical research by analyzing the economic effects of key factors of the EHP, such as trade facilitation
- Present a compromising measure that balances the benefits of all interest parties, so as to restart the stalled DDA negotiations and consequently enhance Korea's standing and role under the WTO regime

▶ Project Manager *Jin Kyo Suh*

China in Emerging Markets and Korea's Countermeasures: With a Focus on Consumer Durables, Construction Projects and Resource Development

■ Objectives of the Study

- Both Korea and China have noted the potential of emerging markets, and accordingly expanded strategies on entering emerging markets.
  - Depending on exports to developed economies is starting to show its limitations, giving rise to the necessity to enter emerging markets in order to secure future export markets.
- China has become the most frequently encountered competition for Korean companies in emerging markets.
  - China's competitive edge is rapidly shifting from low costs and low prices to the higher value-added sector, and as a result Korea is receiving the most pressure from competition.
- It is time to devise measures that can help Korean companies secure a competitive advantage over China in emerging markets, and formulate cooperative strategies to prevent unnecessary competition.
- This research will examine the status quo on Chinese companies operating in emerging markets, and identify the organizations and policies supporting outbound Chinese companies. Based on the findings, the paper will suggest measures to help Korean companies secure a competitive advantage over Chinese companies in emerging markets, and suggest sectors in which Korea can cooperate with China.

■ Expected Benefits

- Seek implications on South-South cooperation by analyzing Korea and China's efforts to enter emerging markets
- Provide the basis for financial and institutional support toward Korean companies entering overseas markets
- Identify implications for different types of businesses entering markets in different regions

▶ Project Manager *Pil Soo Choi*

China's Green Growth Strategies and Implications for Korea-China Trade

■ Objectives of the Study

- China's rapid growth for the past 30 years, at an average rate of nearly 10% per year, has brought about the inevitable side effects of severe environmental pollution.
- China's National Development and Reform Commission and the Development Research Center of the State Council, on September 22, 2009, announced an energy and carbon emissions plan for 2050.

- The plan sets a reduction target using an absolute quantity method and a relative index (emission unit calculated by dividing carbon emissions by GDP) in order to limit China's carbon emissions.
- On the issue of the benefits and costs of carbon tax, the report cites carbon tax on fossil fuel as a key contributor to reducing China's carbon emissions in the future.

- A number of trade protectionist measures involving green policies have sparked controversy in relation to the WTO.

- China's green growth policies are linked to the WTO regulations on Most-Favored-Nation treatment (e.g. border tax adjustment), the subsidies agreement (supporting green technology development, etc.), and the TBT agreement, and there is a need to examine these matters.

- This research will identify China's green growth policies and examine whether these may collide or coexist with multilateral trade systems or WTO regulations, and seek implications for China's green industry trade or future cooperative system.

■ Expected Benefits

- Analyze the economic effects of rapid climate change
- Analyze China's green growth strategies, which aim for sustainable growth, and reflect cooperative measures in Korea's policies

▶ Project Manager *Ik Joon Moon*

Characteristics of China's Domestic Market by Province and Region and Tailored Outbound Strategies

■ Objectives of the Study

- Since 2011, China has been underlining consumption as a core competency for economic growth. Accordingly, there is a need to systematically analyze the Chinese domestic market in order to utilize it in a more effective manner.
- Rather than being a single massive market, China's domestic market tends to display distinct, unique characteristics by region. The center of domestic growth for China has also shifted from the coast and spread to the central and western inlands, as well as the northeastern region.

- Due to the sharp differences among regions, it would be more effective to approach the Chinese market not a as a single entity, but as an assembly of a number of different local markets, and seek outbound strategies suited to the different characteristics of each region.
- By analyzing the competitiveness of Korean companies in China's local markets, access to the Chinese domestic market must be enhanced, and this should be accompanied by the formation of effective Korea-China economic cooperation measures tailored to each region.

- This research will suggest outbound strategies for Korean companies by conducting an in-depth analysis on the Chinese domestic market by region, and provide effective policy suggestions to support these companies.

■ Expected Benefits

- Provide a new market analysis framework by conducting a structural analysis on China's domestic market by region
- Provide policy support measures to Korean companies aiming to enter China's domestic market
- Suggest a new direction for economic cooperation between the two countries (between local areas in particular), along with relevant policy measures

▶ Project Manager *Pyoung Seob Yang*

Strategies on Strengthening Industrial Cooperation with Key Emerging Southeast Asian Countries

■ Objectives of the Study

- Ever since concluding an FTA with the ASEAN in 2007, Korea has been working to strengthen economic cooperation with ASEAN countries in the areas of trade and investment. Recently, there have been preparations for bilateral FTAs (or CEPAs) with Vietnam, Indonesia and Malaysia.

- In order to enter overseas markets and make active use of overseas production factors, Korea should strengthen production networks with key ASEAN countries and expedite localization procedures, with a focus on strategic industries.

- As a case in point, Japan is reviewing multilateral measures on building a strategic global production network centered on Thailand and the Philippines, and on cutting service link costs between Japanese companies and companies operating overseas by engaging in bilateral cooperation.

- Meanwhile, China continues to reinforce industrial cooperation with key Southeast Asian countries, as seen in the FTA conclusion with the ASEAN in 2005, and the Pan-Beibu Gulf Economic Cooperation Forum carried on since 2006.

- Korea is in need of more elaborate, diverse measures to strengthen bilateral industrial cooperation on the government level, and to build and develop a strategic production network on the business level.

- This research will examine the industrial cooperation structure between Korea and key ASEAN countries, and seek policy measures to reinforce strategic industrial cooperation and global production networks.

- The paper will also serve as reference for bilateral FTAs with Vietnam, Indonesia and Malaysia.

■ Expected Benefits

- Present strategies and measures on expanding bilateral industrial cooperation, serving as reference material in the course of preparing for bilateral FTA negotiations

▶ Project Manager *Tae Yoon Kim*

Changes in India's Labor Market Following Economic Reform, and Associated Implications

Objectives of the Study

- In the years following India's economic liberalization in 1991, the country has achieved remarkable growth, and the recent conclusion of a number of FTAs are propelling India toward becoming a more open economy.
- Although there has been continuous research on how economic reform, including trade liberalization, deregulation and market-led policies, has affected India's labor market, the scope of research is far from being comprehensive. Also, there is hardly any research that provides Korean companies operating in India with basic information on Indian labor market, or identifies implications on developing relevant policy support measures.
- This research will analyze how continued economic reform since 1991 has affected the Indian labor market.

- The analysis will include a study on how trade liberalization (tariff reduction and RTAs), deregulation measures and the Indian government's market-oriented policies have affected India's labor market in terms of industry (agriculture, manufacturing, services), region (by state), cities and local areas, skilled labor and job classification.

- This paper aims to identify implications for Korean companies operating in India and the development of associated policy support measures by examining the changes in India's labor management following economic reform.

Expected Benefits

- Contribute to empirical research in the relevant area by analyzing India's labor market from diverse perspectives
- Serve as reference material on India's labor market
- Contribute to labor relations and management of Korean companies doing business in India

▶ Project Manager *Woong Lee*

Expanding Economic Cooperation with Central and South America by 'MultiLatinas'

■ Objectives of the Study

• The economic boom in Central and South America in the 2000s was accompanied by the emergence of 'multilatinas,' multinational companies based in Latin America.

- The multilatina boom was largely driven by commodities, and multilatinas are now wielding strong influence in industries as diverse as resources, manufacturing, construction and services. This serves as a formidable threat to Korean companies already operating in Central and South America.

• Such developments call for a close examination of multilatinas, which continue to gain stronger influence on the Latin American economy and industry, and the development of appropriate response measures.

- Since the globalization strategies of multilatinas are yet in their initial stages, and the specialty areas of Korean and Latin American multinationals are mutually complementary, it would be advisable to seek a win-win relationship as strategic cooperation partners.

• This research will suggest ways to expand economic cooperation with Central and South America utilizing multilatinas.

- The research will include policy suggestions on supporting Korean companies entering the Latin American market and ways to enhance competitiveness, entering the resource development and construction/plant sectors, and initiating joint projects with multilatinas in third countries.

- A focus will be placed on attracting multilatinas to Korea, given their rapid overseas expansion on the back of abundant capital from primary commodity sales

■ Expected Benefits

- Make academic contribution as first domestic research on multilatinas

- Suggest measures to support Korean companies entering the Latin American market, utilizing multilatinas

▶ Project Manager *Kisu Kwon*

Entering the African Market through Foreign Financial Institutions

■ Objectives of the Study

- Africa's low sovereign credit ratings compared to other developing countries and complex risk factors associated with initiating projects make it difficult for Korean financial institutions to independently procure financial capital.
  - Recently, resource-rich African nations have been witnessing a boom in resource development and construction, supported by political stability. Project scales have become larger, leading to the emphasis of financing capabilities as a key factor in project orders.
- There should be efforts to expand the financial network to enable the utilization of outside financial institutions, with their abundant capital and sound financial conditions, as partners in co-finance.
  - Korea has been signing 'package deals' with Africa by providing the infrastructure requested by African governments, and in return acquiring the rights to resource development in the region. For such deals to succeed, raising capital through project finance is a crucial factor.
- This research will examine measures on strengthening financial procurement capabilities, pinpointed as the biggest obstacle for Korean companies entering the African market, and will contribute to setting the groundwork for Africa-bound Korean companies.
  - Since the African market has higher risks and uncertainties compared to other regions, and requires mid- to long-term investment, it is important to raise the initiative for financial support through cooperative networks with foreign financial institutions.
  - Such financial partnerships, including co-finance, will help disperse the risk associated with providing financial support to countries with low credit ratings.

■ Expected Benefits

- Contribute to boosting Africa-bound initiatives among Korean companies by seeking co-finance measures with foreign financial institutions

▶ Project Manager *Young Ho Park*

Current Trends in Healthcare in the MENA Region and Measures to Link Korean Industries

■ Objectives of the Study

- Countries in the MENA region, as part of efforts to foster non-oil industries, has been implementing policies to promote manufacturing and service sectors such as the healthcare and medical industry, automobiles and new and renewable energy.
- Up until now, Korea has maintained a cooperative relationship with MENA countries centered on the petrochemicals industry and construction plant projects. However, since fossil fuels will be exhausted at some point in the future, it is time to develop a more sustainable means of industrial cooperation.
- This research will examine current trends and policy measures of the medical and healthcare industry in the MENA region, and analyze competitive aspects of Korea's medical and healthcare industry to seek measures for cooperation.

- The study on trends in relevant industries in the MENA region will include an examination of infrastructure investment scales, medical city initiatives and promotion policies for the private medical care market, and an outlook on future demands.
- Competitive aspects of the medical and healthcare industry in Korea will be analyzed by sector, including medical equipment, hospital construction and operation, and medical tourism, to produce more detailed cooperative measures.

■ Expected Benefits

- Contribute to research involving industrial analysis by analyzing growth factors in the medical and healthcare industry and presenting mid- to long-term demand forecasts
- Form cooperative measures for the domestic medical and healthcare industry in connection to the MENA region and identify policy implications
- Seek measures for future cooperation with the MENA region in non-oil industries

▶ Project Manager *Kisu Kwon*

Governance Study on the Efficient use of Global Commons

■ Objectives of the Study

- Global commons such as space, air, high seas and the Antarctic are beyond national jurisdiction, and are normally subject to international law (Outer Space Treaty 1967; Antarctic Treaty 1961).However, since international law, by nature, lacks concrete detail, and the development of science technology has given rise to new issues, institutions currently in force are proving to be insufficient.
- The development and ownership of the Antarctic's natural resources, excessive fishing in high seas, interference among geostationary satellites have all become major issues for discussion in the international community.
- There is a need to look into a governance system that would enable the efficient utilization of global commons.
- The current governance structure should be evaluated from the perspective of sustainable development.
- Korea should seek measures to contribute to sustainable development under the current governance structure, based on an analysis of global commons and associated issues, while at the same time maximizing national interest.
- The Korean government must be able to actively respond to international discussions by presenting a governance logic and structure for global commons that meets the conditions of sustainable development, efficiency and equality.

■ Expected Benefits

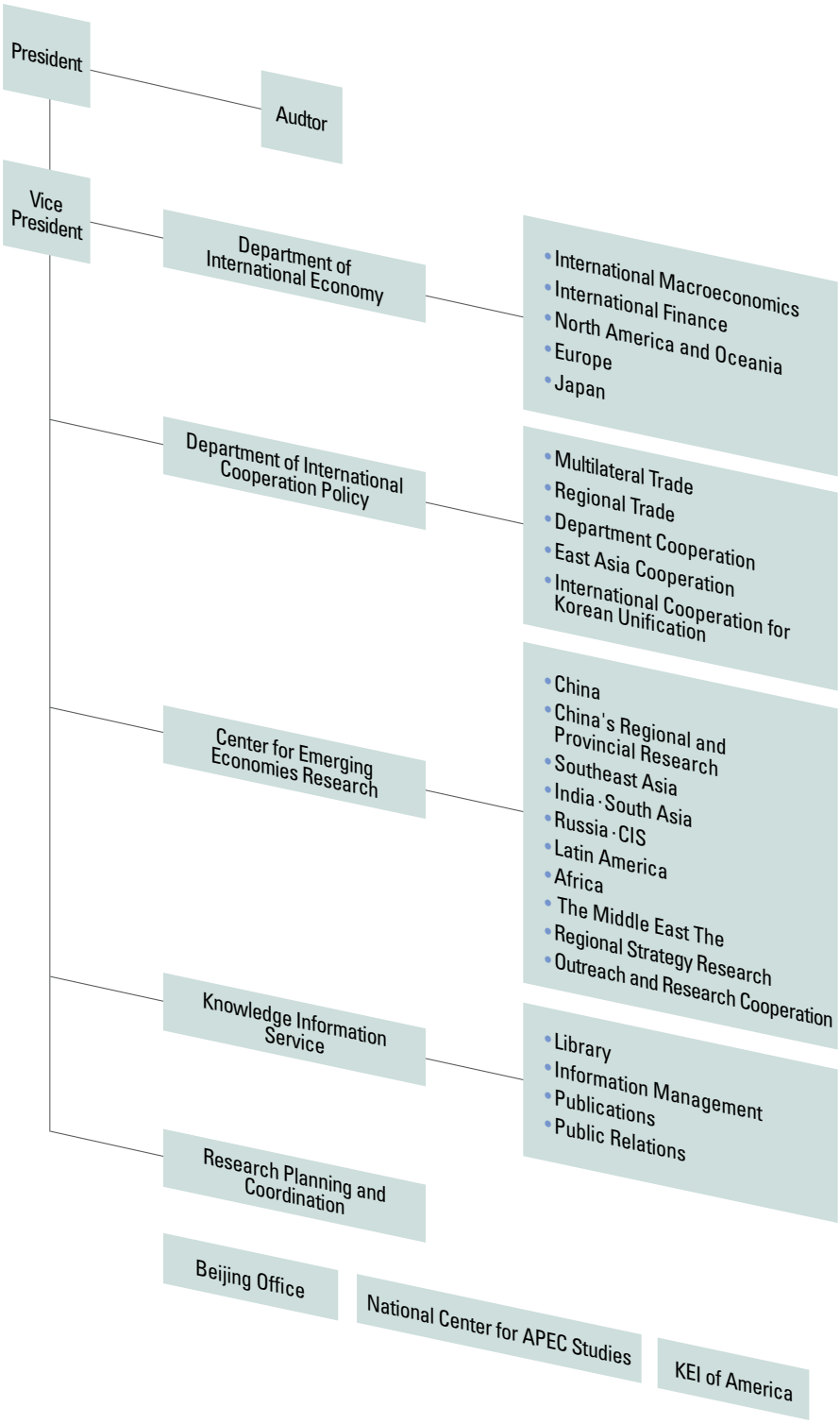
- Contribute to theoretical research on global commons governance
- Enhance understanding of global commons and commons governance
- Serve as basic reference material to support the Korean government's active response in relevant international discussions

▶ Project Manager *Ba Ran Han*

IV

Appendix

Organizational Structure



Main Research Focus

Department	Research Focus
Department of International Economy	• Current issues related to international macroeconomics and fni ance • 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 - 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	• Korean trade policy - export, import, and trade structure • Establishment of an international trade order at the WTO anda t 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	• 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 - 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	• 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	• 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

Staff

President	Research staff		Support staff		Technicians	Total
	Research fellows	Researchers	Specialized staff	Administra-tive staff		
1	47	41	9	12	14	124

Position	Name	Main research field
Vice President	Sangkyom Kim	APEC, International Economics (US, University of Pennsylvania)
Director of Planning and Research Coordination	Heung Chong Kim	European Economy, Economic Integration and Growth (Korea, SeoulNational 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	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)
	Yeo-Cheon Jeong	Russian & Eastern European Economies (Germany, München University)
	Hyung-Gon Jeong	North Korean Economy, Transition Economy, Northeast Asian Cooperation (Germany, University of Cologne)
	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)
	Pyoung Seob Yang	Chinese Economy (Korea, Hankuk University of Foreign Studies)
	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)

Position	Name	Main research field
Research Fellows	Sung Chun Jung	Japanese Economy, Environment Economics (Japan, Hitotsubashi University)
	Jione Jung	WTO, Antidumping rules (US, University of Florida)
	Chul Chung	International Trade (US, University of Michigan)
	Kyujong Choi	China Research (China, Chinese Academy of Social Science)
	In Huh	Econometrics, Financial market (US, University of Rochester)
Assistant Research Fellows	Kang Dae-chang	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)
	Misoo Kim	South Asia (India, Jawaharlal University)
	Booyong Kim	Beijing / Tianjin / Hebei (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)
	Jinyoung Moon	Energy / Environment (US, Minnesota University)
	Young Ho Park	Africa and ODA (Korea, Hankuk University of Foreign Studies)
	Chan Kwon Bae	Trade and Knowledge Spillovers (US, Indiana University)
	Suh Jeong-meen	Trade and Environment, International Trade (US, Boston University)
	Juyeon Sun	Trade and Competition (US, Cornell University)
	Jiyoun An	Financial Economics, International Finance, Empirical Asset Pricing (US, Cornell University)
	Soohyun Oh	International Trade / Development (US, Pennsylvania State University)
	Yoonah Oh	Southeast Asian Economy (US, Ohio State University)
	Sung Hak Yoon	Central Asia (Korea, University of Yonsei)
	Kwonhyung Lee	Middle East (UK, London University)
	Woong Lee	East and West South Asia (US, California University)
	Dong-Eun Rhee	Monetary Policy, Financial Economics, International Finance (US, Indiana University Bloomington)
	Sanghun Lee	Chinese Economy (China, Chinese Academy of Social Sciences)
	Seungrae Lee	FTA / FDI (US, University of Texas at Austin)
	Taekyun Im	Political Economy / Country and Society (US, California State University)
	Jihyun Jung	Chinese Economy (China, Chinese Academy of Social Science)

Position	Name	Main research field
Assistant Research Fellows	Sunghoon Jae	Russia / Political Economy of the CIS (Russia, Moscow State University)
	Dooyeon Cho	International Financial / Currency and Foreign Exchange Market (US, Michigan State 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)
	Juhyeon Pyeon	International Macro Financial / International Trade (US, California State University)
	Ba Ran Han	Middle East Economy (US, Cornell University)
Invited Research Fellows	Wolla Park	Chinese Economy (US, University of Michigan)
	Jungsoo Kim	Political Economy of Japan (US, Johns Hopkins University)
Total	59	

List of Publications (2012)

Policy Analysis

12-01 Economic Effects of Trade on Employment and Value Added

12-02 The Analysis of the Factors for the Stalemate of the Doha Development Agenda Negotiation and Implications for its Completion

12-03 The Impact of Free Trade Agreements on Economic Performance in Korea

12-04 Empirical Analysis of Trade Liberalization: The Benefits to Korean Consumers

12-05 A Study on Interaction between Economic Openness and R&D Policies

12-06 Korea' Green Growth Policy and Multilateral Trade Rules: Harmonization Issues and Policy Implications

12-07 Designing New Climate Change Regime: A Unified Approach for Mitigation and Finance Mechanisms

12-08 Effects of Government Debts on Sovereign Credit Rate

12-09 Macroeconomic Policies during the Global Financial Crisis: Lessons and Policy Implications

12-10 Effective FX-hedge Policy Using Financial Market

12-11 Impacts of Large Disasters on Macroeconomy and Financial Markets

12-12 Causes of the European Debt Crisis and Reform of the European Governance

12-13 Trilateral Economic Cooperation: Proposal for Enhancing Economic Cooperation Dialogue Channels among China, Japan, and Korea

12-14 The Least Developed Countries: Key Challenges and the Way forward for Korea' Development Cooperation

12-15 Japan' Economic Cooperation with China in the Era of G-2 and Its Implications for Korea

12-16 China' Urbanization: Consumption, Construction and Risks

12-17 R&D of Chinese Firms: Characteristics and Implications

12-18 The Reinforcement of Economic Cooperation among China-Taiwan-Hongkong and its Implications

12-19 Russian ODI and FDI promotion strategy of Korea

12-20 Korea's Development Cooperation with the Mekong Region Countries

12-21 Southeast Asian Labor Migration to Korea: Origin-Country Factors and Policy Implications

12-22 Economic Cooperation between India and Selected Asian Countries: Current Status and Policy Implications

12-23 How to Promote Economic Cooperation with Resource-abundant Andean Countries: Focus on Venezuela, Ecuador, and Bolivia

12-24 Cooperation with the Middle East after the Arab Spring: Circumstantial Changes and Implications

12-25 Trends in the African Construction/Plant Building Market and Implications for Korea

12-26 The Current Situation of Marketization in North Korea and Prospects for Change of its Economic System

Policy References

12-01 Lessons from Mexico under NAFTA

12-02 The Structure and Policy Implications of Islamic Finance: Focused on sukuk

12-03 A Study on the Korea-China FTA Service Negotiation Strategies: Focused on the Implications from China-Hong Kong CEPA Service Concessions

12-04 Korea-Japan Economic Cooperation amid a New East Asian Integration with an Emphasis on FDI Flows

12-05 Issues on Development Aid: European Perspective

12-06 A Case Study on the Foreign Companies Inroad to the Urban Development in China

12-07 Changing Labor Environment in China and Countermeasures of South Korean Companies: Focused on the Bohai Economic Rim

12-08 China's Non-Tariff Barriers and Implications for Korea-China FTA

12-09 The Analysis of Competitive Strategies of Enterprises in Shanghai Luxury Consumer Market

12-10 Analysis on the Multinational Retailers' Entry into Central China

Working Papers

12-01 Comparative Advantage, Outward Foreign Direct Investment and Average Industry Productivity: Theory and Evidence

12-02 Multilateral Engagement in North Korea's Economic Rehabilitation and Possible Establishment of Trust Funds

12-03 A Theory of Economic Sanctions

12-04 Election Cycles and Stock Market Reaction: International Evidence

12-05 Korea's Monetary Policy Responses to the Global Financial Crisis

12-06 Real Frictions and Real Exchange Rate Dynamics: The Roles of Distribution Service and Transaction Cost

12-07 An Assessment of Inflation Targeting in a Quantitative Monetary Business Cycle Framework

Trade and Investment Study Series

12-01 Spillover Effect of Inward Foreign Direct Investment in Korea by FDI Mode

12-02 A Study on Systemic Issues of WTO Governance and Korea's Policy Options

12-03 Investigation of China-Korea and Japan-Korea FTA Preferences and Policy Implications

Studies in Comprehensive Regional Strategies

12-01 Co-petition Strategy through Comparative Studies on the Korean and Indian Pharmaceutical Industries

12-02 Myanmar's Transformation: International Responses and Implications for Korea

12-03 Development of Myanmar's Foreign Policy and Relation with Major Countries

12-04 Industrial Cooperation between Korea and Indonesia in Java Economic Corridor

12-05 Current State of Foreign Aid in HRD in Lao PDR and Korea's Assistance Strategy

12-06 Mongolia's Investment Environment and Measures to Expand the Market Entry of Korean Businesses

12-07 The Characteristics and Implications of Sovereign Wealth Funds in Central Asian Countries: Kazakhstan and Azerbaijan

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