

Strategy W Samsung Economic Research Institute Report 2011 Finance'

Knowledge hub for Creative Solutions



CEO's Message

CHUNG Ki-Young
President & CEO

This time last year, I expressed concerns in the 2010 Annual Report that the aftershocks of the global financial crisis would continue to inflict damage, stoking inflation in emerging economies and worsening fiscal conditions in advanced economies. Unfortunately, the concerns became reality. Negative effects from measures taken to overcome the global financial crisis surfaced in 2011, suppressing the world's economy. Emerging economies were plagued by high inflation caused by massive injections of liquidity, while year-round fiscal tightening slowed domestic growth. Advanced economies painted even grimmer pictures. The sovereign debt crisis sparked by Greece reached Italy and Spain and triggered a credit downgrade in France, as the effects of the crisis spread from the edges of Europe to its center. The US and Japan in turn suffered credit rating downgrades in 2011. As the consequences of the crisis mounted, public anger swelled against polarization of wealth and a greedy financial sector. US citizens demonstrated by staging the "Occupy Wall Street" movement, which echoed in worldwide demands for structural changes.

Although Korea did relatively well in 2011, with the trade volume surpassing US\$1 trillion, it was not immune to the dismal conditions of the world as a small open economy. Growth of exports, the main driver of economic growth, began to slow rapidly in the fourth quarter of 2011. Moreover, a downturn looks inevitable in 2012, due to global economic weakness and increasing uncertainties.

Domestic demand has not recovered, contracting even more than exports, with external difficulties dampening appetite for consumption and investment. Therefore, another government-led economic recovery like the rebound shortly after the global financial crisis is hard to expect in 2012.

2012 will be the first year that a new phase of the fiscal crisis affects the world economy. This is not an issue that can be overcome quickly, and it will hamper economic growth for a long time. The highly trade dependent Korean economy will face hardships and even worse, can become trapped in a low-growth trajectory.

For 2012, the start of protracted low growth, the main research tasks of Samsung Economic Research Institute (SERI) are balanced pursuit of economic stability and stimulus, advancement into new markets and easing of socioeconomic problems. To effectively study these issues, we not only have to mobilize internal research capabilities but also tap the wisdom of external research institutes, universities and the wider society.

As for specific actions, we will focus on the following three.

First, SERI will expand our knowledge network. Accordingly, we will increase opportunities to exchange knowledge by holding various academic events and promoting industry/academia collaboration. This will enable us to serve as a platform that generates multi-faceted solutions to pending issues.

Second, SERI will explore new research areas. The current research paradigm centering on advanced countries is limited in identifying the means to overcome low growth. Consequently, we will look into Latin America, Africa and other emerging markets, which have been out of the limelight, and predict their future growth to find new growth opportunities for the Korean economy.

Third, sharing with those excluded from the benefits of economic growth will become a new research area. For this, SERI established its Corporate Citizenship Research Department and began to study themes that redefine corporate citizenship. Through this, we will find ways for businesses to help address the side effects of low economic growth.

SERI's annual reports are both a way to reflect on what we learned in the past year and to prepare for the future. With this in mind, we will be cautious in taking steps while continuing to strive to realize our vision of a "Knowledge Hub for Creative Solutions."

As the leading private think tank in Korea, we will do our best to fulfill our obligations to help industries, society and the country prosper and ascend to the next level. I hope that you will sustain your encouragement and advice.

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Thank you.

CHUNG Ki-Young President & CEO Samsung Economic Research Institute

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Review of Korean Economy in 2011

Korea Economic Review 2011

Economic healing from the global financial crisis stumbled in 2011. Fallout from stimulus measures to fight the crisis stoked the eurozone's sovereign debt turmoil, heightening fears of financial contagion, and led to lowered credit ratings of advanced economies. The consequence was persistent volatility in capital markets and suppressed real economic activity.

The Korean economy did not escape the instability. On the bright side, annual trade volume surpassed US\$1 trillion for the first time as strong exports continued to drive growth. However, Korea's vulnerability to external shocks increased as its trade dependence reached almost 100%. Domestic demand was sluggish with lack of investment incentives and weakened private spending capacity. In the meantime, high prices have blunted real income, making it harder for ordinary people to make ends meet. Domestic financial markets also remained vulnerable to external shocks even though soundness of foreign exchange market and of banks has improved since the lowest depths of the global financial crisis.

There are rising concerns that economic instability will heighten in 2012. It is very likely that the low-growth trajectory of the global economy will be prolonged. Most nations lack the capacity and/or political consensus for additional stimulus measures and their private sector is still limping. Likewise, it is expected to take considerable time for the Korean economy to recover to its pre-crisis growth path. Therefore, the foremost priority of the Korean economy in 2012 is to prepare against the low-growth environment.

First, economic stability needs to be shored up. The government should focus on price stabilization through tailored microeconomic strategies while maintaining fiscal soundness without undermining growth. In addition, efforts need to be made to increase stability of the financial market, which is vulnerable to internal and external shocks.

Second, greater efforts should be directed toward finding the "next China" markets with high growth potential. This is needed to reduce Korea's heavy reliance on the Chinese economy and to offset restrained demand in developed economies. Moreover, Korea should increase the utilization rate of free trade agreements while minimizing their side effects.

Third, Korea must ease social conflicts and discontent so that they do not undermine the economic recovery. To this end, all economic players — government, companies and citizens alike — should work together to achieve mutual, sustainable prosperity.

I. Retrospect of 2011 Korean Economy

1. Global Effects on Korea

Extraordinary external events buffeted Korea's export-dependent economy in 2011. The populist revolts throughout the oil-producing Arab states provoked inflationary pressure and the earthquake in Japan disrupted supply chains. Also, the sudden death of North Korean leader Kim Jong-II raised geopolitical risks. The impact of these shocks dissipated after a few months. But there was no way to avoid the enduring side effects of massive economic stimulus that governments have injected to weather the global financial crisis since 2008. The spending has severely eroded the fiscal health of advanced economies, and in emerging economies, the stimulus has fueled price spikes. Although fiscal tightening was needed and applied by governments, it slowed down domestic consumption and government spending, delaying full economic recovery even more.

The eurozone sovereign debt crisis in particular hovered over the global economy as worries intensified over disorderly national defaults, financial contagion and fresh blows to the real economies around the world. The sense of crisis spilled over from Greece to Italy, whose fiscal condition also is fragile, and to Spain where insolvency of savings bank was severe due to a slumping real estate market. Consequently, the interest rate of government bonds in Italy and Spain fluctuated around 7%, which is viewed as a dangerous level.

Contentious negotiations between Greece and the International Monetary Fund, European Central Bank and eurozone nations over a rescue plan kept world capital markets on edge and volatile throughout 2011. In August, the Volatility Index (VIX) broke above the threshold of 40, the unofficial "panic range," for the first time since May 2010. The 3-month LIBOR, an interbank lending rate, rose to 0.56% as of January 21, 2012, more than double the level of July 2011. The coordinated

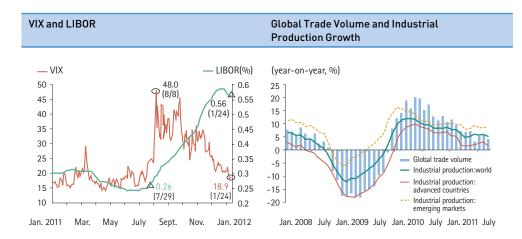
Annual Report 2011

international efforts finally placed financial firewalls around Greece at year's end. However, fundamental solutions to resolve the eurozone crisis have not been found yet.

Sovereign debt woes were not limited to European countries. Fiscal conditions in the US and Japan, exacerbated by economic stimulus measures, are no longer safe with their credit ratings downgraded in August 2011. In other words, not only European nations but also the US and Japan must slash their national deficits over the next several years. However, major advanced nations showed sluggish growth in 2011, and the risk for another leg down is heightening. G7 countries except for Germany are expected to record less than 2% growth in 2011. Concern that the fiscal crisis can evolve into a financial contagion has contracted consumption and investment sentiment, slowing growth of the global economy. In other words, the current global economy succeeded in overcoming the financial crisis, but faces a new risk of consolidating low growth. The sluggishness will be prolonged in many countries because of their lack of fiscal capacity and/or political consensus to inject new fiscal stimulus.

Major advanced countries are expected to show fragile growth in 2012 because of insufficient resilience of the private sector and weakened capacity for stimulus. They are caught between stimulating the economy and keeping fiscal spending in check.

Expansion is also slipping in emerging economies. The pace of export growth is slowing due to sluggishness in advanced countries, and rising inflation has dragged down domestic consumption growth. Still, emerging economies are relatively in a good shape compared with debt-strapped advanced economies. They are expected to record 6% growth in 2011, much higher than 1.7% of advanced economies. Their contribution to the global economic growth is about 79% in 2011. On the back of their relatively good performance, the BRIC nations (Brazil, Russia, India and China) are expected to be among the top 10 economies in the world. These economies are rebalancing their growth with more focus on their own domestic market, and are no longer a low-cost production base, enhancing their position as a strategic market.



Note: 3-month LIBOR Source: Bloomberg.

Note: Global trade volume based on quantity, and construction exempted from industrial production. Source: Netherlands Bureau for Economic Policy Analysis.

GDP Ranking of B	RICs (nominal ba	se)		
Country	2010	→ (Country Overtaken)	2011	GDP (2011)
China	2nd	→	2nd	US\$7.22 trillion
Brazil	7th	→ (UK)	6th	US\$2.43 trillion
India	9th	\rightarrow	9th	US\$1.96 trillion
Russia	11th	→ (Canada)	10th	US\$1.84 trillion

Source: Global Insight.

Under the aforementioned circumstances, it is necessary to evaluate the global and Korean economies in 2011, and identify the tasks ahead for sustaining growth.

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2. Economic Highlights

A. Trade Volume Surpasses US\$1 trillion

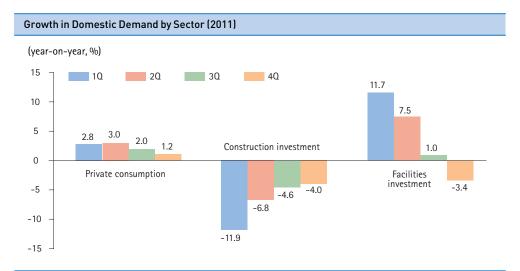
In 2011, Korea became the world's ninth country to reach US\$1 trillion in trade volume. Exports surpassed US\$500 billion as Korea remained the seventh largest exporter in the world. The only other countries in the so-called "US\$1 Trillion Trade Club" were the US, Germany, China, Japan and France. The driving force behind Korea's stellar trade performance despite sluggish global economic growth was improved export competitiveness and entry into emerging markets. However, Korea's vulnerability to external shocks also increased with its trade dependence reaching almost 100%.

Export Rai	Export Ranking of Major Economies (Unit: US\$100 million)				
Country	2008	2009	2010	2011(Ja	n.–Nov.)
Country	2009 2010	2010	Country	Amount	
1	Germany	China	China	China	17,240
2	China	Germany	US	Germany	13,620
3	US	US	Germany	US	13,541
4	Japan	Japan	Japan	Japan	7,505
5	Netherlands	Netherlands	Netherlands	Netherlands	6,078
6	France	France	France	France	5,497
7	Italy	Italy	Korea	Korea	5,081
8	Belgium	Belgium	Italy	Italy	4,817
9	Russia	Korea	Belgium	Russia	4,715
10	UK	UK	UK	Belgium	4,415
11	Canada	Hong Kong	Russia	UK	4,344
12	Korea	Canada	Hong Kong	Canada	4,137

Source: World Trade Organization.

B. Sluggish Domestic Demand Slows Economic Growth

Sluggish domestic consumption dented economic growth. Rising inflation reduced real income, contracting consumer sentiment and consumption. A slower pace in export growth and rising uncertainty over the global economy also dampened investment sentiment, leading to a sharp deceleration of facilities investment. Moreover, continuous softness in the housing market and less infrastructure spending crimped investment in civil engineering, which led to a downward spiral in construction investment in 2011. As a result, in 2011, domestic demand rose only 0.7%, and GDP growth remained at 3.6%, falling short of expectations.



Source: Bank of Korea.

C. Inflation Pressure Persists

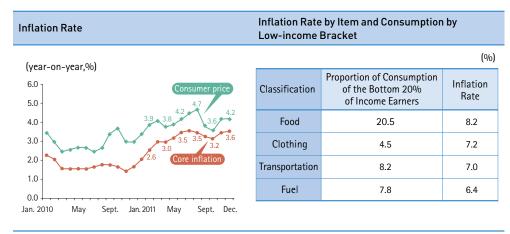
Inflation languished above 4% in 2011. Surging commodity prices in the first half of the year and service price hikes in the second half were the main culprits. In particular, prices of food, transportation and fuel, which account for a large share of household expenditures of ordinary people, increased relatively sharply, making the lives of low-income brackets much more difficult.

D. Financial Instability Continues, but Less Severe than 2008

In 2011, financial market volatility persisted due to fallout from the European sovereign debt crisis and downgrade of the US credit rating. The won/dollar exchange rate was especially sensitive to external turmoil. The rate rose by 146 from

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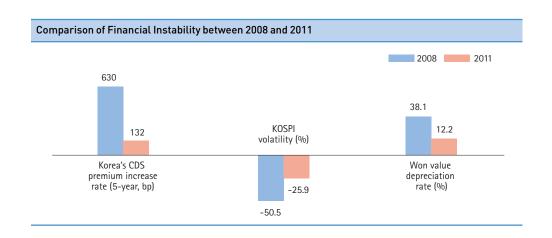
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Source: Bank of Korea.

Note: Based on 2011. Source: Statistics Korea.

1,050 (year-low) in July 27, 2011 to 1,196 (year-high) in September 26, 2011. Still, the volatility was less severe than that of 2008 global financial crisis. This was evident in the credit default swap premium, which rose only 132 basis points in 2011, compared with 630 basis points in 2008. Since 2008, Korea has strengthened its ability to absorb external shocks with improved foreign exchange soundness on the back of higher foreign currency reserves, a smaller proportion of short-term external debts, continuous surplus in the current account balance and currency swaps with major economies. The soundness of banks also has improved thanks to lowered loan-to-deposit ratios of commercial banks and an increase in the BIS capital adequacy ratio.



Comparison of External Shock Absorption Capacity of Financial Sector between 2008 and 2011					
Classification 2008 2011					
	Foreign Currency Reserves	US\$258.1 billion (End-June 2008)	US\$304.5 billion (End-June 2011)		
Foreign Exchange Soundness	Proportion of Short-term Foreign Debt	48.2% (End-June 2008)	38.5% (End-June 2011)		
	Current Account Balance	US\$680 million (First Half 2008)	8.1 (First Half 2011)		
Bank	Loan-to-deposit Ratio	112.4% (End-June 2008)	98.4% (End-July2011)		
Soundness	BIS Ratio	11.2% (End-June 2008)	13.5% (End-September 2011)		

Note: Based on the lowest and highest figures during the period.

Source: Bank of Korea, Bloomberg.

II. Tasks for the Korean Economy in 2012

The low growth of the global economy will likely be prolonged due to the vicious cycle of "fiscal crisis \rightarrow tightening policy \rightarrow growth slowdown \rightarrow reduction of tax revenues \rightarrow worsening public finances." The tasks of the Korean economy to cope with the weak environment can be summed up in three key words: stabilization, discovery and easing. Stabilization of the economy as well as prices, public finance and financial markets is urgently required. Discovery of new export markets is needed to help offset the decline in global demand. Economic tension must be eased to prevent social conflicts and to help overcome the low-growth trend.

A. Price Stability

Price stability is needed to smooth out income and enhance consumption capacity. So far, identifying structural factors behind price instability and implementing customized strategies has been thought to be the most effective approach. This is because price stabilization measures that use macroeconomic variables (e.g., interest rate hikes and strengthening of the won) could exacerbate Korea's weakening economic pace. Interest rate hikes could cause consumption and

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investment to contract, and won appreciation could weaken the price competitiveness of exports.

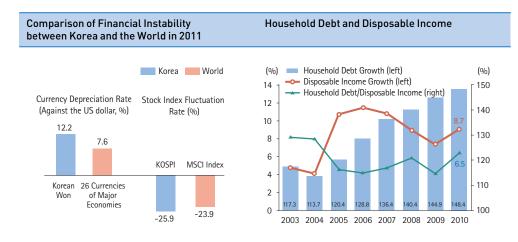
B. Fiscal Consolidation

Korea's fiscal condition is relatively sound compared with major advanced economies, with the ratio of fiscal deficit and national debt to GDP standing at 2% and 35.1%, respectively in 2011. However, Korea cannot be complacent. The size of national debt increased from 309 trillion won in 2008 to 436 trillion won in 2011. Moreover, medium- to long-term fiscal prospects are uncertain with surging expenditures related to the nation's rapidly aging population, concerns over fiscal deterioration of state-owned companies and local governments, and the need to strengthen government reserves to pay for national reunification costs. However, with economic conditions throttling back, it is necessary to flexibly handle public finance in the short term and to focus on securing fiscal consolidation in the medium to long term. In the short term, fiscal policy should be swift and flexible to keep pace with economic shifts to prevent damage to growth engines. In the medium to long-term, strengthening the management of public finance and establishing a preemptive response system to risks are needed to prevent structural fiscal damage.

C. Stabilization of Financial Markets

Korea's financial market is exposed to foreign currency liquidity risks. Changes in foreign currency flows have increased volatility of exchange rates due to Korea's small foreign exchange market, a high proportion of foreign bank branches and offshore non-deliverable forward transactions. Moreover, rising household debt has heightened concerns over the solvency of domestic financial institutions. Therefore, efforts to stabilize financial markets need to be ramped up and systems to mitigate insolvency risks need to be installed. In the short-term, Korea should pursue currency swap agreements with countries like the US, and focus on raising foreign currency liquidity by diversifying foreign exchange credit lines from the US and Europe to the Middle East and Asia. In the long term, Korea needs to improve foreign exchange soundness and secure stability in foreign currency flows by

maintaining current account surplus and stiffening regulations on speculative capital flows.



Source: Bank of Korea

Note: 1) Based on the highest and lowest figures in 2011. 2) Average appreciation rate of 26 major currencies

calculated by fluctuation rate of dollar index. **Source**: Bank of Korea, Bloomberg, U.S. Federal Reserve

Bank of St. Louis.

D. Discovery of "Next China" Markets

Korea needs to seek ways for its main growth engine exports to continue to expand. Currently, growth is slowing in advanced economies. China is Korea's largest export market with stable growth. However, Korea's dependence on China is rising, increasing its vulnerability to China's risks, with the proportion of exports to China reaching almost 25%. Therefore, Korea needs to aggressively pioneer "next China" markets, which have high growth potential. The candidates include India, Indonesia and Brazil, whose population size rank second to fifth in the world and whose GDP rankings are rising rapidly. To advance into these markets, it is necessary to try various means, including the development of local-oriented products, direct investment and M&As.

Comparison between China and Major "Next China" Markets in 2011						
Classification	China	India	ASEAN	Indonesia	Central and South America	Brazil
GDP Size in 2011 (US\$ trillion, current price)	7.2	2.0	2.0	0.8	5.6	2.4
GDP Ranking (2001 \rightarrow 2011)	6th→2nd	13th → 9th	14th → 10th	28th \rightarrow 17th	$3rd \rightarrow 4th$	11th→6th
Growth Forecast (2011/2012)	9.0 / 8.4	7.7 7.5	5.0 / 4.9	6.4 / 6.3	4.5 / 4.0	3.7 / 3.6
Population (ranking) (100 million)	13.5 (1st)	12.1 (2nd)	4.3	2.4 (4th)	5.7	1.9 (5th)
Per-capita GDP (US\$, current price)	5,345	1,622	4,502	3,469	9,804	12,731

Note: 1) ASEAN includes Indonesia, Malaysia, the Philippines Singapore and Taiwan.
2) Figures of ASEAN 5 and Central and South America are compared with those of individual countries.

Source: Global Insight, Samsung Economic Research Institute.

E. Easing of Social Conflicts

In 2011, social conflicts and unrest surfaced as the income gap between the haves and have-nots widened because of the sluggish domestic economy. Social unrest stemming from economic polarization is an obvious risk to economic activity. In the run up to Korea's parliamentary and presidential elections in 2012, the negative impact of the social tension needs to be contained. Therefore, all economic players need to join forces to break the vicious cycle causing the polarization and achieve continuous mutual prosperity.

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SERI Activities

Research Calendar Symposium & Forum Cyber SERI SERI China **Publications Creative Solutions** Top Ten Hit Products of 2011

- CEO Information: Current issues and keywords for top executives and policymakers
- SERI Focus of the Week: Weekly analysis on key developments and issues in the Korean and global economies
- SERI Management Note: Timely delivery of major domestic and global issues related to corporate management
- Issue Paper, Research Paper: SERI researchers' incisive opinions on the economy, management, industry and policy

January

Ten Global Trends of 2011

Korea's Ten Major Trends in 2011

Emergence of the Convergence Health Care Industry

Best Top Ten Hit Products of 2000-2010

Japanese Companies Turn High Yen into Opportunity
Factors Lowering Investments in the Service Industry and
Policy Tasks

Korea's Housing Market: Features & Outlook from the 2010 Census

Possibility of a Repetition of the 2008 Commodity Price Spike

Spending Power of Chinese Tourists

More Businesses Need to Go "Cheap Chic"

Korean Footwear Industry Taking Another Leap Forward

Google vs. Facebook: Competing for Talent

Changes in China's Labor Market

EMGC and Economic Growth in Emerging Countries:

Flagship Companies

How to Cope with Rising Inflation

The Emergence of Eco-friendly and Low-cost Vehicles

Competitiveness Analysis of China's Fast Growing,

Promising Industries

February

China Risk

Major Focal Points for Global Business in 2011

SME Competitiveness: The Power of Cooperation Networks

Does Household Debt Threaten the Economy?

Current Status of Work Permits for Foreigners and Ways for Improvement

Imbalance in Vietnam's External Accounts

Big Data: Analysis and Application

A Paradigm Shift in Power Systems

Know Your Employees

BRAVO: Understanding the New Generation

Tackling Food Security Worries

March

April

Tapping into the Indian Market

Ways to Strengthen Korea's Software Industry How to Bolster Workplace Communication

Analogue Shines in a Digital Era

Economic Ripples from the Japan Earthquake

Won-Yen Rate Clouds Export Competitiveness

The Impact of China's Aging Population

China's National People's Congress 2011

High Food and Commodity Prices and Policy Implications Policy Suggestions to Improve Inflation Targeting Systems

EPL's Success

Google + ARM = The Next Wintel

"New Seniors" Become a Consumer Force

Becoming a Winner in the HR War in China

Korean Peninsula Security Index: Survey Results for

1st Quarter 2011

Post-crisis Changes in the World Economy and Responses

Fast Fashion: Out-of-the-Box Thinking in the Apparel Industry Middle East Unrest

Four Major Corporate Risks

Suggestions for Globalization of Small- and Medium-sized Enterprises

US Economic Recovery and Exit Strategy

Japanese Businesses' Responses in the Aftermath of the

Emerging Commodity Markets: Current Status and Utilization

Multi-dimensional Approach to Understanding Consumers

Lessons from Number Two Companies

How to Capitalize on SNS

Dealing with Organizational Diversity

Won/Dollar Rate Falls Below 1,100: Background and Outlook

2012 Outlook for the Global and Korean Economies

Korea-China FTA: Its Meanings and Major Issues

How to Work "Smart"

May

June

July

August

The Emergence of Business Platforms

The Rise of Anti-Consumption and Corporate Responses Global Liquidity Risks and Implications

How Businesses Can Stay Young

Korean Households' Spending and Inflation

Characteristics of China's Monetary and Financial Policy Competitiveness of Korea's Service Industry

Green Stress: Opportunity or Crisis?

Mishaps and Injury in Social Networking Services

Incentives: Motivation for Acts

SERI's Organizational Culture Management Model

The Falling Household Savings Rate and Its Economic Impact Infrastructure Opportunities in Emerging Market Cities Social Media Changing Policy Making
The Nature of Corporate Philanthropy: SPIRIT
"Brain Factory" China Overtakes Korea

Korea-EU FTA Effects to Come Slowly

Budget Deficit Threatening the US: Causes and Outlook

China's Foray into Overseas Energy Resources

Korea's Small Businesses Go Green

Stress: A New Business Opportunity

Six Rules for "Visual" Management

The Rise of Specialized Service Robots
Conditions for Business Model Innovation

A Wellness Scoreboard for a "Healthy" Win-win

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Global Liquidity Risk and Implications

Best Summer Holiday Reads for CEOs Global Transformers

China's Technological Prowess and Korea's Response A Defense Against Fiscal Crisis: Fiscal Rules

Korea's Credit Card Market Causes Concerns

Introduction of the Renewable Portfolio Standard (RPS) in 2012 Rapid Emergence of Indian Companies

Analysis of Relations between Exports and Domestic Demand

Emergent Leadership: From the Complex System Perspective Apple: From Pioneer to Transformer of Personal Computing

Resolution of Employee Complaints

The New Resource Nationalism and Oil Security

Assessing the Potential Value of Rare Metals in Urban Mines: A Comparative Look at Korea and Japan

Aging Population Risks to Labor Market Rising Agro Prices and Responses

Prospects for the Korean and Global Economies after the

US Credit Rating Downgrade Liberal Arts Changing Business Management

Eurozone Debt Crisis and Korea's Responses

Three Dilemmas Facing the UK Economy and Outlook Issues Regarding Policy for Ethnic Koreans in China and Solutions

Comparative Analysis of the Effectiveness of ODA Projects
US Manufacturing Industry Back in the Spotlight

A Cupful of Socioeconomics

Changes in the Internet Landscape

Corporate Social Networking - Discovering New Frontiers Psychological Contracts: The Secret to Higher Organizational Commitment

Tasks for Korean Universities in IT Talent Cultivation

- CEO Information: Current issues and keywords for top executives and policymakers
- SERI Focus of the Week: Weekly analysis on key developments and issues in the Korean and global economies
- SERI Management Note: Timely delivery of major domestic and global issues related to corporate management
- Issue Paper, Research Paper: SERI researchers' incisive opinions on the economy, management, industry and policy

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October

Characteristics of Korea's Inflation by Item and Countermeasures

Upgrade Strategies for Korea's Tourism Industry
Workforce Diversity Management for Creativity and Innovation

Global Patent War and Changes to Competition

Rebuilding of Japan's Supply Chain

Voice Recognition Technology Spreads

Primitive Psychology - An Obstacle to Rational Decision Making

Three-fold Evolution of the Game Industry

Korean Companies in the 21st Century: 2000 vs. 2010

Business Lessons from Primera Liga

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Outlook for the Korean and Global Economies in 2012

Experiential Marketing Opens the Minds of Customers
Eurozone Debt Crisis and Korea's Reponses
Moving into Africa, the Next Big Market
Learning Competition Tactics from Japan's Strong, Mid-sized
Companies

Increasing Female Employment and Implications
Mid-tier Hotel Formulas for Success

A Structural Change in Export of Resource-rich Countries in Southeast Asia

Paradigm Shift in Maritime Wind Power Generation Advertising Strategy in a Low-growth Period Bottlenecks in the Mobile Communications Revolution Succession Planning, A Lesson from the Death of Steve Jobs

November

Battle for Operating System Leadership Software Talent Development

Five Major Issues for Korean Companies in 2012

Healthcare 3.0: The Era of Healthy Long Life
International Cooperation to Tackle the Global Economic Crisis

Worsening Terms of Trade: Meaning and Impact
Exporting Korea's Urban Development Expertise

Single Senior Households: Income among the Aging Population Impact of the Global Financial Instability on the Won/Dollar Rate Outlook for Trans-Pacific Partnership

How to Win Female Consumers' Hearts

The Emergence of Biodegradable Plastics

Pink Ribbon

New Employee Retention Solution, START China's East Asia Strategy and East Asia's Responses

Workforce Competitiveness of Korea and China

Economic Impact of Population Aging

December

Korea's Top Ten Hits of 2011
Ten Promising Global Technologies
Tasks for the Korean Economy in 2012

Recent Status of Corporate Financing Conditions Recent Trends in Financial Consumer Protection Possibility of US Consumption Recovery

Global Climate Change Stalemate

Hidden Secrets to Management

Developing Marine Natural Resources: Present and Future

TV Survival Shows Sweeping Korea

Secrets of Prestigious Orchestras

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Outlook for the Global and Korean Economies in 1H 2012

Japanese Businesses' Changing Strategies toward China and Lessons for Korean Firms

Assessment of China's Market, Technology and Industry Potential

Causes of Falling Household Savings and Tasks Ahead Characteristics of Korea's Consumer Inflation and Tasks for Price Stability

Learning the Art of Competition from Japanese SMEs

Symposium

Samsung Economic Research Institute(SERI) hosts symposia on major issues in the Korean economy, to share expertise and to contribute to Korea's future development.

June 22, 2011

2020 CHINA: 2020 Outlook for China's Markets, Technology and Industry, and Korea's Responses

Session 1: Assessment of China's Consumption and Innovation Capacity

- China Industry Outlook for 2020 | LEE Seong-Ho (Research Fellow at SERI)
- China's Consumption Map | HONG Sun-Young (Research Fellow at SERI)
- China's Innovation Capacity and Korea's Responses | PARK Chan-Su (Research Fellow at SERI)

Session 2: Competitiveness Outlook for China's Major Industries and Korea's Responses

- Auto Industry's Competitiveness Outlook and Responses | BOK Deuk-Kyu (Senior Fellow at SERI)
- Pharmaceutical Industry's Competitiveness Outlook and Responses | CHOI Jin-Young (Research Fellow at SERI)
- Renewable Energy Industry's Competitiveness Outlook and Responses | QIU Gang (Research Fellow at SERI)

Panel Discussion: China's Rise and Korea's Responses

- Moderator: KIM Jae-Yun (Vice President at SERI)
- Participants: KIM Yong-June, Professor, Sungkyunkwan University; RHEE Seung-Kyu, Professor, KAIST College of Business; PARK Seung-Rok, Director, Korea Economic Research Institute

Nov. 23, 2011

2020 CHINA II: The Present and Future of Chinese Industries and Challenges to Korea's Mainstay Industries

Session 1: The Maturing of China's Industry and Workforce

- The Maturing of Chinese Industry and the Outlook for Sino-Korean Relations | LEE Seong-Ho (Research Fellow at SERI)
- China's Lead over Korea in Talent Competitiveness | RYU Ji-Seong (Senior Fellow at SERI)

Session 2: Outlook for Chinese Industries and Korea's Response

- China's Petrochemical Industry: From Opportunity to Competition | KOH You-Sang (Research Fellow at SERI)
- Chinese Shipbuilding: A New Powerhouse in the Industry | BAE Young-II (Research Fellow at SERI)
- China's TV Manufacturers Enter Emerging Markets | JANG Sung-Won (Research Fellow at SERI)
- China's Mobile Phone Manufacturers Pursue Global Brand Status | LIM Tae-Yun (Research Fellow at SERI)
- China's Government Subsidized LED Industry Set for Rapid Growth | LEE Chang-Yong (Research Fellow at SERI)

Panel Discussion: China's Rise and Reponses from Korean Government and Businesses

- Moderator: KIM Jae-Yun (Vice President at SERI)
- Participants: LEE Keun, Professor, Seoul National University; KIM Ik-Su, Professor, Korea University; PARK Seung-Rok, Director, Korea Economic Research Institute

Regional Economic Forum SERI oversees regional economic forums to exchange knowledge among members and provide up-to-date information. The forums, run in tandem with local governments and chambers of commerce, feature a seminar on a current business issue every month, while providing business information to the community from SERI reports. SERI's regional economic forums thus contribute to the local business community and increase the competitiveness of their members.

Jan. 2011	Daejeon	Daejeon City Government Management Directions for 2011	YUM Hong-Chul Mayor of Daejeon
	Daegu	Ten Global and Domestic Trends for 2011	HONG Sun-Young Senior Vice President at SERI
	Gwangju	Ten Global and Domestic Trends for 2011	SHIN Changmock Research Fellow at SERI
	Gyeongnam	Ten Global and Domestic Trends for 2011	JEONG Young-Sik Research Fellow at SERI
Feb. 2011	Daejeon	Failure, the Seed of Great Success	KIM Jin-Hyuk Research Fellow at SERI
	Busan	Ten Global and Domestic Trends for 2011	KIM Deuk-Kab Senior Fellow at SERI
	Daegu	Growth into an Advanced Country and Global Strategies	PARK, Yeong–Jun Vice Minister of the Ministry of Knowledge Economy
	Jeonbuk	Nine Suggestions for CEOs in 2011	HAN Chang-Soo Research Fellow at SERI
	Ulsan	Ten Global and Domestic Trends for 2011	JEONG Young-Sik Research Fellow at SERI
	Jeju	New Corporate Communication Strategy in the Era of Social Media	LEE Dong-Hun Research Fellow at SERI
	Gwangju	Nine Suggestions for CEOs in 2011	YOO Seok-Jin Vice President at SERI
	Chungnam	Ten Global and Domestic Trends of 2011	SHIN Changmock Research Fellow at SERI
	Gyeongnam	Complex System-based Management: Ways for Survival and Growth in the Era of Uncertainty	KIM Chang-Wook Research Fellow at SERI
	Chungbuk	Ten Global and Domestic Trends for 2011	KWAK Soo-Jong Research Fellow at SERI
March 2011	Daejeon	Nine Management Issues for 2011	HAN Chang-Soo Research Fellow at SERI
	Gimhae	Ten Global and Domestic Trends and Economic Outlook for 2011	KWAK Soo-Jong Research Fellow at SERI
	Busan	CEOs Explore Space	LEE Seo-Gu Director of the Korea Astronomy and Space Science Institute
	Jeonbuk	New Corporate Communication Strategy in the Era of Social Media	LEE Dong-Hun Research Fellow at SERI

	Ulsan	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Jeju	Jeju, Opening an Era of "Tournomics"	KANG Shin-Kyum Professor at Chonnam National University
	Gwangju	The Korean Economy and the Gwangju-Jeonnam Economy	YOO Byung-Sam Yonsei University
	Chungnam	Arrival of the High Real Interest Rate Era and Corporate Responses	KIM Yong-Ki Senior Fellow at SERI
	Gyeognam	Recent Developments in the Middle East and World Economy	KWAK Soo-Jong Research Fellow at SER
	Chungbuk	Rediscovery of Japan	LEE Woo-Kwang Research Fellow at SERI
April 2011	Gimhae	Rediscovery of Japan	LEE Woo-Kwang Research Fellow at SERI
	Daegu	The Middle Eastern Crisis, the Japan Earthquake and the Korean Economy	KWAK Soo–Jong Research Fellow at SERI
	Daejeon	Background of the Trend toward Rising Interest Rates and Corporate Responses	KIM Yong-Ki Senior Fellow at SERI
	Jeju	The Rapidly Changing External Environment and Corporate Response Strategy	JEONG Young–Sik Research Fellow at SERI
	Busan	Failure, the Seed of Great Success	KIM Jin-Hyuk Research Fellow at SERI
	Jeonbuk	The Rapidly Changing External Environment and Corporate Response Strategy	PARK Bun-Soon Senior Fellow at SERI
	Ulsan	Intellectual Property Rights and Corporate Management	PARK Ho-Hyong Planning and Budget Officer of the Korea Intellectual Property Office
	Chungbuk	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Gwangju	Three Keywords for Promising Businesses in 2015	KIM Jae-Yun Vice President at SERI
	Chungnam	New Corporate Communication Strategy in the Era of Social Media	LEE Dong–Hun Research Fellow at SERI
	Gyeongnam	Nine Management Issues for 2011	HAN Chang-Soo Research Fellow at SERI
May 2011	Daegu	Fair Trade Policy for Shared Growth between Large and Smaller Companies	KIM Dong-Soo Chairman of the Korea Fair Trade Commission
	Daejeon	The Changing Global Economic Environment and Tasks for the Korean Economy	HYUN Jung-Taik Chairman of the Korea Trade Commission
	Gimhae	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Jeonbuk	Jeonbuk: Dreaming is Energy	MIN Seung-Kyu Administrator of Rural Development
	Busan	Great Leaders Build Great Nations	SON Kil–Seung Former Chairman of SK Group

	Ulsan	Nine Management Issues for CEOs	HAN Chang-Soo Research Fellow at SERI
	Jeju	Economic Outlooks for Jeju, Korea and the World	PARK Seong–Jun Head of the Jeju Office of the Bank of Korea
	Chungbuk	The Rapidly Changing External Environment and the Economic Outlook for Second Half 2011	JEONG Young–Sik Research Fellow at SERI
	Chungnam	Nine Managerial Issues for CEOs	YOO Seok-Jin Vice President at SERI
	Gyeognam	The Rapidly Changing External Environment and the Economic Outlook for Second Half 2011	PARK Bun-Soon Senior Fellow at SERI
June 2011	Daegu	Changes to Future Society Led by Science and Technology Development	KO In-Soo Professor at POSTECH
	Daejeon	The Rapidly Changing External Environment and the Economic Outlook for Second Half 2011	JEONG Young-Sik Research Fellow at SERI
	Gimhae	Three Keywords for Promising Businesses in 2015	KIM Jae-Yun Vice President at SERI
	Jeonbuk	Tasks for the Korean Economy and Solutions	PARK Seung Former Governor of the Bank of Korea
	Ulsan	A Creative City and a Creative Economy: New Paradigms for Regional Development	LEE Chul-Ho Professor at Busan National University
	Chungbuk	Changes to Future Society Led by Science and Technology Development	KO In-Soo Professor at POSTECH
	Busan	Strategies for Organizational Progress in Times of Rapid Environmental Changes	CHANG Sang-Soo Senior Vice President at SERI
	Jeju	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Gyeognam	Pop Culture Trends and Secrets to Mega-success	LEE Seung–Jae Reporter of Dong-A Ilbo
	Gwangju	FTAs and the Trade Environment and the Economic Outlook for Second Half 2011	KWAK Soo–Jong Research Fellow at SERI
July 2011	Gimhae	Pop Culture Trends and Secrets to Mega-success	LEE Seung-Jae Reporter of Dong-A Ilbo
	Chungnam	Failure, the Seed of Great Success	KIM Jin-Hyuk Research Fellow at SERI
	Daegu	Three Keywords for Promising Businesses in 2015	KIM Jae-Yun Vice President at SERI
	Daejeon	Twelve Promising Business Models in the "Smart" Era	LEE Seung-Jun CEO of Tabtomedia
	Busan	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Jeonbuk	Great Leaders Build Great Nations	SON Kil–Seung Former Chairman of SK Group
	Ulsan	Strategies for Organizational Progress in Times of Rapid Environmental Change	CHANG Sang-Soo Senior Vice President at SERI

Aug. 2011	Gwangju	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Chungnam	Types of Management Risks in the 21st Century and Solutions	HAN Chang-Soo Research Fellow at SERI
	Gyeognam	Rediscovery of the Japanese Manufacturing Industry —Changes in the Supply Chain and Responses	LEE Woo-Kwang Research Fellow at SERI
	Jeju	Vision for the Next Decade in Jeju's Free International City	KIM Hyun–Joo Research Fellow at SERI
	Chungbuk	Pop Culture Trends and Secrets to Mega-success	LEE Seung–Jae Reporter of Dong–A Ilbo
Sept. 2011	Daejeon	Moving and Persuasive "Art" Speech	KIM Mi–Kyung CEO of W.insights
	Gimhae	Failure, the Seed of Great Success	KIM Jin-Hyuk Research Fellow at SERI
	Busan	Climate Change and Business Management	YOO Jin-Ho APEC Climate Center Head of External Affairs Department Lim Dong-Soon Professor at Dong-eui University
	Jeonbuk	Global Economic Trends and the Korean Economy	KIM Jong-In Former Presidential Economic Advisor
	Gyeognam	What Should be Managed?	LEE Myoung-Woo Professor at Hanyang University
	Ulsan	New Corporate Communication Strategy in the Social Media Era	LEE Dong-Hun Research Fellow at SERI
	Jeju	Economic Trends at Home and Abroad and Tasks for the Korean Economy	LEE Dong-Geun Vice Chairman of the Korea Chamber of Commerce and Industry
	Chungbuk	Types of Management Risks in the 21st Century and Solutions	HAN Chang-Soo Research Fellow at SERI
	Gwangju	Failure, the Seed of Great Success	KIM Jin-Hyuk Research Fellow at SERI
	Daegu	2012 Outlook for the Economy and Business Environment	KWAK Soo–Jong Research Fellow at SERI
	Chungnam	Three Keywords for Promising Businesses in 2015	KIM Jae-Yun Vice President at SERI
Oct. 2011	Daegu	Three Keywords for Promising Businesses in 2015	HAN Chang-Soo Research Fellow at SERI
	Daejeon	2012 Economic Outlook	JEONG Young–Sik Research Fellow at SERI
	Gimhae	2012 Economic Outlook	SHIN Changmock Research Fellow at SERI
	Busan	2012 Economic Outlook	KWON Soon-Woo Vice President at SERI
	Jeonbuk	2012 Outlook for the Economy and Business Environment	HWANG In-Seong Vice President at SERI
	Jeju	2012 Economic Outlook	KWAK Soo-Jong Research Fellow at SERI

	Chungbuk	2012 Economic Outlook	SHIN Changmock Research Fellow at SERI
	Gwangju	2012 Economic Outlook	JEONG Young–Sik Research Fellow at SERI
	Ulsan	2012 Economic Outlook	LEE Chan-Yeong Research Fellow at SERI
	Chungnam	2012 Economic Outlook	SHIN Changmock Research Fellow at SERI
	Gyeognam	2012 Economic Outlook	KIM Deuk-Kab Senior Fellow at SERI
Nov. 2011	Daejeon	Falling in Love with Brands	LEE Min-Hoon Research Fellow at SERI
	Gimhae	New Corporate Communication Strategy in the Social Media Era	LEE Dong-Hun Research Fellow at SERI
	Busan	Types of Management Risks in the 21st Century and Solutions	HAN Chang-Soo Research Fellow at SERI
	Daegu	Tax Revisions in 2011 and Responses	KWON Gi-Ryong Commissioner of the Daegu Tax Office
	Jeonbuk	Understanding New Generations and Organizational Management in the "Smart" Era	CHUNG Kweon-Taek Vice President at SERI
	Ulsan	Future Management Trends and Human Resource Management	RYU Ji-Seong Senior Fellow at SERI
	Chungbuk	The Era of Chungcheongdo Has Arrived	HONG Chul Chairman of the Presidential Committee on Regional Development
	Jeju	Inter-Korean Relations and the Future of a Unified Korean Peninsula	Hyun In-Taek Former Minister of Unification
	Gwangju	Changes in the Corporate Environment and Responses	Park Young-Seo President of the Korea Institute of Science and Technology Information
	Chungnam	International Financial Market Jitters and Corporate Responses	JEONG Young-Sik Research Fellow at SERI
	Gyeognam	Zoom in Russia: Understanding Russia's Economy and Culture	LEE Dae-Sik Research Fellow at SERI
Dec. 2011	Chungbuk	How Do the Weak Defeat the Strong?	MIN Seung-Kyu Administrator of Rural Development
	Gimhae	Uncertainties, Risks and Business Management	HAN Chang-Soo Research Fellow at SERI
	Gwangju	Recent Changes in Labor Relations and Responses	LEE Jeong-II Vice President at SERI
	Daegu	Future Management Trends and Human Resource Management	RYU Ji-Seong Senior Fellow at SERI
	Ulsan	Failure, the Seed of Great Success	KIM Jin-Hyuk Research Fellow at SERI
	Jeju	Uncertainties, Risks and Business Management	HAN Chang-Soo Research Fellow at SERI

Busan	Three Keywords for Promising Businesses in 2015	KWON Ki–Duk Research Fellow at SERI
Jeonbuk	Recent ROK-US Relations and Outlook for the KORUS FTA	LEE Tae-Sik Former Ambassador to the US
Chungnam	Falling in Love with Brands	LEE Min–Hoon Research Fellow at SERI

Contacts for Regional Forum Membership

Jeonbuk Economic Forum

Jeju Economic and Tourism Forum

Busan Economic Forum	Busan Chamber of Commerce and Industry 82-51-990-7062
Daegu Economic Forum	Daegu Chamber of Commerce and Industry 82-53-756-3036
Gwangju Economic Forum	Gwangju Chamber of Commerce and Industry 82-62-350-5863
Daejeon Economic Forum	Daejeon Chamber of Commerce and Industry 82-42-480-3042
Ulsan Economic Forum	Ulsan Chamber of Commerce and Industry 82-52-228-3103
Gyeognam Economic Forum	Changwon Chamber of Commerce and Industry 82-55-210-3001
Chungbuk Economic Forum	Chungbuk Research Institute 82-43-220-1194
Chungnam Economic Forum	Chungnam Northern Chamber of Commerce and Industry 82-41-556-7131
Gimhae Economic Forum	Gimhae City Government 82-55-330-3447

Jeonju Chamber of Commerce and Industry 82-63-288-3013

Jeju Chamber of Commerce & Industry 82-64-757-2164

Cyber SERI: Korea's No.1 Knowledge Service

Cyber SERI provides the greatest value to its customers

Cyber SERI is a comprehensive brand for all of Samsung Economic Research Institute's (SERI) websites. SERI's websites serve as conduits for information for both domestic and global audiences, and play a pivotal role in making SERI a hub of Northeast Asia's knowledge ecosystem. Cyber SERI is dedicated to facilitating communications and the global exchange of ideas.

» Cyber SERI Website Features

SERI.org

Open Knowledge Ecosystem

SERI.org, SERI's main Korean language website, has become Korea's No.1 website for economic research, and is building a foundation for an "open knowledge ecosystem" between SERI and its members. SERI.org's diverse communication channels include its regular newsletter "SERIZine," its mobile web service, five-minute audio and video reports based on SERI publications, and social media services like the SERI Twitter and Facebook presence, all of which enjoy high popularity among members.



• Launched in October 1996

Main Features

- Various types of media reports including video, audio, infographics and PDFs
- Interactive member services, including the Open Knowledge Forum, the Creative Zone and the Cyber Forum
- Mobile web services for access to SERI reports, books and forums
- Briefs of latest reports distributed through social media, including Twitter and Facebook

• Status (As of December 2011)

- Number of Members: 1.92 million

- Number of content items: approx. 3.53 million

- Number of Twitter followers: 130,000 (the third largest among Korean companies)

- Number of Facebook fans: 24,000 (the 11th largest among Korean companies)

age of SEF	RI.org Mer	nber	5			Status of N	lain Content
(%)						Producer	Name of C
45.0		41.48					SERI Re
40.0 - 35.0 -						SERI	SERI B
30.0			25.46			SENI	SENI DO
25.0 -	22.64		25.46				Informatio
20.0							Open Knowle
15.0				8.77		Members	
0.0				0.77		iviembers	Creative
5.0 0.18					1.47		Foru
Teenage	ers 20s	30s	40s	50s	60s and above		Total

	Status of M	ain Content	(As of December 2011)
	Producer	Name of Content	Number of content items
SERI	SERI Reports	4,446	
	SERI	SERI Books	950
		Information Center	273,176
		Open Knowledge Forum	272,934
	Members	Creative Zone	165,792
		Forum	2,816,957
		Total	3,533,869

SERIWorld.org

Business and Economy Portal for a Global Audience

SERIWorld.org is SERI's English language site, and provides SERI's research results and analysis on economic, management and industrial trends in Korea and Northeast Asia to a global audience. SERIWorld.org is an essential resource for overseas opinion leaders interested in the Korean economy.

• Launched in November 2004

Main Features

- Reports, video clips and columns on the economy, policies, management and industries of Korea and Northeast Asia
- Korea Economic Trends, a weekly newsletter on Korean economic and management developments

• Status (As of December 2011)

- Number of Members: approx. 77,000
- Number of content items: 7,391 reports; 1,338 video clips; 202 columns, etc.



SERIChina.org

Knowledge Bridge between Korea and China

SERIChina.org seeks to become a bridge for knowledge between Korea and China, providing information on major economic, management and industrial trends and issues in China.

• Launched in March 2006

Main Features

- $\ Reports \ written \ by \ Chinese \ researchers \ at \ SERI \ Beijing \ Office \ on \ economics, \ management \ and \ industries$
- Video clips and reports on economics, management and industries
- Services provided in Chinese and Korean

• Status (As of December 2011)

- Number of Members: approx. 38,000

- Number of content items: 427 reports; 35 video clips



SERICEO.org

From Imagination to Insight

SERICEO.org is a "multimedia knowledge and information service" for CEOs and opinion leaders. SERICEO aims to provide essential knowledge and information in a timely and comprehensible manner to help enhance the competitiveness of Korea's managers, companies and the national economy as a whole.



• Launched in September 2001

Main Features

- Multimedia content produced by SERI researchers and experts in each field
- Short briefings for busy CEOs on important knowledge and information in five-minute video format
- Various programs on the latest issues, and insights on the economy, business, the humanities, science, philosophy and the arts
- "Smart learning" via smartphones and tablet PCs
- Applications downloadable on the Android Market and App Store

• Status (As of December 2011)

- Number of Members: 18,542
- Number of content items: 11,573 video clips (four new installments updated on a daily basis)

SERICEO's Membership Services

Main Services **Additional Services** • Online Seminar (to be launched in May 2012) CEO Information - High-quality content on economics, management, and - Hard copy of SERI's weekly flagship reports, "CEO the humanities Information" (52 issues a year) - Mail delivery of lecture materials SERI New Books - Free offers for books on management and economics Multimedia Briefing published by SERI (five books a year, mail delivery) - Short briefings on the latest issues on the economy and management in five-minute video format Report Download Service - Four video clips are updated on a daily basis (approx.10,000 videos are available) - SERI research papers, international raw material market trends, reports of major domestic institutions Email Service - Daily: New and recommended content • Company and People Profiles - Weekly: Weekly highlights - Information on companies and people useful for - Monthly: Monthly best/breakfast seminar business • "Wisdom in My Hands" Download Service - Handy knowledge, golden sayings and hot issues provided in e-book format CEO Summary Download - Two one-page summaries on pressing issues every week

SERICEO Customized Service

SERICEO provides customized services to companies by selecting the most critical items among SERICEO's content. The purpose of this service is to improve competency for core human resources and strengthen ties with VIP customers. Starting with the customized website for Samsung Life Insurance, SERILIFE (www.serilife.com), in June 2003, SERICEO now operates 23 customized websites.

Main Features

- Establishes an exclusive education infrastructure customized to each company including the development and operation of customized websites.
- Reflects company management philosophy and culture and provides selected content in line with company objectives
- Dedicated teams to the customized website provide management services (service, marketing and call centers)

	Name	Website	Members	
	Kyobo Life Insurance	www.kyobolove.com	Employees and financial planners	
	Korea Life Insurance	www.k-seri.com	Branch managers	
	Samsung Life Insurance	www.pension-esociety.com	Retirement pension subscribers	
	Samsung Fire and Marine Insurance	www.seri-thinknext.co.kr	Employees	
	Shinhan Life Insurance	www.shherosclub.com	Team leaders and above	
Financial	Shinhan Bank	www.shheros.com	Vice department heads and above	
Sector	Woori Financial Group	www.woorialbatross.co.kr	Employees of group affiliates	
	Woori Bank	www.waclub.co.kr	Vice branch managers and vice department heads	
	Hana Bank	www.hanaseri.co.kr	Branch managers and vice branch managers	
	Industrial Bank of Korea	www.ibkfriend.com	CEOs of small- and medium-sized companies	
	LIG Insurance	www.ligvictory.com	Branch managers and team leaders	
_	Cheil Worldwide	ideaschool.cheil.com	All employees	
Corporate Sector	Hyundai Kia Automotive Group	www.hkprime.co.kr	Executives and team leaders	
	KT	www.ollehktpark.com	Major executives	
	Ministry of Land, Transport and Maritime Affairs	www.storypark.or.kr	Level 5 civil servants and above	
	National Assembly	www.e-assembly.or.kr	Lawmakers and level 5 civil servants and above	
Government	Agriculture Forestry Fisheries Information Service	www.okdabceo.com	CEOs of agricultural foods companie	
and Government	National Unification Advisory Council	www.peacenuri.or.kr	Members of the advisory committee and employees of the Secretariat	
Funded Organizations	Ministry of Foreign Affairs and Trade	www.serimofat.org	Employees	
-	Korean National University of Education	www.schoolplus.kr	Principals of "creativity fostering schools"	
	Korea Coast Guard	www.neocean.or.kr	Sergeants and above	
	Public Officials Benefit Association	www.mypoba.or.kr	Members	
	Ministry of Environment	www.ecoleader.or.kr	Employees	

SERIPro.org

Training for a Smart Workforce

SERIPro.org provides optimized video content and services for working professionals based on content from SERICEO.

• Launched in July 2008

Main Features

- Content designed for middle managers
- Content from various fields including economics, business and the humanities based on the standardized competency model used in Samsung Group's own employee training system
- In addition to online services, on-the-go learning is possible via smartphones and tablet PCs (mobile applications available)
- Status (As of December 2011)
- Number of Members: 6,100
- Number of content items: 2,900 video clips (three new installments are updated on a daily basis)

Services of SERIPro

- Online Multimedia Content
- Five-minute video briefings
- 12 new content items updated on a weekly basis
- Email Service
- $\cdot \ \mathsf{Monday} \mathsf{Thursday} \colon \mathsf{New} \ \mathsf{content}$
- \cdot Friday: Best content of the week
- Mobile Service
- Available for all SERIPro members
- Content is accessible anytime and anywhere, while commuting or on business trips

- Offline Seminar
- Monthly "Spark" seminar
- · Inspires new thinking for the next-generation leaders of Korea

Special Benefits

- Mileage points
- · Mileage points provided for watching online content can be used to order books, accompany people to seminars and present content to others

SERI & U

Bridging the Gap between Academia and the Business World

SERI&U is a new role model for university education that bridges the worlds of business and the classroom. Professors can select multimedia content produced by SERI, devise curricula using the content and optimize the content for school use. Sungkyunkwan University, Chungnam National University, Daegu University and Woosuk University plan to introduce SERI&U in their curricula through an academia-industry cooperation initiative in 2012.



• Trial Service Launched in January 2011

Main Features

- Professors can use SERI's media content to explain theory during lectures
- Students can refine their skills in real world business and enhance their competitiveness on the job market
- Universities can ensure differentiation for their course offerings and improve their competitiveness

SERICEO.cn

Online Knowledge Source for Chinese Employees at Samsung Group China

SERICEO.cn provides Samsung employees in China with information on China's economy, management and industry. The service also includes items to bolster individual capabilities. Two content items are uploaded daily, with more than 90% of surveyed SERICEO.cn users indicating that they are satisfied. The website is considered to be one of the best knowledge services available for local employees.



• Launched in October 2007

Main Features

- Information on economics, management and industry, both in China and the world
- Content on Samsung Group's managerial philosophy, history and values
- Communication venues where employees can share information and knowledge

• Status (As of December 2011)

- Number of Members: 15,400
- Number of content items: 3,132 video clips; 427 reports

SERI China

After receiving authorization from the Chinese government on May 31, 2005, SERI China became SERI's first global base for economic research.

SERI's vision for SERI China is to become a hub of information on China that can promote development of China's economy, society and business by providing creative and essential knowledge. SERI China is now taking firm root as one of China's top foreign private research institutes. By providing early warning on changes in China's business environment, as well as proposals to bolster China's competitive advantage, SERI China has enhanced the competitiveness of businesses in China and contributed to the overall Chinese society.

SERI China is also playing a role as a pioneer in the globalization of SERI as it deepens its expertise and enhances its proficiency in both theory and practice through continuous exchanges with Chinese public-sector institutions and universities.



An information hub for China promoting the continual growth of China's economy, society and business through provision of creative and essential knowledge

Act as the vanguard of SERI's China research and provide up-to-date information from the field

Act as a hub for a network of China experts

Activities of SERI China					
Classification	Founding (2005-2006)	Expansion / Establishment (2007-2011)			
Research and Activities	⟨Research Activities⟩ Launched research and operations independent from SERI headquarters in Seoul Began publishing regular reports (weekly/monthly/quarterly) ⟨Outbound Activities⟩ Networked with opinion leaders in China Hosted seminars 	(Research Activities) - Building a collaborative research system with SERI headquarters - Publishing regular reports (weekly/monthly/quarterly/semiannual) and issue reports - Pursuing joint research and strategic projects (Knowledge Management) - Opened an educational website tailored to Samsung China Group employees (SERICEO China) (Outbound Activities) - Invited an advisory board and held regular meetings in Beijing (eight members) and Shanghai (five members) - Conducted an essay contest for university students - Expanded exchanges with research institutes and universities in China			
Organization	 Researchers (eight) Expatriates (two) Translation/administrative workforce (three) →Total: 13 employees 	 Researchers (14 in three teams) Knowledge management workforce (seven) Expatriates (three) Translation/administrative workforce (four) → Total: 28 employees 			

Performance of SERI China in 2011

01 Regular Reports

China Business Focus (weekly)

- Forty-eight editions published (96 separate reports)

SERIChina Review

- Looming Debt Crisis from Local Governments
- Issues with the Economic Growth Model
- The Environment of the Computer Industry and Business Strategies
- China's Promising Technologies for 2011
- Status of Smart Grid and Development Strategies
- Growth of Multinational Companies in the Medical Equipment Market
- Structural Changes in the Home Appliance Industry
- Rapidly Growing Offshore Plant Industry
- Engines for Sustainable Growth
- Strategies to Enter Second- and Third-tier Cities

- Analysis on Partnerships of Chinese Securities Companies with Foreign Counterparts
- The Process of and Prospects for Urbanization
- Entrance of Mobile Operating Systems into the Chinese Market
- Current Status and Prospects for the Solar Power Industry
- Midea's Competitiveness Based on Its Management Mechanisms
- Shift in China's Trade Policy
- Structural Changes in Import Demand and Prospects
- China's High-end Medical Service

Issue Reports

- Development Opportunities for the Semiconductor Industry
- Development Models for the World's Smart Cities
- Changes in the Labor Market and Their Impact
- Structural Changes in the Labor Force and Implications
- Governance of State-owned Listed Companies and the Role of the Board of Directors
- Development Plan for Central China
- Purchasing Power of Rural Residents
- Competition in the Pharmaceutical Industry
- Foreign Car Companies' Technology Transfers

Economic/Industrial Trends Reports

- Economic Trends in the First and Second Half of 2011 and Outlook
- Industrial Trends in the First and Second Half of 2011 and Outlook
- Macroeconomic Environment Index in the First and Second Half of 2011

02 Consulting Projects

- Prospects for the Real Estate Bubble and Future Impact
- Competitiveness and Strategic Shifts at Foxconn
- Impact of the 12th Five-Year Plan on Doing Business in China and Countermeasures
- The Decision Making Process on Economic Policies
- Measures to Maintain R&D Workforce
- Chinese Values and Civic Mindedness
- High-revenue Businesses and the New Rich

- The Success and Failure of Global Companies in the Chinese Market
- Engines for Sustainable Growth
- Policies to Boost Domestic Demand
- Issues over Foreign Exchange Liberalization
- Cooperation among LED Companies in China
- Current Status of China's Renewable Energy Industry
- Analysis of Underdeveloped Industries in China

03 SERICEO China Service

This service provides information in video-clip format on economics, management, industry and culture to approximately 15,400 business executives and staff employed in Samsung Group China

- Launched in October 2007
- Produces 10 new items every week on management strategy, marketing, leadership, industry outlook, persuasive psychology, business Korean, consumption trends and innovation

04 Outbound Activities

Operation of the SERI China Advisory Board

• Comprised of 13 advisory members, including deans of prominent Chinese universities, presidents of state-owned research institutes and media figures (eight from Beijing and five from Shanghai), to discuss issues in China's politics, economy and society in regular meetings

Contribution to Korean and Chinese Media

- Interviews and columns in Korean broadcasting companies and major newspapers
- Research reports in journals and websites in China
- About 130 reports to about 50 magazines including China Entrepreneur and China Economic Net
- $\bullet \ \mathsf{Blog} \ \mathsf{activity} \ \mathsf{in} \ \mathsf{major} \ \mathsf{Chinese} \ \mathsf{websites} \ \mathsf{publicizing} \ \mathsf{SERIChina.org}$
- Around 500,000 users visit SERI China blogs annually at Sina, 163.com, and Sohu.
- Web link to SERIChina.org at 24 websites in China, including Sina Management/China Economic Net, Foreign Investment Web and China HRD Management

SERI Books

Samsung Economic Research Institute's (SERI) publications contribute to the deepening of public knowledge and the development of society. They focus on the economy, society and business. Outside authors as well as SERI researchers contribute to SERI's annual book list.

Feb. 11, 2011	You Don't Learn Only Kung Fu at Shaolin Temple	Samsung Economic Research Institute
March 1, 2011	I Insist, Therefore I Am	Samsung Economic Research Institute
March 31, 2011	Lifetime Financial Plan – You Should Start It Right Now	HONG Eun-Ju
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Assessing the Risks of Korea's Household Debt

Creative Solutions O'

1. Background and Objectives

Although Korean households are concerned about the economy, they have continued to pile up debt. The ratio of household debt to disposable income stood at 143% in 2009, 1.6 times higher than the 87.4% in 2000. Compared to major countries, Korea's household debt ratio is in the upper tier along with the UK (161%) and Australia (155%). It even exceeds that of the US (128.2%), the epicenter of the global financial crisis.

Much of the lending to households is in the form of mortgages. They increased 17.6 trillion won in January-November 2010, accounting for 88.8% of the commercial banks'entire lending to households. Households also turned to credit unions, credit cooperatives and other non-bank institutions in the same time period, borrowing 19.6 trillion won.

This paper attempted to assess the impact of ballooning household debt on the Korean economy.

2. Key Findings

Considering households' financial structure and the soundness of household loans, the default risk on the loans is considered low.

First, the ability of households to service their debt has improved thanks to a bullish stock market. The robust rebound in the Korean stock market since mid-2009 has increased the ratio of households' financial assets to financial liabilities and that has substantially enhanced households' ability to handle their debt payments. In the third quarter of 2010, net financial assets (financial assets - financial liabilities) held by individual sector rose by 324 trillion won from the end of 2008 to 1,205.4 trillion won. Accordingly, the ratio of the individual sector's financial assets to financial liabilities increased from 2.1 to 2.34 for the same period.

Indicators related to household loans seem also encouraging. Korea's loan-to-value (LTV) ratio for home mortgages, which account for two-thirds of the nation's total household loans, was set at 35.3% in 2010. Compared to the US, Japan, UK and France, which set LTV ratios at 70-80%, Korea's LTV ratio is very strict.

Another factor is that lending to those with a low credit rating (8th to 10th grade) has been falling since late 2008. The ratio of lending to those with a low credit rating to the nation's total household lending fell from 14.7% at the end of 2008 to 13% at the end of last December.

The favorable conditions are not worry free. Interest rates, pushed down to historically low levels to weather the global financial crisis, allowed households to take on more debt without being weighed down by interest payments. In the third quarter of 2010, household interest payments was estimated at 11.7 trillion won, down 3.3 trillion won from the fourth quarter of 2008. Now, with the economy recovered from the financial crisis fallout and inflation spiking upward, interest rates are headed back to normal levels. This will raise households' interest payment burden.

Structural weaknesses from mortgages such as short-term maturities and a high proportion of adjustable rates also can become a potential threat. A substantial portion (91.3%, as of late June 2010) of adjustable rates on household loans also makes household debt vulnerable to interest rate hikes. Even worse, if a high

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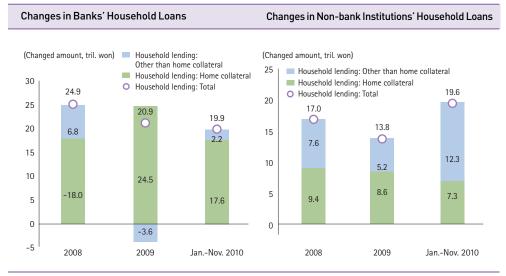
Samsung Economic Research Institute

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number of lump-sum mortgage payments come due within a short period of time, the household sector will come under more pressure.

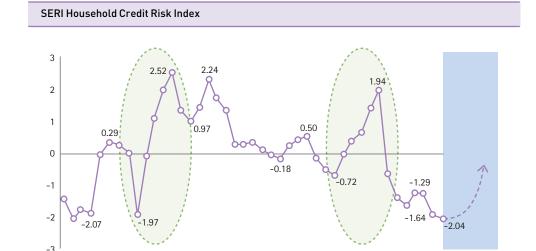
Non-bank financial institutions pose a third potential risk. Whereas growth in commercial banks' household loan declined from 24.9 trillion won in 2008 to 19.9 trillion won in January-November 2010, growth in household loans provided by non-bank financial institutions expanded from 17.0 trillion to 19.6 trillion won for the same period. In particular, loans which don't have home collateral (e.g., credit loans) rose sharply. If macroeconomic variables take a negative turn (i.e., economic slowdown and interest rate hikes), there is relatively high possibility that non-bank institutions will have more trouble due to the lack of collateral.

Concerns remain as household debt environment will likely worsen. Interest rates are returning to normal levels. Since stock markets are volatile, the strength of households' financial assets cannot be taken entirely for granted.



Source: Bank of Korea.

The SERI Household Credit Risk Index, a composite of risk indicators, fell to -2.04 in the third quarter of 2010 from 1.94 in the fourth quarter of 2008 but is expected to edge up. If interest rates climb quickly and housing value drops, the index could rise sharply, as it did in 2002 and 2007 after touching the bottom.



2005 2006 2007

2008

Source: Samsung Economic Research Institute.

2003

2004

3. Implications

In the current environment, souring macroeconomic factors such as interest rate hikes, a bearish stock market and sinking real estate can occur at any time, eroding households' liquidity and assets. This can lead to an increase in household debt defaults, especially among those with substantial credit. The spike in nonperforming loans in turn would threaten the solvency of financial institutions and risk a recession.

Government steps are needed to contain a significant increase in household debt. Loan-to-value and debt-to-income ratios should be applied to raise macroeconomic stability. Also, the government should pay careful attention to household loans by non-bank institutions to prevent them from becoming a burden on the entire financial system. Many non-banks already are in distress because of rising nonperforming loans to developers.

44 Samsung Economic Research Institute Samsung Economic Research Institute 45 Extending maturities of household loans and increasing the proportion of fixed-rate loans would be a good way to reduce household debt when interest rates rise. To this end, a flexible payment method would be particularly effective. For example, a certain portion of loan can be provided at fixed rates or can be repaid in installments. Conversion of adjustable-rate loans to fixed-rate loans after a certain period of time is also recommendable. In this way, households can cut rising debt service burden when interest rates rise. Along with this, banks should end their long-standing practice of automatically extending maturities.

Effects of the Korea-EU FTA

Creative Solutions

1. Background and Objectives

The Korea-EU free trade agreement (FTA) went into effect on July 1, 2011. The FTA, the first signed by the EU with an Asian country, calls for the elimination of import duties over the next five years. This is expected to raise Korea's trade with the EU by an annual average of US\$4.65 billion: US\$2.52 billion in exports and US\$2.13 billion in imports. Still, the benefits to Korean companies cannot be automatically counted. Much will depend on their ability to seize the opportunities that the FTA will present, and even then, rapid expansion of Korea's market share in the EU should not be expected.

This paper examined the opportunities that the Korea-EU FTA creates and how Korean companies can maximize the potential benefits from the trade pact.

2. Key Findings

Considering the structure of Korea's exports to the EU, it appears that it will be difficult for Korean companies to fully capitalize on the Korea-EU FTA.

First, Korea's market share in the EU has been stagnant because Korean exporters have focused on the US and rapidly growing emerging countries rather than the 27-nation EU market. Although the EU is the Korea's second biggest exports market

with export volume reaching US\$53.5 billion as of 2010, it is still far behind top destination China (US\$116.84 billion). Korean goods have less than 3% of the EU market (Korea is the EU's eighth largest import source).

Furthermore, the share of the EU continues to decline, outpaced by emerging countries. Germany and the UK were among Korea's top 10 export destinations in 2001, ranking sixth and eighth, respectively, but in 2010, the UK was Korea's 18th biggest export market due to strong exports to India (7th) and Vietnam (9th).

Market Share in the EU				
	2008	2009	2010	
Korea	2.5	2.7	2.6	
China	15.8	17.8	18.9	
US	11.9	13.2	11.4	
Japan	4.8	4.7	4.3	

Note: Market share refers to the weight of the country in EU's total imports from outside the territory. Source: European Commission.

Second, Korean goods are losing on comparative advantage in the EU market. The number of Korean goods which scored higher than 1 in the Revealed Comparative Advantage (RCA) Index (based on HS 2 digit code, a total of 96 items) fell from 17 in 2001 to 13 in 2010. Korea's rivals in the EU market – China, the US and Japan – were much higher: 35, 26, and 18 in 2010, respectively.

No. of Goods with Comparative Advantages in the EU							
Korea US China Japan							
2001	17	29	35	15			
2005	14	27	33	15			
2008	14	28	36	16			
2010	13	26	35	18			

Note: 1) The number of items which scored higher than 1 in RCA index.

2) Based on HS 2 digit code.

Source: International Trade Commission.

Third, Korea's exports to the EU have a high geographical concentration. Korea heavily relies on the East European market rather than the 15 nations in the Western Europe, the backbone of the EU economy, accounting for 87.8% of the EU's total GDP and 91% of its total imports. In 2001-2010, the share of Western Europe in Korea's total EU exports fell by more than 20 percentage points from 92.4% in 2001 to 70% in 2010. This presents a sharp contrast with the US and China.

Fourth, Korea's dependence on certain flagship items is excessively high. This trend is more conspicuous in Korea's EU-bound exports rather than in its exports to China and the US. In 2010, 65.9% of total EU-bound exports from Korea consisted of the top 10 items, far more than the top 10 to the US (59.5%) and China (52%).

The heavy concentration in the export mix to the EU is because Korea's shipments are largely comprised of heavy and chemical products from major Korean companies. The lack of export diversity and heavy reliance on a small number of large exporters suggests that tariff removal will have no immediate impact on most Korean companies.

3. Implications

FTA negotiations between the EU and other Asian countries are proceeding slowly. That should give first-mover advantage to Korea for at least three years. Still, Korea's market share probably will not see significant gains initially. Now at 2.6%, it is only expected to be 2.9% in 2016 and 3.0% in 2020.

To maximize benefits of the FTA, Korean exporters should obtain the approved exporter status in advance. Any Korean exporter who has the approved exporter status can benefit from simplified issuance of export certificate of origin when they export goods worth more than 6,000 euro to the EU per shipment. Next, companies should establish a system that can satisfy the European countries' rules of origin and fully understand the EU's product classification system as there could be

48 Samsung Economic Research Institute Samsung Economic Research Institute 49 misunderstanding and confusion due to differences between the EU and Korean coding systems.

In the mid- to long-term, Korean exporters will be in position to take an aggressive approach to increase market share in the EU. Falling tariffs will enhance price competitiveness and free up cash for investments and marketing. Korean exporters also should get a boost from the EU's anti-dumping regulations aimed at Chinese goods.

At the same time, Korea needs to find promising industries in new growth engines. That will help diversify the export mix, lowering the outsized dependence on products of large companies and maximizing the potential benefits of the FTA. Companies need to monitor market trends frequently and identify promising exports on a per country basis. Particularly, industrial cooperation between EU and Korean firms is worth considering. By incorporating EU's green technology with Korea's IT and manufacturing technologies, Korean companies can develop green products and open up new export markets.

Government assistance to small and mid-size enterprises (SMEs) will assist the export diversification effort. The government should provide market information to SMEs so that they can enter into public procurement and private brand markets. The government also should be facilitating the entry of foreign companies who regard the Korea-EU FTA as a stepping stone into Asia and the EU.

Finally, Korean companies will need to decide whether to modify their global production chain to capitalize on benefits of Korea-EU FTA tariff reductions. Since the FTA requires local processing and delivery by manufacturers to comply with the rules of origin, companies need to produce EU-bound items domestically.

Infrastructure Opportunities in Emerging Market Cities

1. Background and Objectives

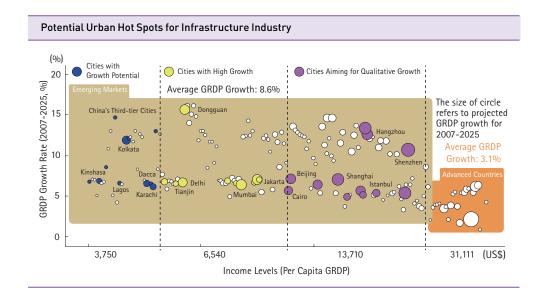
By 2025, cities will be home to an estimated 60% of global population growth, and account for 75% of world GDP growth. At the forefront of urbanization will be cities in Asia and Africa, which are generating more than 80% of the world's urban population growth and are expected to enjoy the fastest income growth. To keep pace with their current and anticipated population explosion and industrialization, cities in Asia and Africa are expected to pour about US\$7 trillion into urban infrastructure over the next decade.

Global companies already are jockeying for position in emerging market cities. Korea, which possesses deep IT and differentiated know-how for large-scale urban projects, should set its sights on the infrastructure opportunities in emerging markets.

Against this backdrop, this paper categorized promising cities in emerging economies into three groups and studied the characteristics of urban infrastructures of each group. This paper also attempted to prioritize the countries that are best fitted to Korea's capability and competitiveness level and suggested desirable entry strategies.

2. Key Findings

Cities in Asia and Africa were divided into three groups based on Gross Regional Domestic Product (GRDP) per capita and projected GRDP growth by 2025. The categories were: growth potential, high growth and aiming for qualitative growth.



1. Cities with Growth Potential: Cities in Africa and South Asia

Although cities in this group have low income levels, their inexpensive labor is expected to power growth. Kinshasa and Lagos in Africa and Karachi in Pakistan are in this group. The slow build-up of basic infrastructure, such as electricity, roads and water and sewage facilities, cannot properly respond to the needs of their rapidly growing population. Furthermore, low financial reserves force these cities to rely on international aid and sales of resource development rights for their infrastructure development. Recently, foreign companies have offered direct financial assistance for infrastructure development in return for rights to operate infrastructure systems or to develop land or resources.

2. Cities with High Growth Rates: Cities in India and Southeast Asia and China's Second-tier Cities

The cities in this group (e.g., Delhi in India and China's second-tier cities like

Tianjin) have a large concentration of manufacturing and thus are regarded as production bases. Naturally, demand for electricity and transportation, the foundation for manufacturing, is surging in these cities. Local governments are pressing ahead with the construction of urban infrastructures and proactively trying to attract investors, both domestic and foreign, through tax breaks and removal of foreign ownership limits. In cooperation with the governments, global companies have gained a foothold in the early stages of advanced development in this group's cities and are attempting to broaden their presence beyond current strongholds.

3. Cities Seeking Qualitative Growth: China's First-tier Cities and Middle Eastern Cities

Although cities in this group (e.g., China's first-tier cities like Shanghai and Riyadh in Saudi Arabia) have a relatively large economy, their competitiveness and quality of life are still behind those of the developed world. The quantitative growth of these cities has become stagnant, prompting them to focus on efficiently managing their infrastructures and upgrading living environments. Their infrastructure is becoming smarter and more environment-friendly by incorporating smart power grids and green buildings. By leveraging cutting-edge technologies such as electricity efficiency, carbon reduction and intelligent water treatment, global leading companies are trying to preemptively attain business opportunities in these cities through technical tie-ups and pilot projects.

3. Implications

This paper provided insight to the Korean government and to Korean companies on winning infrastructure contract in emerging economies. The paper distinguished itself from previous studies by using city, not nation, data and performing a quantitative analysis of the characteristics of infrastructures in each group.

Korean companies already have extensive understanding of urban infrastructure in emerging economies. Going forward, they need to take a "choose and concentrate" approach in securing infrastructure construction contracts abroad. First, a tailored

strategy considering demand patterns is needed as different infrastructure will be required according to a city's income levels. Second, Korean companies should focus on cities with high growth first. Also, as cities with high growth will likely become a hub for great-sphere economic blocs, especially in China and India, successful entry into these cities will make it a lot easier to advance into small- to mid-sized cities. Third, market strategy should differ for cities with growth potential and cities aiming for qualitative growth. As for cities with growth potential, providing technology and capitals for infrastructure build-up in exchange for rights for extracting natural resources would be a viable strategy. On the other hand, targeting the IT-converged smart infrastructure market would be recommendable for breaking into cities aiming for qualitative growth.

Attractiveness as Infrastructure Market and Main Segment						
	At					
Category	Market Size	Competition Level	Competency Appropriateness	Overall Evaluation	Major Projects	
Cities with Growth Potential	Δ	0	0	0	Telecommunication, Water and Sewage, Transportation	
Cities with High Growth	0	0	0	0	Electricity, Transportation	
Cities Aiming for Qualitative Growth	0	Δ	Δ	0	Smart Grid, Complex Infrastructure Projects	

Note: 1) Market size is measured by GRDP growth considering the size of major business.

2) Competition level (0: lowest competition level) and competence appropriateness are measured by experts interviews.

Making forays into emerging market cities also requires government support. The government should enhance Korean cities' competitiveness by setting up environment-friendly and smart pilot cities and subsequently promote Korea's successful city model to emerging countries. In addition, it is important to forge friendly relationships with emerging market cities through development aid and economic cooperation. Since infrastructure projects necessitate the convergence of various technologies, Korean companies should be packed with systemic business models that encompass planning, management, financing, let alone equipment. To that end, partnerships and consortiums among companies or between companies and governments need to be expanded.

Moving into Africa, the Next Big Market

Creative Solutions 04

1. Background and Objectives

Thanks to rapid growth in the 2000s, African economies have become the latest emerging markets in the world. Propelled by rising natural resource exports and ballooning investments, the economies enjoyed an average annual growth of 5% for the period from 2001 to 2010, exceeding expansion in Central and Latin America and Central Asia. In addition, African countries are now receiving attention as potential consumption markets and production bases, as well as suppliers of natural resources. Developed and emerging countries' foreign direct investment in Africa jumped from US\$11 billion in 2000 to US\$55 billion in 2010. Leading global companies and Chinese and Indian companies already have made inroads into African markets and are competing to solidify and widen their foothold. Accordingly, a growing number of Korean companies will likely follow suit.

Against this backdrop, this research tried to help Korean companies successfully enter Africa by studying the huge potential of the continent and suggesting desirable entry strategies along with a list of the most promising African markets.

2. Key Findings

After a long period of relative exclusion from the global economy, Africa has turned into a continent of opportunity since 2000 thanks to its "DYNAMIC" appeal:

① Developing and Young; ② Natural and Agricultural resources; ③ a huge consumption Market; ④ Infrastructure market; and ⑤ Changing business climate.

To successfully advance into the African markets with high growth potential, customized strategies based on commodities trade, consumption market and production base is needed. Whatever the entry purpose, a strategy that emphasizes mutual growth and cooperation should form the common denominator of all approaches. For example, sharing experiences of Korea's past economic development through industrial training and technology transfer would raise the chance of Korea's becoming mid- and long-term partner of Africa. Also, setting up local office or subsidiaries in targeted African markets will facilitate Korean companies' localization, a process needed to understand culture and society. Furthermore, building human networks is vital since information about Africa development and investment in Africa is usually closed and unsystematic.

The first strategy aimed at Africa's resource market is to focus on business-to-government projects designed to tackle Africa's top challenges – improving infrastructures and scaling up its natural resources industry. Given Korea's global competitiveness in infrastructure construction (e.g., roads and ports) and IT enhancement, Korean companies would be especially suited for large infrastructure projects in Africa. In exploring for natural resources, Korean companies could concentrate on adding value to African commodity producers by offering not only mining but also the construction of the first- and second-stage processing facilities (e.g., general refineries and oil plants). The second strategy is joint market entry with other Asian companies. To compete against European companies, which already have a presence in Africa's natural resources and infrastructure markets, Korean companies should cooperate with other Asian companies. Chinese and Indian companies, which have accumulated considerable experience in Africa, and Southeast Asian resources companies, such as Thailand's PTTEP and Vietnam's PetroVietnam, can be viable partners for Korean companies.

The first strategy aimed at Africa's consumption market is to target Africa's young

people, the so-called "Cheetah Generation," who are sensitive to changes and express freely their desire, and the middle class. After focusing on the middle class, Korean companies should turn their attention to low-income consumers. The second strategy is customizing business models to local conditions. Factoring in the cultural diversity of Africa, companies should unveil products that are easily approachable and satisfy local needs. For instance, small packaging, rental services, pay-per-use rating system and sales of used goods could be used to meet the needs of low-income African consumers, who may not be at the top of companies' target list but wish to experience products and services. In addition, the release of products and services that can deal with Africa's poor infrastructure (e.g., transportation, water services, telecommunication, electricity and finance) is recommendable. And products and services promising integrated solutions should be offered to build up infrastructures.

The first strategy to make a foray into the production base is to pair with local companies. Korean companies can establish and maintain a business relationship by providing managerial resources such as management know-how, technologies and brands that local companies need. Particularly, as the business-to-business market providing components and industrial materials to local companies is expected to grow rapidly, preemptive responses are needed. The second strategy is training to secure a capable, local workforce. Companies cannot count on finding enough educated workers. Since it is difficult for a company to set up and operate a formal school, an in-house training system would be a more effective way to secure the type of workers needed. Also, supporting local universities for special courses related to the company's operations would be beneficial. Companies should hire those who finished the course first to encourage further enrollment and a stream of graduates.

Country-specific potential also should be analyzed. Accordingly, this paper devised economic, social and political indices and assessed growth potential of each African country as a supply source of natural resources, a consumption market and a production base. Four North African countries (Egypt, Libya, Algeria and

Morocco), Nigeria, South Africa, Angola and Kenya were selected as the most promising African markets in terms of three axes.



3. Implications

In view of Africa's limitless growth potential, Korean companies' business expansion into the African market is a must. However, the competitiveness of latecomer Korean companies is far behind that of experienced European and US counterparts and Chinese companies, which have deep pockets and government backing. Korean companies, short of market experience and information on local markets, need to equip themselves with an in-depth understanding of African markets and custom-tailored strategies. African markets harbor a raft of uncertainties so countermeasures against lurking risks need to be thrashed out. For starters, Korean companies need to strategically pick from the more than 50 African nations. The four most promising nations, in terms of natural resources, the consumption market and production bases, are Egypt in the North, Nigeria in the West, Kenya in the East and South Africa in the South. Connecting the four creates the shape of a diamond. Therefore, companies need to first penetrate Africa's "Dynamic Diamond" to take on the rest of the African market more efficiently.

To understand Africa's cultural diversity and uniqueness, Africa experts should be fostered. While forging win-win relationships with targeted African nations, Korean companies should display a respect for the local culture and desire to contribute to national economic development so as to differentiate themselves from early comers. In short, latecomer Korean companies need to market themselves as "solution providers," who can help African countries' long-term economic growth. Considering the weak distribution systems in Africa and hefty start-up costs due to insufficient information, the Korean government needs to consider tax incentives and financial support.

Lastly, companies need to utilize Africa's poor industrial system as a business opportunity in the long term. To reduce risks, Korean companies should strengthen cooperation with Japanese, Chinese and Indian governments and companies, who advanced into the African market relatively early.

"Brain Factory" China Overtakes Korea

Creative Solutions **O**

1. Background and Objectives

China is diversifying from being the world's assembly plant and turning itself into a "brain factory." The number of China's R&D workers has already surpassed that of the US, making China a likely innovation hub for the 21st century. As can be seen in its solar energy industry, China is quickly narrowing the gap with advanced countries in cutting-edge technologies that are still far out of reach of other emerging economies. This is largely attributable to the power of its excellent human resources.

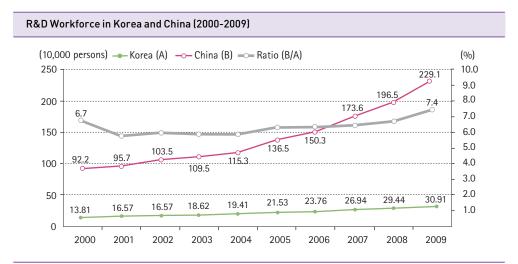
When considering that the competition between Korea and China is only deepening in major industries and technology areas, a comparative analysis on their battle for human capital would be helpful for Korea to devise a strategy.

This paper examined the quality and quantity of their human resources as well as research performance, with a focus on the science and technology workforce in several industries, including telecommunications, pharmaceutical, automobile, shipbuilding, petrochemicals and energy.

2. Key Findings

In 2009, China had 172,000 post graduates (masters and doctorates) in science and

engineering compared to 19,000 in Korea. In the number of R&D personnel, China topped the US in 2007 to lead the world. It had 2,291,000 persons engaged in R&D on a fulltime basis in 2009, 7.4 times more than Korea's 309,000 R&D workers. Over the last three years, China's R&D workforce swelled by an average annual rate of 15.1%, while that of Korea rose 9.2% on average. The yawning gap is expected to only become more prevalent in the foreseeable future.



Source: Ministry of Education, Science and Technology (2010). Report on 2010 R&D Activities; National Bureau of Statistics of China, Science and Technology Department (2010). China Statistical Yearbook on Science and Technology 2010.

China also stands ahead of Korea in the number of world-class institutions for talent cultivation. In the benchmark QS World University Rankings, China has nine of the world's top 100 universities in engineering and technology and Korea has two. In particular, there has been a significant increase of university departments ranked in the top 1%, as measured by Essential Science Indicators, reflecting global research capabilities. Seven Chinese universities, including Peking, Tsinghua and Fudan universities, saw the number of the top 1% departments jump from 24 in 2001 to 74 in 2010. In the information and telecommunications industries, the number of researchers in China is 1.6 times those in Korea. The cumulative number of Chinese research articles published in the world's top 10 academic journals is 2.5 times that of Korea. In the energy and environment industries, the number of Chinese researchers and the cumulative number of Chinese articles published in those top-

tier journals are 11 times and 3.6 times those of Korea, respectively.

Furthermore, Chinese universities have been laudable in the commercialization of research results. By 2007, a total of 510 Chinese universities had contributed to science and technology (S&T) commercialization by creating 3,665 university-run enterprises. The most representative example is Beida Fangzheng Group, a powerhouse in the field of IT and medicine, set up by Peking University. Universityaffiliated science institutes have played a central role in China's construction of university S&T parks across the country. The S&T parks take the lead in cultivating personnel for innovation and business start-ups as well as S&T industrialization and cutting-edge technology development. As of November 2010, the number of employees working in such university S&T parks reached 128,900. As of 2007, there were 6,574 enterprises established under the umbrella of university-affiliated science institutes.

Why is China's talent competitiveness so strong? Since the 1980s, amid economic reforms and an aggressive open-door policy, China has made the transformation of its universities into first-rate global institutions a top priority. Accordingly, the government has steadfastly implemented national plans, notably Project 211¹ in 1995 and Project 985² in 1998. To prevent the weakening of higher education institutions and to improve the effective use of state funding, more than 1,000 universities were merged to form a core of 428.

Second, China has established "special talent zones" through close cooperation between government agencies, private enterprises and universities and operated them as talent cultivation and utilization bases. Central and local governments provide financial and institutional support to help attract superior talent from abroad, while universities cultivate and supply outstanding graduates. Private enterprises move innovative ideas and research towards commercialization. Zhongguancun, dubbed as China's Silicon Valley, is home to about 1 million highlyeducated workers as well as 10,000 foreign personnel and 40% of China's ventures.

Third, China has been setting up successful models of government-enterpriseuniversity cooperation. The most representative showcase is "Himin Solar Energy," a leading company in China's solar energy industry. Dezhou City (government), Himin Solar Energy (enterprise), Himin Solar Energy Process Technology Institute (university) and Chinese Academy of Sciences Huangming Research Center (funded research institution) banded together to create Solar Energy Valley and maintain a steady supply of solar energy experts.

3. Implications

In order for Korea to be competitive in human resources, government, industries and universities should jointly establish policies that will deliver the type of personnel needed. This should be done with a long-term, comprehensive perspective and implemented consistently and predictably. Second, Korea should not engage in a quantitative race with China. The huge population difference between the two neighbors gives China an insurmountable advantage in potential R&D workers, engineers, etc. Instead, Korea's focus should be quality-driven programs and university investments aligned with the needs of Korean industries that have competitive advantages. Third, both government and each university should identify the type of workers that the business community will need. Fourth, policies should be tailored to fill technology jobs. High caliber talent that can produce original technologies must be nurtured at home, whereas overseas talent should be actively attracted for urgent practical and applied technologies.

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^{1. &}quot;Project 211" is a mid- to long-term project that aims to elevate over 100 universities to world-class levels in terms of academic disciplines and science research areas.

^{2. &}quot;Project 985" is a mid- to long-term project to develop global first-rate universities and internationally recognized research-oriented universities in China. As of 2011, there were 39 top universities listed under this project.

^{3.} Since the second half of the 1990s, China has been implementing a variety of overseas talent recruitment policies. One of them is "One Thousand Talents Program" and as of 2011, a total of 1,143 highly talented individuals have been brought into China under the program.

China's Technological Prowess and Korea's Response

_____ Creative Solutions 06

1. Background and Objectives

China is evolving from the world's factory to a crucible of innovation. In 2006, the nation made indigenous innovation a top priority as it unveiled its Medium-and Long-term National Plan for Science and Technology Development. This signaled the demise of the nation's follow-and-copy approach that has turbo-charged economic growth in recent decades. Since then, China has been shifting to capital-and technology-intensive industries and focusing on developing innovative technology. The payoff is evident. Both in terms of quality and quantity of innovation capabilities, China is now rapidly approaching the world-class level. China is the world's second largest R&D investor (measured by purchasing power parity) only after the US, and possesses the largest national R&D workforce in the world or 20% of the world's total R&D brain power. Qualitatively, China's innovation capability has made equally impressive strides. In terms of the number of articles covered in the top 10 international journals, China ranked fourth in the 2007-2009, up from the 19th place in 1987-1989.

The segments in which China is catching up to Korea are not confined to low-price and low-function products. As China has strengthened its innovation capabilities and produces low-price and high-function products, Korea's competitiveness is under siege. In particular, Chinese companies, backed by strong government support, are increasingly entering industries that are envisioned to be Korea's new growth engines. This means these industries may turn into a red ocean, or heated

competition, even before Korean companies enter the markets.

This study assessed the competitiveness of China's industrial sectors and compared the status of technological capabilities of both countries in major industries, including electronics, automobiles, pharmaceuticals and solar power. Then, the study suggested how Korea should respond to looming faceoff with China.

2. Key Findings

This study conducted an analysis of Total Factor Productivity (TFP) to gauge how fast Chinese companies are improving their technological and innovation capabilities. The result showed that China's productivity is rapidly nearing Korea's level. Chinese companies have an annual average TFP growth rate of 4.46%, which is more than 30% higher than their Korean counterparts' 3.36%.

The top Chinese companies' technological progress (3.87%) is much higher than that of leading Korean companies. The outperformance is seen in both high-tech and medium-tech industries (e.g., electronics and automobile industries), which means China is quickly closing the technological gap with Korea's mainstay industries.

Decomposition of Total Factor Productivity Growth of Korea and China					
	Korea (n=4,628)	Unit (%)		China (n=6,018)	Unit (%)
Total Factor Productivity Growth		3.36	Tot	al Factor Productivity Growth	4.46
	Technological Progress Rate	2.12		Technological Progress Rate	3.87
Efficiency Change Rate	-0.26		Efficiency Change Rate	-0.80	
Effect of Economies of Scale		0.15		Effect of Economies of Scale	0.31
	Other Effects	1.46		Other Effects	1.09

In newly emerging industries such as pharmaceuticals, solar power and electric automobiles, China's technological capability has already overtaken Korea's. China has also dwarfed Korea in terms of production size of these industries, growing fast in innovation capabilities including R&D investment and patents.

A close look at the electronics industry reveals that the technological gap between Korea and China is narrowing especially in major electronics products such as televisions. As for the telecommunication equipment and smart home solutions, China is grabbing the lead in next-generation product development. In the automobile industry, China has acquired product development capability by establishing its own brands and through M&A with advanced companies. In the pharmaceutical industry, China has been successful in developing innovative new medicines thanks to its strong basic research capabilities and global human resources. As for the solar power industry, Chinese companies are increasingly moving to the front in the overall value chain in wafers, cells and modules. In the electric car industry, Chinese automakers like BYD, which rolled out the world's first electric car, are leading the industry and setting international standards for electric vehicles, on the back of strong government support.

3. Implications

This report warned that Korean companies need to be wary of China's technological advancement and seek ways to tap its innovation capabilities, as China, once considered a mere manufacturing powerhouse, is rapidly evolving into an innovation powerhouse. The report's suggestions for the Korean government and businesses were as follows.

First, Korea needs to reestablish a national R&D system in order to respond to threats from China. The danger will only become larger. China is rapidly obtaining technological prowess with its advantage in scale; the government is pushing for innovation; and large-scale investments are being made in R&D and manpower. Therefore, Korea's national innovation capability should be funneled into maximizing its technological competitiveness. When planning large-scale R&D for new growth engines, Korea needs to include the "China factor" in the equation. Rather than pursuing quantitative competition, Korea should pursue qualitative competition by giving a boost to "star companies" or "star researchers." Meanwhile,

by fostering links among R&D participants such as university, research institutes and companies, innovation capability should improve significantly.

Second, Korean businesses need to outpace their Chinese counterparts in both core industries and new growth engines. Korea's world-class process technology and operation efficiency in mainstay industries should be fully leveraged and bold investment should be made in new growth engines to overcome its competitive disadvantage in cost. The kind of strategies that take product innovation one step ahead of China in core industries and two steps ahead in newly emerging industries should be put in place to lead the global market.

Third, ways to tap China's intellect and technologies should be explored. Korean businesses should positively review establishment of R&D centers in China and preemptively secure top personnel related to key technologies.

Global Patent War and Changes to Competition

Creative Solutions 07

1. Background and Objectives

A fierce patent battle is under way among global companies. Increasing application of convergence technologies to products such as smartphones and hybrid cars is multiplying the need for more patent protection in product development. Moreover, there is a widespread consensus that companies that hold patents on core technologies can gain leadership. Google's acquisition of Motorola Mobility and increasing patent lawsuits illustrate the escalating M&A race for patents.

There are three trends in how the patent battle is being waged and the way it is reshaping industrial competition. First, patents are now regarded as business assets. Many companies are now trying to generate income by licensing patents, investing in ventures or reselling patents. Second, patent business models are becoming segmented and specialized. There are brokerage services such as those provided by ICAP Oceantomo, which help connect patent technology providers. Patent-backed financial products increased liquidity aspects of patents, an intangible asset. Lastly, the non-practicing entity (NPE) model is also spreading. NPE business models generate income by licensing patents or enforcing patent protection by filing infringement lawsuits against manufacturers.

Patents help configure a standard platform or serve as an entry barrier to latecomers, allowing patent-holding companies to enjoy tighter control of the market. The landscape of industrial competition is also revolving around patent-holding businesses.

This study examined how the global patent battle is affecting competition among major industries and discussed the implications for Korean businesses and government.

2. Key Findings

Competition for patents is especially intense in the IT sector, where the speed of technology innovation is fast and the potential market is huge. To wit, this study analyzed three IT industries — smartphones, semiconductors and LED.

1. Smartphone Industry

One of the rapidly growing industries with technology convergence, companies are scrambling to grab control of the market by securing technologies and market leadership. Particularly, the patent fighting has gone beyond individual companies and spread to business ecosystems, where operating systems are shared.

In the smartphone industry, a wide variety of patents are needed, and major operating system providers are weak in telecommunication technologies. Therefore, industry players actively seek mergers and acquisitions across various industries. Cash-loaded companies like Apple, Google and Microsoft will likely aggressively pursue a whole company or just its patent portfolios. Among smartphone manufacturers, Samsung Electronics with relatively strong patent portfolios will likely adopt a strategy to reduce dependence on a particular operating system by utilizing multiple operating systems or by inventing its own system.

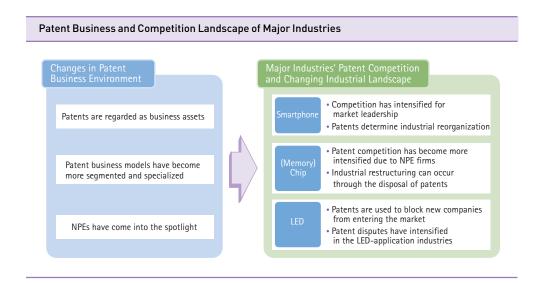
2. (Memory) Semiconductor Industry

In the memory semiconductor industry, where growth is slowing and profit polarized among companies, mid-tier companies sold unused patents to NPEs or started to strengthen a direct licensing business to compensate for their deficits. Qimonda, bankrupt in 2009, transformed itself into a patent management company, Qimonda Licensing LLC. US company Micron Technology sold patents to Round

Rock Research while Renesas, a Japanese electronics company, established a strategic patent licensing alliance with Acacia Research Corporation to use their patent holdings as business methods. Restructuring of the semiconductor industry is likely to accelerate as some mid-tier companies sell patents or close down, solidifying the position of market leaders. And patent management firms that purchased patents from the mid-tier companies are taking on companies that have a weak patent portfolio, raising concerns over magnified patent risks.

3. LED Industry

In the LED industry, a few major LED companies have formed a patent block or a market entry barrier with Nichia's patented source technologies at the center. Consequently, latecomers are either shut out of market or having a hard time in entering because they usually have to divert resources to patent litigation. Patent lawsuits have also intensified with growing markets for LED-application products. In the LED lighting market, Philips and Osram are launching joint efforts to gain an upper hand in the market. Major companies also keep latecomers in check by filing patent lawsuits.



3. Implications

As the shift to knowledge-based economy accelerates, intangibles assets, including patents, are becoming a key factor in competitiveness. This study was distinguished from others in that it described how patents can reshape competition in the industrial sector. The shift in the business environment has important implications for Korean companies and government policies.

First, Korean companies should establish a system which uses patents as business assets. A paradigm shift is needed in which R&D is geared to creating a stronger patent portfolio. Rather than be obsessed with increasing the number of patents, companies need to bolster patent management from a quality perspective such as improving the commercialization process, increasing royalty income and selling unused patents. In addition, patent portfolios should include not only current main businesses but also future growth engines as well as their complementary industries.

Companies are also advised to actively participate in global patent ecosystem. They need to build up strong patent capability which will enable them to survive in the global patent ecosystem, while seeking ways to cooperate with foreign universities and research institutes to find and secure core technologies quickly.

Lastly, the government should set up consistent patent strategies to reinforce industrial competitiveness. In particular, it should devise programs to enhance small- and medium-sized enterprises, which usually are at disadvantage in terms of patents.

Battle for Operating System Leadership

Creative Solutions 08

1. Background and Objectives

The proliferation of smartphones and tablets has trigged tectonic shifts in the operating system (OS) market. The arrival of Apple's iPhone in 2007 heralded the demise of Symbian and BlackBerry and the competition between Apple's iOS and Google's Android for smartphone OS supremacy. The fight then spread to tablets and televisions and even the auto industry. Lawsuits between Apple and Android providers, strategic cooperation between Microsoft and Nokia, and Google's acquisition of Motorola exemplify the intensity and scale of the battle.

This is just the opening rounds of the fight. It will become more heated because the number of devices that need an OS is exploding. The number of devices on which various applications are available and connected to the Internet is expected to increase from 12.5 billion units in 2010 to 50 billion in 2020. Any company that has the OS embedded in multiple devices will be able to enjoy massive benefits by leading relevant industries to the direction it wants to be headed. Cloud computing enables users to access cloud-based applications or contents with multiple devices. The OS needed in the cloud environment is different from that installed in a personal computer, creating an incentive to develop a cloud service OS, which will be a huge cash cow.

This study analyzed strategies of major companies such as Apple, Microsoft and Google. Then the study looked at how the competition over OS leadership will unfold and suggested strategies to respond to that.

2. Key Findings

The OS business models of Apple, Microsoft and Google are closed, licensed and open, respectively. Each model has positives and negatives in terms of agility in market and OS platform expansion.

OS Business	OS Business Models			
Category	Closed OS (OS-Device Integration)	OS License	Open OS	
Company	Apple	Microsoft	Google	
Upside	Quick market response thanks to fast OS-device optimization	Exclusive profits when dominating market	Easy OS platform expansion	
Downside	Limited OS platform expansion	Prompt response to market is difficult due to packaged OS	It is difficult to maintain compatibility when changing provider	

The three giants are executing strategies to address their OS weaknesses, in order to capture opportunities provided by cloud service. In an attempt to fend off Android, Apple has been bolstering its line-up for iOS-embedded devices to include low- and mid-priced smartphones and televisions. For consistent user experience, the OS embedded in various devices are identical and all devices can access an Apple App store. Apple is also working on making iCloud — Apple's own cloud service — the digital hub for various Apple devices.

Microsoft failed to quickly respond to changing mobile environment. But the company is now launching a new OS to target mobile market and fostering cooperation with device makers. To venture into tablet market, the tech giant developed Windows 8 to fit with mobile environment and has expanded cooperation with mobile phone makers, including Nokia, Samsung Electronics and HTC. Microsoft has also optimized its own applications like its Office suite for cloud.

Following the huge success of mobile OS Android, Google is challenging Microsoft with its own PC OS — Chrome. With the ambitious OS, Google looks to upgrade quality by integrating smartphone and tablet OSes, while trying to expand its market

presence by applying Android OS to home equipment like the television. Recently, the search giant is geared to establish cloud service platform by unveiling Google Music Beta — cloud-based music service — and planning to provide movie rental service.

OS Business and Strateges of Top OS Providers Mobile PC TV Mobile PC TV Mobile PC _____ App Store Cloud Contents App Store Cloud Contents App Store Cloud Contents Mainly OS & application licensing Bundling sale of OS and device OS is a tool to boost ad profits OS: closed operation OS: closed operation OS: open operation Device: own brand Device: outside specialized brands Device: outside specialized brands Application: open operation Application: closed operation Application: open operation iTunes, App Store, etc. Killer applications like Office Exclusive services like Google and Messenger Rich service platform search, YouTube and Google Maps Heavy dependence on Low market share in mobile OS OS: stagnant market share mobile OS market Conflict of interest between Fortify leadership in Quality issue including lack existing PC OS and cloud N screen service of OS consistency businesses Increase Google OS-embedded Realigning mobile OS business Expand device lineup Nurture ecosystem Put cloud at the center with cloud service Set up cloud platform & of business restructuring (licensing, service business) improve OS quality

3. Implications

As the number and type of computing devices continues to increase and the speed of technology innovation accelerates, it has become difficult for a specific company's OS to dominate the market and technology. The dynamics of the industry, where device makers do not want to be subject to a single OS, contribute to the multi OS system as well. For now, it is Google's Android that seems to be on the leading edge,

but the OS is not likely to enjoy the same status that Microsoft had in the PC OS market in the past. Instead, it is likely to be an oligopoly situation where Apple and Microsoft take up large shares.

The implications of this study were as follows. First, the expected multi OS competition needs to be strategically leveraged. Cooperation with OS providers should be encouraged, while the risks and burdens accompanying multi OS environment should be minimized. R&D and development resources should be allocated effectively, and development be quickened to respond to frequent OS upgrades. Equally important is securing cost competitiveness.

Second, it is crucial to create a business model based on a company's strength because devices and contents can play an equally substantial role in sharpening a company's competitive edge. Device makers need to secure contents and applications that can be installed into their product, and contents/service providers should provide the contents and services that are optimized for OS and devices.

Third, convergence software manpower should be nurtured. They should have industrial expertise and software development capabilities. The expected spread of OS competition to home electronics and appliances, automobiles and industrial devices, raises demand for software developers dedicated to certain industries. Therefore, cooperation with software developers should be enhanced and more efforts should be put into securing manpower through M&A or strategic partnerships with universities.

The Nature of Corporate Philanthropy: SPIRIT

Creative Solutions 09

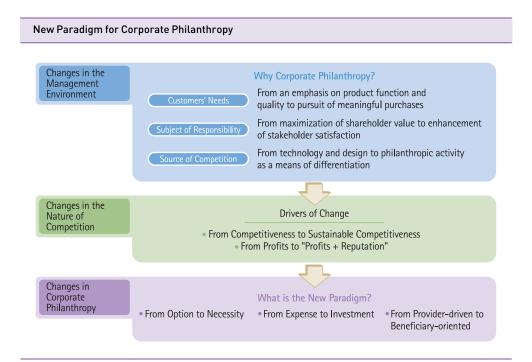
1. Background and Objectives

Companies aiming at growth in the 21st century are now pursuing "sustainable competitiveness," which takes social performance into consideration. As such, corporate philanthropy is no longer a peripheral activity, but an integral part of management activities. This paper introduced a new paradigm in corporate philanthropy, as well as key success factors in sustainable competitiveness.

2. Key Findings

Changes in the landscape of corporate philanthropy are forming a new paradigm. Three aspects are at play here.

First, corporate philanthropy is not an option but a necessity. Corporate philanthropy is an integral part of management activities that must be performed continuously. Second, corporate philanthropy is not an expense but an investment that simultaneously generates social and corporate values. Third, corporate philanthropic activity is beneficiary-oriented, not provider-driven. In other words, corporate philanthropic activities must be customized to fit the needs of beneficiaries by sharing values with them, and must not be performed solely for the convenience of providers.

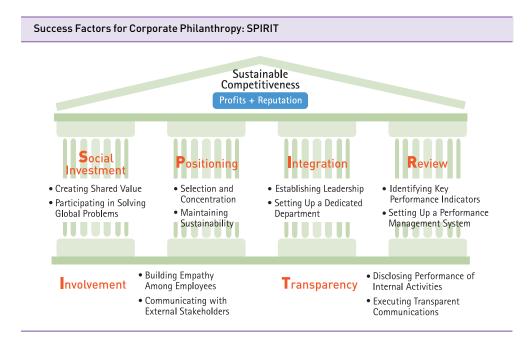


Six Success Factors in Corporate Philanthropy

There are six factors for successful corporate philanthropic activities, which are represented as an acronym "SPIRIT" (Social Investment, Positioning, Integration, Review, Involvement and Transparency). Since consumers have been evolving into market participants with the "human spirit" that cherishes social value, corporate philanthropy likewise needs "SPIRIT" to gain consumers' trust.

① Social Investment: The objectives of corporate philanthropy should be set from a long-term perspective for the sustainable development of society. Corporate philanthropic activities must not be regarded as short-term expenses but as long-term investments. Corporate growth assumes inseparable relationships with local communities and global society. Accordingly, corporate philanthropy that responds to society's expectations and needs enhances both social and corporate values.

Interviewed corporate philanthropy experts at 40 companies in 16 countries including the US, Japan and European countries, to derive factors for successful corporate philanthropy activities.



- ② Positioning: Corporate philanthropic activity can maximize effects when it involves business-related areas and concentrates companies' resources on those areas. Hence, corporations need to consider both shareholders' interests and growth potential when setting objectives and selecting areas for corporate philanthropic activities.
- 3 Integration: The company needs a responsible corporate philanthropy organization with distinctive characteristics. Top executives must lead philanthropic activities. Most global companies have elevated the status of their philanthropic activities by establishing a dedicated department to organize company-wide efforts.
- (4) Review: It is necessary to identify key performance indicators (KPI) and establish performance management systems. KPIs must be developed and managed systematically to evaluate the effectiveness of corporate philanthropy programs.
- ⑤ Involvement: Corporations need to create a virtuous circle of communication by encouraging participation from internal and external stakeholders. Internal communications need to promote systematization of corporate philanthropic

activities and employees' participation. In particular, it is important to increase enthusiasm for philanthropy by regularly communicating the company's direction of effort with executives and employees, and to facilitate volunteerism by providing various voluntary service programs.

(6) Transparency: The importance of publicity about non-financial corporate activities, such as CSR and corporate citizenship is increasing. Credibility for such corporate philanthropic activities must be gained through transparent disclosure of information, by using various means and channels of communication, including the Internet, forums and social networking services.

3. Implications

Korean corporations must steer their corporate philanthropic activities in a way that reflects changing times. Society demands that they be more than donors; they are being asked to become social innovators. Although corporate philosophy and societal values must become consistently maintained, corporate philanthropic activities need to be timely and adequate to reflect current sentiments.

A significant loss of trust can occur when the sincerity of philanthropic activities is questioned despite all the efforts made. Hence, the company must withdraw any publicity-seeking philanthropic activities. Instead, they must carry out systematic corporate philanthropic activities that are aligned with their business directions and capabilities.

Corporate philanthropy denotes the sum of activities aimed at enhancing social values by utilizing corporate resources in areas of vital importance to business and society. Accordingly, each company must consider corporate philanthropy seriously at the corporate level, rather than at the level of individual executives and employees, or at the team level.

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Social Media Heralds New Policy Environment

Creative Solutions 10

1. Background and Objectives

The rise of social media as a new communication paradigm is dramatically altering the relationship between government representatives and society. Coming to the forefront is the so-called "social government" in which citizens use social media to exchange information and opinions with each other and with politicians and elected government officials. The interconnection already has proven effective in elections, with candidates and their supporters using social networking services to inform and mobilize voters. As it evolves, the new age communication is expected to improve government accountability and efficiency. However, there is also concern that mass populist organization through social media will ignite economic and social demands that will bog down or distract authorities.

This report attempted to analyze the impact of social media on policymaking and to suggest the government's use of social media and other ways to respond to public demands.

2. Key Findings

There are three characteristics of social media that can shape the policymaking environment. First, micro-blogs like Twitter or me2DAY and mobile devices have

incited a "big bang" of opinion and information postings that can find an audience regardless of time or place. Nearly everyone becomes a potential reporter. Indeed, social media users are increasingly ahead of the established news media in noteworthy events. Second, the connectivity of social media is so strong that a Twitter message between two people on average has four relays. The contagion effect is further incited by online media services, which have started to incorporate social media content. Third, real-life relationships through social media reduce online anonymity. Online reputation turns out to be equally as important as offline reputation. Being conscious of friends and acquaintances, an increasing number of social media users tend to exercise self-censorship to avoid misleading or distorted information, especially when they express their thoughts about sensitive issues.

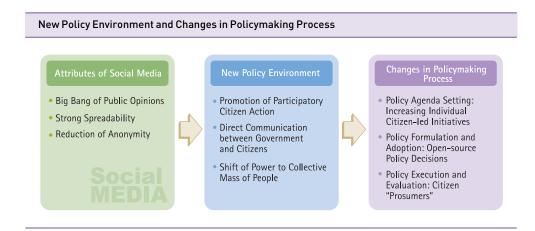
The way in which social media stimulates voter participation reconfigures the political environment. In Korea, where peer pressure is palpable and highly influential, young people sitting on the sidelines are prompted to join the political discourse and to vote because friends and role models do. In the 2010 local government elections and the 2011 by-elections to fill vacancies, tweeting of a few photos taken by some celebrities in front of a polling place and re-tweeting of them among young people had reportedly played big part in significantly increasing young voter turnout rates.

Social media also has altered the way the government communicates. Spokespersons for officials and government agencies are unable to keep pace with the speed and impact of matters that go viral. Some officials around the world have decided it is better to communicate with the public directly. In 2009, Gordon Brown, then Prime Minister of the UK, required civil servants to use Twitter to check real-time feedback on government activities. He even gave guidelines for the official use of Twitter, suggesting two-three tweets per working day written in informal conversational English.

Lastly, the government and a handful of opinion makers can no longer completely

control the talking points and formation of viewpoints. Now, an ordinary person can ignite widespread public discussion and shape opinions. This ability of anyone to gather a broad audience through social media makes it much more difficult for officials to steer the public dialogue surrounding a policy.

These changes in the political environment are expected to lead to more and more individual-led policy setting. There will also be more open-source decision making by citizens who fully participate in forming and promoting policies. In this process, citizens are no longer silent consumers of public services. Some governments welcome the "prosumers" (proactive consumers). For example, officials in Vancouver, Canada hold online discussions via Facebook in order to develop its transportation policies. And in an attempt to sweep out corruption, the Philippines Department of Finance receives tip-offs about corrupt public servants through Facebook and Twitter.



3. Implications

Mass opinion mobilized via social media puts a new type of public pressure on the government. The easy rise of grass-roots policy discussion and the quick spread of conflict-provoking comments are potential threats to policy objectives. What should

be done to filter out populism in the policymaking process and to manage conflicts effectively?

First, it is necessary to strengthen a deliberation process in which decision-making takes place through mutual consultation between government and stakeholders. Deliberation, which was shaped in ancient Athens, involves rational discussion about strengths and weaknesses of policy alternatives before reaching a decision. Realizing deliberation thus requires a shift from the "closed method" of decision \rightarrow announcement \rightarrow defense to an "open method" of deliberation \rightarrow decision \rightarrow announcement. Once deliberation becomes a basic tenant of public decision making, it is possible to mitigate dangers of mob rule.

Korea is not a particularly fertile ground for rational deliberation. The education system is based on rote learning so creative and critical thinking is underdeveloped. Furthermore, development of oral and writing skills is given little attention. Henceforth, social literacy education is urgently needed to nurture respect for dissenting opinions and to enhance the ability of creative content production as well as critical interpretation ability.

Finally, the government should not remain passive in responding to public opinions. Instead, it must openly participate in public opinion formation by utilizing social media and respond actively and preemptively to misinformation on specific policies or malicious criticism not based on facts. It is also important to reinforce social media-related planning and public relations functions in the government's departments and to disseminate major policy information effectively by hiring private-sector PR experts. In addition, official support for development of government department guidelines should be provided to have individual public servants take on the role of an online spokesperson when needed.



Photo Gallery











































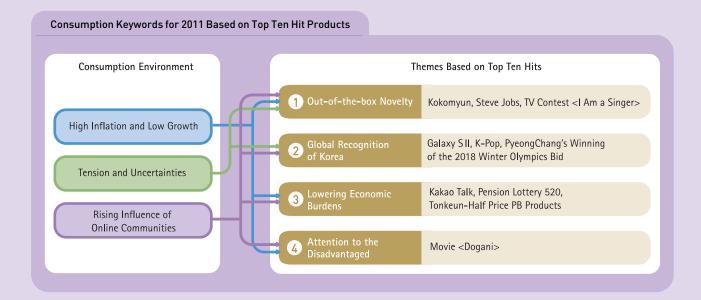






• Top Ten Hit Products of 2011 •

Top Ten Hit Products of 2011 Samsung Economic Research Institute selects a list of the top ten hit products and services every year that have a major influence on Korea's economy, society and culture. This highlights the impact and importance that notable products have had on Korean society and can forecast Korea's consumption trends in the future.



Pursuit of Interactive Pleasure Rediscovery of Value Widespread Use of Mobile Devices Out-of-the-box Novelty Proxy Satisfaction and a Satisfaction through Celebrities • Enthusiasm for Underdogs' Global Recognition of Korea Sense of Achievement Passion and Perseverance • Enthusiasm for Innovations Lowering Economic Burdens Reasonable and Meaningful Pursuit of Function and Aesthetics Pursuing Relief and Safety Attention to the Disadvantaged Spending Proof of Safety **Hit Products** 1. Makgeolli 1. Haptic Mobile Phones 1. Smartphone 1. Kokomyun 2. Swine Flu Products 2. Gold Medalists of the 2. Superstar K2 2. Steve Jobs Beijing 2008 Olympic Games 3. Yu-Na Kim 3. Women's National Football Team 3. Kakao Talk 3. Transport Payment Services 4. LED TVs 4. Social Media 4. TV contest <I Am a Singer> 4. Online Discussion Forums 5. Smartphones 5. Tablet PC 5. Galaxy S II 5. TV Drama "Beethoven Virus" 6. TV Drama "Queen Seondeok" 6. Kia Motors' K-series 6. K-Pop 6. Real Variety Shows 7. Girl Groups 7. Avatar 7. Pension Lottery 520 7. Nintendo Wii 8. Walking- and Experience-8. Movie < Dogani> 8. Blueberries 8. Netbooks Based Tourism 9. Thermal Clothing 9. Pyeongchang's Winning of the 9. Donations 9. Bogeumjari Apartments 10. TV Drama, Bread, Love 2018 Winter Olympics Bid 10. KT QOOK 10. Consumer Report Programs 10. Tonkeun-Half Price PB Products and Dreams 2009 • 2010 2011

Consumption Keywords

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About SERI

Mission & Vision
Research Areas
Consulting Areas
History
Organization

Mission & Vision

Mission

To be Korea's leading provider of economic insights by building and sustaining world-class resources in knowledge creation

Create strategies and information that enhance business competitiveness

- Publish timely analysis on business trends and changing management conditions
- Devise strategies for sustaining competitive advantage

Become Korea's leading business opinion maker

- Set nationwide agendas for a growing economy
- Provide analysis on policies for an increasingly complex market



A Knowledge Hub for Creative Solutions

Knowledge	Provide systematic knowledge to anticipate and understand changes in the future environment
Hub	Become a center of global information exchange networks that create new knowledge
Creative	Move beyond conventional thinking through a spirit of challenge that leverages original research topics and creative research methodology
Solutions	 Present policies and strategies for development of businesses and the economy in preparation for an increasingly interconnected economy, both in Northeast Asia and the world
	Define problems: • Preemptively set agendas to develop the community and enhance business competitiveness by thorough analysis and understanding of business problems
	Define solutions: • Move beyond standardized approaches to provide workable, long-term solutions that are applicable in the field

Groundbreaking Research Open Research Field-Based Research Samsung Economic Research Institute (SERI) generates reports on business, economy and public policy, that contribute to the community through knowledge creation

Economic Research

- SERI produces reports on macroeconomic trends and major issues, providing indispensable information on the public sector and the corporate world.
- SERI investigates global macroeconomic issues of critical importance, including international finance, international business, and human and material resources, and suggests strategic responses for the nation.
- SERI examines ways for Korea's financial services industry to adapt to a rapidly changing environment.

Management Research

- To help Korean companies become globally competitive, SERI provides strategic intelligence on the present and future business environment, deriving readily applicable management lessons from detailed analysis of real-world business cases.
- SERI suggests practical solutions to labor management and personnel issues faced by Korean husinesses
- SERI proposes appropriate policy and strategic responses for government policy makers and corporate leaders in an environment of constant technological change.

Public Policy Research

- SERI supports government decision makers by providing analytical reports and examining
 public policy issues at national and local levels. To realize a business-friendly environment,
 SERI recommends policies conducive to creating a full-fledged market economy.
- SERI contributes to the community by doing research on local infrastructure investment, regional development and specialized local industry promotion. In addition, SERI performs research on other important issues, including education, population imbalances and welfare reform.

• Consulting Areas • • History

Creative Solutions

SERI provides management consulting services to clients in diverse areas, including financial institutions, government agencies and local governments.

Management Strategy Consulting

- Global management strategies
- Future growth studies
- M&A strategies
- Vision-building strategies
- New business development strategies
- Complexity system
- Brand strategy
- Market-entry · competition strategies
- Restructuring strategies
- Marketing strategies

Human Resources & Organization Consulting

- Strategic personnel systems
- Organization design
- Corporate culture design
- e-HRM in e-business

- Strategies to hire and retain core talent
- Leadership development
- Human resources development
- Reward system design
- Assess corporate culture

Technology & Industry Consulting

- Industry forecast (trends in supply & demand, prices)
- Technology policy and strategy making
- Market research on domestic & international markets

- Analysis of technology trends
- Global R&D strategies
- Industry policy and strategy making
- New business feasibility studies

Policy & Regional Development Consulting

- Financial policy making
- Regional development
- Low birth rate & aging population policies
- Small business policies

- Tourism & leisure industries
- Climate change & environment policy
- Education, finance and welfare policies
- Government reform

SERI HISTORY





1986~1994

Foundation

July 1986	Established as an affiliated center of Samsung Life
	Lim Dong-Sung inaugurated as first president
July 1987	 Hosted first international symposium to commemorate the first anniversary
July 1990	Started management consulting business
Apr. 1991	1 Incorporated as Samsung Economic Research Institute
Dec. 199	1 Launched quarterly report "Consumer Sentiment Surve
Jan. 1993	3 Advanced into book publication and sales by publishing "Catch One Second"
Sept. 199	3 Established an affiliate, Samsung Earth Environment Center
Oct. 1993	Started "SERI Club," a membership-based information service

Moved to Samsung Group headquarters





1995~1997

Recognition Building

May 1995 Choi Woo-Suk inaugurated as second president

Aug. 1995	Started Regional Economic Forum
	Launched weekly issue report, "CEO Information"
Feb. 1996	Held thesis award for college and graduate students to commemorate the 10 th anniversary
July 1996	Published 10 th anniversary company history
Sept. 1996	Moved to Kukje Center, Yongsan, Seoul
Oct. 1996	Opened Internet homepage (www.seri-samsung.org)
July 1997	Opened research & information database to the public
Dec. 1997	Spun-off Samsung Earth Environment Center



98~2003	Korea's SERI
Dec. 1998	Established IMF database (now known as "Academics'

Perspective on Korean Economy") Held a symposium entitled "Knowledge Management and Korea's Future" Established knowledge database Launched Cyber SERI Club, an online community Opened knowledge portal SERI.org Nov. 1999 Published first World Report Feb. 2000 Held "Digital Shock and Korea's Economy" symposium Apr. 2000 Opened English website Koreaeconomy.org (Integrated into SERIWorld.org in Nov. 2004) Sept. 2000 Held "Plan for Korea-China-Japan Industrial Nov. 2000 Collaboration" symposium Opened Ebitzone.org, an English-language global research service (Integrated into SERIWorld.org in Nov. 2004) Jan. 2001 May 2001 Selected as No.1 global think tank site by Alexa Published 15th anniversary company history July 2001 Launched SERICEO, a knowledge service for business Oct. 2001 leaders (www.sericeo.org) Opened SERICEO to the public Feb. 2002 Held a symposium entitled "China's Market, a Way to Growth for the Korean Economy" Mar. 2002 Sept. 2002 SERI.org members top 300,000 Hosted "Future of Korea's Venture Agriculture" Nov. 2002 Agreed with Sungkyunkwan University to jointly promote Korea General Social Survey (KGSS) Dec. 2002 SERI.org launched on Single TOPIC, the Samsung Group May 2003

Hosted "Korean Competitiveness, Is it Alright?"

intranet

June 2003





2003~2005

Establishing Regional Stature

	stabiliting regional statute	
Sept. 2003	Jung Ku-Hyun inaugurated as third president	
Nov. 2003	Hosted "Future of Korea's Venture Agriculture" symposium	
June 2004	Hosted "Role of Foreign Ownership in Financial Service Industry of Korea, Japan & China" symposium	
	Held an international symposium on "Korean's Value Orientation: An International Comparison"	
	Held a symposium entitled "Korean Entrepreneurship: Diagnosis and Tasks"	
Aug. 2004	Opened learning site for military officers. "MKiss," with sponsorship by the Military Mutual Aid Association	
	Changed the title of the publication World Report to Global Issues	
Sept. 2004	Hosted "Financial Reform Experience in Korea and China" symposium	
Oct. 2004	Hosted "In Pursuit of \$20,000 Per Capita Income" symposium	
	SERI.org members top 850,000	I
	Opened customized SERICEO knowledge sites (Samsung Life Insurance, Samsung Fire & Marine Insurance, Samsung Card and Hana Bank)	
Nov. 2004	Opened SERIWorld.org, an English website for global audience (www.seriworld.org)	
Dec. 2004	Hosted "Benefits and Challenges of the Korea-Japan FTA" symposium	
Feb. 2005	Started open research project, "Digital II"	
Apr. 2005	Hosted "Challenges of 21st Century US-Korea Relationship" symposium	
May 2005	Held press conference with Foreign Correspondents' Club members (held every quarter thereafter)	
	SERI.org members top 1 million	
June 2005	Opened Digital2.org site	
	Launched SERIJapan.org	
	Held a symposium entitled "Innovating Universities and their Competiveness."	
	Hosted "Making Korea a Good Country to Live: The G10 in Y10 Project" symposium	
	Held a joint symposium with the National Assembly on "Strategies to Enter the Top 10 Advanced Countries."	
July 2005	SERI's Beijing office SERIChina approved by Chinese government	

Aug. 2005 Opened Six Sigma research site, SERI6sigma.org

Nov. 2005

Opened complexity theory website, Complexity



SERI's 20th Anniversary: Reinvent SERI

	SERISZO Allinversary. Remivent SERI
Jan. 2006	Redesigned the SERI Knowledge Management System (KMS)
Feb. 2006	Established Digital Research Center and Complex System Center
	Concluded joint research with the Japan Research Institute
Mar. 2006	Samsung Economic Research Institute Beijing Office opens official website www.SERIChina.org
Apr. 2006	Expanded charity activities by signing a donation agreement with Community Chest Korea
June 2006	Hosted 20th anniversary symposium "Historical Transitions in the Korean Economy and Challenges" (Reflection on the 20-year Korean economy)
July 2006	Published 20th anniversary company history
Sept. 2006	Launched redesigned SERIWorld.org with focus on Korea- China-Japan-Global
Dec. 2006	Hosted first Complexity Conference (held every December thereafter)
	SERICEO sales top 10 billion won (in subscription income)
July 2007	Moved into Samsung Group's new headquarters in Gangnam, Seoul
	Hosted 21st anniversary symposium, "Renaissance of the Korean Economy: Outlook and Strategy for the Next 10 Years"
Oct. 2007	Launched SERICEO China, knowledge service for Samsung China's 1,200 executives (www.sericeo.cn)
Jan. 2008	Launched English-language quarterly journal SERI Quarterly
Mar. 2008	Expanded SERICEO China service to Samsung Group China employees (14,000 people)
Apr. 2008	Hosted International Korea-China forum with Sungkyunkwan University to commemorate the 15 th anniversary of diplomatic ties between Korea and China
May 2008	Held the Korean General Social Survey symposium on Korean's culture, leisure and quality of life
June 2008	Held symposium to commemorate the 22 nd anniversary (New Financial Capitalism: New Financial Paradigm and the Global Economy)
July 2008	Opened SERI Spark (www.serispark.org), a knowledge service for middle to upper managers
Sept. 2008	Held "How to Boost Korea's Renewable Energy Industry" conference
Oct. 2008	SERI.org members surpass 1.5 million
Nov. 2008	Held "Upgrading Korea into a Market Economy of Mutual Prosperity" symposium
Dec. 2008	Held "Global Financial Crisis and Korea's Policy Responses" symposium

Published SERI Research Essay No. 100 issue



Becoming a Global Knowledge Hub Jan. 2009 Chung Ki-Young inaugurated as fourth president of SERI Signed a Memorandum of Understanding regarding the joint operation of the EU Centre with Yonsei University Feb. 2009 Held the "Forecasting the Future": "Mid- to Long-Term Forecasts and Technology Strategy to Overcome the Global Financial Crisis" symposium with KISTEP Mar. 2009 Opened of the Yonsei-SERI EU Centre with Yonsei University Apr. 2009 Launched a new report series titled "SERI Management Held a signing ceremony of a climate change project supported by the British Foreign and Common Wealth May 2009 Launched a video report series titled "Go Korea!" Held a debate on SSGE (Seismic Shift of Global Economy) Held the "2009 Korean Economic Forum" with Joongang June 2009 Hosted "In Search for Exit from Job Shortages" symposium Promoted the Green Office campaign July 2009 Attended a conference by the National Brand Committee regarding the development of the Korea Brand Index Number of SERI-Spark members tops 5,000 Aug. 2009 Published "Selected SERI Reports on Future Industries" Sept. 2009 China's National Development and Reform Commission visited SERI Held a symposium on the "Three Pressing Issues Facing the Korean Economy and Policy Responses in 2010" Won the Ministry of Culture, Sports and Tourism Minister's award for special libraries in the 2009 Korean Public Library Operation Assessment Feb. 2010 Held international symposium to commemorate the 100th birthday of Ho-Am Lee Byung-Chull Held international conference on "Economic Impact of the Cap and Trade System in Korea and its Scale-up Strategies" Mar. 2010 Held a symposium on "International Sports Events and National Brand" Opened a customized SERICEO site, Okdab CEO, for Ministry for Food, Agriculture, Forestry and Fisheries



Industries"



Apr. 2010	Held a press conference to celebrate SERICEO surpassing 10,000 memberships
May 2010	Co-hosted "2010 Korean Economic Forum" with Joongang Daily
June 2010	Held SERI's 24th anniversary symposium titled "Market Opportunities from the Rise of Emerging Market Economies and Responses by Korea, China and Japan"
	Opened a mobile website m.seri.org, the first for Korean private think tank
Sept. 2010	SERI President Chung Ki-Young nominated to be civilian commissioner of G20 Summit Preparation Committee
Oct. 2010	Held a charity photo exhibition of SERICEO members titled "Accompany"
Nov. 2010	SERI placed first for third consecutive year in Hankyung Newspaper's ranking of economic think tanks
Dec. 2010	Held a symposium on "Post-crisis Course of the Korean Economy: Challenges and Tasks in the Next Decade"
Jan 2011	Signed a Memorandum of Understanding for joint operation of SERICEO and the Chungcheongnamdo Office of Education for enhancing teachers' competence
Feb. 2011	Launched the Corporate Citizenship Research Department
Apr. 2011	Launched the audio report service at SERI.org
June 2011	Held the 25th anniversary symposium "2020 Outlook for China's Markets, Technology and Industry and Korea's Responses"
July 2011	Signed an agreement with the Korea Federation of Small and Medium Business for content exchange to enhance the competitiveness of small- and-medium sized companies
Sept. 2011	Started SERIPro's video content contribution to small businesses in regional areas
Oct. 2011	Promoted a "100 CEOs' education contribution" campaign for the 10th anniversary of SERICEO launch
Nov. 2011	Opened the Samsung Learning Platform for Samsung employees
	Held a symposium entitled "2020 CHINA II: The Present and Future of Chinese Industries and Challenges to Korea's Mainstay

>>> Structure

President & CEO

- 8 Departments
- 1 Team
- 4 Centers 1 Overseas Office
- Number of Researchers: 116

Economic Policy Department

•Climate Change Research Center

Global Studies Department

•Economic Security Team

SERI Beijing Office

>>> Executives

Industry & Strategy Department I

Complex Systems Center

Industry & Strategy Department II

•Center for the Future

Human Resources & Organization Research Department

• Education Reform Center

Corporate Citizenship Research Department

Knowledge Business Department

Planning & Coordination Department



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