

# **K**ERI **E**CONOMIC **B**ULLETIN

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# Economic Trends and Outlook

## Executive Summary

The internal and external environments for 2007 appear improved compared to December 2006. The brighter outlook is due in part to the agreement reached at the six-party talks in February this year, bringing hope that North Korea's nuclear uncertainty could be mitigated, and to the positive effects expected from the Korea-US FTA conclusion. The global economy is expected to maintain its brisk pace of growth, albeit at a slower rate than in 2006 due to a slowdown in the U.S. economy.

Considering the improved environments at home and abroad, Korea's economic growth (real GDP base) is revised up 0.3%p from the previous projection of 4.1% to 4.4% for 2007. The upward revision reflects the faster-than-expected recovery in domestic demand, including consumption and investment, in the first quarter of this year.

Economic indicators in the first quarter show that the economy is gradually beginning to recover. Furthermore, alleviation of North Korean nuclear risk and the conclusion of Korea-US FTA negotiations should provide more fuel to hasten the recovery process. For these reasons, quarterly growth rates of the economy are expected to improve with the first quarter as a baseline.

Consumer prices are expected to rise in the low 2% range in the first half of this year due to stabilization of international oil prices, a favorable foreign exchange rate, etc., but are likely to rise faster in the second half due to an increase in public utility charges and domestic demand recovery.

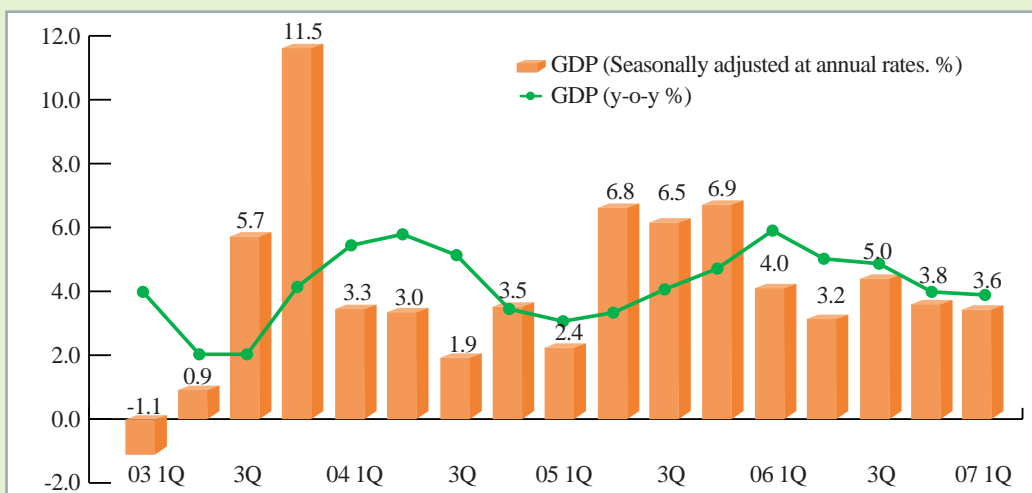
With the service account deficit exceeding the goods account surplus, the current account balance is expected to record a deficit of about US\$4 billion in 2007 for the first time since the foreign exchange crisis in 1997. The deficit in the service account may expand further due to the domestic service sector's poor competitiveness and a growing demand for overseas services.

A slowdown of the U.S. economy, U.S. current account deficit, and a narrowing interest rate gap between the U.S. and the EU are contributing to global weakening of the U.S. dollar. As such, Korean won will continue its appreciation against the U.S. dollar this year. Market interest rates are projected to rise gradually thanks to a recovering domestic demand and inflationary pressures.

## Recent Developments

In the first quarter, whereas manufacturing production slowed, the service sector expanded. The manufacturing production growth continued its downward trend from 11.8% and 5.5% in the third and fourth quarter of 2006 to 2.3% in the first quarter of this year. In contrast, the service sector grew by 5.5% in the first quarter of this year from 4.5% and 4.8% in the third and the fourth quarter of 2006.

### Real GDP



Consumption growth is improving, driven by sales of durable goods. Consumer goods sales, a representative consumption indicator, recorded a sharp upturn to grow at 7.2% in the first quarter of this year from 2.9% and 4.5% in the third and fourth quarter of 2006.

Facility investment and construction investment also expanded in the first quarter. Facility investment growth and construction investment growth increased significantly by 11.2% and 6.5%, respectively, in the first quarter of this year from 5.5% and 6.0% in the fourth quarter of 2006.

The brisk export trend is also continuing. Export growth in the first quarter reached 14.8%, maintaining a double-digit growth rate since the third quarter of 2006. Notably, exports of semiconductors, oil products and ships rose as high as 20.8%, 20.2% and 31.2% respectively, but export growth of automobiles sharply slowed to 3.4%. Meanwhile, exports of wire-

less communication equipment (-0.2%) and computers (-4.3%) continued their declines in the first quarter.

The current account deficit expanded sharply to US\$1.52 billion in the first quarter of this year from US\$300 million in the fourth quarter of 2006.

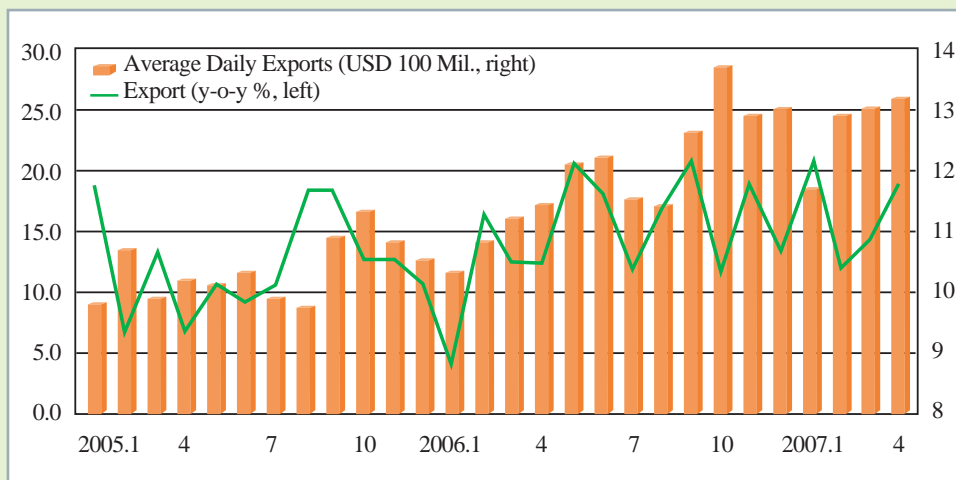
**Industrial Output, Consumption and Investment**

(Unit: y-o-y,%)

	2005	2006				2007	
	Year	1/4	2/4	3/4	4/4	Year	1/4
Manufacturing Production	6.2	12.8	11.5	11.4	5.2	10.1	3.4
Services Activity	3.7	6.2	5.4	4.4	4.8	5.2	5.5
Wholesale & Retail sales	2.9	4.0	4.5	4.4	4.0	4.2	5.2
Consumer Products Sales	4.1	5.3	6.1	2.9	4.5	4.7	7.2
Estimate of Equipment Investment	6.4	6.2	6.6	11.7	5.1	7.3	11.2
Domestic Construction Completed	4.1	4.2	-0.3	4.8	6.0	3.7	6.5

Inflation doesn't seem to pose a threat at least for now. Despite the price rise in the service sector, consumer inflation stood at 2.0% year-on-year. Producer prices also maintained the declining trend since the third quarter of 2006, growing at 1.8% in the first quarter of this year.

**Exports**



Market interest rates, which had declined since February this year due mainly to uncertainty in the subprime mortgage market and stagnation of the global securities market, returned to an upward trend at the end of March. Major factors in this trend were net selling of national treasury bond futures, a strong securities market, etc.

### Balance of Payments

(Unit: USD Bil.)

	2005	2006					2007	
	Year	1/4	2/4	3/4	4/4	Year	1/4	
Current Account	15.0	-1.1	0.7	0.4	6.1	6.1	-1.5	
Goods Account	32.7	5.2	7.4	6.2	10.3	29.2	6.2	
Service Account	-13.7	-5.0	-3.9	-5.4	-4.5	-18.8	-6.2	

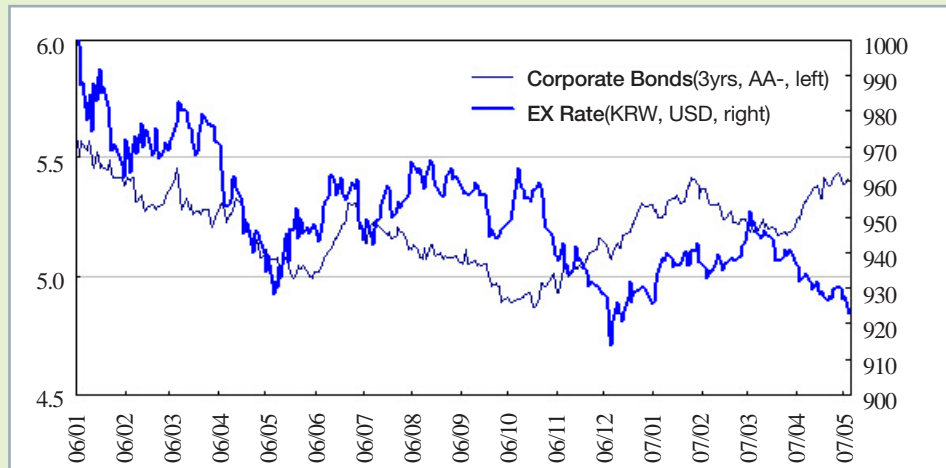
Won-U.S. dollar exchange rate was on a brief upward trend until March. Non-residents switching their positions on the non-deliverable forwards from selling to buying, a successful conclusion of the Korea-U.S. FTA negotiations, and improvement in Korea's economic indicators helped reverse the upward trend.

### Prices

(Unit: y-o-y,%)

	2005	2006					2007	
	Year	1/4	2/4	3/4	4/4	Year	1/4	
Consumer Prices	2.8	2.1	2.2	2.5	2.1	2.2	2.0	
Producer Prices	2.2	1.7	2.4	3.1	2.0	2.3	1.8	

Interest Rates and Exchange Rates



## Outlook for 2007

### *External Environment*

Due to a economic slowdown in the U.S., triggered in part by sluggish housing and automobile markets, the global economy is showing signs of slowing down. However, economic recoveries in the E.U. and Japan and robust growth of the Chinese economy will replace the U.S. as an engine of the global economic growth. On net, the world economy is expected to grow at a robust rate in 2007, albeit a little slower than 2006.

Geopolitical risks in the Middle East and Nigeria are contributing to a supply-and-demand imbalance in the oil market, fueling fears of international oil price hikes. Notwithstanding these fears, the projection that this year's oil prices would be lower than in 2006 at around US\$60/barrel is still prevailing. The projection of a lower oil price is based on the fact that OPEC's decision to reduce the oil supply is likely to be offset by a reduction in oil demand and a rise in oil production by non-OPEC countries.

The U.S. dollar is expected to weaken in 2007 due to the U.S. current account deficit, a narrowing interest rate gap between the U.S. and the EU as well as Japan, and major countries' efforts to diversify their foreign exchange holdings.

### *Internal Environment*

Compared to December last year, the internal environment has somewhat improved. The downside is that the upcoming Presidential election in December, increases in various tax burdens related to real estate, sharp growth in household debt, etc. may serve to hamper the economic recovery. On the other hand, a successful conclusion of the Korea-U.S. FTA negotiations, mitigation of the North Korean nuclear risk, stabilizing real estate prices, etc. are expected to serve as positive factors for the Korean economy. A successful conclusion of the Korea-U.S. FTA negotiations, in particular, may increase the growth rate of the Korean economy by about 0.6% through better accessibility to the huge U.S. market and enhancement of national brand and external confidence. As for the North Korean nuclear issue, although there are still numerous difficulties yet to be overcome, it is appraised that the risk will be reduced drastically in the wake of the agreement reached at the six-party talks on February 13 this year.

### *Prospects for 2007*

In 2007, Korean economy is projected to expand gradually with the first quarter as the bottom. The main reason behind such a projection is that leading economic indicators suggest

that the economy may have bottomed out in the first quarter and is headed for recovery. Supporting this assessment is first quarter growth of 0.9%, which is nearly identical to that of the fourth quarter of 2006. As last year's economic growth recorded a cycle of high in the first half and low in the second, the likelihood is high that this year may see a trend of low growth in the first half and high growth in the second half. Furthermore, improvement of economic sentiments following alleviation of North Korean nuclear risks, conclusion of the Korea-U.S. FTA negotiations, etc. is also expected to support the recovery trend.

Yet, the rate of growth is not likely to be robust. This is because Korea's exports to China are expected to stagnate as China's localization of parts, materials and capital goods expands amid expectations of a slowdown of the U.S. economy. Moreover, the recovery in private consumption may be restricted due to increases in the tax burden of homeowners, higher household debts, the stagnating labor market, etc. In the case of investment, it may improve more than in 2006, but sharp growth is unlikely because the corporate investment environment is still not sufficiently robust and there may also be fears of policy confusion related to the presidential election-fueled political situation.

The consumer price index is expected to maintain a stable 2% level this year but is projected to be higher than in 2006. This is because the inflationary pressures will be greater in the second half of the year due to a recovery of domestic demand and an increase public utility charges such as transport fares, medical insurance fee, and energy prices.

The shrinking goods account surplus, coupled with the expanding service account deficit will result in the current account deficit of about US\$4 billion in 2007. A lack of competitiveness of the domestic service sector and an increase in overseas service demand are cited as the major factors in the service account deficit expansion.

The won-U.S. dollar exchange rate is likely to appreciate due to global dollar-weakening factors, which include a slowdown of the U.S. economy, U.S. current account deficit, and a narrowing interest rate gap between the U.S. dollar and Euro. However, the trend is not expected to be so sharp due to the high level of the won's appreciation thus far and the economy's conversion to a current account deficit.

The recovery in the domestic demand sector and the upward inflation trend will cause the market interest rates to trend upward. Nevertheless, stabilizing real estate prices along with the U.S. interest rate cuts, among other things, will serve to limit the extent of domestic interest rate hikes.



### Prospects for Domestic Economy in 2007

(Unit: y-o-y, %)

	2006	2007				
	Year	1/4	2/4	3/4	4/4	Year
GDP	5.0	4.0	4.1	4.5	4.8	4.4
(S.A. at annual rate %)		0.9	0.9	1.7	1.2	
Private consumption	4.2	4.0	4.0	4.1	4.3	4.1
Construction investment	0.4	4.3	4.1	2.7	0.9	2.8
Equipment investment*	7.8	9.6	7.8	6.2	7.7	7.8
Consumer Prices	2.2	2.0	2.3	2.4	2.9	2.4
Current Account(USD Bil.)	60.9	-15.2	-11.3	-15.4	2.1	-39.9
Commodity(USD Bil.)	292.1	61.8	67.5	53.3	55.0	237.5
Exports(USD Bil.)	3318.5	865.6	913.2	945.7	967.1	3691.7
growth(%)	14.8	14.2	11.2	10.9	9.1	11.2
Imports(USD Bil.)	3026.3	803.8	845.8	892.5	912.1	3454.1
growth(%)	18.4	13.9	13.2	12.9	16.5	14.1
Service & Others(USD Bil.)	-231.2	-77.0	-78.9	-68.7	-52.9	-277.5
Ex rate(Ave, KRW/USD)	955.9	938.9	935.0	927.0	921.0	930.5
Corp. Bond Yield Rate(3yrs. AA-)	5.2	5.3	5.3	5.4	5.5	5.4

\* Including intangible asset investment

# Issue Focus

## A Trend in Korean Manufacturing Wages

Chan-Guk Huh, Chang-Bae Kim, Pilhyun Kim  
Korea Economic Research Institute

### *A controversy ensues...*

As Korean economy has grown at a rate that is the envy of all, disagreements over how to divide up the ever-growing economic pie have taken the center stage of the national policy arena. In 2006, the Korean Confederation of Trade Unions (KCTU) published a report on international comparison of labor productivity and the unit labor cost in the manufacturing sector. In it, KCTU contended that the critics of rapid wage growth were misguided as they failed to take into consideration accompanied improvements in the labor productivity. The essence of its argument was basically that the wages are rising fast because the workers are becoming more productive. In response, the Korea Employers Federation (KEF) published a report in February 2007 that contradicted the KCTU's claims. According to its report, not only did the wage rates in the manufacturing sector rise by an unprecedented rate of 92.1% since 1997, but also the competitiveness of the Korean economy was badly damaged by it. It also maintained its position that the conventional measure of labor productivity does not correctly reflect the contributions of the capital stock, and thus cannot be used to justify the rapidly rising wage rates in the manufacturing sector.

In this issue of the KERI Bulletin, we examine this controversial issue more closely to shed some light on adequacy of recent wage increases in the Korean manufacturing sector.

### *In relative terms, Korean workers are paid more*

According to the U.S. Bureau of Labor Statistics, an average employee in the Korean manufacturing sector received US \$13.6 as compensation in 2005. The figure puts the Korean workers at 21st place among 31 countries behind most major European countries, Japan, and the U.S.. Still, Korea is far ahead of her major competitor countries such as Singapore, Taiwan, and Hong Kong.

As can be seen, depending on which countries you choose for reference, quite a different picture can be drawn. Hence a simple direct comparison of labor costs is not really informative. In order to avoid comparing apples with oranges, we adjust the labor costs with the Gross National Income (GNI) per capita, noting that each country is on a different stage of economic development. When the hourly compensation cost is adjusted for the GNI per capita, Korea ranks 5th in a sample of 31 countries, ahead of Japan and the U.S..

### Comparison of the Relative Compensation Levels in the Manufacturing Sector in 2005

(Unit: y-o-y, %)

	(A)Hourly Compensation Costs (\$, US=100)	(B)GNI per capita (\$, US=100)	Relative compensation =(A)/(B) (US=100)	Ranking
Brazil	17.3	7.9	218.9	1
Germany	139.5	79.1	176.5	2
Netherlands	134.5	83.7	160.6	3
Belgium	130.2	81.6	159.6	4
Korea	57.3	36.2	158.4	5
Finland	135.0	85.6	157.6	6
Austria	124.4	84.5	147.1	7
Australia	105.3	73.7	143.0	8
Denmark	149.9	108.3	138.4	9
Canada	100.7	74.5	135.1	10
France	104.1	79.6	130.8	11
Spain	75.2	58.0	129.7	12
Italy	89.0	68.6	129.7	13
Sweden	121.5	93.9	129.4	14
United Kingdom	108.5	86.0	126.2	15
Israel	52.5	42.6	123.4	16
Norway	165.5	136.2	121.5	17
Poland	19.2	16.3	118.0	18
Hungary	25.7	22.9	112.0	19
New Zealand	63.3	59.4	106.6	20
Czech Republic	25.8	24.5	105.5	21
Ireland	96.2	91.8	104.8	22
Japan	92.0	89.1	103.2	23
Switzerland	129.0	125.6	102.7	24
United States	100.0	100.0	100.0	25
Portugal	31.0	37.0	83.9	26
Luxemburg	117.0	150.0	78.0	27
Taiwan	27.0	35.1	76.9	28
Mexico	11.1	16.7	66.6	29
Singapore	32.4	62.8	51.5	30
Hong Kong	23.9	63.3	37.8	31

Note: GDP per capita is used for Taiwan.

Source: US BLS(Bureau of Labor Statistics), World Bank World Development

Indicator

*And the labor is biting a larger share of the economic pie*

That the Korean workers receive higher wages than their counterparts in other countries at a similar developmental stage provides us with only a limited picture. It tells us that the Korean workers may be relatively better off in terms of pecuniary compensations, but does not inform us on the adequacy of the compensations they receive.

The labor unions argue that the compensation is inadequate given the high level of labor productivity in the Korean manufacturing sector. The catch is that the labor productivity they refer to is rather an imprecise concept. Specifically, the labor productivity in this context is simply the ratio of output to the number of hours worked, and ignores the contributions of other factor inputs in the production process. Recognizing the limited nature of this measure, the U.S. Bureau of Labor Statistics (BLS) adds in its widely quoted report on the labor productivity that:

"Although the labor productivity measure presented in this release relates output to the hours worked of persons employed in manufacturing, it does not measure the specific contributions of labor as a single factor of production. Rather it reflects the joint effects of many influences, including new technology, capital investment, capacity utilization, energy use, and managerial skills as well as the skills and efforts of the workforce." (The U.S. Bureau of Labor Statistics, *International Comparisons of Manufacturing Productivity and Unit Labor Cost Trends*, 2005)

As such, the conventional labor productivity is an inaccurate measure of the labor's contributions to output and, by extension, the adequacy of wage rates.

In order to address this issue, we examine the relative income shares of capital and labor (RISks, henceforth) over time to see if the workers are getting their fair share of the economic pie. Once we assume that elasticity of substitution between capital and labor is constant, the RISks is determined by the ratio of labor to capital. For our analysis, we use data on the labor-equipment ratio from the Bank of Korea as a proxy for the ratio of labor to capital. The data show that while the labor equipment ratio remained unchanged on average between 2000 and 2005, the ratio of the labor income share to the capital income share has risen 4.2% per year. It implies that the labor income share has grown at a faster rate than warranted by a rise in the labor-equipment ratio.

In simpler terms, it can be argued that the labor took a bigger bite out of the economic pie than it was supposed to. The flip side is that the capital received less than its fair share, which may explain the sluggish business investment currently observed.

On the other hand, Japan experienced quite the opposite. While the labor-equipment ratio rose by 1.5%, the ratio of the labor income share to the capital income share actually declined by an yearly average rate of 2.7% between 2000 and 2004. It is possible that this has helped the Japanese economy to regain its international competitiveness.

### Comparison Between Real Income Distribution and Income Distribution in View of Labor Equipment Ratio

(Unit: %)

Growth rate of Labor Equipment Ratio		Growth of Income Distribution					
		optimum					real
		s=0.2	s=0.5	s=0.8	s=1	s=1.25	
Korea(2000~2005)	0.0	0.1	0.0	0.0	0.0	-0.0	4.2
Japan(2000~2004)	1.5	5.9	0.0	0.4		-0.3	-2.7

Note: s = elasticity of substitution

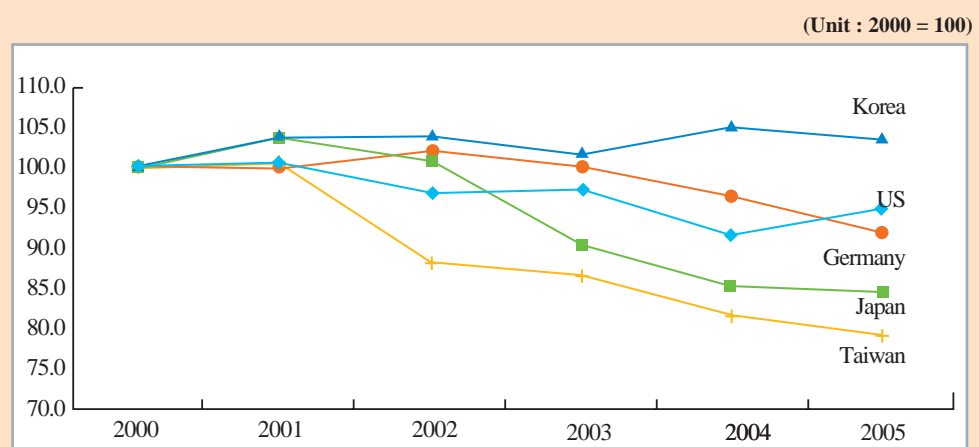
Source: The Bank of Korea Financial Statement Analysis, Cabinet Office. Government of Japan

### *Yet, the unit labor cost keeps rising rapidly*

Even if one accepts the notion that the conventional labor productivity measure accurately captures the contribution of the labor, the wage growth in Korea is excessive when compared to other countries. A useful measure that shows the relationship between the wage rates and the labor productivity is the unit labor cost. It is constructed as the ratio of the labor productivity (output per labor hour) to hourly wages. By construction, if the wage rate rises in accordance with the labor productivity improvements, the unit labor cost remains unchanged. A rising (falling) unit labor cost over time implies that the wage rate is rising faster (slower) than the rate of labor productivity improvement.

A look at the data from the BLS reveals that the compensations Korean manufacturing workers received grew faster than the labor productivity. More specifically, the unit labor cost in the manufacturing sector increased by 2.5% points between 2000 and 2005 in Korea. That wage growth outstripped the productivity growth means that the manufacturing industry faced increasingly heavier burdens in terms of labor costs. What's more disturbing is that while the Korean businesses were suffering from undue labor cost burdens, major competitors such as the U.S., Japan, Germany, and Taiwan saw significant drops in their unit labor costs, which range from 6.4% up to 20.9%. Paying 2.5% more than you are supposed to may not seem much, but when others are cutting expenses by as much as 20.9%, it makes a world of difference in terms of international competitiveness.

#### Comparison of the Unit Labor Cost Index in Manufacturing



Source: US BLS(Bureau of Labor Statistics)

*A restrained wage rate growth is needed to boost Korea's competitiveness*

Any discussion that involves a person's pay stirs up the public emotion. Almost by design, it tends to become a target of emotional backlashes and responses. However, it is crucial for us to remember that its consequences are very real. The data shows that the Korean manufacturing workers are getting more than their fair share. The labor getting more than its fair share affects the Korean economy in two important ways. First, as businesses realize lower returns for their investment into physical capital, they would eventually either look for investment opportunities abroad or simply stop investing. Second, as the labor costs take up a significant portion of the overall production costs, higher wages mean that the Korean exports will be more expensive. We are already seeing these effects materialized in reality. Domestic business investment has been sluggish for the past few years and shows no sign of improvement any time soon. News of Korean firms losing their market shares overseas are popping up with an increasing frequency. As a result, concerns over weakening economic fundamentals and the growth potential are mounting. Yes, adequacy of wage rates is a highly emotional issue, but its consequences are certainly very real.

# | Recent Publications

- Research Monograph: provides comprehensive medium- and long-term research results in both theoretical and empirical aspects on various economic issues.
- Policy Report: provides timely and current analysis on the economic policy issues and offers policy alternatives.
- Issue Paper: provides research results in a form of the series of related papers dealing with occasionally selected issues.
- Working Paper: provides preliminary research results on various economic issues.

This issue of KERI Economics Bulletin introduces 3 new research monographs, 2 new policy reports and 4 new working papers published during 2006. Together with the previous issues of the bulletin, it has introduced all reports published during 2006.

## Research Monograph

### **Alternative Measures for Reasonable Regulation on Collusion**

Research Monograph 06-05

In Kwon Lee

The Korea Fair Trade Commission(KFTC) drastically changed Fair Trade Act, in particular, codes of regulation on unfair collusion, in the end of 2004. This study investigates the effect of the regulation change on the formation of cartel, antitrust damage suit, and the imposition of administrative fine. And also, this study explores on the types of abuse in the levy of administrative fine through analyzing the existing judicial precedent cases.

This study suggests that the government agency should assess the basic fine on the basis of proper damage estimation, not on the basis of the certain percentage of gross sales. The legal approach may help the consistency, the stability, and predictability of legal enforcement. This study also suggests that at the stage of active antitrust damage suit, the financial remedy rely on damage suit and the fine focus on administrative regulation reflecting dead weight loss and enforcement cost due to the collusion in oligopoly market. The punitive compensation system needs to be introduced restrictively in hard-core cartels. It also discusses the limit and the irrelevance of coercive investigation right of the agency. Finally, it proposes that the agency to delete the code of the unfair collusion inference and to adopt the actual inference based on solid circumstantial evidence.



## **Government Planning and Market Distortion**

Research Monograph 06-07

Sung Bong Cho

The level of regulation and the size of the government seem to have decreased for the duration, but are expanding again. Although privatization and restructuring had been relatively active up to a certain point, the public sector reform has been waned since the beginning of the current government, and a number of government corporation privatization plans - which had been set up by the former administration - have been cancelled. Since 1998, all-out regulatory reform had taken place, resulting in 5,430 regulations being lifted and 2,411 ameliorated out of the total of 11,125. Since the beginning of the this current government, however, government regulations have increased from 7,124 as of 1999 to 8,040 as of March 2006. The government size has also enlarged, resulting in the executive staff at the minister and vice-minister level growing by twenty seven persons, a 25% increase from 2002, and the number of all government employees increasing by 22,422 as of the end of July 2005.

This study analyzes government plans that are expressed in and implemented pursuant to a range of statutes, which are some of the structural devices that force the number of government regulations and the size of economic activity intervened in by the government not to decrease or to increase again after a temporary decrease. Government plans, by and large, may be seen as institutional devices designed in a manner that allows the government to effectively intervene in economy and limited resources to be focused on necessary activities in the initial stages of economic development, when infrastructures and institutional maturity are lacking. A case in point is the Five-Year Economic Development Plans of Korea, implemented from 1962 until 1981. The government plans in Korea, however, are not being pursued in this time-limited fashion any more. Currently, the government plan is one of the most universal means by which major economic authorities intervene in economy. While the government roles to lead economic development are being phased out in other parts of the world, various plans of the Korean government are ever expanding and have been positioned as the most prevalent form of government activities. this study reviews the rundown of government plans, which are widespread in how the Korean government works, and discusses their characteristics and associated problems.

## **The Implications of the Development and Reform of European Welfare Models**

Research Monograph 06-17

Soon Kwon Ahn

This study analyzes the development and characteristics of welfare-state policies pursued by European countries. It also examines economic crises these countries experienced and their effects on social policies. Finally, the study provides a comparative analysis of various socioeconomic policies of the four major European welfare models.

This approach to the study of European welfare models yields the following implications: Firstly, the rate of increase in welfare expenditure as proposed in Vision 2030 by the Participatory Government far exceeds those seen in European countries in the past and the growth of the Korean economy. As excessive welfare programs may hamper growth potentials by creating heavy tax burdens, the rate of increase in welfare spending should be adjusted within the extent of not impairing growth potentials.

Secondly, although the welfare spending accounts for only a fraction of GDP in Korea, changes in demography and financial needs of social pension programs require efforts to minimize the likelihood of the British disease experienced by European countries by establishing a growth friendly framework of welfare policies.

Thirdly, mitigation of income inequality and poverty require the Korean government to offer more educational opportunities to the children of the lower income bracket, create jobs for the youth, devise schemes to grant opportunities for failed entrepreneurs to restart, and to expand the opportunities for middle-aged workers to be reemployed.

Fourthly, as illustrated by experiences of the U.K., Sweden, and Germany, creation of jobs is the best way to achieve a sustainable welfare state. Hence, the Korean government must pursue bold deregulation and create a business-friendly environment with firm resolution.

Lastly, Distribution oriented Swedish and German welfare models are not suitable for a country that strives to achieve a per-capita income of US \$30,000 within a decade, all in fierce competition with Japan, China and India. Instead, the Korean government should establish its own model where welfare is sustained through economic growth.

Government versus Private Control, Political Loans, and the Privatization of Korean Banks

## Policy Report

### **U.S. Current Account Deficit and Its Prospect**

Policy Report 06-05

Jeongseok Song (Chung-Ang Univ.)

The continuing U.S. current account deficit has prompted attention and spread concern among the U.S. policy makers and academics. However, experts differ in their views as to what is causing the swelling of the deficits. This study examines the structural composition of the U.S. and the world economy by looking at the U.S. industrial structure, its macroeconomic characteristics, and the changes in major European and East Asian economies. Then, the study aims to shed light on the possible causes and significance of the large U.S. current account deficit of today.

This study argues that the fundamental causes of the continuing U.S. current account deficit are the increase in consumer spending and the imbalance between manufacturing production and demand. In addition, the increase in capital inflows and the reduction in spending in other sectors also contributed to the swelling current account deficit. The analysis using the VAR approach shows that after 2000 there was no correlation between the size of the deficit and the changes in the real effective exchange rate. The results suggest that adjusting the exchange rate may not prove useful in solving the deficit problem as advocated by some. As such, the upward revaluation of Chinese Yuan may not contribute much to reducing the U.S. current account deficit. This study suggests that the ongoing U.S. current account deficit may be a symptom of a long-term structural problem, and that it is not likely to be solved by an artificial adjustment of the exchange rate as in the Plaza Accord.

## **Issues and Critical Review of Corporate Policy**

Policy Report 06-08

Inhak Hwang and Chung-Gyu Choi

The Korea Fair Trade Commission is exploring options of circular share-holding restrictions and other alternatives under the premise of the abolition of the equity-holding cap, which has been the core of the policies to curb economic power concentration as well as the symbol of reverse discriminatory regulation. The Ministry of Justice has also embraced the views of non-government organizations and incorporated, in the proposed amendment to the Commercial Code, the executive officer system, the double derivative suit system, and the prohibition on usurpation of corporate opportunities, which is unprecedented in the legislation of other countries, leaving the business community uneasy. In this respect, this study organizes and evaluates the characteristics, issues and problems associated with major pending questions regarding the Antitrust and Fair Trade Act(AFTA) and the Commercial Code.

This study aptly organizes and diagnoses the problems and orientation associated with the pending issues on the proposed amendments to the AFTA and the Commercial code that are not very convincing in theoretical and empirical terms. This study persuasively underscores the fact that although the intent of the institutional experimentation or criticisms against Korean corporate groups are not to be negated, the government should avoid policy approaches comparable to the burning of the house to roast the pig, which are expected to result in more loss than gain, in a consistent perspective that the imperfection of economic realities and inefficiency should be distinguished.

## Working Paper

### **The High School Equalization Policy and Academic Achievement: A Focus on KSAT Scores**

Working Paper 06-02

Sung-Joon Park

Despite thirty years since the implementation of the high school equalization policy, there has been a seemingly endless stream of controversy, amid which potential decline in scholastic ability has been pointed out as the most fundamental problem. A substantial number of studies have been conducted on this subject so far, but resulting in no definite conclusion yet. This study intends to examine what impact the equalization policy has made upon scholastic ability.

The results indicate that, first, the influence of equalization on scholastic ability is not significant and instead the location of each school exerts very substantial influence. Second, substantial difference was found in the elements affecting scholastic performance between equalization regions and non-equalization regions. That is, in the case of equalization regions, the effort made by the student himself does matter, but the parents-interest in the student and school wield relatively greater influence on scholastic achievement than in non-equalization regions. Third, it is shown that in equalization regions, the intermural disparity in scholastic ability is, as expected, relatively small while intramural disparity is larger, but it is the other way around in non-equalization regions.

Conclusively, the equalization policy might have reduced disparity among schools, but it enlarged disparity within each school. It is indicated that the average Korean Scholastic Aptitude Test(KSAT) score in equalization regions is indeed higher than that in non-equalization regions, though it is entirely due to family background and no effect of school exists, which is deemed to cause distrust in public education.

## **Government versus Private Control, Political Loans, and the Privatization of Korean Banks**

Working Paper 06-03

Jaewook Ahn (Kyunghee University), Sang-Kun Bae and Ronald A. Ratti (University of Missouri-Columbia)

Since the early 1980s, the privatization of the financial sector began, resulting in successful proliferation of bank ownership among private entities. However, the ownership restriction system, which was established to prevent conglomerate groups from monopolizing banks, allowed the government to gain effective control over privatized banks. The purpose of this study is therefore to use the data from 1987 to 1997 to compare the performance of the banks owned and operated by private entities (PCBs) and that of those that have been privatized but effectively remain under government control.

The analysis indicates that despite relatively higher loan interest rates and the consequent increase in the likelihood of adverse selection, the percentage of non-performing loans and the loan loss reserve rate for PCBs were relatively lower than those for the banks operated by the government. Moreover, even the costs other than non-performing loans incurred by the banks under the control of the government were higher than those by PCBs. Additionally, analysis shows that the banks operated by the government were less efficient than PCBs and that inefficiency were directly proportional to the amount of political loans. A number of analysis methods were employed to examine whether costs and profits showed statistically significant differences between GCBs and PCBs. Firstly, the entity controlling the bank, as an explanatory variable for cost and profit, is incorporated in the analysis by means of using a dummy variable. The ratio of loan loss reserves to non-performing loans as well as the percentage of non-performing loans were used as proxy variables for political influence. Secondly, cost and profit functions were used to measure the efficiency of each group. The efficiency index estimated for each individual bank indicated that GCBs were less efficient than PCBs. Although the inefficiency of banks is correlated with non performing loans, this relationship varied depending on how the cost function is set up. An analysis with the loan loss reserves level and political influence taken into account showed that the profits of GCBs were greatly lower than those gained by PCBs.

## **The Effects of Financial Sector Development on Innovation as an Engine of Sustained Growth**

Working Paper 06-04

Pilhyun Kim

Theoretical models of the finance-led growth hypothesis adapt the endogenous growth framework and show that financial development promotes economic growth by enhancing either efficiency of capital accumulation or technological innovation. This study empirically tests the validity of the 'finance-led growth hypothesis' by examining the relationship between financial development and innovative activities across a set of developing countries.

For the analysis, patent applications are used to proxy for the rate of technological innovation of a country. The patent data are obtained from the USPTO for 19 developing countries between 1970 and 2000. Dummy variables are used to control for heterogeneous qualities of patent applications across sample countries.

Three variables are used to measure the degree of financial sector development. First, the country's GDP to personal credit (PC) in private sector, second, GDP to money supply (liquidity), and last, the country's GDP to total assets (DMBA) Using these three variables would enable us to better capture different facets of financial development.

The results of the analysis show that financial development is positively correlated with the number of patent applications, suggesting that financial development does enhance economic growth by promoting technological innovations.

## **The Investigation into the Cause of Low Fertility and Proposed Measures**

Working Paper 06-05

Sung-Joon Park

The birthrate in Korea is declining in an unprecedented manner, reaching the world's lowest level in a mere thirty year span. The total fertility rate in Korea back in 1960 was a relatively high level of 6.0 children. The rate, however, continually plummeted to 2.08 children in 1983, even lower than the replacement rate of 2.1, and plunged at a steeper rate to 1.16 in 2004 and 1.08 in 2005, reaching the lowest level in the world. This decline in fertility rate not only lowers the potential growth rate by causing decreased labor supply and sluggish domestic consumption but also create intergenerational discord by placing more burden of supporting the aged on younger generations, producing nontrivial adverse effects. This study intends to use the theoretical framework of economics to find the cause of low fertility. In contrast with some of the previous studies, this study uses macro-level variables to conduct a principal component analysis.

Increase in GNP per capita, the level of education by females, increase in economic participation by females, the wage gap between female and male workers, average monthly household income, household education expenses, and the percentage of household education expenses are all indicated to have adverse impact on the fertility rate. Youth unemployment is shown to have a negative effect as well. The change in land price does have negative impact on fertility rate, which, however, is shown to be not significant.

A summary explanation would be that as the rising level of education attained by females improves the condition of their economic activities including their economic participation rate and the wage gap between female and male workers, such opportunity costs for employed females as the loss of wages and human capital accumulation are bound to account for more, raising the ages at marriage and childbirth and otherwise negatively affect the fertility rate. In addition, the increase in income as well as the change in the perspective on parenting-which is a factor that cannot be accounted for in this study, though-results in higher cost-education expenses-for the utility gained from children, which is shown to have negative impact on fertility.



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**Publisher:** Jong-Seok Kim

**Editor:** Chan-Guk Huh

**Co-Editor:** Yun Ho Chung, Chang-Bae Kim, Pilhyun Kim

*Designed by Blue-Ribbon Content & Strategy (BCS.Com)*

*Phone: (82-2) 6258-7870/3 Fax: (82-2) 6258-7877*



**KERI Economic Bulletin**

is published by Korea Economic Research Institute,  
FKI Building, 28-1 Yoido-dong, Yeongdungpo-ku,  
150-756 Seoul, Korea.

Tel : (82-2)3771-0001, FAX : (82-2)785-0270/1