SESSION 7: PANEL DISCUSSION

STRUCTURAL PROBLEMS OF THE KOREAN ECONOMY AND ITS ECONOMIC POLICY DIRECTIONS

By Park, Yang Su¹

1. Introduction

Global liquidity increased sharply upon the implosion of the Bretton Woods system in the early 1970s and wholesale financial deregulation in the 1980s. The swelling global liquidity and increased cross-border capital flows led to capital inflows into emerging market countries with high growth potential. These capital inflows established a foundation for emerging market countries to sustain their high growth trends, but were not without side-effects including a widening divergence between the financial sector and the real economy. In fact, some Asian countries were hit by a currency crisis in the late 1990s.

In the absence of a global safety net, those emerging market countries that suffered a currency crisis focused on securing foreign currency liquidity by way of the accumulation of foreign reserves through current account surpluses. Korea also followed the export-oriented growth strategy. This strategy had positive effects such as productivity improvement in the area of tradable goods and the expansion in external debt servicing capacity, but started to demonstrate negative side-effects such as a household debt overhang, income disparity among sectors, and the breakdown of the linkages running from growth to employment and income. The Korean economy is now at a crossroads where it should adjust its existing export-oriented growth strategy to pursue sustainable growth.

This paper examines the impact on emerging market countries' economic policies from the increase in capital flows following changes in global financial environment. It also sets out to examine the progress Korea has made since the currency crisis by following an export-oriented growth strategy together

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with the economic structural problems that it has given rise to before suggesting the direction for implementing economic policies going forward.

The remainder of this paper is organised as follows. First, Section 2 explains the background to emerging market countries' policies to sustain their current account surpluses. Section 3 analyses the influence of an exportoriented growth strategy on productivity, the current account, wages and interest rates and Section 4 discusses the structural problems of the Korean economy including the household debt overhang. Lastly, Section 5 undertakes a comprehensive evaluation of the current economic conditions in Korea and suggests directions for implementing economic policy going forward.

2. Changes in Global Financial Environment and Emerging Market Countries

2.1 Expansion of Capital Flows and its Influence on Emerging Market Countries

In the aftermath of the collapse of the Bretton Woods system, financial regulations continued to be eased starting from the 1980s and capital accounts also were progressively liberalised. Accordingly, liquidity increased with innovative banking techniques and derivatives emerging, and advanced country capital frequently flowed from country to country in search of high returns. Global banks, in particular, adopted a global business strategy involving the ratcheting up of leverage, thus sharply increasing cross-border capital flows (global banking glut). As a result, global liquidity increased sharply and Figure 1 shows that global investment positions have been massively enlarged since the 1980s.

Figure 1
Global Investment Positions in Major Countries

As a percentage of world GDP 30 200 World trade (lhs)² China Spain 25 150 Germany United Kingdom 20 100 - Italy United States Others 50 0 -150 -5 -200 -10 1980 1985 1990 1995 2000 2005 2010

Sum of 114 economies. ² Average of exports and imports in goods and services.

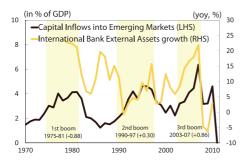
Sources: IMF, International Financial Statistics and World Economic Outlook; OECD; BIS calculations.

Source: Cited at second-hand from the IMF and the GFSR.

The increase in global liquidity and the liberalisation of capital flows fueled sudden capital inflows into those emerging market countries maintaining high growth. As Figure 2 shows, three peak periods of capital inflows have been observed since the 1970s. Meanwhile, external transactions by type in Figure 3 show that capital inflows into emerging market countries were going, mostly, to finance current account deficits before the 2000s. Since then, however, capital inflows have been continuing despite current account surpluses in emerging market countries. The IMF (2011) analysed that this state of affairs is attributable to the fact that the influence of global factors (push factors), including global liquidity conditions and the global preference for risky assets, had increased.

Figure 2
Global Liquidity and Capital
Inflows into Emerging Market
Countries¹⁾

Figure 3
Emerging Market
Countries' 1) External
Transactions by Type



-Current Account Balance Current
Net Capital Flows
Change in Reserves

E. Asia Crisis

2
2
2nd boom 3rd boom 2003-07

1981 1986 1991 1996 2001 2006 2011

Notes: 1) Low and Medium Income Economiesof World Bank

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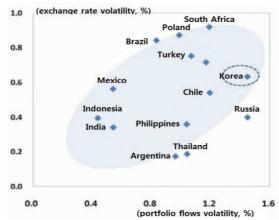
2) Figures in () represent the correlation coefficients between capital inflows into emerging market countries and global liquidity during expansion phases.

Source : WDI

Source: WDI, BIS

At periods of enlarged capital inflows, emerging market countries can expect a positive effect on economic growth through, for instance, a reduction in funding costs. However, if there are excessive capital inflows, the consequent currency appreciation will weaken their competitiveness in the area of tradable goods, thus actually having a negative influence on their economic growth. In truth, emerging market countries such as Korea, Thailand, Mexico and Brazil all experienced currency appreciation and stock and asset price inflation with their current account persistently in deficit and their capital accounts in surplus in the course of the 1990s. Meanwhile, with the surge in capital flows, exchange rate volatility increased, which acted to slow export growth. In the case of Korea, it has been analysed that since the early 2000s an increase of one standard deviation in exchange rate volatility brings a 0.12~0.17% point drop in the volume of exports (Park and Choi, 2010). Figure 4 shows that there is a positive correlation between portfolio investment capital inflows and exchange rate volatility.

Figure 4
Volatility¹⁾ of Portfolio Investment Fund Inflows and Foreign
Exchange Fluctuations



Note: 1) Standard deviation of inflows of portfolio investment funds/nominal GDP (2000.1/4 ~2010.2/

4).Source: IMF.

Moreover, excessive capital inflows could cause macro-financial dissonance, meaning a weaker linkage between capital movements and real sector activities, as they lead to surges in net financial transactions which have nothing to do with the real economy. Fujiwara and Takaashi (2011) analysed that, for Asian nations, the interconnectedness of their real economies with China has heightened, but the volatilities in their stock and bond markets have been affected greatly by the US and Europe.

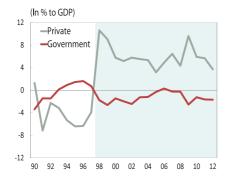
Meanwhile, capital inflows to emerging market economies have experienced sudden stops or rapid capital outflow, regardless of the countries' economic fundamentals, where unrest or shocks in the international financial markets occur. The Asian currency crisis in the late 1990s is attributable to this factor. In addition, when nations' financial transactions are closely linked with each other, like they have been recently through global banks, an economic crisis of one nation can be easily transmitted to other nations. Shin (2011) and Gourinchas (2011) argued that the 2008 crisis in the US turned into the global financial crisis partly because of the global banking glut.

2.2 Increases in Current Account Surpluses of Economies that Experienced Crises

The Asian emerging market economies that experienced the Asian currency crisis in the late 1990s have since then had tendencies to maintain current account surpluses as their net savings (gaps between savings and investment) in the private sectors have expanded sharply. This is a kind of a learning effect, due to the realisation that their nations could be vulnerable to sudden stops in the case of capital flow liberalisation. This also implies that these nations have made efforts to ease the instabilities of their financial markets by enhancing their external payment capacities through increases in external assets sourced from current account surpluses. According to empirical analysis based on the savings decision model, emerging market economy current accounts have increased by 5~6% of their GDP since the Asian currency crisis, reflecting this learning effect.

Figure 5
Sectorial Accounts¹⁾of
Economies²⁾ that Experienced
Crises

Table 1
Empirical Analysis of
Factors Determining
Current Accounts



	Medina et al.(2010)	
Structural changes in Asia	0.05***	0.06***
Fiscal Account	0.48***	0.19***
Ratio of ages under 15	0.06***	-
Ratio of ages over 64	-0.04	-0.14**
Relative income	-0.01	-0.02*
Oil Account	0.22**	0.23***
R^2	0.38	0.52

Notes:1)Private sector refers to current account minus government balance2) Unbalanced averages of Indonesia, Korea, Malaysia, Thailand, and the Philippines.

Sources: WEO, IMF.

Note: *, **, *** indicate significances at 10%,5% and 1% levels, respectively.

Indeed, external assets are still at insufficient levels for many emerging market economies, as it is difficult for them to maintain current account surpluses if their goods accounts do not record surpluses. Emerging market economies therefore strive to run goods account surpluses by sharpening

their competitive edges in tradable goods in terms of price and quality. If we look at the external asset volumes and current account balances of major economies in Table 2, those nations with large holdings of external assets have run current account surpluses for a long time.

Table 2
Volumes of External Assets of Major Economies¹⁾

(billion dollars, %)

	Japan	German	Netherland	Switzerland	Korea
2)3)	7506	8782	3826	3619	742
External Assets ^{2) 3)}	(127.9)	(246.0)	(457.5)	(569.4)	(66.5)
Net External Assets ^{2) 3)}	3255	1184	314	937	-97
	(55.5)	(33.2)	(37.6)	(147.4)	(-8.7)
Current Account Surplus to GDP	2.7	3.7	4.4	7.5	3.6
Surplus to GDP ratio ^{4) 5)}	(31)	(20)	(31)	(31)	(19)

Notes: 1) Nations which have maintained current account surpluses and net external assets for a long time.

- 2) Figures within () represent the ratios to GDP.
- 3) Based on IIP in 2011.
- 4) Calculating only the years in which current account surpluses were recorded, from 1980 through 2011.
- 5) Figures in () represent the numbers of years during which current account surpluses were run, from 1980 through 2011.

Sources: WEO, IMF.

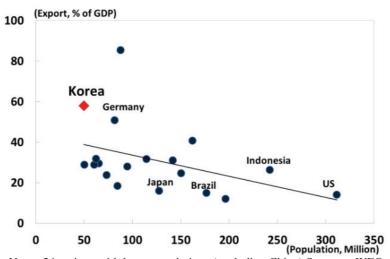
Emerging market economies' efforts to run current account surpluses have been made basically to deal with liquidity risks caused by the inconvertibilities of their local currencies, but are a result also of the absence of an international last lender of resort, which is one limit of the international monetary framework. As there have been no functioning global financial safety nets since the Asian currency crisis, that can replace foreign reserves, emerging market economies have had no choice but to build up foreign reserves through current account surpluses, to avoid foreign exchange crises when sudden capital flow stops occur.

3. Adoption of Export-oriented Strategies in Korea and Wages and Interest Rates

3.1 Export-driven Growth Strategy and Current Account Surplus

Korean policymakers and private sector economic agents began to realise the importance of the current account surplus and increase in foreign reserves while experiencing the Asian currency crisis and the global financial crisis, and have thus pushed ahead with an export-led growth strategy. Many scholars and policymakers thought that the excessive domestic demand and appreciation of the won caused the Asian currency crisis, by making the nation more vulnerable to external factors, and that export-driven growth was an inevitable strategy for the Korean economy given its small domestic markets.

Figure 6
Relationship between Populations and the Ratio of Export to GDP in Major Countries¹⁾



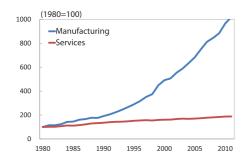
Note: 24 nations with large populations (excluding China). Sources: WEO, IMF.

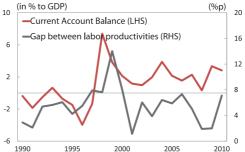
In the 2000s, when global competition has intensified further, the productivity of the tradable goods sector increased dramatically thanks to export companies' efforts to strengthen their competitiveness. Meanwhile, the productivity in the non-tradable goods sector stagnated. This was partly

because of the lack of efforts to increase productivity in the service sector. There is a high likelihood, however, that as the service sector has served as a buffer in the process of the manufacturing sector workforce adjustment, this led to declines in service sector productivity. Consequently, while exports have seen high growth due to the enhanced productivity in the tradable sector, the stagnant productivity of the service sector has acted as a stumbling block to income increases, tempered the demand for imports, which reinforced the continuous trend of current account surpluses.

Figure 7
Labour Productivity
by Industry

Figure 8
Current Account and Gap
between Labour Productivities





Sources: Bank of Korea, Statistics Korea.

Sources: Bank of Korea, Statistics Korea.

Empirical analysis also find that the widening productivity gap between the tradable and non-tradable goods sectors since the 1990s had a significant positive impact on the current account surplus volume. Table 3 shows the results of regression analysis by adding the productivity gap between the manufacturing and the service sectors to the current account decision model. It illustrates that, if the period of the pre-1990s is added, the coefficient of the productivity gap is not significant, and this coefficient becomes significant if only the post-1990s period is used.

$$CA_t = \alpha_0 + \alpha_1 CA_{t-1} + \alpha_2 pgap_t + \alpha_3 emp_t + \alpha_4 growth_t + \alpha_5 tot_t + \alpha_5 rrate_t + \varepsilon_t$$

CA_t: Current Account in to GDP, pgap_t: labour productivity gap,

emp₁: Number of Employees in percent change, growth₁: growth rate,

tot, : Terms of Trade in percent change, rrate, : short-term real interest rate

Table 3
Impacts of Labour Productivity Gap on Current Account

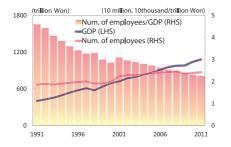
1980.1Q~2012.2Q	0.003 (0.72)	-0.06** (0.02)	0.01 (0.43)	0.03*** (0.01)	-0.01 (0.54)	0.84
1990.10~2012.20	0.03**	0.03	-0.08***	0.02**	0.01	0.79
1990.1Q~2012.2Q	(0.05)	(0.52)	(0.01)	(0.02)	(0.56)	

Note: 1) **, *** indicate significances at the 5% and 1% levels, respectively.

3.2 Restraints on Wages and Current Account Surplus

Apart from the stagnation of productivity in the nontrade sector, structural factors have also restrained wage growth in the economy as a whole. While the employment inducement effect of production has declined since the 2000s, export-oriented industries in the trade sector such as the electricity and electronic businesses have relatively low employment inducement coefficients, and have not absorbed labour force sufficiently despite their high growth. Moreover, as increased trade with emerging economies including China has led to massive imports of products made by their SME manufacturing sectors which are based on low wages, wages in the sectors in Korea with comparative disadvantages have been exposed to downward pressures.

Figure 9
GDP¹⁾ and Number of Persons
Employed



Note: 1) Real GDP based. Source: Bank of Korea.

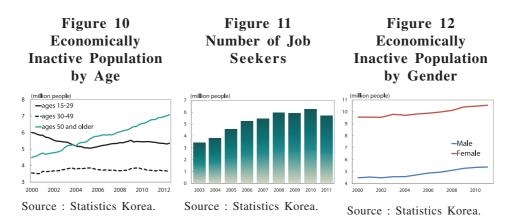
Table 4
Employment Inducement
Coefficientsby Industry

	2000(A)	2010(B)	B-A
Manufacturing	13.2	9.3	-3.9
(Electric &Electronics)	14.5	6.2	-8.3
Construction	17.0	13.7	-3.3
Service	21.5	16.6	- 4.9
Total Industry	18.1	12.9	-5.2

Note: 1) Real GDP based. Source: Bank of Korea.

²⁾ Figures within () represent the p-values.

On the supply side, idle workers have increased mainly among the elderly, youth and female work forces. Despite the slowing rate of population increase, the working-age population above 15 years of age has risen rapidly, especially in the 50s and 60s age group. The youth population, particularly those with high levels of education, is searching over longer periods for decent jobs given the scarcity of available jobs, while female participation in economic activities has steadily increased. However, with jobs limited, a considerable number of workers have reduced the reservation wages that they are prepared to accept and are suffer long waiting periods for job openings. This idle work force helps to dissipate rapidly the new labour demand in times of recovery, leading to constrained growth in wages even despite an expansion in employment.



Although declining since the Asian currency crisis, the proportion of irregular workers still remains high. The numbers of quasi-irregular workers have also soared, including those of indefinite contract workers, who are categorised as regular workers but have far poorer wage levels and welfare benefits compared to subcontract workers and special contract workers. As the wage competitiveness and wage elasticity of labour supply are low for quasi-irregular workers, an increase in the number of quasi-irregular workers constrains wage increases for regular workers. In the traditional service sector including wholesale and retail businesses and restaurants and accommodations, the intensification of competition and trends toward larger scale businesses and greater specialisation since 2005 have led to a big shrinkage in operating profits for the self-employed, which in turn puts restraints on wage increases for paid workers. The worsening conditions for the self-employed in the segmented labour market have hampered wage growth, by heightening paid workers' incentives to maintain their statuses.

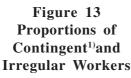
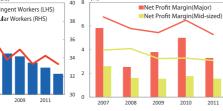
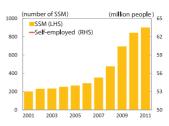


Figure 14 Profitability of Large **Enterprises** and **SMEs**

Figure 15 Self-employed and **SSM**







Note: 1) Less than 1-year fixed-term contract

Source: Bank of Korea.

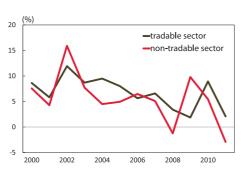
Source: Korea Small Business Institute.

employees.

Source: Statistics Korea.

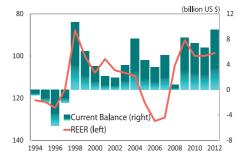
Due to the above-mentioned factors, the growth of overall wages, specifically in the non-trade sector, remains very low. According to the Balassa-Samuelson effect, rapid productivity growth in the trade sector causes growth in wages and prices in the non-trade sector and an overvalued real exchange rate, leading to a worsening of the current account. In Korea, however, wage growth in the non-trade sector has been restrained, putting depreciation pressures on the real Korean won exchange rate, which is likely to have contributed to the continued surplus in the nation's current account.

Figure 16 Wage Growth in Trade and **Non-trade Sectors**



Source: Statistics Korea.

Figure 17 KRW Real Effective Exchange Rate1) and Current Account



Note: 1) 26 trading partners.

Sources: IMF, BIS.

3.3 Current Account Surplus and Downward Pressure on Interest Rates

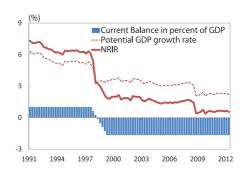
With capital flows having been greatly liberalized since the Asian currency crisis, the maintenance of a current account surplus and undervaluation of real exchange rate imposed downward pressures on real interest rates, by creating expectations of exchange rate appreciation and reducing the national risk premium. According to Kim and Park (2013), the neutral real interest rate has received pressures for downward adjustment by 2~3% points from the decline in potential growth and by 2.5% points from the current account surplus.

Table 5
Potential GDP Growth Rate of
Korea (During-period average, %)

Figure 18
Factors Behind Korean Neutral
Real Interest Rate (NRIR)

(During-period average,%)

	1990	2000		2012
	~99	~09	08~09	~12
•Production function approach I	6.7	4.5	2.8	3.7
•Production function approach ∏	6.7	4.6	3.0	3.6
•HP -filter method	6.7	4.5	3.4	3.3
•Multivariate unobserved components model	6.4	4.4	2.5	3.8



Source: Re-quotation from Park et al. (2013).

Source: Re-quotation from Kim and Park (2013).

As shown in Figure 20, Korea's real policy rate has declined from $5\sim9\%$ before the Asian currency crisis to $-2\sim2\%$ since the crisis. Compared to the US real policy rate, it was high in absolute terms before the crisis, but the gap between them has narrowed greatly since the crisis and there have even been reversals between the two rates. Despite the increase in liquidity and the decline in real interest rates, prices have stabilised due to the constraints on wage growth and to the imports of low-price goods from China. This has helped the real policy rate to remain low for a long time.

Figure 19
Nominal Policy Rates of Korea
and the US



Source: Re-quotation from Kim and Park (2013).

Figure 20
Real Policy Rates of Korea and the US

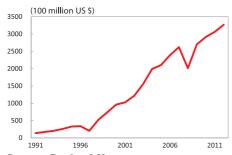


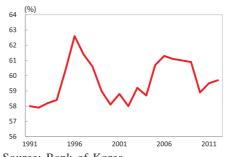
Source: Re-quotation from Kim and Park (2013).

As described above, since experiencing the Asian currency crisis, Korea has enhanced its external payment capability by maintaining a current account surplus and accumulating a large amount of foreign reserves, while adopting an export-led growth strategy. However, its export items have been concentrated in the IT sector, which has a low employment inducing effect, while the share of labour income has declined due to the restraints on wage increases given the nature of the labour market and the industrial organisation, while the continued current account surplus has created expectations of exchange rate appreciation. As a result, downward pressures on interest rate have increased, and a low-interest rate environment has been maintained for a long time. The Korean economy accordingly faces a structural problem, in which household debt is accumulated and the virtuous cycle of growth leading to employment and to higher income does not work smoothly. Due to changes in its population structure, Korea is also expected to face a decline in potential growth and a worsening of fiscal conditions going forward.

Figure 21
Foreign Reserve Holdings of
Korea

Figure 22 Share of Labour Income in Korea





Source: Bank of Korea.

Source: Bank of Korea.

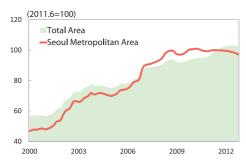
4. Structural Problems of the Korean Economy

4.1 Overhang of Household Debt

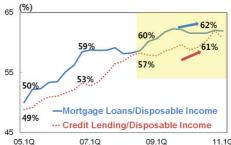
Despite the continuation of low interest rates and abundant market liquidity since the early 2000s, businesses enjoying improved credit ratings have preferred direct financing through the issue of stocks and CPs rather than indirect financing through banks. On the other hand, amid the easing of financial regulations and fiercer competition among financial institutions, banks have come to prefer more profitable lending to households. In addition, since the 2000s, demand for housing has surged reflecting a bulge in the 40-54 age bracket. Accordingly, home mortgage loans increased greatly until the mid-2000s, and household debt rose sharply as well in lockstep with rising real estate prices. Apart from this, since the global financial crisis, recourse to household loans for raising business capital or basic living expenses has also increased greatly, with such borrowings being mainly taken on by the self-employed and those in low-income brackets.

Figure 23
Housing Sale Price Index in
Korea and in Seoul
Metropolitan Area

Figure 24
Ratio of Mortgage Loans and
Credit Lending to Disposable
Income



Source: Bank of Korea.



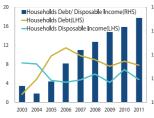
Source: Bank of Korea, National Information & Credit Evaluation (NICE).

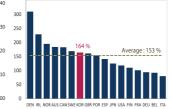
As can be seen in Figure 25, the growth rate of household debt has continued to exceed that of disposable income since the mid-2000s, and the ratio of household debt to disposable income has increased continuously as a result. Household debt in Korea has been on the rise ever since the global financial crisis unlike in the US and the UK, and is at a relatively elevated level as of 2012 compared with most major countries.

Figure 25
Household Debt,
Disposable Income
and Debt Ratio¹⁾

Figure 26
Ratio of Household
Debt to Disposable
Income by Country

Figure 27
Ratio of Household
Debt to Disposable
Income in Major
Countries







Note: 1) Household credit

basis.

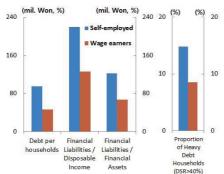
Source: Bank of Korea.

Source: OECD Economic Outlook (2012).

Source: Reports released by Central Banks, Statistical Office and Demark Financial Stability Report (2011).

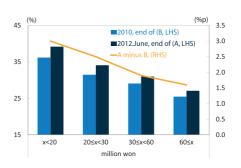
According to Park (2011), under the current conditions, Korean household debt is unlikely to trigger an economic crisis in the short term, but the vulnerable groups including those in low-income brackets, the elderly and multiple debtors are analysed as being at high risk of default. The trend of growing indebtedness has persisted and the structure of household debt has also worsened in a situation in which the income conditions of small and one-man businesses have been deteriorating. Those in low-income brackets have greater reliance on borrowings from non-banking institutions, and their default risk. The number of multiple debtors whose risk of default increases greatly during periods of economic downturn has also seen a sharp increase.

Figure 28
Debt Structure of the Selfemployed and Wage earners
and Proportion of Heavilyindebted Households



Source: Bank of Korea.

Figure 29 Proportion of Lending from Non-banking Institutions, by Income brackets

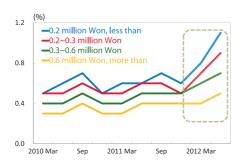


Note: 1) Lending by non-bank financial institutions/ lending by financial sector as a

whole.

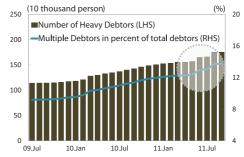
Source: Bank of Korea.

Figure 30
Household Lending Delinquency
Rate by Income Brackets



Source: Bank of Korea.

$\begin{array}{c} Figure \ 31 \\ Multiple \ Debtors^{\scriptscriptstyle 1)} \end{array}$

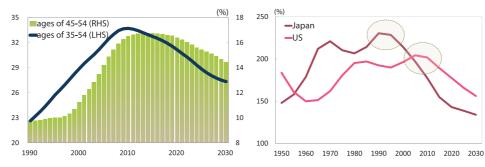


Note: 1) Those taking out loans from at least three institutions. Source: Korea Credit Bureau (KCB).

In view of projected changes in the demographic structure, policy efforts to adjust household debt seem necessary even though this debt is not likely to trigger an economic crisis in the short term. According to Statistics Korea, the share of those in the 30-54 age brackets in the population has started to decline from early 2010, further signaling the coming aging of society. Nishimura (2011) argues that Japan, the US and other major advanced economies experienced financial crisis once their economically productive population began to decline. This means Korea cannot entirely rule out the possibility that the household debt problem may serve to precipitate an economic crisis in the event of another large shock occurring or real estate prices taking a tumble in a situation in which the global recession drags on.

Figure 32
Share of Population Structure by
Age Groups

Figure 33
Dependency Ratio 1) of the US
and Japan



Source: Statistics Korea.

Note: 1) Population age of 15 to 64 / (total population minus population age of 15 to 64).

2) Shades corresponds to the financial crisis period.

Source: UN.

4.2 Weakening of Virtuous Cycle among Growth, Employment and Income

As noted earlier, Korea opted for an export-led growth strategy after the currency crisis, and economic growth has been led by large companies and exporters, particularly in manufacturing with a low job creation capacity. In particular, since the reduction of production costs is the key to competitiveness in the IT industry, technological innovation has been achieved in line with maximising processing efficiency, and the labour required per output unit has declined rapidly with about half of the intermediate goods input relying on imports. The result has been jobless growth where high economic growth rates have not led to a corresponding increase in employment.

Because of the intensified global competition, exporters have found it hard to increase the unit value of exports despite run-ups in both raw material prices such as international oil prices and in the cost of intermediate goods due to the high exchange rate. In response, businesses have reduced labour cost by easing labour market rigidities, using idle manpower and taking advantage of their relations with subcontractor SMEs. As a result, as shown in Figure 34 and Table 6, the linkage running between employment and income has weakened greatly since the currency crisis. In other words, the increase in employment has not led to a large increase in household income.

Figure 34
Growth Rate of the Employees and Household Income

6, yoy) (%, yoy) correlation =0.19 -5 -2 -10 -4 -15 -Number of Employees (left) -Real Households Income (right) -8 <u>-</u> 1994 1997 2000 2003 2006 2009

Source: Statistics Korea, Bank of Korea.

Table 6
Regression Analysis¹⁾ of
Household Income(or Wage)
and Employment

	$\Delta lnHI$ () β	β	$\beta \Delta lnE$	ε	
	HI	: household	l income,	: wage,		
	E : employment, ε : error term					
	Before the currency crisis ²⁾		the	After the currency crisis ²⁾		
	Household Income	Wage		usehold ncome	Wage	
β	3.37**	1.74**		-0.18	-0.77	

Notes: 1) Before the currency crisis (1994~1998), after the currency crisis (1999~2011) excluding global financial crisis (1999~2008.2q).

2) ** means significance below 5% level..

From the turn of the century, income imbalances have been deepening. As can be seen from Figure 35, the income of the high-income quintile has increased rapidly while that of the low-income quintile has stood still. Moreover, the propensity to consume of the lowest income quintile has risen somewhat while that for those in the third and higher quintiles has declined. As a result, the ratio of consumption expenditure relative to household income, the average consumption propensity, has declined rapidly since the mid-2000s. In other words, the deterioration of income distribution has had a negative impact on consumption.

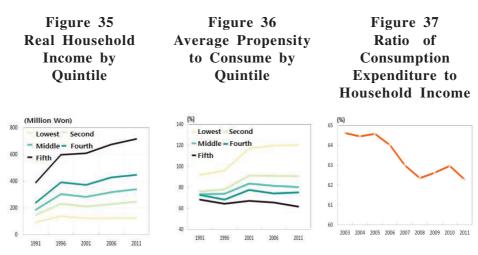
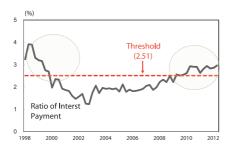
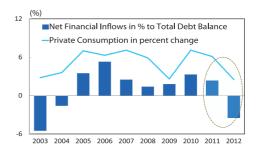


Figure 38
Ratio of Interest Payment and
Threshold of Consumption
Shrinkage



Source: Bank of Korea.

Figure 39
Net Funding Inflow Ratio¹⁾And
Growth rate of Private
Consumption



Note: 1) Growth rate of household debt(net increase in debt/debt balance) minus household lending rate (net payment/debt balance).

Source: Bank of Korea.

The overhang of household debt built up so far has also acted to shrink household consumption owing to the heightened debt servicing burden. According to Parkat et al. (2011), the burden of households' interest payments alone intensified beyond the point at which it acted to reduce consumption back in 2009. As shown in Figure 39, the funds available for consumption have fallen with households' payments of interest alone exceeding the net increase in debt in 2012.

In the meantime, owing to the combined effects of the industrial and labour market structures, the income generated from economic activities has accrued disproportionately to the corporate sector. As seen in Figure 40, the ratio of household to corporate income has declined continuously, and has shown a different pattern from other OECD countries. Increased corporate incomes have reduced the debt ratios of companies, but with little increase

in their investment, their retention of income has increased. In conclusion, there has been a weakening of the virtuous cycle whereby increases in income of households and companies lead to rises in demand, which in turn expands production.

Figure 40
Ratio of Household Income to
Corporate Income



Note: 1) the average of 25 OECD countries(excluding Korea).

Source: Bank of Korea.

Figure 41 Debt Ratio and Retained Capital¹⁾of Corporations



Note: 1) Equity capital is based on manufacturing business.
Source: Bank of Korea.

4.3 Projection of Declines in Potential Growth Rates and of Deterioration in Fiscal Soundness

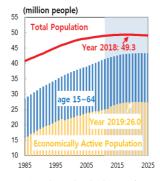
The OECD (May 2012) projects the potential growth rates in major OECD countries to hold steady at around the 1-2% level until 2030 overall without major changes. In contrast, the potential growth rate in Korea is expected to decline from 3.4% (2012~2017) to 2.4% (2018~2030). Academic institutions in Korea expect it to then fall further to about 2%. The decline in the potential growth rate is mainly attributable to a sharp decline in the contribution of labour input due to slowing growth of the economically-active population owing to aging, and to a slowdown in the growth of the capital stock resulting from the transit of the economy to a mature stage.

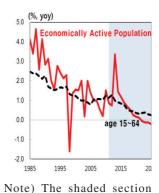
Table 7
Major OECD
Countries' Potential
Growth Rate
Forecasts

Figure 42 Population Projection

Figure 43 Productive Population Forecasts

	2012 ~17	2018 ~30
OECD	2.0	2.2
Korea	3.4	2.4
US	2.1	2.4
UK	1.6	2.2
France	1.8	2.1
Germany	1.6	1.2
Japan	0.9	1.4





Source: OECD Economic Outlook. (2012.5).

Note) The shaded section represents the period for the forecasts.

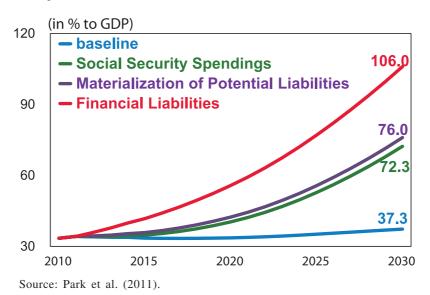
represents the period for the forecasts.

Source: Statistics Korea. Se

Source: Statistics Korea.

There is growing likelihood of financial soundness worsening in the medium- and long-term as the population ages rapidly and the potential growth rate declines significantly. According to Park et al. (2011), the ratio of Korean government debt to GDP is very favourable, at about 33%, but is forecast to approach 100% by around 2030. If only a sharp rise in social security expenditures, such as for public pensions and health insurance, resulting from population ageing, is taken into account, the ratio can be expected to reach 70% in 2030. But if the materialisation of potential liabilities and growth in financial liabilities (related with the Foreign Exchange Stabilization Fund, the National Housing Fund, etc.) are also counted in, the debt ratio is forecast to exceed 100%. This situation demands substantial attention, given that according to Reinhart and Rogoff (2010) the growth rate falls by 1% point once the ratio of government debt to GDP exceeds 90%, and it then takes an average of 23 years for it to fall to 90% or lower.

Figure 44
Projection for Korean Government Debt-to-GDP Ratio



5. Overall Evaluation and Economic Policy Directions

5.1 Overall Evaluation

The Korean government's adoption of an export-driven growth strategy was inevitable due to its original sin as an emerging market country that needed to expand its net savings, after learning from its experience of currency crisis in the process of changes in its financial environment including the rise in global liquidity and capital liberalization. This growth strategy has had positive effects ⁻ Korea was hit less hard by the recent global financial crisis, as heightened productivity in tradable goods and a sustained current account surplus had become entrenched. The strategy is also revealing its limitations, however, causing household debt to soar, worsening the income distribution structure and weakening the virtuous cycle from growth to employment and income.

Due to growth being led by the manufacturing industry, centering around the electricity and electronic sectors, the Korean economy is not enjoying strong job creation effects, and corporate surpluses are concentrated in export-oriented and large corporations that are not enthusiastic about domestic investment. The labour markets of the tradable and non-tradable goods sectors are cut off from each other, and the channels through which profits in the export sector lead to growth in income including wages in the domestic sector have weakened owing to idle manpower, to the use of quasi-regular workers and to unfair transactions. Workers weeded out in the process of restructuring of competitively disadvantaged sectors are launching small-scale businesses with limited market demand, and large corporations are also expanding their businesses to these areas, leading to the existence of many financially vulnerable persons including the self-employed and the low-income groups. Household debt has moreover soared, owing to the sustained trend of global financial easing, to the irrepressible real estate prices and to the preference for lending to households by financial institutions. Also, financially vulnerable groups have become highly likely to suffer bankruptcies, due to the sluggishness of domestic demand-oriented industries and to the limited flows of income to the household sector.

Meanwhile, households' accumulation of debt and declining incomes and worsening inequality in income distribution have been undermining the vitality of consumption and weakening the economy's resilience. In this situation, where the possibility is high of the global economic slump persisting for a considerable period of time, household debt is highly likely to trigger a crisis in the event of any huge shock such as a plunge in real estate prices or a decline in income. In addition, in light of the forecasts of a decline in the potential growth rate following future demographic changes, and of a rise in the government debt ratio, it is important to resolve the structural problems of the Korean economy as soon as possible so as to change the economic fundamentals to those under which sustainable growth can be maintained.

5.2 Future Directions for Economic Policy Implementation

It is desirable for the Korean economy to shift its growth strategy from an export-driven one to another one that seeks balanced development between exports and domestic demand, insofar as this does not undermine external asset accumulation, foreign exchange soundness and the global financial safety nets. The economy should adopt a strategy to reduce household debt gradually, since the corporate and government sectors remain sound. Also, the burden arising from the process of debt rescheduling for the financially vulnerable groups should be shared among households, corporations (including financial institutions) and the government in order to minimise the shock. Considering the situation of a large idle labour force, economic policy should focus on job creation rather than on production, and in the medium- to long-

term concentrate on expanding the potential growth of the economy by improving total factor productivity.

More specifically, it is appropriate to determine the required size of the current account surplus given the desire for further accumulation of external assets, foreign exchange soundness, and the progress in constructing a global financial safety net. The strategy would promote and seek development that is balanced between exports and domestic demand. It may be necessary to leave the exchange rate to be determined by the market, compatible with improved productivity, while keeping in mind the establishment of a global financial safety net and the degree of the private sector's foreign currency asset accumulation.

The Korean economy needs to narrow the productivity gap between its tradable and non-tradable goods sectors by strengthening the linkages between them, and to strengthen policy efforts to establish a foundation for long-term growth. It is important to expand the range of core export items to include those of industries having great capacity to create jobs, while working on improvement of the institutional framework for investment in human capital and the discovery of high-income, high-technology job types so as to enhance the productivity of the non-tradable goods industry. In order to increase potential growth, it would be advantageous to seek long-term industrial competitiveness not by increasing the intensive margins of the existing export goods but by securing their extensive margins through improvement of the levels of technology employed in their production and the development of new products.

To gradually relieve the adverse side-effects of labour market segmentation, it is necessary to develop measures to make use of the idle workers generated by demographic change and make efforts for the creation of quality jobs and reduction in the wage gap between regular and non-regular workers. Social expenditures for the poor and the aged must be raised, to keep income inequality from worsening, and efforts need to be made in the medium- and long-term to ensure that educational opportunities are given equally to all income groups. Meanwhile, creation of a fair trade environment in the relationships between large corporations and SMEs, between SSMs and smaller stores, and between contractors and subcontractors is also needed, so as to achieve a system in which large corporations cannot monopolise the markets and the fruits of growth are shared by all.

Rather than a dramatic debt reduction, to minimize shocks to the economy it would be better to develop measures to gradually resolve the debt problems by improving wages and the savings ratio. For those in most need, including the low-income groups in particular, injection of government funds or central bank lending can be made available from the standpoint of financial inclusion. Since a rise in real estate prices may act as a factor increasing household debt, and their fall act as a factor heightening systemic risks for financial institutions and increasing government debt (including worsening of the Korea Land & Housing Corporation balance), there is a need to promote real estate price stability.

It is important to avoid keeping interest rates at a low level for too long, so as reverse the strong risk appetite among households which has facilitated the accumulation of debt. However, independency of interest rate policy depends upon how much an export-driven strategy has been modified, upon whether regulatory instruments concerned with foreign exchange soundness have been secured, and upon how high the country's foreign exchange risk premium is. The advanced countries' aggressive implementation of quantitative easing policies would also act as a constraining factor. In this regard, additional policy instruments need to be secured, to ease foreign exchange volatility and ensure monetary policy independence. Appropriate foreign exchange regulations can in addition be a way of dealing with the economic trilemma resulting from maintenance of a floating exchange rate system.

Despite international efforts including the expansion of IMF resources, the strengthening of RFAs (Regional Financing Arrangements), and the establishment of currency swaps between central banks since the global crisis, there is as yet no global safety net to replace official foreign reserves. Therefore, continuous efforts should be made to expand such safety nets. The reason is that the holding of sufficient official foreign reserves reduces the possibility of crisis occurrence and is effective in easing the impact of global shocks as seen during the recent global financial crisis. Efforts should in addition be made to reduce systemic risks, through for instance the reduction of currency mismatches in emerging market countries and the provision of greater funding opportunities during times of crisis through the pursuit of regional bond market development.

Measures in response to the aging of and decline in population should be prepared from a medium- to long-term perspective, and a road map for maintaining fiscal soundness should be developed and policy should be implemented based upon a firm will to achieve this.

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