National Assembly Budget Office

Economic Outlook and Fiscal Analysis: 2013 and Medium Term

2013. 2

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Economic Outlook and Fiscal Analysis: 2013 and Medium Term

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English Editor | Sangjun Park

Economic Outlook and Fiscal Analysis: 2013 and Medium Term is published to evaluate the 「2013 Budget Proposal」 and to support the National Assembly's review of the government budget proposal.

Contact: Economic Policy Analysis Team, 82-2-788-3776 philmania@nabo.go.kr

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Foreword

The European financial crisis since 2010 does not seem to be resolved in the near future, and the delayed economic recovery in the United States does not show bright prospect either. Moreover, with the slower growth of Chinese economy than before, the global economy has gradually stagnated. Even though Korea, due to its comparatively sound national finance, has overcome the global financial crisis, the country should now cope with uncertainty that exists around the global economy, stagnant domestic demand, shrinking investment and household debts which are expected to withhold dynamic aspects of the economy.

National Assembly Budget Office forecasts Korea's economic growth rate of 2012 to be 2.5% and 2013's to be 3.5% which is higher than the previous year's but still presents low growth. In addition, by NABO's medium term expectation, Korea's growth rate is expected to be 3.5% that does not fully reach the estimated potential growth rate of 3.7%. Under such economic circumstances, Korea should also make preparations for the challenges its aging population brings about, such as decline in tax revenue, stagnated economic growth and the required expansion in welfare expenditures and especially in pension funds. To deal with these challenges, while the government's fiscal soundness should be retained, fiscal management should be taken advantage of. The administration has submitted 2013 Budget Proposal, 2012-2016 National Fiscal Management Plan and Tax Revision Bill for changes of tax structure to National Assembly with the revitalization of the economy and stability of public well-being as its goals. NABO, in order to aid National Assembly in its review of the plans and proposals submitted by the administration, publishes the Economic outlook and Fiscal Analysis: 2013 and Medium-Term series.

Economic Outlook and Fiscal Analysis: 2013 and Medium Term Series

1. *Economic Outlook: 2013 and Medium Term*
2. *Analysis on Tax Revision Bill 2012*
3. *Analysis on 2013 Tax Revenue Budget Proposal and Forecast of Medium Term Total Tax Revenue*
4. *Analysis on 2013 and Medium Term Fiscal Management*
5. *Analysis on 2013 Tax Expenditure Budget*

Comprehensive Review

This series consists of five books on different topics and one that succinctly provides the overview of those topics, which are designed to assist Strategy and Finance Committee and other committees, such as Special Committee on Budget and Accounts in their work.

In order to facilitate better understanding on 2013 budget proposal issues, each book is separated in two sections: 2013 and medium term(2012-2016). Integrating outlook on total revenue and analysis on issues of Tax Revenue Budget Proposal is intended to systematically support revenue budget deliberation in the National Assembly.

I sincerely hope that you find this report helpful in furthering your understanding of Korea's economy and its fiscal management.

February 2013

Chief of the National Assembly Budget Office, Republic of Korea

Joo, Young-Jin

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Executive Summary

Executive Summary

2013 and Medium Term Economic Outlook

The European financial crisis that has caused serious economic troubles since 2010 is forecast to continue on its magnitude. Chinese economy that has provided crucial momentum to the global economic growth, has slowed down its growth pace. Moreover, given that the United States has still struggles with its recession, global economy is expected to start its transition into a slow-growth path. In view of given conditions, last October, IMF has lowered its expectation for the next year's global economy growth rate to 3.6% which is 0.3%p lower than that of last July's. Uncertainty in export conditions is projected to continue due to the slower growth of the world economy and the recovery in domestic demand is also viewed to be difficult to achieve anytime soon owing to the problems from household debts and worsening employment.

NABO expects the growth rate of Korean economy to be 3.5% in 2013 which is 1.0%p higher than 2.5% in 2012. This figure is 0.5%p lower than the estimated one included in 2012 Budget Proposal submitted to National Assembly by the administration which is about 4%. The administration also projects that the growth rate of consumer price is about 3.0% which is 0.5%p higher than NABO's estimate of 2.5%. Therefore, there will be a gap of 1.0%p between the estimates of nominal growth rate of economy. The NABO's estimate is conducted under the assumption that the European financial crisis does not pull the trigger to the global recession. In case of Spain and Italy asking for bailouts and Greece leaving the Euro-zone, Korea's economy cannot help but stay in its recession path for the long term contrary to the initial forecast.

In medium term (2012-2016), Korea's economy is projected to grow at an annual average of 3.5% which does not fully reach its estimated potential growth rate at 3.7%. Nevertheless, as government and household debt problems of advanced countries are better controlled and instability in international financial markets gets better, which will consequently help export, upward trend in the economy is expected from 2013 to 2014.

Appraisal on *2013 Budget Proposal* and Medium Term Fiscal Management Plan

An appropriate fiscal policy is crucial in achieving stable economic growth because Korea is a small open economy and vulnerable to external shocks. As learned from the financial crisis in southern Europe, failure in maintaining fiscal soundness could cause a serious crisis for the economy. In practice, government's measures to overcome the last global financial crisis were based on its sound fiscal management. Moreover, considering that the growth rate of the economy will slow down, tax base will shrink and that welfare expenditure will soar

Table 1 _ 2012-2016 Economic Outlook

(unit: %, $100M)

	2012	2013	2014	2015	2016
GDP	2.5	3.5	4.3	3.9	3.4
Current Account	274.6	219.3	185.8	245.7	256.7
GDP Deflator	1.9	2.2	2.6	2.5	2.4
Nominal GDP	4.4	5.8	7.0	6.5	5.8

Source: National Assembly Budget Office

due to the low fertility and aging population problems, fiscal soundness should be secured. On the other hand, because Korean economy is at the risk of sliding back into recession this year and next, appropriate fiscal management in response to the business cycle shall be taken as well.

2013 Budget Proposal and 2012-2016 National Fiscal Management Plan submitted by the administration declare that it is important to maintain fiscal balance for securing future fiscal capacity and for raising international credit standing, and fiscal policies should decisively achieve economic revitalization and stability of public well-being. Total expenditure for 2013 would increase by 5.3% from this year's to reach 342.5 trillion won and total revenue would increase by 8.6%, reaching 373.1 trillion won. Consequently the managed fiscal deficit is projected to be 4.8 trillion won and government debt is projected to be 464.8 trillion won which is increased by 18.9 trillion won from 445.9 trillion won this year[1]. Total revenue from 2012 to 2016 is projected to grow at an annual average of 6.3% and total expenditure for the same period is projected to grow at an annual average of 4.6% which would turn the managed fiscal balance into surplus in 2014 and the managed fiscal surplus is envisioned to be 0.5% of the GDP in 2016. Government debt, in turn, would reach below 30% of the GDP in 2015. Although it is desirable to maintain fiscal soundness by keeping the fiscal stance balanced and in the black, thorough considerations are required on the administration's budget proposal and medium term fiscal plan regarding validity of total revenue forecast and the direction of fiscal stance next year.

First, the estimate of 2013 total revenue seems quite optimistic and this is because the administration has an optimistic economic outlook next year and has overestimated uncertain parts of tax revenue. If the economic climate does not improve as forecast by the administration and any delays on planned sales of government-holding-shares, there would be a financial setback. NABO, with the assumption of 5.8% nominal economic growth next year, has anticipated 214 trillion won in national tax revenue which is 2.3 trillion won less than the administration's. The non-tax revenue next year is also estimated to be 145.5 trillion won which is 11.2 trillion won less than the administration's. This is because

Table 2 _ Total Revenue, Total Expenditures, Fiscal Balance, Government Debt Outlook

(unit: 1 tril.won)

		2012	2013	2014	2015	2016
Total Revenue	NABO's(A)	337.8	359.5	377.1	396.6	411.0
	the Administration's(B)	343.5	372.6	396.1	415.2	439.1
	Difference(A-B)	-5.8	-13.1	-19.0	-18.6	-28.1
Total Expenditure	NABO's(A)	325.4	342.6	360.5	377.5	394.2
	the Administration's(B)	325.4	342.0	357.5	373.1	389.7
	Difference(A-B)	-	0.6	3.0	4.4	4.5
Managed Fiscal Balance	NABO's(A)	-19.8	-18.5	-20.7	-19.0	-19.3
	the Administration's(B)	-14.3	-4.7	1.0	2.2	8.3
	Difference(A-B)	-5.5	-13.8	-21.7	-21.2	-27.6
Government Debt	NABO's(A)	450.9	478.6	517.1	554.0	591.8
	the Administration's(B)	445.9	464.6	470.6	481.2	487.5
	Difference(A-B)	5.0	14.0	46.5	72.8	104.3

Note: The Administration's in 2012 and 2013 are from the Budget.

1 Finally, National Assembly set 2013 Budget : Total expenditure 342.0, Total revenue 372.6, Managed fiscal deficit -4.7, Goverment Debt 464.6(trillion won).

NABO has a more conservative view on realizability of the government holding shares. NABO also anticipates total tax revenue increases by 5.0% on an annual average from 2012 to 2016 and this figure is 1.3%p lower than 6.3% that the administration estimated in 2012-2016 National Fiscal Management Plan. This is because NABO has a lower estimate of nominal economic growth and did not include profits from sales of government holding share in the estimation of total tax revenue.

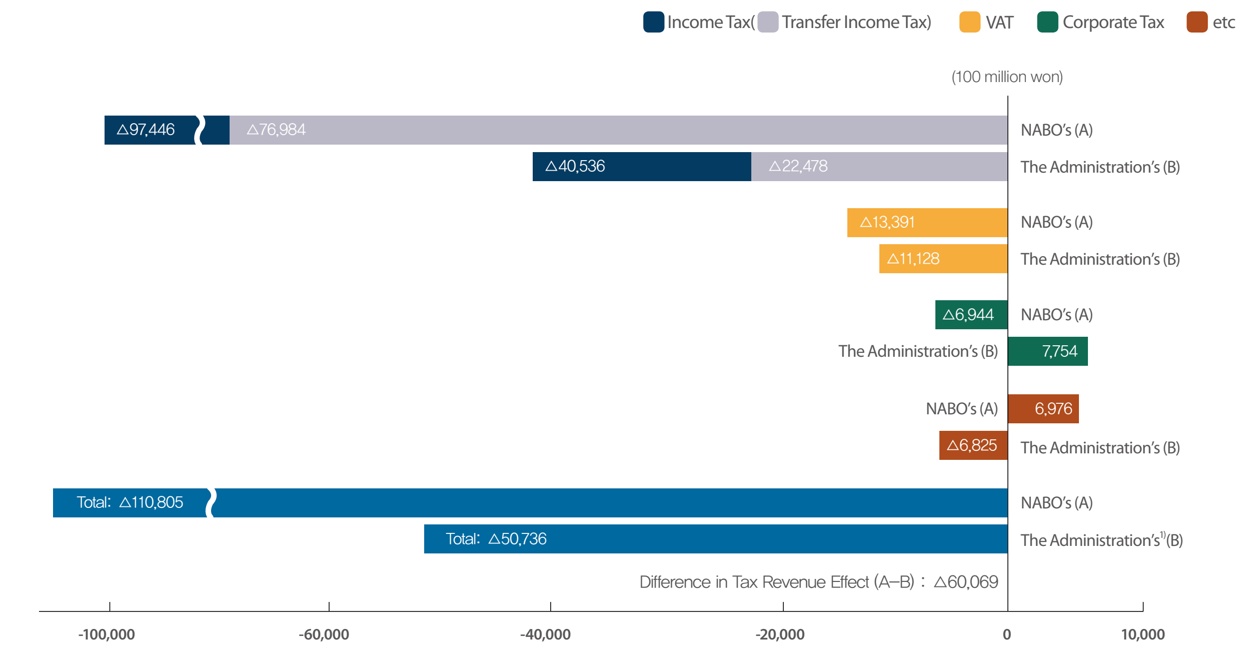
Second, NABO emphasizes a need of more delicate fiscal management in 2013. 2013 Budget Proposal is viewed retrenched by Fiscal Impulse Index (FI index). The FI value of 2013 Budget Proposal comes out to be -0.81 which is a little closer to 0 but it still comes negative. In addition, the GDP gap of 2013 is forecast to be -2.8. This is considered better in comparison with -3.3 in 2009 with the global financial crisis and is a similar level with -2.7 in 1999 with Korean currency crisis. The 2012 budget is considered quite austere as the economic condition was worsening. Ease on ansterity stance in finance is recommended within the range that would not damage budget soundness in 2013 because the economic condition is not viewed to improve easily. Moreover, because fiscal sustainability is considered secured in the analysis on 2012-2016 National Fiscal Management Plan, fiscal flexibility needs to be improved next year.

Major Issues on 2012 Tax Revision Bill

The role of National Assembly inspection of tax revision bills is very important in the national fiscal management because fiscal expenditure needs to be analyzed with respect to its items, extent and the credit side revenue. This amount of revenue is determined by economic conditions and tax laws. Although 2012 Tax Revision Bill has been evaluated, it is intended to provide enough responses to worsening economic climates generally. It is necessary to point out its lack of specific direction in taxation reform for medium term, plausible plans to achieve policy goal and comprehensive effects of the anticipated reform.

First, its tax system part does not provide specific goals, directions or consecutive plans by year for the medium term. The revenue projection does not match its expenditure planning part that does provide such, even though fiscal management focused on maintaining fiscal soundness is heavily required. For example, short-term

Figure 1 _ Comparison of NABO's and the Administration's Tax Revenue Effects Estimates Pursuant to the Tax Revision Bill (2013-2017)



Note: 1) results from totaling the tax expenditure estimates submitted by the administration and the omitted expenditure estimates to be supplemented in press releases reforming actions such as the partial cut-down on brackets of aggregate taxation on financial income and expanding the scope of tax on stock-transfer profit are suggested in spite of the medium term reforming plans that reflect changes in the market environment. Conditions on tax system should be systematically presented for the ultimate goal, in an attempt to reform the financial tax system. Therefore, it is suggested that the administration develops detailed plans for the reform of tax system by year and attach the plans to its National Fiscal Management Plan.

Second, in view of recent economic conditions, it would be timely to set goals regarding job creation, growth capacity and stabilization of the public life but specific steps to the goals are still lacking. That is, the increase in the additional deduction rate of Job Creation Tax Credit was intended to provide corporations with an incentive for additional employment. But the method applied here does not make enough incentive as intended because it is with a deduction of 10 million won per person employed in addition to recognizing basic deduction even when employment is actually decreasing.

Third, this fragmentary tax reform that simply lists each revision could cause a lack of comprehensive effects of each revision. Fundamentally speaking, a more comprehensive method should be presented. For instance, levying scope of transfer income tax on stock transfer profit could be broadened by turning transaction tax into gift tax as a new tax on derivative transactions.

Fourth, some sunset clauses are simply extended as happened in other years. For example, the income tax deduction and the tax-free interest income on long-term savings for house-purchase were abolished as their sunset periods were over. However, other tax free or deduction clauses that offer equivalent benefits have been created under different names such as income tax deduction on long-term fund and this is hardly seen a reform.

NABO estimates that, by the baseline method, tax revenue would decrease by 11.1 trillion won for the next five years once 2012 Tax Revision Bill kicks in. This is because the extension and the creation of sunset clauses and the tax cut on gift tax cancel out the effect of the tightened tax on financial income and the raised minimum rate of corporate tax combined. The administration estimates tax revenue would decrease by 5.1 trillion won for the same period but its estimate displays over and under-calculations, inconsistencies between the Tax Expenditure Estimates and the Tax Expenditure Budget Report. Therefore the administration needs to improve accuracy of its estimation and to present related sources.

Tasks in Future Economic and Fiscal Management

Appropriate preparations for the long-lasting European financial crisis, slow economic growths in the U.S. and China are necessary as the world economic conditions even worse than the global financial crisis did. The quality of exporting goods should be improved further to push up shares in the advanced countries and policies that can aid search for new markets in developing countries are strongly suggested. Maintaining the current account surplus, downsizing short-term foreign loans and enlarging foreign exchange reserves are required in order to prevent the domestic financial market from fluctuating with fluctuations of international markets. Monetary policy should be implemented considering inflation, household debts and potential impacts from the European financial crisis that might cause a delay on economic recovery in the domestic market. Since the economic growth rate has been below its potential growth rate and the consumer price has been slowed in its uptrend, the current monetary policy shall be maintained for the time being. To solve the problematic household debt which has been one of the main reasons for the economic contraction, demand of housing loans should be kept down and job creation should take priority so that debtors who hold heavy loans are provided stable income sources that can help them repay debts.

Future fiscal management should consider not only fiscal soundness but also minimizing economic shocks that come after business cyclical fluctuations. Fiscal soundness maintained by temporary non-tax revenues such as disposal of asset, is not advisable in view of net wealth. An observation for tax revenue based on an optimistic economic forecast could generate greater uncertainty in the medium term fiscal management. Therefore, the administration should have a more realistic revenue evaluation and a specific direction for the medium term tax reform, included in the National Fiscal Management Plan.

Regarding expenditures, it is suggested to develop a system that can supervise mandatory expenditures through following steps: 1) budget compilation, 2) budget deliberation, 3) budget execution, in order to avoid inflexibility that mandatory expenditures could cause in medium and long term fiscal management. Also, supervision on discretionary expenditures could be tightened by enhancing effectiveness of the supervision system on total project costs. Moreover, an evaluation system of local fiscal impacts could be introduced to review the movement of the conversion rate of local consumption tax and to adjust the rate of local education financial grant at a proper level, all in order to enhance local fiscal soundness.

In operation of social security expenses, institutional improvements should be pursued with enhancement of effectiveness and fiscal soundness of both pension and social insurance funds and policy effectiveness in job creation. With aforementioned actions, enhancement of fiscal soundness and efficiency in fiscal expenditures should be sought. Lastly, to enhance effectiveness of medium term fiscal management plan, it is required to keep on adjusting National Fiscal Management's planning period and improving fiscal policies, for example, allowing the submission in the first half.

Table 3 _ Comparison of NABO's Fiscal Prejection and the Administration's Budget Proposal

	NABO (A)	The Aministration' s (B)	Difference (A–B)	Remarks
Economic Growth Rate (%, %p)	3.5	4.0	-0.5	Slumps anticipated in export and domestic demand due to continuing European financial crisis and slowing Chinese economic growth
GDP Deflator	2.2	2.8	-0.6	Achieving price stabilization due to slow growth (weak aggregate demand) and increase in the value of Won.
Nominal Growth Rate	5.8	6.9	-1.1	Weak increasing trends in both real economic growth rate and GDP deflator
Total Revenue (exclusive of sales of government shares) (tril. won)	359.5 (359.5)	373.1 (365.0)	-13.6 (-5.5)	National Tax Revenue △2.3 trillion won (nominal growth rate 1.1%p↓ Non Tax Revenue △11 trillion won (exclusive of 8.1 trillion won of sales of government holding shares and etc.)
National Tax Revenue	214.0	216.4	-2.3	Difference in real/nominal growth rates (NABO's 3.5/5.8 vs. the administration's 4.0/6.9) *1%p of difference in nominal
Non-Tax Revenue	145.5	156.7	-11.2	Exclusive of sales of government holding shares. Adjusting excessively overestimated fines and etc. in the Tax Revenue Budget Proposal
Total Expenditure (tril. won)	342.6	342.5	0.1	0.1 trillion won difference in mandatory expenditure
Mandatory Expenditure	160.7	160.6	0.1	1 trillion won greater interest expenditure, 0.3 trillion won less welfare, 0.5 trillion won less financial grants to local government. In NABO's prediction in comparison to the administration's budget proposal
Discretionary Expenditure	181.9	181.9	-	Based on figures from 2013 Budget Proposal
The Consolidated Fiscal Balance (tril. won)	16.9	30.6	-13.7	13.6 trillion won of difference in total revenue + 0.1 trillion won of difference in total expenditure
The Managed Fiscal Balance (tril. won)	-18.5	-4.8	-13.7	Identical difference as in the consolidated fiscal balance due to the identical prediction on balance of social security featuring funds
Government Debts (tril. won)	478.6	464.8	13.8	Difference in deficit debt (15.3 trillion won) and capital debt (-1.7 trillion won) Capital debt mainly due to the difference in the managed fiscal balance
(percentage of GDP)	(35.0)	(33.2)	(1.8)	Differences in the predictions of government debt and GDP (the administration's: 1,400 trillion won, NABO's: 1,367 trillion won)

2013 Economic Outlook and Fiscal Analysis

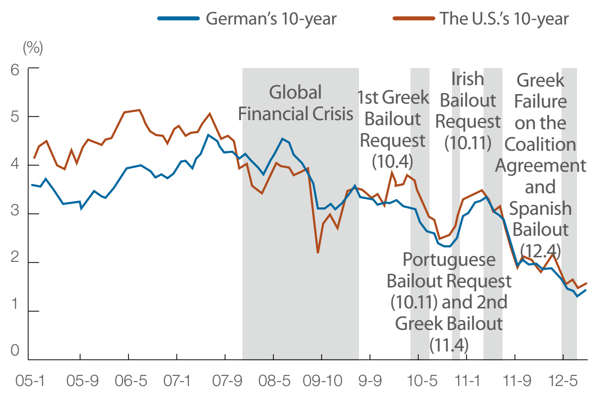
Macroeconomic Outlook

Ⅰ. Forecast of 2013 Economic Growth Rate

The Korean economy is expected to grow 3.5% in 2013 which is still a slow-growth but the value is above 1.0%p from 2012. This increase is due to stabilization of international financial markets caused by expansions in money supply of advanced countries and the increasing volume of global trade.

The Korean economy is expected to grow 3.5% in 2013. This is mainly owing to; first, shocks from the financial crisis in the southern European countries have been gradually eased. The global financial markets have experienced instabilities three times from the southern European financial crisis. That is, the first shock comes from the announcement of correcting Greek government budget deficit from 4% to 16% of its GDP (Sep. 2009) until the first Greek bailout request (Apr. 2010), the second one comes from Irish (Nov. 2010) and Portuguese (Apr. 2011) bailout requests until the second Greek bailout request (Jun. 2011) and the third one from the failure in forming a coalition government in Greece (May. 2012) until Spanish bailout request (Jun. 2012). Whenever the shocks came, international financial markets fluctuated having prices of risky assets dropped such as stocks while prices of relatively less risky assets, to put, bonds raised. The extents of each fluctuation have varied but the recorded fluctuation was relatively small for the third shock. The European financial crises have gradually had smaller impacts on international financial markets. This is because the European Central Bank and the European Commission have started to respond much quickly with stronger policy solutions. It, nonetheless, is likely that there are no more financial crises from the southern European countries. Negative impacts which another financial crisis might cause on international financial markets and the global economy are expected to be comparatively smaller than those of the first and second. Once, international financial markets recover its usual stability, Korean domestic demands and its exports will gradually pick up.

Figure 1 _ Trend of International Interest Rates after theSouthern European Financial Crisis



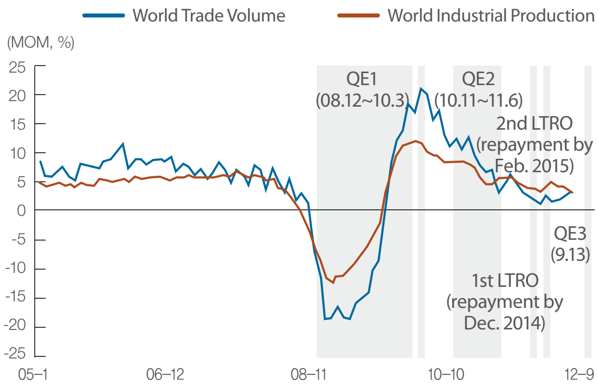
Note: the shaded areas refer to the periods that global financial crisis and the European financial crisis came impactful.
Source: Bloomberg

Second, advanced economies are also anticipated to recover progressively since their massive expansion policies on money supply have come into effect and the expansionary policies have helped stabilize international financial markets. The Federal Open Market Committee has recently announced its third expansionary policy (Sep. 12th). That is, the Fed undertakes $40 billion purchases of Mortgage Backed Security monthly until the labor market shows significant improvement. Moreover, it eventually aims to lower the treasury bond yield and mortgage rates by reinvesting government and matured public sector bonds. The European Central Bank also promised to make an unlimited purchase of the government bonds of countries, which have suffered from their problematic budget balances, on the condition of adopting austerity budget. The Bank of Japan has also announced that it would expand its asset purchase program to 80 trillion Yen from the current 70 trillion Yen (Sep. 19th). These expansionary policies are designed to boost slow economies. The FOMC has accordingly raised its prediction of the 2013 U.S. economic growth rate to 2.5%-3.0% from its previous June's 2.2%-2.8%. Improvement in advanced economies is expected to cause the condition of Korea's export to improve as well.

Third, policies to lower bank-rate and to increase liquidity would boost the domestic economy. Since there is a gap between interest rates in Korea and other advanced countries, domestic stock prices are likely to fluctuate by those short-term round-trips of funds between financial markets. The monetary authority is anticipated to further lower its bank rate in order to stabilize the market's volatility and to support the domestic economy.

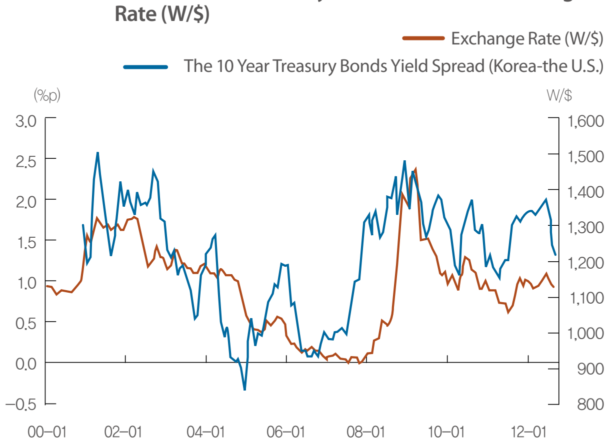
Fourth, Budget expansion would stimulate the domestic economy. The growth rate of government budget expenditure for 2013 is 5.3% which is equivalent to the rate in 2012 but there is 3.5 trillion won of additional disposable budget allocated for flexible reactions to cyclical fluctuations, stabilizing public well-being (0.7 trillion won) and support for local governments (1.3 trillion won). Including these, the actual government expenditure growth rate goes up to 7.3% which is 2%p higher than the nominal expenditure growth rate and this increase in government expenditure would stimulate the domestic economy. The Administration has additionally announced its first (8.5 trillion won, Jun. 2012) and second (5.9 trillion won, Sep. 2012) bankroll plans

Figure 2 _ World Trade Volume and World Industrial Production



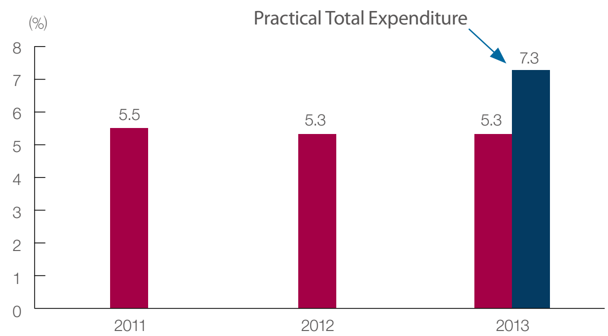
Note: 1. QE1 (08.12~10.3), QE2 (10.11~11.6), SMP (10.5), 1st LTRO (11.12), 2nd LTRO (12.2)
2. The shaded areas refer to the periods that QEs are in effect
Source: the CPB Netherlands Bureau for Economic Policy Analysis

Figure 3 _ Gap between Korean and the U.S. Market Interest Rates (10 Year Treasury Bonds Yield) and Exchange Rate (W/$)



Source: Bank of Korea, Bloomberg

Figure 4 _ Government's Total Expenditure Plan



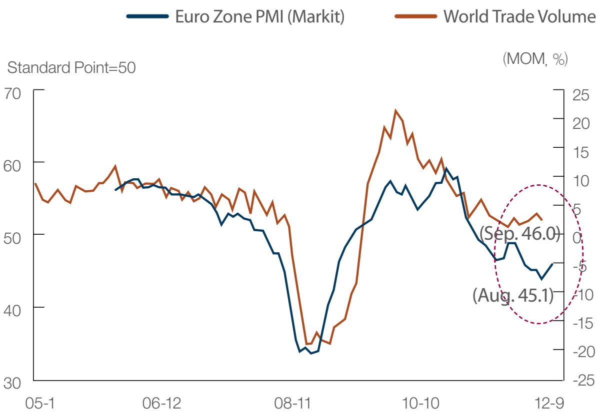
Note: Practical Total Expenditure: the growth rate of 2013 total expenditure in case of including the interest gap subsidization scheme
Source: Ministry of Strategy and Finance, Korea

to revitalize the economy during the second half this year. Therefore, after the fourth quarter of 2012, consumption (due to the temporary tax cut on specific consumption tax on automobiles and another tax cut on the earned incomes) and investment (broadening investment on SOC and public corporations, increasing support for small and venture corporations and revitalizing plans for real estate market and rural economies) sectors would decelerate the downturn to some extent.

Fifth, the world trade volume which highly correlates with Korea's export has recently stopped its downturn and started its weak rebound. The increase of world trade volume hit 1.4% in the first quarter of 2012, 3.7% in June and 2.7% in July. Further, owing to the ECB's announcement that the ECB will continue the quantitative easing, Europe's PMI (Purchasing Managers Index) data and Germany's ZEW index that forecasts the economic climate of the following 6 months started to rally and raised expectations that Korea's export would rebound in 2013 consequently.

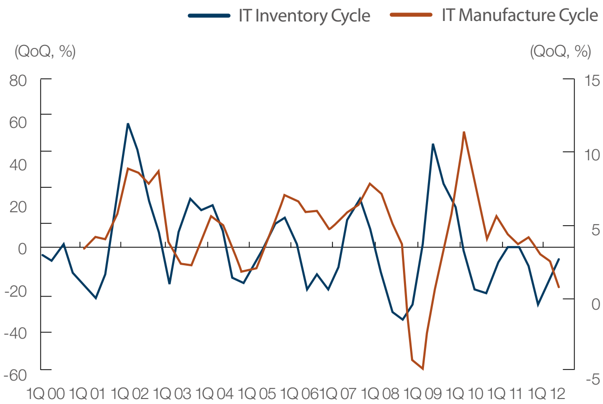
Sixth, IT sector that takes a huge part in Korean economy has, as well, stopped its downturn and appeared to rebound. The inventory cycle in the IT sector is a leading and pro-cyclical economic indicator to the IT manufacturing cycle and recently the inventory cycle of the IT sector is on the rebound which indicates IT manufacture would hit its trough and rebound soon.

Figure 6 _ Euro Zone PMI and World Trade Volume



Source: the CPB Netherlands Bureau for Economic Policy Analysis, Markit

Figure 7 _ Inventory Cycle and Manufacture Cycle in IT Sector

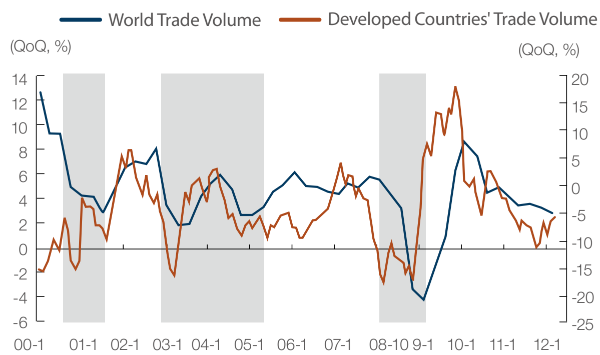


Source: Bank of Korea, Statistic Korea

Figure 5 _ World Trade Volume and Korea's Export Volume

Source: Bank of Korea, the CPB Netherlands Bureau for Economic Policy Analysis

Figure 8 _ Growth Rate of World Trade Volume and Developed Countries' Volume



Note: 1. Terms of Trade = the unit cost of export / the unit cost of import
2. The shaded areas refer to recessions.

Source: Bank of Korea

Lastly, as oil prices have hit its peak and on its way down, the net barter terms of trade improves. Since the currency crisis, the net barter terms of trade index has moved pro-cyclically and prior to the movement of the economic growth rate. Therefore, this improvement in the net barter terms of trade indicates the domestic economy would soon start its upturn.

In conclusion, Korean economy would, in 2013, show a modest upturn, having the second half of 2012 at the cycle's bottom. But because this growth is weak yet, the actual growth rate (3.5%) would not reach its potential growth rate (3.7%).

Table 1 _ 2012-2016 Domestic Economy Outlook

	2010	2011	2012	2013	2014	2015	2016
GDP (%)	6.3	3.6	2.5	3.5	4.3	3.9	3.4
Private Consumption	4.4	2.3	1.4	2.5	3.5	3.2	2.6
Facilities Investment	25.7	3.7	0.3	4.5	6.7	5.0	3.2
Construction Investment	-1.4	-5.0	-0.6	0.2	1.3	1.5	2.0
Exports of Goods & Services	14.7	9.5	3.5	4.9	6.4	5.1	4.2
Imports of Goods & Services	17.3	6.5	1.9	3.5	5.8	4.3	3.3
Current Account (100 Million Dollar)	293.9	265.1	274.6	219.3	185.8	245.7	256.7
Exports of Goods (F.O.B., %)	28.3	19.0	-1.2	5.6	8.8	8.3	6.9
Imports of Goods (C.I.F., %)	31.6	23.3	-0.3	5.3	8.9	8.1	6.6
GDP Deflator (%)	3.6	1.7	1.9	2.2	2.6	2.5	2.4
CPI (%)	3.0	4.0	2.2	2.5	2.9	2.8	2.6
Unemployment Rate (%)	3.7	3.4	3.5	3.5	3.4	3.6	3.6
Exchange Rate (W/$)	1,156	1,108	1,132	1,096	1,059	1,101	1,143
Yield of KTB (3-year maturity)	3.7	3.6	3.1	3.3	3.5	3.4	3.2
Nominal GDP (%)	10.2	5.4	4.4	5.8	7.0	6.5	5.8

Note: 1. Employment rate in consideration of four-week searching period.
2. The exchange rate and the yield of government bond are annual average basis.
Source: National Assembly Budget Office, Bank of Korea, Statistics Korea

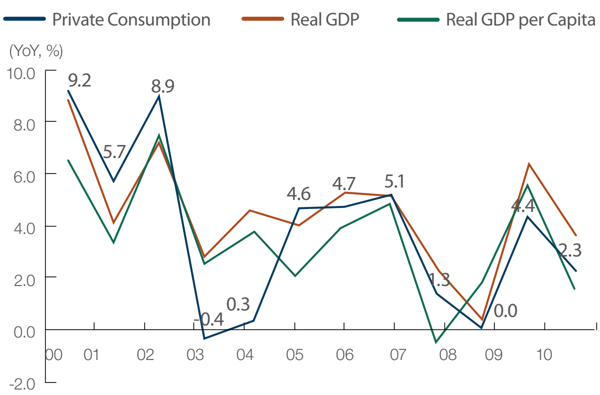
Ⅱ. Outlook by Sectors

Even though the overall domestic demand would slightly improve, obstacles to economic recovery, such as a contraction in real estate markets, a burden from household debt problems and employment insecurity in small private businesses are expected. The anticipated growth rate of export at 5.6% is considered not enough to stimulate the domestic economy. The CPI level would be stabilized at an increase of 2.5% and the market interest rate would be kept low in consideration of the weak domestic demand.

1. Private Consumption

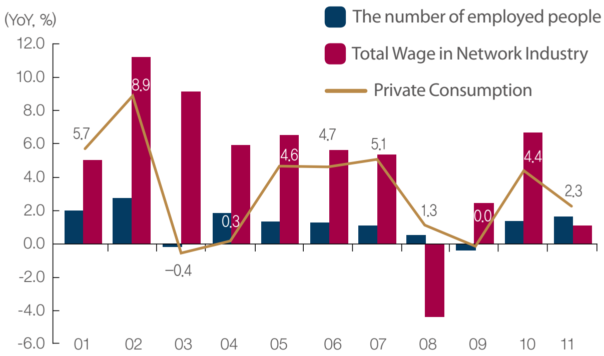
In 2013, private consumption would grow at a rate of 2.5%, slower than the whole economy growing at a rate of 3.5%. Private consumption grows slower than the whole economy does because uncertain economic conditions disrupt the labor market and those factors such as a burden from household debts, falling consumer confidence and a slump in construction businesses cause negative wealth effects all together. The total number of employed people would grow 1.4%, 0.3%p lower than 1.7% in 2012, while the unemployment rate stays at 3.5% (at 3.5% in 2012). This is because, first, external uncertainties such as economic slowdowns in advanced economies and instabilities in financial markets are unfavorable for Korea's export. Second, due to the stalled domestic demand, domestic corporations are currently not able to make a significant contribution to the increase in employment. The consumption growth is anticipated not to be strong in view of weak employment.

Figure 9 _ Trends in Private Consumption, Real GDP and Real GDP per Capita



Source: Bank of Korea

Figure 10 _ Trends in Private Consumption, Real Wage and the number of employed people



Source: Bank of Korea

Lastly, an ongoing increase in household debts and its repayment burden would drop the consumer confidence. Once household debts reach a certain amount that exceeds debtors' ability to make repayment, financial institutions might collapse and consumption drops in turn. Factors in both supply and demand caused household debts to substantially increase. In view of supply, low interest rates and abundant liquidity in the economy allowed financial institutions to provide a substantial amount of loans to the economy and those institutions also have issued credit cards indiscriminately. On demand side, the economic downturn, an income reduction due to job losses and a great deal of student loans have caused household debts to increase rapidly. When the real estate market slows down and domestic demand comes weak, burdens to pay off the loans would suppress the household consumption capacity because outstanding household loans are mostly for housing purposes currently.

2. Construction Investment

Construction investment in residential buildings would make a poor progress. First, the government has applied a comprehensive remedy[1] to the intensifying household indebtedness problem since 2011. The Administration is implementing policies to change the mortgage structure that households bear so that it reduces risks of household debts. According to the Bank of Korea, 46.1 % of total secured loans reach their maturities in 2012-2013. The Administration's master plan designed to induce the redemption of the principal in its restructuring the household mortgage will place more burdens on home owners.

Table 2 _ the amortization(period) of the mortgage loan by household(distribution ratio)

2011	2012	2013	2014	2015	2016	After 2017
19.3%	25.6%	20.5%	8.7%	5.8%	3.6%	16.4%

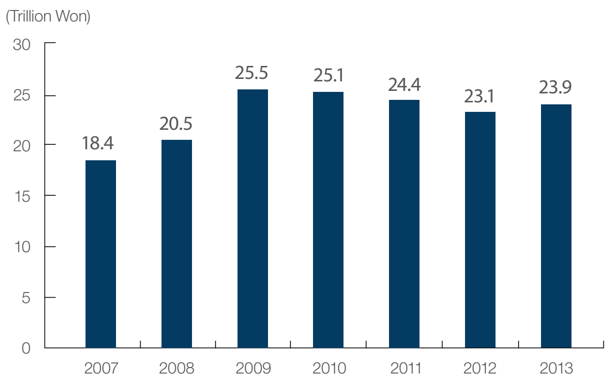
Source: Bank of Korea

Second, the low growth of Korean economy for two consecutive years in 2012 and 2013 weakens the purchasing power in housing. In 2011 Household Finance Report, the principal and interest to income ratio is 12.9% which indicates that the low growth has been adding burdens to real estate markets.

Third, the rural real estate markets show a sign of a weakening. The construction investment in residential buildings had been revitalized mainly in the non-metropolitan areas such as Gyeongsang provincial areas (Southern and Northern Gyeongsang-do, Busan, Ulsan and Daegu) and Southern Chungcheong-do over the past few years. The approval performance on rural housing construction in the first half of 2012 had increased by 68.3% from the first half of 2011 which outplayed the approval performance of the Seoul metropolitan area's, 8.6%. The performance has, however, decreased -4.0% and -3.8% in July and August. Moreover, the prices of houses in mentioned rural areas have rapidly adjusted in 2012. These all support the forecast that the trend of reducing investment in residential construction for past few years would stop soon in 2013 but still slow.

Another trend of reducing investment in the civil engineering sector would fade as well. The biggest factor that contributed to the reduction of investment has been the Administration's shrunk budget on SOC for 2 years in a row but the Administration has expanded 2013 SOC Budget by 5.2% to 24.3 trillion won to stimulate the economy.

Figure 11 _ Trend of SOC Investment Budget



Source: Ministry of Strategy and Finance, Korea

On the other hands, the volume of non-residential construction would take a large proportion in the whole construction investment. Above all, spending on construction of government office buildings is sharply increasing from the second half of 2012 as many government bureaus are leaving Seoul.[2] Most of the expenses on office building construction ($9,535.5 billion)

1 In order to improve the structure in which 79.5% of total mortgages are lump sum payment loans and 95% are adjustable rate mortgages (the end of 2010), this comprehensive remedy (Jun. 2011) attempts to raise the proportion of fixed rate, amortized mortgages to 30% by 2016

2 According to an investigation conducted by Program Evaluation Bureau of NABO, only three institutions among 104 public institutions subject to relocation (government offices excluded) completed their relocations and most of the rest are planned to complete the relocation by the end of 2014

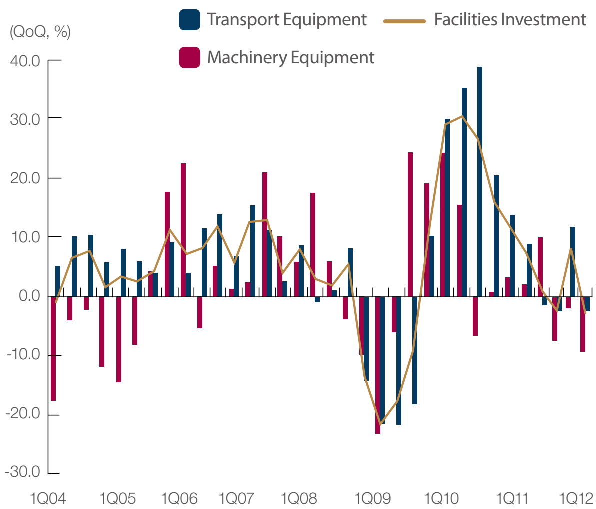
are planned to be paid over the second half of 2012 to the first half of 2014. Moreover, the increasing number of foreign travelers demands more hotel constructions in cities and the progress of the Lotte Super Tower project (total project cost: 3 trillion won) seems to go smoothly. The increase of non-residential construction offsets the reduction of residential and civil-engineering constructions, thus the whole construction sector investment increases 0.2% in comparison to -5.0% in 2011 and -0.6% in 2012 (estimated).

3. Facilities Investment

In the first half of 2012, facilities investment has merely increased by 2.2% year-over-year because the growth momentum of the global economy has slowed and internal and external uncertainties proliferated. In the second half of 2012, facilities investment is anticipated to decrease 1.6% year-over-year. Thus, the actual growth rate in facilities investment in 2012 would record barely 0.3% which is very slow and much lower than 4.8% of the adjusted projection of facilities investment released last May. Investment started to rapidly shrink since the second quarter and the investor's confidence is not likely to rise substantially even in the fourth quarter, considering domestic and foreign uncertainties.

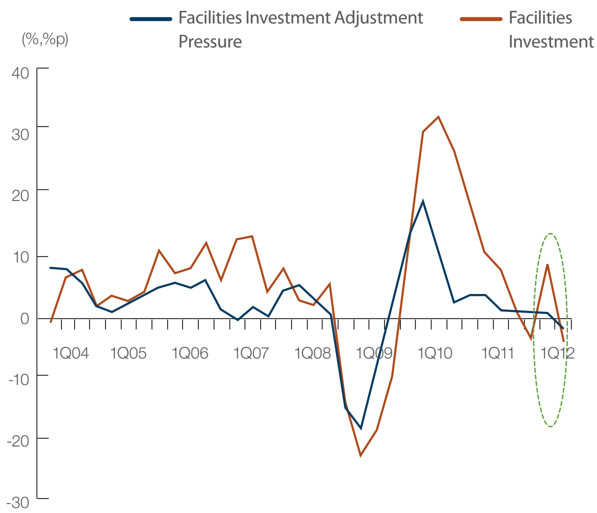
European financial crisis, the U.S.'s slow economic recovery and Chinese slow economic growth all drag down the global economic growth momentum. Therefore, Korea's export has decreased since last March and, it decreased by 8.7% and 6.2% in July and August year over year. In the first half of 2012, export has increased merely 0.7% from the first half of the previous year and in the second half and it is expected to decrease by 3.0% from the second half of the previous year. As mentioned above, under the influence of foreign uncertainties, exporters have trouble expanding their investment in facilities in advance. The year over year forecast on facilities investment for 2013 has been lower adjusted by 1.5%p from 6.0% of the adjusted forecast in May. This is due to the decrease of 0.4%p in the expected economic growth rate of 2013 from the previously estimated rate of 3.9% in May and the expected growth rate of export has been 3.8%p lower adjusted to 5.6%. Even though the global economy gains more growth momentum next year, those boosting forces would be very limited. Therefore, exporters in Korea would involve themselves in an expansion on facilities investment after they make sure that necessary demand increases substantially. In 2013, facilities investment would grow gradually 3.6% in the first

Figure 12 _ Fluctuation in Facilities Investment by Type of Capital Goods



Source: Bank of Korea

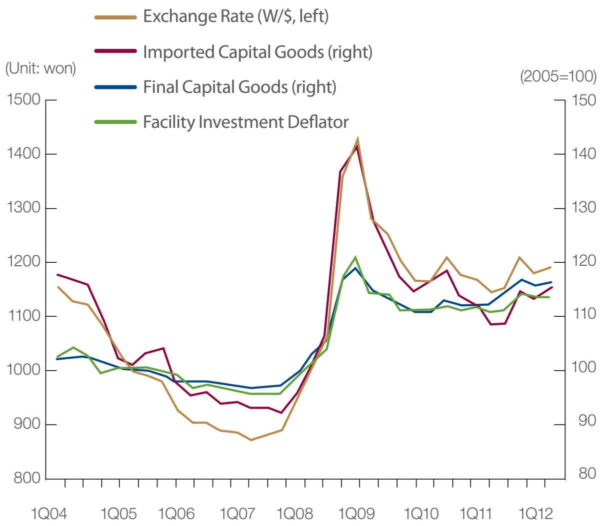
Figure 13 _ Adjustment Pressure of Facilities Investment



Source: Bank of Korea, Statistics Korea

half and 5.4% in the first half and after the second quarter it would show a sign of recovery.

Figure 14 _ Exchange Rate, Capital Goods Price Index, Facility Investment Deflator



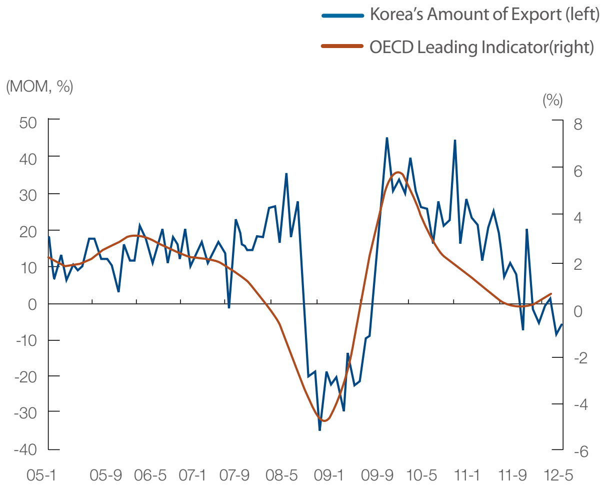
Source: Bank of Korea, Statistics Korea

4. Foreign Transactions

The volume of exports based on customs clearance for 2013 is expected to increase 5.6% which is 6.8%p higher than -1.2% in 2012. First, massive expansionary policies implemented in most of the advanced economies would fade negative shocks from the European financial crisis and those economies would soon recover their demand for import. OECD's leading indicator and the Global Business Survey Index which highly (pro-cyclically) correlate with Korea's export have rebounded which indicates that Korea's import would gradually increase. Second, the decrease in export to EU has slowed. The export to EU has decreased 17.7% and 14.4% in the first and second quarter but in August it has increased 3.2% which shows that the export to EU stops decreasing.

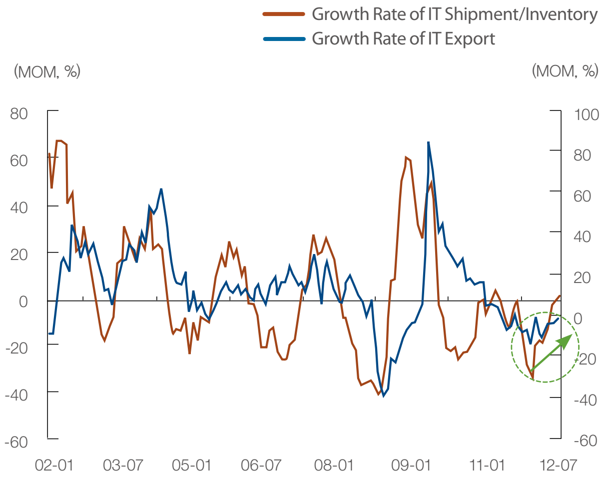
Third, Export to China which takes the biggest importance in Korea's export will improve as consumer confidence indexes are improving in advanced economies. Those advanced economies will demand more imports from China, and China will demand more of intermediary goods such as parts, materials from Korea. Even though, in the second quarter of this year, export to China, which contrariwise increased 14.8% in 2011, has decreased 3.6%, it is expected to keep growing after 2013.

Figure 15 _ OECD's Leading Indicator and Korea's Export



Source: OECD, Korea Customs Service

Figure 16 _ Growth Rate of Korea's IT Shipment/Inventory and Growth Rate of Korea's IT Export

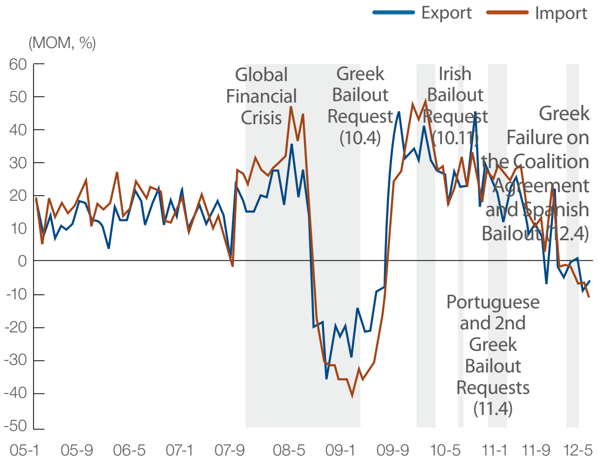


Source: Korea Customs Service, Statistics Korea

Lastly, the IT export cycle shows an upturn. Korea's IT inventory cycle (shipment/inventory) which precedes IT export ran into an up-cycle.

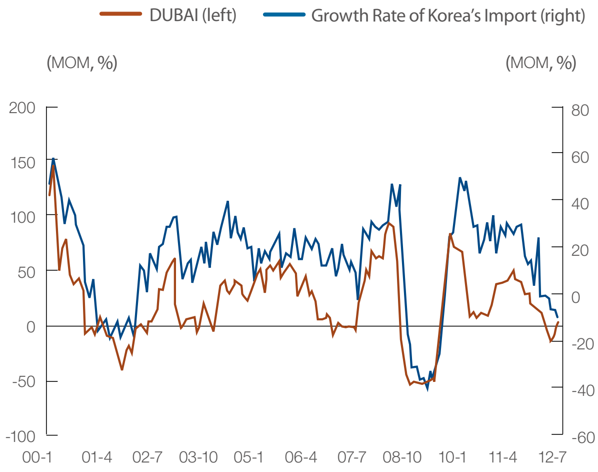
The volume of Imports based on customs clearance for 2013 is expected to increase 5.3% which is 5.6%p higher than -0.3% in 2012. First, export conditions are improving which correlates with imports. Second, as the global economic recovery is currently underway, prices of raw materials such as crude oils are rising which would therefore increase the amount of import of Korea.

Figure 17 _ Growth Rates of Korea's Import and Export



Note: the shaded areas refer to the periods that global financial crisis and the European financial crisis came impactful.
Source: The Korea International Trade Association

Figure 18 _ Price of Crude Oil and Growth Rate of Korea's Import



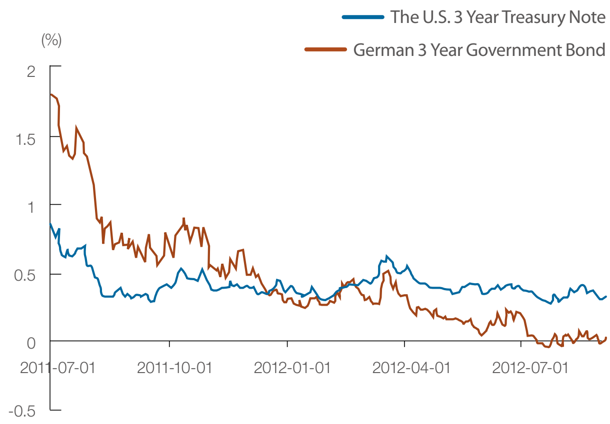
Korea Customs Service, Bloomberg

5. Exchange Rate

The won/dollar exchange rate is forecast to gradually fall. The first reason is that advanced economies are intensifying their quantitative easing policies. The FRB has announced that the Fed undertakes $40 billion Mortgage Backed Security purchases monthly until the labor market shows significant improvement on last 13th September.[3] Moreover the Bank of Japan has also announced that it would expand its asset purchase program to 80 trillion Yen from the current 70 trillion Yen on last 19th September.[4)5)]

Quantitative easing policies being implemented in advanced economies will add more international liquidity and the demand of safe assets will grow global-wide. By contrast, the supply of safe assets is diminishing as advanced countries' (the U.S. and Japan) credit ratings are falling. The worldwide shortage of sound government bonds causes a strange phenomenon that German short-term government bonds' yield drops below zero per cent. Under this circumstance, international capitals would

Figure 19 _ Yields of the U.S. and German Treasury Bonds



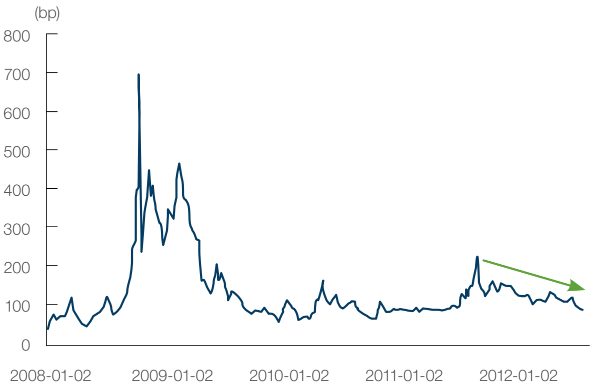
Source: infomax

3 This announcement did not set a time limit of the policy. In addition, holding stocks' maturities are exteded and returns of Treasury bond, public bonds and MBS are reinvested by the end of the year. The FRB also decided to spend $85 billion each month on long-term securities by the end of the year so that long-term interest rates fall eventually.

4 The Bank of Japan decided to increase the amount of short-term Japanese government securities and the amount of long-term Japanese government bonds by 1 trillion Yen each and it also extended the preiod of purchase to the end of December 2013 which was initially by the end of June 2013.

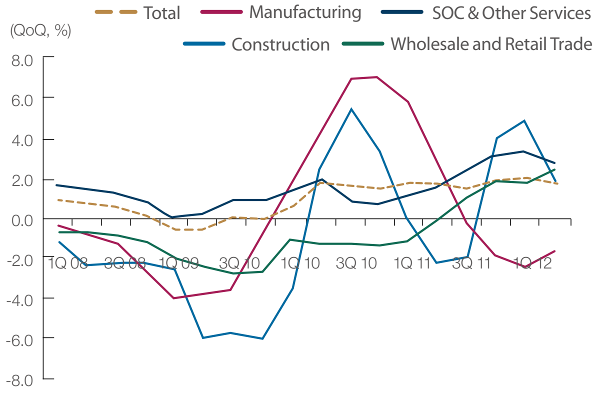
5 The ECB implemented a QE policy through 2010 Securities Market Program and it introduced Outright Monetary Transactions in place of SMP on Sept. 6th. This enables the ECB to purchase bonds (1-3 year maturity) of countries to which European Financial Stability Facility and European Stability Mechanism offer financial stability loans.

Figure 20 _ European Financial Crisis and Exchange Rate Movement



Source: Korea Center for International Finance

Figure 21 _ Changes in the Number of Persons Employed by Industry



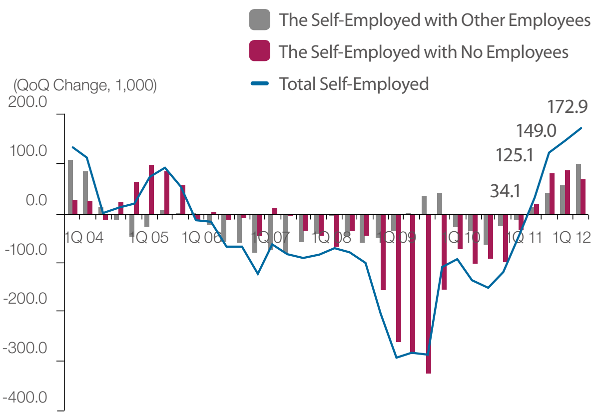
Statistics Korea

demand relatively more risky external assets for their investments. Now, international credit rating agencies upgraded Korea's credit rating. Especially Fitch raised Korea's above that of Japan's (A+).[6] Due to these raises, the CDS premium has declined and eventually Korea will be receiving more attention for a country to invest. In 2013, the won/dollar exchange rate would keep decreasing due to advanced economies' quantitative easing policies, awareness of Korea as a safe investment haven and the continuous surplus in Korean current account ($21.9 billion dollar forecast for 2013). However, the degree of the fall in the exchange rate is forecast not to be much great, rather slight because Korea's economy is barely grow 3.5% and there remains uncertainty of European financial crisis. The annual average exchange rate would be settled at 1,096 won which is 3.2% decreased from 1132 won this year.

6. Employment

In the first half of 2012, the number of jobs has increased by 450,000 (1.9%) over the year. This is an expanded growth compared to 412,000 jobs increased (1.7%) in the first half of 2011. By the sector, while manufacturing has reduced 84,000 jobs (2.0%), construction has showed a favorable

Figure 22 _ the Number of the Self-Employed



Source: Statistics Korea

tendency of 56,000 (3.3%) jobs created. In SOC and other services, the employment has increased by 565,000 (3.1%). Wholesale and Retail Trade, Accommodation and Food Service sector where the self-employed are massively distributed has started to grow again since the third quarter of 2011 and this sector is considered to have led the major increase of employment in service area by creating additional 120,000 jobs only in the first quarter of 2012. Categorizing by ages, employment of 50's and over 60's grew 293,000 (5.9%) and 215,000 (7.7%) in the first quarter

6 The credit rating of Korea is raised by Fitch from A+ to AA- on Sept. 6th, by Moody's from A1 to Aa3 on Aug. 27th and by S&P from A to A+ on Sept. 14th.

Figure 23 _ Real GDP Growth Rate and the Number of the Self-Employed Growth Rate

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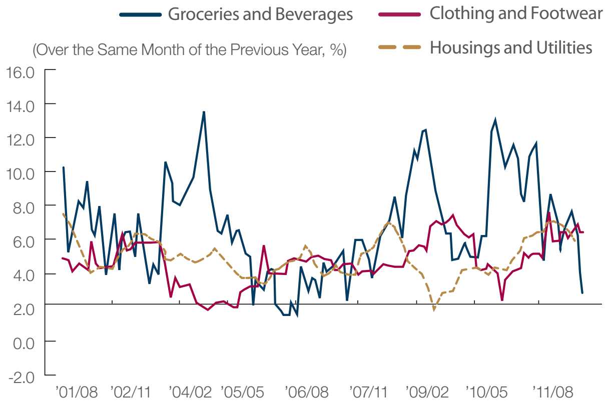
Figure 24 _ CPI by Types of Necessities



Source: Bank of Korea

of 2012 on a year over year basis which showed the biggest increase over the different age groups.

In 2013, Although business cycle is improving, employment is expected to only slightly increase, at most, 350,000 jobs (1.4%). Although the business is improving with the growth rate of 3.5%, it gives us insufficient basis to say that businesses are recovering from recession. Moreover, the number of self-employed which sharply grew regardless of the slow economy cannot help but now grow slowly on the flat and gradual economic recovery stance. If the projected low growth continues, those small businesses run by the self employed with no other employment could easily be the first to be severely thrown under restructuring. In 2013, the unemployment rate is forecast to record 3.5% which is a slight drop from 2012's. The size of the economically active population increases due to the improvement of economic conditions but this is a limited job creation that cannot provide the young generation with quality jobs and there still remains the increase of the unemployed.

7. Price Level and Interest Rate

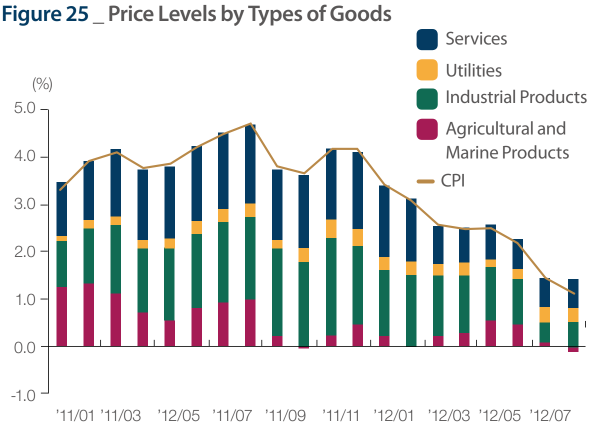
In 2013, the CPI and GDP deflator are forecast to rise 2.5% and 2.2% reflecting the recession. Even though the growth rate of price level rises, it is because of the base effect as last year's was quite low. The inflation rate is forecast to stay low as the expected inflation rate is stable and prices of imported goods dropped low.

By sorting CPI into services, industrial products and agricultural and marine products, service sector's price index cannot avoid falling in 2013 due to the stagnant demand and this falling will have an impact on CPI. Price indexes in agricultural and marine sectors have great variability because these sectors are easily influenced by climate conditions and natural disasters and above all, the variability is tricky to foresee.

In 2013, aggregate supply and demand factors on price level would move along the direction that reduces inflation pressure. On the expense's side, prices of oil and raw materials have acted as suppressing factors on the inflation pressure since they have been relatively stable and the growth of grain prices had a delay before it comes into effect in domestic market but recently, oil prices rose slightly and this rise would be reflected on the inflation.

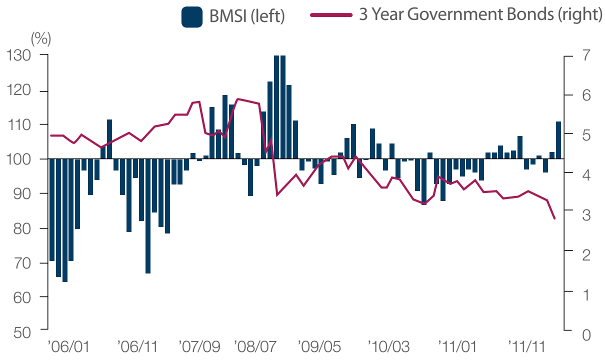
Private consumption deflator would grow by 2.5% which shows gradual slowdown throughout 2012 and 2013. The total import and export deflators are expected to rise 1.3% and 1.5%. Construction deflator is expected to rise 2.1% because the price of imported capital goods slows its rising and construction investment continuously turns inactive. Facilities investment deflator is forecast to be 0.0% because of the recent drop in the exchange rate.

Figure 25 _ Price Levels by Types of Goods



Note: Monthly Price by Contributions
Source: Bank of Korea

Figure 27 _ Bond Yields and Consumer Sentiment



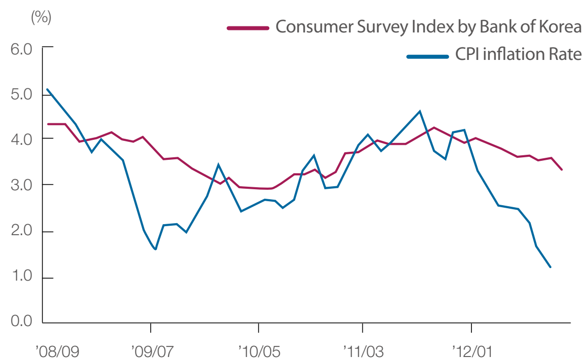
Note: Monthly Averaged
Source: Bank of Korea

Yields of government bonds (3 Year) are expected to record 3.3% owing to low growth, weak inflationary pressure and the expected additional drop of the base rate.

The increase rate of CPI slows recently as negative real interest rates, which had continued since 2008, has turned positive and elevated an expectation of an additional interest rate cut. As inflation pressure comes weak, the government is allowed to enjoy more flexibility in implementation of interest rate policies. The economic growth rate which stayed low for a while also elevates the expectation of economic stimulation. Contrarily, household debts of which amount already reached a quadrillion won might refuse long lasting low interest rates. Having recent trend of interest rate show noticeable stabilization at low level, the yield of the 3 year government bonds has, in August 2012, recorded a historical low at 2.8% (previously at 2.9%). If the Bank of Korea further lowers the interest rate over the second quarter of 2012 and the first quarter of 2013, the low interest stance is expected to continue throughout 2013.

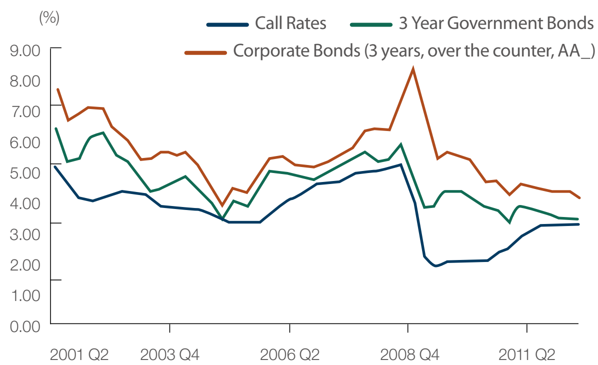
Bond rates are also expected to stabilize at a lower level for a while due to the reduced inflationary pressure, and the expectation for the Bank of Korea's base rate cut. In terms of the return of corporate bonds among other market interest rates, offsetting effect is expected after all because the risk premium over the government bonds has decreased recently, external risks add, Korea's credit rating was upgraded. In 2013, yields of government bonds would rise at 3.3% which is a slightly better figure than that of 2012's (3.1%) and the yields of corporate bonds would rise at 3.9% which is also higher than 2012's 3.7%.

Figure 26 _ Movement of Expected Inflation and CPI Inflation Rate



Source: Bank of Korea

Figure 28 _ Market Interest Rates



Note: Quarterly Averaged
Source: Bank of Korea

Ⅲ. Policy Implications

To overcome this unfavorable world trade condition, it is strongly advisable to provide comprehensive measures for export expansion. In addition, mindful policy implementations, to specifically put, the maintenance of the current account surplus, the reform of the foreign debts structure, a conservative management of the government debts, a monetary policy in accordance with fluctuations of financial markets and business cycles and a proper control over the immanent risks in financial markets such as piling household debts, are strongly required in order to take care of foreign and domestic uncertainties.

First, harsh export conditions for Korea might deepen due to continuing European financial crisis, slowing Chinese economic growth and the low growth of the U.S. economy. Therefore the country needs to prepare means to deal with obstacles that might come true. The quality of exporting goods should be further improved and a ceaseless effort has to be made in order to gain greater market access to foreign markets. The country has to focus on expanding market shares in developing nations which have relatively greater growth potential and ultimately achieve diversification of export markets. A balanced growth between trade and domestic demand has to be maintained because low growth caused by the worse foreign conditions is expected to last for quite a while. For this reason, it is recommended to produce more parts and intermediary goods domestically and eventually to enhance the linkage between export and domestic demand. Promoting knowledge based service sectors is another means to lay the foundation firmly for domestic economy. In those high value generating industries such as medical, legal, finance, education, customers' demands should be led to domestic providers from foreign ones by improving the quality of services so that high quality jobs are more created.

Second, the instabilities (a fall in stock market, a rise in exchange rates, an increase in foreign exchange equalization bond spread, worse terms of foreign loans) in domestic financial market caused by uncertainties of international financial market, that is, the linkage or correlation between foreign and domestic financial institutions has to be weakened and to accomplish this goal, the current account has to be maintained surplus, the foreign debt structure should be reformed (the reduced amount of short term loans, diversification of loaners, foreign debt ratio control). To control the speculative capital flow, financial transaction tax should be introduced and all-time currency swap among major Asian countries should be arranged as a firewall designed to block other region's financial instabilities.

Third, the total amount of government budget should be managed thoroughly to improve the fiscal balance and maintain the government debts at an appropriate level. The southern European countries' government debt ratio (104.4%, the average for 2009-2011) was little higher than that of the U.S. (97.1%) but much lower than Japan's (218.4%). But those southern European countries bear much greater risk of government finance compared to those of Japan and the U.S. This is due to 1) the high level of foreign debt ratio makes the nations vulnerable to external shocks, 2) growing size of underground economies in the countries makes tax foundation weak and the likelihood of temporary default once economy hits a recession, 3) the lack of financial system makes risk evaluation difficult. Therefore, Korea should maintain its fiscal soundness and enhance the endurance to government debts. The external debt dependence which makes a country vulnerable to external shocks should stably be under control, the tax foundation should be secured firmly and setting up necessary infrastructure for further development of the financial system is required.

Fourth, in monetary policy implementation, the inflationary pressure, the trend of household debts, and the probability of a delay in economic recovery due to the

European fiscal crisis should be considered. The Bank of Korea has pulled off a massive quantitative easing policy to cope with the global financial crisis but the action has also caused an excessive liquidity and the rapid increase of household debts in turn. But because the economic growth rate has been forecast not to reach the potential economic growth rate of 3.7% and consumer prices seem to stabilize, it appears delicate to hold onto the current monetary policy, in short term, to avoid economic downturn. As after 2014, the momentum of an economic recovery is expected to be strong, it is necessary to set the monetary policy tighter so that each economic agent could lower their expected inflation level and the further increase of household debts could be prevented.

Fifth, high level of household debts can be lowered by creating more jobs. Creation of quality jobs should be sought to make each loaner able to keep repaying their debts and this is a solution for the high level of household debts. For the soft-landing of the debt problem, the demand for more mortgage loans should be restrained while the low income debtors who bear the excessive amount should remain able to afford the repayment consistently which can be solved by providing stable income sources. With deepening income inequality, the amount of debt borne by the low income class has been on the rise. The income inequality exposes debtors to the risk of insolvency. Because those, especially, who bear multiple loans from various institutions are the ones who raise the possibility of insolvencies. Raising the required rate of deposits according to their credit gradually and sharing the credit information of them are keys to the soft-landing. In addition, as most of the household debts are composed of residential mortgages, stabilization of the real estate markets is essential. Recently, there is a growing possibility of a drop in home prices around Seoul metropolitan area. Those retirees have scant income sources and they are expected to sell their properties to finance for their retirement and repayment. Once, any unexpected shock causes home prices to fall, excessive loan holding households' insolvencies would cause serious troubles. Various measures should be discussed for reverse mortgage loans and more employment opportunities should be given for the seniors to avoid insolvencies.

Revenue

Ⅰ. 2013 Outlook

In 2013, the revenue is forecast to increase by 6.4% totaling to 359.5 trillion won. The rate of increase (6.4%) is greater than last year's 4.6%. The Administration has submitted the 2013 Revenue Budget, which forecast the revenue to total 372.6 trillion won and this figure is 13.1 trillion won greater than NABO's. The difference is caused by different forecasts on the economic growth rate and also by the Administration's inclusion of the expected earnings of 7.7 trillion won from sales of government holding shares which is not certain to be collected yet. Collection of tax revenue might be difficult if relevant economic conditions do not improve and government holding shares are not disposed in opposition to the Administration's expectations.

1. Total Revenue

In 2013, total revenue is forecast to increase by 6.4% totaling to 359.5 trillion won. Due to the expectation of a slow economic recovery, the rate of increase (6.4%) is greater than last year's 4.6%.

The national tax revenue is forecasted at 214.0 trillion won. Having the second half of 2012 at its bottom of the cycle, the economy is expected to slowly start to recover which enables the rate of the national tax to further increase by 5.7% in fiscal year 2013 compared to the previous year's 5.2%. Non-tax revenue and capital gains would total 145.5 trillion won which is a 7.5% increase and this is a result from the increase of social security (6.0%) and the capital surplus of Bank of Korea.

NABO's projection of total revenue is 13.1 trillion won lower than the Administration's 2013 Tax Revenue Budget because NABO did not include the expected earnings of 7.7 trillion won from sales of government holding shares which is not certain to be collected in its calculation and also because it has a different expectation on the economic growth rate.

2. National Tax Revenue

In 2013, the national tax revenue is expected to amount to 214.0 trillion won which does not reach the claimed 216.4

Table 1 _ 2012 – 2013 Total Revenue Projection

(unit: trillion won, %)

	2011 Actual Record	2012 Revenue Forecast	To Budget		To Previous Year		2013 Revenue Forecast	To Budget		To Previous Year	
Total Revenue	323.0	337.8	-5.8	(-1.7)	14.8	(4.6)	359.5	-13.1	-(3.5)	21.8	(6.4)
National Tax	192.4	202.4	-3.3	(-1.6)	10.0	(5.2)	214.0	-2.4	-(1.1)	11.6	(5.7)
Non- Tax Revenue	130.6	135.3	-2.5	(-1.8)	4.7	(3.6)	145.5	-10.7	-(6.9)	10.1	(7.5)
Social Security Contribution	38.9	42.3	1.8	(4.5)	3.4	(8.8)	44.9	-1.5	-(3.2)	2.5	(6.0)
etc.	91.7	93.0	-4.3	(-4.4)	1.3	(1.4)	100.6	-9.2	-(8.4)	7.6	(8.2)

trillion won of the budget with a 2.4 trillion won gap (1.1%). This gap comes from the fact that NABO has a slower expectation on the economic recovery pace of 2013 than that of the administration.

However, the national tax revenue in 2013 is forecast to increase at a higher rate (5.7%) than the previous year (5.2%) because of the expected economic recovery. Putting aside 2.8 trillion won which had been carried over from the previous year (2011), the national tax revenue is virtually calculated to increase from 2.5% (2012) to 7.1% (2013), which shows a sign of recovery in the tax revenue.

Generally speaking, the trend of corporate and income tax follows the previous year's economic cycle. Hence, under the influence of a previously slow economic cycle, withdrawal of previous tax cuts and tax revision bills which aim to secure various tax sources are not expected to do much but to increase corporate and income taxes in a narrow range. On the other hand, other tax items which follow corresponding year's business cycles are expected to demonstrate a significant increase.

By item, income tax is estimated to display an increase of 11.3% reflecting an improvement in employment indicators and an establishment of a new top marginal income tax rate. Earned income tax is forecast to collect 22.5 trillion won which shows a high increase of 16.0%. With setting up a new top tax rate bracket, other factors to increase the amount of collection such as employment expansion and a rise in income levels are seen to cause a higher increase rate of tax revenue than the growth rate. Global income tax is also expected to collect 11.1 trillion won which is an increase of 13.8% to the previous year. As the Baby Boomers have started new businesses after their retirement, the number of business owners has increased, and as the Faithful Voluntary Tax Report Confirmation regime has settled firmly, the total amount of income reported has increased. These can be seen as the factors increasing the amount of tax collection. Moreover, there would be an additional positive revenue effect from the new top tax rate bracket of 38% which was partly applied on interim prepayment in 2012, but entirely applied in 2013.

Capital gains tax does not appear to increase much but by 3.1% to the previous year due to sluggish real estate markets. The Administration has announced a stimulative measure on real estate markets which lowers the transfer and acquisition tax rate for unsold homes but because this measure is effective just until the end of 2012, it is not certain that the real estate markets would be active in 2013. Stricter requirements on major shareholders with marginal profit from the 2012 Tax Revision Bill would act as a factor that increase capital tax collection.

0.9 trillion won of retirement income tax is expected to be collected which is a 9.9% increase from the 2012 projection. This high increase indicates that Baby Boomers started their retirements on a larger scale and also serial shake-outs in finance and construction businesses are causing a turnover of workers.

Corporate income tax would amount to 48.7 trillion won which is just a 3.3% increase to last year which is due to corporations failing to report high performances. The reported amount would record 36.8 trillion won, increased by 4.3% to the 2012 projection's 35.3 trillion won. Although business performances were worse than the previous year, a slight increase is forecasted because the expected economic recovery and the positive revenue effect that would follow once the Tax Revision Bill is passed. The 2012 Tax Revision Bill embodies various features that aim to increase tax revenues such as the revision of Job Creation Tax Deduction (15.7 billion won, 2013 basis), increase of minimum rate of corporate income tax (72.3 billion won), rise of the special provisional rate on association corporations (91.5 billion won), and adjustment on the calculating method of R&D Tax Deduction (76.9 billion won). The amount withheld is estimated to increase by 0.3% from 2012 projection (11.89 trillion won) won to 11.93 trillion won. This reflects the fact that a drop in interest rates comes into effect with a delay even though the balances in saving accounts and bonds actually increase.

VAT is forecast to amount to 57.6 trillion won, increased by 7.3% to that of the last year owing to the increases in import and domestic demands. Since 2000, VAT has stably increased at 8% per annum until the financial crisis in 2007. The rate of increase dropped to about 5% in 2009 for the backwash of the financial crisis and it has further dropped to 3.4% in 2012 due to the economic slump. In 2013, the Tax Revision Bill's positive revenue effect and the increases in private consumption and import are expected to put the rate of increase (YoY) back to 7.3%.

Special excise tax is expected to amount to 5.6 trillion won, increased by 3.8% (0.2 trillion won). As the economy is back on its recovery track, private consumption is supposed to be enlarged but the demand on oils composing 70% of total special excise tax is heavily suppressed due to skyrocket oil prices.

Transportation-energy-environment tax is shown to total 12.8 trillion won, decreased by 4.3% to the previous year. This is because the increase rate of gasoline and diesel oil consumption is expected to decrease gradually due to the high oil prices and, furthermore, revenue in 2012 did include 865.9 million won carried over from the previous year (2011) which raised the base in the first place. Putting aside the amount carried over, taxes on transportation, energy and environment are actually increasing by 2.5% compared to 2012.

Customs duty, regardless of a gradual recovery of import, barely amounts to 10.1 trillion won, increased by 0.4% from the previous year because the Korea-U.S. FTA has been effective since March 2012, which lowered the effective duty rates. In 2013, although imports based on customs (clearance in dollars) are expected to increase by 5.3% compared to the previous year, the increase rate of imports based on customs clearance in won which is used for taxation is forecast to barely have an additional 0.05%p rise to the previous year because the currency exchange rate falls by 3.2% to last year. The effects of Korea-EU FTA and Korea-U.S. FTA contribute to this additionally.

Revenues on the previous years are forecast to total 5.8 trillion won, decreased by 4.9% from last year. Once setting aside revenues brought forward (1.3 trillion won), the increase rate of revenues on previous years comes to show an increase of 22.5% compared to last year. This reflects the fact that the defaulted collection in 2012, caused by the economic recession, is expected to be collected in 2013 itemed as revenues of previous years.

3. Social Security Contribution

In 2013, social security contribution is forecast to total

Table 2 _ 2013 National Tax Revenues Forecast

(unit: trillion won, %)

	2012	2013		To 2012 Projection		To 2013 Budget	
	Projection	Budget	Projection	Increased Amount	Rate of Increase	Increased Amount	Rate of Increase
Total Nat'l Tax	202.4	216.4	214.0	11.6	5.7	-2.4	-1.1
Percentage of GDP	15.7	15.1	15.7	-	-	-	-
General Accounting	195.5	208.9	206.8	11.2	5.7	-2.1	-1.0
Internal Tax	166.3	179.0	178.0	11.7	7.0	-1.0	-0.5
1. Income Tax	45.7	50.5	50.8	5.2	11.3	0.3	0.7
2. Corporate Income Tax	47.2	48.1	48.7	1.6	3.3	0.7	1.4
3. Inheritance-Gift Tax	4.1	4.8	4.7	0.7	16.1	-0.1	-2.6
4. VAT	53.7	58.9	57.6	3.9	7.3	-1.3	-2.2
5. Special Excise Tax	5.4	5.9	5.6	0.2	3.8	-0.3	-4.5
6. Securities Transaction Tax	3.9	4.5	4.4	0.5	12.0	-0.2	-3.5
7. Stamp Tax	0.6	0.7	0.6	0.0	4.1	-0.0	-5.6
8. Revenue on the Previous Years	5.8	5.6	5.5	-0.3	-4.9	-0.1	-2.1
Transportation-Energy-Environment Tax	13.4	13.0	12.9	-0.6	-4.3	-0.1	-1.1
Customs Duties	10.1	11.0	10.1	0.0	0.4	-0.9	-7.9
Education Tax	4.6	4.8	4.7	0.0	0.7	-0.1	-2.6
Comprehensive Real Estate Holding Tax	1.1	1.1	1.1	0.0	1.7	-0.0	-0.5
Special Accounting	6.9	7.6	7.3	0.4	5.8	-0.3	-3.6
Liquor Tax	2.8	3.1	2.9	0.0	1.3	-0.2	-7.1
Special Tax for Rural Development	4.1	4.5	4.4	0.4	8.9	-0.1	-1.2

44.9 trillion won, increased by 2.5 trillion won compared to the projection of 2012. The increase rate from last year is forecast to be 6.0% which is declined from the 8.8% increase last year. This is because since 2013 institutional factors no longer act to raise the contributions.

By parts, national pension would record 31.2 trillion won in 2013, increased by 2.0 trillion won in comparison to last year's 29.2 trillion won. The increase rate hits 6.8% which is a continuous increase with last year's 6.4%.

Workers' compensation insurance in 2013 is forecast to reach 5.5 trillion won, slightly increased by 0.2 trillion won (4.3%) compared to last year's projection, 5.3 trillion won. This is because even though the average income over the whole industry is expected to increase by 3.6%, the employment increase rate of 2013 is expected to fall to 1.4%, 0.3%p declined from the last year's increase rate.

Employment insurance amounts to 6.2 trillion won in 2013, increased by 3.8% (0.2 trillion won) in comparison to 6.0 trillion won of 2012 projection. This is because institutional factors which used to raise contributions are no longer effective.

Teachers' pension reaches 2.0 trillion won, increased by 5.7% (0.1 trillion won) in comparison to 1.9 trillion won of 2012. This is because the increase of contribution rate had come to an end in 2012, so only the growth in the number of new subscribers and the growth in the standard monthly income have been taken into consideration.

4. Non-Tax Revenue and Capital Revenues

In 2013, the central government's non-tax revenue is forecast to total 61.2 trillion won (4.5% to GDP), increased by 8.3% compared to last year. This is a 4.7 trillion won increase from the 56.5 trillion won in 2012 projection. This high rate of increase is due to expectations of a gradual economic recovery and the increase in the receipt of surplus fund of the Bank of Korea. Moreover, a sharp rally after 2012's relatively low growth rate contributes to this high rate of increase.

Accepting the Administration's budget as submitted, the amount of surplus fund of the Bank of Korea to be received is determined to be 2.5 trillion won. This is 0.6 trillion won (31.6%) increased from 1.9 trillion won of 2012. The reason the transferred surplus fund from the Bank of Korea increases to a great extent, is that the Bank of Korea's net profit for 2012 is expected to show a great performance, while the environment for government's revenue hardly seems to be optimistic. The Bank of Korea has shown the highest performance of 2.0 trillion won for the first half of 2012 since 2001 (2.7 trillion won). This performance is explained by the fact that it gained a great deal of profits for trading foreign bonds while the interest rates fell. For the second half, although there is a possibility that a recent fall in the won/dollar exchange rate will worsen the current account of the Bank of the Korea, it still is expected to maintain a better performance than other years.

Interest revenues are expected to display an increase of 6.2 % as a bound on the recession in 2012 (-5.6%). The increased amount of interest revenue compared to last year's is merely 1.3 trillion won which is lower than those other years' increase rates per annum (except for the period of 08-09 financial crises when it increased by about 3 trillion won). The reason for this declining trend in interest revenues is found in the expectation of interest rates being stuck at mid 3% level in 2013. Fees, charges and non-industrial sales revenues are expected to reach 8.0 trillion won, increased

Table 3 _ 2012-2013 Social Security Contribution Forecast

(unit: trillion won, %)

	2011 Record	2012 Projection	To Budget		To Previous Year		2013 Projection	To Budget		To Previous Year	
Total	38.9	42.3	1.8	(4.5)	3.4	(8.8)	44.9	-1.5	(-3.2)	2.5	(6)
National Pension	27.4	29.2	1.2	(4.2)	1.8	(6.4)	31.2	-1.7	(-5)	2	(6.8)
Workers' Compensation Insurance	4.8	5.3	0.1	(1.5)	0.5	(9.7)	5.5	0.1	(1.4)	0.2	(4.3)
Employment Insurance	5.1	6	0.6	(11.6)	0.9	(19.1)	6.2	0.1	(1.5)	0.2	(3.8)
Teachers' Pension	1.6	1.9	-0.1	(-0.3)	0.3	(15.5)	2	0	(0.1)	0.1	(5.7)

by 8.0% over last year as the economy recovers. Fines and forfeits are foreshown to rebound to 19.3 trillion won (9.3%) from last year's low increase rate (2.5%).

The forecast for the central government's capital revenue reflects the Administration's budget figures. As in the figures, the capital revenue is supposed to increase by 0.6 trillion won to 4.8 trillion won. Due to the increase in revenues from selling land and building in the special account for the Innovative City construction project, the growth rate over the previous year is quite high at 14.6%.

In repayment of lending part, the scheduled receipt in the budget has been reflected but 7.7 trillion won from sales of government holding shares, which falls under the withdrawal of contributed shares category, is excluded.[1] In 2013, the amount of withdrawn lending would increase by 1.8 trillion won (7.0%) to 27.8 trillion won. Repayment of lending reflects that those divestment collection of contribution in kind, 982.1 billion won, has been transferred to public capital redemption fund from non-performing loan disposal fund and early redemption of loans is scheduled due to the recent trend of falling interest rates. Therefore the increase rate over last year is 7.0% which is quite high. On the other hand, total revenue of public enterprises is forecast to increase by 0.5 trillion won (7.4%) over 2012's projection totaling 6.8 trillion owing to increase in the nominal growth rate.

By comparing to the Administration's budget the central government's non-tax revenue is predicted to decrease 0.9 trillion (-1.5%) more over the budget's 62.1 trillion won. Among major non-tax revenue items, fines and forfeits (-0.6 trillion won) and contribution to government employee pension fund (-0.6 trillion won) are projected to decrease over the Administration's budget. On the 2013 budget fines and forfeits are estimated to be 19.8 trillion won larger (12.2%) than the 2012 budget. This rate of increase is doubled to those of previous years' (2006-2011 6.4% per annum). Contrarily, the collecting rate of fines and forfeits has been below 90% for last three years. Accordingly, the 2013 amount of fines and forfeits collected is projected to decrease 0.6 trillion won compared to the Administration's

Table 4 _ 2013 Non-Tax Revenue & Capital Revenues Forecast

(unit: trillion won, %)

	2012 Projection	2013					
		Budget(B)	Projection(C)	To Previous Year(C-A)		To Budget(C-B)	
				Increased Amount	(%)	Increased Amount	(%)
Ⅰ. Central Government Non-Tax Revenue	56.5	62.1	61.2	4.7	8.3	-0.9	-1.5
1. Property Income	23.5	25.1	25.5	2.0	8.4	0.4	1.6
A. Dividend and Profits	0.8	0.8	0.8	0.1	7.3	0.0	-3.6
B. Other Property Income	22.7	24.2	24.6	1.9	8.5	0.4	1.8
i. Rentals of Government Estates	0.2	0.2	0.2	0.0	32.7	0.0	0.0
ii. Surplus of Bank of Korea	1.9	2.5	2.5	0.6	31.6	0.0	0.0
iii. Interest	20.7	21.5	22.0	1.3	6.2	0.4	2.0
2. Fees, Charges and Non-Industrial Sales	7.4	8.1	8.0	0.6	8.0	-0.1	-1.4
3. Fines and Forfeits	17.6	19.8	19.3	1.6	9.3	-0.6	-2.9
4. Contribution to Government Employee Pension Fund	8.0	9.1	8.4	0.5	6.0	-0.6	-6.9
Ⅱ. Central Government Capital Revenues	4.2	4.8	4.8	0.6	14.6	0.0	0.0
Ⅲ. Reparyment of Lending	26.0	35.7	27.8	1.8	7.0	-7.9	-22.1
Ⅳ. Total Revenue of Public Enterprises	6.4	7.3	6.8	0.5	7.4	-0.4	-6.1

1 Sales of government holding shares are not reflected in this report, considering realizability of sales and uncertainty in the projection. The current Administration's sales plan has not been carried out as planned since this Administration launched and it is also doubtful if the plan will be carried out accordingly during the next Administration's term. Even if partial sales are made, the amount of revenue will vary with the market condition and the sales portfolio. Thus, it is appropriate that the revenue from sales of government holding shares is excluded in the projection of revenue but total revenue could be greater than NABO's projection in case the sales are made favorably as the government planned.

budget. Government employee pension fund is projected to decrease 0.6 trillion won lower than the Administration's projection. This is because the reported income per month and the number of government employees are considered to show slower increase rates than the Administration's projection. The difference in repayment of lending projections came out because NABO did not include 7.7 trillion won of profits expected from sales of government holding shares. Lastly, total revenue of public enterprises is projected to decrease to 0.4 trillion won lower than that of the Administration budget and this is because NABO took the lower expected growth rate than the Administration did.

5. Comparison with the Administration's

The Administration expected the 2013 total tax revenue to increase by 9.3% to 372.6 trillion won over 2012's projection of 341.0 trillion won. The Administration's expectation on the 2013 total national tax shows a 6.5% increase over last year's projection which is more moderate growth than the current growth rate while non-tax revenue is forecast to display the high growth rate of 13.4% over the 2012 projection. NABO has the 2013 total revenue projection of 359.5 trillion won which is 13.1 trillion won (3.5%) lower than the Administration's 372.6 trillion won. As NABO has excluded expected profits from sales of government holding shares (8.1 trillion won) in projecting total revenue, it has a 5.0 trillion won gap to the Administration's. For this 5.0 trillion won, national tax causes a 2.4 trillion won gap and non-tax revenue causes the other 2.6 trillion won gap.

Above all, for the 2013 national tax revenue, NABO projects 214.0 trillion won which is 2.4 trillion won lower than the Administration's 216.4 trillion won. The different GDP growth rate each agency has is the major reason that causes NABO to have a lower expectation on national tax revenue. NABO sees the real GDP growth rate to be at 3.5% (the current growth rate, 5.8%) which is lower than the Administration's 4%. That is, considering that the European financial crisis might last and in- and external uncertainties still exist, NABO expects a more moderate economic recovery than the Administration does.

By the items, for income and corporate income tax, the Administration has figures about 1 trillion won lower than NABO does. The Administration expects the 2013 income tax to increase by 12% over the last projection, totaling to 50.5 trillion won, while NABO expects 300 billion won more will be collected, considering a newly established 38% tax bracket, the increase in nominal wages, and the increase in the number of the employed. The Administration forecasts that corporate tax would not increase much but just 1% over the 2012 projection so that it totals 48 trillion won, 0.7 trillion won lower than NABO's. The Administration explains that it reflected the decrease of business by 13.9% over last year's, but NABO expects that it would contrarily increase due to the economic

Table 5 _ Comparison between NABO's Projection and the Administration's Tax Revenue Budget

(unit: trillion won, %)

	The Administration (A)	NABO (B)	Difference (B-A)
Total Revenue	372.6	359.5	-13.1
Total National Tax	216.4	214.0	-2.4
Income Tax	50.5	50.8	+0.3
Corporate Income Tax	48.1	48.7	+0.7
VAT	58.9	57.6	-1.4
Customs Duties	11.0	10.1	-0.9
Etc.	48.0	46.7	-1.2
Non-Tax Revenue	156.2	145.5	-10.7
Social Security Contribution	46.4	44.9	-1.5
Non-Tax Revenue & Capital Revenues	109.8	100.6	-9.2
The Elasticity of National Tax	0.9	1.0	+0.1

recovery in the second half of 2012 and the first half of 2013.

For the other items such as VAT and customs duties, NABO has a 3.4 trillion won lower projection compared to the Administration's. Being the item with the biggest gap to the Administration's, the Administration expects that VAT is the item that leads tax revenue to increase, itself increasing by 9.1% and totaling 58.9 trillion won while NABO has a projection which is lower by 1.3 trillion won (-2.2%) over the Administration's. This difference is due to NABO's expectations on the increase rates of private consumption and importation are each 1.1%p and 4.7%p lower than the Administration's expectations, respectively. On the other hand, NABO has lower expectations on customs duties by 900 billion won (-7.9%) than the Administration's. This is because the Administration has forecast imports based on customs clearance in won to increase (5.1%) while NABO has forecast it to decrease (-1.9%).

Also, NABO has a 0.9 trillion won lower expectation on 2012's national taxation performance than the Administration's (203.3 trillion won), which is a major indicator of estimating the following year's corresponding taxation performance and therefore NABO has a lower expectation on the 2013 national tax revenue than the Administration's.

Next, NABO has a 10.7 trillion won lower non-tax revenue projection, this is mainly because NABO excludes profits from sales of government holding share in its calculation. Although Incheon International Airport Corporation and shares that Korea Development Bank holds on other corporations have not been sold, they have been put in the budget held for sale for three consecutive years. Therefore, non-tax revenue shows an exceptional rate of increase (13.3%) but it is considered implausible.

The Administration forecasts that social security contribution will soar by 17.3% while NABO forecasts it being moderate at 6.8%, totaling to 31.2 trillion won which is 1.5 trillion won less than the Administration. Fines and forfeits are showing a 13.8% increase, doubling its past increase rate but NABO has projected it to be 0.8 trillion won less than that of the Administration's, considering its collection rate which has been below 90% for the last three years. Contribution to government employee pension fund is forecast 0.6 trillion won less by NABO because the reported income per month and the number of government employees are considered to show slower increase rates than the Administration's projection.

◆ General Review on 2013 Tax Revenue Budget

According to the 2013 Tax Revenue Budget, the Administration forecasts that the 2013 total tax revenue amounts to 372.6 trillion won increased by 9.2% over the 2012 projection (341.0 trillion won). National tax revenue is forecast to increase by 6.5% over last year's, on the assumption that the real economic growth rate stays around 4%. The Administration has high expectations on non-tax revenue items. By expecting huge amounts from uncertain items such as surplus fund of the Bank of Korea and sales of government holding shares, the Administration has succeeded to increase the 2013 non-tax revenue by 32.4% in the 2013 budget from the 2012 budget.

On the other hand, NABO has a more conservative estimation. According to NABO's projections, the 2013 real economic growth rate (3.5%) and the nominal growth rate (5.8%) are each 0.5%p and 1.1%p lower than those of Administration's forecast. With these macroeconomic projections, NABO expects the 2013 total revenue to total 359.5 trillion won, 13.1 trillion won lower than that of the Administration's. NABO excludes the uncertain 7.7 trillion won of sales of government holding shares. Considering this omission, there still remains a 5.0 trillion won gap between the two projections presented. Therefore, there rises a concern that the actual amount of tax collected may possibly not reach the budget's estimate and a revised supplementary budget will be unavoidable, unless the economic climate does improve and the plan to dispose of government holding shares is carried out as the Administration projected.

Ⅱ. Analysis on Issues of Tax Revenue Budget

On the 2013 budget, the fiscal balance is -4.7 trillion won. Due to counting sales of shares as revenue and conversion from financial loans to the Interest Gap Subsidization Scheme, the fiscal balance is improved by 9.4 trillion won from the -14.3 trillion won of the 2012 balance. However, by the net wealth basis, excluding sales of shares and financial loan conversion is advisable in determination of fiscal soundness and fiscal stance. In this case, the fiscal balance appears -9.4 trillion won which is a greater extent than the Administration's figures.

1. Fiscal Soundness

According to the Administration's budget, the 2013 managed budget deficit is -4.7 trillion won (0.3% to GDP), improved by 9.4 trillion won from the 2012 budget's 14.3 trillion won deficit. As the government announced, the fiscal stance appears sound by the managed fiscal balance. However, it is necessary to consider more factors for better judgment on fiscal soundness. Especially the 2013 budget includes such items that could cause misunderstandings in terms of fiscal soundness. The managed fiscal balance by which the Administration announced has limited interpretation on fiscal stance.

One of those factors is the profit from sales of government holding shares. It is put under the repayment of lending in the account, acting as a surplus factor. However, putting it as revenue is problematic because there is a cash inflow from sales of government holding shares and it does not indicates that the government's asset is actually growing but the type of asset is changed from shares to cash. Under the current cash basis accounting on fiscal balance, by the amount of sales of shares, the fiscal balance appears to improve. On the contrary, cash inflows caused by sales of tangible assets make no difference in the book, by the net wealth. Therefore, to have a better judgment of fiscal soundness, it is recommended to count out the profits from sales of government holding shares.

Another factor of misunderstanding in terms of fiscal soundness also exists in loan expenditure. The Administration has converted 6.7 trillion won of the financial loan expenditure to the Interest Gap Subsidization Scheme in the 2013 Budget. That is, the government bears only 115.7 billion won of the interest gap, in lieu of 6.7 trillion won from the current financial loan expenditure. This comes up with improvement in the fiscal balance by 6.6 trillion won, subtracted 115.7 billion won from 6.7 trillion won. However, reduced 6.6 trillion won of expenditure is a result of the change the government made in its operation of the financial loan support, not an actual reduction of government expenditures. In addition, this improvement in the fiscal balance lasts only a short period. Assuming that a loan had a five year repayment term, fiscal revenue diminishes as the amount of withdrawn lending decreases relatively to the previous lending scheme once the term is due. Therefore, taking repayment terms into consideration, the decline in loan expenditures does not indicate that fiscal soundness has actually improved. Contrarily, the principal of financial loans is hardly considered as expenditure on the net wealth basis. The financial loans have a repayment rate close to 100%. That is, it is as if the government holds a kind of asset named repayment of loans, the more financial loan expenditures does not necessarily harm fiscal soundness. In other words, financial loan expenditures fall into the strict definition of expenditure. It is reasonable that the subsidy cost which covers the gap between the market rate and the cap interest rate on financial loans is counted towards expenditure and the principal itself is left out in order to calculate the exact loan expenditures. However, calculating the exact subsidy cost is not a realistic approach and considering the whole principal as financial expenditure might make an overestimation. Therefore it is plausible to leave out the financial loans in the consolidated fiscal balance.

On the other hands, once fiscal expenditure is switched to ordinary expenditure, there is a decline in net wealth. According to the Budget, the government plans to operate the Interest Gap Subsidization Scheme, in turn to spend 3.5 trillion won, now available on the business cycle response and stability of public well-being. This is a switch of 3.5 trillion won from fiscal expenditure to ordinary expenditure which causes a 3.5 trillion won decline in net wealth.

The receipt of surplus fund from the Bank of Korea does not also fall into the strict definition of revenue. That is the payment of surplus fund to the government increases the fiscal revenue and improves the fiscal balance while increases the money base. According to Koh, (2003)[2] the government can take advantage of the receipt of surplus fund of the Bank of Korea in order to decrease fiscal deficits as much as it wishes in appearance. A central bank pays its surplus fund to the government and, in turn, it issues monetary stabilization bonds to prevent money base from increasing. He points out that this central bank bond is no different to government bond. In other words, the government can direct the central bank to issue bonds and take the surplus fund as government's revenue, instead of issuing its own bonds.

982.1 billion Won from sales of share which was transferred to public capital redemption fund from non-performing loan disposal fund is also practically not considered revenue. The government has transferred the investment revenue to public capital redemption fund as it has written off non-performing loan disposal fund since 2012. This transferred 982.1 billion won is considered as withdrawal of lending which improves fiscal balance. However, this transfer of the fund does not make a real increase in revenue but make the fund come into view.

In determination of fiscal soundness, a distortion could be caused by including temporary and irregular revenue and expenses. Even though the government succeeds to keep balanced fiscal stance by including temporary revenue increases or expenditure decreases, once those temporary factors come out of effect, it cannot avoid the consequent deficit. Therefore in determination of fiscal soundness, removal of those distortive factors such as revenue from sales of government holding shares and financial loans from the analysis on the consolidated fiscal balance is suggested.

Once the removal from the consolidated fiscal balance is completed, the adjusted fiscal balance comes out to be 9.4 trillion won which is 4.7 trillion won greater than the amount announced by the government. With further removal of surplus funds of the Bank of Korea, the deficit comes up to 11.9 trillion won which discloses extra deficit of 7.2 trillion won. By the adjusted fiscal balance, the estimated deficit has no difference in size from the deficit of 2012. The bottom line is that improvement of fiscal soundness has barely achieved.

This 2013 Budget might be a result of an attempt to catch two rabbits that it does not increase expenditures

Table 6 _ Adjusted Fiscal Balance

(unit: trillion won, %)

	2012	2013
The Managed Fiscal Balance (A)	-14.3	-4.7
(Percentage of GDP)	(-1.1)	(-0.3)
Loan Expenditure (B)	31.7	31.0
Repayment of Lending (C)	27.0	35.7
The Adjusted Fiscal Balance 1 (D=A+B-C)	-9.6	-9.4
Surplus Fund of the Bank of Korea (E)	1.4	2.5
The Adjusted Fiscal Balance 2 (F=D-E)	-11.0	-11.9
(Percentage of GDP)	(-0.8)	(-0.8)

Note: Repayment of lending includes 7.7 trillion won of the revenue from sales of government holding shares and 1.0 trillion won of the investment revenue transferred from non-performing loan disposal fund to public capital redemption fund.

2 Young-Sun, Koh, "Quasi-fiscal Activities of the Bank of Korea", KDI Journal of Economic Policy Vol. 25, NO. 1, 2003

for economic stimulation while it keeps the fiscal stance balanced. This type of "creative accounting" that allows fiscal soundness to appear better than it actually is could cause side effects for long term sustainable fiscal soundness. Some have claimed that the 2013 Budget has been formulated ineffectively for economic stimulation. However, considering above, the 2013 Budget has expansionary features than it is claimed. When the government increases fiscal expenditures for necessary economic stimulation and, in turn, it damages fiscal soundness, the government has an obligation to announce it correctly. Otherwise, the fiscal stance could be erroneously construed and additional increase in fiscal expenditure could cause unnecessary further damage to soundness. Rather, an awareness of the correct fiscal stance could be helpful to maintain long-term sustainable fiscal soundness.

2. Consistency in Short and Medium Term Tax Revenue Forecast

The Administration's projection on national tax revenue appears conservative for the fiscal year and optimistic for medium term. In the 2013 Budget and the National Fiscal Management Plan 2012-2016, a similar tendency is found. The increase rate of 2013 national tax is 6.5% while the medium term increase rate is 8.0%. The Administration needs to publish more realistic forecast on national tax revenue.

The Administration has conducted quite accurate short term forecasts. Since 1990, there have been only two years, 2000 and 2007 that disagree with the standard error range, when the budgets and actual figures are compared. Most of time, the forecasts have stayed within ±3% in comparison to closing accounts which have been

Table 7 _ National Tax Revenue Forecast in National Fiscal Management Plan

(unit: trillion won, %)

	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	Average Annual Increase	
														Forecast	Actual Figure
04-08	112.9	121.0	131.9	143.6	156.4									8.5	9.2
05-09		121.7	130.4	141.7	153.6	165.9								8.1	6.6
06-10			130.0	142.5	154.1	166.2	179.2							8.4	6.5
07-11				141.6	159.4	170.5	183.4	197.8						8.7	4.5
08-12					165.6	179.6	188.0	199.7	212.4					6.4	5.3
09-13						164.0	168.6	182.1	199.8	219.5				7.6	-
10-14							170.5	187.8	204.2	221.1	241.7			9.1	-
11-15								187.6	205.8	224.2	242.6	262.3		8.7	-
12-16									205.8	216.4	238.9	259.1	280.4	8.0	-
Actual Figure	117.8	127.5	138.0	161.5	167.3	164.5	177.7	192.4	203.3	-	-	-	-	-	7.2
Rate of Increase	-	8.2	8.3	17.0	3.6	-1.7	8.0	8.3	5.7	-	-	-	-	-	-
Difference*	-	0.7	-1.9	-2.0	9.2	-1.9	-8.7	-10.2	-6.6	-3.1	-2.8	-3.2	-	-	-

Note: 1. 2012 National Tax Revenue Forecast is 203.3 trillion won, while 2012 Tax Revenue in the National Fiscal Management Plan is 205.8 trillion won. The annual average increase rates of 2008-2012 and 2004-2012 (actual records) are calculated based on 203.3 trillion won of 2012 forecast.
2. Difference* is calculated by subtracting the last forecast of national tax revenue of a fiscal year from the initial forecast of the corresponding year.

Source: National Fiscal Management Plan, the Government of the Republic of Korea, The Statistical Yearbook on National Tax Service, Statistics Korea relatively accurate.

Since 2005, closing accounts have been greater than those forecasts in budgets. National tax elasticity to GDP proves this trend. The elasticity is the increase rate of national tax revenue divided by the economic growth rate which shows the rate of percentages the national tax revenue increases when the growth rate increases by 1%. Therefore, the forecast is considered a conservative one when the forecast on the increase rate of national tax revenue is smaller than the actual increase of national tax revenue at the point where forecast of the growth equals the actual growth rate. Since 2005, absolute values of elasticity have shown to be smaller than the actual rates except 2008 when the economic crisis struck which refers that the Administration has formulated conservative budgets.

The Administration tends to formulate the budget conservatively regardless of macroeconomic outlooks when deficits in tax revenue come about in order to avoid the burden of making revisions for supplementary budgets. Conservative forecasts on tax revenue for short-term might be helpful but its prolongation might trigger inaccuracy of budget formulation, such as the likelihood of inefficient fiscal expenditures and an excessive increase of tax burdens.

Contrarily, National Fiscal Management Plan consists of medium term plans with an optimistic tone. Except for 2004, it has had greater forecasts than the actual performances. This optimism can also be found by tracking forecasts back in time on a specific year. For instance, the 2011 national tax revenue was forecast to be 197.8 trillion won in 2007 but when it was forecast again in October 2011, 187.6 trillion won came out which is 10.2 trillion won less than the forecast four years earlier. This has happened except in 2008 concluding that the Administration's optimistic medium term forecasting has a structural problem.

As National Fiscal Management Plan 2012-2016 forecast, the annual increase rate of national tax revenue is 8.0%, higher than past records around 6-7%. The Administration should pay an effort to correct the structural errors eventually.

3. Sales of Government Holding Shares

It is not much likely that 7.7 trillion won of massive government holding shares are easily sold as illustrated in the 2013 Tax Revenue Budget, considering its potential shock to financial markets and the current condition of markets. Taking the circumstances into consideration, the size of government holding share sales should be adjusted to be a more practical level.

Circumstances

The administration has assigned 8,184 billion won as sales of government holding share which is an amount increased by 6,280.2 billion won from the 2012 budget. In the Ministry of Strategy and Finance's general accounting, 2,642.3 billion won is included as sales of shares on Korea Development Bank, which is increased by 1,761.5 billion won from 2012's. Furthermore, 5,098.6 billion won is included as sales of shares on Industrial Bank of Korea, which is increased by 4,075.6 billion won from 2012's. In addition, 443.1 billion won of sales of shares on Incheon International Airport Corporation, which have continuously been a bitter controversy, is included in the special accounting for Traffic Facilities of the Ministry of Land, Transport and Maritime Affairs.

Since 2006, the Administration started to reflect its partial sales plan in the budgets of the shares on IBK, KDB and Incheon International Airport Corporation, but sales of shares have never made yet in the 2011 closing accounts.

Practicality

The Administration has not stated the targeted quantity and price as an effort to keep the market from shocks the sales might cause. However, formulating a budget inclusive of such revenues could cause an impact on the market. Next year, the Korean economy is projected to improve slightly. Given this, if a stock supply of 8 trillion won is released in the market, the extent and impact of the supply is expected to be severe.

In addition, the target price does not look plausible. The Administration has formulated 5.1 trillion won in the 2013 budget as sales of IBK share. On the assumption that it plans to sell out all 374 million shares, the target price should be set at 15,800 won per share. However, as the financial market has not fully recovered from the European financial crisis, IBK stock price stays around 12,700 won. Roughly speaking there is a 3,000 won gap between its actual price and the target price which disproves its practicality and even if those shares are sold at lower prices than the targeted, it does not reach the figures in the budget. Because sales of IBK and KDB shares are in general accounting, once the sales are delayed or not met with the targets, the shortage of revenue would cause an increase of national debts and fiscal deficits.

Sales of Incheon International Airport Corporation, moreover, requires amendments to the Incheon International Airport Act, but the National Assembly is not likely to pass the amendments easily due to the public opinions against the sales.[3]

Table 8 _ the Schedule of Sales of Government Holding Shares

(unit: trillion won)

	2012	2013	2014	2015	Total
Total	1.9	7.7	7.3	0.7	17.6
Industrial Bank of Korea	1.0	5.1	-	-	6.1
The Korea Development Bank	0.9	2.6	6.4	-	9.9
Incheon International Airport Corporation	-	-	0.9	0.7	1.6

Source: Ministry of Strategy and Finance, Korea

3 Also, the price for sales of Incheon Airport Corporation has been cut entirely during the 2013 Budget's deliberative process.

Analysis on Expenditure and Fiscal Management

Ⅰ. 2013 Fiscal Management Analysis

Total expenditure in the 2013 Budget Proposal increases by 5.3% over last year's budget. The fiscal stance is analyzed to be tight. From the GDP gap, it is projected that the recession deepens. The actual total revenue is expected to be less than the Administration forecasts due to inclusion of implausible revenues from sales of government holding shares. Therefore, massive expansion in the budget seems difficult to carry out for the sake of fiscal soundness but implementation of cycle-responsive fiscal policy is necessary.

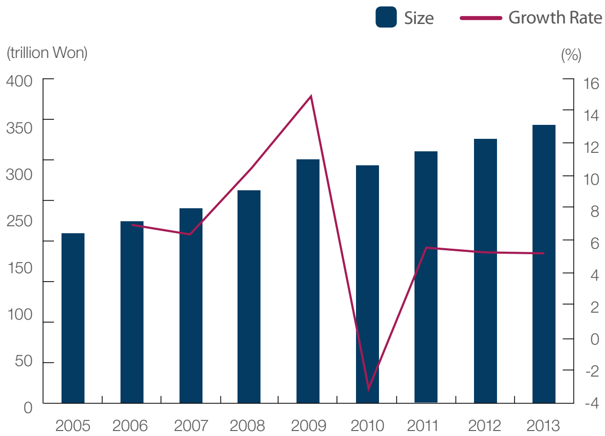
1. Total Expenditure

NABO forecasts that the 2013 total expenditure increases by 17.2 trillion won (5.2%) from 2012's to 342.6 trillion won.

In its estimation of total expenditure, NABO has employed the method of summing separate projections for mandatory expenditure and discretionary expenditure. Mandatory expenditures such as interest payments on loan and legal expenditures, of which amount and obligation are mandated by law, are projected using the outlook on the macro-economy and tax revenue. Discretionary expenditure is the rest and has been projected pursuant to the government plans.

Under the Outlook, mandatory expenditure is projected to total 160.7 trillion won and discretionary expenditure is to total 181.9 trillion won so that the total expenditure totals 342.6 trillion won which is 0.1 trillion won greater than that in the budget.

Figure 1 _ Size and Growth Rate of Total Expenditure



2. Fiscal Management

In the 2013 Budget Proposal, the total expenditure increases by 17.1 trillion won (5.3%) over this year's to 325.4 trillion won so that it totals 342.5 trillion won. The increase rate of 5.3% is equivalent to the rate last year which is the lowest since 2005 except in 2010. Expenditures and the amount of lending minus repayment increases 5.1% from the 2012 budget which is slightly lower than 5.3% of the total expenditure increase.

Fiscal Impulse Indicator

To determine whether fiscal management is expansionary or contractive, Fiscal Impulse Indicator (FI indicator)[1] is used. Looking into fiscal stance by FI indicator, it comes out -0.81 for the 2013 Budget Proposal. This indicates that contractive stance is maintained this year though little weaker than -1.27 last year.

Table 1 _ Structural Fiscal Balance and FI Indicator (unit: trillion won, %)

	The Managed Fiscal Balance	The Structural Fiscal Balance	FI Indicator
2009	-50.8 (-4.8)	-40.4 (-3.8)	3.11
2010	-30.1 (-2.6)	-26.8 (-2.3)	-1.53
2011	-25.0 (-2.0)	-19.2 (-1.5)	-0.74
2012	-14.3 (-1.1)	-4.0 (-0.3)	-1.27
2013	-4.8 (-0.4)	6.8 (0.5)	-0.81

Note: percentage of GDP in brackets

Appraisal on the Size of Expenditure

According to NABO's outlook, the 2013 economic growth rate is 3.5%, higher than 2.5% this year. However, deepening in GDP gap is projected to further progress to -2.8 compared to -2.5 of 2012. Negative value in GDP gap indicates that an actual growth does not reach a potential growth and increasing in its absolute value suggests that deepening of recession.

Since the global financial crisis in 2009, GDP gap has shown negative values with increasing absolute values which indicates that the recession deepens. It raises concern that the budget is proposed not responsively for the cycle as the budget's FI indicator -0.81 is comparable to -0.74 in 2011[2], when the GDP gap presented the recession to a lesser extent.

Figure 2 _ Trend of GDP Gap and Its 2013 Projection

Appraisal on the Postponement of Achieving Balanced Fiscal Stance

The Administration has initially presented its medium term goal in achieving balanced fiscal stance by 2013 in 2011-2015 National Fiscal Management Plan. It invalidated this goal in the 2013 budget proposal and presented the managed fiscal balance of 4.8 trillion won instead. This change is suitable to global recession and its worsening but it is necessary

1 Fiscal Impulse Indicator shows that positive number means expansionary fiscal stance compared to last year and negative number means contractionary fiscal stance compared to last year.

2 GDP gap of 2013 is -2.8 but GDP gap of 2011 is -1.3.

to point out that the Administration changed the plan to bring forward achieving the goal by a year and called it off, back to initial plan. More thorough consideration in developing medium term plans shall be conducted.

Optimistic Total Revenue Outlook and Actual Fiscal Stance Distortion

The Administration has put down 373.1 trillion won for total expenditure in the 2013 budget proposal. National tax revenue is 216.4 trillion won, 2.4 trillion won greater than NABO's projection and this difference is derived from different economic outlooks each has. While NABO forecasts that the real growth rate is 3.5%, the Administration forecasts at around 4%. The Administration's 4% forecast is considered high considering that construction investment and private consumption are burdened with external shocks from EU, the U.S. and China and internal factors such as recession in real estate markets and household debts.

In the 2013 budget proposal, non-tax revenue excluding social security contribution increases 37.4 trillion won. This is an increase of 9.2 trillion won from 2012's 28.3 trillion won which mainly results from sales of shares on IBK (5.1 trillion won), KDB (2.6 trillion won). Under the current circumstances, it is unlikely that sales at the targeted prices will be made. The government has planned the sales since 2008 but it has not been accomplished in reality and even though the sales are made at proper prices, this non-recurring improvement in fiscal soundness lasts for only a short-term.

Appraisal on Conversion from Financial Loans to Interest Gap Subsidization

A noticeable feature of the 2013 budget proposal is the conversion from financial loans to Interest Gap Subsidization scheme. The government now provides loans with lower interest rates than market interest rates for necessary sectors and subsidizes instead it provides the sectors with direct loans. The government has changed the existing direct loans of 3.5 trillion won to the subsidies of 75 billion won and newly issued subsidies of 50 billion won which would have amounted 3.5 trillion won in direct loans. This conversion includes Support for First Time Home Purchase in National Housing Funds, Support for Energy Saving Companies in Energy Special Accounts and Emergency Rescue Funds in Small and Medium Enterprise Establishment and Promotion Fund. However, Emergency Rescue Funds might not work as intended in case commercial banks grant loans directly to businesses because banks might be unwilling, for profit-seeking nature of commercial banks, to grant loans to eligible businesses as being eligible itself raises doubts of solvency and credit.

In addition, although direct loans of 3.5 trillion won have been converted to the subsidies, the sum of direct loans has barely been reduced by 1.0 trillion won from 27.6 trillion won of the 2012 budget to 26.6 trillion won, meaning that other direct loans still continue to increase by 2.5 trillion won regardless of conversion to interest gap subsidies. Because subsidy is easily handed out, the size of loans could remain not reduced

Table 2 _ Non-Tax Revenues from Recent Sales of Government Holding Shares

(unit: trillion Won)

	2009		2010		2011		2012		2013 Budget Proposal	
	Budget	Closing Account	Budget	Closing Account	Budget	Closing Account	Budget	Closing Account	Budget	Closing Account
KDB	-	-	-	-	-	-	0.9	-	2.6	-
IBK	1.3	-	1.3	-	0.7	-	1.0	-	5.1	-
Incheon International Airport Corporation	-	-	0.6	-	0.7	-	-	-	0.4	-

while the subsidy increases so it gives more burdens on the budget.

Necessity of Proper Fiscal Policies Responsive to Business Cycle

As mentioned above, active roles of fiscal management should be discussed in order to cope with the recession and to secure growth momentum. However, expanding the budget like the extent of the 2009 budget, which was exceptional case in response to the global financial crisis, is implausible. By NABO's outlook, fiscal soundness is predicted to steadily worsen as balanced fiscal stance seems unlikely to be attained by 2016 and pension expenditure keeps increasing due to aging society for long term as well.

If expansionary budget is to be carried out, discretionary expenditure should be increased. Once a mandatory expenditure item is created, it would be barely eliminated and it is projected to soar rapidly which makes it inappropriate to increase for responding to business cycle. NABO expects mandatory expenditure to increase at an annual average of 6.6% (the Administration's 7.3%) until 2016, which is twice higher to 3.3% of the increase rate of discretionary expenditure.

For items to increase among discretionary expenditures, job creation and social welfare related areas should take priorities. Employment rate of the young which had been on uptrend started to decrease since June and the number of the employed for next year is projected to increase by 350,000 which is less than the increase of this year's 420,000 which makes job creation measures urgently needed. According to a recent research[3], spending on social welfare is of greater effect on production and employment inducement in comparison to spending on education, health care, national defense.

In conclusion, given that pulling off massive fiscal expansion is implausible, selective fiscal expansion especially on areas such as job creation and social welfare has to be undertaken in order to respond to the recession more effectively and further discussions are required.

3 Sung-Min, Hyun, "Ripple Effect on National Economy Caused by Fiscal Government Spending", NABO, 2012, 9.

Ⅱ. Analysis on the Allocation and Major Expenditure Areas

It is appraised that the 2013 Budget proposal is insufficient to respond to the expected economic recession because the budget for R&D area declines and the total expenditure is tightly allotted, regardless of relative increases in the areas which induces economic growth

1. Resource Allocation

Trend of Functional Expenditures

There has been a pro-cyclical movement between total expenditure and each expenditure area sizes. In 2009 and 2012, most expenditures have increasing percentages of GDP, as the total expenditure's percentage of GDP increases to a great extent in order to cope with the global financial crisis. Contrarily in 2010, 2011 and 2013, each expenditure show decreasing percentage of GDP, as the total expenditure's percentage of GDP decreases as well.

Areas related to economic affairs such as SOC and Industry · Small and medium enterprises · Energy which had increased to the biggest extent for the sake of economic cycle response and stabilization of public well-being has had a conflicting movement to Health · Welfare · Labor which had another biggest increase. SOC and Industry · Small and Medium Enterprises · Energy areas showed the biggest increase rate in 2009 for expansionary fiscal policies, since then it showed a decreasing trend. Contrarily, in 2009, Health · Welfare · Labor area benefited from the revised supplementary budget

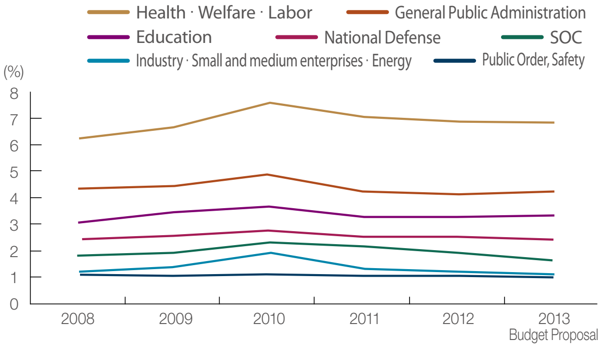
Table 3 _Recent Trend in Functional Expenditures by Classification

(unit: %, %p)

Classification	2008		2009[3]		2010		2011		2012[4]		2013[5]	
	Percentage of GDP	Rate of Increase	Percentage of GDP	Rate of Increase	Percentage of GDP	Rate of Increase	Percentage of GDP	Rate of Increase	Percentage of GDP	Rate of Increase	Percentage of GDP	Rate of Increase
SOC	2.00	0.11	2.39	0.39	2.17	-0.21	1.95	-0.22	1.79	-0.16	1.75	-0.04
Industry · Small and Medium Enterprises · Energy	1.43	0.14	1.96	0.52	1.31	-0.65	1.22	-0.09	1.17	-0.05	1.15	-0.02
Agriculture · Forestry · Fisheries · Food	1.64	0.01	1.63	-0.01	1.50	-0.13	1.41	-0.09	1.40	-0.01	1.34	-0.06
Health · Welfare · Labor	6.70	0.41	7.57	0.87	7.03	-0.54	6.91	-0.12	7.17	0.26	7.11	-0.06
Education	3.52	0.37	3.69	0.17	3.32	-0.37	3.29	-0.03	3.52	0.23	3.59	0.07
Culture · Sports · Tourism	0.32	0.02	0.34	0.02	0.34	0.00	0.34	0.00	0.36	0.02	0.35	0.00
Environment	0.44	0.03	0.54	0.10	0.47	-0.07	0.46	-0.01	0.46	0.00	0.46	0.00
National Defense	2.59	0.08	2.73	0.14	2.56	-0.16	2.51	-0.05	2.55	0.04	2.53	-0.02
Reunion · Diplomacy	0.27	0.03	0.28	0.01	0.29	0.00	0.30	0.01	0.30	0.00	0.30	0.00
Public Order · Safety	1.14	0.02	1.17	0.03	1.12	-0.05	1.10	-0.02	1.12	0.02	1.10	-0.02
General Public Administration	4.47	0.13	4.86	0.39	4.22	-0.64	4.19	-0.03	4.26	0.07	4.19	-0.07
Others[1]	1.08	-0.06	1.24	0.16	1.04	-0.20	1.05	0.01	1.08	0.03	1.19	0.12
R&D[2]	1.08	0.08	1.19	0.11	1.19	-0.01	1.19	0.00	1.24	0.05	1.24	0.00
Total	25.60	1.29	28.39	2.79	25.37	-3.02	24.72	-0.65	25.19	0.47	25.06	-0.12

Note: 1) 'Others' includes Communication, Science, Technology and Emergency
2) The sum of R&D spending across in 16 budget areas
3) Based on the revised supplementary budget
4) Numbers exclude inter-transaction and conservation
5) Estimated by NABO's outlook on the current GDP

Figure 3 _ Recent Trend in Functional Expenditures by Classification (% of GDP)



allotted to overcome the global financial crisis and it showed an increase of 0.52%p. This was the biggest increase the area has had for past six years. Since then, it has by year showed variation of -0.54%p of 2010, -0.12%p of 2011, 0.26%p of 2012 and -0.006%p of the 2013 budget proposal.

Education and R&D areas have showed successive increases in percentage of GDP. Recently education has showed a successive and visible increase among other areas since 2011. This is because Financial Grants for Local Education which is an important financial source of K-12 has successively increased. The size of Financial Grants for Local Education is determined by the size of internal tax and the grant rate. The grant rate has progressively increased to 19.4% of total amount of internal tax in 2006, to 20.0% in 2008, to 20.27% in 2010. R&D area has also increased by 0.05%p over 2008-2013.

Features of Functional Allocation and Major Tasks in the 2013 Budget Proposal

In the 2013 Budget Proposal, three areas (Education 7.9%, Environment 5.8%, R&D 5.3%) have greater increase rates over previous year than the increase rate of Administration's total expenditure (5.3%) while nine other areas have lower ones (Agriculture · Forestry · Fisheries · Food 1.2%, Public Order · Safety 3.2%, SOC 3.6%, General Public Administration Industry · Small and medium enterprises · Energy 4.1%, Health · Welfare · Labor 4.8%, Culture · Sports · Tourism 4.9%, Reunion · Diplomacy 5.0%, National Defense 5.1%).

The 2013 Budget Proposal's Allocation answers the

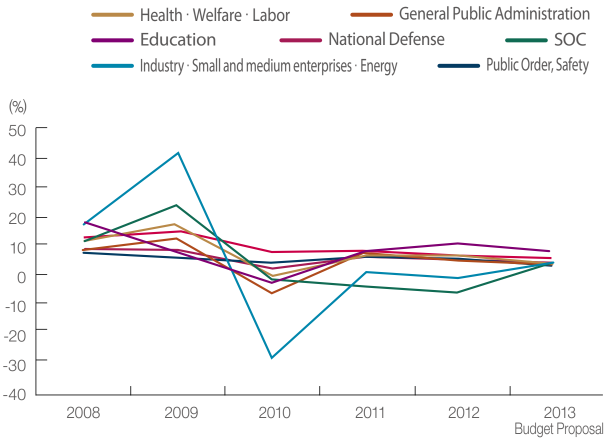
Table 4 _ Functional Allocation in 2013 Budget Proposal

(unit: trill won, %)

Classification	2012		2013		
				Remarks	
	Budget(A)	Increased Amount from 2011 Budget	Budget (B)	Increased Amount from 2012 (B-A)	Rate of Increase
SOC	23.1	-5.5	23.9	0.8	3.6
Industry · Small and medium enterprises · Energy	15.1	-0.5	15.7	0.6	4.1
Agriculture · Forestry · Fisheries · Food	18.1	2.8	18.3	0.2	1.2
Health · Welfare · Labor	92.6	7.2	97.1	4.5	4.8
Education	45.5	10.3	49.1	3.6	7.9
Culture · Sports · Tourism	4.6	8.8	4.8	0.2	4.9
Environment	6.0	3.5	6.3	0.3	5.8
National Defense	33.0	5.0	34.6	1.7	5.1
Reunion · Diplomacy	3.9	8.0	4.1	0.2	5.0
Public Order · Safety	14.5	6.3	15.0	0.5	3.2
General Public Administration	55.1	5.3	57.3	2.2	4.0
Others[1)]	13.9	0.8	16.3	2.4	17.3
R&D[2)]	16.0	7.6	16.9	0.9	5.3
Total[3)]	325.4	5.3	342.5	17.1	5.3

Note: 1) 'Others' includes Communication, Science, Technology and Emergency
2) The sum of R&D spending across in 16 budget areas
3) Numbers exclude inter-transaction and conservation

Figure 4 _ Rate of Increase in Functional Expenditures over Previous Year by Classification



pursuit of balanced budget while it also strives to prevent the economy from sliding into recession. The government's effort to achieve the balanced budget has shown tight budgets of the fiscal 2012 and the 2013 Budget Proposal, two consecutive years.

Most of areas except Education have decreased in percentage of GDP. Health · Welfare · Labor is the one that has shown the largest decline over past six years due to the conversion to Interest Gap Subsidization from housing loans and the change of the earliest age to receive the national pension benefit from 60 to 61. To achieve the intended policy goal, the Interest Gap Subsidization for housing loans should make an equivalent performance to that of direct loans. On the other hand, part of available resources from the conversion has been put into areas with economic affairs, SOC and Industry · Small and medium enterprises · Energy for the sake of economic cycle response so that the decreasing trend of allocation in two areas slowed down. Education has presented a higher increase rate than the increase rate of total expenditure for 2012-2013.

The government presents four major tasks, that is, the budget for revitalizing economy, the reliable budget of for employment, welfare and security, the strong budget for structural change of economy and the thrifty budget. Except the economy revitalizing budget, the four tasks present a lack of fiscal capacity for achieving the intended goal.

First, a great deal of resources have been put into SOC and Industry · Small and medium enterprises · Energy areas with great multiplier effects so that it raises weights of the budget for economic revitalization. Contrarily, Health · Welfare · Labor and Public Order · Safety areas which relate to the task of employment, welfare and security have the increase rate of 4.8% and 3.2% each which are lower than other years. The decelerating increase rate of Health · Welfare · Labor budget is explained by the conversion of housing loans to the Interest Gap Subsidization. However, the task of achieving employment, welfare and security does not present much practicality, considering that the conversion has created available resources which were put into public well-being stabilization again but it failed to raise the increase rate much and that the change of the earliest age to receive pension benefit causes the increase rate to slow.

Second, the budget for economic structural change is, as well, considered not to have enough fiscal capacity to make enough change. The increase rate of R&D budget over last year's is 5.3% which is not only similar to the annual average increase rate of total expenditure but is even quite lower than 7.6% of itself in fiscal 2012. Moreover, budgets for fostering global human resources and other purposes have increased slightly.

In summary, in the 2013 Budget Proposal, areas with economic affairs which have relatively greater effects of economic stimulation present relatively high increase rates while the total expenditure shrinks. In other words, the 2013 Budget Proposal is appraised insufficient in respond to the expected economic recession.

2. The Direction of Major Fiscal Expenditure Areas

Current Circumstances in Employment

The currently ongoing recovery from the global financial crisis is shown by major indicators of employment. The employment to population ratio reaches 60.0% in the third quarter of 2012 with an increase of 0.5%p (YoY). The unemployment rate has dropped to 3.0% in the third quarter of 2012 from 3.6% in the third quarter of 2009, with a decreasing trend every year. In addition, the number of the employed has increased by 506,000 (YoY).

However, government's supportive policies are still needed. Most of the increase in employment took a place in the senior group between their 50's and 60's while the number of jobs for the young generation in 20's declined. The employment rate of 25-29 (the third quarter 2012, 68.6%) has declined by 2.3%p Year over Year while the number of the self-employed seniors (55-64) has increased by 73,000 in 2011. Furthermore, the total number of self-employed, which has declined since the early 2000's, is now turning around. The increase of employment is focused on sectors that create little added values such as Transportation, Wholesale and Retail Trade, Accommodation and Food Service.

The administration has increased the budget for the job creation support to 10.8 trillion won which is an 8.6% increase from 9.9 trillion won of 2012. Contents of the job creation program vary every year and this frequent modification has caused troubles in operating the program as the program is conducted through multiple authorities (22 relevant authorities in 2013). Therefore, classification of contents over relevant authorities is required to enhance accuracy of time series statistics of budgets and the medium term budget size for the program has to be presented.

Although the fundamental direction of job creation support program is considered appropriate as it enhances those responsive features to economic cycle by the first hand participation of government in job creations against the economic slowdown, effectiveness of each budget activity for job creation could be enhanced further and the private sector's role in job creation should be reinforced.

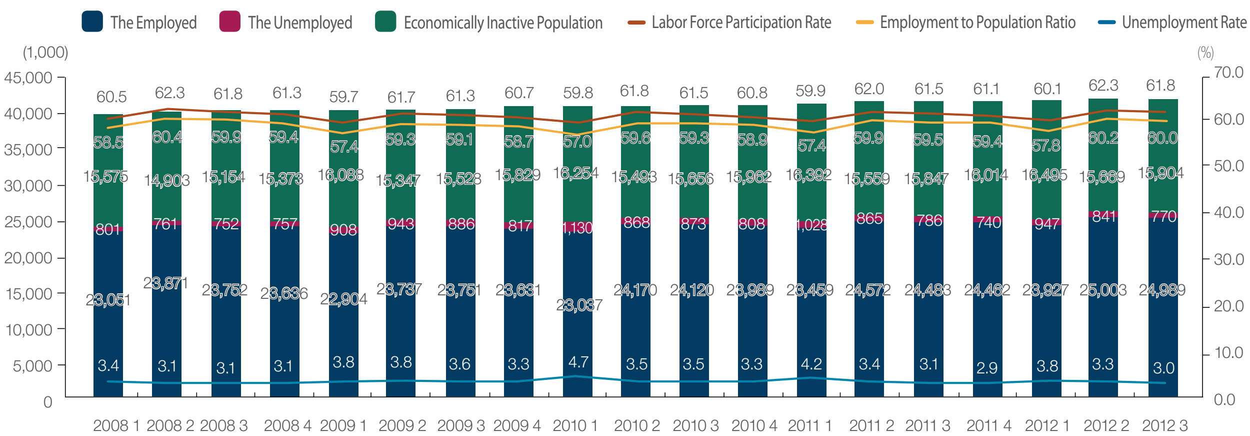
Periodic appraisals and analyses should be carried out on employment promotion subsidy as it generates deadweight loss in general. Because the government's first hand participation in job creation program might cause the lock-in-effect in which participants are consistently tied in funding, the premise that the operation of program is temporary should be kept seriously, in order to keep the amount of budget from increasing rapidly.

Fundamentally, long-term comprehensive economic and industrial policies which could draw creation of more decent jobs in service sector should be developed to offset the job loss in manufacturing and export-oriented sectors where the sectors' job creation capacity continues to weaken in overall. Enhancement of the private sector's role in job creation should be prioritized and the first hand participation of government in job creations should focus on substandard groups such as long-term job seekers among the young and the aged, self-employed who run small businesses.

Welfare

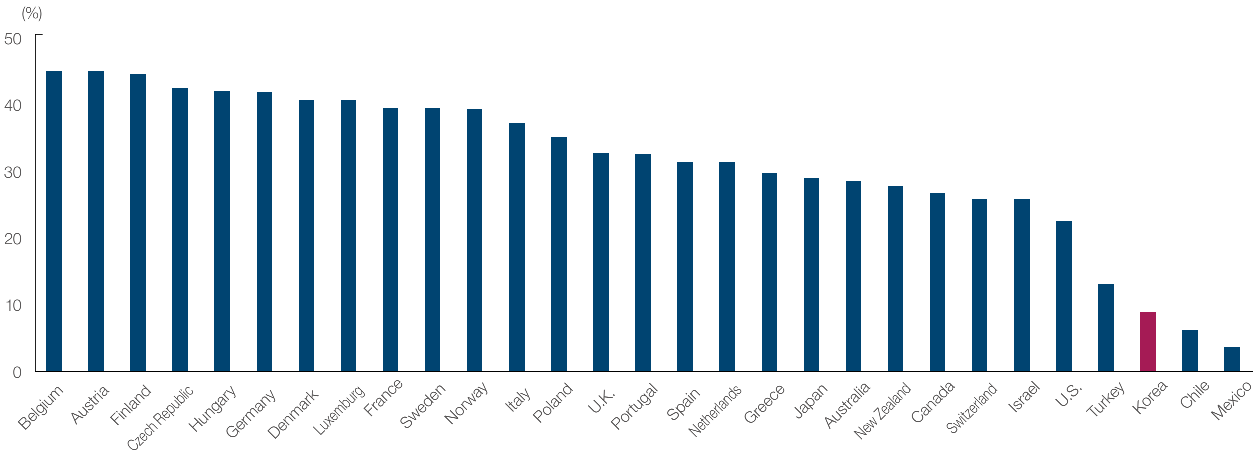
The Gini coefficient on nationwide households dropped to 0.341 in 2010 which had shown a progress of income distribution but it has risen back to 0.342 as given economic circumstances worsened in 2011. Improvement Rate of Gini coefficient which is derived from the gap between inequalities of market income and disposable income has gradually risen from 0.025 to 0.031 over 2006-2009 but it

Figure 5 _ Trend of Economically Active Population since 2008 (by Quarter)



Source: Statistics Korea Kosis

Figure 6 _ Comparison of Improvement Rate of Gini Coefficient



Source: OECD database

has stayed at 0.031 over 2009-2011. This standstill comes partly from the fact that tax burden ratio has declined to 19.8% from 21.0% from 2008 to 2011.

Compared to other OECD members, Korea's tax and transfer system is not efficient in reducing the poverty rate. As illustrated in figure 6, Korea has the third lowest improvement rate of 9.1% after Mexico's 3.6% and Chile's 6.1%. The average of OECD reaches 31.3% which shows an existing gap between Korea's and those of other advanced countries, regardless of Korea's improvement in income distribution thus far.

Major factors that worsen the income polarization are the expanding gap of wages between regular and temporary jobs, the expanding gap of productivities between large enterprises and small-medium enterprises and declining incomes of the self-employed for the persistent recession. From 2008 to 2011, the period after the global financial crisis, regular-job holders enjoyed the wage increase rate of 12.3%, while temporary job holders have seen their wage increase by 4.0% and a greater gap of wages than that before the crisis. Productivity in manufacturing sector has risen by 24.4% by the second quarter of 2012 but service sector's has risen by 1.9%. Workers who lost their jobs for the economic crisis became the self-employed which further lowered the low-income group's business incomes. From 2008 to 2011, the period after the global financial crisis, business income of households in the 8th income bracket has increased by 43.6%, by 18.8% in the 9th, by 18.6% in the 10th which all showed a great deal of increase while the 2nd bracket households' decreased 4.5% and the 3rd's increased by 3.0%.

The 2013 Budget Proposal aims at improvement of mid-low class by creating enough jobs and providing customized welfare. Areas related to health and medical show high increase rates. The budget for health insurance subscriber supportive programs increased from 5,406.5 billion won of 2012 to 5,147.7 billion won in 2013. The budget for medical care assistance reaches 4,530.2 billion won, increased by 13.8% over that of previous year. Given circumstances such as an increase in income level and aging society, health and medical related expenditures are projected to continuously increase. The effect of insurance benefit expansion on the health and medical budget has to be evaluated for its long-term master plan and comprehensive reform has to be undertaken based on the evaluation.

The labor budget has increased by 5.4% from 13.1 trillion won of 2012 to 13.8 trillion won in 2013 which is the smallest increase among the health, labor and welfare part. Vulnerable groups to jobless growth such as temporary workers at small business should be given active labor market policy, for instance, proper job training and job search support. The object of the 2013 Budget Proposal, promotion of welfare and income increase from labor is not pursued by the budget composition. Henceforth, a variety of job creation policies should be developed such as expansion of supportive infrastructure for employment, and social job creation.

Table 5 _ Percentage of Businesses with Interest Coverage Ratio less than 100%

(unit: %)

	2008	2009	2010
Total	13.5	13.3	14.3
Groceries	16.2	14.6	18.4
Beverages	31.4	35.8	44.5
Textile Goods; except Clothes	14	7.6	14.1
Clothes, Clothes Accessories, Fur	9.6	16.2	12.4
Leather, Bags, Shoes	13.9	13.7	7.9
Wood, Wooden Goods; except Furniture	3.8	6.5	14.7
Pulp, Paper, Paper Products	11.7	12.7	12.1
Print, Recording Media Duplication	9.8	10.8	10.4
Coke, Briquettes, Petroleum Refinery Products	19.3	12.4	18.4
Chemicals; except Medicines	18.5	19.1	17.8
Medical Supplies and Medicines	28.3	17.2	17.8
Rubber Goods, Plastic Goods	15.6	10.8	14.2
Non-Metallic Mineral Goods	9.2	12.3	17.1
Primary Metal	10.1	14.2	11.9
Metal Processed Goods; except Machineries and Furniture	10.0	9.6	11.5
Electronics, Computers, Visual, Audio, Communication Devices	23.2	24.6	17.2
Medical, Precision, Optical Devices, Clocks and Watches	15.4	21.2	17.5
Electrical Equipments	10.9	12.2	17.1
Other Machineries and Equipments	14.7	11.3	14.5
Automobiles, Trailers	17.7	19.5	15.0
Other Transportation Equipments	14.9	17.0	23.7
Furniture	14.9	9.6	6.3
Others	13.3	16.2	10.8

Source: Korea Federation of Small and medium sized enterprises

Current Circumstances in Small and Medium sized enterprises

Proper policy intervention is required, as the gap of productivity and profitability between small-medium sized businesses and large enterprises have expanded since the financial crisis of 2008.

Additionally, analysis on the small and medium sized enterprises Management Indices from 1999 to 2010 has been conducted to determine how the business environment has changed. Importance of small and medium sized enterprises in data processing and service sectors has grown while weight of micro-sized businesses in the sectors decreased in terms of the number of workers and businesses and the amount of added value created. Therefore, the government's decision to separate micro-sized businesses from small and medium sized enterprises in its policy support was well-grounded on the circumstances change.

Moreover, another analysis on the growth rate of productivity by the sizes of business from 1999 to 2008 has been conducted to determine if the government was right to concentrate governmental support on fostering medium sized businesses. The result reveals that the bigger a business is, the faster the productivity grows.

However, small-sized businesses turn out to avoid increasing their size to the medium as they fear to lose benefits for the small. As government's R&D support is weighted on large enterprises and small sized ones, the government's decision to create a separate plan to foster medium sized businesses was well-grounded on the circumstances change.

In the 2013 Budget Proposal, the size of guidance policy loans for small and medium sized enterprises is increased to 8.5 trillion won and 1.2 trillion won of facility investment fund for small and medium sized enterprises will be provided. In addition, the government increased the size of guidance policy loans for micro-sized businesses to 3.3 trillion won.

A potential byproduct of policy loan expansion is that marginal businesses might get to stay in the market, creating inefficiency. According to the Small and Medium Sized Enterprise Management Indexes published by Korea Federation of Small and Medium Enterprise, the percentage of businesses across the whole business sectors that cannot pay its interest from operating profit, in other words, is of an interest coverage ratio less than 100%, was 13.5% in 2008 and it decreased to 13.3% but it increased back to 14.3% in 2010.

Therefore, Korea Credit Guarantee Fund, Korea Technology Finance Corporation, and local trust guarantee funds should direct restructuring of marginal businesses while they expand guidance policy loans in order to ultimately enhance efficiency of resource allocation for small and medium sized enterprises. Especially sectors such as Electronics, Computers, Visual, Audio, Communication Devices, Groceries and Beverages have shown vulnerability in terms of interest coverage ratio. These sectors should be closely managed by relevant authorities so that an excessive competition does not drop small and medium sized enterprises to micro-sized ones.

Analysis on Tax Revision Bill 2012

Ⅰ. Summary and Evaluation of Tax Revision Bill 2012

The 2012 Tax Revision Bill is in general responding appropriately to the recent economic slump, but the proposals are insufficient to achieve the expected goals in long-term tax reform, specific measures to achieve the goal, comprehensive connections among reformed tax items.

The Administration's 2012 Tax Revision Bill aims at achievement of vital economy, fiscal health and stable future. The Bill sets its direction to improving taxation system, creating jobs and growth engines for future, boosting domestic demands, supporting middle and low income classes and improving fiscal health. Major reform agendas are as follows.

First, the Administration has reformed financial taxation which has been under restrictions and pension and retirement income tax in preparation for the upcoming 100-year-old era. The reform of financial taxation focuses on expanding tax base such as reducing the amount of aggregate taxable financial income, relaxation of major stockholder requirement to broaden taxation on capital gains from stock transfer, charging tax on financial derivatives transactions. Moreover, the reform of pension and retirement income taxation develops retirement income tax system by providing lower tax burdens on private retirement pensions than lump sum payment in order to make arrangement for the coming aged society.

Second, job creation and expansion of growth base are suggested again, as it was in the 2011 Bill because the economic growth rate turns out lower than expected due to the persistent European financial crisis. Job Creation Tax Credit has expanded additional deductions. Hence small and medium enterprises which maintained their numbers of workforce are given extended sunsets of tax preferences. The sunset period of R&D tax deduction is extended. Tax benefits on medium-sized businesses and tax deduction on start-up companies are also included in the bill.

Third, the Administration is to encourage sound consumption, to stimulate the real estate market and to provide the middle class, the low income class, farmers, fishermen, the senior and the handicapped, which are vulnerable to economic fluctuations, with proper care through the Revision Bill. The tax rate on house transactions after short-term possession is cut and heavy income tax rate on capital gains to multiple house owners and non-business purpose lands are abolished in order to stimulate real estate markets as well as to stabilize rent prices. In addition, tax deductions on the property formation savings and long-term fund come into effect to help the low-income and middle class building their assets and the EITC is further expanded to the senior single person family.

Last, enhancement of fiscal soundness and taxation fairness is suggested as the bill's goal. Above all, suggested measures are to promote transparency of tax sources and to lower the weight of underground economy. Under the measures, the broader range of overseas accounts is now obligated to report and the sunset of the special VAT exemption provision on gold bullion trades is extended. Those 24 sunset clauses are ceased and other 26 are modified among 103 sunset clauses stating reduction and exemption. The minimum corporate tax rate on large enterprises is raised and the exemption clause on long-term house-purchasing savings is ceased in 2012 as written. As efforts to improve taxation fairness and to secure tax sources, all-inclusive system of gift tax is enhanced and selective excise tax is newly imposed on luxury bags. This revision bill is appraised that it advances taxation on financial transfers and income with standing on the balanced revenue stance in overall, but shows following flaws to amend.

First, this bill lacks comprehensiveness and is shortsighted in that it is only focused on the corresponding year. This bill, instead of taking a step further, takes a shortsighted approach. For example, it partly reduces the amount of aggregate taxable financial income and partly expands the extent of taxation on capital gains from stock transfer. It suggested a measure to simulate house markets on September 10th which lowers income tax on capital gains and acquisition tax but this measure is considered effective temporarily and to lack of a master plan of long-term taxation reform. Unlike the National Fiscal Management Plan includes medium-term expenditure plans by year, there is no direction and target presented on the side of tax systems. Therefore, proper directions, goals and reform plans by year should be covered in the National Fiscal Management Plan and submitted to National Assembly.

Second, this bill does not successfully comprehend specific strategies despite it presents timely policies for supporting of middle and low income classes, job creation and securing future growth engine. It raises the additional deduction rate in Job Creation Tax Deduction to provide corporations with incentives for employment. But deduction of mere 10 million won per capita is considered not sufficient to create adequate incentives. The deduction rate on R&D expenses is newly set at 8% and the preferred deduction rate on small and medium sized enterprises in new growth and fundamental technology fields is set at 30%. However, these rates are considered limited to make intended impact on securing growth base and job creation as they do not make an enough difference from existing rates on large enterprises at 6% and other small and medium sized enterprises at 25%. Revocation of heavy taxes on non-business purpose land, capital gains of multiple house owners and transfer profits from short-term possession of houses also calls for thorough reviews as they might not stabilize the housing markets sooner or later. In case of EITC, debts are not taken into account for setting the asset criterion in screening for its qualification. Also, additional tax benefits seem to be required to lead commercial banks to participate in reverse mortgage loans.

Third, the bill fails to present a comprehensive perspective that embodies the entire taxation reforms. Instead, it plainly lists individual fragmentary reforms. In terms of the proposed new transaction tax on financial derivatives, conversion of transaction tax to income tax on capital gains should be discussed in tandem with including minority shareholders in the coverage of stock income tax on capital gains so that the reform generates comprehensive and inter-connected synergic effects. As tax exemption and deduction on savings produce portfolio-shifting to the size of financial income which determines whether to be imposed the aggregate tax, the amount of aggregate taxable financial income should be lowered mutually. However, the fact that the size of deduction and exemption on financial income totals two trillion won which quadruples the amount of revenue increased from lowering amount of aggregate taxable financial income (0.5 trillion won) proves no synchronization effects of reforms was taken into consideration in writing the bill.

Fourth, this bill, not different from other years', fails to make valid modifications on some ineffective tax breaks and tax preferences. Regardless of the revenue expanding measures such as raised minimum corporate tax rate and heavier taxation on financial income, the tax revenue effect of the bill is estimated as minus 11.1 trillion won. The 7.0 trillion won of decrease caused by adding and extending exemption and deduction sunset clauses is picked for the major factor of the decrease. Moreover, sunset closure of income deduction on long-term house purchasing funds and exemption on the relevant interest income makes no difference in tax revenue because newly created tax deduction on long-term funds and exemption on the property formation savings offer identical benefits.

Fifth, omitted adjustment of the tax rates and brackets irrespective of the recent active discussion proves that the bill misses out a major point of the reform. As the new government takes over, the expected increase of fiscal expenditure for the escalating welfare demand would be treated as one of the most important agendas and its financing solution through broadening tax base shall be presented.

Ⅱ. Tax Revenue Effects

According to NABO's estimate, the negative revenue effect compared to the base line generated by the 2012 Tax Reform Bill for the 2013-2017 period totals 11.1 trillion won (2.9 trillion won in 2013, 3.1 trillion won in 2014) and the difference between the revenue effects estimated by NABO and the Administration totals 6.0 trillion won (NABO's 11.1 trillion won and the Administration's 5.1 trillion won).

1. Estimation of Tax Revenue Effects by Tax Revision Bill 2012

The estimated total revenue effect compared to the base line generated by the 2012 Tax Revision Bill for the 2013-2017 period totals -11.1 trillion won. The bill includes 4.5 trillion won of the revenue increasing items such as the reduced amount of aggregate taxable financial income (+2.2 trillion won), adjusted calculation method on R&D tax deduction (+1.8 trillion won), raised minimum corporate tax rate (+0.7 trillion won), imposing a transaction tax on financial derivatives (+0.4 trillion won). However, it also includes prevailing 15.6 trillion won of decreasing items such as abolition of heavy tax rates on capital gains of multiple house owners, short-term house holdings or non-business purpose properties (-7.7 trillion won), extension and creation of tax deduction and exemption sunset clauses (-7.0 trillion won), expansion of Earned Income Tax Credits (-2.5 trillion won).

The total revenue effect is estimated to decrease below the base line because reduction of capital gains taxes and extension, creation of tax deduction and exemption sunset clauses creats greater decreasing effects in absolute value than the increasing effects in absolute value from reducing minimum aggregate taxable financial income and raised minimum corporate tax rate.

By the specific items causing the tax revenue effects, the income tax has the greatest tax revenue effect (-9.7 trillion won) other than corporate tax (-0.7 trillion won), VAT (-1.3 trillion won), stock transaction tax (+0.3 trillion won). By each item's functions, improving fiscal health (+2.4 trillion won), improving taxation system (+2.8 trillion won) are the items to increase tax revenue and boosting domestic demand as well as supporting middle & low classes (-12.0

Table 1 _ NABO's Estimate on Tax Revenue Effects Caused by the 2012 Tax Revision Bill (2013-2017) to the Base Line (unit: 100 million won)

	Increased Tax Rate (+)	Switched to Imposition (+)	Decreased Tax Rate (-)	Switched to the Non-Taxable (-)	Inclusion to Deduction & Exclusion from Taxable Revenue (-)	Income Deduction (-)	Tax Credit (-)	Tax Exemption (-)	Etc. (-)	Total (2013-2017)
Income Tax	-	21,666	△73,258	△2,732	-	△7,247	△3,717	△2,905	△29,253	△97,447
(Capital Gains Tax)	-	(2,390)	(△73,258)	(△ 6)	-	-	(△3,756)	(△2,287)	(△67)	(△76,984)
Corporate Tax	7,019	-	△944	△1,734	△3,978	-1	4,991	△4,760	△7,536	△6,944
VAT	-	-	-	△6,966	-	-	△6,328	△97	-	△13,391
Stock Transaction Tax	-	4,360	-	△1,310	-	-	-	-	-	3,050
Etc.	-	12,170	-	△-6,968	-	-	-	△979	△297	3,926
Total	7,019	38,196	△74,202	△19,710	△3,978	△7,248	△5,055	△8,741	△37,086	△110,805

Note: 1. Switched to Imposition means non-taxable items switched to the object of tax imposition
2. -25,381 of etc. items in income tax are derived from expansion of Earned Income Tax Credit

trillion won), creating jobs and growth engines for future (-3.3 trillion won) are the ones to decrease tax revenue.

2. Comparison with the Administration's

There is a gap of 6.0 trillion won between NABO's and the Administration's estimates of tax revenue effects (NABO -11.1 trillion won, the Administration -5.1 trillion won), most of which is from income tax on capital gains. NABO estimates -5.6 trillion won while the Administration does -0.9 trillion won for the revocation of heavy tax on non-business purpose land transfer. Such difference rises because the Administration claims that, in 2013, no decrease in the tax revenue occurs because the basic tax rate has been applied on the non-business purpose land for 2009-2012, and the same rate will be applied in 2013 as the result of revocation. Yet, NABO insists it is correct to estimate the tax revenue change because the current law is to cease applying the basic rate from 2013 but the revision bill revokes the schedule. Similarly, NABO estimates that the revocation of heavy tax on multiple house owners causes the tax revenue effect of -1.2 trillion won while the Administration has no estimates on it. The Administration did not submit a cost estimate report on the newly reduced capital gains tax rate on house transfer after short-term possession as well.

For the cases of over and underestimation, NABO has estimated 64.9 billion won for adjustment of the Job Creation Tax Credit Rate while the Administration has 611.4 billion won. Expansion of EITC to the senior single person family causes 2.4 trillion won according to NABO's estimate unlike the Administration estimates 0.2 trillion won. Accuracy of estimate method should be sought of through a methodological improvement and reasonable assumptions.

Other problems are also found that the Tax Expenditure Proposal and the Report of Cost Estimates do not have corresponding tax revenue effects. As the expiration date of R&D Tax Deduction has been extended, the Report of Cost Estimates expects the revenue effects of 119.1 billion won while the Tax Expenditure Proposal expects 158.2 billion won for 2013. This shows inconsistency and makes producing correct estimation tricky. Moreover the Administration's Report of Cost Estimates (2012.10) does not attach enough information on estimation process which causes trouble as National Assembly conducts validity analysis for inspection. The tax revenue effects based on data the Administration attached to the Tax Revision Bill is less complete than data in the Tax Expenditure Proposal, that estimating of the tax revenue effects based on the data is practically implausible. The Administration should submit relevant data for validity check on the revenue effect estimation.

Table 2 _ Comparison of Estimated Tax Revenue Effects by NABO and the Administration (2013-2017)

(unit: 100 million won)

	NABO (A)	The Administration[1] (B)	Gap (A-B)
Total	△110,805	△50,736	△60,069
Income Tax	△97,446	△40,536	△56,910
(Capital Gains Tax)	(△76,984)	(△22,478)	(△54,506)
Corporate Tax	△6,944	7,754	△14,698
VAT	△13,391	△11,128	△2,263
Etc.	6,976	△6,825	13,801

Note: 1) Based on the Report of Cost Estimates submitted by the Administration. Omitted items are supplemented with additional press releases

Ⅲ. Analysis on Major Issues

1. Reform of Tax System Regarding Financial Sector

The administration has reduced the aggregate taxable financial income from 40 million won to 30 million won in order to improve the system efficiency.[1] Requirements on major shareholders of exchange-traded are eased (percentage of shareholding 3%, values of 10 billion won → 2%, 7 billion won) so that more marginal profits from transfer come under the scope of assessment.[2] Considering taxation fairness with other financial instruments, a new transaction tax on exchange-traded derivatives is created and exemption on the property formation savings and deduction on long-term funds are newly created in place of ceased exemption on long-term house-purchasing savings.

In terms of aggregate financial income tax, the amount of aggregate taxable financial income tax should de-escalate further to 20 million won in the long term, considering the following facts. First, the proportion of those who reported their financial income above 100 million won increased from 33% in 2006 to 35% in 2010. Also in 2002, the Constitutional Court had allowed separated taxation of financial income up to 80 million won per a married couple which doubled the de facto minimum amount of aggregate taxable financial income. To put it back to 40 million won per a couple which was that before the court's order, 20 million won per capita seems reasonable. In terms of relaxation of major stockholder requirements which aimed to expand taxation on capital gains from stock transactions, additional relaxation is required to enhance taxation fairness. The current requirement might damage taxation fairness because a person could be counted as a major stockholder with relatively small value of share but a great portion while another could avoid being counted as one with much greater value and portion of stake by keeping it below the requirements (e.g. 1.8%, 6.5 trillion won). (For the sake of vertical equity, heavier tax should be imposed to high income class for their greater amount of marginal profits from stock transfer). As most of OECD countries put a tax, even all inclusive of small holders, on capital gains from stock transactions, a greater range of stock holders should be taxed for their profits.

An introduction of derivatives transaction tax with initial

Table 3 _ Revenue Effects of Exchange-Traded Stocks by Relaxation of Major Stockholder Requirements (the Administration's): 2013-2017

(unit: 100 million won)

	2013	2014	2015	2016	2017	Total
Current Taxation (A)	3,739	3,739	3,739	3,739	3,739	18,695
Revision Bill (B)	4,005	4,270	4,270	4,270	4,270	21,085
Revenue Effect (B-A)	266	531	531	531	531	2,390

1 National Assembly finally decided to set the amount at 20 million won

2 The administration proposed to impose such taxation from Jul 2013, to major stock holders who has over 2% or more of KOSPI listed items or 7 bil. Won. National Assembly's final decision is to put such taxation in effect from Jan 2014 to major stock holders with 2% of KOSPI listed item, over 5 billion won or 4% of KOSDAQ listed item, 4 billion won.

three year suspension period could be put forward because the volume of KOSPI 200 options transaction in 2010 hit 3.5 billion. Even considering the transaction tax's introduction, it would record 3 billion and regardless of further drop of the volumes traded for the increase in the multiplier of options (△80%, 0.6 billion), the volume still stays as world number one. Because equity-linked warrant is an equivalent instrument to options, once options are taxed for transactions, there would be substitution effects. ELW should be taxed as options are. Furthermore, in terms of expansion of transaction tax on marginal profits from stock transactions to minor stockholders, a discussion that transaction taxes on stocks and derivatives could be converted to capital gains taxes is timely.[3]

The Administration has modified only 5 exemption and deduction items regarding financial incomes in the 2012 Tax Revision bill and each modifications does not contain comprehensive inductive effects. Deduction on long-term house-purchasing savings is closed at the end of 2012 but it instead introduced the exempted property formation savings and deducted long-term funds which consist of following similar contents. It is designed to benefit employees with their total wages below 50 million won and business owners with their aggregate incomes below 35 million won. Those employees should subscribe to a 10 year or longer term fund that meets certain requirements in order to receive interest income tax exemption and aggregate income tax deduction. Introduction of these savings and funds after cessation of deduction on long-term house-purchasing savings is hardly seen as a modification.

Moreover, another problem pointed out is that the exempted property formation savings and deducted long-term funds are favorable to higher income brackets. As the bottom 20% of total households struggle with deficits, their limited liquidity does not allow them enough financial leeway to benefit from those funds. The modification that the exemption and deduction benefits are nullified, once withdrawn before the maturity, is considered proper reflecting immediate annuity controversial for excessive benefits for high incomers. But once it reaches 10 year or longer maturity without withdrawals, no specific income criterion is determined to subscribe nor is a limit on the size of savings to receive benefits, which makes savings still favorable to high incomers.

2. Job Creation: Job Creation Tax Deduction

The Administration has made modifications by lowering the basic deduction rate on large enterprises to 3% from 4% and raised the additional deduction rate to 3% from 2% instead of abolishing employment requirements in job creation tax deduction.[4] The Administration appropriately raised the additional deduction rate in order to enhance the incentive of employment of large enterprises. However, given that circumstances turn unfavorable to increase employment as manufacturing sector has shown the decreasing trend in employment since the second half of 2012 and economic outlooks are not promising, the modifications are restrictive as inducements for corporations to create additional jobs and practically reversed to previous Temporary Facility Investment Tax Deduction. It is because the revision allows basic deduction to not only businesses with increased workforce but ones with reduced workforce as well.

The Administration expected that lowering the basic deduction rate would generate a great deal of revenue effects mainly by large enterprises but NABO's analysis concludes that it would not be that great as expected. The Administration estimated that for this modification, tax revenue will increase by 305.7 billion won each year for 2013-2014 totaling 611.4 billion won based on its own performance data of 5% Temporary Facility Investment Tax Deduction (TFITD) and 1% Job Creation Tax Deduction in 2011. But this Administration's estimate is a result of overestimation because they took results

3 After consultation with standing committee, taxation plan for financial derivatives is canceled.

4 Final decision is to allow basic deduction to SME's only even if their workforce decreased. For large enterprises, only deduction rate was amended from the Administration's proposal (basic 4% + additional maximum 2% → 3% + 3%)

Table 4 _ Revenue Effects of Revised Job Creation Tax Credit (the Administration's): 2013-2014

(unit: 100 million won, %)

			2013	2014	Total: 2013~2014
Large enterprises	Current Taxation	Basic Deduction	11,483	12,174	23,657
		Additional Deduction	3,423	3,628	7,051
		Sum	14,906	15,802	30,708
	Revision Bill	Basic Deduction (A)	10,047 (+1,436)	10,651 (+1,522)	20,698 (+2,959)
		Additional Deduction (B)	4,309 (-887)	4,569 (-940)	8,878 (-1,827)
		Sum	14,356	15,220	29,577
	Revenue Effects (C=A+B)		549	582	1,131
Small and Medium Sized Enterprises (SMEs)	Current Taxation	Basic Deduction	1,934	2,050	3,984
		Additional Deduction	1,372	1,455	2,827
		Sum	3,306	3,505	6,811
	Revision Bill	Basic Deduction (D)	2,175 (-241)	2,306 (-256)	4,481 (-497)
		Additional Deduction	1,372	1,455	2,827
		Sum	3,458	3,761	7,308
	Revenue Effects (E)		-241	-256	-497
Total	Current Taxation		18,212	19,308	37,519
	Revision Bill		17,904	18,982	36,886
	Revenue Effects (F=C+E)		307	326	633

Note: values in brackets The Current amount deducted the revised amount deducted
Source: Kis-Value (Korea Investors Service)

from TFITD, which had no requirement for additional employment, to estimate effect of lowering basic deduction rate. Likewise, tax decreasing effect must have been underestimated because performance under 1% deduction cap seems to be simply trippled to estimate effect of raising additional deduction rate. NABO used 2010-2011 corporate financial data to analyze 1) increasing revenue effects from the lowered basic deduction rate, 2) effect of allowing basic deductions to businesses with reduced workforce on deceasing revenue and 3) decreasing revenue effects from expanded additional deductions and it concludes that the revenue effects does not increase much but by 63.3 billion won for 2013-2014.

Especially large enterprises are the ones that benefit the most from the revision in which now basic deductions are allowed even to the businesses with reduced workforces as economic conditions become worse. An analysis based on data from Korea Investors Service reveals that for those businesses with reduced workforce, the basic deduction's actual effective rate on large enterprises with great amount of facilities investment is 1.9% while small and medium sized enterprises' is 1.7%. Moreover, once the 2009 situation in which enterprises were suffered from recession is applied, that of large enterprises rises to 2.1% and that of small and medium sized enterprises' drops to 1.5%.

When 2010-2011 economic conditions applied, the size of deduction benefit for large enterprises decreases by 113.1 billion and that for small and medium sized enterprises increases by 49.7 billion won compared to the current system but when 2009 economic conditions applied, it is estimated that large enterprises receive the benefit 254.2 billion won more and small and medium sized enterprises receives 52.3 billion won more.

Considering the job creation effect and revenue effect, this revision bill stands against the Administration's intent to induce more jobs by switching Temporary Facility Investment Tax Deduction to Job Creation Tax Deduction just a year ago. Therefore, applying the basic deduction to businesses with reduced workforce should be through re-discussion.

3. Sustainable Growth: R&D Tax Deduction

R&D Tax Credit has two options, one named "corresponeding term deduction method," which deducts the corresponding year's R&D expenses. The other one is termed, "increment deduction method," which deducts excessive amounts over the reference line. Corresponding term deduction method applies deduction rates of 3-6% on large enterprises and of 25% on small and medium sized enterprises. Increment deduction method applies 40% on large enterprises and 50% on small and medium sized enterprises over the average amount of past four years' expenses. To draw more active investment activities in new growth engine and fundamental technology fields, preferred rates of 20% on large enterprises and 30% on small and medium sized enterprises are applied when corresponding term method is chosen until the end of 2012.

In the revision bill, the Administration suggests that increment deduction method's reference line to change from past four year average basis to the previous year's investment expense basis, a new corresponding term deduction rate applied on medium sized be set at 8% and not only more businesses be included but also current ones be sunset-extended in the new growth and fundamental technology fields in the revision bill. The suggestions are evaluated based on data from Korea Investors Service and it estimates that 23.3 billion won in 2013 and total 1,346.7 billion won of the increase in tax revenue occurs over 2013-2017. The change of the calculation method creates increase of 1,825.1 billion won. Nonetheless, the decrease of 478.4 billion won occurs for the new rate created on medium sized enterprises, inclusion and extension of businesses in the new growth and fundamental technology fields.

This revision improves efficiency of overall tax incentive system and backs up the economic growth momentum but certain items should be reviewed for validity. The change of the calculation method is to improve efficiency of deduction and to lessen excessive deduction but the previous one year reference reduces incentive for businesses to choose increment deduction method and eventually suppresses additional R&D investment demands. Therefore, the reference calculation method should be adjusted in accordance with the global trend of R&D tax incentives and a comprehensive research of each method's effectiveness. Especially for those small and medium sized enterprises, combined method of the corresponding term deduction method and the increment deduction method could be introduced in order to improve the current limited incentives.

Introduction of a new deduction bracket for medium sized businesses is considered necessary in terms of its efficiency as a tax incentive and fostering competitive medium sized enterprises but the suggested 8% corresponding term deduction rate should be set at higher level to expect an actual improvement of incentives, considering 6% capped deduction rate on large enterprises and 25% on small and medium sized enterprises.

For inclusion of new businesses and expansion of existing sunset clauses in the new growth and fundamental technology fields, it is expected to generate future growth momentum and new jobs but the preferred rate of 30% on small and medium sized enterprises compared to the base rate of 25% is not considered effective enough unlike the preferred rate of 25% on large enterprises compared to the base rate of 3-6% has enough carrots.

4. Reform of Pension and Retirement Tax System

The Administration raised the amount of pension income subject to separate taxation to invigorate private pensions and lowered withholding tax rate. To lead a social change that current lump sum retirement payment to annual pensions, the current one year reference in Year-Dividing Calculation is changed to five years so that retirement income tax burden comes heavier than that of the tax on pension income (3%).

As the effective rate on pension income comes lower than the current one in the revision while the tax burden on

Table 5 _ Tax Revenue Effect of Non-Business Purpose Lands: 2013-2017

(unit: 100 million won)

	2013	2014	2015	2016	2017	Total
Tax Revenue						
Heavy Rate w/o Deduction (A)	11,663	12,029	12,408	12,762	13,128	61,990
Base Rate w/o Deduction (B)	1,814	1,905	2,000	2,089	2,180	9,988
Base Rate w/ Deduction (C)	1,103	1,175	1,248	1,317	1,389	6,232
Heavy Tax Rate w/ Deduction (D)	8,821	9,106	9,401	9,677	9,962	46,967
Revenue Effect						
Base Rate (E=B-A)	-9,849	-10,124	-10,408	-10,673	-10,948	-52,002
As Revised (Base w/ Deduction) (F=C-A)	-10,560	-10,855	-11,159	-11,445	-11,739	-55,758
Base Rate Assumed w/ Deduction (G=F-E)	-711	-731	-752	-771	-791	-3,756
Heavy Rate Assumed w/ Deduction (H=D-A)	-2,843	-2,923	-3,007	-3,085	-3,166	-15,023

retirement income comes greater, a shift from lump sum payment to pension would be achieved to some extent but one problem is that tax burden on pension income still set heavier than that on retirement income in the high income group of over 15 continuous service years.

Therefore, more discussions are needed on that deduction on the high pension income bracket is altered higher so that pension recipients receive a greater benefit than those with retirement income do.

5. Revocation of Heavy Capital Gains Tax on Real Estate Property

The Administration suggests abolition of heavy taxes on all kinds of capital gains and application of basic rates (6-38%) except for real estate owned less than a year and unregistered real estate transactions for normalization of real estate markets. The Administration’s suggestion is to perpetuate the base rate application on non-business purpose lands, multiple house owners, and short-term possessions and to apply the special deduction for long-term possession on non-business purpose lands. If sunset clauses were over as initially scheduled and heavy taxation came into effect, tax revenue would increase by 1,763.5 billion won in 2013. But tax revenue would increase by 224.8 billion won once the Administration's suggestion is implemented, meaning that the revision has a 1,538.6 billion won of negative tax revenue effect.

Abolition of heavy tax implementation on non-business purpose lands has to be dealt with more caution. Because it does not seem to have much impact on normalization of house markets and the Constitutional Court has recently stated that possession of non-business purpose lands can be seen as a speculative activity. But it is desirable that the special deduction for long-term non-business purpose lands holding is designed to offset inflations while the deduction can be implemented within 10-30% range. The tax revenue is estimated to decrease by 1,056 billion won in 2013 once the abolition and the special deduction are implemented as in the revision.[5]

A thorough discussion is necessary on the permanent

5 The Assembly’s final decision is to abolish the heavy tax on non-business purpose lands a year later, but not to allow special deduction for long-term holding

abolition of heavy taxation on multiple house ownerships, considering its policy effectiveness; relaxation of rental business operator requirements, temporary freezing effects, and few transactions actually takes place. The Roh government's introduction of the heavy taxation on multiple house ownerships achieved its intended policy object to some degree as the multiple house ownership households to total households ratio has been brought down from 33% to 9% and 1.39 million households that did not use to have own houses have newly acquired their own. Since 2012, as rental business operator registration criteria have been relaxed, those with multiple house ownership could avoid the heavy rate by registering as a rental business operator. Few transactions are expected among those multiple house owners who are not registered as non-rental business operators as they are subject to the heavy rate (16000 expected transactions in 2013). An analysis on margins of transfer over 2003-2010 reveals that the increase in tax rates does not reduce the margins for long-term.[6)]

The application of the basic rate on houses owned for two years or less would stimulate transactions only in certain areas. Over the past two years, house prices in Seoul metropolitan area declined by 1.5% but house prices in Gwangju (25%), Busan (24%) and Ulsan (23%) have increased regardless of the recent narrow drops. Once the revision comes into effect, marginal profits from transfers would be actively realized in certain cities with sharp rises in price and those cities would have active house transactions.[7)]

On the other hand, the current Administration has frequently amended taxation system to stimulate house markets but this has raised doubts in its effectiveness and the frequent amendments violate the principle of consistency. Last September 10th, as a stimulation measure to real estate market, the government announced that capital gains taxes on unsold houses are subject to exemption and the acquisition tax rate on those are subject to additional cuts. Under the current government, real estate market stimulation measures have been pulled out through tax laws eight times (tallied mainly from Local Tax Reduction and Exemption Control Act and General Tax Reduction and Exemption Control Act). These amendments have caused local tax collections to decrease by 6,740.6 billion won in 2011 and 3,693.7 billion won in 2012. Even though the reduced acquisition tax had an additional tax cut in 2011, it barely increased the transaction record by 3% to the annual average record over 2005-2010 (1,190,000).

6. Support for Working Class and Those in Need

In the revision bill, followings are aimed to provide support for the working class and the needy. EITC has an additional expansion so that the 60-year-old or older single person households are subject to it. Those private banks' reverse mortgages are now subject to reverse mortgage deductions (two million won capped per year). Workers without house ownership now benefit from the increased 50% deduction rate (previously 40%) on rent income. The 30% deduction rate is now applied on credit card usages on public transportations with one million won capped.

According to the revision bill in which EITC is expanded so that the senior single person households and those previous recipients who took an exit from Minimum Living Security Benefits are now subject to it, the 384,000 single senior households and the 56,000 previous minimum living security benefit recipients, total 440,000 would newly receive EITC in addition to existing 594,000 (in 2013) recipients. This would help the senior poor problem solved and the minimum living security benefit recipients stand on their own foot in general. However, as EITC criteria do not concern about debts, the asset criteria (100 million won capped) or house ownership criteria (60 million won capped in the standard market price) often exclude valid benefit applicants from the benefits even though they fall into the near poverty group. This problem should be solved.

When it comes to the application of pension income deduction on interest expenses of private reverse mortgages, it is well-designed to provide the seniors

6 Applying preferential rate for multiple house owners was initially to be finished at the end of 2012 but final decision of National Assembly is to extend its sunset for another year

7 National Assembly's final decision is not to apply preferential rate for properties held under 2 years.

who own a house but lack incomes with a safety net but additional tax incentives could help achieve the intended goal of the application.

The cap of income deduction should be raised at higher level than that of Housing Guarantee (at 2 million won) in an attempt to control guarantee risks and interest rate risks of private reverse mortgages. Not only pension incomes but also earned incomes and global incomes should be made deductible as the eligibility age to receive national pension is gradually raised from age 60 and private reverse mortgage lenders do not limit subscribers' age. 25% deduction on property taxes for those subscribers to Housing Guarantee could be applied to private reverse mortgage subscribers for sake of equity.

When it comes to a raise in rent income deduction rate from 40% to 50% in the revision, a raise in the rate should be more effective than a raise in the cap. A recent trend shows that the rent households to total households ratio has increased from 19% in 2006 to 21.4% in 2010 and under the assumption of 50% deduction rate, to receive the full deduction benefit of 3 million won, the amount paid for rent should reach 500,000 won ((300/50%)/12) but most workers pay for their rent less than 500,000 won. It means that a raise in the cap would not make an obvious difference.

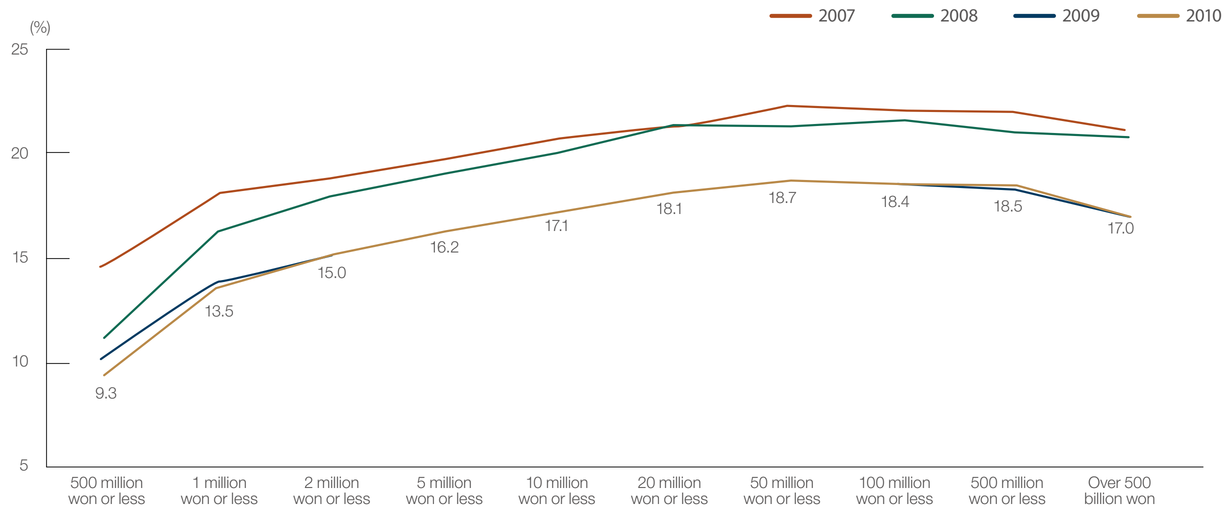
For an additional raise in the capped deduction on credit card usages on public transportations, it turns out the deduction benefit goes to mostly those high incomers with their annual income of 40 million won or higher (2.59 million cases in 2010). Also, the deducation has already achieved the initial goal of dragging out the revenue sources to light. Thus, no further expansion seems necessary.

7. Extension of Effective Period of Transportation, Energy and Environmental Tax

The Administration suggests that effective period of Transportation, Energy and Environmental Tax be extended for 3 more years. The tax had been initially to be implemented for 10 years since its first introduction in 1994 and it has been through a controversy of closure. Earmarked taxes including Transportation, Energy and Environmental taxes were to be integrated into the main taxes so that the Administration is able to operate simplified taxation but the attempt is failed as relevant authorities stand for different views.

Some claim that Transportation, Energy and Environmental tax is needed for sustainable investment in construction of transportation infrastructure as congestion charges and logistical costs are at high levels due to insufficient transportation facilities. However, this claim

Figure 1 _ Effective Rates of Corporate Tax by Brackets (on Accrual Basis): 2007-2010



Source: National Tax Service, [Statistical Yearbook of National Tax] is not persuasive because the back-bone national traffic network project has been already completed and no more massive constructions of transportation infrastructure are evaluated necessary for the time being. Moreover, the high levels of logical costs may have been derived from other inefficient factors. In addition, with the beneficiary principle, tax revenues collected under the Act on Special Accounts for Traffic Facilities should be limited on expenses on road works which benefit everyone for free but those expenses for railroads, ports and airports which have their own separate accounts of usage fees are accessible to the special accounts for traffic facilities too. Frequent amendments regarding Transportation, Energy and Environmental tax harm its legal stability and make the system unpredictable to the public. Therefore, the extension of effective period of Transportation, Energy and Environmental tax is not suggested for consistency of policies and stability of legal orders.

Although the abolition of such tax should be concerned with abolition of other object taxes such as education tax and the special rural development tax, it seems more reasonable to integrate those taxes covert into selective excise taxes in the general accounts for simplification of taxation system and elastic resource allocation.

8. Transparency in Tax Source and Tax Equity

The Administration suggests a raise in the minimum tax rate covered by the bracket of over 100 billion won from the current 14% to 15% in an attempt to secure the fiscal revenues and to enhance taxation fairness in the bill. After the taxation revision in 2008, the effective tax rates of the brackets over 100 billion won have come even lower than below brackets. Even though corporate tax rates all over the brackets have been lowered, the top brackets are the ones that take the most advantages of the tax cut and that has the tax burdens excessively reduced. The raised minimum rate to 15% is to remedy this and to improve taxation fairness.

However, since the bracket of over 500 billion won still has a lower effective rate than other brackets, additional modifications to adjust intervals of brackets or the overall tax cut considering effectiveness of tax cuts are required.[8]

Under the current system, only banking and stock transaction accounts are subject to report their existence to the NTS. This aims to track down current domestic residents' overseas financial incomes. This revision attempts to expand the range to all kinds of overseas financial accounts for more thorough investigation. Once revised, a great deal of oversea tax evasions could be placed under the tax service's sight especially for those oversea real estate acquisitions.

The revision bill attempts to add 'economical gains' into the range of donated property and to create a new tax code of donated property calculation because the current all-inclusive basis in the Act on the Inheritance Tax and Gift Tax can be found as a violation of the Constitution. The current all-inclusive basis is an abstract and general notional code which is against the principle of Tax Codes in view of Clearness and raises doubts to its effectiveness. Therefore, the elimination of the unconstitutional factors is appraised to be reasonable.

Those expressions "actions that increase other entities' asset values" and "consideration as one continuous action or transaction" inserted in Article Ⅱ Clause 3 of the Act on the Inheritance Tax and Gift Tax do not indicate a clear point of time for formation of tax liability. These expressions shall be edited in the legislation.

The revision also attempts to levy selective excise tax on high-priced designer bags over two million won in conformity to jewels and watches currently subject to the tax.[9] In this case, the logic stands that other high-priced items should be levied likewise which points out the imposition's invalidity. The Act on Selective Excise Tax has had minor adjustments of rates on certain items since the 2004 revision. A thorough and comprehensive discussion of a reform should be carried out in accordance with changed patterns of consumption, industrial structures and the current economic development stage.

8 Final decision is to raise minimum tax rate from 14% to 16% for bracket of 100 billion won or over, which is 1%p higher than the Administration's proposal. Also for bracket of 10 billion won or over, the rate was raised from 10% to 11%.

9 Standing committee decided to put the taxation in effect from the 1st of Jan 2014

Medium Term Economic Outlook and Fiscal Analysis

Macroeconomic Outlook

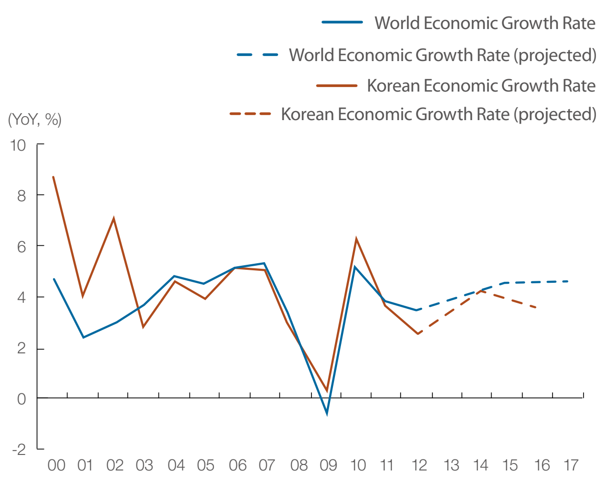
Ⅰ. Medium Term Forecast of Economic Growth Rate

The domestic economy is expected to grow at an annual rate of 3.5% over 2012-2016. This low growth is projected because export conditions would not improve easily as the European financial crisis prolongs and domestic demands would recover slowly. In addition, the household-debt problem has to soft-land, the quality job creation does not show bright prospect and the real estate market is in a recession.

The Korean economy grew 2.5% in 2012 and it is expected to grow 3.5% and 4.3% in 2013 and 2014, respectively. This is because export conditions started to improve as the global economy recovers from recession and instability in global financial markets are under control. IMF says that the global economy grew 3.5% in 2012 and forecasts that it would grow 3.9% and 4.4% in 2013 and 2014. IMF expects the global economic growth rate to continue to rise as it has hit its bottom in 2012. Despite the global economy starts to recover, the pace of growth is expected to be gradual compared to that before the crisis. That is, over 2003-2007, the global economy has grown at an annual average of 4.7% each year but it would grow at an annual average of 4.2% per year over 2012-2016. The European region's low growth worsens BRIC countries' export conditions. Therefore, Chinese economy which had grown at annual average of 11.7% over 2003-2007 would much gradual growth at annual average of 8.6% over 2012-2016 as wells.

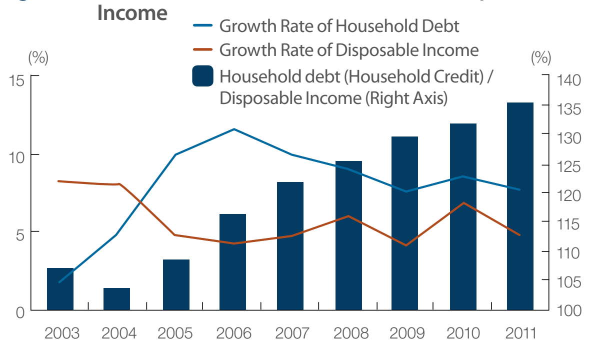
Unlike the recovery of global economy, the Korean economic growth slows down after 2015. The Korean economic growth rate is expected to grow 4.3% in 2014, 3.9% in 2015 and 3.3% in 2016. First, this is because, major central bank interest rates, either domestic or foreign, are expected to be raised. The FOMC announced that zero interest rates policy will be withdrawn not until mid-2015. Considering projections of the U.S. economic growth (the Fed's projection: 2.5%-3.0% in 2013, 3.0%-3.8% in 2014), the U.S. would have market interest rates raised at least a half year earlier than the point it would raise the base rate. As those rates rise, the global economic growth rate is expected lower than IMF's projection and Korea's exports would shrink likewise.

Figure 1 _ World vs. Korean economic growth



Source: NABO, IMF, BOK

Figure 2 _ Growth Rates of Household Debt and Disposable Income



Note: Household Credit Basis
Source: Bank of Korea

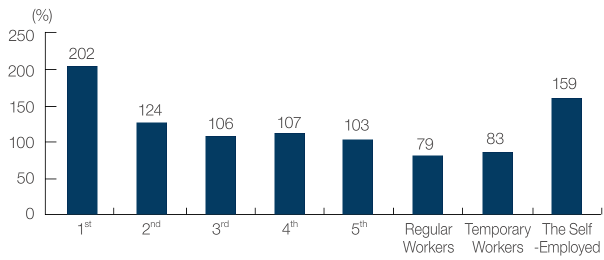
Second, households should bear the heavier burden of debt services as the interest rates are raised. In the first half of 2012, the current household liabilities (household credit basis) has increased.

13.1% over 2010's and 4.0% over 2011's which amounts to 922 trillion won. The household debt to disposable income ratio (163.7% in 2011) comes high. With the high level of household debts, the increase in the income level relatively shows a gradual pace which makes households, especially at the lower income level, vulnerable to the debt burden. According to the Survey of Household Finances 2011, households' Debt Service Ratio increases to 12.9% which is 1.5%p higher than 2010's 11.4%. By the income brackets, the first bracket has a 2.1%p increase of DSR (20.0% in 2010 to 22.1% in 2011), the second bracket has a 3.2%p (14.4% in 2010 to 17.6% in 2011), the third bracket 2.0%p (12.0% in 2010 to 14.0% in 2011) and the fourth bracket 2.0%p (9.4% in 2010 to 11.4% in 2011). The number of loans that start the payments as the preset grace periods are over which makes the repayment burden heavier. The size of loans whose grace periods are over has a gradual increment of 19.2 trillion won in 2012, 24.6 trillion won in 2013 and 37.5 trillion won in 2014. As the accumulation of household debts raises households' DSR higher, it would shrink private consumption and restrain a recovery of domestic demands.

Third, consumption and construction investment (as parts of domestic demands) would continue to have lower contributions to growth as the quality job creation is at a loss, the real wage growth slows down and real estate markets shrink. This explains for the steady declining trend in the domestic economic growth since the currency crisis.

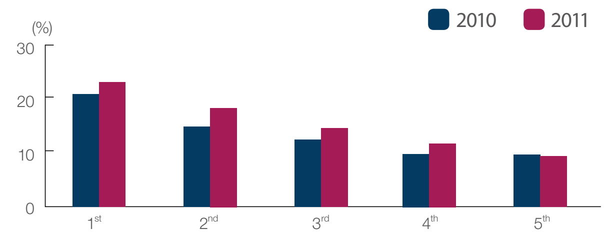
Besides, the size of economically active population keeps on decreasing for the aging population, dynamics of domestic demands would become weaker than other competing nations'. To sum up, after 2013, the domestic economy would start to recover but its pace would be very gradual. The uptrend the economy would have over 2013-2014 is projected to slow down after 2015 for the expected rise of interest rates.

Figure 3 _ Household Debt to Disposable Income Ratio by Income Brackets



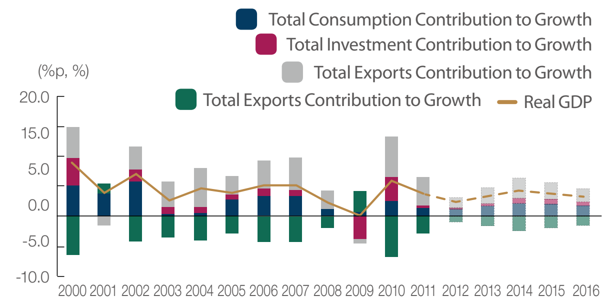
Source: [Survey of Household Finances 2010-2011], BOK, Statistics Korea

Figure 4 _ Debt Service Ratio by Income Brackets



Source: BOK

Figure 5 _ Contribution to Growth by Expenditure Items



Source: BOK

Ⅱ. Medium Term Outlook by Sectors

Over 2012-2016, private consumption would increase at an annual rate of 2.6% as the household debt problem goes through an adjustment and the income growth slows down. Over the same period, facilities investment grows at an annual rate of 3.9% as investor sentiments would not easily recover due to the global economic instability. Regardless of the instability the international financial markets caused, the surplus in the currency account would weaken the instability shock to the domestic financial market.

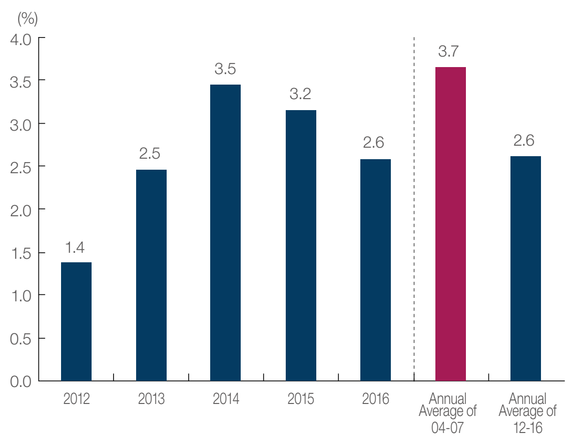
1. Private Consumption

Private consumption would grow at an annual rate of 2.6% over 2012-2016. By years, the growth rate increases from 1.4% in 2012 and 2.5% in 2013 to 3.5% in 2014 but it comes back down to 3.2% in 2015 and 2.6% in 2016. The ground for the increase in the private consumption after 2013 is that the number of the employed is expected to have the increase rates of 1.4% in 2013, 1.5% in 2014 and 1.4% in 2015. Moreover, the wage growth would have its annual average rate of 2012-2016 at 3.7% which is slightly higher than 3.5% in 2012. However, over 2012-2016, the annual average growth rate of private consumption would be 2.6% which is 1.1%p lower than its 3.7% before the global financial crisis. For the first reason, debt service burdens on households limit the household liquidity and financial supervisory authorities tightened regulations on the household debts. As the adjustment pressure on debts comes greater, the higher interest rates cause greater debt service burdens and limited consumption capacity to households.

Second, as the economic growth rate settles down at 3%, the low growth would cause the income growth to slow down which contributes to weaker private consumption.

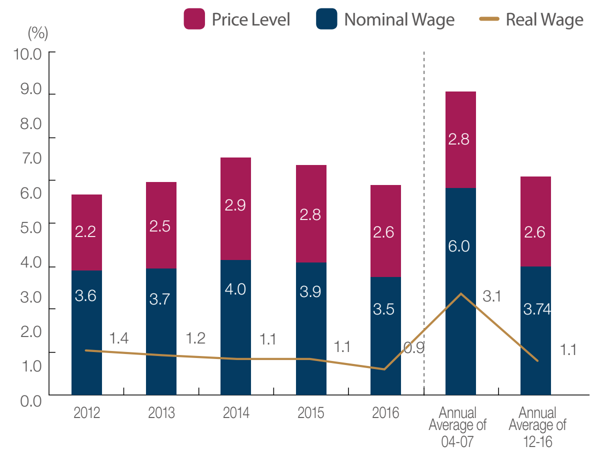
Third, trading terms turn worse. It would work as a factor that causes the real purchasing power to decrease and that eventually puts a limit on the consumption increase. International oil prices are expected to stay at high level, nevertheless European countries and BRICs countries would demand less due to their slower growths. Geopolitical risks in the Middle East region and Iran's nuclear weapon conflict contribute to its less supply. Higher prices of raw materials such as oils cause the worse trading terms.

Figure 6 _ Medium-Term Predictions of Private Consumption



Source: NABO

Figure 7 _ Medium Term Wage Growth Rate



Source: NABO

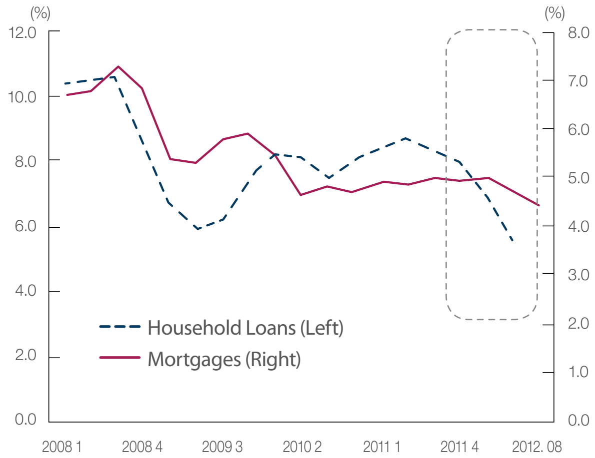
2. Construction Investment

Residential investment would not show much progress in 2013 but it is expected to have a gradual increase afterwards. For the reason, first, a huge effort is made for the adjustment of the household debt structure and once the adjustment shows some progress, the current pressure for house owners to make a sale of their house would be relieved. The growth rate of household debts shows a slow-down from 8.0% (QoQ) increase in the first quarter of 2011 to 5.5% increase in the second quarter of 2012 which supports that the government's measures have gradually worked.[1]

Second, the demand for houses is still increasing. According to Statistics Korea, new 250,000 households emerge every year over 2012-2016.[2] As the demand for new houses continues to increase, redevelopment, reconstruction and remodeling projects on deteriorated residential areas would come into spotlight. Households whose householder is at his/her middle age (age 30-54) are the major buyer group and the size of those households is shrinking which makes the recovery in the house markets gradual.

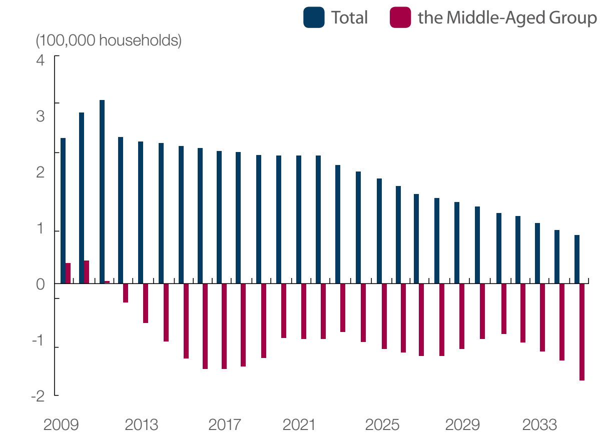
Third, technologically speaking, after 2014, the residential investment would increase. Over 2009-2011, even though the number of approved residential construction projects increased, the actual amount of investment on residential constructions decreased. This is not only because those licensed house builders reduced their actual investment for the sluggish market but also because the structural shift in the supply of houses to small-medium sized ones of less construction costs are ongoing. In 2011, the supply of house has increased as much as 42.2% (approximately 550,000 houses) but the proportion of small-medium sized houses in the supply increased to 81% which explains for 15.9% decline in the actual residential investment. The structural shift in the supply of house to small-medium sized houses started in 2014 and is expected to be completed by 2014. Once the shift completes, the gap between the size of supply and the amount of investment would diminish. That is, as the supply of small-medium sized houses makes majority in

Figure 8 _ Rates Applied on Household Loans and Mortgage Loans



Note: Quarterly Basis
Source: BOK

Figure 9 _ Future Growth Trend of Households



Note: The middle-aged group refers to households whose householders age within 30-54
Source: Statistics Korea

1 Mortgage rates fell to a record-low 4.41% (new issuance) in August.
2 The Administration has provided about 440,000 houses each year for the last three years and it plans to provide 451,000 units this year considering the increasing number of households and demolition of existing houses.

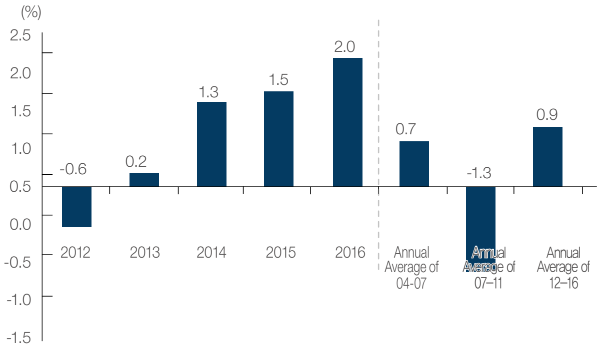
Table 1 _ the Number of Houses Approved to Construct and Residential Investment Trend

(unit: 10,000 houses, %)

	Sum	Small-Medium Size (85m² or smaller)	Medium-Large Size (over 85m²)	Growth Rate of Residential Investment
2007	55.6	34.7(63)	20.8(37)	-3.0
2008	37.1	25.8(69)	11.4(31)	-7.8
2009	38.2	25.3(66)	12.9(34)	-2.0
2010	38.7	28.4(73)	10.3(27)	-13.4
2011	55.0	44.6(81)	10.4(19)	-15.9

Note: Figures in brackets refer to percentages
Source: Ministry of Construction and Transportation

Figure 11 _ Projection of Medium Term Construction Investment

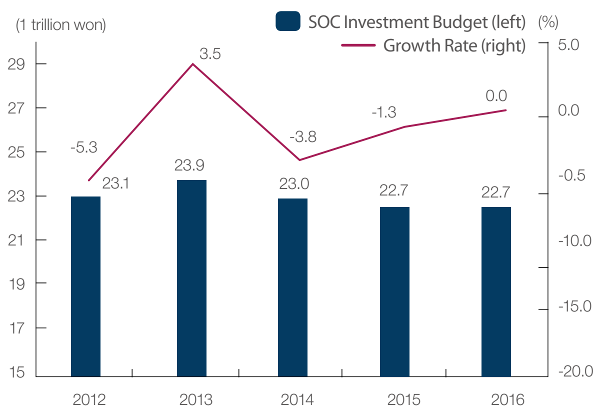


Source: Ministry of Strategy and Finance

the total house supply, the increase in the supply of small-medium sized houses becomes an indicator of the increase in the residential investment.

Investment in civil engineering would be reduced over the medium term. According to the Administration's National Fiscal Management Plan, the growth rate of SOC budget stays at as low as -0.5%. Furthermore, it states that the focus of SOC investment is on the maintenance of existing facilities rather than new constructions. Even the current budget for SOC could be downsized as budgets allocated for welfare, education and national defense are increasing. Non-residential construction increases from the second half of 2012 to 2014 due to the relocation projects of government buildings. As the economic recovery shows stronger signs, the demand for business buildings would increase as well.

Figure 10 _ SOC Investment on the Medium Term National Fiscal Management Plan



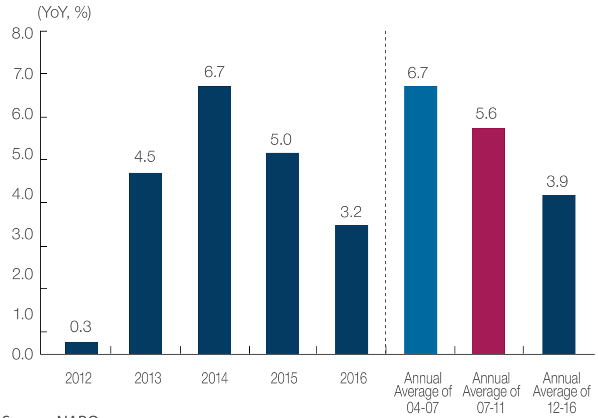
Source: Ministry of Strategy and Finance

In conclusion, construction investment is expected to increase at an annual rate of 0.9%. Over 2013 to 2015, investment would have a gradual increase mainly on non-residential constructions. Over 2014 to 2016, once the special measures of soft-landing household debts turn out to work as intended to lessen the debt service burden, the demand for and investment (redevelopment and reconstruction projects) in houses are expected to increase. There is a possibility that the Administration could carry out a house market stimulation measure during 2016 when the economic downturn is obvious.

3. Facilities Investment

Over 2012 to 2016 period, facilities investment is expected to increase at an annual rate of 3.9% which is lower than 6.7% of four years (2004-2007) before the financial crisis or 5.6% of five years (2007 – 2011). By the years, the growth rate is forecast at 0.3% in 2012, 4.5% in 2013, 6.7% in 2014 5.0% in 2015 and 3.2% in 2016. These values are 1.1%p lower adjusted from those in the last May's revised outlook. Specifically, the 2012 growth rate is 3.5%p lower adjusted and that of 2013, 1.5%p lower adjusted, those of 2014-2016, 0.2%p higher adjusted. Last May, as foreign instability from the European fiscal was extinguished to some extent, facilities investment was expected to show a gradual recovery in 2012 unlike it was slow in 2011. Furthermore, it was expected that in 2013, the Euro zone escapes from recession and the U.S. and

Figure 12 _ Medium Term Projection of Facilities Investment



Source: NABO

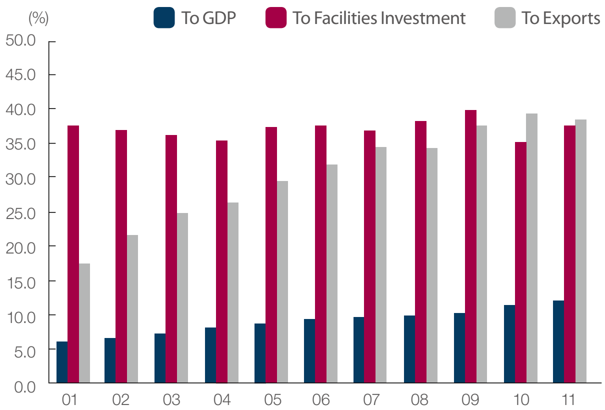
Chinese economies start to recover. However, in reality, instability in the Euro zone expanded and showed a sign of prolongation which consequently dragged down the real economies of the U.S. and China and shrank the businesses' investment sentiment in the second quarter. In 2013, the Euro zone does not seem to escape from the recession the financial crisis brought and the recovery of global economy is expected to be weak. Therefore, the domestic economic growth rate is 0.4%p lower adjusted to 3.5% from the last May's and the growth rate of facilities investment is 1.5%p lower adjusted to 4.5%.

Korean economy has a great proportion of IT sector in its exports and investment and the exports lead industrial productions. The increase in the export oriented manufacturing sector stimulates consumption and investment and eventually consumption and investment increases domestic demands. After the currency crisis Korean industrial structure has changed towards IT and service industries. While investment is focused on manufacturing of semiconductors and mobile communications, traditional industries have relatively lost importance. Under this structure, when IT exports show a strong sign, the level of facilities investment maintains at a similar level to other years but when IT sector and other relevant sectors are slow, a severe shock hits facilities investment. Unless other industrial sectors relevant to domestic demands are found so that those sectors can provide a new power to stimulate facilities investment, a steady downturn in facilities investment would continue. In the medium term, since the currency crisis the growth rate of facilities investment has steadily declined. It was at an annual rate of 13.6% over 1999-2003, 6.7% over 2004-2007 and 5.6% over 2007-2011 and is projected to stay at 3.9% increase for next five years.

4. Foreign Transactions

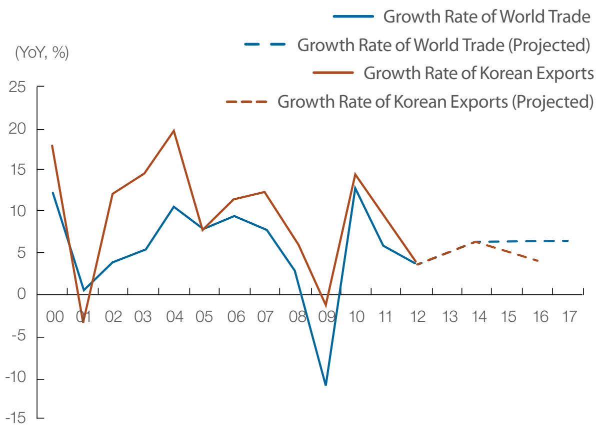
From 2012 to 2016, the projected annual growth rate of exports is 5.7% which is a big fall from both the last projection (10.0% growth projected for the same period)

Figure 13 _ Projection of Medium Term Facilities Investment



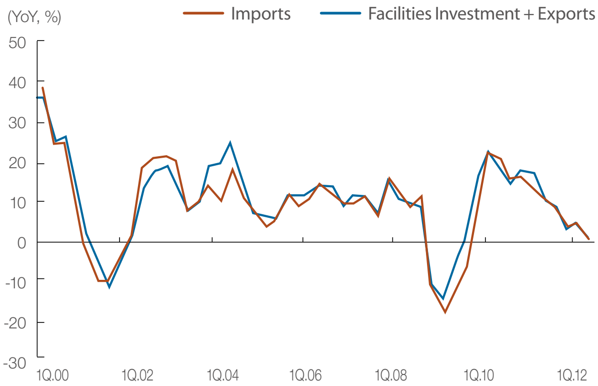
Source: NABO

Figure 14 _ Volumes of World Trade and Korea's Exports



Source: NABO, IMF, BOK

Figure 15 _ Difference between Final Demand and Imports



Source: BOK

and the 2011 actual volume of exports (19.0% growth performed to the previous year's). Slow growth of the world trade volume supports the low projection. Moreover, export conditions are not in favorable terms as financial institutions of the major advanced countries are under the restrictions of loans and those countries still suffer from credit squeezing.

2012 to 2016, the projected annual growth rate of imports is 5.7% which is another big fall from the last May's projection (10.2% projected) and the 2011 actual volume of imports (23.3% growth performed to the previous year's). The ground for the projected drop in the rate is the projected slow recovery in domestic demands in tandem with exports and facilities investment.

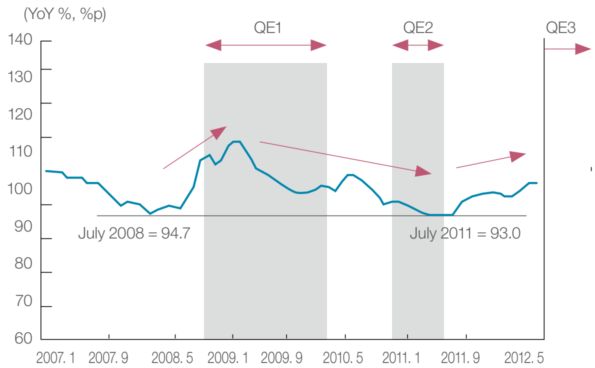
On the other hand, the 2013 current account is expected to have a surplus of $21.93 billion which is decreased by $5.53 billion from the 2012 current account ($27.46 billion surplus estimated). The projected annual average surplus of the current account from 2012 to 2016 is $23.64 billion which is $720 million less than the last projection's. For the next five years, Korea is expected to maintain the surplus in the current account although export conditions do not seem to improve. This is because, those developing countries on which Korea's exports depend much would sustain their demand for imports and prices in raw materials such as oils are expected to rise slowly.

5. Exchange Rate

The Won/Dollar exchange rate would gradually and steadily fall over 2013 and 2014 until it bounces up in 2015 and 2016. By looking into the given medium-term conditions in the foreign exchange markets, four main factors that would cause this movement of the rate are found.

First, quantitative easing policies the U.S. currently implements would cause the fall of the rate for medium term. The Fed's firm stance in implementing a series of QEs is aimed to boost the economy but also it aimed to suppress the strong dollar in terms of exchange rate. The Fed has already succeeded to downgrade the real effective exchange rate (the lower value of the U.S. dollar) to the level it was before the financial crisis hit through two QEs.[3] But only within a year (July 2011-July 2012) after the end of the second QE (June 2011), the U.S. dollar's real effective exchange rate has soared 8.8% and started to be as a burden to the U.S. economy.[4] The Fed has input $2.35 trillion purchasing bonds for three years so that it is back to the level before the financial crisis. By the result

Figure 16 _ Movement of the Real Effective Exchange Rate in Accordance with the U.S. Quantitative Easing



Source: BIS

3 The Fed provided liquidity of $1.75 trillion and $0.6 trillion each through 1st (2008.12-2009.03) and 2nd (2010.11-2011.06) QEs to the market.

4 In fact, the U.S. economy's increase rate of goods and service fell from 15.3% in July 2011 to 2.8% in July 2012. Although the global economy's recession is pointed out for the main reason, the rapid rise of the U.S. dollar is also seen as a reason.

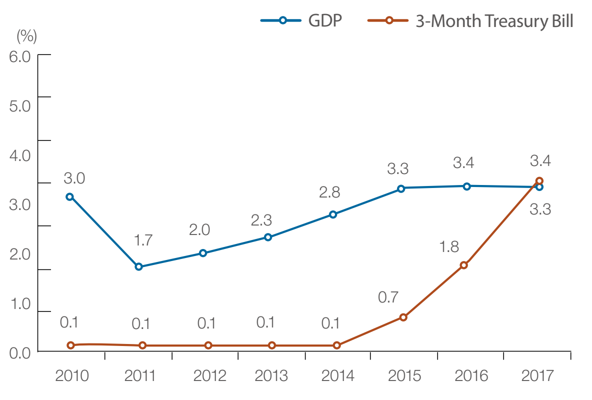
of the size of input, this QE's impact might last until 2014. The QE's impact on the real effective exchange rate would work as a factor to suppress the Won/Dollar exchange rate.

Second, the future direction of the Won/Dollar exchange rate depends much on the U.S. economy's recovery. IMF has forecast the U.S. economy's gradual recovery in the medium term in its IMF Country Report, 2012. Aug. Once the U.S. economy is back on the track of stable growth at 3%, the Fed would cease its QE and attempt to raise the bank rate. Such a tighter monetary policy implementation would affect the Korean foreign exchange markets and work as a factor to raise the exchange rate.

However, it should be noted that the two past QEs' stimulation effect on the real economy was somewhat limited. It is noticed in the balance sheets of those central banks that most of released liquidity has flown back to the banks as short-term deposits (EU) or reserves (the U.S.). For instance, in the U.S., after the second QE with $600 billion released, the amount of reserves has increased by $601.2 billion, while the size of ECB's 1-day term deposits has increased by 580 billion Euros after the two LTROs with 730 billion Euros. The inflow of liquidities as reserves and 1-day term deposits are supposed to be from the funds supplied to banks under the name of QE and LTRO.[5)6)] Therefore, the implementation of QE is not considered to have a direct impact on the real economy, rather it'd better to stabilize the financial markets and draw a gradual recovery.

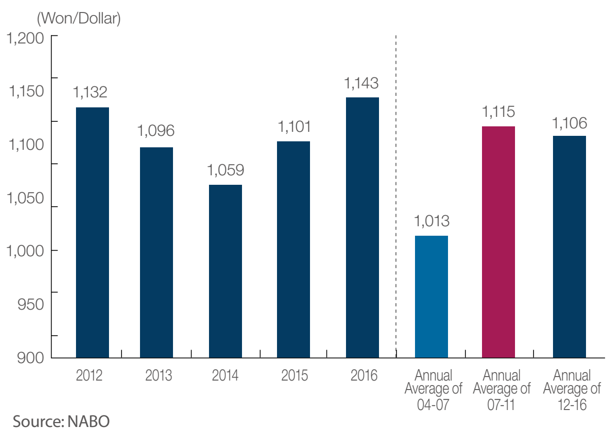
Third, the European financial crisis still affects the domestic economy. As the EFSF and the ESM (European Financial Stability Facility and European Stability Mechanism) were not capable to remove the instabilities in the financial markets, the ECB recently initiated OMT (Outright Monetary Transaction) in attempt to support Spain and other nations at stake. ECB's liquidity support through QE and financial crisis management facilities is of a limitation on solving the fiscal problems those southern European countries are going through. A fundamental solution of the southern European fiscal crisis should be found through comprehensive approaches to achieve the advancement of fiscal structures. The countries should

Figure 17 _ IMF's Outlook on the U.S. Economy and Interest Rates



Source: IMF Country Report No. 12/213, 2012. 8.

Figure 18 _ Medium Term Projection of Won/Dollar Exchange Rate



Source: NABO

5 As a result, those central banks' massive liquidity supply barely increased loans to the private sector. In the U.S., the annual increase rate of loans was 8.7% from 2000 to 2007 but it fell to -0.7% in 2008 and has stayed at an annual increase rate of 0.8% since then because banks started to avoid risky loans due to the pressure to improve financial soundness and households and businesses had less demand for loans due to the recession in the house market and the economic uncertainty.

6 On the other hand, QEs had a great impact on the asset markets (stock markets). The QE implementation supplied a great deal of liquidity to the financial system's most vulnerable parts and fixed the credit squeeze. The Fed's QE1 purchased $0.2 trillion of MRB from Freddie Mac, Fannie Mae and Ginnie Mae and $1.25 trillion of MBS. This purchase fixed the most imminent credit squeeze in the housing finance market.

resolve the pervasive deficits in the current accounts by enhancing international competitiveness, reforms of pension and welfare structures should be conducted and flexibility of labor market should be protected. In last January 2012, heads of EU have agreed on the "fiscal compact" (effective in 2013), that mainly states about the fiscal austerity drives but whether they would comply with the compact is doubtful. The Eurozone has still to deal with not only the consequent economic downturn of fiscal austerity measures and lowering banks' leverage but also the discussion of Greexit, and the downgraded credit ratings of European countries. With above mentioned instabilities, European financial crisis still matters to international financial markets.

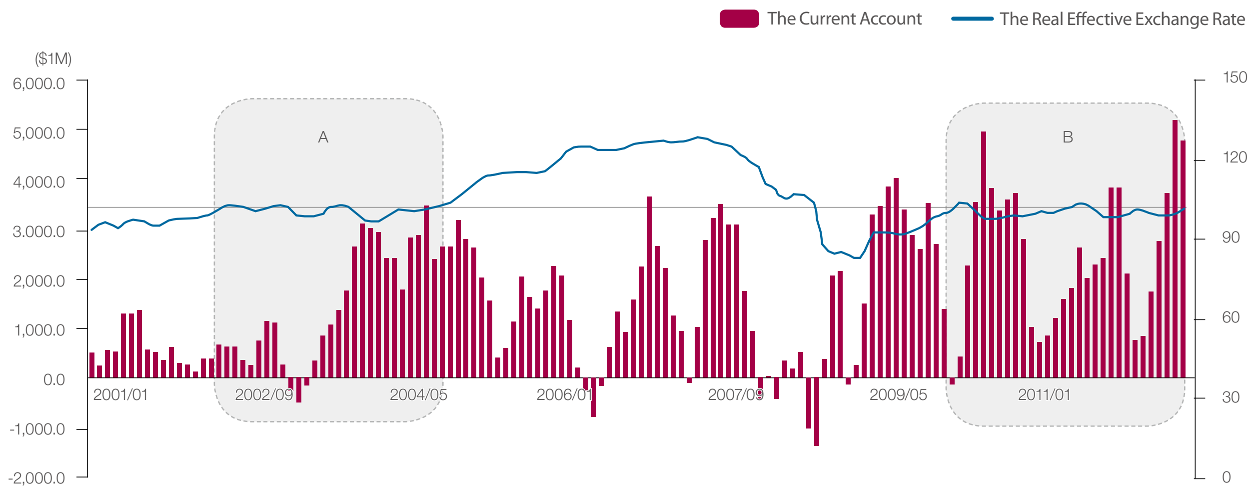
Fourth, Korea maintains the current account surplus. This would reduce the extent of fluctuations caused by internal and external instability shocks. The early-mid 2000's (A in the figure) and the period after the global financial crisis (B in the figure) both had similar levels of the real effective exchange rate but the B period had a greater size of the current account surplus.[7] This implies that the domestic economy has a greater capacity to generate surplus. From 2012 to 2016, the projected annual average surplus of the current account is $23.64 billion.

In conclusion, the Won/Dollar exchange rate would gradually fall from 2012 to 2014 and start to bounce up from 2015 to 2016, staying around at 1,106 won/dollar.

6. Employment

Analysis of the labor market trend shows that global financial crisis disturbed the job market for the past five years. On the other hand, during the economic recovery period in 2010, the annual growth of employment recovered back to the level before the crisis with a 1.4% increase (△323,000). By sectors, the manufacturing sector decreased at an annual rate of 1.7% from 2005 to 2009 and increased 5.0% in 2010 but SOC and other service sectors had a 1.2% increase in 2010 which did not even reach the 1.7% annual increase rate of the preceding five years. In 2011, employment increased 1.7% (△415,000). On the indicator, employment rather improved although the exports and industrial output in the second half of 2011 slowed down owing to the European financial crisis and economic slowdowns of the U.S. and China. Looking into the relationship of two variables, the real GDP growth rate and the unemployment rate over the same period in the

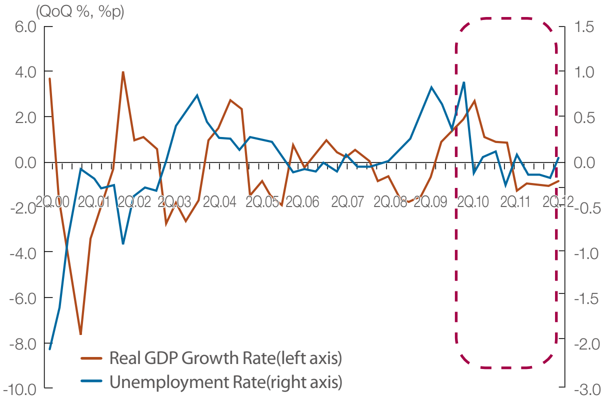
Figure 19 _ Trends of the Real Effective Exchange Rate and the Current Account



Source: NABO

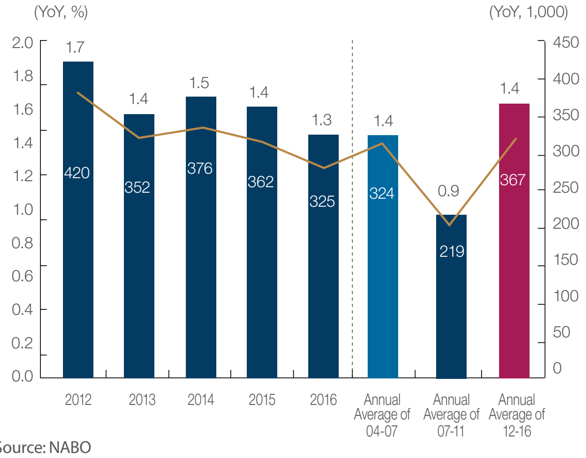
7 The current account recorded $1.57 billion (monthly average) for A (2002.5-2004.9) and $24.4 billion for B (2010.1-2012.7).

Figure 20 _ Fluctuations of Real GDP Growth Rate and Unemployment Rate



Source: NABO

Figure 21 _ Medium Term Projection of Employment



Source: NABO

previous year, the movement is when the growth rate goes up, the unemployment rate comes down. This correlated movement maintained until 2009. However, after the global financial crisis, this counter-cyclical movement changed to a pro-cyclical relationship. In 2010, the economic growth rate increased by 6.0%p to 6.3% while the unemployment rate increased to 3.7% which is a 0.1%p increase to the rate of 2009. In 2011, the economic growth rate decreased by 2.7%p (6.2% in 2010 → 3.6% in 2011) but the unemployment rate decreased by 0.3%p (3.7% in 2010 → 3.4% in 2011).

After the global financial crisis, for the relationship of unemployment rate and the economic growth rate displays a different movement, first, employment in the group of age 50 or older increased and it started to cause an aging of working population since the Baby Boomers (born in 1955-63) started to reach age 50 in 2005. Second, some of wage workers among the Baby Boomers took early retirement over the recession period the financial crisis caused and they stayed as non-waged workers and decided to start their own businesses.

It is projected that the number of the employed people grows at an annual average rate of 1.4% (△367,000) from 2012 to 2016 which is a similar level to the increase rate of 1.4% (△324,000) before the crisis from 2004 to 2007. For the same period, the annual rate of the unemployment rate is projected to be at 3.5% and the employment rate is at 59.8%. The unemployment rate is similar to the rate of the period before the crisis (2004-2007). However, over the past five years (2007-2011) including the global financial crisis, the number of the employed people grew at an annual rate of 0.9% and the unemployment rate stayed at 3.4%. Compared to this, the projection of the period from 2012 to 2016 is a 0.5%p increase in the number of the employed people and the unemployment rate increases by a small margin of 0.1%p. The aging progress of working population would be rapid from 2005 to 2018, having 2005 as a starting point when the first Baby Boomers (born in 1955) reached age 50 and 2018 as an ending point when the last Boomers (born in 1963) reach age 55. With this phenomenon, those retired Baby Boomers could stay as potential non-waged workers and open own businesses unless the economy rapidly slows down. Therefore, wholesale and retail trade, accommodation and food service sectors would continually have the increased numbers of both waged workers and non-waged workers.

7. Price Level and Interest Rate

From 2012 to 2016, the consumer price is projected to increase at an annual rate of 2.6% and the GDP deflator at a rate of 2.3%. These low rates are grounded on the facts that the increase of import prices is expected to be gradual and the domestic economy is expected to face a slow growth which both helps keep the price level low. The inflation pressure is suppressed as the real growth rate does not reach the potential growth rate and the wage increase is expected not to be rapid. In terms of wage costs derived from the unit labor cost index, inflation pressure caused by the labor costs are expected not to be strong. The Won/Dollar exchange rate is currently in 2012 at 1,132 won/dollar which had a smaller margin of increase and it would steadily decline from 2013 to 2014 and this movement would stabilize the price level until the exchange rate bounces up in 2016.

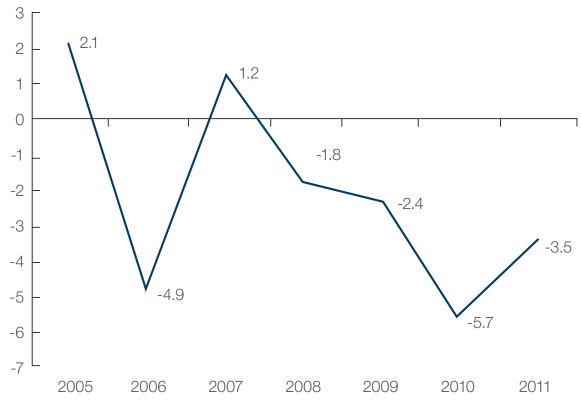
Import prices and the price of raw materials in the international markets are not likely to soar as the global economic slowdown is projected to continue for a while and its recovery is also projected to be gradual. From 2012 to 2013, the import price increase would be settled due to the global economic slowdown and from 2014 to 2015 the growth rate of import prices is projected to increase gradually as the global economy would show signs of recovery.

The GDP deflator is expected to grow at an annual rate of 2.3 from 2012 to 2016 which is higher than the rate of 1.4 from 2004 to 2007 but lower than the rate of 2.7% from 2007 to 2011. Consumer price is projected to increase at an annual rate of 2.6% from 2012 to 2016. Interest rates are expected to stay around 3.3% as safe assets are demanded because of still existing financial markets' instability and the base rate is not likely to be rapidly raised.

As the economic growth rate falls for the first time since the global financial crisis of 2008 to the 2% range, an economic stimulation is expected in 2012 and the economic recovery is not expected to be strong in 2013 which implies that the Bank of Korea would keep its base rate low. But in the second half of 2013, a chance of raising the base rate is expected. In 2013, economic recovery is projected to be relatively gradual and the base rate would gradually return to an uptrend.

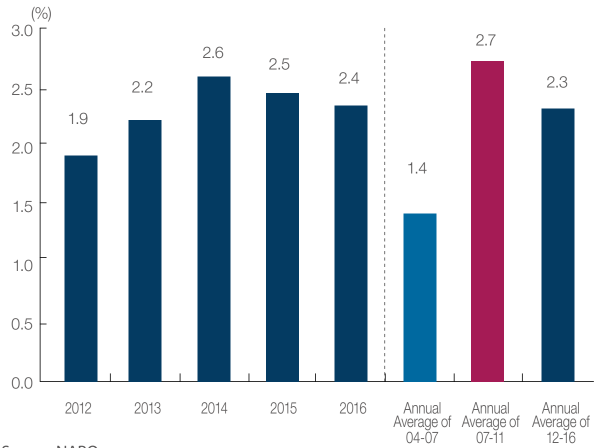
From 2012 to 2016, the yield of government bonds is projected to have a small margin of fluctuation around the 3% range. For the same period, the economic recovery is not likely strong which implies that the base rate would have a small increase and the yield is also stable as well. The yield would be at 3.3% in 2013, 3.5% in 2014, 3.4% in 2015 and 3.2% in 2016 which fluctuates on the 3 percent range.

Figure 22 _ Unit Labor Cost Index



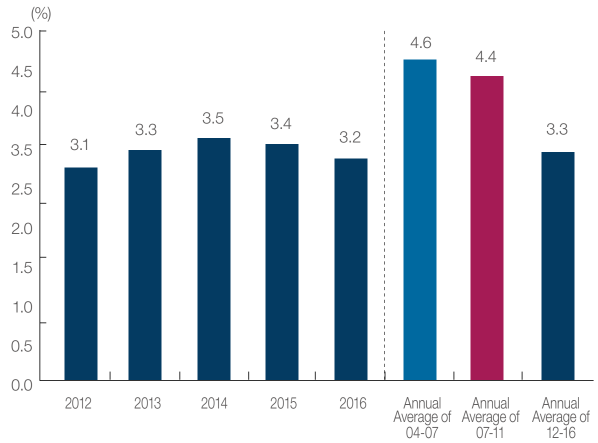
Note: a new method is applied to the 2011 value
Source: NABO, BOK

Figure 23 _ Projection of GDP Deflator



Source: NABO

Figure 24 _ Projection of the Government Bond Yield



Source: NABO, BOK

8. Potential Growth Rate

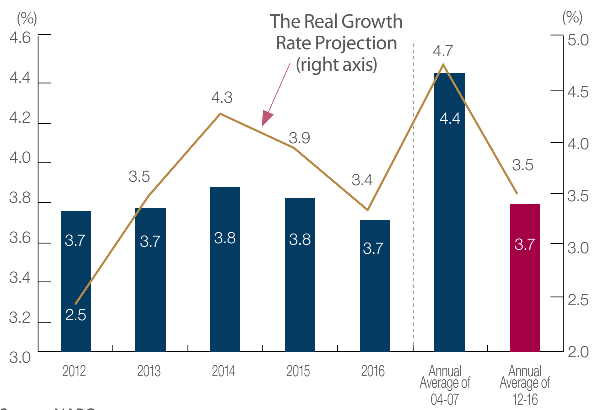
Using projections of sectors and input factors, the domestic economy's potential growth rate for the next five years has been estimated and the potential growth rate is expected to reach 3.7% from 2012 to 2016. It turns out to have declined by 0.7%p after the global financial crisis from 4.4% for the four years before the crisis from 2004 to 2007 and to have declined by 0.2% from 3.9% of four years with the crisis from 2007 to 2011. The financial crisis shrank the real economic activities such as investment and production. The potential growth rate started to come below 4% (3.9%) in 2008 and it was at 3.8% in 2009 and it rose to 4.0% in 2010 and fell to 3.8% in 2011. From 2004 to 2007, the four years, before the financial crisis had an actual annual growth rate of 4.7%. The growth rate exceeded the potential growth rate of 4.4%. However, for the next five years, the actual annual growth rate of 3.5% would fall short of the potential annual growth rate of 3.7%.

Total labor input is determined by the size of working age population, the labor participation rate, the unemployment rate and the weekly hours of work. The growth of working age population over age 15 has gradually slowed down from 3.5% in 70's to 2.4% in 80's, 1.6% in 90's and to as low as 1.2% in 2000's. For the projected period (2012-2016), the size of working age population would expand at an annual rate of 1.1%. The weekly hours of work decline from 43.5 hours in 2012 to 41.6 hours in 2016 and by an annual average for the period, it is of 42.6 hours which is 3 hours less than the preceding five years' (2007-2011). The labor participation rate reaches 62.0% annual average rate, increased by 0.7%p from the previous term. The unemployment rate settles at 3.5%. With given variables, the annual average growth rate of total labor input from 2012 to 2016 records 0.4%. The growth had a peak of 0.9% in 2012 and it comes down to the level of previous term by 2016.

The growth rate of net capital stocks is determined by the depreciation rate and the gross fixed capital investment (facilities + construction + intangible fixed capital). The growth rate of net capital stocks recorded under the economic recession -1.9% in 2008 (construction -2.8%, facilities -1.0%), -1.0% in 2009 (construction 3.4%, facilities -9.8%) and -1.1% in 2011. From 2007 to 2011, the average annual growth rate of gross fixed capital stocks fell to 1.2%. This is a drop with a big margin from the annual average growth rate of 2.9% before the financial crisis. For the next five years, the projected growth rate of gross fixed capital stocks is as low as 0.7% in 2012 but it rises to 4.2% by 2014 and settles at 2.8% in 2016. The projected annual average growth rate is 2.7% for the projected term from 2012 to 2016. The depreciation rate for the projected term is assumed at 5.0%. From 2012 to 2016, the annual average growth rate of net fixed capital stocks is projected to be 3.5% which is 0.9%p lower than the rate of 4.4% the preceding five years had and is 1.9%p lower than the rate of the period from 2004 to 2007 before the financial crisis hit.

Looking into the actual growth contribution of factors of production from 2012 to 2016, the annual average actual growth contribution of labor is 0.3%p which is 0.1%p higher than the contribution of labor of four years (2004-2007) before the crisis. Total factor productivity's contribution for the projected term is 1.9%p which is 0.4%p lower than that of four years before the crisis. Compared to these points, the potential contribution of labor for the projected term is annual average 0.2%p and the potential contribution of total factor productivity is annual average 2.2%p both increased by 0.1%p over four years before the crisis (2004-2007). However, the potential annual average contribution of capital is 1.4%p which is 0.8%p lower than

Figure 25 _ Medium Term Projections of Real and Potential Growth Rates



Source: NABO

the level (2.2%p) before the crisis. This lower potential contribution of capital would work as a major factor that pushes down the potential growth rate.

A few implications to the declining potential growth rate are found by this analysis on contributions. First, overall economic efficiency must improve in order to raise the potential contribution of total factor productivity which has stagnated. For instance, taxation systems has to be reformed or new revenue sources need to be sought in terms of fiscal policy so that marginal tax rates effective on households and corporate could be lowered in order to enhance the overall economic efficiency. Second, the labor participation rate of women should be raised by increasing welfare spending regarding birth and childcare, in attempt to offset the slowdown in growth of working age population and the declining weekly hour of work. Last, the country should escape from the current industrial structure heavily dependent on IT exports. New sectors that could provide growth momentum in services and manufacturing that could serve for domestic demands should be found and fostered. Raising weight of these new sectors in investment, the potential growth contribution of capital could be raised in turn.

The output gap between the real GDP and the potential GDP is estimated to be -2.5% in 2012, -2.8% in 2013, -2.4% in 2014, -2.2% in 2015 and -2.5% in 2016 which indicates that the real GDP falls short of the potential GDP. This is mainly because the real GDP below the potential GDP expanded the output gap further for the three years in a row from 2011 to 2013.

Table 2 _ Medium Term Projection of Labor Input

(unit: Hour, YoY %)

Periods	Total Labor Input	Projection of Determinants		
		Weekly Hours of Labor	Labor force Participation Rate	Unemployment Rate
2012	0.9	43.5	61.6	3.5
2013	0.4	43.1	61.8	3.5
2014	0.5	42.6	62.1	3.4
2015	0.3	42.1	62.2	3.6
2016	0.0	41.6	62.2	3.6
Annual Average of 04-07	0.4	47.9	61.9	3.5
Annual Average of 07-11	-0.2	45.6	61.3	3.4
Annual Average of 12-16	0.4	42.6	62.0	3.5

Source: NABO

Table 3 _ Medium Term Projection of Capital Input

(unit: YoY %)

Periods	Net Capital Stock	Projection of Determinants		
		Gross Fixed Capital Formation	Facilities Investment	Construction Investment
2012	3.5	0.7	0.3	-0.6
2013	3.4	2.5	4.5	0.2
2014	3.5	4.2	6.7	1.3
2015	3.5	3.4	5.0	1.5
2016	3.4	2.8	3.2	2.0
Annual Average of 04-07	5.4	2.9	6.7	0.7
Annual Average of 07-11	4.4	1.2	5.6	-1.3
Annual Average of 12-16	3.5	2.7	3.9	0.9

Source: NABO

Revenue

Ⅰ. 2012-2016 Outlook

From 2012 to 2016, the growth rate of total revenue is projected to reach 5.0% which falls short of 6.3% of the nominal economic growth rate. Elasticity of national tax revenue is projected at around 1 which means that national tax revenue is expected to increase as much as the nominal growth rate increases but non-tax revenue is expected to grow at an annual average rate of 3.2% as the growth of subscribers of social insurances slows down and interest gains are reduced due to the drop of interest rates.

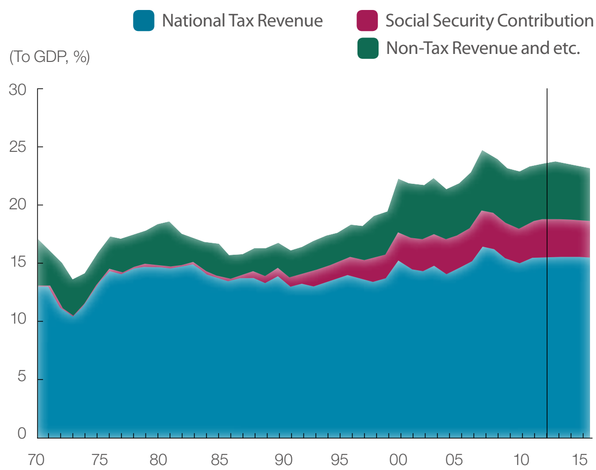
1. Total Revenue

Total Revenue is projected to grow at an annual average rate of 5.0% from 2012's 337.8 trillion won to 2016's 411 trillion won. Although this is lower than the 6.3% of the projected nominal growth rate from 2012 to 2016, it is higher than the 4.7% of the annual averaged total revenue growth rate for the past five years (2007-2011). However, the global financial crisis explains for this low level of growth rate for the past five years at a four percent range and the future growth rate is not expected to catch up the rate level before the financial crisis (8.1% of annual averaged growth rate from 2000 to 2007). Main reasons are found in lower revenues from social security contributions as the pension system matures, less non-tax revenues for lower interest rates and tax cuts. Therefore, total revenue to GDP ratio is projected to slow down its rapid growth it used to have before the financial crisis and to decrease from 26.1% in 2012 to 25.0% in 2016.

National tax revenue is forecast to increase at an annual average rate of 6.2% from 202.4 trillion won in 2012 to 257.3 trillion won in 2016. By years, 2014, the cycle's peak, displays the highest rate of growth of 7.6% and gradually declines afterwards. The projected growth rate of 6.2% is expected to be slightly higher than 4.5 % of past five years' annual rate (2007-2011). For the next five years, there are no signs of any economic crisis and the government attempts not only to lessen the extent of tax cuts but also to raise taxes. National tax revenue to GDP ratio is projected to maintain at 15.6-15.7% from 2012 to 2016.

Non-tax revenue is projected to grow at an annual rate of as low as 3.2% from 130.6 trillion won in 2012 to 153.7 trillion won in 2016. This growth rate dropped from the 4.9% of annual rate for the past five years (2007-2011) because both social security contributions, non-tax and capital revenue have factors expecting lower growth rates than those of the past five years.

Figure 1 _ the Consolidated Fiscal Revenue



Note: Projection is on the right side of the vertical line

Table 1 _ 2012-2016 Total Revenue Projection

(unit: trillion won, %)

		2011	2012	2013	2014	2015	2016	Growth Rate 2012-2016	Growth Rate 2007-2011
Amount	Total Revenue	323.0	337.8	359.5	377.1	396.6	411.0	5.0	4.7
	National Tax	192.4	202.4	214.0	230.1	244.5	257.3	6.2	4.5
	Non-Tax Revenue	130.6	135.3	145.5	147.0	152.1	153.7	3.2	4.9
	Social Security Contribution	38.9	42.3	44.9	47.0	49.8	52.4	5.5	6.9
	Etc	91.7	93.0	100.6	100.0	102.3	101.3	2.2	4.2
To GDP	Total Revenue	26.1	26.1	26.3	25.8	25.5	25.0	-	-
	National Tax	15.6	15.7	15.7	15.7	15.7	15.6	-	-
	Non-Tax Revenue	10.6	10.5	10.6	10.1	9.8	9.3	-	-
	Social Security Contribution	3.1	3.3	3.3	3.2	3.2	3.2	-	-
	Etc.	7.4	7.2	7.4	6.8	6.6	6.2	-	-
Rate of Increase	Total Revenue	8.0	4.6	6.4	4.9	5.2	3.6	-	-
	National Tax	8.3	5.2	5.7	7.5	6.3	5.2	-	-
	Non-Tax Revenue	7.3	3.6	7.5	1.1	3.5	1.1	-	-
	Social Security Contribution	9.4	8.8	6.0	4.8	5.9	5.2	-	-
	Etc	6.4	1.4	8.2	-0.6	2.3	-1.0	-	-
The Growth Rate of Nominal GDP		5.4	4.4	5.8	7.0	6.5	5.8	6.3	6.1
The Growth Rate of Real GDP		3.6	2.5	3.5	4.3	3.9	3.4	3.5	3.1
The Elasticity of National Tax		1.5	1.2	1.0	1.1	1.0	0.9	-	-

Social security contribution is projected to grow at an annual rate of 5.5% from 38.9 trillion won in 2012 to 52.4 trillion won in 2016. The slower growth rates of wage and subscribers of social security decrease the speed of contribution growth and the contribution to GDP ratio is projected to maintain its current 3% range due to the maturing system's limitation on the capability to increase contribution.

Non-tax and capital revenues are expected to increase at an annual rate of as low as 2.2% from 91.7 trillion won in 2012 to 101.3 trillion won in 2016. This annual growth rate is half of the past five years' annual growth rate of 4.2%, due to slower growth of interest gains with a drop of interest rates, less collections of loans, and surplus of Bank of Korea not being counted.

2. National Tax Revenue

National tax revenue is forecast to grow from 202.4 trillion won in 2012 to 257.3 trillion won in 2016. The projected trend of annual increase of national tax revenue shows that the growth rate will increase slightly from 5.2% in 2012 to 5.7% in 2013 and will reach its peak of 7.5%, then start to decline to 6.3% in 2015 and 5.2% in 2016 which shows a pro-cyclical trend to the trend of nominal growth rate. Over the same period, national tax revenue is of an annual growth rate of 6.2% and this is much higher than the annual growth rate of 4.5% from 2007 to 2011. Tax revenue of general accounting is expected to grow at an annual rate of 6.2% over the same period and that of special accounting is to grow at a rate of 5.2%. For the period, the nominal GDP is to grow at an annual rate of 6.3% which estimates 1.03 of the tax elasticity higher than 0.73 from 2007 to 2011. 1.03 of the tax elasticity is a full recovery to the level before the crisis.

By the items, income tax is to grow at an annual rate of 8.4% from 45.7 trillion won in 2012 to 63.1 trillion won in 2016. General income tax and earned income tax are expected to grow at annual rates of each 10% and 10.3% because the gradual economic recovery continuously raises the number of waged and non-waged workers. General income tax is expected to have a rate of growth that exceeds the nominal economic growth rate from 2012 to 2016 because the Faithful Voluntary Tax Report Confirmation regime brings out the tax assessment into the open sources and the base line of aggregate taxation on financial income is lowered (after 2014). Earned income tax is also expected to continously grow at 10.3% because retirees will increase the number of waged workers by actively opening new businesses and finding jobs and the growth of nominal wage increases the tax base.

Corporate income tax is projected to expand at an annual rate of 6.2% from 47.2 trillion won in 2012 to 60.0 trillion won in 2016. This is similar to the annual rate of 6.1% for the past five years (2007-2011). By categories, the reported amount is expected to have an annual growth rate of 6.5% which shows an increase from 35.3 trillion won in 2012 to 45.4 trillion won in 2016 and this is slightly higher than the annual rate of 6.1% for the past five years which reflects constant growth of surplus of corporate operations. The tax deducted at source is expected to increase from 11.9 trillion won in 2012 to 14.6 trillion won in 2016 at an annual rate of 5.2% which is a bit lower than the annual growth rate of 5.9% for the past five years. This reflects the declining trend of interest rates. By years, it records 48.7 trillion won in 2013 which is a 6.0% increase over the previous year. The rate is much higher than 1.4% of 2012. The amount reported is increased by 4.3% from 35.3 trillion won of 2012 projection to 36.8 trillion won. The business showings decreased in 2012 but in 2013, the economy is expected to expand and once the tax revision bill is passed, the tax revenue is expected to increase as reflected in above projections. The

Table 2 _ 2012-2016 National Tax Revenue Projection

(unit: trillion won, %)

	2012	2013	2014	2015	2016	Annual Growth Rate 12-16	Annual Growth Rate 07-11
National Tax Projected by the Administration	203.3	216.4	238.9	259.1	280.4	8.4	4.5
National Tax Projected by NABO	202.4	214.0	230.1	244.5	257.3	6.2	4.5
General Accounting	195.5	206.8	222.4	236.4	248.8	6.2	4.5
Internal Tax	166.3	178.0	193.1	206.3	217.9	7.0	4.8
1. Income Tax	45.7	50.8	55.6	58.9	63.1	8.4	2.1
2. Corporate Income Tax	47.2	48.7	53.2	57.9	60.0	6.2	6.1
3. Inheritance - Gift Tax	4.1	4.7	5.4	5.9	6.5	12.5	4.1
4. VAT	53.7	57.6	62.0	65.9	69.8	6.8	6.1
5. Special Exercise Tax	5.4	5.6	5.8	6.0	6.1	3.0	1.8
6. Securities Transaction Tax	3.9	4.4	4.7	5.1	5.7	10.0	5.4
7. Stamp Tax	0.6	0.6	0.6	0.7	0.7	4.3	1.5
8. Revenue on the Previous Years	5.8	5.5	5.7	5.9	6.0	0.8	9.3
Transportation, Energy, Environment Tax	13.4	12.9	13.0	13.2	13.2	-0.4	0.2
Customs Duty	10.1	10.1	10.4	10.8	11.4	3.0	10.4
Education Tax	4.6	4.7	4.9	5.1	5.2	2.9	2.4
Comprehensive Real Estate Holding Tax	1.1	1.1	1.1	1.1	1.1	1.5	-17.8
Special Accounting	6.9	7.3	7.7	8.1	8.4	5.2	5.2
Liquor Tax	2.8	2.9	3.0	3.1	3.2	3.2	2.8
Special Tax for Rural Development	4.1	4.4	4.7	4.9	5.2	6.6	6.5

tax deducted at source is expecting a 0.3% growth from 11.89 trillion won of the 2012 projection to 11.93 trillion won as the drop of interest rates in 2012 is expected to have a delayed impact. 2014 corporate tax revenue is expected to increase to 53.2 trillion won by 9.2% over the previous year. The reported amount is expected to have a 9.0% increase over the previous year as business climates improves with the higher nominal economic growth rate and the previous year's low corporate tax collection rebounds. The tax deducted at source is expected to expand by 9.7% over previous year to 13.1 trillion won for corporations' balances of savings and bonds are continuously increasing and interest rates are slightly bouncing up. This increasing trend of corporate tax is expected to continue in 2015 regardless of a slight drop in the economic growth rate as it still maintains a high level (7.0% in 2014 to 6.5% in 2015). In 2016, a slowdown in the economic growth rate and interest rate, will decrease the projected growth rate of corporate tax to 3.7% in 2016 from 8.7% of 2015.

Inheritance-Gift tax expects an additional revenue of 360 billion won starting from 2014 as gift tax revenue due to internal transactions within a corporate body. Owing to this effect, gift and inheritance tax is expected to reach 6.5 trillion won by 2016 and its annual growth rate for the projected term is forecast to be 12.5%.

VAT is projected to grow at an annual rate of 6.8% from 53.7 trillion won to 69.8 trillion won in 2016. By years, it records a 7.7% growth in 2014 as it expands its growth with the recovery trends of foreign and domestic economies from 2013. After 2015, the growth is shown to slow down as the dull economic conditions are expected.

Individual consumption tax is projected to grow at an annual rate of as low as 3.0% from 5.4 trillion won in 2012 to 6.1 trillion won in 2016. This is due to sluggish projections of oil demand growth caused by rocket-high oil prices. As 70% of individual consumption tax is from oil consumptions, it is affected the most from oil consumption.

Transportation-Energy-Environment tax is expected to grow at an annual rate of 1.2% from 12.6 trillion won in 2012 to 13.2 trillion won in 2016 on the assumption that the revenue of 860 billion won brought forward from 2011 is excluded in the calculation (-0.4% if included). This is because the consumption growth rates of gasoline and diesel will stay around as low as 1% due to expectations of continuing high oil prices.

Customs duty is projected to increase at an annual rate of 3.0% from 10.1 trillion won in 2012 to 11.4 trillion won in 2016. Although domestic and foreign economies are projected to recover and the volume of trades to expand, the impact of the FTA is projected to have a lower rate of increase than the increases of nominal economic growth rate. By years, Korea-EU FTA and Korea-U.S. FTA's tax exemption effects are mostly reflected in 2012 and 2013 as most items of which tariff is eliminated are placed in the early years. Therefore, after 2014, customs exemption effects are less effective and in 2016 the growth rate is projected to bounce back to 4.8%.

3. Social Security Contribution

Social security contribution is expected to increase at

Table 3 _ 2012-2016 Social Security Contribution Projection

(unit: trillion won, %)

	2012	2013	2014	2015	2016	Annual Growth Rate
Social Security Contribution Rate	42.3	44.9	47.0	49.8	52.4	5.5
National Pension	29.2	31.2	32.7	34.7	36.6	5.8
Workers' Compensation Insurance	5.3	5.5	5.8	6.0	6.3	4.5
Employment Insurance	6.0	6.2	6.6	6.9	7.2	4.5
Teachers' Pension	1.9	2.0	2.1	2.2	2.3	5.6

an annual rate of 5.5% from 42.3 trillion won in 2012 to 52.4 trillion won in 2016 which falls short of the nominal economic growth rate of 6.3% for the same period. This trend is lower than that of other years (6.9% of average growth rate for the past five years) because it leads the number of subscribers to slowly increase as national pension system matures. Moreover, employment insurance's expansionary implementation and the increased rate of contribution applied to teachers' pension also partially work as institutional factors that lowers the social security contribution in 2013.

National pension is expected to grow at an annual rate of 5.8% from 29.2 trillion won in 2012 to 36.6 trillion won in 2016 due to the increased number of subscribers and the average monthly income increase.

Industrial Accident Compensation Insurance is expected to increase at an annual rate of 4.5% from 5.3 trillion won in 2012 to 6.3 trillion won in 2016. This is doubled from the annual growth rate of 2.1% for the past five years (2007-2011) because those past five years have dealt with the lower premium rate and a slower wage growth. From 2013, however, the expected economic recovery and its consequent constant growth of waged and non-waged workers will draw the growth rate of the insurance to a 4% range.

Employment insurance is projected to grow at an annual rate of 4.5% from 6.0 trillion won in 2012 to 7.2 trillion won in 2016. The rate comes much lower than 8.5% of past five years' (2007-2011) because it already had a rapid growth of 28.5% in 2011 due to the premium rate raised by 0.2%p.

Teachers' pension is projected to expand at an annual rate of 5.6% from 1.9 trillion won in 2012 to 2.3 trillion won in 2016. The number of subscribers is expected to grow at an annual rate of around 2% rate and the monthly amount of remuneration is expected to grow at an annual rate of 4% range which does not reach the nominal economic growth rate. Moreover, the annual averaged growth rate is projected at a much lower level than 12.0% of past five years (2007-2011) because it already had an exceptional increase of 40.9% due to institutional changes. Excluding 2010, the annual average growth rate from 2006 to 2009 was 4.1% and compared to this, the above projection is a slight increase.

Table 4 _ 2012-2016 Central Government Non-Tax Revenue and Capital Revenue Projection

(unit: trillion won, %)

	2012	2013	2014	2015	2016	Annual Average Growth Rate
Ⅰ. Central Government Non-Tax Revenue	56.5	61.2	62.6	65.8	67.1	
(To GDP)	(4.4)	(4.5)	(4.3)	(4.2)	(4.1)	
(Growth Rate)	0.6	8.3	2.3	5.1	2.0	(4.4)
1. Property Revenue	23.5	25.5	25.4	26.2	25.2	(1.8)
1.1 Dividend Revenue	0.8	0.8	0.8	0.8	0.8	(1.7)
1.2 Other Property Revenue	22.7	24.6	24.6	25.4	24.4	(1.8)
Rentals of Government Estates	0.2	0.2	0.2	0.2	0.2	(9.0)
Surplus of Bank of Korea	1.9	2.5	-	-	-	
Interest Revenue	20.7	22.0	24.4	25.2	24.2	(4.0)
2. Fees, Charges and Non-Industrial Sales	7.4	8.0	8.7	9.4	10.2	(8.2)
3. Fines and Forfeits	17.6	19.3	19.6	20.9	22.1	(5.9)
4. Contribution to Government Employee Pension Fund	8.0	8.4	8.8	9.2	9.6	(4.8)
Ⅱ. Central Government Capital Revenue	4.2	4.8	4.8	3.6	3.9	(-1.6)
Ⅲ. Repayment of Lending	26.0	27.8	25.3	25.1	22.1	(-4.0)
Ⅳ. Total Revenue of Public Enterprises	6.4	6.8	7.3	7.8	8.2	(6.7)

4. Non-Tax Revenue and Capital Gain

Central government's non-tax revenue is projected to grow at an annual rate of 4.4% from 56.5 trillion won in 2012 to 67.1 trillion won in 2016. This trend is lower than 6.7% of the average growth rate for the past four years. The reason for this trend is that the elasticity of non-tax revenue to the nominal GDP has been stabilized to a lower level and the rate of return from operation of funds stays low for unresolved instabilities such as the European financial crisis. For the growth rates by years, it is projected to bounce up to 8.3% in 2013 over the previous year's rate of 0.6% due to the economic recovery and the increased amount receipted from surplus of Bank of Korea. Afterwards, the stagnant increase of interest gains for decreased bonds and exclusion of surplus of Bank of Korea in the calculation will suppress the growth. For this, the to GDP ratio of central government's non-tax revenue will decline to 4.1% in 2016 from 4.5% in 2013.

By major items, government-invested revenue is projected to be 0.8 trillion won from 2012 to 2016. This is a slightly higher figure than 0.7 trillion won for past five years' average performance because it reflects that the public corporations' dividend payout ratio which is projected to rise in the future. Receipts of Surplus from Bank of Korea are set at 2.5 trillion won in 2013 and at 0 in 2014. Bank of Korea's financial structure is highly exposed to both domestic and foreign fluctuations of interest rates and exchange rates. Therefore, estimating the size of surplus of Bank of Korea could have a wide range of errors and the amount for Bank of Korea to pay the government is determined between the Bank and the budgeting authority with considerations of the size of reserves and the government's fiscal shape. Thus, it is reasonable not to include estimates in projections after 2014. The Administration's 2012-2016 Plan does not include surplus of Bank of Korea after 2014 as well.

Interest gains reach 4.0% which falls short of the nominal growth rate but increase to 24.2 trillion won in 2016 from 20.7 trillion won in 2012. The increase in fund reserves, including national pension's, leads interest gains to increase following after. However, market-instabilizing factors such as the European financial crisis cannot be resolved in a short term and this hinders the rates or return from rising high. Moreover, conversion to the interest gap subsidization scheme reduces bonds' balance as it reduces fiscal loan expenditures. Hence, interest gains' growth rate is expected to slow down comprated to other years' growth rate (8.1% for the past five years).

Meanwhile, fees, charges and non-industrial sales are expected to grow stably at an annual rate of 8.2% from 2012 to 2016 due to the increase in nominal economic growth rate. For the same period, fines and forfeits are expected to grow at an annual rate of 5.9%.

The central government's capital revenue is projected to increase by 2.5 trillion won in 2012 and by 4.8 trillion won of annual average increase over 2012 to 2014 due to the increase of revenues from selling lands and buildings in the special accounting for the Innovative City construction project. Once the project is completed in 2015, the annual increase would be declined to around 3.5 trillion won.

Repayment of lending reflects the scheduled repayment of major funds and budgets such as National Housing Funds and Small and medium sized enterprises Industrial Funds. According to this, the annual size of withdrawal of lending increases from 26.0 trillion won in 2012 to 27.8 trillion won in 2013 for early repayments. Afterwards, it continues to decline to 22.1 trillion won in 2016 for the lower level of fiscal lending expenditure. Total Revenue of the enterprises' special accounting is expected to move with the nominal growth rate.

II. Comparison with the Administration's Outlook and Policy Implication

Total revenue is expected to grow at an annual rate of 5.0% over 2012 to 2016 and this NABO's figure is lower than that of the Administration's due to the difference each has on the expected growth rate and so forth. The Administration's medium-term total revenue plan does not seem plausible as it holds an optimistic prospect on national tax revenue and it assumes that the sales of government holding shares will bring about a massive deal of non-tax revenue. The Administration should focus on the practicality of the medium-term fiscal analysis and maintain its long-term fiscal soundness in order to deal with potential internal and external fiscal risks.

1. Comparison with the Administration's

NABO expects the annual growth rate of total revenue from 2012 to 2016 to be at 5.0% but the Administration does at 6.5%, a little higher. The two institutions have a significant difference in the projections on non-tax revenue from 2012 to 2014 and also in the projections on national tax revenue from 2015 to 2016.

Above all, the two institutions stand on different positions regarding future economic conditions. The Administration expects the nominal economic growth rate after 2014 to be within a 7% range while NABO forecasts the nominal growth rate to drop to 5.8% after 2016 for the remaining possibility of an economic downturn. Based on these assumptions, NABO forecasts the national tax revenue to grow at an annual rate of 6.2% while the Administration forecasts the national tax revenue to grow at a higher annual rate of 8.4%. The difference in projections of national tax revenue partially causes the Administration to expect an economic expansion after 2014 and contain an optimistic macroeconomic perspective.

Another reason of different perspectives is that NABO expects the elasticity of national tax revenue to stabilize at 1.0 while the Administration expects it to rise after 2014 from 0.9 to 1.4. The Administration has made optimistic projections of future national tax revenues in the past five years' National Fiscal Management Plans. Since 2005, the projections of growth rate of national tax revenues by the Administration turned out to be all above the actual growth rates. The gap between the two institutions' perspectives of the likelihood and extent of the budget expansion causes the projection of national tax revenue to widen even more after 2014 and the gap reaches 8.8 trillion won in 2014 and 23.1 trillion won in 2016.

In the National Fiscal Management Plan, The Administration suggests a heavier tax imposition on security transactions and an introduction of Tax Expenditure Performance Management Scheme as measures to broaden national tax revenue bases. However, according to NABO's analysis of the Tax Revision Bill, the revision about arbitrage transfer profits of stocks and derivatives does not make a revenue effect more than one trillion won by the sum of 2013 to 2016. Therefore, in order to achieve the revenue collection as projected by the Administration, a stricter expenditure management is required and the tax base should be expanded.

Figure 2 _ Comparison between NABO's and the Administration's Nominal Growth Rate Projections

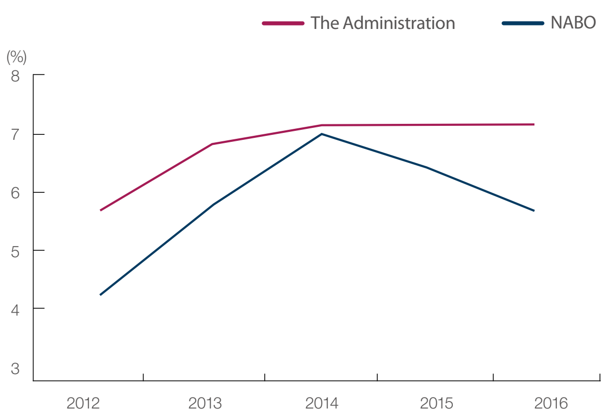


Table 5 _ Comparison between NABO's and the Administration's 2012-2016 Projections

(unit: trillion won, %)

		2012	2013	2014	2015	2016	Annual Average Growth Rate
NABO	Total Revenue	337.8	359.5	377.1	396.6	411.0	5.03%
	National Tax	202.4	214.0	230.1	244.5	257.3	6.18%
	Non-Tax Revenue	135.3	145.5	147.0	152.1	153.7	3.24%
	The Growth Rate of Nominal GDP	4.4%	5.8%	7.0%	6.5%	5.8%	6.30%
	Tax Elasticity	1.2	1	1.1	1	0.9	
The Administration	Total Revenue	341.0	372.6	396.1	415.2	439.1	6.50%
	National Tax	203.3*	216.4	238.9	259.1	280.4	8.40%
	Non-Tax Revenue	137.8	156.2	157.2	156.2	158.7	3.60%
	Tax Elasticity	1	0.9	1.4	1.2	1.1	
Difference	Total Revenue	-3.4	-13.1	-19.0	-18.6	-28.1	
	(Excluding the Sales of Government Holding Shares)	(-1.5)	(-5.4)	(-11.7)	(-18.0)	(-28.1)	
	National Tax	-0.9	-2.4	-8.8	-14.6	-23.1	
	Non-Tax Revenue	-2.4	-10.7	-10.2	-4.1	-5.0	
	(Excluding the Sales of Government Holding Shares)	(-0.5)	(-3.0)	(-2.9)	(-3.4)	(-5.0)	

Note: * is from the Administration's recent estimates (Sep. 2012). As non-tax revenue figure had not been announced, the budget decision figure was used.

Lastly, most of the difference from 2012 to 2014 comes from whether it includes the sales of government holding shares in non-tax revenue. As NABO excluded the sales of government holding shares, the difference of non-tax revenue projections exceeds 10 trillion won from 2013 to 2014 and it declines to a 4-5 trillion won range after 2014 when the Administration's plan of sales is completed. Excluding the sales of government holding shares in the Administration's plan, the difference of non-tax revenues comes out about 0.5-3.0 trillion won from 2012 to 2014 which is explained by the different perspectives of growth rates and interest rates. Therefore, NABO expects the non-tax revenue to grow at an annual rate of 3.2% while the Administration expects the non-tax revenue to grow at a higher annual rate of 3.6%.

2. Policy Implication

The actual performance of tax collection is expected to fall short of the initial budget as economic conditions worsened this year. In 2013, as responsive policies are implemented in most countries, economic conditions are expected to show signs of recovery but there still remains uncertainty such as the prolonging European fiscal crisis which makes it difficult to have an optimistic perspective in 2013 tax collection. The government has announced its goal to achieve the balanced fiscal stance by 2013 earlier than it previously planned and the announcement receives attention.

According to 2013 tax revenue budget, the administration expects the 2013 total revenue to expand by 9.3% over the 2012 forecast (341.0 trillion won) so that it totals 372.6 trillion won. National tax revenue is expected to grow by 6.5% over the previous year on the assumption of the real economic growth rate being within a 4% range. It also increases the amount of expected non-tax revenue by 32.4% over the 2012 budget by allocating a huge budget in those uncertain items in terms of collection such as sales of government holding shares and surplus from Bank of Korea.

Meanwhile, NABO expects the collection conditions to be cloudier than the Administration's. NABO expects the real economic growth rate to be 3.5% and the nominal economic growth rate to be 5.8% in 2013 and these rates are 0.5%p and 1.1%p lower than the Administration's. Based on the assumption of this macroeconomic perspective, NABO expects total revenue to total 359.5

Table 6 _ the Growth Rates of Nominal GDP and National Tax Revenue

	70's	80's	90's	2000's	2011-2016[1]
The Growth Rate of National Tax(%)	33.0	15.5	12.2	6.6	6.4
The Growth Rate of Nominal GDP(%)	31.2	16.8	12.4	6.5	5.8

Note: 1) NABO's estimate (Oct. 2012)

trillion won which is 13.1 trillion won lower than the Administration's in 2013. NABO excluded 7.7 trillion won of sales of government holding shares which is not certain to be collected and thus, it shows a gap of 5.4 trillion compared to the Administration's Tax Revenue Budget. Therefore, collection of tax revenue might be difficult if relevant economic conditions do not improve and government holding shares are not disposed as the Administration expects. In this case, a revised supplementary budget is unavoidable.

Another fundamental problem is that the Administration is using the so called 'creative Accounting' to make an illusion by which its fiscal soundness looks much more improved than actually is. In 2013 tax revenue budget, 7.7 trillion in the name of the sales of government holding shares is included as fiscal revenue and the conversion to Interest Gap Subsidization scheme reduces 6.6 trillion won of the financial loans. According to the budget, the 2013 managed fiscal account has a deficit of 4.7 trillion won (-0.3% to GDP) which improves by 9.6 trillion won from the 2012 final budget with a deficit of 14.3 trillion won. Regardless of the announcement the government made that the budget should be actively engaged in economic stimulation measures, the current fiscal stance still seems sound by the managed fiscal account. However, because the sales of government holding shares and the financial loan expenditures do not exactly fall into the strict definition of both revenue and expenditure by the net wealth basis, these items should be ruled out in determination of fiscal soundness and the stance of fiscal policy. Excluding the profit of government holding shares and the financial loans, the managed fiscal account is -9.4 trillion won (-0.7% to GDP) which is a much greater deficit than -4.7 trillion won (-0.3% to GDP) the Administration announced. The 2013 budget is a result of the Administration's attempt to increase fiscal expenditures in order to stimulate the economy while it maintains a balanced fiscal stance. However, distorting the fiscal soundness to make it look better could damage the long-term fiscal soundness. It could bring about distorted interpretation of the fiscal stance and additional fiscal expenditures which will cause the fiscal stance to be off balance.

The Administration expects the 7% range of strong nominal economic growth rate to continue even after 2014. By this optimistic economic projection, the Administration sees the growth rate of medium-term national tax revenue at 8.4%. It especially expects the rate to have a peak of 10.4% in 2014. In the trend of national tax revenue growth, by the end of the 90's it showed a high growth rate of two digits but since 2000's it has fallen to a 6% range as the economic growth slowed. It only exceeded 10% once in 2007 among the last five years, and this is explained as an exceptional case for 3.1 trillion won brought forward and the rapid increase in tax collection regarding real estates the revision caused. Considering the past trend, the Administration's projected medium-term growth rate of national tax revenue is an overestimation. Moreover, the Administration estimated revenues as much as 7.7 trillion won in 2013 and 7.3 trillion won in 2014 from the sales of government holding shares.

The Administration's optimism can be read as its will of not abandoning the goal of balanced fiscal stance it proposed. This master plan can be effective in setting up stronger credibility of the government and expressing the government's strong will toward fiscal soundness. The problem is that 'creative accounting' that converts financial loans to interest gap subsidization and projections of optimistic but implausible tax revenue growth cannot be used as policy means to achieve the balanced budget. The government's credibility is a virtue that is not achieved by creative accounting that reduces the size of deficits but achieved ultimately by providing transparent and correct information of the fiscal stance. The government should improve practicality of its medium-term fiscal forecast and state more transparent information of the fiscal stance. Additionally, the Administration should establish a firm and sound long-term fiscal stance that is sturdy against economic fluctuations

Medium Term Fiscal Management Analysis

Ⅰ. 2012-2016 Outlook

The Administration forecasts that the fiscal balance will be achieved by 2014 and the fiscal account would be improved afterwards but NABO forecasts that a deficit of 20 trillion won in the managed fiscal account occurs every year and the fiscal balance is unlikely to be achieved by 2016.

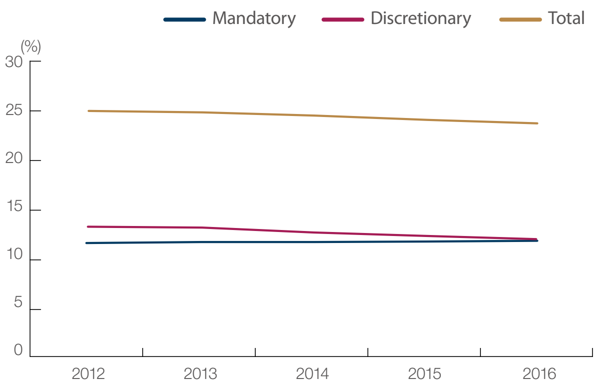
1. Fiscal Expenditure

Total Expenditure

In its outlook of total expenditure, NABO has employed the method of summing separate projections for mandatory expenditure and discretionary expenditure and the identical categorization is used as in this year's National Fiscal Management Plan submitted during the session, so that the outlook is of a better reference.

NABO forecasts that total expenditure grows at an annual rate of 4.9% from 325.4 trillion won in 2012 to 394.2 trillion won in 2016. The growth rate for the projected term is lower than the rate for four years before the crisis (7.8% annual growth 2005-2008) and for three years after the crisis (5.4% annual growth 2010-2012) but higher than the Administration's projected growth rate of 4.6% for the same period.

Figure 1 _ Total, Mandatory and Discretionary Expenditures to GDP Projection



Dividing total expenditure into mandatory expenditure and discretionary expenditure, mandatory expenditure is projected to expand at an annual rate of 6.6% from 151.9 trillion won in 2012 to 196.4 trillion won in 2016 and discretionary expenditure is to increase at an annual rate of 3.3% from 181.9 trillion won in 2012 to 197.9 trillion won in 2016 on the assumption that it complies with the size of 2013 Budget Bill Administration submitted and the intrinsic value is determined by the increase rate of consumer prices.

Mandatory Expenditure

Mandatory expenditure can be divided into four categories: financial grants to local governments, legal expenditure on welfare, interest expenditure and other mandatory expenditures. Legal expenditure on welfare which includes national basic living security, national health insurance, public pension and social insurance, shows the highest

Figure 2 _ Mandatory Expenditure Projection by Sectors (to GDP)

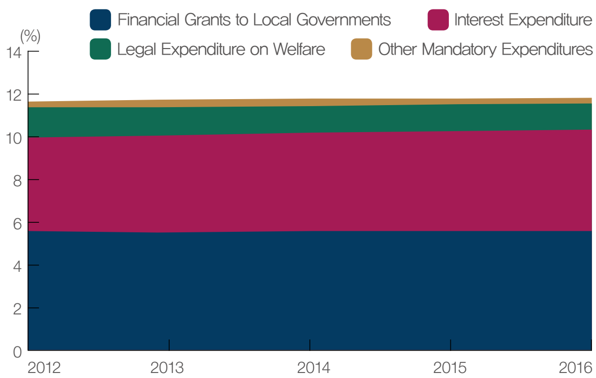
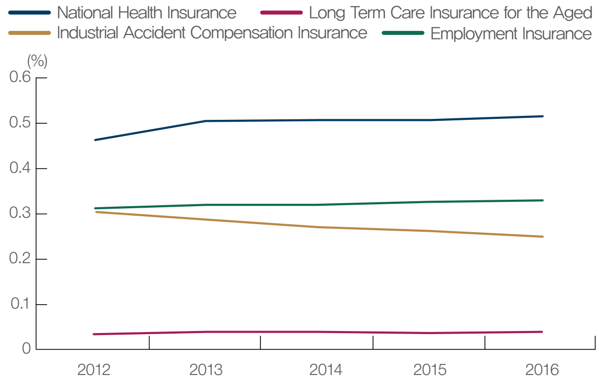


Figure 3 _ Legal Expenditure on Welfare Projection (to GDP)



annual growth rate of 7.6%. Following after this, financial grants to local governments grow at 6.6%, interest expenditure at 4.2% and other mandatory expenditures at 2.7%.

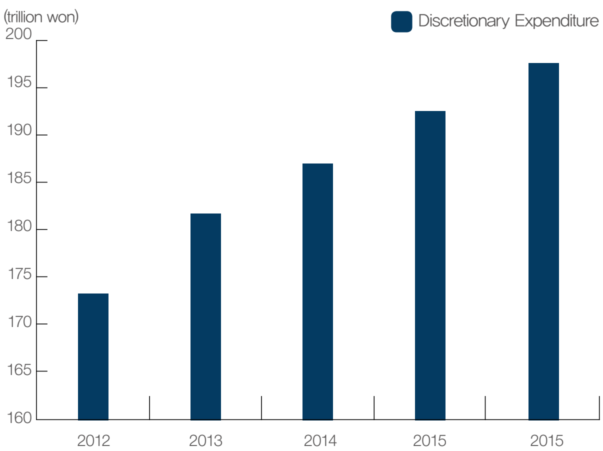
As for the percentages of five categories of GDP reflect, legal expenditure on welfare increases by 0.2%p from 4.6% in 2012 to 4.8% in 2016 and financial grants to local governments rise by 0.1%p from 5.5% to 5.6% while interest expenditure decreases by 0.1%p and other mandatory expenditures decrease by 0.04%p.

Legal expenditure on welfare which has the highest increase in both the annual growth rate and the percentage of GDP can be analyzed by dividing it into categories of national basic living security, national health insurance, public pension, social insurance, senior care, veterans care, childcare and the handicapped and other welfare expenditures. The analysis reveals, first, public pension and national health insurance expand each at annual rates of 9.4% and 9.0% from 2012 to 2016 which are higher than 7.6% of the average growth rate of total welfare expenditures. Senior care at 7.3% comes after the mentioned two and national basic living security at 5.9%, childcare and the handicapped at 5.2%, social insurance at 4.6%, veterans care at 3.1% and other welfare expenditures at 2.7% follow in order of growth rate. Second, as percentages of GDP, public pension, national health insurance and senor care increase by 0.3%p, 0.1%p and 0.1%p but national basic living security, childcare and the handicapped, other welfare expenditures, social insurance and veterans care are projected to decrease in percentages of GDP.

Discretionary Expenditure

Those items not counted as mandatory expenditures in total expenditure fall into discretionary expenditure. Discretionary expenditure figures for 2013 in 2012-2016 National Fiscal Management Plan is adopted in NABO's analysis and figures for the period after 2014 is estimated on the assumption that the growth rate of discretionary expenditure holds onto the increase rate of consumer prices which intends to keep the real value constant. The result of analysis reveals that discretionary expenditure expands at an annual rate of 3.3% from 2012 to 2016. By years, it is projected to total 176.8 trillion won in 2012, 181.6 trillion won in 2013, 186.6 trillion won in 2014, 191.7 trillion won in 2015 and 196.5 trillion won in 2016.

Figure 4 _ Forecast of Discretionary Expenditure



Comparison to the Administration's 2012-2016 National Fiscal Management Plan

NABO forecasts that from 2012 to 2016 mandatory expenditure expands at an annual rate of 6.6% while the Administration plans an annual growth rate of 7.3%. This difference is mainly derived from different projections of financial grants to local governments and interest expenditure. NABO's projection of legal expenditure on welfare (7.6%) does not nearly have a gap to the Administration's plan (7.5%) but projections of financial grants to local governments and interest expenditures have differences. NABO forecasts that financial grants to local governments would grow at an annual rate of 6.6% from 2012 to 2016 but the Administration plans it to grow at an annual rate of 8.8%. NABO has a growth rate of interest expenditures at 4.2% which is 3.6%p higher than the Administration's plan at 0.6%. Differences in two categories are derived from different macroeconomic outlooks which also generate different projections of national tax revenue collections, interest rates.

When it comes to discretionary expenditure, since NABO adopted 2013 figures from the Administration's, NABO's figures of 2012 and 2013 are identical to those in the final budget of 2012 and 2013 and the Administration's National Fiscal Management plan. But, after 2014, there appear gaps as NABO applied its own projection of the growth rate of consumer prices and the Administration applied its own plans. Consequently, from 2012 to 2016, the growth rate of discretionary expenditure projected by NABO is 3.3% and by the Administration is 2.1% with 1.2%p of gap.

Table 1 _ Comparison of Fiscal Expenditure Projections

(unit: trillion won, %)

		2012	2013	2014	2015	2016	Annual Average Growth Rate
Financial Grants to Local Governments	NABO's	71.5	76.1	82.2	87.7	92.4	6.6
	the Administration's	71.5	76.6	84.9	92.3	100.0	8.8
Legal Expenditure on Welfare	NABO's	59.0	62.6	67.8	73.1	79.0	7.6
	the Administration's	59.0	62.9	67.7	72.6	78.8	7.5
Interest Expenditure	NABO's	17.3	17.9	18.8	19.7	20.4	4.2
	the Administration's	17.3	16.9	17.4	17.6	17.8	0.6
Other Mandatory Expenditures	NABO's	4.1	4.2	4.3	4.4	4.5	2.7
	the Administration's	4.1	4.1	4.2	4.3	4.5	2.4
Total Mandatory Expenditures	NABO's	151.9	160.7	173.1	184.8	196.4	6.6
	the Administration's	151.9	160.6	174.3	186.7	201.1	7.3
Discretionary Expenditure	NABO's	173.5	181.9	187.3	192.7	197.9	3.3
	the Administration's	173.5	181.9	183.3	186.4	188.6	2.1
Total Expenditure	NABO's	325.4	342.6	360.5	377.5	394.2	4.9
	the Administration's	325.4	342.5	357.5	373.1	389.7	4.6

Table 2 _ Total Expenditure Projection

(unit: trillion won)

Item	Classification	Details	2012	2013	2014	2015	2016	Annual Average Growth Rate
Financial Grants to Local Governments		Local Grant Tax	33.0	35.3	38.2	40.8	43.1	6.9
		Financial Grants for Local Education	38.4	40.7	44.0	46.9	49.4	6.4
		Total	71.5	76.1	82.2	87.7	92.4	6.6
Legal Expenditure on Welfare	National Basic Living Security	Living Benefit	2.4	2.6	2.8	2.9	3.0	6.1
		Housing Benefit	0.5	0.6	0.6	0.6	0.7	6.1
		Education, Childbirth and Funeral Benefit	0.2	0.2	0.2	0.2	0.2	3.1
		Medical Benefit	4.0	4.1	4.4	4.7	5.0	5.7
		Total	7.0	7.5	7.9	8.4	8.8	5.9
	National Health Insurance	Subscriber Support (General)	4.3	5.2	5.7	6.2	6.7	11.5
		Subscriber Support (Institution)	1.1	1.0	1.0	1.0	0.9	-3.2
		Government Disbursement for Government and Educational Employees	0.6	0.7	0.7	0.8	0.8	8.7
		Total	6.0	6.9	7.4	7.9	8.5	9.0
	Public Pension	National Pension	11.8	12.4	14.5	16.4	19.0	12.5
		Government Employee Pension	11.1	11.4	12.4	13.4	14.4	6.6
		Teachers Pension	1.9	2.0	2.2	2.4	2.6	8.7
		Military Pension	2.5	2.7	2.9	3.1	3.2	6.4
		Total	27.4	28.5	31.9	35.2	39.2	9.4
	Senior Care	Basic Senior Pension	3.0	3.2	3.4	3.6	3.9	7.1
		Long Term Care Insurance for the Aged	0.5	0.5	0.6	0.6	0.7	8.2
		Total	3.5	3.7	4.0	4.3	4.6	7.3
	Veterans Care	Compensation	2.2	2.2	2.3	2.4	2.4	3.0
		Nursing Benefit	0.1	0.1	0.1	0.1	0.1	3.5
		War Veteran Honor Benefit	0.4	0.4	0.4	0.4	0.4	4.0
		Children of 6.25 Veterans Benefit	0.2	0.2	0.2	0.2	0.2	3.1
		Etc.	0.6	0.6	0.7	0.7	0.7	2.8
		Total	3.4	3.5	3.6	3.7	3.8	3.1
	Social Insurance	Employment Insurance	4.1	4.4	4.8	5.1	5.4	7.0
		Industrial Accident Compensation Insurance	3.9	4.0	4.0	4.1	4.2	1.9
		Total	8.0	8.4	8.7	9.2	9.6	4.6
	Childcare and the Handicapped	Childcare Benefit	2.4	2.8	2.8	2.9	3.0	5.6
		The Handicapped Benefit	0.3	0.3	0.3	0.3	0.3	2.1
		Total	2.7	3.1	3.1	3.2	3.3	5.2
	Other Welfare Expenditures		1.0	1.1	1.1	1.1	1.1	2.7
	Total		59.0	62.6	67.8	73.1	79.0	7.6
Interest Expenditure		Interest on Government Debts	14.2	14.5	15.1	16.0	16.6	4.1
		Other Interest Expenditures	3.2	3.3	3.6	3.7	3.8	4.4
		Total	17.3	17.9	18.8	19.7	20.4	4.2
Other Mandatory Expenditures			4.1	4.2	4.3	4.4	4.5	2.7
Total Mandatory Expenditure			151.9	160.7	173.1	184.8	196.4	6.6
Total Discretionary Expenditure			173.5	181.9	187.3	192.7	197.9	3.3
Total Expenditure			325.4	342.6	360.5	377.5	394.2	4.9

2. Fiscal Balance and Government Debt

NABO has estimated the consolidated fiscal balance and the managed fiscal balance for the next five years based on the projections of total revenue and expenditure. The consolidated fiscal balance is estimated to have a surplus of 12.3 trillion won in 2012, 16.9 trillion won in 2013, and 16.7 trillion won in 2014 and is projected to have its peak of 19.1 trillion won surplus in 2015 and the size of surplus returns back to the level of 2013, recording 16.8 trillion won in 2016. The managed fiscal balance is estimated to have a deficit of 19.8 trillion won in 2012, 18.5 trillion won in 2013, 20.7 trillion won in 2014, 19.0 trillion won in 2015 and 29.3 trillion won in 2016.

NABO's projections and 2012-2016 National Fiscal Management Plan have a gap of 13.7 trillion won in the consolidated and managed fiscal balance in 2013. The reason of this gap in the consolidated fiscal balance is that the Administration's plan has a 13.6 trillion won greater projection of total revenue than the NABO's by including the sales of government holding shares.

Government debts are projected to reach 450.9 trillion won in 2012, 478.6 trillion won in 2013, 517 trillion won in 2014, 554 trillion won in 2015 and 591.8 trillion won in 2016 approaching 600 trillion won.

By using NABO's projection of GDP to estimate the government debt to GDP ratio, it continues to increase from 34.9% in 2012 to 35.9% in 2016. However, the Administration plans it to decrease to 29.9% in 2015, as the first time to come below 30%, and ultimately to 28.3% in 2016.

The size of gap between NABO's projection and the Administration's plan of the government debt starts from 5.7 trillion won in 2012 and expands every year by 2016 to 13.8 trillion won, 46.5 trillion won, 72.8 trillion won, 104.3 trillion won in each year by 2016. The annual growth rate of this is calculated at 7.0% by NABO while the Administration plans it to grow at an annual rate of 2.3% which have a gap of 4.7%p between.

Figure 5 _ GDP% of Government Debt

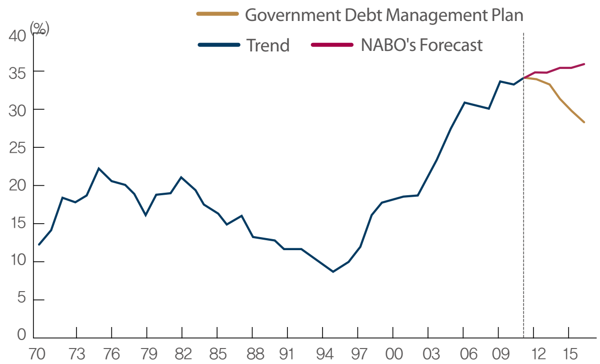


Table 3 _ Fiscal Accounts and National Debt Projection

(unit: trillion won)

		2012	2013	2014	2015	2016
Consolidated Fiscal Account	the Administration (A)	18.1	30.6	38.6	42.1	49.4
	NABO (B)	12.3	16.9	16.7	19.1	16.8
	Difference (A-B)	5.8	13.7	21.9	23.0	32.6
Managed Fiscal Account	the Administration (C)	-14.3	-4.8	1.0	2.2	8.3
	NABO (D)	-19.8	-18.5	-20.7	-19.0	-19.3
	Difference (C-D)	5.5	13.7	21.7	21.2	27.6
National Debts	the Administration (E)	445.2[1)]	464.8	470.6	481.2	487.5
	(Percentage of GDP)	(34.0)	(33.2)	(31.4)	(29.9)	(28.3)
	NABO (F)	450.9	478.6	517.1	554.0	591.8
	(Percentage of GDP)	(34.9)	(35.0)	(35.4)	(35.6)	(35.9)
	Difference (E-F)	-5.7	-13.8	-46.5	-72.8	-104.3

Note: 1) based not on 2012 Final Budget but on the Administration's projection

Ⅱ. 2012-2016 National Fiscal Management Plan

Since this 2012-2016 National Fiscal Management Plan was developed in the very last stage of the current Administration's term, this plan may no longer be in effect once the next administration takes office. The number of times the plans shall be developed and submitted during a term of Administration could be adjusted to once in the initial stage and once more in the middle of a term.

1. Appraisal on the Administration's Review

Those editions of *The Previous year's National Fiscal Management Plan Review and Evaluation* between *2010-2014 National Fiscal Management Plan* which was the first issue after *2010 Revision of National Finance Act* and the most recent *2012-2016 National Fiscal Management Plan* have been consistently composed of 1. Introduction, 2. Analysis on Economic Changes, 3. Analysis on Fiscal Changes, 4. Management Plan Review and Evaluation.

Those editions of the Previous Year's National Fiscal Management Plan Review and Evaluation (the Review and Evaluation) contain problems which are as follows.

First, although the annual plans have made optimistic economic projections, [2. Analysis on Economic Changes] has not analyzed this problem. Macroeconomic predictions heavily affect tax revenue and fiscal balance predictions over the whole planned term. The greater the gap between a macroeconomic prediction and an actual performance is the more wrong a prediction of tax revenue is. It in turn causes fiscal balance and the national debt management plan to indicate situation incorrectly so that medium-term fiscal plans' practicality deteriorates. In conclusion, fiscal risks in the medium-term fiscal management are derived initially from a failure of macroeconomic predictions.

Therefore, the Review and Evaluation should appraise problems and solutions of the government's tendency to make an optimistic economic prediction but the Review and Evaluation this time does not.

Second, although [3. Analysis on Fiscal Changes]

Table 4 _ Comparison of [2011- 2015]·[2012-2016] National Fiscal Management Plans

(unit: trillion won)

		2012	2013	2014	2015	2016
Fiscal Revenue	2011-2015 Plan	343.6	375.7	395.8	415.3	
	2012-2016 Plan	343.5	373.1	396.1	415.2	439.1
Fiscal Expenditure	2011-2015 Plan	325.4	341.9	357.5	373.1	
	2012-2016 Plan	325.4	342.5	357.5	373.1	389.7
Managed Fiscal Account	2011-2015 Plan	-14.3	0.2	3.1	5.3	
	2012-2016 Plan	-14.3	-4.8	1.0	2.2	8.3
National Debts	2011-2015 Plan		460.0	466.4	471.6	
	2012-2016 Plan		464.8	470.6	481.2	487.5

in the Review and Evaluation explains the changes of comprehensive fiscal conditions but it did not succeed to convey the purpose of the Review and Evaluation. In other words, the purpose of the Review and Evaluation is to reveal what have not been implemented as planned last year and what have to be modified to what extent in this year's plan but the Review and Evaluation lacks specific details. The Review and Evaluation should state how the comprehensive fiscal conditions change for the macroeconomic changes or errors in predictions, how the changes would affect the plan this year and how management plans are ought to be revised for the influences. For instance of the Review and Evaluation this year, it explains that the growth rate of national pension fund revenue rises over last year for the growth of subscribers and the growth of wage. However, it does not explain not only how the fluctuation in the number of subscribers occurs but also how the new predictions were made. The Review and Evaluation should contain specific explanations of fluctuation's cause and effect so that the next plan has fewer errors.

Third, the Review and Evaluation omits explanations about the allocation changes by each area. Each year's National Fiscal Management Plan has different allocations for the overlapped period but the Review and Evaluation does not explain why the allocation has changed. This is because the budgeting authority does not recognize the importance of medium-term plans. When the medium-term is considered difficult to comply with, for the sake of economic responsiveness, the causes of changes should be explained and fiscal management plan based on the causes should be suggested. With lack of recognition of purposes of the Review and Evaluation, the medium-term fiscal management plan is unlikely to have practicality. Future challenges are suggested in the comprehensive evaluation part of the Review and Evaluation but those challenges are suggested without specific and strategic implementation methods. The future challenges and each part of the medium-term fiscal management plan should be connected in order to come up with specific implementation methods.

2. Analysis of Fiscal Stance

Validity of Targets of Fiscal Policies

2012-2016 National Fiscal Management Plan does not state an explicit target in its fiscal management. Under the title of 'the Medium-Term Fiscal Outlook and Fiscal Management Goal', it simply lists 24 pages of predictions about fiscal revenue, fiscal expenditure, fiscal accounts and government debts. About fiscal revenue, the national tax revenue, non-tax revenue and the national pension fund revenue are projected over 2012 to 2016 and about fiscal expenditure, mandatory and discretionary expenditures are presented over 2012 to 2016 by types of expenditures. Regarding fiscal accounts and government debts as well, targeted figures are merely presented for the same period. This is barely called a fiscal management goal. That is, the goal is not clearly set and is not to pursue in the long-term.

The plan in terms of fiscal balance attempts to reduce the size of deficits to -0.3% of GDP in 2013 so that it maintains the balanced fiscal stance and in order to do so, it plans to keep the growth rate of fiscal expenditures 1.7%p below the growth rate of fiscal revenues (6.3%) but these have no different features compared to the suggestions 2010-2014 and 2011-2015 National Fiscal Management Plans previously presented.

It might be problematic to set a goal of the medium-term fiscal management in the fiscal balance at a certain point of time.

First, even though having a goal of the medium-term fiscal management in the fiscal balance at a certain point of time can be beneficial as the public easily understands and the goal is clear in fiscal management, it is tricky to control the nature of budget, 'expansionary tendency of fiscal expenditures'. It sure has an implementation method that it keeps the growth rate of total expenditure below the growth rate of total revenue but the method's effectiveness is doubtful because the management plan of total expenditures has frequently changed in the past National Fiscal Management Plans. In 2010-2014 National Fiscal Management Plan, the Administration has stated that the growth rate of fiscal expenditures is kept at 4.8%, 2.9%p below the growth rate of fiscal revenues but in 2011-

Table 5 _ Changes of Total Expenditure Control in Past National Fiscal Management Plans

(unit: %)

		2010	2011	2012	2013	2014	2015	2016	Annual Rate of Increase
Growth Rate of Total Expenditure	2009-2013 Plan	2.5	5.1	5.0	4.1				4.2
	2010-2014 Plan		5.7	4.9	4.0	4.5			4.8
	2011-2015 Plan			5.5	4.9	4.6	4.4		4.8
	2012-2016 Plan				5.3	4.4	4.4	4.4	4.6
	Actual Figures in Final Budget	-3.0	5.6	5.3					
Growth Rate of Total Revenue – Growth Rate of Total Expenditure	2009-2013 Plan	-3.6	2.4	4.1	3				
	2010-2014 Plan		2.5	5.1	2.5	2.6			
	2011-2015 Plan			4	4.3	0.7	0.5		
	2012-2016 Plan				3.3	1.8	0.4	1.3	
	Actual Figures in Final Budget	11.3	2.3	1.1					

Note: the shaded areas refer to projected years instead of fiscal years.

2015 National Fiscal Management Plan, the Administration changed the plan to state that the growth rate of fiscal expenditures is maintained at an annual rate of 4.8%, 2.4%p below the growth rate of fiscal revenues. In 2012-2016 National Fiscal Management Plan, a new targeted rate is suggested that the growth rate of fiscal expenditures is kept at an annual rate of 4.6%, 1.7%p below the growth rate of fiscal revenues. In other words, it is not clear whether the goal of fiscal management plans are to keep the growth rate of fiscal expenditures below the growth rate of fiscal revenues with a constant gap or to keep the growth rate of fiscal expenditures at a fixed level. Even if one of the two is the goal of the fiscal management, both has not been kept but changed every year.

Second, setting a certain point of time to achieve the goal of medium-term management plans is not advisable. As the planned term goes by, unexpected economic shocks could hit and the government might need flexibility in its policy implementation. As a matter of fact, a goal of the balanced budget by 2012 was presented in 2008-2012 National Fiscal Management Plan but it has changed to 2013 in the next management plan because it did not expect the global financial crisis in 2009. A fluctuation in the fiscal account is a mixture of the business cycle and impacts that fiscal policies generate. For instance, a certain year's fiscal deterioration could arise from either an economic slump or a change of the government's fiscal policy implementation such as special consumption tax's temporary change and a temporary investment tax credit. Therefore, the structural managed fiscal balance except autonomous changes from the fluctuation in the economic cycle should be considered as a target of fiscal management. By targeting the structural managed fiscal balance as a goal, the Administration could prevent unexpected economic shocks from interrupting the policy implementation.

As other advanced countries' examples, the U.K. has a surplus of 529 billion pounds in the business-adjusted nominal fiscal account as a goal of the medium-term fiscal management and Sweden and Netherlands have a surplus or a balance of the fiscal account with a consideration of the business cycle as a goal of fiscal management.

Economic Responsiveness and Fiscal Soundness of Medium-Term Fiscal Management

Economic responsiveness and fiscal soundness in 2012-2016 National Fiscal Management Plan are analyzed as follows.

First, the GDP gap that indicates the present condition of the economy is estimated to see if the responsiveness of 2012-2016 National Fiscal Management Plan is valid and FI indicator used to determine whether fiscal management is expansionary or contractive is calculated. For fiscal stance to have a counter-cyclical feature, FI indicator and the GDP gap should have opposite signs. That is when it is an economic boom, the GDP gap would have a positive sign and fiscal stance should be constrictive which implies that the FI indicator would have a negative sign. Contrarily, when it is a recession, the GDP gap would display a negative sign and FI indicator would show a positive sign for the expansionary fiscal stance.

The result of FI Indicators Analysis in [Table 6] shows that the fiscal stance on National Fiscal Management Plan is invalid. The GDP gap shows negative signs throughout 2012-2016 which signifies the economic downswings for the period. With negative signs of the GDP gap, FI indicator on National Fiscal Management Plans shows also negative signs. Moreover, considering that the Administration converts the financial loans to the interest gap subsidization in fiscal 2013, [Table 6] includes the result in case that the conversion is reversed. With the reversion, it still displays constrictive fiscal stance which confirms that the Administration's 2013 fiscal management plan is not correctly responsive to the business cycle.

Table 6 _ FI Indicators Analysis

(unit: trillion won, %)

	GDP Gap Ratio	2012-2016 Plan		With the Interest Gap Subsidization Scheme Counted as Fiscal Expenditure	
		Managed Fiscal Account	FI	Managed Fiscal Account	FI
2011	-1.3	-25.0	-0.74		
2012	-2.5	-14.3	-1.27		
2013	-2.8	-4.8	-0.81	-11.5	-0.32
2014	-2.4	1.0	-0.34	1.0	-0.83
2015	-2.2	2.2	-0.04	2.2	-0.04
2016	-2.5	8.3	-0.43	8.3	-0.43

Second, the fiscal sustainability test was conducted to figure out what impacts would 2012-2016 National Fiscal Management Plan have on fiscal soundness. Blanchard's short-term indicator is used for the fiscal sustainability test and the result indicates that the budget is sustained for the tested term.

Table 7 _ Fiscal Sustainability Test

(unit: %)

	2011	2012	2013	2014	2015	2016
Blanchard's Short-Term Indicator	-0.77	-0.43	-1.46	-2.09	-1.97	-2.1

Third, 2012-2016 National Fiscal Management Plan's comprehensive appraisal inclusive of both economic responsiveness and fiscal soundness is as follows. The evaluated period of 2012-2016, as the budget sustains its stability, its economic responsiveness can be raised as long as it does not damage the sustainability.

Therefore, considering that the GDP gap has continued to worsen (-1.3% in 2011 → -2.5% in 2012 → -2.8% in 2013), the 2013 budget needs managing on an expansionary stance than the Administration's budget bill proposed unlike the management was constrictive in 2012. It is noticeable that the conversion to the Interest Gap Subsidization scheme might lessen the impact of expansionary fiscal management. Moreover, the result of Blanchard's test shows negative signs implying that the budget has a capacity to bear more fiscal expenditures yet.

Furthermore, the result shows that in 2015 when the economy is expected to back on recovery, the management plan arranges an expansionary fiscal management even though it is reasonable to prepare a contractive fiscal management. Therefore, the fiscal management should be expansionary in 2013 when the economic cycle is expected to hit its bottom and should be contractive in 2015.

3. Major Issues

Management of Mandatory and Discretionary Expenditures

The medium-term fiscal management indicators (total revenue, total expenditure, the fiscal balance and government debt) in National Fiscal Management Plan have exposed their limits to scientifically and objectively display medium-term fiscal burdens and risk factors. Therefore, National Assembly has revised [National Finance Act] in May 2010. The revised National Finance Act requires the Administration to separate fiscal expenditures into mandatory and discretionary expenditures and to specify grounds and management plans of results in its projection. Separation of mandatory and discretionary expenditures enables the medium and long-term fiscal estimations to be scientific and unbiased in providing reliable figures and makes efficient regulation and management by types of fiscal expenditures achievable.

In order to efficiently control mandatory expenditures which could bring about inflexibility in the medium-and long-term fiscal management, systematic supervision should be taken through compilation, deliberation and execution in process of budgeting. First, in the process of budget compilation, incorrect budget compilation should be prevented by scrutinizing necessary government expenditure. Expenditure predictions regarding aging population should be expanded to look ahead at least 10 years so that the medium- and long-term impact of aging population's structural change could be analyzed in advance and countermeasures can be developed.

Second, in the process of deliberation, the prior-verification process should be internally stable. To do so, proper rules should be arranged so that the National Assembly Law Article 83-2 (bills regarding budget subject to consultation with Special Committee on Budget and Accounts) can be effective and the Estimation Reports of Bill Expenses should be used more frequently.

Third, in the process of budget execution, the budget leak that unlawful receipts of budget cause should be reduced so that limited budget could be distributed to qualified recipients.

Discretionary expenditures are more relatively flexible than mandatory expenditures in the processes of compilation and deliberation but comprehensive supervision is also required through all process of Planning, compilation, execution and post-evaluation in order to execute efficiently the budget.

To manage the discretionary expenditure efficiently, first, the Total Project Cost Supervision's efficiency has to be improved. More strict supervision on validity check and execution drawing has to be carried out. Clauses concerning sunk costs which are often used as grounds for exemption of validity re-check should be deleted. The total project cost supervision could be of service to deliberation on bills by providing information of performance.

Second, poor performing annual projects and projects overlapping one another with similarity should be regulated. Because those poor performing projects decrease policy effects and disrupt the rational allocation of the limited national budget, in deliberation on the budget bill, only the executable amounts are allowed. A measure should be devised that National Assembly could compel the Administration to take immediate actions when the Administration neglects without proper reasons the Assembly's request of correction of overlapping projects.

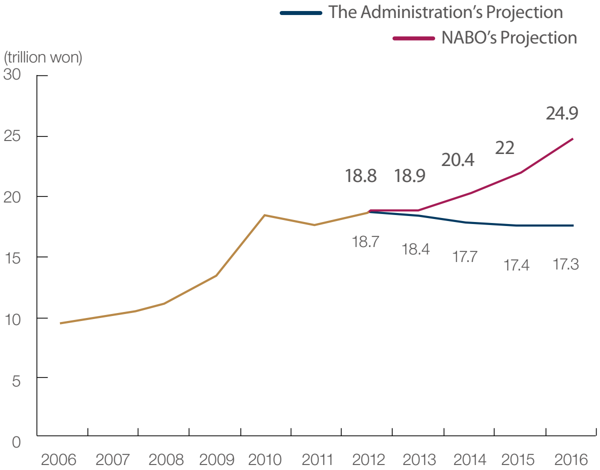
Third, the performance budget should be implemented with the feedback results from the fiscal project self-evaluation. To raise effectiveness of the fiscal project self-evaluation, properly differentiated incentives and penalties should be given by different features of projects and insufficient factors and receive feedbacks of the evaluation result, rather than uniformly increasing or decreasing the budgets. Project units on the system of performance management and those projects units on the budgetary system should be adjusted to correspond to each other so that the performance management system and the budgetary system could be connected systematically.

Lastly, for separation of mandatory and discretionary expenditures to be fully effective, the word 'mandatory expenditure' should be clearly defined. The Administration should discuss with the Assembly to sort types of expenditure. Moreover, in projections of mandatory and discretionary expenditures, detailed calculation methods (i.e., item * price) and specific main assumptions should be stated in order to raise the degrees of transparency and objectivity.

Management of Local Government Budgets

The Administration expects the local governments' net debt to gradually decrease from 2012 in 2012-2016 National Fiscal Management Plan. However, the expectation is on the assumption that the general financial grants and

Figure 6 _ the Administration's Plan and NABO's Projection on Net Local Government Debts



financial grants for local education are transferred to local governments as stated in the Administration's medium-term plan. In case that the grants are less transferred, the local governments' fiscal capacity weakens by the amount that has not been transferred as planned. The government forecasts that the national tax revenue expands at an annual rate of 8.0% from 2012 to 2016 which is 2.0%p higher than the growth rate of 6.0% NABO forecasts. If the local governments do not change their expenditure plans regardless of the so called "hypothetical" reduced amount of grants, local governments should issue local bonds to make up the deficits. If so be that, local governments' net debt is projected to increase every year until 2016 as follows.

This is also problematic that the number of government subsidized projects has rapidly increased raising the amount borne by local governments simultaneously. In the recent five years, the size of central government subsidized projects has increased at an annual rate of 10.7% and this is more than twice as high as the total budget growth rate of local governments at 4.9%. As the budget of central government subsidized projects expands, the amount that local governments bear increases as well but the local governments' burden increases faster. In other words, those projects take greater shares in the total budget of the local governments and the local budgets become inflexible. With less flexible budgets, local governments are less capable of other projects customized to regions' demands and natures.

Table 9 _ Growth Trend of Local Public Corporations' Debts

(unit: trillion won, %)

	2007	2008	2009	2010	2011	Annual Growth Rate
Size	27.7	32.4	42.7	46.5	49.4	15.6

In 2011, local based public corporations have liabilities of 49.4 trillion won and the liabilities increase at an annual rate of 15.6% and the size is 1.8 times greater than 28.2 trillion won of local governments' debts.

When local based public corporations fail, local governments are the ones to take the fiscal responsibilities. Therefore, the rapid increase of debts local based public corporations hold should be supervised.

Private-invested projects consist of two types, BTO (Build-Transfer-Operate) and BTL (Build-Transfer-Lease). It is also considered problematic because the amounts payable increase

Table 8 _ Trend of Expenditure in Health·Welfare·Labor Area: 2008-2012

(unit: trillion won, %)

	2008	2009	2010	2011	2012	Annual Growth Rate
Total Government Subsidized Projects	35.0	41.8	46.7	48.6	52.6	10.7
Central Government's Subsidy(percentage)	22.8 (65.1)	26.5 (63.4)	29.2 (62.5)	30.1 (61.9)	32.1 (61.0)	8.9 -
The Amount borne by Local Governments(percentage)	12.2 (34.9)	15.2 (36.4)	17.5 (37.5)	18.5 (38.1)	20.6 (39.2)	13.8 -

rapidly as the size of private-invested projects expands fast. Because the payables in private-invested projects occur over a long period of time and payments are subject to contracts, a great size of the payables could cause inflexibility in local budgets and could damage fiscal soundness of local budgets.

These should be discussed for the local fiscal management. First, the influence on the local budget evaluation system could be introduced. Local governments also bear fiscal expenditures in the central government subsidized projects and an excessive increase in the size of subsidized projects could damage the local governments' fiscal capacities. With the evaluation system, in the deliberation on the bills that cause local governments to bear a certain size of expenditure responsibility, a required report about a project's impact on a local government's fiscal stance could be submitted by NABO.

Second, a number of measures to maintain financial soundness of local based public corporations should be sought. Financial statements of not only corporations making deficits but those public corporations with high ratios of debt should be inspected and if those corporations turn out to be risky, solutions such as downsizing should be given. Stricter requirements should be applied to establishment of a local based public corporation in order to prevent insolvency of public corporations in advance. When considering a new business, stricter validity checks should be carried out as the financial structures and profitability managements of local based public corporations should be improved. Those public corporations that have a difficulty to rationalize fares such as subway corporations could raise their profitability by raising fares gradually. In terms of private-invested projects, the central government should be able to control the size of BTL projects by setting a limit on the amount of local bonds the local government could issue for those projects.

Third, a discussion of an increase in the conversion rate of local consumption tax is needed. If the current conversion rate of local consumption tax at 5% is raised by 5%p to 10%, local fiscal revenues increase by the increased amount in local consumption tax while the central government's fiscal revenues decreases and financial grants to local governments from the central government decrease as well. Based on NABO's tax revenue projection, local governments' budgets increase by 2 trillion won each year when the conversion rate rises by 5%p. the amount that local governments bear for government subsidized projects has increased by 1-3 trillion won each year since 2008 and the 5%p rise of the conversion rate could offsets the increasing amount of the local governments responsibility in the government subsidized projects.

However, the rise of the conversion rate still decreases the central government's tax revenue and could reduces the local governments' expenditure responsibility as it simply expands the local governments' budget without delegation and decentralization of governmental tasks.

Lastly, a discussion to adjust the ratio between general financial grants to local governments and financial grants for local education is needed in the long term. According to the Statistics Korea's Trend and Projection of Population of School Age Children, the size of population at school age has continuously decreased since 1981 at a rate that is decreasing but the financial grants for local education is increasing at an annual rate of 8.4% from 2012 to 2016. School operating costs which have the second largest percentage with 22% after payroll cost have increased at an annual rate of 19.4% over the last five years and it needs controlling at a proper range. As the population size of children at school age decreases and the local governments suffers the incremental welfare expenditures, the ratio of financial grants for local education and general financial grants to local governments could be adjusted as a long-term solution.

Analysis on Welfare Expenditure

The low fertility level, population aging, deepening income inequality, polarization in labor market and intensified global competition and a drop in the potential growth rate are factors that increase the demand for welfare rapidly. On the contrary, an expansion of welfare expenditure in the current circumstances seems very difficult to pull off as foreign and domestic economic environments deteriorate. Investment plans of welfare expenditures in 2012-2016 National Fiscal Management Plan and the current government's management of welfare expenditures over the last five years have been analyzed and summarized.

The trend of welfare expenditures over 2008 to 2012, the Health · Welfare · Labor expenditure has an annual growth rate of 6.7% which exceeds the annual growth rate of total expenditure at 5.5%. By the size of expenditure, Public Pension, Housing, Labor, and Health Insurance Aid come in order and Childcare · Family · Women (19.3%), Seniors and Minors (16.4%), General Social Welfare (11.1%), the Disadvantaged Class Aid (10.9%) have relatively high annual growth rates. This is because Basic Senior Pension (in 2007), Long Term Care Insurance for the Aged (in 2008), the Handicapped Pension (in 2010) are newly introduced the coverage of Child-Care Aid expands and the General Social Welfare Management Network (in 2010) is established.

According to 2012-2016 National Fiscal Management Plan, the Health · Welfare · Labor expenditure increases at an annual rate of 5.1% from 92.6 trillion won in 2012 to 112.9 trillion won in 2016. Education (7.1%), General Public Administration (6.1%), Diplomacy and Unification (5.9%) have growth rates higher than the Health · Welfare · Labor. Public Pension has an annual growth rate of 9.7% for 2012 to 2016, Health Insurance has a rate of 8.8% and Seniors and Minors has a rate of 7.8%. This implies that welfare areas regarding population aging are predicted to have remarkable growths. Especially, most expenditure areas except Public Pension, Housing, Labor, and Veterans Care in 2013 show high expenditure growth figures compared

Table 10 _ Trend of Expenditure in Health·Welfare·Labor Area: 2008-2012

(unit: billion won, %)

Area	Category	2008	2009	2010	2011	2012	Annual Average Growth Rate
Social Welfare	Public Pension	21,429	23,820	25,986	28,183	31,268	9.9
	Housing	15,415	15,288	16,716	18,054	19,006	5.4
	Labor	10,494	14,685	12,294	12,618	13,124	5.8
	Basic Living Security	7,272	7,980	7,294	7,524	7,910	2.1
	Veterans Care	3,129	3,360	3,609	3,874	4,054	6.7
	Seniors and Minors	2,206	3,284	3,663	3,876	4,051	16.4
	Childcare·Family·Women	1,669	1,957	2,369	2,876	3,385	19.3
	The Disadvantaged Class Aid	922	2,406	1,521	1,343	1,395	10.9
	General Social Welfare	380	641	464	546	579	11.1
	Total	62,916	73,421	73,916	78,894	84,772	7.7
Health and Medical	Health Insurance Aid	4,554	5,204	5,383	5,710	6,011	7.2
	Health and Medical	1,172	1,584	1,704	1,560	1,604	8.2
	Food Safety	179	208	244	230	244	8.1
	Total	5,905	6,996	7,331	7,500	7,859	7.4
Total Welfare Budget (A)		68,821	80,417	81,247	86,394	92,631	6.7
Total Government Expenditure (B) (trillion won)		262.8	301.8	292.8	309.1	325.4	5.5
Total Government Expenditure to Total Welfare Budget Ratio (A/B)		26.2	26.6	27.7	28.0	28.5	-

Note: 2008 and 2009 figures are from the revised supplementary budgets
Source: NABO, [2012 Budget of Republic of Korea], 2012.

to last year. On the contrary, in 2014 and 2015, other areas except Public Pension, Seniors and Minors, and Food Safety show lower expenditure growth rates than the inflation rate.

The medium-term fiscal management of welfare expenditure should be carried out in the way that can improve fiscal soundness of pension and social insurance, effectiveness of social insurance and efficiency of job creation policies.

First, fiscal soundness of pension and social insurance which could be highly determinative in sustainability of the welfare budget should be enhanced. From 2008 to 2012 the amount of pension and medical insurance costs the government bears are as follows, 12,879.1

Table 11 _ Investment Plan in Health·Welfare·Labor Area: 2012-2016

(unit: trillion won, %)

Area	Category	2012	2013	2014	2015	2016	Annual Average Growth Rate
Social Welfare	Public Pension	31.3	33.1	36.8	41.1	45.4	9.7
	Housing	19.0	17.5	18.0	17.8	17.1	-2.7
	Labor	13.1	13.8	14.1	14.5	14.9	3.2
	Basic Living Security	7.9	8.6	8.7	9.0	9.3	4.2
	Veterans Care	4.1	4.3	4.4	4.5	4.7	3.5
	Seniors and Minors	4.1	4.5	4.7	5.1	5.5	7.8
	Childcare·Family·Women	3.4	4.5	3.6	3.4	3.5	0.6
	The Disadvantaged Class Aid	1.4	1.6	1.6	1.6	1.7	4.8
	General Social Welfare	0.6	0.7	0.7	0.6	0.7	3.5
	Total	84.8	88.6	92.6	97.7	102.6	4.9
Health and Medical	Health Insurance Aid	6.0	6.5	7.6	7.8	8.4	8.8
	Health and Medical	1.6	2.0	1.6	1.5	1.6	0.3
	Food Safety	0.2	0.3	0.3	0.3	0.3	6.1
	Total	7.9	8.8	9.5	9.5	10.3	7.1
Total Welfare Budget (A)		92.6	97.4	102.1	107.2	112.9	5.1
Total Government Expenditure (B)		325.4	28.5	357.5	373.1	389.7	4.6
Total Government Expenditure to Total Welfare Budget Ratio (A/B)		28.5	28.4	28.6	28.7	29.0	-

Source: NABO, [2012 Budget of Republic of Korea], 2012.
Note: Final Budget is used for 2013 in place of the budget proposal.

Table 12 _ The Growth Rate of Investment Plan in Health·Welfare·Labor Area: 2012-2016

(unit: %)

Area	Category	2012	2013	2014	2015	2016
Social Welfare	Public Pension	10.9	6.0	11.2	11.6	10.3
	Housing	5.3	-7.8	2.5	-0.8	-4.3
	Labor	4.0	5.4	1.7	2.9	2.9
	Basic Living Security	5.1	8.2	1.8	3.5	3.2
	Veterans Care	4.7	5.6	3.1	1.9	3.6
	Seniors and Minors	4.5	11.1	5.0	8.5	6.5
	Childcare·Family·Women	17.7	32.9	-20.0	-6.0	2.6
	The Disadvantaged Class Aid	3.9	14.7	-3.0	3.9	4.3
	General Social Welfare	6.1	18.1	0.0	-6.4	3.9
Health and Medical	Health Insurance Aid	5.3	8.7	15.9	2.4	8.5
	Health and Medical	2.8	24.7	-18.0	-10.4	10.2
	Food Safety	6.0	8.6	3.8	5.5	6.6
Macroeconomic Indicators	Inflation Rate	2.2	2.5	2.9	2.8	2.6
	GDP Growth Rate	4.4	5.8	7.0	6.5	5.8

Note: Shaded Areas refer to growths less than inflation rate

billion won as government compensation for the chronic fiscal deficit of the government employee pension and the military pension and 25,640.2 billion won as a government subsidy for the health insurance and the long term care insurance for the aged. These fiscal burdens are expected to pile up as the population's aging. According to NABO's long term projection, expenditures for the pension are projected to increase more than triple times from 2.35% to GDP in 2012 to 7.93% in 2060 and expenditures for health insurance and the long term care insurance are expected to reach 1.14% in 2060 from 0.51% in 2012. To improve the fiscal accounts of the pension and the medical insurance, additional actions such as a reform on pension and increases in the contribution rate and the premium rate are needed and the medical insurance should be operated in consideration of fiscal transparency and fairness between generations.

Second, blind spots of social insurance should be reduced. In 2012, 27.1% of male employees and 41.6% of female employees are temporary job holders and only about 40% of those are provided the social insurance, while 80% of regular job holders are provided the social insurance. The government has supported premium payments to low-waged workers so that it promotes official employment since July 2012, but the administrative supervision should be carried out tighter and the coverage of the employment insurance should be expanded so that business owners cannot evade relevant regulations.

Lastly, the efficiency of the job creation policy should be improved. From 2008 to 2012, the job creation policy has been carried out in focus of direct employment, job training and employment grants but the employment indicator is not greatly enhanced. This is not only because foreign and domestic macroeconomic shocks influenced but also because the communication system among departments of local and central governments was insufficient and their projects overlapped in many aspects, causing inefficiency. In addition, direct employment lacked continuity and connectivity to the actual employment. The employment support service did not have sufficient infrastructure and the benefits of job training were focused on a small number of beneficiaries. To solve the overlapped projects, job creation policies carried out by many forms and levels of governments should be reorganized into a uniform system and responsible agents of projects should be sorted into the central government and local governments by features and expected influences of projects. A customized employment service that features the process of 'counseling - job training - job seeking' is highly effective to the weak in the labor market and qualified professional counselors and necessary infrastructures should be arranged to provide the service broader. Finally, the problem that the benefits of the job training service are focused on the young, the middle aged and large enterprises rather than women, the senior and the handicapped and the small businesses has be to sorted out and the current low level of labor productivity should be raised by the job training.

4. Policy Suggestions

National Fiscal Management Plans have been submitted to the Assembly nine times since 2004 but the plans' effectiveness has not been improved by much. Problems and solutions of this year's 2012-2016 National Fiscal Management Plan are presented below.

First, the submission date of National Fiscal Management Plan is coincident with the submission date of the budget proposal which is against the purpose of the plan. Basically, the medium term fiscal management plan is written to make up the defects the budget system could have as a budget for a specific year only involves each corresponding year. In other words, a medium term direction of fiscal management is decided first, and then allocation of fiscal resources and priorities of projects are decided each fiscal year based on the direction so that the fiscal management's efficiency and predictability could be improved. Therefore, the submission date of the plan should be antedated so the plan is fully reflected in the budget deliberation. The proper timing of submission could be either May or June after the open budget forum (in March every year) is held which is for the budget planning.

Second, the plan lacks integrity. The 2012 plan does not present a specified prediction of the economic growth rate which is essential in further predictions of tax revenue, fiscal accounts and national debts. In the 2012 plan, the Ministry of Strategy and Finance explains the domestic conditions as "with the growth rate near its potential level in the range of 4% after 2013" while it lists the specified growth rates and projections of the fiscal revenue (8.6% in 2013, 6.2% in 2014, 4.8% in 2015 and 5.7% in 2016). In the 2011 plan too, it simply stated "with the growth rate near its potential level in the range of 4% after 2012". Although it is known that the domestic economy is highly sensitive to foreign shocks and to predict the exact growth rate of it under the given circumstances is very challenging but that the ministry presents predictions for the next four years with no differences each year shows the plan's lack of integrity. Moreover, the plan's optimistic tendency in predictions of economic growth might be seen wishful but this optimistic tendency causes distortions in understanding of the fiscal goal and the fiscal stance.

Third, microscopic approaches are needed in the plan's implementation besides efficient fiscal management. That is, the preliminary validity check and the supervision system on total project costs should be thoroughly carried out. Total 588 projects (total 272.4 trillion won) have been analyzed with the preliminary validity check for the 13 years since its introduction in 1999 and until the end of 2011 and 220 projects (117.8 trillion won) have been evaluated to be invalid. Article 38 of the National Finance Act stipulates that the preliminary validity check is mandatory in budget compilations of new projects. To improve transparency and effectiveness of the validity check system, new projects of which costs exceeds 50 billion won should require the project budget bills to have a result report of the validity check attached. In the selection of projects, because the current permission criteria stating "a project demanded by the national policy and selected by the minister of strategy and finance" is arbitrary, proper permission criteria should be stipulated in the act instead of an enforcement ordinance.

A problem of the supervision system on total project costs is that repeated alterations of plans and extended project periods increase total costs after all. This is against the National Finance Act which states that "to improve efficiency of fiscal expenditure, investment project costs showing a massive amount shall be controlled separately" as a purpose it requires a fixed amount of total costs. When a project shows a poor performance, even if the project is currently in progress, another validity check and execution drawing should be immediately carried out.

Lastly, the number of times the plans shall be developed and submitted during a term of one administration could be adjusted to twice, once in the initial stage and once more in the middle of a term. Since this 2012-2016 National Fiscal Management Plan was developed in the very last stage of the current Administration's term, once the next Administration is established, this plan might be ineffectual.

Analysis on Related Documents

2013 Tax Expenditure Budget

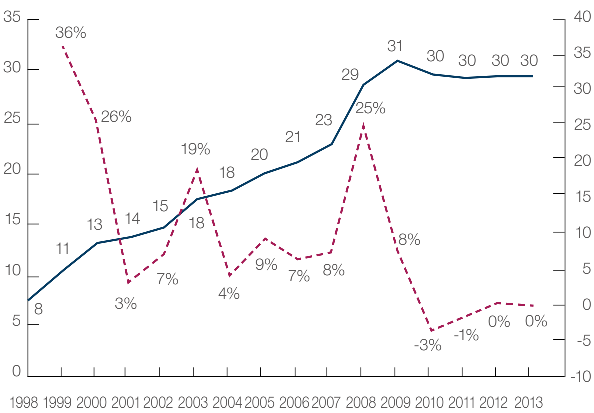
Although 2013 Tax Expenditure Budget accepted criticisms about the methods by which it sorts categories and it calculates the amount of deductions, the report still needs further revisions about incorrect estimations of the size of tax expenditures, the lack of a performance management and the disorder in exemption and deduction items.

Ⅰ. Overview

Tax Expenditure Budget is a supplement document attached to the budget bill according to National Finance Act. It had been submitted to National Assembly under the title of "Tax Expenditure Report" from 1999 to 2009 but since 2010, it has changed the title to "Tax Expenditure Budget." According to the 2013 Budget, the amount of tax deduction (counted as a type of tax expenditure) was 29.7 trillion won in 2012 (provisional) and 29.8 trillion won in 2013 (projection) with an increase of 0.1% between. The number of relevant items was decreased by 27 from 201 in 2011 to 174 in 2012. The rate of national tax deduction which is total tax deduction to total national tax revenue was decreased by 0.7%p from 12.8% in 2012 to 12.1% in 2013 and this is lower than the legal limit 13.7% on the rate of national tax deduction.

Since 1988, the amount of total tax deduction which is annual averaged for a government's term have increased to 12 trillion won during Kim's Administration, to 20 trillion won during Roh's Administration and to 30 trillion won during the current Administration with increments of each about 10 trillion won. The current government's rate of national tax deduction has decreased to 12.8% in 2012 but the averaged rate over its term comes out to be 14.1% which is the highest one in comparison with other two Administrations. The top ten items by the size of expenditure in 2012 take 54% (15,953.2 billion won) of total tax deduction. R&D Tax Deduction (2.7 trillion won), Insurance Premium Special Income Deduction (2.1 trillion won) and Temporary Facility Investment and Job Creation Tax Deduction (1.7 trillion won) are the ones with the greatest sizes in order.

Figure 1 _ National Tax Deduction and Its Rate of Growth

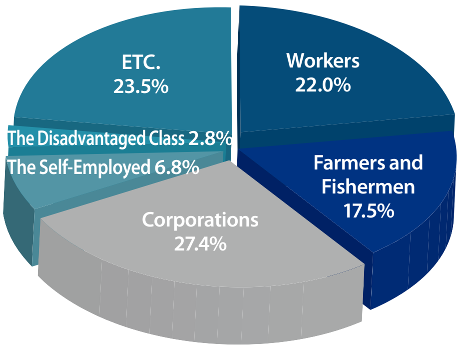


Source: Government of the Republic of Korea, [Tax Expenditure Report Budget], Editions of Relevant Years.

The ratio of tax deduction sorted by direct, indirect taxes and customs duty was 75:24:1 over 2011-2013 period. The Administration has preferred tax support on direct taxes to other means as this enables the tax support to reach various economic classes. Income tax deduction was frequently pulled out in response to the global economic crisis.

To learn about the current state of tax expenditure from 2008 to 2012, benefit recipients were sorted and

Figure 2 _ Tax Expenditure by Types of Benefit Recipients: 2008-2012 Average



analyzed into groups of workers, farmers and fishermen, corporations (inclusive of large enterprises, small and medium sized enterprises, common forms of business), the self-employed, the disadvantaged class, and etc. The result is that corporations took the greatest proportion of tax expenditure benefits with 27.4% and especially large enterprises are the ones that took 54.6% out of 27.4%. For the same period, out of total tax expenditure 143.3 trillion won, corporations took 39.3 trillion won (27.4%) and etc. took 33.8 trillion won (23.5%), workers took 31.6 trillion won (22.0%), farmers and fishermen took 25.0 trillion won (17.5%) the self-employed took 9.8 trillion won (6.8%) and the disadvantaged class took 4.0 trillion won (2.8%).

II. Appraisal on 2013 Tax Expenditure Budget

Features and Defects of 2013 Tax Expenditure Budget

To improve transparency and efficiency of fiscal management, 2013 Tax Expenditure Budget has partially reflected criticisms. The report provides the size of total expenditure, the noticeable increases and decreases in expenditure items with detailed statements by separating memorandum subject to exemption and deduction in categorization according to each relevant tax laws. The report organized items which have had disorders for frequent changes. It includes 2012 sunset clauses organization plan which reflects the tax revision about the arrangement of exemption and deduction. In order to calculate the exact size of income tax deduction, it applied the actual effective tax rates differently by the size of incomes.

However, following defects are found in the publication of correct data regarding deduction items to improve transparency of fiscal management and the organization of sunset clauses to control deduction items.

First, despite the plan to review sunset clauses that are due to reach their closures in 2012, the report does not explain clearly the reasons why it extended some of clauses nor provide details of clauses. Moreover, it does not cover those sunset clauses to reach their closures in 2013.

Second, the number of deduction items this year totals 174 (153 items of tax expenditure, 21 of exemption and deduction according to each tax laws) and this is decreased by 13.4% over the number of last year's. Although it seems that the deduction items have been through an intensive rearrangement process but its effectiveness is doubtful as many items have been simply merged (i.e. five different items with zero rates of VAT into one), those still existing items are excluded from the list of deduction items (the abolition of heavy taxation on the multiple house ownership and the non-business purpose land ownership) and items already subject to deduction are arbitrarily put in the list afterward. In the publication of the report in the future, the number of items subject to deduction by year, details of rearrangement of items and if there is, any changed standards for listed items should be stated clearly.

Third, a number of significant gaps are found between the actual records of 2011 in the 2013 report and the predicted figures of 2011 in the 2012 report. For example, the actual records of corporate tax exemption on agricultural corporations and other eight items for 2011 reach 85.7% level of predicted figures in the 2012 report. Not only to evaluate effectiveness and used methods of policy implementation but also to uphold the initial cause of the report, the size of deduction in the report should be correctly estimated.

Fourth, the Administration presented a plan to reorganize 19 sunset clauses (24 to close, 5 to create) but the total number of sunset clauses that reach their closures this year is 103 which is relatively greater than the previous years'.

Table 1 _ 2011 Tax Expenditure Items with big gaps between Plans and Actual Records

(unit: 100 million won)

	2012 Tax Expenditure Proposal			2013 Tax Expenditure Proposal		
	2010 Record	2011 Estimate	2012 Plan	2011 Record	2012 Estimate	2013 Plan
Corporate Tax Exemptions on Agricultural Corporations (Restriction of Special Taxation Act§ 68/ Act on Regulation of Tax Reduction and Exemption§ 53)	-48	-40	-41	-5	-23	-27
Corporate Tax Exemption on Interest Gains from International Financial Transactions (Restriction of Special Taxation Act§ 21/ Act on Regulation of Tax Reduction and Exemption§ 94)	-304	-119	-204	-381	-190	-306
Electronic Tax Receipts Issuing Deduction (Value-Added Tax Act§ 32-5)	-3	-92	-97	-212	-335	-350
Lower Rate Applied Gift Tax on Family Business Succession (Restriction of Special Taxation Act§ 30-6)	-11	-16	-17	-222	-143	-150
Special Treated Gift Tax on Business Establishment Funds (Restriction of Special Taxation Act§ 30-5)	-1	-1	-1	-21	-12	-12
Individual Consumption Tax Exemption on Hybrid Vehicles (Restriction of Special Taxation Act§ 109(1))	-114	-113	-118	-261	-341	-352
Value-Added Tax Exemption on Introduction of Capital Goods by Foreign Invested Corporations (Restriction of Special Taxation Act§ 121-3)	-260	-264	-484	-529	-1,155	-961
Value-Added Tax Exemption on Education, Science, Culture Imports (Value-Added Tax Act§ 12(2)3)	-36	-38	-42	-492	-541	-372
Income Deduction on Credit Card Usages (Restriction of Special Taxation Act§ 126-2)	-18,405	-15,467	-16,338	-11,729	-13,090	-14,994

Source: Government of the Republic of Korea, [Tax Expenditure Report Budget], Editions of Each Year.

By the percentage of rearranged clauses over total sunset clauses, 2013's ratio turns out to be 23.3% (24 to close) which is not much different to 28.0% (13 clauses) in 2010 and 21.4% (9 clauses) in 2011. This proves the Administration's effort to reorganize tax deduction and exemption was not sufficient.

Evaluation

Here we set 4 criteria for effectiveness evaluation of major exemption and deduction items in 2013 Tax Expenditure Budget; 1) if the taxation support has a weak ground, 2) the purpose of deduction is accomplished, 3) the legitimacy of support is lost due to economic and sociological changes and 4) the deduction benefit does not reach to the group that deserves the policy support. Under the criteria, following items have been selected and reviewed for a lack of effectiveness or an inappropriate tax incidence, hence in need of reorganization.

Above all, Job Creation Tax Deduction, and R&D Tax Deduction are evaluated to provide insufficient motivation of job creation or an inducement to attract investment on R&D. The current exemption and deduction to support those savings with a tax break are evaluated to generate the inappropriate tax incidence of missing a huge deal of tax sources, a mere asset portfolio change without accumulation of assets and the concentration of benefits on the high income class.

The selective excise tax exemption on the admission of membership exclusive golf courses (nation-wide and Jeju) has an example that a similar policy had been previously abolished for its low effectiveness. It is not surprising that a tax deduction of 20,000 won has a very limited impact to those owners of a golf course membership which easily costs 160 million won on average. It is also evaluated to have a little or no inducement that could turn the demands of overseas golf tours to domestic golf courses. The sunset extension of the VAT exemption on gold bullion trades is evaluated to be inappropriate for the sake of transparency to extend its effective term because currently smuggling or untraceable transactions take more than a half of the total volume of transactions in the gold market and it is very likely that other new forms of illegal transactions could continue to appear.

Abolition and reduction of the benefits from certain items have been discussed because the benefits from those items have been considered to be concentrated on certain types of recipients and to jeopardize the fairness. The Facilities Investment Tax Deduction intended to promote the human resource development in research is evaluated to benefit intensively large enterprises, and the tax cut on capital gains from house transfers that occur within a year is determined to benefit intensively certain areas that had the recent rise in house prices.

Previous Temporary Facility Investment Tax Deduction was changed to current Job Creation Tax Deduction by the tax revision of 2011 and its effective term was set to cease in 2014. However, such change in this year's revision bill is evaluated that it simply made previous Temporary Facility Investment Tax Deduction virtually permanent in its context and had failed to make an additional investment inducement.

A thorough review on its taxation fairness is required not only because the tax deduction, as an expenditure item of which size reaches two trillion won a year, is appraised unable to attract sufficient investment and employment, but also because 90% of the benefit is concentrated on large enterprises.

The Administration suggested extending the sunset terms of those R&D deductions which were supposed to reach the due this year, such as that of the special tax treatment on R&D contribution, and this suggestion is seen to aim for long-term economic effects it could bring about. However, 95% of the deduction benefit of 'R&D Tax Deduction' is concentrated on large enterprises and 'the technology acquisition tax credit on small and medium sized enterprises' shows its size of expenditure as low as 700 million won a year. The preferred deduction rate on R&D expenses on small and medium sized enterprises in new growth and fundamental technology fields is at 30% which barely has an additional inducement compared to the general deduction rate of 25%. The level of deduction rates and beneficiary selection processes of these above mentioned items should be correctly modified.

There are 18 exemptions and deduction provisions on savings accounts and only five provisions have been rearranged in the revision and the rearrangement is still fragmentary. The tax exemption on interest incomes from long-term house-purchase savings is ceased at the end of 2012 according to the relevant laws but as alternative measures, an income tax deduction on long-term funds and property formation savings is newly created. When it comes to the tax exemption on marginal profits from long-term deposit term insurances, it is considered reasonable that a withdrawal before the term reaches maturity is taxable but income criteria and a cap on the size of funds are not determined unlike other deduction clauses and these defects are beneficial to high income classes. In addition, the application of low tax rates on preferred savings as a tax break is considered to generate the inappropriate tax incidence of missing a huge deal of tax sources, a mere asset portfolio change without desirable accumulation of assets and the concentration of benefits on the high income classes. Therefore, abolition of the relevant provisions should be discussed.

Evaluation of the temporary tax cut on house transactions after the short-term possession of a year or less reflects that the tax cut intesively benefit certain areas that had experienced recent rise in house prices. While house prices in Seoul metropolitan area had a decrease of 1.9% over this year, Ulsan (12.0%), Kyeongbuk (8.7%), Chungbuk (8.1%), Daegu(7.8%) areas had an increase in prices. Besides, it should be mentioned that an asset possession should last more than a year to entitle a tax deduction in other advanced countries and the taxation which should have consistency is used as a means to stimulate the housing market.

The selective excise tax exemption on the admission of membership exclusive golf courses should be also cautiously discussed. It has an example of a similar policy that had been previously abolished as the policy was evaluated to generate domestic demands less than expected. Furthermore, those courses in Jeju commonly have deficits regardless of the deduction benefit since 2004.

The Administration attempts to extend the sunset provision of the special VAT exemption on gold bullion trades another year as the opening of the gold exchange is delayed. However it is evaluated to be inappropriate for the sake of transparency because currently smuggling or untraceable transactions take more than a half of the total volume of transactions in the gold market and it is very

Table 2 _ Estimation of the Size of Tax Expenditures in 2013

(unit: 100 million won, %)

	2013 the Administration's (A)	2013 NABO's Estimation (B)	Gap (C=A-B)
Income Tax	△140,612	△141,882	1,270
(Deduction on Personal Pension Savings)	(Omitted)	(△7,297)	(7,297)
(Deduction on Credit Card Usages)	(△14,994)	(△9,945)	(△5,049)
(Deduction Educational Expenses)	(△12,328)	(△10,042)	(△2,286)
(Special Treatment of Foreign Workers)	(△2,554)	(△1,152)	(△1,402)
(Lower Rated Tax on Short-Term Transfer of Houses)	(Omitted)	(△753)	(753)
(Job Creation Tax Credits)	(△6)	(△429)	(423)
Corporate Tax	△83,158	△84,838	1,680
Gift, Inheritance Tax	△657	△657	0
VAT	△52,261	△49,691	△2,570
Traffic Tax	△10,592	△10,636	44
Individual Consumption Tax	△4,251	△5,710	1,459
Liquor Tax	△431	△431	0
Stamp Tax	-	0	0
Securities Transaction Tax	△275	△447	172
Education Tax	△2,889	△3,340	451
Customs Duty	△2,506	△2,510	4
Special Tax for Rural Development	-	△563	563
Total Tax Expenditure	△297,633	△300,706	3,073
National Tax Projection[1]	2,163,763	2,163,763	-
The Rate of Reduction	12.1	12.2	

Note: 1) the Administration's Projection (NABO's: 214,038.1 billion won)

likely that other new forms of illegal transactions could continue to appear. Considering VAT impositions have an effect of normalizing taxable transactions, taxation on all gold bullion trades should be discussed.

The Size of Tax Expenditure and the Estimation Guideline Review

The tax expenditure budget should be written under an identical guideline with the tax revenue budget bill but these documents are written under different guidelines causing inconvenience in the budget deliberation of National Assembly. The tax revenue budget bill is written under the collection basis while the tax expenditure budget report is written under the declaration basis. Moreover, two documents do not coincide in the rearrangement. The tax expenditure budget bill and the tax expenditure budget do not correspond in figures as well. These defects should be corrected in the future.

When it comes to the estimation of tax expenditure, accuracy of the estimation should be sought through a methodological improvement and a reasonable assumption. The income tax deduction on credit card usage should be estimated applying the different actual effective tax rates in each income brackets as other income tax deductions are estimated. The income tax deduction imposed only on workers should exclude the consolidated income declaration data so that the size of expenditure is not double counted. Some of items subject to tax deduction are found omitted in the tax expenditure budget. The size of expenditure by three omitted items including deduction on personal pension savings are estimated to total as much as one trillion won. Thus, cautions should be taken in the next reports.

The current tax expenditure budget report simply lists the sizes and the items of deductions and does not provide grounds used for estimation. The relevant grounds should be provided to aid reviewing in the attempt to improve accuracy of estimation.

As a result that those omitted items are included and over- and under estimated items are estimated correctly, the amount of deducted national tax in 2013 totals 30.1 trillion won which has a gap of 300 billion won to 29.8 trillion won in the Administration's estimation. This raises the rate of deduction from 12.1% to 12.2%. The total size and the composition of items do not differ much but each item has noticeable differences as Table 2 shows.

Suggestions for Improvement of Tax Expenditure Budget System

In case of fiscal projects, a well-organized outcome management is carried out on fiscal projects according to National Finance Act. A fiscal project requires a planned outcome, a report of progress, a self-evaluation and a final intensive evaluation. The result of these requirements are submitted to National Assembly and utilized for the budget deliberation.

It is noticed that a proper management is not carried out on the tax expenditure budget. The budget does not contain a performance review. A proposal and an appraisal of tax cut which are fundamental to outcome management are treated as an Administration internal data.

Therefore, the Administration introduces the outcome management system in order to provide a comprehensive outcome analysis and management. It requires the tax expenditure budget to include a policy goal, a progress to the goal, and an explained association with the revenue budget. It also attempts to improve the outcome management system by assigning comprehensive analysis on major expenditure items in the tax cut appraisals to specialized institutions (Restriction of Special Taxation Act Article 142 and Revised Article 135) but an additional effort to improve the system is necessary.

For the composition of the tax expenditure budget report, the Administration assorts total tax expenditure in 2013 (29.8 trillion won) into tax exemption and deduction according to Restriction of Special Taxation Act (18.9 trillion won), memorandum items subject to tax exemption and deduction according to each tax laws (11.0 trillion won) and transitive measures items (0.2 trillion won). The Administration causes confusion because it often names those deduction and exemption according to Restriction of Special Taxation Act, simply tax expenditure. It is concerned that those tax deduction and exemption could be confused for total tax expenditure. Moreover, data only about tax deduction and exemption according to Restriction of Special Taxation Act are sorted and presented by budget types and by items, excluding other tax expenditures. Furthermore, the stated amounts in the tax expenditure proposal do not reveal the grounds for estimation. This brings about limitation in reviewing the size of tax expenditure that could actually occur. Therefore, a suitable sorting method should be founded and grounds used in estimation should be provided.

For a review of tax expenditure to be effective, criteria in consideration of the nature of tax expenditure should be arranged for a comparative analysis of policy means, evaluation of the extent of taxation fairness violation, juridical sufficiency evaluation. Although pre-evaluation is essential in the tax expenditure budget composition, simply a cost estimation report is attached in tax break bills. Therefore introduction of Tax Information and Impact Note of U.K. could be discussed as a solution.

Lastly, it is difficult to understand how the Ministry of Strategy and Finance's deliberation result is reflected because the proposals and appraisals of tax cut are treated as an Administration internal data. To establish an effective outcome management system, a circulation system of those data should be maintained and it should be legislated that those data are subject to submission to National Assembly. It should be also concerned that most of appraisals of tax cut fail to provide necessary information as appraisals often do not quantify results of economic support in numerical figures. A means to connect fiscal projects and tax expenditures should be discussed in order to adjust overlapped investment and estimate an appropriate size according to a goal of policy.

Government Debt Management Plan

According to Government Debt Management Plan, the ratio of government debts to GDP falls rapidly from 34.0% in 2012 to 28.3% in 2016. On the contrary, NABO forecasts that the ratio rises every year for the rapidly increasing size of debts. A clear means to manage the debts should be presented and the fiscal statistics should be reformed in attempt to raise the plan's effectiveness.

Trend of Government Debt

Government debts have rapidly increased after the foreign currency crisis from 60.3 trillion won in 1997 (11.9% to GDP) and the debts are expected to total 445.2 trillion won (34.0% to GDP) based on the Administration's projection in 2012.

Kim's administration had deficit debts from a substantial current account deficit and National Housing Funds as causes of increasing debts. Roh's administration had conversion of public funds to government bonds and issue of foreign currency market stabilization bonds as causes of increasing debts. Lee's administration had a fiscal expansionary policy to overcome the global financial crisis as a cause of the debts.

Projection of Government Debt 2012-2016

Based on NABO's GDP projection, it is projected that the ratio of government debts to GDP rises every year from 34.9% in 2011 to 35.9% in 2016. This projection is contrary to the administration's projection that the ratio falls below 30% from 2015.

The main reason two institutions have a substantial gap in projections is that projections of the managed fiscal account have a substantial gap (a difference of 20 trillion won after 2014).

Figure 3 _ Trend of Government Debt Growth and to-GDP-Ratio

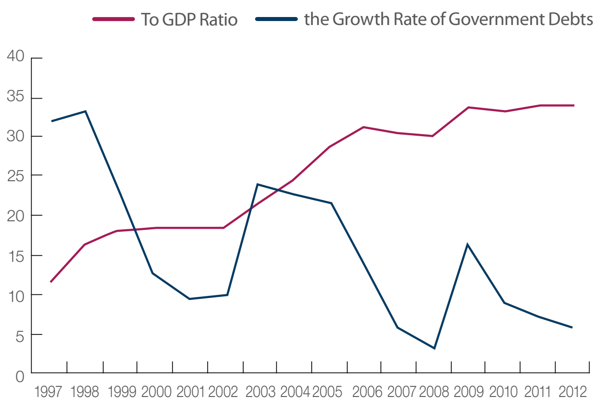


Table 3 _ Government Debts Projection and Comparisons 2012-2016

(unit: trillion won, %)

	2012	2013	2014	2015	2016	Annual Average Growth Rate
NABO's Projection (A)	450.9	478.6	517.1	554.0	591.8	7.0
(% of GDP)	(34.9)	(35.0)	(35.4)	(35.6)	(35.9)	-
The Administration's Plan (B)	445.2	464.8	470.6	481.2	487.5	2.3
(% of GDP)	(34.0)	(33.2)	(31.4)	(29.9)	(28.3)	-
Gap (A-B)	5.7	13.8	46.5	72.8	104.3	-

Evaluation and Recommendation

The most important part of the plan is suggestions of management targets and means but targets and means are suggested vaguely. Sustainability of budget that the administration presented is a goal that is excessively simple and abstract for a long-term plan. It is considered effective to present a specific goal to accomplish within the planned term or two to three years. Next, management methods should be specified. The aggregate management should be able to present how tax deduction and tax source are expanded at what level the expansion is planned. The management should also be able to explain how the deficit balance in the general account is reduced and the size of issue is estimated in detail.

Next, in Oct. 2011, the administration has presented methods to reform financial statistics about government debts and such in 2011-2015 National Fiscal Management Plan but the methods' effectiveness is doubtful. Those reform plans have been submitted only to international organizations and have not been provided to the public. The reform of fiscal statistics has failed to accomplish its goal to end the argument of coverage, handling methods, and size. It also failed to fix other problems of fiscal statistics such as mismatch between the consolidated fiscal statistics and the range of government debts. It is suggested that the range of government should be adjusted to coincide with the definition of general government sector under GFSM 2001, the current international standard. Some of public organizations should be counted as in the general government sector based on results of marketability test. Deficit from public pension contributions should be determined to be included in whether government debts or accounts. In order to accomplish the suggestions, an overall revision of fiscal statistics should be carried out that National Finance Act which defines government debt and the enforcement ordinance of National Finance Act need to be revised and in their provisions, guidelines of statistical data should be presented.

Government Guaranteed Debt Management Plan

The size of government guaranteed debt is expected to reach 33.8 trillion won at the end of 2012. It starts to decrease since then and it eventually falls to 24.0 trillion won in 2016. A new management method is needed to deal with a massive asset of Deposit Insurance Fund Bond Redemption Fund's bond which was not successively disposed by sale in time and Ministry of Education, Science and Technology ought to act as a supervisor of Korea Student Aid Foundation's bond. Appropriate steps should be taken for foreign currency denominated debts of Korea Development Bank (KDB) because management methods are not presented, despite predictions have come out for passage of the guarantee agreement.

The government guaranteed debt is a debt that the government guarantees for a debtor's repayment liability. Even though it is not a government debt directly, as a contingency liability, a management plan is made by government and submitted to the National Assembly.

The size of government guaranteed debts was 35.1 trillion won (2.8% to GDP) at the end of 2011. The ratio of government guaranteed debts to GDP did not reach 10% level before the foreign currency crisis and it soared to 16% during the crisis. The ratio fell below 10% in 2004 and now it has further fallen to 2.8% in 2011.

The government guaranteed debt consists of Deposit Insurance Fund Bond Redemption fund's bond (DIF Bond Redemption Fund's bond), Korea Student Aid Foundation's bond (KSAF's bond), Restructured fund's bond, foreign currency denominated debt held by domestic banks, and Waterway Maintenance Fund.

According to *2012-2016 Government Guaranteed Debt Management Plan*, the size of government guaranteed debts is projected to reach 33.8 trillion won at the end of

Figure 4 _ Trend of Government Guaranteed Debt

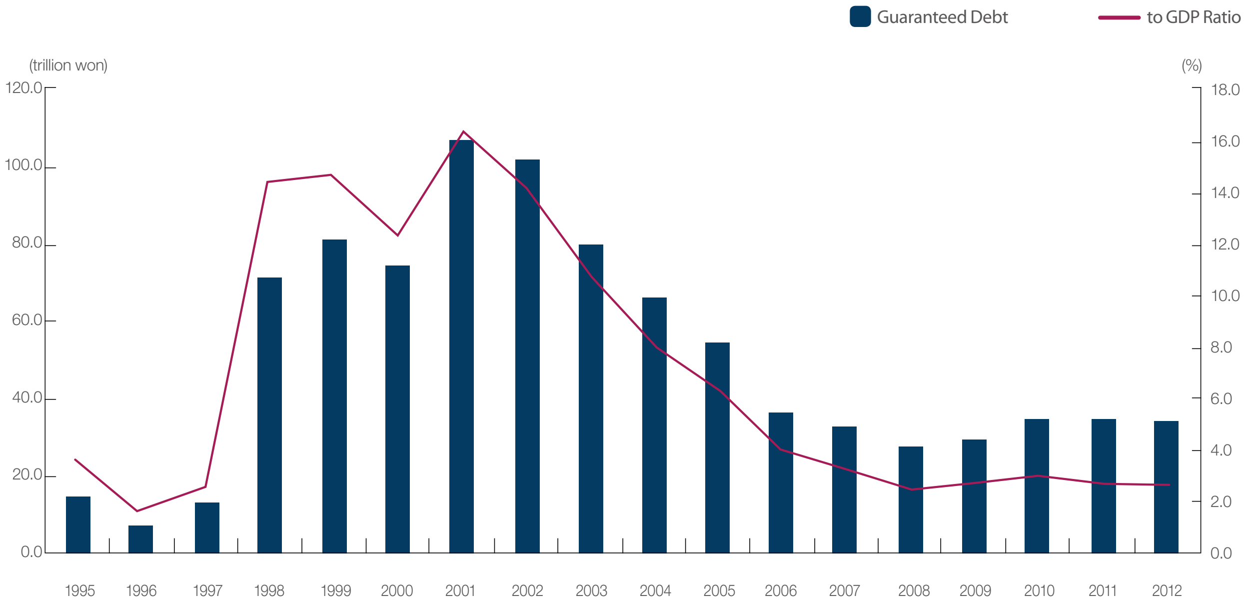
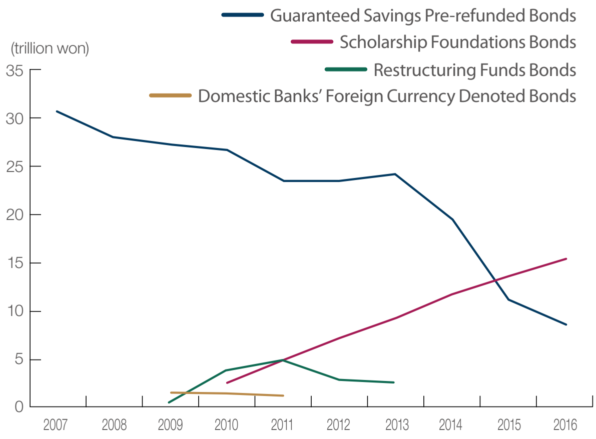


Figure 5 _ Trend and Projection of Government Guaranteed Debt by Types



2012 which is decreased by 1.3 trillion won from 35.1 trillion won at the end of 2011. The size is projected to have a peak of 36.3 trillion won at the end of 2013 then projected to gradually decrease to 31.3 trillion won in 2014, 24.9 trillion won in 2015 and 24.0 trillion won in 2016.

By types of government guaranteed debts, the size of DIF Bond Redemption Fund which currently has the greatest proportion is projected to decrease and the size of KSAF's bond is projected to grow to exceed the size of DIF Bond Redemption Fund in 2015. Therefore, means of guarantee risk control and repayment should be prepared for KSAF's bond for the long-term.

The administration plans to increase the value of holding assets, make timely sales, cautiously manage MOUs and establish a multilateral sales strategy for management of DIF Bond Redemption Fund but the value of holding assets declines and unsuccessful sales occur since 2010. For the case of Woori Financial Holdings, in Aug. 2011, because an effective competition did not stand, the sales process has been put on hold. Considering, its massive size, sales principles in Financial Holding Companies Act, the administration has also to come up with a new management method.

KSAF's bond is seen to have three different risks from interest rates, liquidity and credit. Because Korea Student Aid Foundation is not subject to inspection of Financial Supervisory Service, a concerned office, in this case, Ministry of Education, Science and Technology should take responsibility of necessary supervisions.

2012-2016 Government Guaranteed Debt Management Plan explains major features of the agreement of payment guarantee of KDB's foreign currency denominated debts and its projection from 2012 to 2016. However, management methods are omitted. It also separately contains a projection of KBD's foreign currency denominated debts for medium- and long-term from 2012 to 2016 but management methods are omitted. It is concerned that the administration plans to make sales of shares on KDB Financial Holdings such as investment in kind to NH Financial Holdings after the agreement of government guarantee of KDB's foreign currency denominated debts passing in National Assembly. Proper management should be prepared.

Medium and Long Term Fund Financial Management Plan

To improve effectiveness of the medium and long term fund financial management plan, a system that could confirm the performance of the management plan and an evaluation system should be founded. For transparency and objectivity of estimation to be improved, the management plan should include major assumptions used in projections of fiscal balance and liability and classify items in the tables of fiscal balance and financial statements.

Medium and Long Term Fund Financial Management Plan is a document that the administration submits to National Assembly as an attachment in National Fiscal Management Plan. It contains a projection and a management plan of 11 funds' fiscal balance, asset and liability fluctuation and appraisals and evaluations of modifications and their causes and management plans over at least five fiscal years. National Finance Act Article 7, Article 73-3, and Article 31 of the enforcement ordinance of the act stipulate the plan's subject funds, necessary procedures and requirements.

Among those funds subject to submission of the plan, plans of Government Employees Pension Fund, Employment Insurance Fund, DIF Bond Redemption Fund were analyzed and the result presents these. Active fiscal stabilization measures are necessary in order to reduce Employment Insurance Fund's unemployment benefit account's fiscal deficits by readjusting the premium rate on employed workers.

When it comes to Government Employees Pension Fund, a prediction model for government employee salary should be developed to enable the fund to properly apply the increase rate of salary in estimation of contribution revenue. When writing the financial statement, the pension accounting that includes the size of deficit in pension contribution and the fund accounting that includes investment in financial assets, lending businesses, rental house construction projects should be separated. On the subject of DIF Bond Redemption Fund, Delayed sales of holding assets should be properly handled and the validity check on calculation of special contributions should be carried out with a wider coverage.

Since Medium and Long Term Fund Financial Management Plan was first submitted to National Assembly as an attached document in 2010 National Fiscal Management Plan, many aspects have been improved but insufficient management plans regarding revenue, expenditure and liability, imperfect predictions of fiscal balance and fiscal standings and incorrect estimation show that the plan still needs further improvements as follows. Above all, a plausible and responsible management plan of revenue, expenditure and liability management plan should be developed and implemented. For this, a systematic improvement that checks progress of the management plan needs to be made and an evaluation system that monitors if funds' management plans are responsibly carried out needs to be established.

Second, based on a medium term plan of revenue and expenditure, predictions of fiscal balance and liability and management plans should be presented. With correct estimations, the funds' financial standings and risky factors are found to improve funds' fiscal soundness. To make accurate estimations, projections of economic variables that reflect current economic conditions and proper assumptions should be made and each plan should make sure that infrequent incidents are also considered in the assumptions. In projections of fiscal balance and liability, major assumptions and detailed calculations should be included in attempt to enhance accuracy of revenue and expenditure estimation and eventually to provide useful fiscal information in the deliberation process in National Assembly.

Third, tables of fiscal balance and financial statements should be fully detailed with information. The current fiscal account table categorizes revenue into initial revenue, internal revenue of government, loans and collected surplus. The table categorizes, on the other hand, expenditure into project expenditure, fund operation expenditure, internal expenditure of government, principal redemption, interest payment, surplus fund operation. Those items in tables could be more broken down so that deeper details can be shown in tables and the categorization should have a consistent organization feature of funds.

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