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Measures to Cope with Balance Sheet Recession in Korea*

Gongpil Choi

SUMMARY

| ☐ In Korea, growing household debts are threatening to precipitate a balance sheet recession that is hard to address with macroeconomic policies, similar to what transpired in Japan. The household debt—to—GDP ratio climbed to a significantly high level, and the debt structure is vulnerable to both external and internal shocks. Combined with deleveraging efforts around the world, the current situation would be hard to fix with market—led adjustment. | d 1 |
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| ☐ Moreover, 80% of private—sector assets are held in property market, and stimulating consumption through asset liquidation might result in a sharp fall of asset prices, system—wide financial distress and possibly a long—term recession. In case asset prices plummet, it will severely hit asset owners strengthen a negative feedback, and cause a system—wide implosion to worsen asset polarization which could be more damaging than income divide. |),), |
| ☐ With limited means to address the current situation, the best course of action would be implementing various measures to stop further widening of asset—liabilities gap for the middle class and deter a rapid decline in asset values. | |
| ☐ To this end, the government should endeavor to avoid implosion as the Swedish government did through bank—oriented debt restructuring. In particular, private public investment fund (PPIF) scheme needs to be activated to resuscitate credit flows in the real estate market. At the same time fiscal spending should be expanded to some degree to make up for declining demands. |) |

^{*} Opinions expressed are those of the author and do not necessarily reflect the official positions of the Korea Institute of Finance.





The household debt is a worrisome issue in Korea for it allows limited effects of macroeconomic policies amid the world-wide deleveraging efforts, and it is hard to repair balance sheets at a moderate pace.

Concerns over Balance Sheet Recession

There is a rising concern for a balance sheet recession in Korea that precipitates a fall in asset prices amid mounting deleveraging burden. A balance sheet recession can be understood as a part of deleveraging shock whereby a sharp fall in asset prices widens asset—liabilities gap on the balance sheet, and as a result, financial distress leads to economic slump. In this condition, policy paths are blocked and the effectiveness of macroeconomic policies could be seriously undermined. Moreover, the shock of a balance sheet recession is likely to be protracted amid pervasive deleveraging efforts around the world. In a state of over—indebtedness, asset liquidation widens asset—liabilities gap, which in turn, contracts endogenous liquidity: accordingly, both financial industry and market economy are distressed. Further, the private sector is already overburdened with debts, and rounds of quantitative easing cannot be effective. This is an unprecedented condition as the debt problem is pervasive throughout the world, and if the economy falls into liquidity trap, the growing—out strategy through economic growth would not work either.

In Korea, household debts have surfaced as a major threat that can trigger a balance sheet recession. Many overseas cases show that over—borrowing in the private sector resulted in soaring public—sector debts, and managing private—sector debt is clearly an urgent issue. Unfortunately, only limited options are available at this point. Debt restructuring and closing asset—liabilities gap would be extremely hard amid global—wide deleveraging and the strained market condition.

Confounding the issue is the peculiar condition of emerging markets that heavily rely on exports and stable exchange rates. In export—driven economies, exchange rate stability is of paramount concern such that the double whammies of shrinking



external demands and inflation related with commodity price hikes are directly transferred to households. Efforts to protect engines of economic growth expose households to the shock of debt restructuring and a possible deflation afterwards. Meanwhile, portfolio adjustment in advanced economies sends shock waves to emerging markets that have more limited means to adjust portfolio.

Given this, it is essential to prevent deterioration of core assets through policy coordination focused on private—sector debt restructuring. Mitigating the present symptoms would not be enough. Specifically, to make up for liquidity shortage, fiscal spending should be expanded to some degree. This would help manage asset—liabilities gap and avoid collapse of the middle class.

Diagnosis and Remedies

In Korea, household credits, the sum of household loans and credit card purchases, reached a risky level amid the world—wide deleveraging efforts. Between 2005 and 2011, they grew average 9% annually, rising 68% from the end—2005. Their ratio to nominal GDP reached as high as 74% as of 2011, exposing the economy to the risks of both internal and external shocks. The ratio of household credit to disposable income was over 150% in 2010, quite high compared to major OECD economies.¹⁾ This indicates that the calm surface of the current economy might be deceiving, and merely reflects long delayed deleveraging efforts. It is inevitable to re—adjust debt portfolio at some point, and unlike the great moderation in the past, this time, it could directly lead to a precipitous fall in asset price. In tackling this tricky issue, comprehensive and preemptive measures are required to avoid further widening of asset—liabilities gap.²⁾

Despite burden of fullscale deleveraging ahead, it is essential to curb a further widening in asset-liabilities gap to prevent a sharp fall of asset prices and collapse of the middle class.

¹⁾ Among OECD member economies, the household debts—to—disposable income ratio were 146.46% in Canada, 93.62% in France, 85.91% in Italy, 91.07% in Germany, 121.33% in Japan, 157.01% in the UK and 122.49% in the US.



The economy is already in a quagmire, and the policy goals should be clear and practical, and their focus should be on protecting core capacities to ensure economic recovery after the phase of adjustment and restructuring. In other words, the middle—class and low—income workers should be guarded, who would be hit hard in deleveraging, exacerbating asset polarization. To avoid this, the government should promptly intervene in debt restructuring to deter a sharp decline in securities value and widening of asset—liabilities gap.

At this point, a realistic option would be all—out efforts for debt restructuring, liquidation and recovery of the market functions. Opting for deflation might only aggravate the market fluctuation and obstruct moderate adjustment. In formulating policies, the case of debt restructuring in Sweden could provide a useful guideline.

Debt Restructuring in Sweden

Sweden went through a bout of credit expansion in the early 1980s. The housing price index rose from 97.8 in 1985 to 136.2 in 1990, during which time, inflation, household and corporate loans soared as well. Between 1986 and 1989, the household credit—to—disposable income ratio increased from 116.9% to 131.5%. Soon enough, the bubbles burst, and the GDP contracted for three years in a row between 1991 and 1993. Faced with this problem, the Swedish government acted quickly to restore the economy. By 1996, the household credit—to—disposable income ratio fell back to 90%—range, and the income expenditure—to—disposable income ratio fell from 10% in 1990 to 5% in 1997. Over the same period, the share of bailout costs in GDP slid from 6% to 2%—range.

²⁾ Gongpil Choi "Strategies to Use Covered Bonds to Address Current Household Debt Issues", Weekly Financial Review 21-12.



The primary reason behind the successful debt restructuring was that Swedish banks acted promptly for true valuation of assets and debts write—down. The timely intervention of the government also facilitated sales and purchase of assets in the market. Similarly, the US government operated the Private Public Investment Program for Legacy Assets and operated Large—Scale Asset Purchase to engage market players in swift price discovery. Of particular significance was to identify and separate deteriorated assets in the early stage.

In case of debt restructuring in Sweden, the government vouched for banks that wrote off debts, and the representative case is the acquisition of Nordbanken shares. The Swedish government turned two commercial banks into fully state—owned entities, and held close to 25% shares in both cases. Bank assets were divided into good and bad, and the latter was transferred to the Asset Management Funds (AMF) for intensive management. The government's efforts to separate bad assets were most important in keeping credibility of the financial industry. Also, debt restructuring was carried out in as diversified channels and methods as possible. In Sweden, Bank Support Authority was established in 1993 to identify the amount of bad debts and banks' remaining capacity for lending. If it were the case in Korea, such task could have been tackled by the existing public agencies without going through the lengthy process of relevant institution-building. Next, sufficient preparatory work was done in advance so as not to overburden the market. For instance, the AMF was exempted from the regulation that requires disposal of bad assets within three years of their acquisition. Such decision helped to prevent a deluge of assets for sales at times the market condition suddenly turned for the worse. With these measures, the Swedish economy gradually recovered, and the blanket guarantee was repealed in 1996. However, as the government involved deeply in this process, Sweden became a net borrower, and the public debt-to-GDP

The Swedish government actively sought to manage bad assets through quick price discovery, separation of bad assets and diverse debt restructuring efforts.



A precipitous fall in asset prices increases system risks in both the financial sector and the market economy, and yet, effective remedies are hard to find. ratio rose from 42.7% to 72% in three years. Nevertheless, the intervention was about fully supporting debt restructuring, rather than merely supplying liquidity in the market. Bolstered by the aggressive and preemptive moves, Sweden could lay a foothold for the subsequent economic recovery and growth.

This case presents how private—sector debts can be restructured by disposing bad debts in the banking sector. The risky adjustment of balance sheet recession could be skillfully handled by disposing bad assets in the early stage, quickly discover true price of assets, and by separating bad assets from good ones. The central bank and investment funds bought securities backed by bad assets and resold them after a certain period, mitigating the impact of restructuring to repair balance sheets.

Private-sector Debt Restructuring and Future Tasks

To avoid a balance sheet recession, it is important to cut various links that can trigger asset deterioration, while minimizing impact on the market. In this process, the key is to plug the widening asset—liabilities gap without a sharp fall in asset price. This requires an elaborate bypass surgery to separate sound assets from bad assets. Here the private—sector participation should be encouraged to accurately take out bad assets. At the same time, smooth and renewed credit flows to potentially vibrant areas in which asset values can be stabilized need to be strengthened. If the government is willing to buy bad debts, it could mitigate the risk of asset price fall and excessive burden of interest payment on households. By quickly separating assets, a vicious cycle of liquidity crunch, slump in market economy, and a plunge of securities price can be avoided. In Korea, it would be reasonable for banks and KAMCO to work on transfer and securitization of bad debts, and carry out debt monetization to



a certain degree. Also, it should be considered to work on the bad debts over an extended period of time to recover investment through structured securitization. As for the property assets, granting a reasonable repurchase option should be considered, which might enhance ownership protection without a risk of moral hazard. Efforts to identify the haircut and to coordinate repurchase options would help recover the market functions.

In the end, the primary goal of policy measures is to avoid a full-blown crisis of market functions by ensuring the government intervention since the private sector depleted risk management capacities in the face of the system-wide risks. The government should take part in assessing and distributing risks and losses among various market participants. The proposed measures are expected to mitigate the crash of asset prices, stop further widening of asset-liabilities gap, and contribute to a gradual recovery of the market.

Moving Forward

Debt restructuring is a key to addressing the current issues, and yet the proposed measures would have only limited effects because of the risk of moral hazard, controversy over the fairness of the measures, and difficulty in identifying sources of responsibilities and accountability, as well as pessimistic market sentiment. Nevertheless, failing to restructure private-sector debt might precipitate a balance sheet recession. Thus, additional strategies should be put in place. Private-sector players should be encouraged to make joint investment in bad asset, including their transfer and structured securitization. It is imperative to ring-fence bad assets or potentially bad assets to minimize fluctuation in asset prices. Unlike in the past, a balance sheet can be adjusted through securitization in an "originate—and—hold" manner. The government

The government should provide support to overindebted borrowers and financially vulnerable people, while distributing risks to prevent a downfall of core asset

prices.



Financial inclusion should extend to overindebted borrowers to contain spread of asset deterioration, and new types of asset securitization should be sought to facilitate capital flows.

should not leave the market to suffer from liquidity crunches; it should be a market maker.

In restructuring private—sector debts, it is important to curb the asset-liabilities gap, and stabilize value of core securities to protect the financial industry that upholds the economy. To do so, financial inclusion should be extended to over-indebted borrowers to contain spread of asset deterioration. Without doing so, the weakest part of the economy might be damaged most in the adjustment process. Also, job-related loans and asset-building support should be extended to the vulnerable classes of people to stabilize the market. Further, covered bonds should be issued, which is the safest type of ABS to prevent a long-term chill in property market and to revitalize the real estate financing. Early settlement of bad debts is a prerequisite for stable market condition. Next, efforts should be made to absorb FX-related risks and to globalize private-sector asset portfolio, considering that the impact of debt restructuring in advanced economies would affect emerging markets. As part of such endeavor, supply of reserve asset such as index-based covered bonds should be widely promoted. It will be timely to reorganize asset portfolio through issuance of regional index-based bonds with various lengths of maturities.

In this paper, three measures have been proposed to address the current issues: blocking spread of bad debts and loss, securitization of bad debts, and supply of new types of financial instruments. These will facilitate adjustment of balance sheets that currently have high concentrated risks. At the same time, portfolio rebalancing is required to channel funds to job creation and enhancing productivity in the fields of education, medical service and welfare. Resources from debt securitization should be utilized to strengthen the economy and investment in non-trade goods. Meanwhile, financial inclusion, new types of



asset securitization and greater financial accessibility would create a virtuous cycle of capital to facilitate risk management, investment and employment.

If these measures can be implemented in an effective mix in a timely manner, a full—scale balance sheet recession might be dodged. Supplying a wider variety of financial instruments and extending financial inclusion would check a quick spread of bad assets and alleviate burden of adjustment and asset polarization. In consideration of market capacity, private public investment fund (PPIF) should be established to deal with both upward and downward risks and relieve growing pressure on balance sheets. Prompt debt restructuring and debt securitization based on true valuation would be the most promising course of action in the face of a rising possibility of a balance sheet recession.

Focus & Brief

Oct 1-5

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Reducing Withholding Tax on Personal Interest Income to Promote Savings

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☐ Policy Issue in Brief:

Reducing Withholding Tax on Personal Interest Income to Promote Savings

Jongkyu Park, Senior Research Fellow

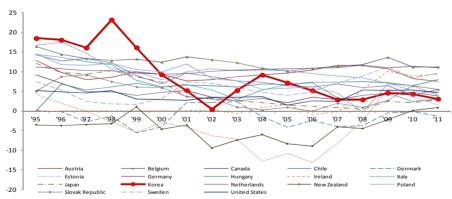
- Summary: In Korea, household savings rate has stayed at an extremely low level for many years, eroding household capacities to absorb economic shock. Considering that the current condition of the global economy makes it hard to raise the rates soon, it should be positively considered to significantly cut withholding tax rate on personal interest income to a single—digit to boost savings.
- The global economy has been through a series of setbacks from the financial crisis in 2008 to the recent fiscal crisis in peripheral EU countries. Fundamental solutions are yet to be found, and it remains unclear when the economy would fully recover.



- The ECB announced a plan to purchase sovereign bonds of troubled EU countries without limit, which would absorb the shock of the debt crisis to some degree. However, it does not address the structural problems of the EU.
- · In midst of the economic chill around the world, growth rate of the export—driven Korean economy fell to 2%—range this year, and the household debts climbed to a risky level. Further, the economy is growing more vulnerable as real estate prices decline in metropolitan area.
- In Korea, household savings rate fell sharply, making the economy vulnerable.
 - · According to the BOK, the net savings rate of Korean households was 2.7% in 2011, staying at an extremely low level of below 5% for six years in a row.
 - · By the 2000s, the savings rate of Korean households plunged from the world's highest to lowest level. <See Graph>
 - · Low savings rate indicates limited capacity of Korean households to absorb economic shock.

<Graph> Savings Rates of OECD Economies

(Unit: %)



Source: OECD Economic Outlook

- The savings rate slided mainly due to low interest rates since 2001.
 - The BOK has been reluctant in raising interest rates, which built up bubbles in property market and household loans.
 - · Further, low interest rates reduced households' savings,



eroding the macroeconomic fundamentals.

- Although the interest rates should be reverted to a normal level to improve economic fundamentals, uncertainties in the global economy and the gloomy outlook on Korean economy makes it hard to do so.
 - · The government submitted proposals for tax reforms to the National Assembly, which included measures to boost savings such as tax-exempt asset-building savings products, income deduction for long-term funds, and income deduction for single parents.
 - · However, empirical analysis shows that limited tax benefits are likely to change portfolio of savings products, rather than raising the savings rate.
- Under these circumstances, lowering withholding tax rate on personal interest income from 14% to a single-digit could be considered to increase after-tax income and boost savings.
 - · Analysis of data since 1996 shows that the interest rate has a positive correlation with households' net savings rate at a significance level of 8%.
 - · Lowering withholding tax for interest income might draw criticism for favoring wealthy people with substantial amount of savings. However, if the base amount for consolidated taxation on financial income could be lowered significantly, it might be able to limit benefits to wealthy people, while promoting savings.

<Table> Withholding Tax Rates on Interest Income

(Unit: %)

| | Individuals (Residents) | | | Tax Benefits | | | |
|-----------------------|---------------------------|------------------|-------|---------------------------|---|-------|------------------|
| Date | Interest Income Tax | Residen t Tax | Total | Interest Income Tax | Special Tax for Rural Development | Total | Corporate Tax |
| 1991.01.01~1994.06.30 | 20 | 1.5 | 21.5 | 5 | - | 5.0 | 20 |
| 1994.07.01~1995.12.31 | | | | 5 | 1.5 | 6.5 | 20 |
| 1996.01.01~1997.12.31 | 1.5 | 1.5 | 16.5 | 10 | 0.5 | 10.5 | 20 |
| 1998.01.01~1998.09.30 | 20 | 2.0 | 22.0 | 10 | 1.0 | 11.0 | 20 |
| 1998.10.01~1999.12.31 | 22 | 2.2 | 24.2 | 10 | 1.2 | 11.2 | 22 |
| 2000.01.01~2000.12.31 | 20 | 2.0 | 22.0 | 10 | 1.0 | 11.0 | 20 |



| 2001.01.01~2001.06.30 | 15 | 1.5 | 16.5 | 10 | 0.5 | 10.5 | 20 |
|-----------------------|----|-----|------|----|-----|------|----|
| 2001.07.01~2004.12.31 | 15 | 1.5 | 16.5 | 10 | 0.5 | 10.5 | 15 |
| 2005.01.01~ | 14 | 1.4 | 15.4 | - | - | - | - |

Source: National Assembly Budget Office

□ Policy & Industry News Briefs: Oct 1-5

■ Korean Banks' Lending Rates Fall to Record Low in August

In August, Korean banks' lending rates for new loans dipped to a historical low level of 5.22%, down 0.23%p in a month, said BOK. The average rates for banks' loans to households and corporations recorded 4.90% and 5.36% respectively, down 0.30%p and 0.17%p from the previous month. Meanwhile, the average interest rate for bank deposits fell 0.24%p to the record low of 3.19%. The lenders' loan—deposit spread climbed 0.01%p to 2.03% over the same period, but the rise was far smaller compared to 0.07%p in July. Mutual savings banks and credit cooperatives applied lending rates of 15.55% and 7.06% for new loans, up 0.12%p and 0.03%p respectively from the previous month.

■ Korea's Central Bank Introduces a New Risk Assessment Model

The BOK said it has developed a risk assessment model, SAMP (Systemic Risks Assessment Model for Macroprudential Measures), to analyze the financial stability condition comprehensively. The SAMP not only evaluates primary impacts of macroeconomic shocks on the financial system, but also identifies and analyzes secondary impacts, that is, how the risks magnify and spread through channels such as contagion, credit crunch and deleveraging. The SAMP will operate based on six modules: probability distribution of risk factors, profits and losses in the banking sector, contagion risks from bankruptcy, contagion risks from liquidity shortfall, losses over multiple periods, and systemic risks indicators. The BOK will use the SAMP to facilitate implementation of macroprudential measures through systemic risks



monitoring, macroeconomic stress test, simulation of macroprudential measures, analysis of domestic SIFIs, and inspection of individual banks' vulnerabilities. The BOK will make continued efforts to improve the model for higher accuracy and broader application, share the information with other central banks and international organizations, and organize conferences to test the model and reflect expert opinions.

■ Strengthening Banks' Internal Control to Deter Financial Incidents

The FSS announced a plan to strengthen banks' internal control to deter financial incidents. They include measures to improve banks' internal supervision, reestablish the role of auditors and compliance officers, stricter sanctions on the neglect of internal control, as well as measures to improve business practice and strengthen consumer protection. Banks will be asked to ensure internal monitoring for effective surveillance, and strengthen regulation on loans made against savings and installment deposits. More stringent rules will apply to revising loan documents, and customer information will be protected more securely. The FSS will request banks to submit measures to this effect by the end-October, and inspect the progress in December.



☐ Market Indicators: Oct 1-5

| | | 2011 Avg. | Sept Avg. | Oct 1 | Oct 2 | Oct 3 | Oct 4 | Oct 5 |
|-------------------------|---|-----------|-----------|-------|----------|-------|----------|----------|
| Interest | Call Rate (1d) | 3.10 | 3.01 | - | 2.99 | _ | 3.01 | - |
| | CD Rate (100 mil. won) | 3.44 | 3.14 | _ | 3.09 | _ | 3.09 | 3.09 |
| | Industrial Finance Bond | 3.66 | 2.91 | _ | 2.88 | _ | 2.87 | 2.88 |
| Rates (%) | Corporate Bonds (3yr, unsecured·AA-) | 4.41 | 3.03 | _ | 3.27 | _ | 3.26 | 3.27 |
| | Korean Treasurys (3yr) | 3.62 | 2.81 | _ | 2.76 | _ | 2.74 | 2.75 |
| | Nat'l. Housing Bonds (5yr) | 4.10 | 3.31 | _ | 2.99 | _ | 2.98 | 2.99 |
| KOSPI | KOSPI (1 Jan 1980 = 100) | 1,983.41 | 1,961.29 | _ | 1,996.03 | _ | 1,992.68 | 1,995.17 |
| & | Trading Value | 68,308 | 52,169 | _ | 36,789 | _ | 49,511 | 43,996 |
| Trade Value (KRW 100 | Investment Balance | 174,122 | 183,723 | _ | 195,769 | _ | 193,687 | _ |
| mil.) | Foreigner Net Purchases | -371 | 1,638 | _ | 479 | _ | - 626 | - 416 |
| FX Rates | Won/Dollar | 1,107.96 | 1,123.62 | - | 1,112.50 | - | 1,113.80 | 1,111.30 |
| | Won/Yen | 1,391.92 | 1,438.11 | _ | 1,417.38 | _ | 1,418.85 | 1,415.67 |
| | Won/Euro | 1,541.48 | 1,446.42 | _ | 1,435.68 | _ | 1,449.94 | 1,446.69 |

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