



# REPUBLIC OF KOREA

## 2013 ARTICLE IV CONSULTATION—STAFF REPORT, PRESS RELEASE AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE REPUBLIC OF KOREA

April 2014

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2013 Article IV consultation with the Republic of Korea, the following documents have been released and are included in this package:

- **Staff Report** prepared by a staff team of the IMF, for the Executive Board's consideration on January 10, 2014, following discussions that ended on November 1, 2013, with the officials of the Republic of Korea on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on December 13, 2013.
- **Informational Annex** prepared by the IMF.
- **Staff Supplement** of January 6, 2014, updating information on recent developments.
- **Press Release** summarizing the views of the Executive Board as expressed during its January 10, 2014 consideration of the staff report that concluded the Article IV consultation with Republic of Korea.
- **Statement by the Executive Director** for the Republic of Korea.

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# REPUBLIC OF KOREA

## STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION

December 13, 2013

### KEY ISSUES

**Overview.** Korea has experienced impressive growth since the 1970s, enabling it to escape the middle-income trap. However, this prosperity has been concentrated lately within the highly competitive export-oriented conglomerates, whereas household income growth and service sector productivity have been sluggish. Moreover the population is aging rapidly. To sustain income convergence with the most advanced countries and enhance stability and inclusiveness, Korea needs ambitious reforms to its fiscal framework (including to create space for higher social spending), labor market, and services sector. Such reforms would be mutually reinforcing.

**Near-term Outlook and Risks.** The economy is recovering gradually, helped by supportive monetary and fiscal policies and strong exports, and it emerged as a “safer” haven in last summer’s market turmoil. Growth should strengthen further in 2014, although risks are on the downside. The main near-term risks are external: sharply slower growth in Korea’s main trading partners or severe market stress. Given significant private debt overhang, key domestic risks are weak domestic demand and, over time, lower potential growth if structural reforms fail to offset the drag from rapid aging.

**Policy Recommendations.** Policies should aim to tackle the weakness of domestic demand and counter forthcoming headwinds to potential growth.

- **Fiscal Policy.** Keep supporting demand in 2014, which may require a supplementary budget. Increase countercyclicality through higher automatic stabilizers and a structural balance fiscal rule. Create fiscal space to boost household incomes and the growth potential by allowing a temporary structural decline in government savings and broadening the narrow tax base.
- **Structural Policies.** Continue to focus on labor market reforms to enhance participation and reduce duality and, as the social safety net expands, accelerate services sector deregulation and SME consolidation.
- **Monetary Policy.** The current accommodative stance is appropriate given the lack of inflation or financial stability concerns. Normalization should not start until there is confidence that the output gap will close soon.
- **Exchange Rate Policy.** The exchange rate should continue to be market-determined and intervention limited to smoothing disorderly market conditions. FX reserves are ample and there is no need for further accumulation.
- **Financial Sector.** As the FSAP found no imminent stability risks, focus on closely monitoring vulnerabilities such as household and corporate debt to further enhance resilience; and supporting growth, including by reducing government intervention.

Approved By  
**Jerry Schiff and  
 Vivek Arora**

Discussions took place in Seoul during October 21–November 1, 2013. The staff comprised I. Mateos y Lago (head), S. Jain-Chandra, J. Ree, A. Serechetapongse (all APD), A. Kangur (FAD) S. Iorgova (MCM), and D. Furceri (RES). Mr. Yoon (OED) participated in the key policy meetings. Mr. Shabsigh, FSAP mission chief, joined the concluding meetings. Outreach included a press conference (Article IV and FSAP), joint BOK-IMF seminar, meetings with members of the National Assembly and financial analysts (in Hong Kong S.A.R.).

## CONTENTS

<b>INTRODUCTION</b>	<b>4</b>
<b>THE MACROECONOMIC AND FINANCIAL CONTEXT</b>	<b>4</b>
A. Current Situation	4
B. Outlook and Risks	8
C. Near-Term Policies	9
<b>TACKLING THE WEAKNESS OF DOMESTIC DEMAND</b>	<b>10</b>
A. Background	12
B. Staff Views	13
C. Authorities' Views	14
<b>ARRESTING THE DECLINE OF GROWTH POTENTIAL</b>	<b>14</b>
A. Background	14
B. Staff Views	15
C. Authorities' Views	16
<b>A MORE GROWTH-FRIENDLY FISCAL FRAMEWORK</b>	<b>17</b>
A. Background	17
B. Staff Views	18
C. Authorities' Views	22
<b>TOWARDS A MORE GROWTH-ENHANCING AND STABLE FINANCIAL SYSTEM</b>	<b>23</b>
A. Background	23
B. Staff Views	24
C. Authorities' Views	26
<b>STAFF APPRAISAL</b>	<b>27</b>

**BOXES**

1. Is Korea A Safer-Haven? _____	5
2. Exchange Rate Intervention _____	11
3. Towards a Rules-Based Fiscal Framework _____	20
4. Tax Policy Priorities in Korea _____	21
5. Corporate Sector Risks _____	25

**FIGURES**

1. Korea's Medium-Term Economic Policy Challenges and Remedies _____	6
2. The Real Economy _____	30
3. Credit and the Banking Sector _____	31
4. Financial Markets _____	32

**TABLES**

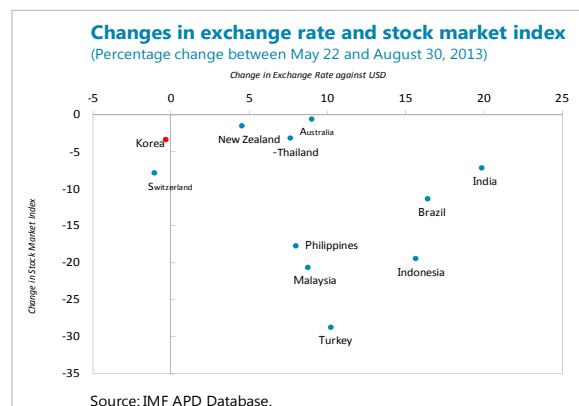
1. Selected Economic Indicators, 2009-15 _____	33
2. Balance of Payments, 2009-15 _____	34
3.a. Statement of Central Government Operations, 2009-15 _____	35
3.b. Integrated Balance Sheet- Consolidated General Government, 2009-12 _____	36
4. Medium-Term Projections, 2012-18 _____	37
5. Financial Soundness Indicators, 2009-13 _____	38
6. Indicators of Financial and External Vulnerability, 2008-13 _____	39
7. International Investment Position, 2009-12 _____	40

**APPENDIXES**

I. Risk Assessment Matrix _____	41
II. Main Recommendations from the 2012 Article IV Consultation and Follow Up _____	42
III. Public Sector Sustainability Analysis (DSA) _____	43

## INTRODUCTION

1. **Korea is reaping the benefits of prudent macroeconomic management and financial moderation.** It was affected relatively mildly by the recent global market turmoil, being even dubbed a safe haven: after some short-lived turmoil, bond yields rose only modestly and the exchange rate appreciated (Box 1). This reflected both strong macroeconomic fundamentals and an absence of strong financial tailwinds prior to the turmoil phase, partly due to active macroprudential regulation.



2. **However, the economy faces significant medium-term growth and inclusiveness challenges.** Slow household income growth hinders stabilization in household debt and weighs on domestic demand, while services sector productivity is very low. These features hamper rebalancing of the economy towards more inclusive and domestically-driven growth, less sensitive to the vagaries of global demand. Separately, absent reforms, rapid population aging will be a drag on growth potential that could stall income convergence with the most advanced economies.

3. **To address these challenges, ambitious reforms are needed, as elaborated in the remainder of this report.** After discussing the near term macroeconomic context and policies, the report discusses policies to lift domestic demand—by shifting resources away from the prosperous export-oriented corporate sector to households—and to boost potential growth. It then examines in greater depth how to make the fiscal framework and financial sector policies more growth-friendly. As shown in Figure 1, the policies under each heading are mutually reinforcing. Exchange rate appreciation would further help the necessary rebalancing.

## THE MACROECONOMIC AND FINANCIAL CONTEXT

### A. Current Situation

4. **After moderating sharply in 2012, GDP growth appears to have bottomed.** Facing strong headwinds from the global economy, GDP growth slowed to 2 percent in 2012. Export growth stalled to a mere 0.4 percent, while fixed investment, strongly related to exports, contracted by 1.7 percent. Held back by high household debt, private consumption growth remained tepid. However, activity has bottomed and the economy expanded by 1.1 percent in Q2 and Q3 2013, with exports rebounding strongly and private consumption and construction strengthening, due in part to low base, but also to a pickup in wage growth and policies to reinvigorate the housing market.

5. **Inflation has been subdued, due to the absence of demand pressures and moderating commodity prices.** Inflation fell from 4.2 percent in 2011 to 1.4 percent in 2012 (end of period), well below the target band of 2½–3½ percent, as the economy weakened and food prices fell. In addition, government subsidies for child care and education costs reduced inflation by around 0.4 percentage point. As a result, headline inflation remained in the 1–1½ percent range during the first half of 2013, falling to 0.7 percent in October, while core inflation was muted, though stable, at around 1½ percent during 2013.

### Box 1. Is Korea A Safer-Haven?<sup>1</sup>

To assess prospects for the continuation of Korea's newly-acquired safe haven status, staff estimated a model of capital flows in the presence of unconventional monetary policy (UMP), and including both push and pull factors.<sup>1</sup>

#### Key findings:

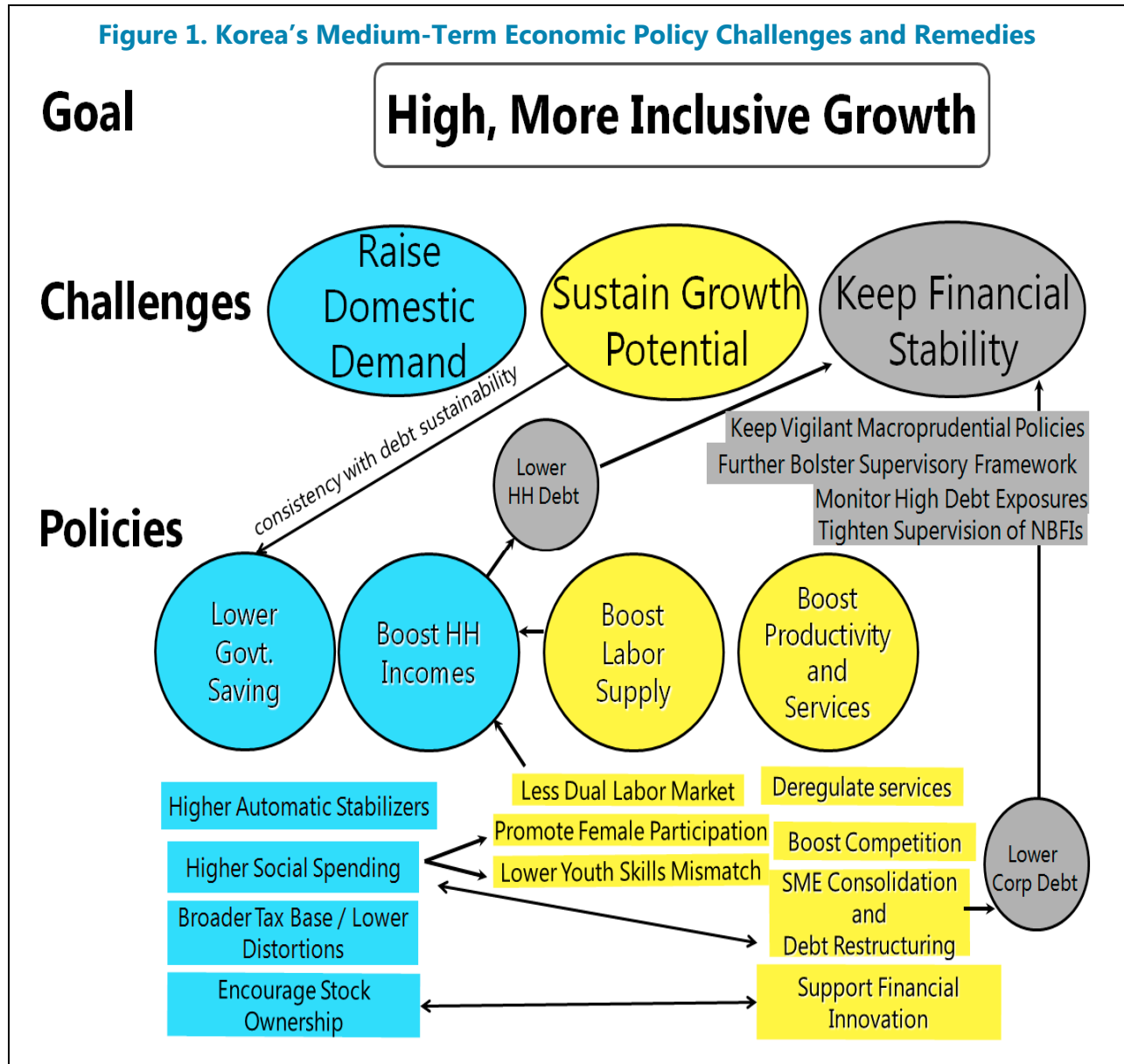
- *QE operations or announcements were found to have had generally little or no direct influence on capital flows to Korea. The only significant exception was cross-border banking capital flows.*
- While the indirect effects of QE, through financial prices, seem to be significant, impulse responses indicate the existence of an important nonlinear behavior. In particular, bond inflows demonstrate a "safe-haven" behavior (i.e., flows increase with higher VIX), until the risk aversion has reached certain threshold levels. The threshold, which is time-varying, and is now about 40 (about one standard deviation above the median of VIX during the sample period). Bond flows start to decrease with higher VIX, when VIX rises beyond this threshold.
- Overall, the indirect effects point to a largely positive impact of QE on capital flows through the alleviation of risk aversion (captured by VIX) and global dollar liquidity stress (represented by the LIBOR-OIS spread).

#### Implication:

- A growth-driven smooth QE exit, which leaves long-term U.S. rates anchored and does not hurt U.S. investor confidence, is unlikely to cause capital outflows from Korea, and could even cause inflows to Korean equity and bank debt through positive signaling effects associated with an orderly steepening of the yield curve.
- However, a disorderly QE exit, that pushes up the VIX and/or the LIBOR- OIS spread would likely cause capital outflows. The negative effects would likely be exacerbated, particularly for bond flows, if the unwinding of bond positions causes dislocation of the onshore dollar funding market. For equities, the impact would be unambiguously negative. But for bonds, the impact of a spike in the VIX could be positive so long as it stays within about one standard deviation from the historical median.

<sup>1</sup> The model is estimated as  $y_t^h = a^h + b_1^h x_t^h + b_2^h z_t^h + b_3^h UMP_t + u_t^h$ , for  $t=1, \dots, T$  ( $y_t^h$ : capital flows of type  $h$ , from an array comprising portfolio bond, portfolio equity, and bank flows,  $x_t^h$ :  $m \times 1$  vector of push factors,  $z_t^h$ :  $n \times 1$  vector of pull factors,  $UMP_t$ :  $n \times 1$  vector of UMP proxy variables). The regression uses weekly data (from January 2008 to June 2013) compiled by the Korea Exchange as the dependent variable for portfolio (equity and bonds) flows. For banking flows, monthly balance of payment data are used. For proxies of UMP, the regression uses the weekly change in the balance sheet of the U.S. Federal Reserve of the amount outstanding of unconventional operational measures. An event dummy variable is also included to capture the impact of QE announcements. For QQME, the BOJ's monthly balance sheet data are used. A standard set of independent variables, mainly financial market indicators, are used as control variables.

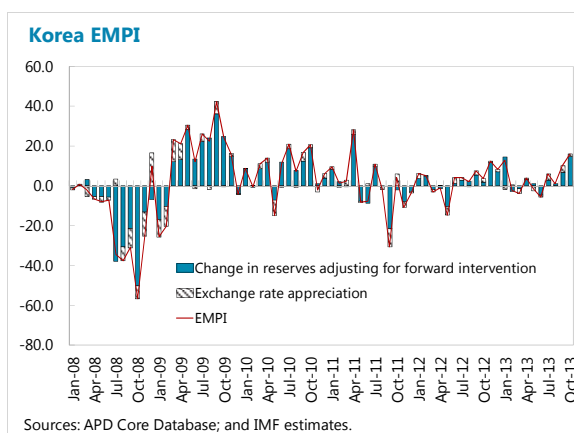
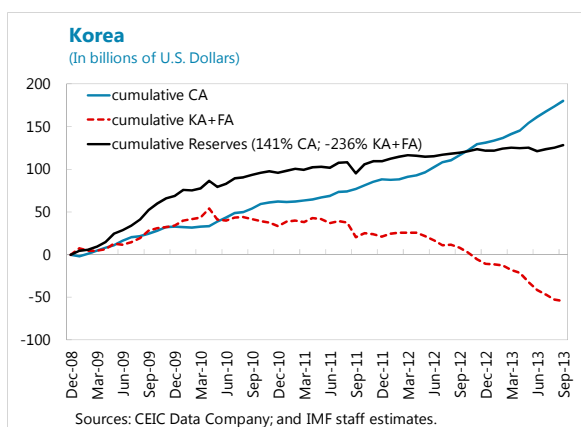
Figure 1. Korea’s Medium-Term Economic Policy Challenges and Remedies



6. **Korea’s high interconnectedness exposes it to external shocks.** Korea’s trade openness is about twice as high as the OECD average (54 percent of GDP), with main exposures to China, the U.S., the E.U. and Japan and significant value chain links with these and other Asian countries. Financial ties are primarily with the U.S. and U.K. For instance, foreign bank claims on Korea are large and are mostly held by U.K. and U.S. banks, while exposure to euro area banks is relatively limited. Foreign holdings of portfolio capital amount to 40 percent of GDP.



7. **The current account surplus has widened to a record high, while capital flows remain moderate.** Despite fears related to the depreciation of the yen against the won, exports have rebounded in October by 7 percent, after growing 2–2½ percent for most of 2013, reflecting the strong competitiveness of Korea’s world-class electronics, at the same time as much weaker imports. As a result, the current account (CA) surplus is projected to widen to around 5½ percent of GDP in 2013. In the first half of 2013, steady bond inflows were offset by equity outflows. However, the U.S. Federal Reserve’s decision in August to delay QE tapering prompted a sustained pickup in equity inflows. Meanwhile, banks have been repaying external loans and Korean corporates continued to invest overseas, resulting in overall negative net capital flows—not large enough, however, to offset the current account surplus. Thus, the exchange rate has been under upward pressure.



8. **The external sector position is substantially stronger than implied by medium-term fundamentals and desirable policies and external imbalances have widened.** The 2013 External Sector Report (ESR) assessed Korea’s 2012 CA balance to be 1–4 percent of GDP above the level implied by fundamentals and desirable policies (“norm”). Refinements in the staff estimate of the norm (in particular updated estimate of the social spending norm) and actual developments have contributed to an updated EBA estimate of a CA gap of around 4 percent reflecting in part fiscal policies in the rest of the world<sup>1</sup>. Given that Korea’s terms of trade changes may not be fully captured in the exercise, staff assesses that the CA is now around 3–4 percent above the norm. An updated EBA estimate for Korea finds that the REER is 8 percent below equilibrium, relative to 11 percent in the June 2013 EBA. While the exchange rate has appreciated recently, updates to the social spending norm have led to a higher norm, indicating continued undervaluation. Staff therefore continues to assess that the exchange rate remains moderately undervalued in the range of 2–8 percent, with the upper end of the range seeming more plausible in light of the recent widening of the current account surplus.<sup>2</sup> Also the lower end of the range is derived as the deviation from historical average, which is not necessarily a valid equilibrium benchmark. Reserves rose to US\$343 billion in October 2013 (US\$ 16 billion above end-2012), broadly unchanged at 130 percent of the IMF’s adequacy metric. The BOK’s forward position has risen by US\$ 7 billion since end-2012, which may have further mitigated appreciation pressures (see Box 1). Korea’s international investment position is modest at around -9 percent of GDP, and has been improving in line with CA surpluses.

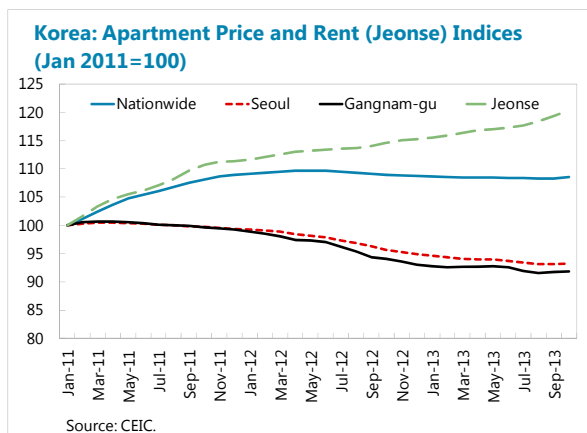
<sup>1</sup> The External Sustainability Approach of the EBA points to a CA gap of 2½ percent, but is given less weight due to uncertainty involved in defining the benchmark NFA level.

<sup>2</sup> The exchange rate assessment provided in this report refers to developments in the REER up to December 2013.



9. **As noted in the Financial System Stability Assessment, Korea's financial system is sound though household and corporate debt levels are high.** Domestic banks are well capitalized, with an average capital adequacy ratio of 14.3 percent during Q3 2013, and have markedly enhanced their foreign currency liquidity positions since the global financial crisis. Depository institutions' lending growth to the household sector has continued to decline, increasing by 3.2 percent annually as of end-June 2013, down from a double-digit peak prior to the crisis. However, lending by non-depository institutions continues to be brisk, up 13 percent annually over the same period. Overall, household and corporate debt levels (based on OECD data, which includes private and state-owned enterprises) reached 76 percent and 164 percent of GDP as of end-2012, respectively.

10. **Housing prices in Seoul continue to decline, but have leveled off in the rest of Korea.** These developments reflect a large inventory of unsold homes and limited expectations of price appreciation. The authorities introduced various temporary measures—including tax breaks—to revive housing transactions, but volumes have remained low after a spike in mid-2013, when these measures expired.



## B. Outlook and Risks

### Staff Views

11. **The economy appears set for a modest recovery while inflation is expected to remain muted.** Real GDP growth is projected to reach 2.8 percent in 2013 and strengthen further to 3.7 percent in 2014. In 2014, domestic demand is expected to strengthen as consumption and investment recover supported by higher wages and stronger exports respectively, as well as a bounce back from the low base. In line with the authorities, staff expects a negative output gap to persist in 2014, with inflation returning to the target band only in late 2014, assuming that the one-off effect of government subsidies on inflation disappears.

12. **Risks to the near-term outlook are to the downside.** The main risks to the short-term outlook are external given Korea's openness to global trade and finance. The key ones include a disorderly exit from quantitative easing in the U.S., re-emergence of financial stress in the euro area, and deeper-than-expected slowdown in emerging markets, especially China (see Appendix 1). While Korea is unlikely to be much affected by mild turmoil from U.S. monetary policy normalization, more severe turmoil would have considerable knock-on effects.<sup>3</sup> The main near-term domestic risk is protracted sluggish demand reflecting notably high household and corporate debt and uncertainty

<sup>3</sup> In the immediate aftermath of the May 22 QE tapering announcement, Korea faced small outflows from the equity market, after which inflows resumed and the country was treated as a "safer" haven.

about the outlook and policies<sup>4</sup>, which will weigh on both consumption and investment. In the longer run, weak household income growth, deleveraging needs, and conservative fiscal plans mean that demand is likely to remain highly dependent on net exports. On the supply side, the structural reforms implemented may be insufficient to stem the further fall in growth potential implied by rapid population aging.

### **Authorities' Views**

13. **The authorities' broadly concurred with staff on the near-term outlook and risks.** They expect that growth will rise back to potential in 2014 (3.9 percent) as a result of the more favorable world economic outlook, lagged effect of the stimulative policies of 2013, and reduced uncertainty as the government enters the second year of its term. They viewed possible disruptive QE tapering as the key external risk. While they agreed that Korea has become more resilient to external shocks, they noted that its "safer haven" status still has to be tested.

## **C. Near-Term Policies**

### **Staff Views**

14. **A supplementary budget rendered the 2013 fiscal stance slightly expansionary and the 2014 budget proposal, if approved, would be less expansionary than the 2013 budget.** The supplementary budget of 1¼ percent of GDP was adopted in May to authorize borrowing to make up for a large revenue shortfall and finance a spending increase of around ½ percent of GDP. The government also postponed to 2017 the deadline for broadly restoring balance. The proposed 2014 budget keeps the overall deficit unchanged from the 2013 supplementary budget (at 1.8 in percent of GDP). However, revenues have slipped further, likely leading to a larger-than-budgeted deficit (2.1 percent of GDP) in 2013. Thus, without a supplementary budget, the 2014 budget would entail a slight withdrawal of fiscal impulse, and automatic spending cuts on top if there are further revenue short falls. This could unhelpfully dampen the recovery.

15. **The current accommodative monetary policy stance is appropriate and provides significant space for countercyclical use in both directions.** The Bank of Korea cut its policy rate to 2.5 percent in May 2013, amid the uncertain global outlook, the continued negative output gap, and subdued inflation. However, looking ahead, growth is expected to strengthen over the next 6 quarters, and the previous loosening still has to fully work through the economy, suggesting little need for further cuts. This will also avoid fueling further household indebtedness. With inflationary pressures muted, monetary policy normalization should start only when the recovery is firmly established and there is confidence that the output gap will close soon.

16. **Exchange rate policy has entailed active intervention at times, in both directions, but asymmetrically.** Staff analysis, based on estimates of the rise in reserves unexplained by interest income and spikes in the FX forward positions around periods of appreciation, suggests that intervention has tended to be more active in the face of appreciation (Box 2). The won should continue to be market determined, and intervention (either in spot or forward markets) limited to smoothing excessive volatility in the event of disorderly market conditions and not to influence the pace of appreciation toward the equilibrium level. Reserves are adequate and there is no need for

<sup>4</sup> Policy uncertainty comes primarily from the fact that many of the government's broad reform directions have yet to be translated into concrete laws or regulations. This reflects in part polarization-induced paralysis in the National Assembly.

further accumulation relative to the range of metrics. Any additional accumulation should be carried out by the BOK rather than by increasing government borrowing. Over the medium term, greater exchange rate appreciation would encourage reallocation of resources to the non-tradables sector, thereby further supporting rebalancing.

17. **Korea has strong buffers and should use its ample policy space to deal with large shocks.** In the event of a sharp external downside scenario, it can deploy supportive monetary and fiscal policies. In addition, in case of sharp capital outflows, it can use its large foreign exchange reserves buffer, allow exchange rate depreciation—the authorities appropriately used both responses in the aftermath of May 22 and could do the same as needed—and deploy crisis response tools used in 2008 such as the BOK’s foreign exchange swap with domestic banks, and even government guarantee on banks’ short-term external debt. If the domestic risk of the vicious cycle between weak domestic demand, tepid household income and high household indebtedness materializes and leads to sub-potential growth, the authorities could deploy supportive fiscal policy, as well as monetary loosening, and accelerate structural reforms.

### **Authorities’ Views**

18. **The main near-term policy challenge, in the authorities’ view, is to support the recovery while moving to a medium-term fiscal consolidation path.** On the one hand, they aim to continue supporting the recovery in the near term, including by proposing the same deficit in the 2014 budget as in 2013 budget. On the other hand, the government intends to resume fiscal consolidation over the medium term, citing the need for fiscal prudence and their expectation that private demand will revive next year, allowing for gradual withdrawal of fiscal impulse.

19. **The authorities viewed the current monetary policy stance as accommodative, and argued that the won is in line with fundamentals.** Given the level of the policy rate, they viewed the room to cut more limited than in large open or closed economies, given Korea’s exposure to capital flows volatility. They did not view high household debt as a significant constraint on monetary policy for now, in either direction. They disagreed with staff’s assessment that the won is moderately undervalued, noting its appreciation since 2012. They stressed that smoothing operations are restricted to alleviating excessive exchange rate volatility in the face of market herding.

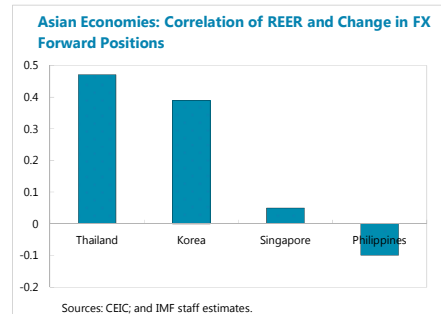
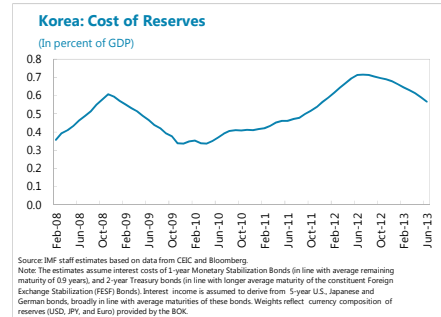
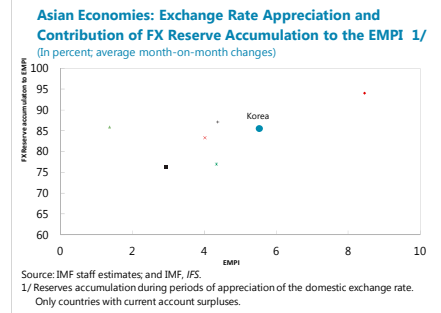
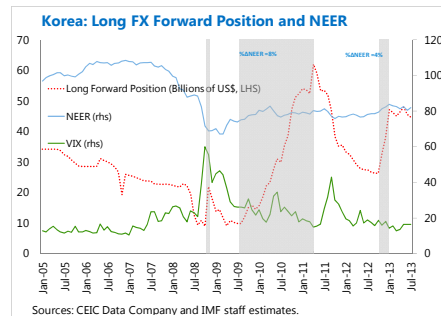
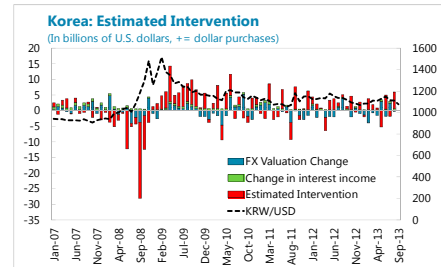
## **TACKLING THE WEAKNESS OF DOMESTIC DEMAND**

*For a sustained and inclusive recovery, policies need to break the nexus among weak household income generation, suppressed domestic demand, and high indebtedness. This entails redirecting savings from the corporate sector and government to boost households’ incomes, as well as labor market reforms.*

### Box 2. Exchange Rate Intervention<sup>1</sup>

The marked rise in FX reserves since the onset of the crisis, and spikes in the BOK FX forward position and FX market flows are indicative of asymmetric intervention to slow the pace of appreciation.

- While subject to uncertainty, estimates of the degree of intervention—approximated by the change in FX reserves not attributable to FX valuation changes or interest income gains/losses—suggest considerable intervention activity. Most frequently, interventions appear to involve dollar purchases.
- Periods of appreciation appear to have been accompanied by spikes in the BOK FX forward position. Most recently, between October 2012 and May 2013, the forward position shot up by 82 percent at a time of appreciation. The forward position also increased fivefold between July 2009 and May 2011 at a time of won appreciation. It is unclear that such increases are linked to financial market pressures. Apart from November 2008, when the authorities used the forwards to inject FX liquidity, increases in forward positions did not occur in periods of rising VIX or deeply negative basis swap spreads.
- Discussions with multiple international banks and hedge funds also suggest that the authorities intervene asymmetrically to curb appreciation pressures, effectively “leaning against the wind”. Recent statements by the authorities also point to the use of this approach.
- FX interventions are not idiosyncratic to Korea. Across Asia, appreciation pressures have gone hand in hand with the accumulation of FX reserves. On average, most (76 to 94 percent) of the monthly rise in the exchange market pressure index (EMPI) is related to FX reserves accumulation. However, the correlation of the REER of the Korean won with the FX forward position is relatively high compared to other Asian countries.
- High FX reserve accumulation entails costs related to the negative differential between the interest received on reserves and that paid on instruments issued to finance or sterilize the reserves. A potentially far larger cost relates to forgone spending in the domestic economy and possible FX valuation losses due to the policy of “leaning against the wind.” The current gross costs from the interest differential alone are estimated to amount to 0.6 percent of GDP a year (KRW7.3 trillion), or about 2 times the envisaged FY14 budget support for childcare.<sup>2,3</sup>
- Under its medium-term debt management plan, the MOSF plans to issue up to KRW16 trillion a year in bonds for its Foreign Exchange Stabilization Fund (FESF) over 2014-17, of which about half is to meet interest payments on existing FESF bonds (about a half of total reserves).



<sup>1</sup> Prepared by Silvia Iorgova, Sonali Jain-Chandra and Anuk Serechetapongse.  
<sup>2</sup> The estimates assume interest costs of 1-year Monetary Sterilization Bonds and 2-year Treasury bonds. Interest income is based on 5-year U.S., Japanese and German bonds.  
<sup>3</sup> See the government’s budget proposal sent to National Assembly on October 1, 2013 (“Explanatory Annex on Program Level Expenditure and Revenue Budget”; Book IV page 148). The childcare budget includes both benefits to families and supports for socially provided childcare services.

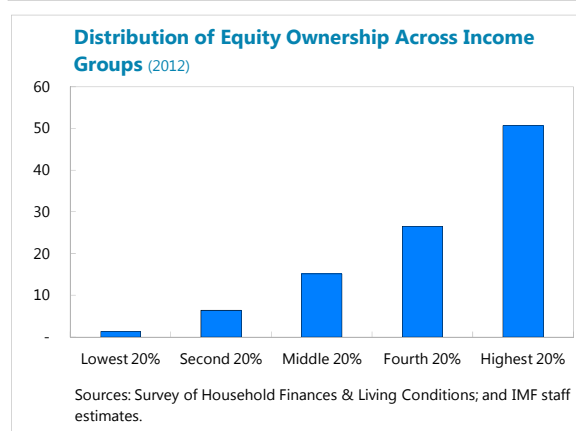
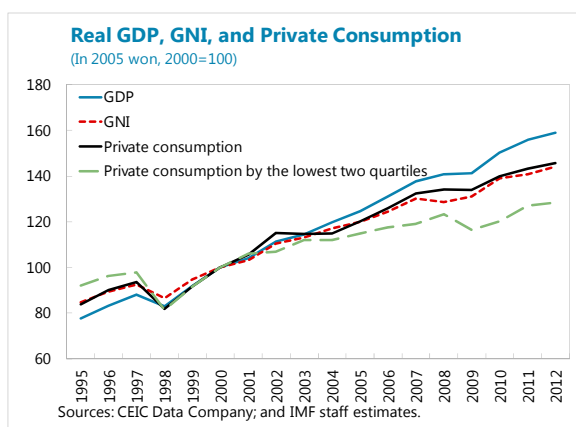
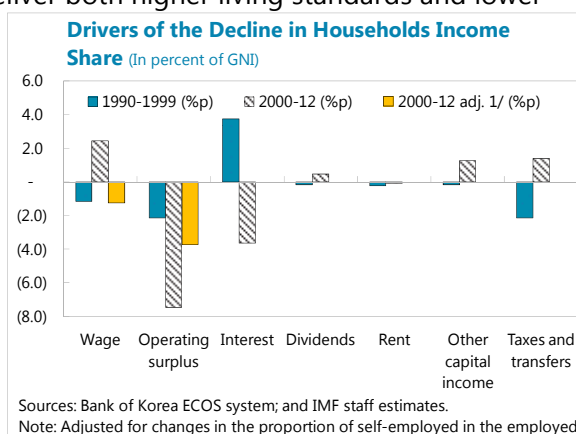
## A. Background

20. **Sluggish domestic demand has rendered Korea highly dependent on, and susceptible to, fluctuations in global demand.** Since 2005, domestic demand, like household disposable income, has grown by about 1 percentage point less than real GDP on average, primarily due to weak private consumption growth. As a result, the economy is heavily reliant on external demand, which explains about 60 percent of the quarterly variation in growth since 2003. Rebalancing the engine of growth toward domestic demand would deliver both higher living standards and lower sensitivity to global cycles.

21. **This sluggishness has multiple causes:**

- i. *Falling share of disposable income.* Households' share of gross disposable income (GDI) fell by 5.5 percentage points during 2000–12. This is driven primarily by the weak financial condition of the self-employed, but salaried workers' share of GDI has fallen too. Meanwhile, the share of corporates' disposable income increased by 4.5 percentage points; however investment has been broadly stable as a share of GDP, cyclical fluctuations aside.
- ii. *Worsening terms of trade.* Driven mainly by the secular rise of global oil prices, Korea's net barter terms of trade index has fallen by about 56 percent since 1995. As a result, GDI grew by about 1 percentage point less than real GDP on average since 2000.
- iii. *Stagnant household real wealth.* The recent moderation of real estate prices hurt households' net worth, given that real estate accounts for 75 percent of household wealth. Despite overall buoyancy of the financial market since 2000, the benefit has not spread widely, given the skewed distribution of financial assets across households.

22. **Households have responded to their muted disposable income growth by reducing savings and compressing consumption.** Private consumption growth has averaged 3.7 percent on average since 2000, about ½ percentage point below real GDP growth. During the same period, the

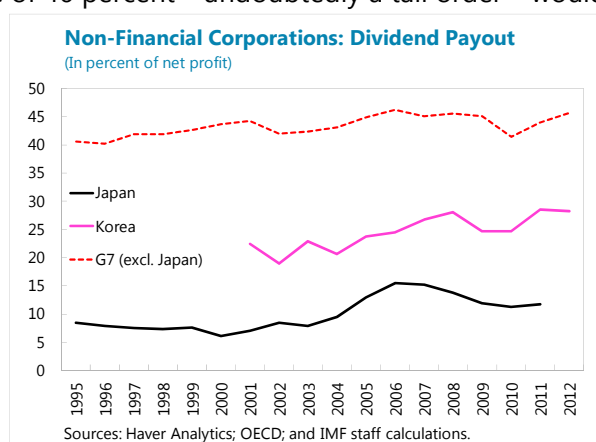


household saving rate fell to 4.7 percent, well below the OECD average of 5.9 percent. The squeeze on consumption and savings has been disproportionately intense for lower income households, amid rising inequality. With household debt now reaching 136 percent of disposable income, many households' ability to consume is getting constrained.

## B. Staff Views

23. **While maintaining a supportive macro-policy mix until the output gap closes is essential, the problem is primarily structural.** Policies to address the weakness in domestic demand could include:

- Redirecting corporate savings by boosting incentives to pay dividends and own shares.** Various elements of the tax code favor earnings retention over dividend payouts and discourage share ownership. Removing distortions and raising Korea's dividend payout ratio of around 30 percent to the G-7 ex-Japan average of 46 percent—undoubtedly a tall order—would redirect around 4 percent of GDI from corporates to households. In addition, encouraging households to hold a larger share of their wealth in shares would help them benefit from the prosperity generated by Korean corporates and would boost domestic demand. Efforts to reduce the tax disincentives to hold shares should continue. The government has proposed tax incentives for long-term investment in equities, similar to the Japan Individual Savings Account.
- Advancing labor market policies that raise the share of salaried wage income and the number of wage earners in each household.** There is no evidence that wages of regular workers are low by international standards; however regular workers account for a low share of the working population. Policies that reduce the duality of the labor market and foster higher female participation would raise household disposable income. The former could also further contribute to redirect corporate savings to households (see next section).
- Increasing government transfers.** Korea's social spending is low by international standards: staff estimates a gap of about 6 percent of GDP between Korea and its OECD peers<sup>5</sup>. There is adequate fiscal space to narrow the gap (see below), through a combination of a lower government savings and higher tax revenues. Better targeting of existing transfers to lower-income households, who have a high propensity to consume, would also help. Such transfers would not only boost income but also possibly reduce precautionary saving.



<sup>5</sup> Updated estimate from "Social Spending in Korea: Can it Foster Sustainable and Inclusive Growth?" IMF Working Paper WP/12/250.

## C. Authorities' Views

24. **The authorities argued that the lingering weakness of domestic demand is primarily cyclical, but also saw structural factors.** They expect the cyclical drag to subside once policy uncertainty diminishes and the new government's growth-supporting measures take effect, and when exports durably pickup. They noted they have an extensive agenda to combat the structural drag, including ramping up social transfers and labor market reforms to improve the wages and social protection of non-regular workers. They acknowledged that financing higher social spending amid the medium-term consolidation plans is a challenge. The authorities agreed that the current taxation of capital income is non-neutral and that the exemptions on capital gains tax coupled with partial double-taxation of dividends may be a disincentive to dividend payouts. The government's Medium-to-Long term Tax Policy includes a higher capital gains tax on equity as a possible avenue for revenue raising.

## ARRESTING THE DECLINE OF GROWTH POTENTIAL

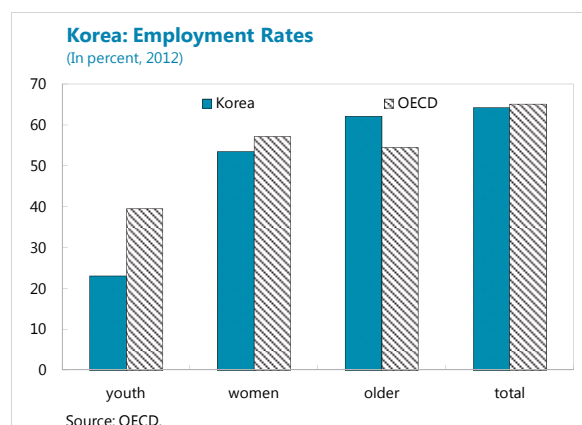
*Given rapid population aging, only a comprehensive package of reforms to preserve the size of the workforce and boost service sector productivity could maintain potential growth at around 3½ to 4 percent during the next 10 years, and strengthen its inclusiveness.*

### A. Background

25. **Korea's growth has been on a declining trend after decades of robust and sustained growth.** Staff estimates that Korea's potential growth decreased from around 7 percent during 1990-97 to 4¾ percent during 2000-07 and further to 3¼–3½ percent in 2011-12, with a slight increase in contributions of total factor productivity and labor inputs outstripped by a decline in the contribution of physical capital.

26. **Going forward, population aging will be a major further drag on potential growth.** On current trends, the working age population is projected to peak in 2016, and Korea is expected to become one of the oldest countries in the OECD by 2050, with the dependency ratio increasing rapidly. As a result, without offsetting policies, Korea's potential growth would decrease to around 2–2½ percent by 2025 and its per capita GDP would cease to converge and instead plateau at the present rate (about 65 percent of the U.S. level).

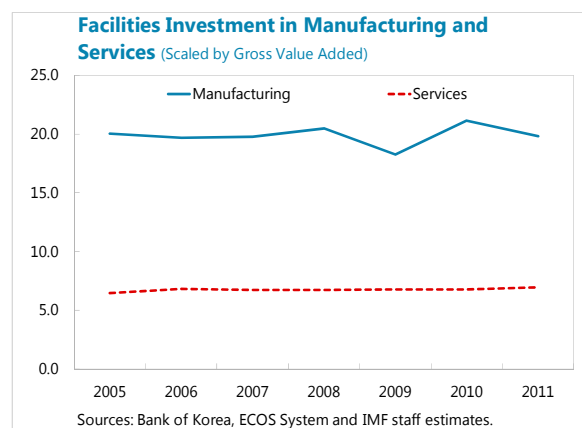
27. **Labor market duality and low employment of segments of the population are key impediments to higher and more inclusive growth.** Korea's employment rate is below the OECD average, particularly for women—their participation rate was around 60 percent in 2012 compared to 70–80 percent in the most advanced countries—and for young males, due to high enrollment in tertiary education, mandatory military service and a widening skills mismatch. Moreover, there is a very high share of temporary, self-



employed and part-time workers (together over half of the labor force). This dualism stems from high protection for regular workers, which leads firms to favor hiring less costly non-regular workers. The latter receive little training, which negatively impacts productivity. Moreover, because of high wage costs due to a seniority-based wage system, firms tend to push workers to retire before the mandatory retirement age (which averaged 57 years in 2010). Given the low pension replacement rates, such workers then tend to become non-regular workers or self-employed in the services sector with much lower productivity.

**28. Another drag on potential growth results from low productivity in the services sector.**

Korea has a world-class manufacturing sector, but services sector productivity is just around half that of manufacturing (against an OECD average of 87 percent), and investment in services has consistently lagged behind the manufacturing sector. This reflects a combination of longstanding, albeit declining, de facto preferential tax treatment for the manufacturing sector, high regulation in parts of the services sector leading to limited competition, excessive reliance on government guarantees to SMEs, and other distortions that effectively constitute incentives for SMEs to remain small and inefficient. It also reflects the role of the services sector as de facto social safety net.



## B. Staff Views

**29. Reforms to increase labor force participation are key to boosting potential growth.**

Further increasing investment in public childcare and childcare benefits, facilitating part-time work, and building on substantial progress to achieve full tax neutrality for second wage earners could boost female participation enough to critically support potential growth. Further efforts to reduce skill mismatches including through vocational training, improving youth access to information on career opportunities and including job-search techniques in school curricula would boost youth participation in the workforce.

**30. Efforts to reduce labor market duality should be stepped up.** Broadening the access to training opportunities and improving social coverage for non-regular workers would raise productivity and reduce precautionary saving. To preserve overall employment, some changes in regular workers' contracts may be needed, including moving to performance rather than seniority-based wage, reducing the relatively high degree of employment protection, and accelerating the shift from mandatory retirement allowance to corporate pension schemes with defined contributions or defined benefits. An important step in this direction was taken in May 2013, when the Federation of Korean Trade Unions, Korea Employers Federation, and the government signed a grand bargain (Tripartite Jobs Pact to Achieve 70 percent Employment Rate). This called for employers to adopt a legally protected minimum retirement age and for unions to accept performance-based wage. However, with implementation of the wage reform left to be negotiated at firm level, there is a risk that in many cases only the increase in minimum retirement age would become binding. This could place an unsustainable burden on some firms, leading them to shut down or cut jobs to survive.



**31. Boosting services sector productivity is also imperative but will take politically and socially difficult steps.**

- Considerable productivity gains could be achieved by deregulating health, education, and legal and other protected professions, and network services (such as rail and utilities). Promoting greater competition in intra-group service provision within the chaebols would also help. Together, these steps would attract investment to these sectors, create jobs, and foster greater efficiency, which would filter through to the rest of the economy.
- The services sector also comprises a myriad of small and unprofitable SMEs that depend on government guarantees, subsidies, and protections for their survival. Such features that prolong the life of unviable enterprises impair productivity. Loan guarantees should thus expire after a few years, and banks be encouraged to develop risk management practices that allow them to provide non-guaranteed funding to viable SMEs. Reducing information asymmetries, e.g., via credit bureaus, would be essential to this process. Until then, policy banks should refocus their lending toward SMEs. As well, efforts are needed to revive access of SMEs to capital markets. An expansion of the social safety net would be a prerequisite to the acceptability of these reforms.
- Additionally, tax breaks and financial support that disproportionately benefit manufacturing should be eliminated over time.

**32. The benefits of comprehensive structural reforms are likely considerable, though the reform agenda should be carefully sequenced.** Staff simulations suggest that a comprehensive package may enable Korea to continue with a potential growth of 3½ to 4 percent over the next 10 years. However, in order to do so the government has to fully implement current plans (to boost labor force participation, reduce duality and deregulate certain services) and further intensify reform efforts<sup>6</sup>. This could enable Korea to reach per capita GDP of US\$48,000 by 2025 (71 percent of the projected U.S. level).

### C. Authorities' Views

**33. The authorities shared staff's views that addressing labor market duality and low participation is essential to sustained and inclusive growth.** Indeed, the government has a broad reform agenda to tackle labor market duality and boost the employment rate to 70 percent by 2017 (from 64 percent). The "70 percent Roadmap" shifts the focus of job creation from current male, manufacturing and conglomerates toward female, services and SMEs. It also focuses on increasing youth and aged employment and improving work-life balance by cutting long working hours. Regarding duality, they considered the existence of different work modalities a natural outcome in the labor market. Their priority is to expand social insurance, including through subsidizing low-income employees of SMEs, eliminate discrimination for non-regular workers, and increase mobility between regular and non-regular workers.

<sup>6</sup> Staff's baseline projections assume concerted structural reforms (beyond current plans) but do not assume implementation of recommended reforms to the fiscal framework.

34. **The authorities welcomed staff's recommendation to boost services sector productivity.** They also concurred that further deregulation and competition is needed, as well as higher investment in this sector. They noted that FTAs with the U.S. and E.U. will help in this regard, particularly in markets for legal services and accounting. The authorities stressed that deregulation should be sequenced along with strengthening the social safety net. They viewed boosting service sector productivity as the key pillar, along with fostering venture capitalism, in the government's creative economy initiative. Both deregulation and convergence of services with information and communication technology would be necessary to achieve this.

35. **The authorities argued that despite imperfections, SME guarantees should be provided for the time being.** They view the credit guarantee system as important in that it enables financial access to SMEs which lack collateral and corrects information asymmetry and limitations pertaining to banks' credit scoring systems. However, the government is continuously making efforts to contain moral hazard by reducing long-term guarantees.

## A MORE GROWTH-FRIENDLY FISCAL FRAMEWORK

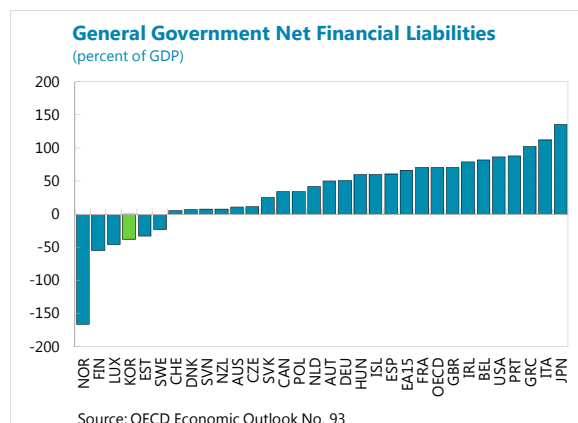
*There is a strong case for cautious recalibration of the fiscal framework to make it more supportive of growth, in two ways: enhanced countercyclicality (via higher automatic stabilizers and a structural balance rule), and more fiscal space (via lower medium-term government saving and a broader tax base), to help address structurally weak domestic demand and large social spending needs. This can be done while fully providing for rising aging costs.*

### A. Background

36. **Korea's long record of fiscal prudence has been an anchor of macroeconomic stability but the framework that delivers it could be more efficient.** Fiscal discipline relies primarily on strict borrowing and asset sale constraints on the central government set in annual budgets, and indicative medium-term fiscal plans that aim to gradually eliminate the overall fiscal deficit (excluding social security) and eventually reduce public debt to about 30 percent of GDP. Automatic stabilizers are weak by advanced economies standards, reflecting a low taxes-low transfers system that provides little cushion during downturns. As a result, Korea has relied mostly on politically contentious supplementary budgets to provide stimulus during slowdowns. Otherwise, revenue shortfalls naturally occurring in downturns have to be offset by spending cuts. The tax base is also very narrow.<sup>7</sup>

<sup>7</sup> The conditional revenue gap—i.e., difference between actual tax revenue and what should be collected given the tax and economic structure—at 7.4 percent of GDP, is one of OECD's largest; see Fiscal Monitor (2013, October)

37. **Korea enjoys low gross debt and large assets, implying an impressive net creditor position.** Korea's net debt was -38 percent of GDP by end-2012, excluding non-financial assets, which are deemed large. Of this, 31 percent corresponds to the assets of the National Pension Fund that can fully meet its pension obligations through 2060<sup>8</sup>. The government views the large asset position as a means to ensure credibility and to cushion against aging costs and geopolitical risks. At the same time large scale quasi-fiscal activities by state-owned enterprises and banks imply contingent liabilities, which are also not well understood, albeit initial inquiries by staff suggest they are manageable. While financial analysts are sanguine about the strength of Korea's fiscal policy and generally think Korea has fiscal space to do more, lack of clarity about the overall public debt position and implicit liabilities has reportedly contributed to Korea's lower sovereign ratings than countries with similar fundamentals.



## B. Staff Views

### *A More Countercyclical, Rules-Based Fiscal Framework*

38. **The fiscal framework should aim to strike a balance between short- and medium-term flexibility and long-term prudence.**

- **Short-run:** the existing annual financing constraints allow for only limited scope for counter-cyclical policies that risk being less timely and targeted than automatic stabilizers. There is room to enhance the degree of counter-cyclicality of fiscal policy in Korea.<sup>9</sup>
- **Medium-term:** the indicative fiscal plans imply an overly contractionary fiscal policy stance that would exacerbate existing external macroeconomic imbalances and provide insufficient support for domestic demand. In particular, without tax reform to boost revenues, they would hinder enhancing social spending needed to kick start structural reforms. The government has a record of flexibly adjusting these medium-term plans, but this approach creates policy uncertainty.
- **Long-term:** the fiscal framework should ensure sustainability in the face of population aging. Budget spending on health, old age pension supplement and other pension schemes outside the national Pension Fund, is expected to increase by about 3.4 and 6.8 percent of GDP in net present value terms through 2030 and 2050, respectively. To ensure the long term sustainability of public finances, reforms that enhance labor force participation and boost potential growth are critical, albeit they have fiscal costs.

<sup>8</sup> This is a key difference with, for example, Japan where the bulk of the debt build-up since the early 1990s reflected rising but unfunded pension costs.

<sup>9</sup> Égert, B. (2010), "Fiscal Policy Reaction to the Cycle in the OECD: Pro- or Counter-cyclical?" *OECD Economics Department Working Papers, No. 763*, OECD Publishing.

39. **Moving towards a structural rule-based fiscal framework would ensure time-consistency in policy objectives.** A structural budget balance rule for the general government would allow timely counter-cyclical policies and reduce uncertainties over medium-term policy objectives. Such rules are being adopted by a growing number of countries, including by most of the EMU countries, the United Kingdom and Colombia. A key element of such a rule is a structural balance target, underpinned by a prudent level of debt, and accounting for the expected increase in spending due to demographics. The structural balance target should be revised every 3–5 years to reflect updated actuarial projections of pension schemes as well as health spending, long-term debt sustainability assessment as well as risk-based assessment of contingent liabilities. Within these constraints, the target can be calibrated to allow space to boost productive social spending and address macroeconomic imbalances.

40. **Well-designed complementary mechanisms would ensure credibility and support the implementation of such a rule.** An automatic mechanism to correct for past deviations from the balance rule would provide a medium-term anchor. Escape clauses would ensure needed flexibility in the face of low automatic stabilizers to address large adverse shocks. A politically independent fiscal council with mandate and expertise to analyze policy proposals, could monitor the implementation of numerical rules, and propose revisions to the structural target would be essential for credibility.

### Fiscal Space

41. **Staff analysis suggests that it would be helpful, and safe, for general government savings to be reduced, in structural terms.** Considering debt-stabilizing conditions, a prudent level of debt and projected aging costs and their current financing schemes, a medium-term consolidated government deficit of up to 1¼ percent of GDP excluding the National Pension Fund (compared to the zero balance targeted by the current indicative rule) would still allow the debt to GDP ratio to decline for a prolonged period of time. This would leave ample time for reforms to rebalance the economy and contain long-term aging costs (see Box 3). This fiscal space can be used to finance the reforms discussed previously to support domestic demand and boost the growth potential (see Box 3). Once the economy rebalances, the structural balance target can be recalibrated.

42. **Additional fiscal space could be generated through revenue measures concentrating on gradually broadening tax bases.** There is considerable scope for both efficiency and equity gains (Box 4). The average effective personal income tax rate is one of the lowest in OECD, and for the median wage earner is close to zero. The base should be broadened by gradually eliminating the wage and other deductions while providing targeted support through social spending. VAT should be extended, notably to all new real state supplies, including the value of land, insurance and financial services, and suppliers to exporters. The corporate income tax is a source of multiple distortions that could usefully be streamlined, in particular there is a need to move toward neutrality in taxing various sources of capital income.

### Safeguards

43. **The government has ample financial assets to contain fiscal risks stemming from medium-term structural loosening.** As noted above the government has a large net creditor position, even after ring-fencing the assets of the national pension system.

### Box 3. Towards a Rules-Based Fiscal Framework<sup>1/</sup>

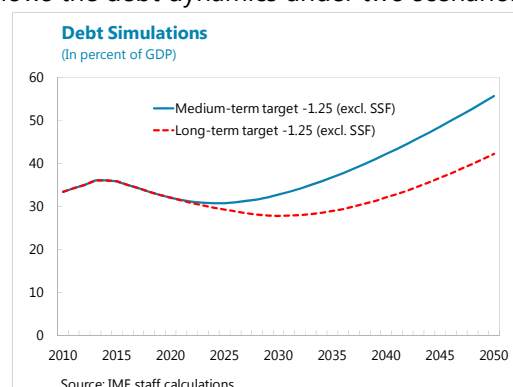
**A structural balance target would enhance counter-cyclicality and ensure time-consistency between policy objectives.** A structural balance rule—such as the one mandated by the 2012 EU Fiscal Governance Reform—allows the budget balance target to be adjusted every year for the output gap, therefore enabling the free operation of automatic stabilizers. The balance target should be regarded as the lower bound for fiscal policy and set in such a way that it ensures convergence of the debt-to-GDP ratio towards a prudent level while incorporating projected ageing costs.

**The debt ceiling on which to anchor the rule should not exceed the lower bound of a safe range of public debt levels.** Following Debrun et al. (forthcoming)\* the safe level of public debt can be defined as the maximum stock of gross financial liabilities the government can stabilize under highly adverse interest rate-growth conditions while generating the highest plausible primary surpluses. As such, the safe level of debt ensures sustainability even in case of large adverse shocks. The safe level of debt for Korea is estimated to be around 65–70 percent of GDP, with robustness tests pointing to a prudent lower bound at about 55 percent of GDP.

**Korea faces rapid population ageing, transforming the country from the third-youngest currently to the second-oldest in OECD by 2050.** Unless mitigated by policy actions, this trend will have profound effects not only on health and pension spending but also on potential per capita growth, which matters for debt sustainability.

- The actuarial deficit of the National Pension Fund through 2060 is estimated to amount to about 30 percent of GDP but is fully covered by accumulated assets. The means-tested basic old-age benefit is expected to increase by at least 1.5 percent of GDP by 2050.
- Health spending is projected to increase by about 3 percent of GDP by 2030, reaching close to 8 percent of GDP by 2050.

**Simulations suggest that, under current policies, Korea can safely allow for a modest structural loosening in the medium term.** The simulations are based on the authorities' current policies and staff's medium-term projections, assuming slight deterioration in the long-run interest-growth differential once the economy converges. While the National Pension Fund is ring-fenced (i.e., higher spending is not debt-creating), other pension spending is fully passed through to the costs. Following current policies 80 percent of the increase in health spending is assumed to be covered by annual increases in health premiums. The accompanying chart shows the debt dynamics under two scenarios. First, keeping the medium-term structural target (excl. SSF) at  $-1\frac{1}{4}$  percent of GDP up to 2020 and subsequently allowing the deficit to increase in line with health costs would raise the debt to about 55 percent of GDP by 2050. Second, keeping the  $-1\frac{1}{4}$  percent of GDP target (excl. SSF) until 2028 would allow to fully cover the cumulative net present value of ageing costs up to 2050 while raising the debt to just below 45 percent of GDP. In both cases, the interest-growth differential is sufficient to allow the debt to decline for a prolonged period of time.

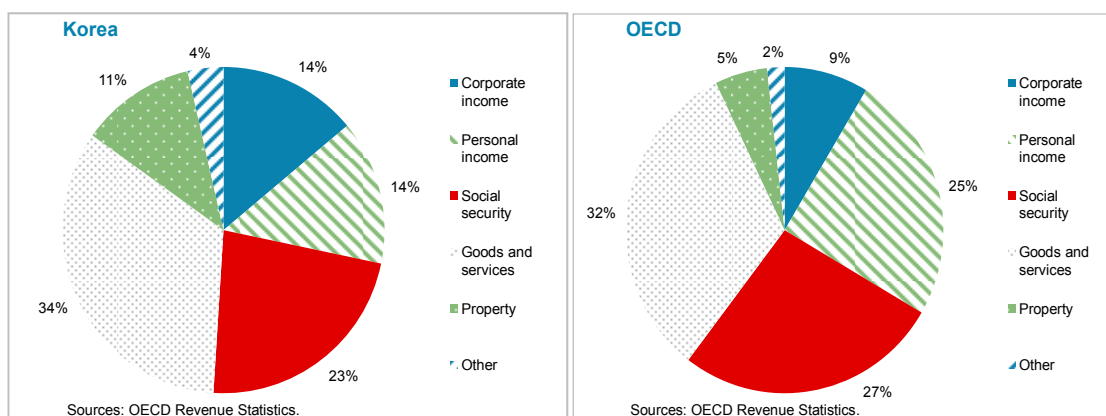


\* Debrun, X., Jarmuzek, M. and A. Shabunina (forthcoming), "Public Debt: Where Is The Safe Harbor?"

<sup>1/</sup> Prepared by Alvar Kangur.

### Box 4. Tax Policy Priorities in Korea

Korea stands out as a lightly taxed economy with a revenue structure that is heavily tilted towards corporate income taxation and excises.



Reforms should be geared towards optimizing the tax structure to alleviate macroeconomic imbalances.

- **Property taxation.** Despite recent reductions, it is still tilted towards taxing transactions, potentially weighing on the functioning of the real estate market. Shifting to recurrent taxes on property would enhance efficiency.
- **Employment.** Current policies to use CIT exemptions to create employment opportunities can be counterproductive. Since CIT is a tax on profits (the return to investment), CIT exemptions induce corporations to substitute away from labor towards capital. In this manner current exemptions can contribute to capital intensive manufacturing and low-skilled intensive services.
- **Income distortions.** The taxation of capital income should aim to achieve the greatest possible degree of neutrality, to avoid various distortions in the economy and incentives to artificially transform one type of capital income into another. Deductibility of interest expense leads to a bias towards debt financing. Exemptions for many categories of taxpayers on capital gains could incentivize excess accumulation of retained earnings. Similarly, there is no clear rationale for even partial double taxation of dividends; this deters households from diversifying their portfolios towards ownership of shares.
- **Inequality.** The wide range of deduction and exemptions under PIT are considerably dampening progressivity. High deductions benefit disproportionately more well-off taxpayers as poorer do not have sufficient income to benefit from deductions. Attempts to curtail personal income tax exemptions should move in tandem with efforts to close self-employed tax loopholes.

<sup>1</sup> Prepared by Alvar Kangur.

44. **There is scope to contain long-term aging costs.** Increasing the retirement ages in both the private and public sectors would enhance sustainability in the face of increasing longevity. Boosting participation and reducing labor market duality will reduce the costs linked to the basic pension scheme. Payroll contribution rates in Korea are currently very low and it should be possible to raise them with limited impact on participation given the highly credible link between current contributions and future pensions, and low participation tax rates. Korea's rapid excess cost growth

in health<sup>10</sup> suggests ample scope to curtail future health costs growth, including with policies to reduce expenditure on pharmaceutical drugs, eliminate incentives for a high number of visits, and reduce hospitals' role in providing long-term care.

45. **Greater transparency on fiscal risks would be desirable particularly, but not only, in the event of the new rules-based framework.** While fiscal risks arising from direct credit guarantees are manageable,<sup>11</sup> state-owned-enterprise debt, some of which reflects quasi-fiscal activities, is high (estimated at 38.8 percent of GDP as of end-2012 with incomplete coverage, albeit their net debt is 19 percent of GDP), and policy banks own about a quarter of the system-wide loan book, exposing the public sector to contingent liabilities. The government's plans to expand the monitoring system to cover assets and liabilities of the whole public sector are welcome; the budget should include a comprehensive assessment of established fiscal risks.

### C. Authorities' Views

46. **While the recommendation to adopt a structural balance rule was received with interest, the authorities do not plan to loosen fiscal policy in the medium term.** The authorities recognized that a structural balance rule would be desirable on macroeconomic stabilization grounds. However, it was considered hard to implement and potentially hostage to political difficulties. Instead, the authorities intend to proceed with the adoption of a "PAYGO" scheme on a central government level that requires fiscal neutrality of any new policy changes, thus favoring stronger fiscal discipline to any loss in cyclical stabilization. In a similar vein, against the background of high exposure to external shocks, looming aging costs and potential geopolitical risks arising from North Korea, the authorities did not view structural fiscal loosening in the medium-term as prudent and aim, for now, to follow the planned consolidation path<sup>12</sup>.

47. **The authorities intend to gradually increase social spending financed by broadening the tax base.** To achieve both an expanded welfare state and the medium-term consolidation objectives, the authorities plan to broaden the revenue base and reallocate spending, rather than increase debt. They plan to reduce tax expenditures, strictly apply sunset clauses and tackle tax evasion. Although preferential treatment of specific industries has decreased over time, wide tax exemptions to invest in new technologies, attract FDI, and support SMEs remain a part of the authorities' strategy to create employment. A high level commission has been set up by the President to consider the pros and cons of moving over time to a higher welfare-higher taxes system.

<sup>10</sup> The Excess Cost Growth (ECG) captures the excess in real per capita health expenditures over the growth in real per capita GDP after the effect of demographic changes has been netted out. Staff estimates that the ECG forms about two-thirds of the total increase in health cost in Korea through 2030, one of the highest in the OECD.

<sup>11</sup> Total credit guarantees to SOEs are estimated at around 2.4 percent of GDP, whereas guarantees issued by funds to support SMEs constitute another 6.1 percent of GDP.

<sup>12</sup> As such, staff's baseline projections do not build in the desired structural decline in savings, but do envisage a slower consolidation path than in the authorities' medium term fiscal framework stemming from the need to support the economy in the near term and avoiding imparting an overly contractionary fiscal impulse in the medium term.

## TOWARDS A MORE GROWTH-ENHANCING AND STABLE FINANCIAL SYSTEM

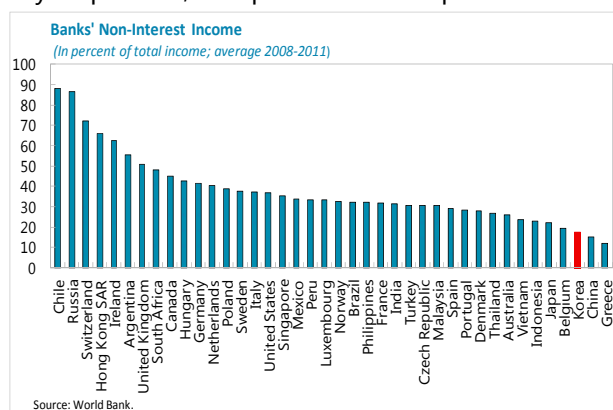
The 2013 FSAP found the near-term vulnerabilities of the Korean financial sector limited, but exposures to household and corporate debt warrant close monitoring. Over the medium term, the financial system should play a greater role in supporting growth, including by reducing government intervention. A more formalized macroprudential institutional setup, with a stronger role for BOK, would be beneficial.

### A. Background

48. **The resilience of the Korean financial system has increased since 2008 as a result of concerted policy efforts.** Banks' liquidity profiles have improved markedly due to well designed macroprudential requirements, as reflected in lower external debt and FX liquidity mismatches. Owing in part to preemptive capital injections by the public sector, banks' capital adequacy is sound. In addition, nonperforming loans (NPLs) are below 1 percent, reflecting, in part, active disposal of bad assets.

49. **Banks' profitability has continued to decline.** Since 2008, profitability has been hampered by low interest rates and elevated credit costs, as well as informal guidance on banks' pricing. The return on assets of commercial banks in 2012 was only ½ percent, compared to 1–1¼ percent in 2005–07, lower than in most peer countries.<sup>13</sup>

The share of non-interest income since the onset of the 2008 crisis has remained low, at 17 percent on average of total income between 2008–11. This reflects the growth slowdown and limited offering of high value-added financial services to households and corporations, due to regulatory reasons. Low profitability has reportedly been an important driver of foreign banks' recent retrenchment of their operations in Korea.



50. **Credit risks at some non-bank financial institutions have increased.** Stricter bank regulations led to a shift of household borrowing to this sector, which accounted for 47 percent of household credit at end-2012. The share of delinquent loans in some of these institutions is now relatively high, and stress tests suggest that some have relatively thin buffers against credit shocks.

51. **While household debt is high, it is covered by household assets to a large extent, mitigating near-term financial sector risks.** At 136 percent of disposable income as of end-2012, household debt is high compared with OECD peers, and has been rising. Debt owed by households with low debt servicing capacity (debt service-to-income ratio over 40 percent) reached 33 percent at end-2012. However, household debt deemed to be at risk accounts for only 0.7 percent of total debt,

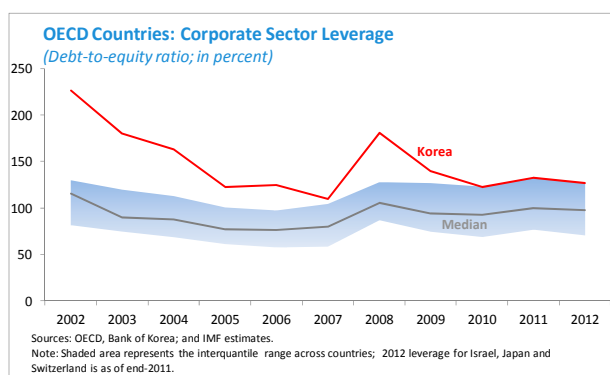
<sup>13</sup> The average ROA for the 35 countries followed by the *Global Financial Stability Report* is 1 percent and is higher than in Korea in 23 countries.



once the high asset buffers (mostly real estate) are accounted for. It is estimated to increase to 0.9 percent in the event of a 300 bps rise in interest rates. In the near term, short of a sizable housing price shock, financial stability risks appear limited to certain household segments—including low-income, older and self-employed.

52. **Corporate sector vulnerabilities show a marked duality.** Corporate sector leverage is high and concentrated and corporate debt (based on OECD data, which includes private and state-owned enterprises) was at 127 percent of equity at end-2012, above OECD average (see Box 5).

Importantly, risks of corporates other than the largest and most profitable chaebols have increased, pointing to a marked duality among corporates. Profitability pressures, liquidity risks and high leverage are concentrated in a few vulnerable industries, including construction, shipbuilding and transportation. Debt of these vulnerable sectors accounted for 33 percent of aggregate corporate debt at end-2012.



## B. Staff Views

53. **Impediments to the financial sector contributing more to growth should be removed.**

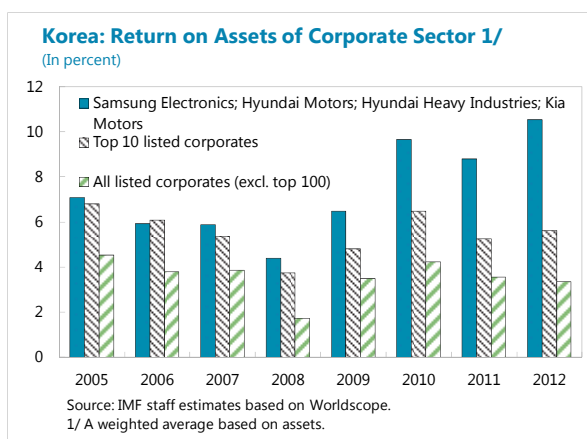
As noted above, SME financing needs an overhaul. The drivers of weak banking sector profitability should also be addressed. These include curbing pressures on banks to cut interest rates and fees which may depress bank profits and limit the availability of credit for higher risk borrowers. In this regard, a balance needs to be found between consumer protection and banks' soundness; and in removing disincentives for banks to engage in more extensive risk-taking and innovation, thus enhancing their ability to support growth. Caution is warranted with regard to the policy to encourage banks to expand overseas, given potential stability risks. Policies to this end should be complemented by more robust cross-border framework for bank regulation and supervision to mitigate possible negative spillovers.

54. **FSAP stress tests suggest that the Korean banking system appears sound.** Banks remain solvent under extreme growth shocks or a protracted economic slowdown. Their foreign currency liquidity positions are robust, with a small but manageable liquidity shortage emerging only under an extreme scenario.

### Box 5. Corporate Sector Risks<sup>1 2</sup>

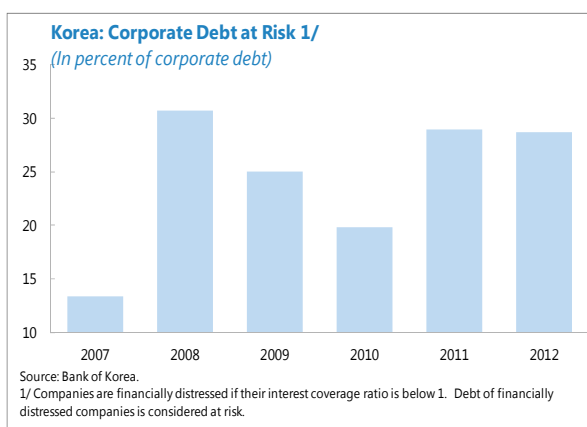
**There is an increasing duality between large export-driven corporations, whose profitability has improved, and other smaller corporates, who have seen a downward drag in profitability.** The return on assets (ROA) of Korea's champion exporters—Samsung Electronics, Hyundai Motors, Hyundai Heavy Industries and Kia Motors—

continued to rise, reaching 10.5 percent at end-2012, up from 9.6 percent in 2010. This presented a stark contrast to the rest of the corporate sector, where the ROA of all listed companies, excluding the top 100 by assets, slumped from 4.2 to 3.3 percent in this period (Figure). Altogether, at end-2012, the four “national champions” accounted for a staggering share—about 30 percent—of the aggregate retained earnings of Korean listed companies.



**Weaker profitability has impaired the ability of corporates to deleverage further and to meet interest expenses.** The aggregate debt at risk of the corporate sector—i.e. the debt of financially distressed corporates whose earnings before interest and taxes (EBIT) cannot cover their interest expenses—stood at 29 percent of corporate debt at end-2012, only marginally lower than the 31 percent at end-2008 (Figure). The share of financially distressed companies has also edged up since 2010, but remains lower than in 2008,

suggesting that now risks are concentrated in somewhat larger companies.



**Vulnerabilities are concentrated in certain sectors—construction, cross-border transportation and shipbuilding—that have been impacted particularly negatively by the growth slowdown and the sluggish property sector.** Cross-border transportation and construction are considerably more leveraged than other industries, and both sectors had negative profitability in 2011 and 2012. All three sectors have debt at risk that has been higher than for other corporates, over 40 percent of corporate debt in the cross-border transportation and shipbuilding sectors. The shipbuilding industry, while still profitable, remains vulnerable to the shift towards lower upfront installments in the global shipbuilding industry and more limited bank funding. Their impact on aggregate corporate sector risks is non-trivial, as they collectively accounted for 26 percent of corporate assets at end-2012.

<sup>1</sup> Prepared by Silvia Iorgova.

<sup>2</sup> The analysis of the corporate sector is based on Worldscope data which includes listed companies, some of which are majority state-owned.

55. **While near-term risks of high household and corporate sector debt appear muted, they warrant continued close monitoring.** Given the sensitivity of asset quality to adverse interest rate or growth shocks, close monitoring of exposure risks and associated provisioning should continue. Separately, it is important to minimize moral hazard in household and corporate debt workout

programs. The authorities' intention to strengthen monitoring of commercial real estate lending and lending to the self-employed are welcome<sup>14</sup>.

56. **While the current supervisory framework has been reasonably effective, it should be enhanced further.** Banks' supervisory structure needs to be strengthened by minimizing the perception of political influence, and eliminating complex processes and overlap of responsibilities across multiple agencies. As the recently completed FSAP pointed out, key recommended improvements to financial supervision include<sup>15</sup>: (i) a more risk-sensitive approach; (ii) extension of Basel II to financial holding companies (which came into effect on December 1, 2013); (iii) expansion of supervisory activities on a group-wide basis; and (iv) better assessment of banks' corporate governance. Also, regulation of large non bank depositary institutions should be aligned with that for banks, with stricter supervision and higher capital and provisioning requirements<sup>16</sup>.

57. **While the current institutional framework for macroprudential policy and crisis management has worked well, it can be enhanced.** There would be benefits to establishing two distinct committees with separate mandates on macroprudential policy and crisis management. Such an arrangement should focus on enhancing transparency and accountability, ensuring a greater degree of independence from the political process, and clarifying and strengthening the financial stability role of the BOK.

### C. Authorities' Views

58. **The authorities viewed the depressed bank profitability as cyclical rather than structural.** They noted that banks are suffering due to the low growth and interest rate environment, but foresaw this unwinding as the business cycle turns around. However, the authorities are encouraging banks to expand overseas to boost profitability, targeting areas compatible with Korean banks' limited expertise and balance sheet power, such as bad assets disposal.

59. **The authorities argued that they have successfully implemented measures to reduce household debt, and that they do not view corporate debt levels as excessive.** They emphasized that the growth of household debt has slowed and that banks' exposures to low income households are low, and do not present risks to banks' profitability. The authorities concurred that boosting household incomes is a viable way to grow out of debt. They also considered banks' exposure to large distressed conglomerates to be limited as they have encouraged banks to proactively restructure. They stressed that the bulk of the expected losses have already been provisioned for. The authorities viewed the current level of banks' prudential buffer sufficiently large to absorb adverse shocks on the corporate balance sheets.

<sup>14</sup> Lending to the self-employed accounts for an increasingly large share of banks' and non-banks' exposures. Commercial real estate lending, while more limited in size, is subject to weaker underwriting standards (including no LTV limits) and, thus, to potentially higher credit risks. The BOK has recently flagged potential financial stability risks from both sectors and called for remedies including a gradual strengthening of LTV regulation.

<sup>15</sup> In addition, the FSAP found that stress testing carried out by the authorities could be further improved.

<sup>16</sup> The capital framework of institutions sized similarly to banks should be strengthened and calculated using the Basel computations and definitions.

60. **The authorities acknowledged that there is close supervisory monitoring of banks' risk pricing behavior.** They pointed out that they monitor voluntary guidelines on banks' risk pricing, and emphasized that these are motivated by the need to ensure sufficient consumer protection. They stressed that the guidelines are entirely voluntary and there are no sanctions for non-compliance. More broadly, they stressed that ensuring sufficient consumer protection is a global trend, and an area that requires sufficient policy focus.

## STAFF APPRAISAL

61. **Korea's economy is experiencing a modest recovery, helped by supportive monetary and fiscal policies and buoyant exports.** Korea's GDP growth is expected to rebound to 2.8 percent in 2013 (from 2 percent in 2012), and inflation is subdued. Despite a supplementary budget in the spring and an accompanying cut in the policy rate, domestic demand remains relatively weak, growing at only 2 percent. Growth is expected to strengthen to 3.7 percent in 2014, in view of the projected global recovery and the gradual pickup in domestic demand. Despite this, the output gap is expected to remain negative through 2014. In view of the fragile recovery, macroeconomic policies should remain supportive. The expansionary fiscal and accommodative monetary stances should be maintained until there is confidence that the output gap will close soon.

62. **Korea has emerged as a safe haven of sorts in the summer's market turmoil.** A strong fiscal position, large CA surplus and ample FX reserves have further strengthened Korea's attractiveness to risk-averse investors, including many central banks and sovereign wealth funds. However, the robustness of this new safe haven status has yet to be tested.

63. **The external sector position is substantially stronger than implied by medium-term fundamentals and desirable policies, and the won moderately undervalued.** Policies are needed to bolster domestic demand and bring rebalancing back on track. The won should continue to be market determined, with intervention (either in spot or forward markets) limited to smoothing excessive volatility in the event of disorderly market conditions and not to influence the pace of appreciation. Reserves are adequate and there is no need for further accumulation relative to the range of the metrics. Any additional accumulation should be carried out by the BOK rather than by increasing government borrowing. Further won appreciation would facilitate the overall rebalancing of the economy towards households and domestic demand.

64. **Risks are on the downside, both in the near and longer term.** While, Korea would likely not be very affected by further mild turmoil from US monetary policy normalization, adverse growth surprises in any of its main export markets—China, U.S., and the EU—or more severe market stress would significantly damage its outlook. On the domestic demand side, absent reforms considered in the baseline, momentum will be muted, reflecting the debt overhang in parts of the household and corporate sectors, which will weigh further on both consumption and investment. In the longer run, weak household income growth, deleveraging needs, and conservative fiscal policy mean that demand is likely to remain highly dependent on net exports. On the supply side, rapid population aging implies a further significant fall in the growth potential. In turn, continued weakness in domestic growth would likely worsen the debt problems of households and corporates. These risks to growth call for a comprehensive and ambitious set of reforms that will be mutually reinforcing across a number of areas, including to the fiscal framework, the labor market and services sector.

65. **Fiscal policy has an essential role to play to support domestic demand, boost growth potential and reduce inequality.** Fiscal policy should be more countercyclical to allow automatic fiscal support in downturns. Specifically, the borrowing ceiling should become non binding and the balance target a structural one. The central government balance could be safely reduced to a deficit of 1¼ percent of GDP over the medium term, even accounting for projected large aging costs. This would free up resources to finance higher social spending and help rebalance the sources of growth toward domestic demand. A debt rule anchored at a prudent level that could be significantly higher than the present one, would ensure continued fiscal prudence. There is also sizable scope to finance additional spending by broadening the currently narrow tax base. Contingent government liabilities arising from credit guarantees and quasi-fiscal operations of state-owned firms and banks need close and transparent monitoring. The government's plans in this regard are much welcome.

66. **Continued reforms to increase labor force participation and reduce labor market duality would further support households' income growth and raise the growth potential.** Higher public spending on childcare and creating more part-time work opportunities could boost female participation enough to critically support potential growth. Further efforts to reduce skill mismatches would boost youth participation in the workforce. Reducing the gap in training and social protection between non-regular and self-employed workers and regular workers would raise productivity and reduce precautionary saving. While the Tripartite Jobs Pact is a step in the right direction, skillful policy making would be required to tackle considerable implementation challenges, and more has to be done to combat dualism, including reducing the relatively high degree of employment protection for regular workers.

67. **Deregulation, restructuring and reduction in government intervention are needed to boost value-added in services and productivity throughout the economy.** As the social safety net expands, incentives that discourage SME growth and allow non-profitable ones to survive should be phased out. Loan guarantees should expire after a few years, and banks be encouraged to develop risk management and pricing practices that allow them to provide non-guaranteed funding to a broader range of viable SMEs. Policy banks should refocus their lending on SMEs. Initiatives to expand SME access to capital markets should continue. Also, considerable productivity gains could be garnered by deregulating network services, health, education, and other professions and by promoting competition in service provision to and by chaebols.

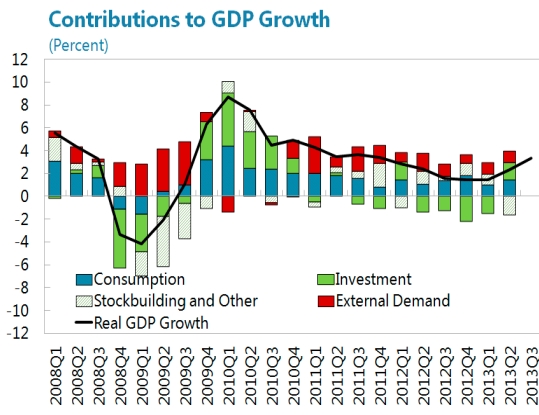
68. **The FSAP found the financial sector sound overall, though risks warrant close monitoring.** Banks are highly capitalized and have low nonperforming loans ratios, reflecting active disposal guidance. The associated write-offs, along with low net interest margin and non-interest income, have contributed to continued weak profits. Low loan-to-value ratios on mortgage loans and large household asset buffers limit risks from potential further deterioration in household debt. However, weak debt repayment capacity and buffers among low income households could further erode profits. Similarly, in certain parts of the corporate sector—construction, transportation, and shipbuilding—a prolonged cyclical downturn had raised risks. Despite these risks, banks' vulnerability to external liquidity shocks has declined, as macro-prudential regulations have reduced markedly their short-term debt. Non-bank depositary institutions are vulnerable to asset quality shocks, but they are individually small and largely not interconnected. Overall, systemic risk appears limited.

69. **Despite this, financial stability would be further supported by active monitoring of risks, adjustments in incentives, and streamlined, more structured institutional frameworks.** Pressures on banks' pricing behavior should be minimized and the authorities should seek to curb potential moral hazard in debt workout programs. The current supervisory structure would benefit from enhanced independence, greater focus on the core supervisory mandate, and institutional streamlining so as to improve coordination. Overall effectiveness would be enhanced by supervision of financial activities on a group-wide basis, and establishment of a dedicated macro-prudential council and a fully formalized committee on crisis management.
70. **In sum, the Korean economy has fared well in the recent turmoil and is well positioned to benefit from the global recovery, reflecting skilled policy-making.** However, it will need deep changes in its economic structure to continue lifting the living standard of its population, in an inclusive way, closer to that of the richest advanced economies. Many of the reforms needed, and identified above, are already in train or planned. Steadfast implementation across these areas will be needed to meet this challenge.
71. **It is recommended that the next Article IV Consultation takes place on the standard 12-month cycle.**

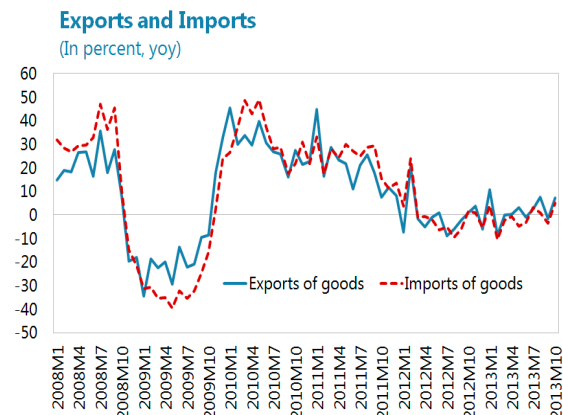
**Figure 2. The Real Economy**

After slowing down to 2 percent in 2012, GDP growth has bottomed out and gathered pace in Q2 and Q3 2013...

...with both exports and imports picking up...



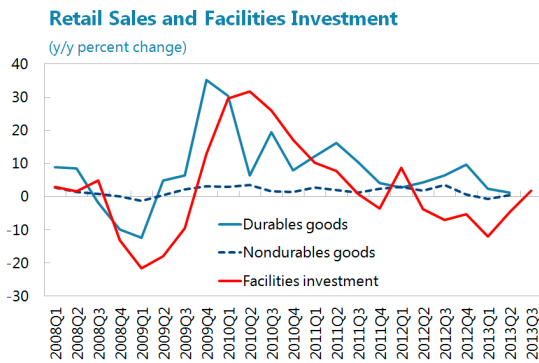
Sources: CEIC Data Company Ltd; and IMF Staff Estimates.



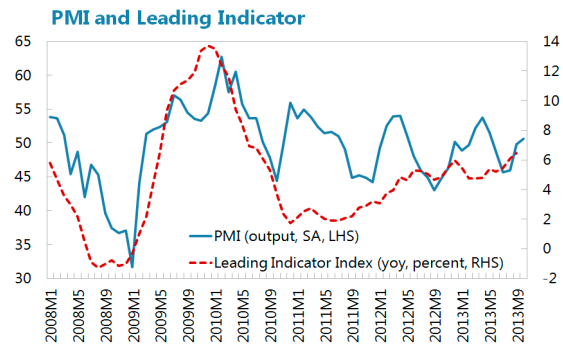
Source: CEIC Data Company Ltd.

...and early signs of imminent turn in the consumption and investment cycle.

...And uptick in high frequency and forward-looking indicators.



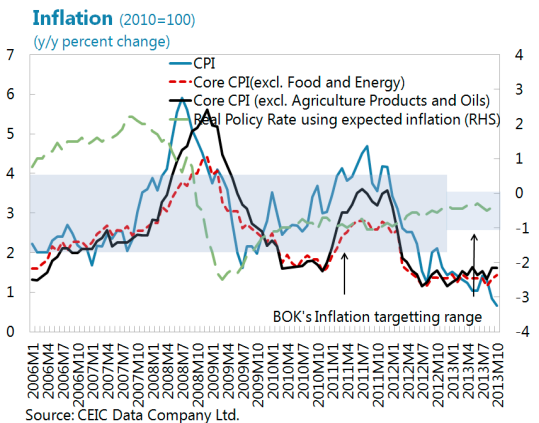
Source: CEIC Data Company Ltd.



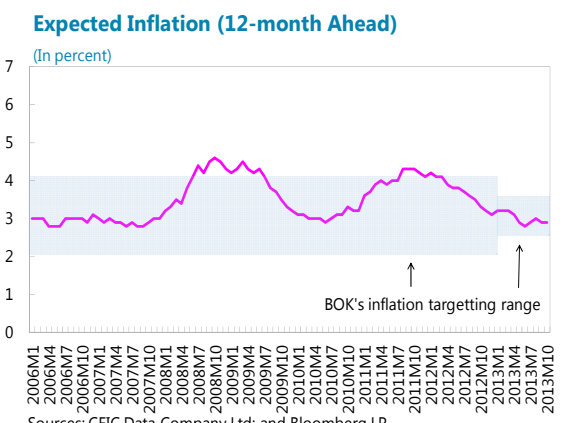
Sources: Haver Analytics Inc., CEIC Data Company Ltd.; and IMF staff estimates.

Headline inflation and core inflation have remained well below the inflation target band...

...and inflation expectations appear well anchored.



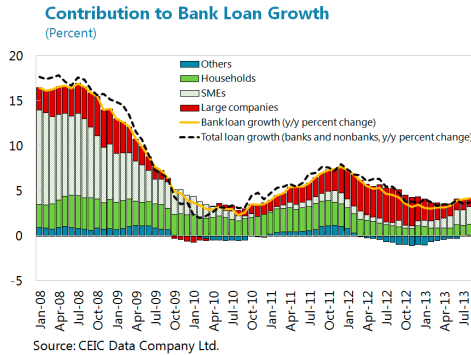
Source: CEIC Data Company Ltd.



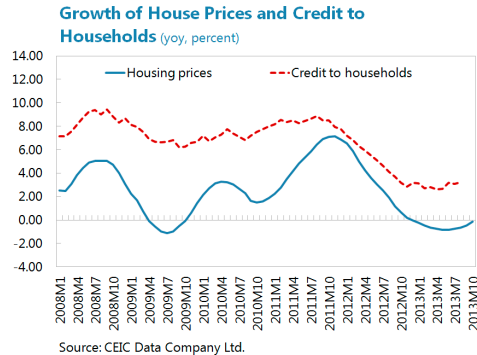
Sources: CEIC Data Company Ltd; and Bloomberg LP.

**Figure 3. Credit and the Banking Sector**

Credit growth appears to have bottomed out, and is currently mostly led by SME loans...

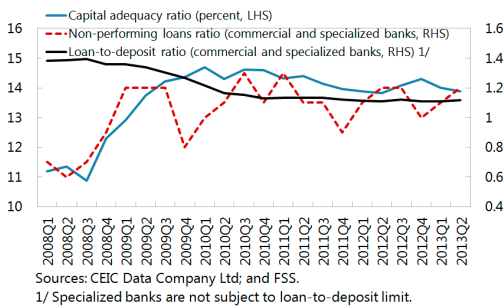


...with the same trend applying to both housing prices and credit to households.



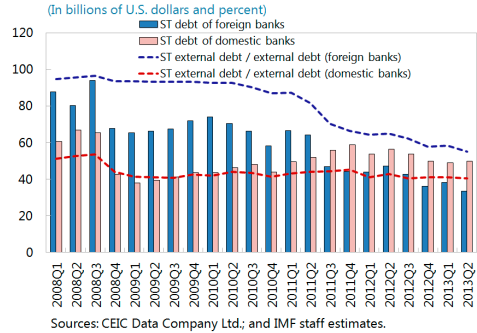
Banking sector soundness remains robust...

**Capital Adequacy, Non-performing Loans, and Loan-to-Deposit Ratio**



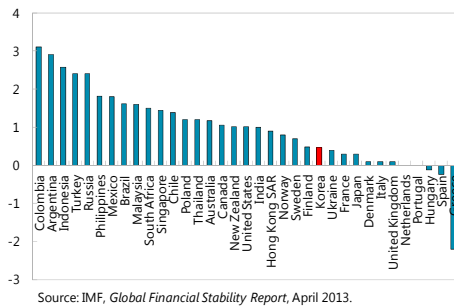
...with banks, particularly foreign bank branches, continuing to shed off short-term external debt.

**Banks' External Short-term Funding**



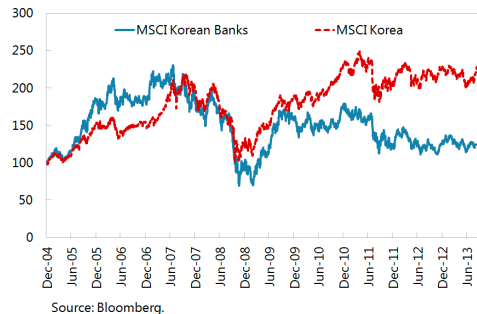
However, banking sector profitability remains weak...

**Bank Return on Assets Across Countries, 2012**



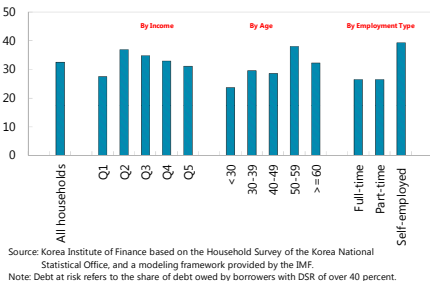
...and bank equity prices have continued to underperform the broad equity index by a large margin.

**Aggregate and Bank Stock Indices**



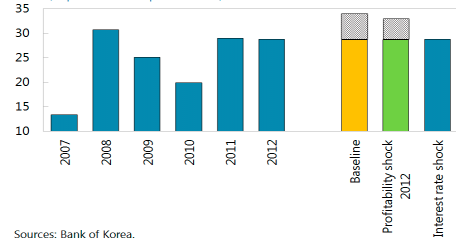
The debt servicing burden of certain types of households is now high...

**Debt at Risk, by Type of Household**



...and corporate risk has increased due to protracted economic weakness.

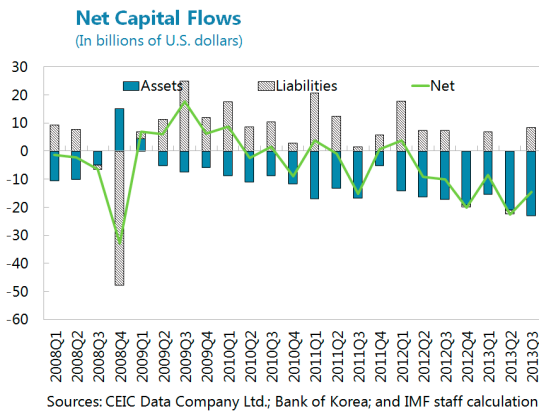
**Korea: Corporate Debt at Risk 1/ 2/**



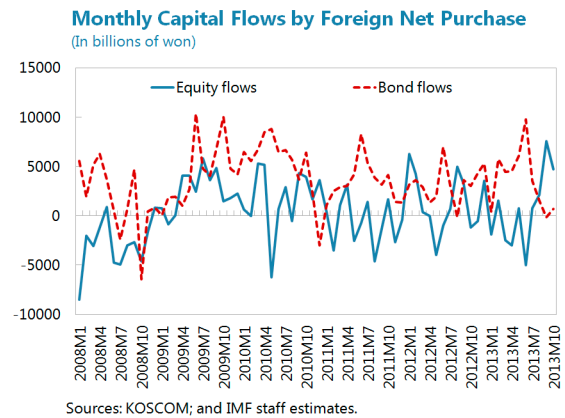


**Figure 4. Financial Markets**

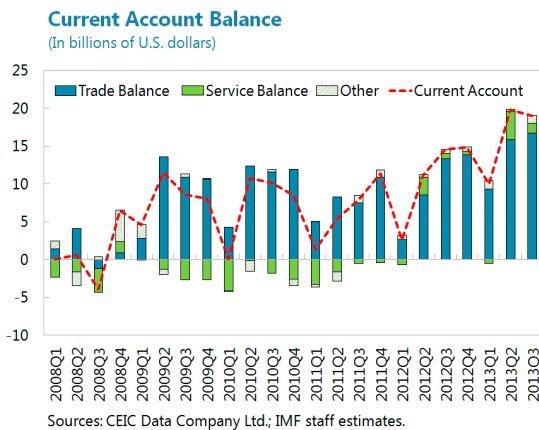
While overall capital outflows have continued since 2012....



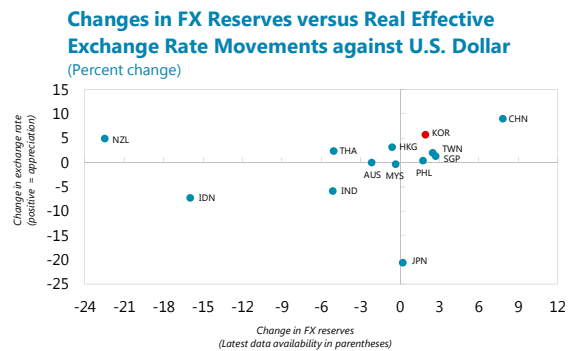
... inflows into bonds continued while flows into stocks rebounded recently.



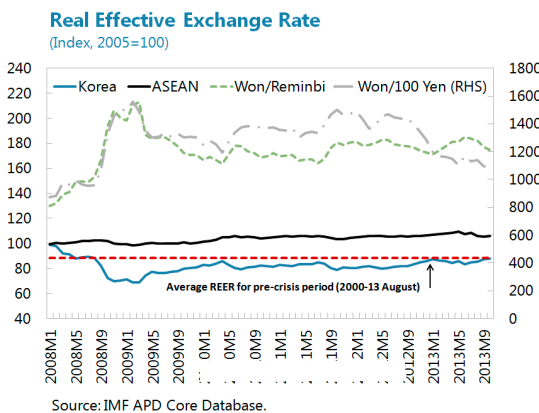
The current account surplus has continued to rise ...



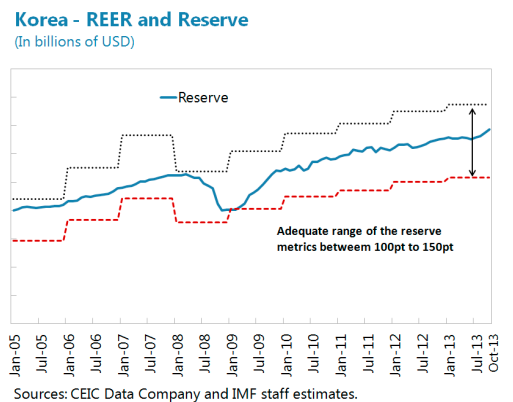
... and the won has appreciated by 6 percent since October 2012 against the U.S. dollar...



... and in real effective terms.



And reserves have remained within the IMF's composite metric.



**Table 1. Korea: Selected Economic Indicators, 2009–15**

Nominal GDP (2012): \$1,130 billion

Main exports (percent of total, 2012): Petroleum products(13), Semi-conductor (12), Automobile (11), Machinery (10)

GDP per capita (2012): \$22,589

Central government debt (2012): 33.4 percent of GDP

	2009	2010	2011	2012	Projections		
					2013	2014	2015
<b>Real GDP (percent change)</b>	0.3	6.3	3.7	2.0	2.8	3.7	3.8
Total domestic demand	-2.7	6.2	2.0	1.0	2.0	2.7	2.9
Final domestic demand	0.6	4.5	1.4	1.1	2.2	2.8	3.0
Consumption	1.2	4.1	2.3	2.2	1.9	2.7	2.8
Gross fixed investment	-1.0	5.8	-1.0	-1.7	3.1	2.9	3.5
Net foreign balance 1/	2.8	0.1	1.9	1.1	1.2	1.3	1.2
<b>Nominal GDP (in trillions of won)</b>	1,065.0	1,173.3	1,235.2	1,272.5	1,343.0	1,414.2	1,496.6
<b>Saving and investment (in percent of GDP)</b>							
Gross national saving	30.2	32.4	31.8	31.8	32.3	32.0	31.6
Gross domestic investment	26.3	29.5	29.5	27.6	26.5	26.9	26.8
Current account balance	3.9	2.9	2.3	4.3	5.8	5.1	4.8
<b>Prices (percent change)</b>							
CPI inflation (end of period)	2.8	3.0	4.2	1.4	1.0	2.5	3.0
CPI inflation (average)	2.8	2.9	4.0	2.2	1.1	1.8	3.0
Core inflation (average)	3.6	1.8	3.2	1.7	1.5	2.0	3.0
Real effective exchange rate	-12.4	11.4	0.6	1.1	...	...	...
<b>Trade (percent change)</b>							
Export volume	0.1	14.4	13.9	5.6	6.0	7.2	9.9
Import volume	-2.2	16.8	5.6	0.5	4.6	6.4	9.9
Terms of trade	10.8	-0.9	-8.2	2.5	2.2	-1.4	-0.8
<b>Consolidated central government (in percent of GDP)</b>							
Revenue	23.0	22.7	23.3	24.2	23.6	23.6	23.6
Expenditure	23.0	21.0	21.4	22.4	22.6	22.5	22.4
Net lending (+) / borrowing (-)	0.0	1.7	1.8	1.8	1.0	1.2	1.2
Overall balance	-1.7	1.4	1.5	1.5	0.7	0.9	1.0
Excluding Social Security Funds	-4.1	-1.1	-1.1	-1.4	-2.1	-1.8	-1.7
<b>Money and credit (end of period)</b>							
Overnight call rate 2/	2.0	2.5	3.3	2.8	2.5	...	...
Three-year AA- corporate bond yield 2/	5.5	4.3	4.2	3.3	3.3	...	...
M3 growth 3/	9.4	5.9	6.6	7.8	6.8	...	...
<b>Balance of payments (in billions of U.S. dollars)</b>							
Exports, f.o.b.	358.2	461.4	551.8	554.2	595.5	640.9	690.8
Imports, f.o.b.	320.3	421.4	520.1	514.4	533.3	577.8	628.1
Current account balance	32.8	29.4	26.1	48.1	69.5	65.3	65.5
Gross international reserves (end of period) 4/	269.9	291.5	304.2	323.2	363.3	385.3	407.7
In percent of short-term debt (residual maturity)	146.2	162.5	165.0	181.2	214.4	220.0	225.2
<b>External debt (in billions of U.S. dollars)</b>							
Total external debt (end of period)	345.7	359.8	398.7	409.4	427.1	453.8	480.6
Total external debt (in percent of GDP)	41.4	35.4	35.8	36.2	35.3	35.4	35.0
Debt service ratio 5/	7.8	6.8	6.4	7.5	7.5	7.8	7.9
Real effective exchange rate (level)	75.8	82.1	82.2	82.0	...	...	...

Sources: Korean authorities; and IMF staff estimates and projections.

1/ Contribution to GDP growth.

2/ Data for 2013 are as of November 4, 2013.

3/ Data for 2013 are as of August.

4/ Excludes gold.

5/ Debt service on medium- and long-term debt in percent of exports of goods and services.

**Table 2. Korea: Balance of Payments, 2009–15**

(In billions of U.S. dollars, unless otherwise indicated)

	2009	2010	2011	2012	Projections		
					2013	2014	2015
<b>Current account balance</b>	32.8	29.4	26.1	48.1	69.5	65.3	65.5
Trade balance	37.9	40.1	31.7	39.8	62.2	63.1	62.8
Exports	358.2	461.4	551.8	554.2	595.5	640.9	690.8
(growth rate, in percent)	-17.6	28.8	19.6	0.4	7.5	7.6	7.8
Imports	320.3	421.4	520.1	514.4	533.3	577.8	628.1
(growth rate, in percent)	-25.4	31.5	23.4	-1.1	3.7	8.4	8.7
Services	-6.6	-8.6	-5.8	5.7	7.5	4.4	4.9
Income	2.3	1.0	2.9	5.7	3.1	1.2	1.2
Current transfers	-0.7	-3.1	-2.6	-3.2	-3.2	-3.3	-3.4
<b>Financial and capital account balance</b>	34.0	-0.5	-12.8	-37.6	-29.5	-43.2	-43.1
Financial account	33.7	-0.3	-12.8	-38.2	-30.0	-43.7	-43.6
Portfolio investment, net 1/	46.6	43.3	12.1	9.5	14.9	-5.5	-5.5
Direct investment, net	-14.9	-22.2	-16.4	-18.9	-17.0	-25.0	-25.0
Inflows	2.2	1.1	4.8	5.6	5.0	5.0	5.0
Outflows	-17.2	-23.3	-21.2	-24.6	-22.0	-30.0	-30.0
Other investment, assets	1.7	-16.0	-27.1	-14.0	-20.0	-20.0	-20.0
Other investment, liabilities	0.4	-5.4	18.6	-14.7	-7.9	6.7	6.9
Capital account	0.3	-0.2	0.0	0.5	0.5	0.5	0.5
<b>Net errors and omissions</b>	1.9	-1.9	0.7	2.7	0.0	0.0	0.0
<b>Overall balance</b>	68.7	27.0	14.0	13.2	40.1	22.1	22.4
<b>Financing</b>	-68.7	-27.0	-14.0	-13.2	-40.1	-22.1	-22.4
Change in reserves (increase -)	-68.7	-27.0	-14.0	-13.2	-40.1	-22.1	-22.4
<b>Memorandum items:</b>							
Current account balance (in percent of GDP)	3.9	2.9	2.3	4.3	5.8	5.1	4.8
Trade balance (in percent of GDP)	4.5	3.9	2.8	3.5	5.1	4.9	4.6
Gross reserves minus gold	269.9	291.5	304.2	323.2	363.3	385.3	407.7
(in months of imports of goods and services)	8.1	6.8	5.9	6.3	6.8	6.7	6.5
External debt	345.7	359.8	398.7	409.4	427.1	453.8	480.6
(in percent of GDP)	41.4	35.4	35.8	36.2	35.3	35.4	35.0
Short-term external debt (inc. trade credits)	149.2	139.8	137.4	126.8	112.9	114.0	115.2
Nominal GDP (U.S. dollars)	834.1	1014.9	1114.5	1129.5	...	...	...

Sources: Korean authorities; and IMF staff estimates and projections.

1/ Includes financial derivatives, net.

Table 3.a. Korea: Statement of Central Government Operations, 2009–15

	2009	2010	2011	2012	Projections		
					2013	2014	2015
(In trillions of won)							
<b>Revenue</b>	245.5	265.8	287.4	307.5	317.5	334.3	353.8
Tax revenue	164.5	177.7	192.4	209.6	214.2	225.5	238.7
Social contributions	40.2	42.8	46.2	47.6	50.2	52.9	56.0
Of which: Social security contributions	33.9	35.6	38.9	43.9	46.3	48.8	51.6
Other revenue	40.7	45.2	48.8	50.3	53.1	55.9	59.2
<b>Expenditure</b>	245.3	246.4	264.9	284.8	304.1	317.6	335.5
Expense	232.7	233.1	251.9	270.8	287.6	301.5	318.5
Net acquisition of nonfinancial assets	12.6	13.2	13.0	14.0	16.5	16.0	17.0
<b>Net lending (+) / borrowing (-)</b>	0.2	19.4	22.5	22.7	13.4	16.7	18.3
Less: Policy lending	17.8	2.7	3.9	3.9	3.9	3.9	3.9
<b>Overall balance</b>	-17.6	16.7	18.6	18.7	9.5	12.8	14.4
Less: Social Security Fund balance	25.7	29.7	32.1	36.5	37.1	38.1	39.3
<b>Overall balance excluding Social Security Funds</b>	-43.3	-13.0	-13.5	-17.8	-27.6	-25.3	-24.9
<b>Net acquisition of financial assets</b>	57.4	35.5	37.5	37.5	37.5	37.5	37.5
Domestic	56.4	34.6	36.8	36.8	36.8	36.8	36.8
Currency and deposits	-0.3	3.3	-0.8	-0.8	-0.8	-0.8	-0.8
Loans	56.7	31.4	37.6	37.6	37.6	37.6	37.6
Foreign	1.0	0.8	0.7	0.7	0.7	0.7	0.7
Loans	1.0	0.8	0.7	0.7	0.7	0.7	0.7
Monetary gold and SDR	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net incurrence of liabilities</b>	57.2	16.1	15.0	14.9	24.1	20.8	19.2
Domestic	57.2	16.1	15.0	14.9	24.1	20.8	19.2
Foreign	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(In percent of GDP)							
<b>Revenue</b>	23.0	22.7	23.3	24.2	23.6	23.6	23.6
Tax revenue	15.4	15.1	15.6	16.5	15.9	15.9	15.9
Social contributions	3.8	3.6	3.7	3.7	3.7	3.7	3.7
Of which: Social security contributions	3.2	3.0	3.1	3.5	3.5	3.5	3.5
Other revenue	3.8	3.9	4.0	4.0	4.0	4.0	4.0
<b>Expenditure</b>	23.0	21.0	21.4	22.4	22.6	22.5	22.4
Expense	21.8	19.9	20.4	21.3	21.4	21.3	21.3
Net acquisition of nonfinancial assets	1.2	1.1	1.1	1.1	1.2	1.1	1.1
<b>Net lending (+) / borrowing (-)</b>	0.0	1.7	1.8	1.8	1.0	1.2	1.2
Less: Policy lending	1.7	0.2	0.3	0.3	0.3	0.3	0.3
<b>Overall balance</b>	-1.7	1.4	1.5	1.5	0.7	0.9	1.0
Less: Social Security Fund balance	2.4	2.5	2.6	2.9	2.8	2.7	2.6
<b>Overall balance excluding Social Security Funds</b>	-4.1	-1.1	-1.1	-1.4	-2.1	-1.8	-1.7
<b>Memorandum items:</b>							
Operating balance (trillion won)	12.8	32.6	35.5	36.6	29.9	32.8	35.3
In percent of GDP	1.2	2.8	2.9	2.9	2.2	2.3	2.4
Primary balance (trillion won)	-13.3	22.5	24.4	26.9	17.6	22.2	26.7
In percent of GDP	-1.3	1.9	2.0	2.1	1.3	1.6	1.8
Overall structural balance (trillion won)	-9.6	17.8	18.6	19.2	11.5	14.3	14.4
In percent of GDP	-0.9	1.5	1.5	1.5	0.8	1.0	1.0
Nominal GDP (trillion won)	1,065.0	1,173.3	1,235.2	1,272.5	1,343.0	1,414.2	1,496.6
Central government debt (trillion won)	346.1	373.8	402.8	425.1	470.8	512.0	553.0
In percent of GDP	32.5	31.9	32.6	33.4	35.1	36.2	36.9

Sources: Ministry of Strategy and Finance; and IMF staff estimates and projections.

Table 3.b. Korea: Integrated Balance Sheet - Consolidated General Government, 2009-12

	2009			2010			2011			2012 2/		
	Transactions	Other economic flows	Closing/Opening balance	Transactions	Other economic flows	Closing/Opening balance	Transactions	Other economic flows	Closing/Opening balance	Transactions	Other economic flows	Closing/Opening balance
<b>Net financial worth</b>			415.1			446.4			470.7			494.9
<b>Financial assets 1/</b>												
Currency and deposits	42.1	24.7	761.2	52.3	24.9	838.3	56.9	6.2	901.5	55.1	8.0	964.5
Securities other than shares	-4.9	0.0	77.5	7.0	0.2	84.7	2.0	0.0	86.7	-4.9	0.0	81.8
Loans	26.8	-0.2	242.5	6.7	5.6	254.8	17.7	1.2	273.8	23.6	3.5	300.9
Other	12.5	-0.3	221.4	18.2	0.1	239.8	14.3	4.0	258.1	18.8	-1.4	275.5
	7.7	25.2	219.7	20.4	19.0	259.0	23.0	1.0	283.0	17.6	5.9	306.4
<b>Liabilities</b>												
Securities other than shares	51.9	-13.6	346.1	39.6	6.2	391.9	33.6	5.3	430.8	33.0	5.8	469.6
Loans	48.9	-9.4	312.5	35.5	11.7	359.6	34.5	8.1	402.2	29.1	6.7	438.0
Other	0.7	-0.1	6.3	0.8	0.0	7.0	-0.6	0.0	6.4	3.8	0.0	10.1
	2.3	-4.2	27.4	3.3	-5.5	25.2	-0.2	-2.8	22.2	0.2	-0.8	21.5
<b>Memorandum items:</b>												
Net financial worth (in percent of GDP)			39.0			38.1			38.1			38.9
Change in net financial worth (percent)			7.4			7.5			5.4			5.1
Liabilities/Financial assets ratio			0.5			0.5			0.5			0.5
Nominal GDP			1,065.0			1,173.3			1,235.2			1,272.5

Source: Haver Analytics.

1/ As of 2012, the asset of the National Pension Fund stood at 393 trillion (295 trillion won excluding government bond holding).

2/ As of 2012, state-owned enterprises (SOEs) in 2012 held 731.2 trillion won of assets and 493.4 trillion won of liabilities.

**Table 4. Korea: Medium-Term Projections, 2012–18**

	Projections						
	2012	2013	2014	2015	2016	2017	2018
<b>Real GDP (percent change)</b>	2.0	2.8	3.7	3.8	3.8	3.8	3.8
Total domestic demand	1.0	2.0	2.7	2.9	3.1	3.3	3.5
Final domestic demand	1.1	2.2	2.8	3.0	3.1	3.3	3.5
Consumption	2.2	1.9	2.7	2.8	2.9	3.0	3.2
Gross fixed investment	-1.7	3.1	2.9	3.5	3.8	4.1	4.3
Net foreign balance 1/	1.1	1.2	1.3	1.2	1.1	0.8	0.8
<b>Prices, period average (percent change)</b>							
Consumer price	2.2	1.1	1.8	3.0	3.0	3.0	3.0
GDP deflator	1.0	2.6	1.6	2.0	2.2	2.1	2.5
<b>Savings and investment (in percent of GDP)</b>							
Gross national savings	31.8	32.3	32.0	31.6	31.4	31.2	31.3
Gross domestic investment	27.6	26.5	26.9	26.8	26.8	26.9	27.2
Current account balance	4.3	5.8	5.1	4.8	4.6	4.3	4.2
<b>Consolidated central government (in percent of GDP)</b>							
Revenue	24.2	23.6	23.6	23.6	23.7	23.8	23.9
Expenditure	22.4	22.6	22.5	22.4	22.1	21.9	21.7
Net lending (+) / borrowing (-)	1.8	1.0	1.2	1.2	1.6	1.9	2.2
Overall balance	1.5	0.7	0.9	1.0	1.4	1.7	2.0
Excluding Social Security Funds	-1.4	-2.1	-1.8	-1.7	-1.2	-0.8	-0.5
Debt, domestic plus external	33.4	35.1	36.2	36.9	37.0	36.7	35.9
<b>Trade (percent change)</b>							
Merchandise exports	0.4	7.5	7.6	7.8	10.4	10.4	10.5
Volumes 2/	5.6	6.0	7.2	9.9	10.8	10.4	9.9
Merchandise imports	-1.1	3.7	8.4	8.7	11.0	11.3	11.4
Volumes 2/	0.5	4.6	6.4	9.9	11.4	11.4	10.9
<b>Balance of payments (in billions of U.S. dollars)</b>							
Current account	48.1	69.5	65.3	65.5	67.5	68.6	70.6
(In percent of GDP)	4.3	5.8	5.1	4.8	4.6	4.3	4.2
Trade balance	39.8	62.2	63.1	62.8	65.4	65.9	66.4
Merchandise exports	554.2	595.5	640.9	690.8	762.6	841.7	930.5
Merchandise imports	514.4	533.3	577.8	628.1	697.2	775.8	864.1
<b>External debt</b>							
In billions of U.S. dollars 3/	409.4	427.1	453.8	480.6	507.7	534.7	562.0
(In percent of GDP)	36.2	35.3	35.4	35.0	34.4	33.9	33.1
Debt service ratio 4/	7.5	7.5	7.8	7.9	8.0	8.3	8.7
<b>Memorandum items:</b>							
Nominal GDP (in trillions of won)	1,272	1,343	1,414	1,497	1,588	1,682	1,789
Per capita GDP (in U.S. dollars)	22,589	24,061	25,373	27,086	28,947	30,856	33,023
Output gap (percent of potential GDP)	-0.1	-0.6	-0.5	0.0	0.0	0.0	0.0

Sources: Korean authorities; and IMF staff estimates and projections.

1/ Contribution to GDP growth.

2/ Customs clearance basis.

3/ Includes offshore borrowing of domestic financial institutions and debt contracted by their overseas branches.

4/ Debt service on medium- and long-term debt in percent of exports of goods and services.

Table 5. Korea: Financial Soundness Indicators, 2009–13

	2009	2010	2011	2012	2013	Date
<b>Financial Sector</b>						
Total loans ( <i>in percent of GDP</i> )	130.6	123.3	126.5	127.3	...	...
Commercial and specialized banks	89.5	84.1	86.1	86.4	...	...
Other financial institutions 1/	41.0	39.2	40.4	40.9	...	...
Bank loans ( <i>growth, in % per annum</i> )						
Large companies	-6.4	15.7	31.8	23.5	7.2	Oct-13
SMEs	4.8	-0.2	2.6	1.3	4.8	Oct-13
Households	5.2	5.3	5.6	2.5	3.0	Oct-13
Banks 2/						
Capital adequacy ratio	14.4	14.6	14	14.3	13.8	Jun-13
Tier 1 capital ratio	10.9	11.6	11.1	11.1	11.0	Jun-13
Return on assets	0.4	0.5	0.7	0.5	...	...
Net interest margin	2.0	2.3	2.3	2.1	1.9	Jun-13
Total loan to deposit ratio 3/	108.9	105.0	103.6	102.4	103.6	Jun-13
Substandard or below loans (share, in percent)						
Commercial banks	1.2	1.9	1.3	1.3	1.8	Sep-13
Specialized banks	1.4	2.0	1.5	1.4	1.8	Sep-13
Mutual savings banks	9.3	10.8	20.1	19.9	...	...
Credit unions	3.7	3.7	3.6	4.2	...	...
<b>Corporate Sector</b>						
Corporate debt/GDP 4/	172.5	165.9	173.3	174.3	...	...
Delinquency ratio (domestic commercial bank loans)	1.0	1.1	1.1	1.2	...	...
Debt ratio to:						
Equity	162.4	82.3	72.5	76.1	...	...
Total assets	24.1	22.7	23.1	21.7	...	...
Sales	33.1	28.6	30.2	28.1	...	...
Interest coverage ratio 5/	1.6	1.6	1.5	1.7	...	...
Current assets/current liabilities	25.1	31.2	30.2	37.0	...	...
Return on assets (weighted average) 6/	6.2	8.3	6.8	7.9	...	...
Return on equity (weighted average) 6/	10.6	14.3	11.0	11.4	...	...
<b>Household Sector 7/</b>						
Household credit ( <i>in percent of disposable income</i> )	128.9	131.1	135.0	136.3	...	...
<i>Of which</i> : Non-bank financial institutions	60.9	64.0	67.8	70.2	...	...
Delinquency ratio (all bank loans)						
Households	0.5	0.6	0.7	0.8	...	...
Credit card 7/	1.4	1.3	1.4	2.4	2.1	Jul-13
Housing prices, percent change	1.5	1.9	6.9	0.0	-0.7	Jul-13
<i>Of which</i> : Seoul	2.7	-1.2	0.3	-2.9	-2.7	Jul-13
Sources: Bank of Korea; Financial Supervisory Service; Worldscope; and CEIC Data Company Ltd.						
1/ Includes merchant banking corp, asset management corp, trust accounts of banks, mutual savings banks, credit unions, mutual credits, community credit cooperatives, and life insurance corp.						
2/ Includes commercial and specialized banks.						
3/ Includes commercial banks only.						
4/ Includes non-financial corporations.						
5/ Operating income to gross interest payments.						
6/ Includes listed companies only.						
7/ all metrics for household sector refer to households, including Non-profit institutions serving households (NPISH).						

**Table 6. Korea: Indicators of Financial and External Vulnerability, 2008–13**  
(In percent of GDP, unless otherwise indicated)

	2008	2009	2010	2011	2012	2013	Data
<b>Financial indicators</b>							
Consolidated central government debt 1/	31.8	35.3	34.8	35.5	36.0	37.1	Proj.
Broad money (M3, percent change, end of period)	9.1	9.4	5.9	6.6	7.8	6.8	Aug-13
Private sector credit (Dep. Corp. survey, percent change, end of period)	16.4	2.5	4.9	6.8	3.7	3.0	Aug-13
One-month call borrowing rate (in percent)	3.0	2.0	2.5	3.3	2.8	2.5	Oct-13
<b>External indicators</b>							
Exports (percent change, 12-month basis in US\$)	11.6	-17.6	28.8	19.6	0.4	-2.0	Sep-13
Imports (percent change, 12-month basis in US\$)	21.9	-25.4	31.5	23.4	-1.1	-4.0	Sep-13
Terms of trade (percent change, 12-month basis)	-14.4	10.8	-0.9	-8.2	2.5	2.2	Proj.
Current account balance (in percent of GDP)	0.3	3.9	2.9	2.3	4.3	5.8	Proj.
Capital and financial account balance (in percent of GDP)	-6.1	4.1	-0.1	-1.2	-3.3	-2.4	Proj.
<i>Of which:</i> Inward portfolio investment (equity, debt securities, etc.)	-14.5	-3.6	-0.5	-2.5	0.2	-0.3	Proj.
Other investment (loans, trade credits etc.)	-1.1	0.0	-0.5	1.7	-1.3	-0.7	Proj.
Inward foreign direct investment in the form of debt or loans	0.2	0.1	0.1	0.1	0.2	0.4	Proj.
Gross official reserves (US\$ billion) 2/	201.1	269.9	291.5	304.2	323.2	343.2	Oct-13
Central bank short-term foreign liabilities (US\$ billion)	18.3	11.7	10.3	8.9	14.9	...	...
Short-term foreign liabilities of the financial sector (US\$ billion)	110.4	115.7	102.1	103.0	85.8	...	...
Official reserves in months of imports GS (projection for full year)	4.6	8.1	6.8	5.9	6.3	6.8	Proj.
Broad money (M3)/reserves (ratio)	7.3	6.4	6.5	6.5	6.8	7	Aug-13
Reserves to total short-term external debt (percent) 3/	111.7	146.2	162.5	165.0	181.2	214.4	Proj.
Total external debt	34.1	41.4	35.4	35.8	36.2	35.3	Proj.
<i>Of which:</i> Public sector debt	2.3	3.3	4.4	4.8	0.0	...	...
<i>Of which:</i> Short-term debt	16.1	17.9	13.8	12.3	11.2	9.3	Proj.
Total external debt to exports GS (percent)	60.4	80.1	65.6	61.6	61.5	60.2	Proj.
External interest payments to exports GS (percent)	1.9	0.8	0.3	0.3	0.4	0.3	Proj.
External amortization payments to exports GS (percent)	5.9	7.0	6.4	6.1	7.1	7.3	Proj.
Exchange rate (per US\$, period average)	1,102	1,277	1,156	1,108	1,127	1,063	11/4/2013
REER appreciation (+) (12-month basis)	-18.8	-11.7	8.4	0.1	-0.2	5.5	Oct-13
<b>Financial market indicators 4/</b>							
Stock market index (KOSPI)	1124	1683	2051	1826	1997	2025	11/4/2013
Stock market index (KOSPI, percent change (y/y))	-40.7	49.7	21.9	-11.0	9.4	6.1	11/4/2013
Foreign currency debt rating (Moody's/S&P)	A2/A	A2/A	A1/A	A1/A	A1/A	Aa3/A+	11/4/2013
Credit default swap on government (index)	175.2	103.3	76.3	146.6	71.2	62.8	11/4/2013
Cross currency swap spreads (1 year, basis points)	-198.5	-198.5	-180.0	-205.5	-72.0	-59.0	11/4/2013
Sources: Korean authorities; private market sources; and IMF staff estimates and projections.							
1/ Including government-guaranteed restructuring bonds issued by KDIC and KAMCO.							
2/ Excludes gold.							
3/ Short-term debt measured on a residual maturity basis.							
4/ Values for the trading day in each year corresponding to the reference date in the right most column.							



**Table 7. Korea: International Investment Position, 2009–12**

(In billions of U.S. dollars)

	2009	2010	2011	2012
<b>Assets</b>	625.9	694.1	753.7	857.8
Direct Investment Abroad	120.4	143.2	171.5	201.8
Portfolio Investment	101.1	112.2	103.4	137.7
Equity Securities	72.3	81.9	71.7	99.1
Debt Securities	28.8	30.3	31.8	38.6
Financial Derivatives	28.7	27.6	26.7	31.7
Other Investment	105.6	119.5	145.5	159.6
Monetary Authorities	5.1	4.7	4.7	5.6
General Government	3.7	3.9	4.5	4.9
Banks	73.5	80.2	97.0	102.3
Other Sectors	23.4	30.8	39.3	46.9
Reserve Assets	270.0	291.6	306.4	327.0
<b>Liabilities</b>	730.8	831.7	838.2	954.7
Direct Investment in Korea	121.1	134.2	133.7	156.1
Portfolio Investment	391.6	489.4	477.1	578.1
Equity Securities	237.1	317.3	284.3	363.3
Debt Securities	154.5	172.1	192.8	214.8
Financial Derivatives	32.6	27.4	29.1	30.9
Other Investment	185.5	180.7	198.4	189.5
Monetary Authorities	8.1	7.3	7.3	8.0
General Government	2.3	1.6	1.0	0.5
Banks	130.7	122.4	139.7	122.7
Other Sectors	44.4	49.3	50.4	58.3

Source: IMF, *International Financial Statistics*.

Appendix I. Korea—Risk Assessment Matrix<sup>1</sup>

Nature/ Sources of Risk	Likelihood of Realization (In the next 3 years)	Potential Impact
A re-emergence of financial stress in the euro area.	<b>Medium</b>	<b>High</b>
	Stalled or incomplete delivery on policy commitments in Europe could intensify financial stress, with large negative consequences for economic growth in the area, and potential spillovers globally.	A deterioration in external conditions could lead to weakening exports, with negative impact on domestic demand, higher unemployment, and weaker corporate profits translating into higher credit risk related to corporates and households.
Fiscal policy shock in the U.S.	<b>Low</b>	<b>High</b>
	A failure to increase the debt ceiling would lead to financial disruption, a sharp fiscal contraction, and in extremis a technical default, with severe global repercussions.	A sharp fiscal contraction in the US would lead to weaker exports to U.S., and the resulting financial dislocation could lead to a spike in risk premia and the tightening financial conditions would further weigh on growth. As noted in risk 4, rising rates could increase household debt burdens.
Sharp slowdown in growth in China	<b>Medium</b>	<b>Medium</b>
	A further build up in excess capacity would eventually lead to reduced returns on investment and cause bankruptcies and large financial losses and hamper employment and growth. This could lead to growth falling to 4 percent in average during 2014-30.	This would have a substantial affect on Korean exports, since China is its main trading partner, accounting for about 25 percent of Korea's exports. In addition to direct trade effects, second round effects could come into play as a Chinese slowdown could be a drag on the global economy.
Prolonged economic and financial volatility, triggered by prospective exit from UMP	<b>High</b>	<b>Medium to High</b>
	Market volatility and a sharp rise in long-term yields could occur as advanced countries exit from UMP. This could trigger capital outflows from EMs.	<ul style="list-style-type: none"> <li>Severity of the impact remains uncertain and would depend on how smoothly markets normalize the pricing of risk.</li> <li>Notwithstanding the recent resilience of Korea, an abrupt exit could lead to a sudden reversal of capital flows and fall in asset prices could hurt business sentiment and investment, which is already weak. Also, sharply tighter financial conditions could be a drag on growth as financing costs of banks and corporates rise. The relatively large presence of foreign investors in the long term government bond market might magnify these dynamics going forward.</li> <li>Given the high incidence of variable rate household loans, higher interest rates can increase household debt repayment burdens and possibly leading to higher credit risks in the banking sector.</li> </ul>
Global oil shock triggered by geopolitical events	<b>Low</b>	<b>Medium</b>
	Geopolitical risks in the Middle East could precipitate a sharp fall in oil supply, leading to a price of \$150 per barrel.	A spike in oil prices would raise inflation and could unhinge inflation expectations. Monetary policy tightening to counteract this would lead to a slowdown of domestic lending, and impair households' repayment capacity (given prevalence of variable rate loans). It would also lower the purchasing power of households and weigh on consumption. Firms' profit margins would get squeezed as well.
An economic slowdown stemming from aging or policy missteps could result in a sharp deterioration of debt repayment capacity of households and corporates	<b>Medium</b>	<b>Medium</b>
	Household and corporate sectors are already heavily indebted. An economic slowdown triggered by impending aging or policy mistakes (including lack of progress on structural reforms) could lead to further drags on domestic demand. This could lead to a rise in household debt repayment burden relative to income and a deterioration in the financial position of households. It would also lead to rise in corporate distress, as corporate balance sheets are highly leveraged.	<ul style="list-style-type: none"> <li>Given the high level of household debt, slowing domestic demand could spillover and have negative implications for credit risk of financial institutions.</li> <li>However, mitigating factors include high household net assets and low LTVs (of about 50 percent).</li> <li>A sizeable decrease of loan collateral values—which in Korea predominantly takes the form of real estate—would amplify potential bank losses. A serious slowdown could also impair the soundness of corporate sector balance sheets, which would in turn further weigh on domestic demand and have implications for financial stability.</li> </ul>
Risks from North Korea	<b>Low</b>	<b>High</b>
	On the downside, a sharp rise in geopolitical tensions in the peninsula could potentially escalate and lead to destabilization of the Korean peninsula. On the upside, a peaceful reunification scenario could also materialize.	The fallout of a serious escalation would have a vast impact on South Korea and will be multifaceted, entailing considerable fiscal costs and financial market instability. On the other hand, a peaceful reunification scenario would, while having immediate and possibly large fiscal costs, could confer long term benefits related to access to additional labor input and investment opportunities
<b>Policy Response:</b> In most of the scenarios related to external shocks (with the exception of the oil price shock), the appropriate policy response would entail utilizing ample fiscal space and monetary loosening to buffer the effect of the shock. Intervention can be used to smooth excessive exchange rate volatility.		

1/ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline. The RAM reflects staff views on the source of risks and overall level of concern at the time of discussions with the authorities

## Appendix II. Main Recommendations from the 2012 Article IV Consultation and Follow Up

The 2012 Article IV consultation was concluded by the Executive Board on August 27, 2012. At the time, Executive Directors noted that the near-term challenge is to manage the escalating downside risks to the outlook. Against this backdrop, Directors welcomed the authorities' intention to maintain accommodative fiscal and monetary policies, but stressed that, in light of the elevated inflation expectations, normalization should resume once the economy strengthens and the negative output gap starts to close.

Directors noted that in the event of a severe downside scenario, Korea has policy space to respond, especially on the fiscal side. They also underscored that flexible exchange rate and ample international reserves would help cushion against external shocks.

Noting that the won is assessed to be moderately undervalued in real effective terms, Directors welcomed the authorities' intention to limit intervention to smoothing exchange rate fluctuations. Directors called on the authorities to continue vigilance on external vulnerabilities and follow through with their strategy for 'soft-landing' of household debt. Directors also supported the government's plan for a targeted increase in social spending over time.

Since then, the growth moderated more sharply than expected, and negative output gap is now expected to remain through 2014. Inflation is also projected to remain subdued until 2015. Against this backdrop the authorities have taken the following policy actions:

- A supplementary budget of 1¼ percent of GDP was adopted in May to authorize borrowing to make up for a large revenue shortfall and finance a spending increase of around ½ percent of GDP.
- The government also postponed the deadline for broadly restoring balance to 2017. The proposed 2014 budget keeps the overall deficit unchanged from the 2013 supplementary budget (at 1.8 in percent of GDP).
- A plan to implement the Presidents' social spending pledges, by tax base broadening and spending reallocation, was unveiled.
- The Bank of Korea cut its policy rate to 2.5 percent in May 2013.
- The won has appreciated by 7.5 percent since the last Article IV. However, exchange rate policy has entailed active intervention at times.
- The authorities are on-track with the strategy 'soft-landing' of household debt.

## Appendix III. Public Sector Sustainability Analysis (DSA)

### Korea Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

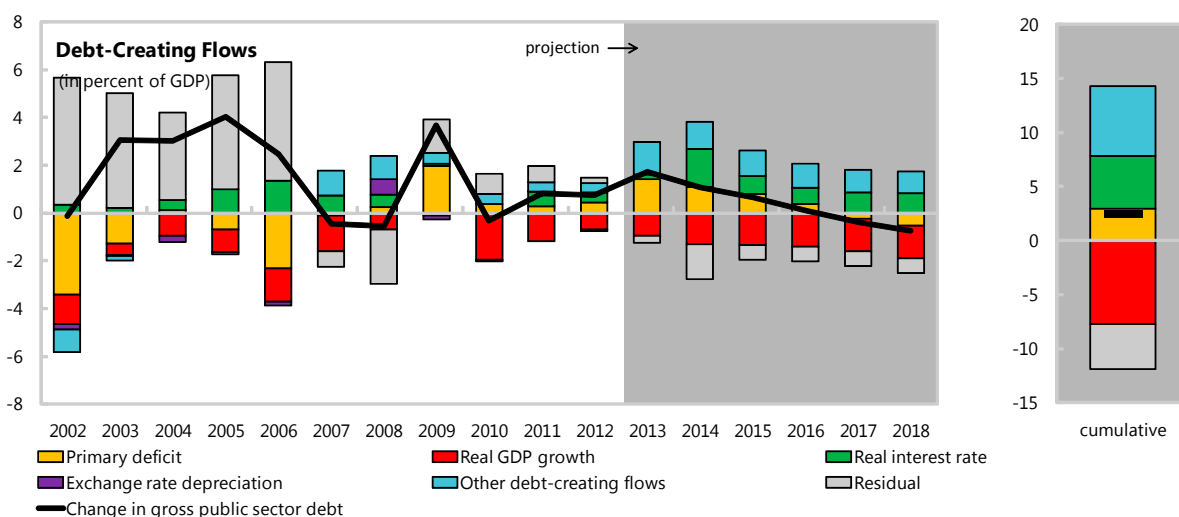
(in percent of GDP unless otherwise indicated)

#### Debt, Economic and Market Indicators <sup>1/</sup>

	Actual			Projections						As of November 15, 2013		
	2002-2010 <sup>2/</sup>	2011	2012	2013	2014	2015	2016	2017	2018	Sovereign Spreads		
Nominal gross public debt	28.1	34.2	35.0	36.7	37.8	38.4	38.5	38.1	37.4	Spread (bp) <sup>3/</sup> 88		
Public gross financing needs	5.5	5.6	6.0	6.5	8.5	7.0	6.1	4.8	4.3	CDS (bp) 60		
Real GDP growth (in percent)	4.2	3.7	2.0	2.8	3.7	3.8	3.8	3.8	3.8	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	2.5	1.8	2.3	3.0	-0.7	2.0	2.2	2.1	2.5	Moody's	Aa3	Aa3
Nominal GDP growth (in percent)	6.8	5.3	3.0	5.1	5.3	5.8	6.1	5.9	6.4	S&P's	A+	AA-
Effective interest rate (in percent) <sup>4/</sup>	4.7	3.7	3.7	3.7	3.7	4.1	4.2	4.5	4.9	Fitch	AA-	AA

#### Contribution to Changes in Public Debt

	Actual			Projections						cumulative	debt-stabilizing primary balance <sup>9/</sup>
	2002-2010	2011	2012	2013	2014	2015	2016	2017	2018		
Change in gross public sector debt	1.6	0.80	0.75	1.7	1.1	0.7	0.1	-0.4	-0.7	2.4	
Identified debt-creating flows	-1	0.14	0.55	2.0	2.5	1.3	0.7	0.2	-0.1	6.6	
Primary deficit	-0.6	0.3	0.4	1.4	1.1	0.8	0.4	-0.2	-0.5	3.0	-0.5
Primary (noninterest) revenue and grant	18.8	18.1	18.7	18.2	18.2	18.2	18.3	18.4	18.4	109.8	
Primary (noninterest) expenditure	18.2	18.4	19.2	19.7	19.3	19.0	18.7	18.1	17.9	112.8	
Automatic debt dynamics <sup>5/</sup>	-0.5	-0.6	-0.3	-0.7	0.3	-0.6	-0.7	-0.5	-0.5	-2.8	
Interest rate/growth differential <sup>6/</sup>	-0.5	-0.6	-0.2	-0.7	0.3	-0.6	-0.7	-0.5	-0.5	-2.8	
Of which: real interest rate	0.5	0.6	0.4	0.2	1.6	0.7	0.7	0.9	0.9	4.9	
Of which: real GDP growth	-1.0	-1.2	-0.7	-0.9	-1.3	-1.3	-1.4	-1.4	-1.4	-7.7	
Exchange rate depreciation <sup>7/</sup>	0.0	0.0	-0.1	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.2	0.4	0.4	1.3	1.1	1.1	1.0	1.0	0.9	6.4	
Net privatization proceeds (negative)	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
General government debt- change (fur)	0.3	0.4	0.4	1.3	1.1	1.1	1.0	1.0	0.9	6.4	
Residual, including asset changes <sup>8/</sup>	2.5	0.7	0.2	-0.3	-1.4	-0.6	-0.6	-0.6	-0.6	-4.2	



Source: IMF staff.

1/ Public sector is defined as the general government (excl. social security fund)

2/ Based on available data.

3/ Bond Spread over U.S. Bonds.

4/ Defined as interest payments divided by debt stock at the end of previous year.

5/ Derived as  $[(r - p(1+g) - g + ae(1+r))/(1+g+p+gp)]$  times previous period debt ratio, with  $r$  = interest rate;  $p$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;

$a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the denominator in footnote 4 as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

7/ The exchange rate contribution is derived from the numerator in footnote 2/ as  $ae(1+r)$ .

8/ For projections, this line includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

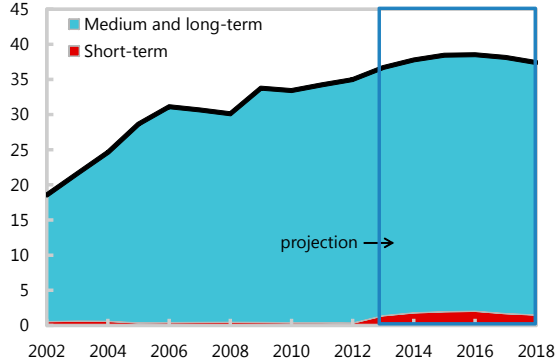
10/ Debt stabilizing primary balance is defined by primary balance needed to offset automatic debt dynamics in 2018.

### Korea Public DSA - Composition of Public Debt and Alternative Scenarios

#### Composition of Public Debt

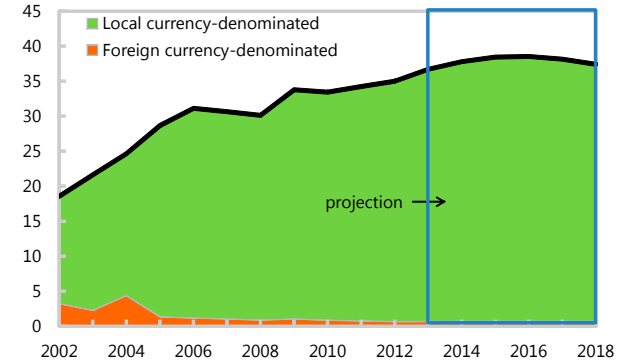
##### By Maturity

(in percent of GDP)



##### By Currency

(in percent of GDP)

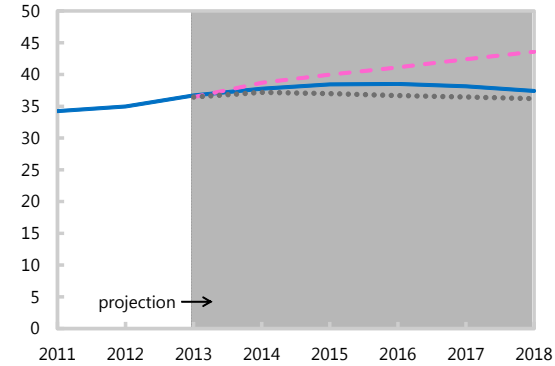


#### Alternative Scenarios

— Baseline      ..... Historical      - - - - - Constant Primary Balance

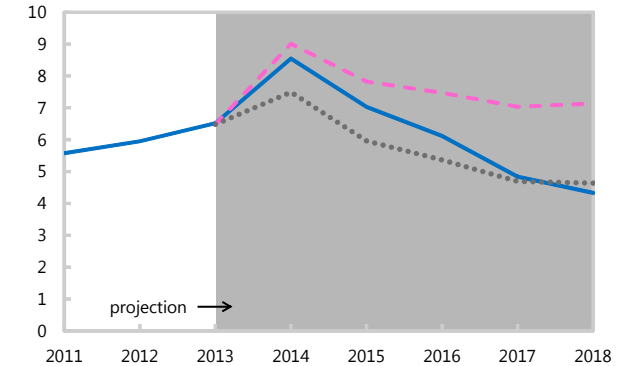
##### Gross Nominal Public Debt

(in percent of GDP)



##### Public Gross Financing Needs

(in percent of GDP)



#### Underlying Assumptions

(in percent)

Baseline Scenario	2013	2014	2015	2016	2017	2018
Real GDP growth	2.8	3.7	3.8	3.8	3.8	3.8
Inflation	3.0	-0.7	2.0	2.2	2.1	2.5
Primary Balance	-1.4	-1.1	-0.8	-0.4	0.2	0.5
Effective interest rate	3.7	3.7	4.1	4.2	4.5	4.9
<b>Constant Primary Balance Scenario</b>						
Real GDP growth	2.8	3.7	3.8	3.8	3.8	3.8
Inflation	3.0	-0.7	2.0	2.2	2.1	2.5
Primary Balance	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
Effective interest rate	3.7	3.7	4.1	4.2	4.6	5.0

Historical Scenario	2013	2014	2015	2016	2017	2018
Real GDP growth	2.8	3.6	3.6	3.6	3.6	3.6
Inflation	3.0	-0.7	2.0	2.2	2.1	2.5
Primary Balance	-1.4	0.1	0.1	0.1	0.1	0.1
Effective interest rate	3.7	3.7	4.0	4.0	4.4	4.7

Source: IMF staff.



# REPUBLIC OF KOREA

## STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

December 16, 2013

Prepared By

Asia and Pacific Department

### CONTENTS

<b>FUND RELATIONS</b>	<b>2</b>
<b>STATISTICAL ISSUES</b>	<b>5</b>

## FUND RELATIONS

(As of November 20, 2013)

**Membership Status:** Joined August 26, 1955; Article VIII

### General Resources Account

	SDR Million	Percent Quota
Quota	3,366.40	100.00
Fund holdings of currency (exchange rate)	2,556.47	75.94
Reserve tranche position	809.94	24.06
Lending to the Fund		
New arrangements to borrow	818.76	

### SDR Department

	SDR Million	Percent Allocation
Net cumulative allocation	2,404.45	100.00
Holdings	2,261.35	94.05

### Outstanding Purchases and Loans

None

### Financial Arrangements (In SDR Million)

Type	Date of Arrangement	Expiration Date	Amount Approved	Amount Drawn
Stand-by	Dec. 04, 1997	Dec. 03, 2000	15,500.00	14,412.50
Of which SRF	Dec. 18, 1997	Dec. 17, 1998	9,950.00	9,950.00
Stand-by	Jul. 12, 1985	Mar. 10, 1987	280.00	160.00
Stand-by	Jul. 08, 1983	Mar. 31, 1985	575.78	575.78

### Projected Obligations to Fund<sup>1</sup>

(SDR Million; based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2012	2013	2014	2015	2016
Principal	0.0	0.0	0.0	0.0	0.0
Charges/interest	0.03	0.14	0.14	0.14	0.14
Total	0.03	0.14	0.14	0.14	0.14

<sup>1</sup> When a number has overdue financial obligations outstanding for more than three months, the amount of arrears will be shown in this section.

**Exchange Rate Arrangement:**

Korea's exchange rate system has been classified as "floating" since 2009. Over 1997–2008, the exchange rate was classified as "free floating" ("independently floating" under the older classification system). Korea maintains exchange restrictions for security reasons, in accordance with UN Security Council Resolutions, which have been notified to the Fund under the procedures set forth in Executive Board Decision 144 (52/51).

**FSAP and ROSC Participation:**

An FSAP update, requested by the authorities, was conducted in April and July 2013. The missions included an assessment of various financial sector standards; the soundness of the financial sector, including vulnerability to macroeconomic shocks; and the crisis preparedness and management framework of Korea. Prior to this, the previous FSAP mission was conducted in October 2002. The Financial System Stability Assessment (FSSA) report for the 2003 assessment has been published (Country Report No. 03/81) and is available on the web at:

<http://www.imf.org/external/np/fsap/fsap.asp>.

FAD: Discussions on fiscal transparency were held in Seoul during June 2000, and a report was drafted and finalized in November 2000, with input from APD staff. The report has been published and is available on the web through the following link:

<http://www.imf.org/external/np/rosc/kor/fiscal.htm>.

STA: Discussions on Korea's data dissemination practices against the IMF's Special Data Dissemination Standard (SDDS) were held in Seoul during December 2009, and a Report on the Observance of Standards and Codes (ROSC) was drafted and finalized in July 2010. The report has been published and is available on the web through the link:

<http://www.imf.org/external/pubs/ft/scr/2010/cr10229.pdf>

**Technical Assistance:**

FAD: A technical assistance mission on government finance statistics took place in Seoul during the period November 8–19, 2010. A mission visited Seoul during August 31–September 16, 2005 to provide technical assistance on the reform of tax policy and administration. A technical assistance mission visited Seoul during January 8–19, 2001 to evaluate current practices in budgeting and public expenditure management and to provide advice on setting up a medium-term fiscal framework.

MCM: Technical assistance missions visited Seoul to provide advice on financial holding company supervision and derivatives regulation during December 8–17, 2008, on measures to deepen the money market during December 4–14, 2007, on strengthening the debt management function and further development of the government securities market during September 20–October 2, 2006, on



the reform and development of the foreign exchange market during March 30–April 13, 2006, and on macroprudential and derivatives supervision during October 27–November 7, 2005.

STA: Technical assistance missions visited Seoul during March 29–April 12, 2000 to provide advice on balance of payments and external debt statistics, with a view toward improving the recording of financial derivatives and developing an international investment position statement, and during November 28–December 11, 2007 on the GFSM 2001 framework. Two missions to support reforms related to government finance statistics visited Korea during November 28–December 11, 2007 and November 8–19, 2010, respectively.

**Resident Representative:**

The resident representative office in Seoul was opened in March 1998 and was closed in September 2008.

## STATISTICAL ISSUES

As of November 20, 2013

<b>I. Assessment of Data Adequacy for Surveillance</b>
<p><b>General:</b> Data provision is adequate for surveillance.</p>
<p><b>National Accounts:</b> The overall structure of the national accounts follows the recommendations of the <i>1993 System of National Accounts</i>. Chain-linked (reference year 2005) and nominal GDP estimates are compiled using the production and expenditure approaches; nominal GDP estimates are also compiled using the income approach. After the revision to reference year 2005, the estimation method for expenditure components has been altered from the commodity flow method to the direct estimation method, in which each expenditure component is measured directly. The size of the informal sector has not been measured. Improved methods are required to adjust quarterly (seasonally-unadjusted) GDP estimates to agree with annual (benchmark) GDP estimates.</p>
<p><b>Consumer Price Index:</b> The Consumer Price Index (CPI) covers 92.9 percent of total households of Korea; it excludes farming and fishing households. The geographical coverage, which includes 37 urban areas, should be extended to rural areas. The consumption basket is updated only every five years; currently, expenditure weights are derived from the <i>2010 Household Income and Expenditure Survey</i>. The new CPI index adopts both geometric means and the ratio of arithmetic means. The geometrics means should be used for all unweighted aggregation. The missing prices of products, except for the seasonal items, are imputed by the price movements of similar products of the same item in the same geographic area. However, the CPI could be improved further by imputing missing prices of the seasonal items rather than carrying forward the last reported prices.</p>
<p><b>Producer Price Index:</b> The Producer Price Index (PPI) covers all domestic industrial activities and a large segment of service activity. It excludes exported products, however, because the Export Price Indexes are compiled separately in Korea. The rebased PPI (2010 = 100) employs 2008 SNA concepts and definitions for the record and valuation of the prices and weights. The PPI could be improved by making more use of imputing missing prices using the prices of similar commodities, rather than carrying forward the last reported price. Mostly, the simple geometric average and the weighted geometric average are employed in the elementary level index compilation. But in some, the indices are computed by the weighted arithmetic average. Nevertheless, the headline PPI should be changed to the one based on a geometric mean at the elementary level. The PPI classification by activity conforms to the KSIC, which is itself based on the International Standard Industrial Classification (ISIC)—with slight modifications only to reflect local considerations. The Korean commodity classification used for the PPI does not conform to the Central Product Classification (CPC) and one based on the CPC should be adopted as soon as possible.</p>
<p><b>Government Finance Statistics:</b> Two sets of government finance statistics (GFS) are compiled for the central government, one using national definitions and the other using internationally recognized standards. Concepts and definitions used in the latter followed the recommendations of the <i>Manual on Government Finance Statistics 1986</i> until recently. The authorities have embarked on an ambitious program to implement reporting according to <i>GFSM 2001</i>, and the first set of financial statements based on the reformed system was released in 2012. The 2009 ROSC indicated that while compilation practices are generally sound, some room for improvement of the accessibility and timeliness of data and metadata existed. Following the 2009 ROSC, the Korean authorities resumed reporting consolidated GFS</p>

data on the general government for publication in the *Government Finance Statistics Yearbook (GFSY)*. The timeliness of these data does not comply with SDDS requirements, mainly due to the lack in timeliness on local government source data. During the 2009 ROSC, the authorities also agreed to improve national dissemination practices and initiated work on improving national websites. However, high frequency data for inclusion in the *International Financial Statistics (IFS)* are not yet reported.

**Financial Sector Data:** Monetary and financial statistics (MFS) compiled by the Bank of Korea (BOK) broadly follow the IMF's *Monetary and Financial Statistical Manual 2000*. Both liabilities and assets in foreign currencies are converted into Korean Won at the previous business day's trading volume weighted average rate prevailing on the balance sheet date. The data are revalued monthly. The BOK is in discussion with STA about reporting MFS using the standardized report forms (SRFs) and drafting related metadata for publication in the *IFS*. Draft SRFs for the central bank and other depository corporations were reported to STA.

Korea participates in the regular reporting of *Financial Soundness Indicators (FSIs)* to the IMF for dissemination on its website. FSI data and metadata are available to the public through the IMF's website at: <http://fsi/FSIHome.aspx#Country>.

**External Sector Statistics:** The BOK currently compiles the BOP and IIP statistics consistent with the Balance of Payment and International Investment Position Manual, sixth Edition (BPM6) analytical framework (see <http://ecos.bok.or.kr/>). The authorities have indicated that the data published in the BOK website are the results of the first-stage implementation of the BPM6, and data compiled by fully using this framework are scheduled to be disseminated in 2013.

The quality of the quarterly external debt statistics has greatly improved. In early 2007, the BOK switched from annual to quarterly reporting of the International Investment Position. Data dissemination on international reserves and foreign currency liquidity meets the SDDS specifications. Since April 2006, the authorities have disseminated foreign reserves data on a monthly basis rather than twice a month, as had been done since 1997.

Korea reports balance of payments and IIP data for the *IFS* (quarterly data) and the *Balance of Payments Statistics Yearbook* (annual data) publications.

## II. Data Standards and Quality

Korea has subscribed to the Fund's Special Data Dissemination Standard (SDDS) since September 1996, and it uses SDDS flexibility options for the timeliness of the general government operations, central government operations and analytical accounts of the banking sector data. Korea is also availing itself of a relevant flexibility option for the coverage of exchange rates.

A Data ROSC reassessment was published in July 2010.

**Korea—Table of Common Indicators Required for Surveillance**  
(As of November 20, 2013)

	Date of Latest Observation	Date Received	Frequency of Data <sup>7</sup>	Frequency of Reporting <sup>7</sup>	Frequency of Publication <sup>7</sup>	Memo Items:	
						Data Quality – Methodological Soundness <sup>8</sup>	Data Quality – Accuracy and Reliability <sup>9</sup>
Exchange Rates	11/20/2013	11/20/2013	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	Oct. 2013	Nov. 2013	M	M	M		
Reserve/Base Money	Sep. 2013	Nov. 2013	M	M	M	O, O, O, LO	O, O, O, O, O
Broad Money	Sep. 2013	Nov. 2013	M	M	M		
Central Bank Balance Sheet	Sep. 2013	Nov. 2013	M	M	M		
Consolidated Balance Sheet of the Banking System	Sep. 2013	Nov. 2013	M	M	M		
Interest Rates <sup>2</sup>	11/20/2013	11/20/2013	D	D	D		
Consumer Price Index	Oct. 2013	Nov. 2013	M	M	M	O, O, O, O	O, O, LO, O, O
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>	NA	NA	NA	NA	NA	O, O, O, O	O, O, N/A, O, NA
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	Jun. 2013	Sep. 2013	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	Q2 2013	Sep. 2013	Q	Q	Q		
External Current Account Balance	Sep. 2013	Oct. 2013	M	M	M	O, LO, LO, LO	O, O, O, O, O
Exports and Imports of Goods and Services	Sep. 2013	Oct. 2013	M	M	M		
GDP/GNP	Q2 2013	Sep. 2013	Q	Q	Q	O, O, O, O	O, O, LO, O, LO
Gross External Debt	Q2 2013	Oct. 2013	Q	Q	Q		
International Investment Position <sup>6</sup>	Q2 2013	Oct. 2013	Q	Q	Q		

<sup>1</sup> Any

<sup>1</sup> Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

<sup>2</sup> Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Includes external gross financial assets and liability positions vis-à-vis nonresidents.

<sup>7</sup> Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

<sup>8</sup> Reflects the assessment provided in the data ROSC or the Substantive Update (published in July 2010, and based on the findings of the mission that took place during December 09–22, 2009) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).

<sup>9</sup> Same as footnote 8, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, and revision studies.



# REPUBLIC OF KOREA

## STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—SUPPLEMENTARY INFORMATION

January 6, 2014

Prepared By

Asia and Pacific Department

1. This supplement to the staff report summarizes the main developments since the staff report was issued on December 13, 2013. Staff projections and the thrust of the staff appraisal remain unchanged.
2. The National Assembly has passed the 2014 government budget with minor changes.
  - The National Assembly cut total expenditure by 1.9 trillion won from the government's proposal (to 355.8 trillion won), and total revenue by 1.4 trillion won (to 369.3 trillion won).
  - As a result, the overall deficit (excluding social security funds) is now set at 25.5 trillion won (1.8 percent of GDP), slightly smaller than the government's proposed target of 25.9 trillion won (1.8 percent of GDP).
3. The Strategy and Finance Committee of the National Assembly has passed a draft 2013 Tax Revision Bill. If approved as is by the National Assembly, the overall revenue impact of the bill (which is reflected in the 2014 government budget just adopted by the National Assembly) is estimated at +2.19 trillion won over the medium term (+0.43 trillion won for 2014), slightly larger than entailed by the original budget proposal (+1.96 trillion won over the medium term; +0.37 trillion won for 2014).
4. The Ministry of Strategy and Finance released 2014 Economic Policies. This document states that the government will manage fiscal policy in a flexible manner to maintain recovery momentum in the first half of the year, and will frontload spending for major government projects. This policy intent is welcome.
5. Latest data releases are broadly consistent with the staff's projections.
  - Industrial production remained flat in November at a relatively high level. PMI edged up to 50.8 in December from 50.4 in November.

- CPI inflation remained at 1.1 percent in December (1.3 percent for 2013) broadly in line with the staff's expectation (1.0 percent in December and 1.1 percent for 2013). Starting with the December CPI release, Statistics Korea began to shift from expenditure weights derived from the 2010 Household Income and Expenditure Survey to ones derived from the 2012 Survey. This shift resulted in slight revision of the inflation data series.

Headline CPI inflation (In percent, year on year)

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
New Index	1.6	1.6	1.5	1.3	1.1	1.2	1.6	1.5	1.0	0.9	1.2	1.1
Old Index	1.5	1.4	1.3	1.2	1.0	1.0	1.4	1.3	0.8	0.7	0.9	...

Note: New CPI index uses weights based on 2012 household survey, while the old one uses those based on 2010 household survey.

- The current account registered a 64.3 billion dollar surplus in January to November 2013, likely implying that staff's year end projection of 65.2 billion dollars will be exceeded.
6. The won has appreciated slightly since the Staff Report was issued.
- Both the real and nominal effective exchange rate appreciated 1 percent in November from October (the last data point applied to the EBA update reflected in the Staff Report).



INTERNATIONAL MONETARY FUND



Press Release No. 14/20  
FOR IMMEDIATE RELEASE  
January 22, 2014

International Monetary Fund  
700 19<sup>th</sup> Street, NW  
Washington, D. C. 20431 USA

### **IMF Executive Board Concludes 2013 Article IV Consultation with the Republic of Korea**

On January 10, 2013, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with the Republic of Korea.

GDP growth has bottomed in 2013 after slowing sharply in 2012. The economy expanded by 1.1 percent in Q2 and Q3 2013, with exports rebounding and private consumption and construction strengthening. Real GDP growth is projected to reach 2.8 percent in 2013. Reflecting stronger exports and muted domestic demand, the current account surplus widened and is expected to reach around 5 <sup>3</sup>/<sub>4</sub> percent of GDP. Inflation has fallen from 4.2 percent in 2011 to 0.9 percent in October 2013, well below the target band of 2½–3½ percent, in the absence of demand pressures and falling food prices.

The economy is expected to strengthen further and growth to rise to 3.7 percent in 2014. Domestic demand is expected to strengthen as consumption and investment recover supported by higher wages and stronger exports respectively, as well as a bounce back from the low base. However, risks are on the downside. The main near-term risks are external: sharply slower growth in Korea's main trading partners or severe market stress. With a significant private debt overhang, key domestic risks are weak domestic demand and, over time, lower potential growth if structural reforms fail to offset the drag from rapid aging.

To support the economy, a supplementary budget of 1¼ percent of GDP was adopted in May 2013 to authorize borrowing to make up for a large revenue shortfall and finance a spending increase of around ½ percent of GDP. The government also postponed to 2017 the deadline for broadly restoring balance. The proposed 2014 budget keeps the overall deficit unchanged from the 2013 supplementary budget (at 1.8 in percent of GDP). To maximize policy effectiveness, the Bank of Korea cut its policy rate to 2.5 percent in May 2013, amid the uncertain global outlook, the continued negative output gap, and subdued inflation.

The resilience of the Korean financial system has increased since 2008 as a result of concerted policy efforts. Banks' liquidity profiles have improved markedly due to well designed

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

macroprudential measures, as reflected in lower external debt and FX liquidity mismatches. Banks are highly capitalized, with an average capital adequacy ratio of 14.3 percent during Q3 2013, and have low nonperforming loans ratios, reflecting active disposal. However, low net interest margin and non-interest income have led to weak profits. Depository institutions' lending growth to the household sector has continued to decline, increasing by 3.2 percent as of end-June 2013, down from double-digits prior to the crisis. However, lending by non-depository institutions continues to be brisk, up 11 percent annually over the same period.

### **Executive Board Assessment<sup>2</sup>**

Executive Directors commended the Korean authorities for their skillful policymaking, which allowed the economy to fare well in the recent crisis and position itself to gain from the global recovery. They stressed the need for continued structural reforms to rebalance the economy toward domestic demand, promote inclusive growth, and continue lifting living standards.

Directors noted that, while a modest recovery is underway, domestic demand remains relatively weak and the output gap is expected to remain negative through 2014. They considered it important to ensure that the monetary and fiscal stances remain supportive of the recovery until it is firmly entrenched. Directors agreed that risks to the growth outlook are on the downside, both in the near and longer term. These include, on the external side, adverse global growth surprises and severe market stress. On the domestic demand side, Directors saw as key risks high private sector indebtedness and ensuing deleveraging needs, weak household income growth, and population aging.

Directors commended the authorities for their fiscal prudence, which has provided Korea with ample fiscal room to maneuver. They agreed that priority should be placed on enhancing automatic stabilizers and increasing social safety nets, while broadening the tax base. Most Directors supported the authorities' current medium term fiscal path to restore a balanced budget, given rapid population aging, contingent liabilities, and geopolitical risks. Others saw scope for somewhat higher deficit targets—implemented prudently—in support of social needs and rebalancing growth toward domestic demand. Directors generally felt that a structural fiscal framework deserves further consideration, although a few did not see a strong case for it given Korea's track record of fiscal discipline. Directors welcomed the authorities' ongoing efforts to enhance fiscal transparency, including on contingent government liabilities.

Directors noted the widening of Korea's external imbalance and the increased pressure on the exchange rate, which the staff assessed as being moderately undervalued in real effective terms. A number of Directors expressed the need for caution in interpreting the results of model based assessments. Directors were of the view that the won should continue to be market determined, with intervention limited to smoothing disorderly market conditions. In this context, many Directors considered that increased transparency in interventions would help enhance the credibility of the authorities' exchange rate policy. Structural policies to bolster domestic

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<sup>2</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.



demand and continued flexibility of the won in line with fundamentals would facilitate economic rebalancing. Some Directors considered that the current level of reserves is adequate and does not warrant further accumulation, while a few others, noting the proven benefits of building a strong buffer in past crises, cautioned against prejudging the case.

Directors supported the authorities' reform agenda aimed at increasing labor force participation and reducing labor market duality. They saw the merits of deregulation, including in network industries, reducing government intervention, and promoting competition in the service sector. Directors encouraged further efforts to boost service sector productivity and strengthen the competitiveness of small and medium sized enterprises, including by phasing out the prolonged use of loan guarantees.

Directors agreed that the financial sector is sound overall. They nevertheless encouraged the authorities to monitor risks closely, particularly weak bank profits, debt owed by fragile households and corporations, and activities in nonfinancial depository institutions. Directors underscored the importance of further improving the supervisory structure, including by strengthening operational independence, group wide supervision, and institutional coordination.

<b>Korea: Selected Economic Indicators, 2009–15</b>							
	2009	2010	2011	2012	Projections		
					2013	2014	2015
<b>Real GDP (percent change)</b>	0.3	6.3	3.7	2.0	2.8	3.7	3.8
Total domestic demand	-2.7	6.2	2.0	1.0	2.0	2.7	2.9
Final domestic demand	0.6	4.5	1.4	1.1	2.2	2.8	3.0
Consumption	1.2	4.1	2.3	2.2	1.9	2.7	2.8
Gross fixed investment	-1.0	5.8	-1.0	-1.7	3.1	2.9	3.5
Net foreign balance 1/	2.8	0.1	1.9	1.1	1.2	1.3	1.2
<b>Nominal GDP (in trillions of won)</b>	1,065.0	1,173.3	1,235.2	1,272.5	1343.0	1414.2	1496.6
<b>Saving and investment (in percent of GDP)</b>							
Gross national saving	30.2	32.4	31.8	31.8	32.3	32.0	31.6
Gross domestic investment	26.3	29.5	29.5	27.6	26.5	26.9	26.8
Current account balance	3.9	2.9	2.3	4.3	5.8	5.1	4.8
<b>Prices (percent change)</b>							
CPI inflation (end of period)	2.8	3.0	4.2	1.4	1.0	2.5	3.0
CPI inflation (average)	2.8	2.9	4.0	2.2	1.1	1.8	3.0
Core inflation (average)	3.6	1.8	3.2	1.7	1.5	2.0	3.0
Real effective exchange rate	-12.4	11.4	0.6	1.1	...	...	...
<b>Trade (percent change)</b>							
Export volume	0.1	14.4	13.9	5.6	6.0	7.2	9.9
Import volume	-2.2	16.8	5.6	0.5	4.6	6.4	9.9
Terms of trade	10.8	-0.9	-8.2	2.5	2.2	-1.4	-0.8
<b>Consolidated central government (in percent of GDP)</b>							
Revenue	23.0	22.7	23.3	24.2	23.6	23.6	23.6
Expenditure	23.0	21.0	21.4	22.4	22.6	22.5	22.4
Net lending (+) / borrowing (-)	0.0	1.7	1.8	1.8	1.0	1.2	1.2
Overall balance	-1.7	1.4	1.5	1.5	0.7	0.9	1.0
Excluding Social Security Funds	-4.1	-1.1	-1.1	-1.4	-2.1	-1.8	-1.7
<b>Money and credit (end of period)</b>							
Overnight call rate 2/	2.0	2.5	3.3	2.8	2.5	...	...
Three-year AA- corporate bond yield 2/	5.5	4.3	4.2	3.3	3.3	...	...
M3 growth 3/	9.4	5.9	6.6	7.8	6.8	...	...
<b>Balance of payments (in billions of U.S. dollars)</b>							
Exports, f.o.b.	358.2	461.4	551.8	554.2	595.5	640.9	690.8
Imports, f.o.b.	320.3	421.4	520.1	514.4	533.3	577.8	628.1
Oil imports	50.8	68.7	100.8	108.3	109.9	109.5	106.0
Current account balance	32.8	29.4	26.1	48.1	69.5	65.3	65.5
Gross international reserves (end of period) 4/	269.9	291.5	304.2	323.2	363.3	385.3	407.7
In percent of short-term debt (residual maturity)	146.2	162.5	165.0	181.2	214.4	220.0	225.2
<b>External debt (in billions of U.S. dollars)</b>							
Total external debt (end of period)	345.7	359.8	398.7	409.4	427.1	453.8	480.6
Of which: Short-term (end of period)	149.2	139.8	137.4	126.8	112.9	114.0	115.2
Total external debt (in percent of GDP)	41.4	35.4	35.8	36.2	35.3	35.4	35.0
Debt service ratio 5/	7.8	6.8	6.4	7.5	7.5	7.8	7.9

Sources: Korean authorities; and IMF staff estimates and projections.

1/ Contribution to GDP growth.

2/ Data for 2013 are as of November 4, 2013.

3/ Data for 2013 are as of August.

4/ Excludes gold.

5/ Debt service on medium- and long-term debt in percent of exports of goods and services.

**Statement by Jong-Won Yoon, Executive Director for the Republic of  
Korea, Wonjin Choi, Advisor to Executive Director, and  
Kyoungwan Moon, Advisor to Executive Director  
January 10, 2014**

On behalf of the Korean authorities, we thank the staff team for their constructive policy dialogue with the authorities, including the productive FSAP discussions.

Korea has weathered the global financial crisis relatively well owing to strengthened economic fundamentals, comfortable policy buffers, and concerted policy efforts. Although the growth rate has remained below its potential in recent years, Korea has successfully safeguarded macroeconomic and financial stability since the global crisis. Nevertheless, there remain considerable policy challenges, which include relatively high household sector indebtedness, rapid population aging, weak domestic demand, high exposure to external shocks resulting from trade and financial openness, and geopolitical risks and the resulting potential fiscal burden.

The Korean authorities have been addressing these challenges preemptively with prudent macroeconomic policies and strenuous structural reforms. Fiscal policy has been firmly anchored to longer term sustainability while providing adequate short-term support when needed. Monetary policy has remained flexible to developments in inflation and financial markets. Exchange rates have continued to be flexible, absorbing most of the external shocks to the economy, with interventions strictly limited to smoothing operations. Macroprudential policies have also been employed to prevent systemic risks, being mindful of the right balance with traditional macroeconomic policies.

We note that most of the staff assessment and advice are broadly aligned with the authorities' appraisal and policy directions. The 2013 mission has provided interesting ideas, part of which seemed to depart from previous missions' positions and policy advice. We found some of them, such as on fiscal policy, to be a potentially reviewable option, but do not consider them relevant at the current juncture given the need to take into account country-specific factors. We particularly note our authorities' disagreement with the staff assessments on the external sector, including on exchange rates and foreign exchange intervention, which are based on a subjective judgment and potentially biased information, leading to confusion and undermining the credibility of the analysis. We also note statistical inconsistencies, including in corporate debt, which could affect relevance of staff's views. We urge the staff team to listen more carefully to the authorities' policy endeavors to balance diverse risks and to give due consideration of country-specific factors in the assessment.

### **Recent development and outlook**

The economy has been showing stronger signs of recovery. Real GDP grew 3.3 percent y.o.y in Q3 2013 on the back of improved private consumption and investment. The authorities project that this trend will continue, with the 2014 GDP growth being projected to reach 3.9 percent, based on

greater domestic demand. Private consumption is expected to increase 3.3 percent supported by improvements in employment. Investment is also expected to grow 6.6 percent.

CPI inflation has fallen to 1.3 percent in 2013, below the Bank of Korea (BOK) target band of 2½-3½ percent, due to weak aggregate demand, subdued commodity price, and the one-off downward effect of expanded childcare subsidies. CPI inflation is expected to rise to 2.3 percent this year as demand pressure increases.

Job creation has rebounded strongly in 2013 aided by growth recovery and the new administration's vigorous labor market policy agenda, "70 percent Roadmap," to boost the employment rate to 70 percent by 2017. The employment rate increased to 64.9 percent in November 2013 from 64.2 percent in 2012. Improvement in female employment is also gaining speed with the number of females employed recently exceeding the previous trend. The unemployment rate fell to 2.9 percent in November 2013 from 3.2 percent in 2012. This strong performance is expected to continue through 2014, with the employment rate reaching 65.2 percent and unemployment remaining at about 3 percent.

The current account surplus has widened in 2013 largely due to lower oil prices and sluggish domestic demand. The value of exports increased 2.2% and that of imports decreased 0.8% in 2013. However, the imports began to turn around from Q3 2013, and this trend is expected to further strengthen in 2014. The authorities project that the current account surplus will decline to below 4 percent of the GDP in 2014 as the import growth (9.0 percent) is expected to outpace the export growth (6.4 percent), reflecting the improving domestic demand and the lagging effect of the Korean won appreciation in the second half of 2013 (8.2 percent against the US dollar and 15.4 percent against the Japanese yen, and 6.7 percent in the BIS REER term). It is also worthwhile to note that while the currencies of most emerging market economies depreciated in large part due to the prospect of the QE tapering, the Korean won actually appreciated significantly during the period.<sup>1</sup>

## **Fiscal policy**

Korea has maintained a strong record of fiscal soundness, which has buttressed the economy during the periods of a crisis or when geopolitical risk materialized. The authorities are committed to sustaining fiscal prudence and meeting the medium-term fiscal policy objectives, as stipulated in the Five Year National Fiscal Management Plan. This includes a gradual recovery to a broadly balanced budget position by 2017 and stabilization of government debt at the current level through broadening the revenue base, reducing the tax expenditures, and consolidating the expenditures. The 2014 budget included measures to raise the personal income tax revenue from high-income earners and also to consolidate tax exemptions further.

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<sup>1</sup> The real effective exchange rate of the Korean won between April and November 2013 has appreciated the most (5.0%) among 34 countries in the world (US 0.8%, China 1.6%, Japan 0.4%, Euro Area 3.1%, UK 3.4%), excluding Venezuela (25.8%) [William R. Cline, "Estimates of Fundamental Equilibrium Exchange Rates, November 2013," Peterson Institute for International Economics, November 2013].

The 2013 budget was expansionary with the deficit being expected to widen to 1.8 percent of GDP owing to the implementation of the supplementary budget aiming at supporting domestic demand and job creation. The 2014 budget envisages the overall deficit at 1.8 percent of GDP, which will provide a similar magnitude of fiscal support to the economy as in 2013. While staff noted the need for a supplementary budget in 2014, the authorities consider it particularly unlikely at the current juncture, as its implementation should depend on future economic development rather than being prejudged now, and also given the improving economic prospect this year. Nevertheless, the authorities will expedite their efforts to enhance the responsiveness of fiscal policy to business cycles by strengthening the role of automatic stabilizers such as expanding targeted welfare provision.

The authorities remain cautious about staff's recommendation to increase fiscal deficits and raise government debt to about 60 percent from the current mid 30 percent level. Huge potential fiscal costs related to geopolitical uncertainties as well as rapidly aging population should be taken into account in determining longer-term fiscal policy objectives.<sup>2</sup> The authorities will remain vigilant to fiscal risks and strengthen fiscal rules for ensuring fiscal sustainability. In this regard, the authorities see the need for tighter monitoring of the liabilities of the SOEs and the overall public sector under a more stringent standard. With a view to providing a more accurate picture of the fiscal sector, they are planning to publish data on comprehensive public sector indebtedness. The resulting greater fiscal transparency on the public debt situation will help guide the authorities' decisions on medium-term fiscal objectives and also enhance public awareness on the pursuit of fiscal policy.

### **Monetary and Exchange rate policy**

The monetary authority has maintained an accommodative policy stance, keeping the policy rate low at 2.5 percent, considering weak global and domestic demands as well as financial market uncertainties related to the normalization of unconventional monetary policies in advanced countries.

The external sector has remained resilient despite external shocks. The exchange rate has continued to be determined in the market. Given the Korean economy's high degree of openness and the tendency for the exchange rate to overshoot in the event of major external developments such as North Korea's nuclear program, the Korean authorities consider that market interventions are useful to smooth excessive volatility in the foreign exchange market. Nonetheless, interventions have been restricted to smoothing operations, in a limited way in both directions, rather than "active and asymmetrical" as staff indicated.

We do not consider staff's analysis of exchange rate intervention in Box 2 to be relevant. Expressions like "while subject to uncertainty" and "Discussion with market sources" in Box 2

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<sup>2</sup> Despite large uncertainties about the potential cost of reunification with North Korea, which vary considerably depending on the ways of unification and estimation methods, the estimates range from 20-30 percent of GDP to more than 100 percent of GDP depending on assumptions.

point to the subjective judgment and potentially biased information. Staff's estimates of the changes in interest incomes and FX valuation differ greatly from the actual changes. Unlike staff's assertion that the increase in the forward position is associated with the curbing of pressure for won appreciation, the BOK's forward position is to provide FX liquidity to the market and has little to do with the exchange rate.<sup>3</sup> Staff's assessment on the correlation of the REER of the Korean won with the forward position is also limited to a certain period of time and when it is expanded to the period of 2005 to 2013, the correlation is negative (-0.1).

The authorities remain concerned about the mechanical application of the External Balance Assessment/the External Sector Report assessment, given that the norms are dependent on staff's subjective judgments in addition to the methodological limitations. While the CA surplus widened in 2013, it is partly due to lower oil prices and subdued domestic demand including weak corporate investment. We expect that the gap will be reduced this year.

The authorities consider that the current level of reserves is broadly adequate and also that there is no need to prejudge a case for or against further accumulation. It will be helpful to note that before the global financial crisis in 2008, Korea's FX reserves were considered to be sufficient. When market perceptions were changed to regard the reserves level as insufficient, the Korean won to the US\$ plunged by 38.1 percent (from 936.6 won/\$ on January 3, 2008 to 1,513 won/\$ on November 24, 2008).

## **Financial sector**

As the FSSA shows, the Korean financial sector remains sound and resilient, with the balance sheets of financial institutions being strong, financial intermediation being robust, and financial regulations and the supervisory framework being competent and compatible with international standards. The authorities will stand ready to amend rules and regulations where needed and in tandem with progress of related international standards.

The authorities are devoted to closing regulatory gaps between banks and nonbank financial institutions (NBFI), being mindful of NBFI's potential impact on financial stability and the ballooning effect from strengthened banking regulation. The regulatory framework will be enhanced into a twin-peak model, where each agency is charged respectively with consumer protection and prudential supervision. This change will help reduce the potential conflict between two supervisory objectives and also contribute to strengthening the supervisory expertise of each agency.

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<sup>3</sup> The rise in the BOK's forward position since the end of last year is attributable mainly to the supply of foreign currency liquidity through FX swap transactions to prevent a foreign exchange funding market crunch stemming from geopolitical risk related to North Korea and concerns about the Fed's QE tapering. From 2011 to September 2012, the forward position declined by 44 percent despite the decrease in the dollar-won exchange rate, which contrasts to staff's argument.

The authorities have safeguarded financial market autonomy while limiting government interventions to those areas justifiable for correcting market distortions, enhancing consumer protection and promoting fair competition. Contrary to staff's speculation, the authorities do not exercise any kind of influence on banks' operations other than the areas mentioned above.

Given the risk associated with high household debt, the Korean authorities have been exerting strenuous effort to limit growth in household debt. Since 2011, policy efforts have helped stabilize the growth of household debt in terms of a share of GDP. Also, the structure of household debt has significantly improved as the share of bullet loans has decreased and the share of fixed-interest loans has increased.<sup>4</sup>

The authorities remain doubtful of staff's assessment that the private corporate debt level is high and poses a risk to financial stability. Staff's assessment is based on the entire corporate sector debt data, mistakenly encompassing public enterprises as well, which seems to be beyond the intended scope of staff analysis. According to the BOK's official Flows of Funds data on private corporations, the level of corporate debt as a share of GDP is 124.5 percent in 2012, far lower than staff's estimates of 174.3 percent, and corporate indebtedness and leverage are lower than those of major advanced economies. While there still exist marginal firms which should be subject to corporate restructuring on a continual basis, the overall corporate sector is financially sound with liquid assets exceeding 110 percent of debt repayments and average ROA being higher than that in most advanced economies.

We do not consider relevant the staff recommendation to establish two distinct committees by separating mandates on macroprudential policy and crisis management. As a recent IMF staff paper<sup>5</sup> indicates, Korea's current arrangements for macroprudential policies are functioning well under close cooperation between relevant agencies. The current institutional arrangements are the result of long-time discussions and hard-won coordination among government agencies. Appropriate arrangements for macroprudential policies should depend on individual country's circumstances, including legal frameworks. Given the close linkage between crisis management and prevention, we remain to be convinced of the need to separate the arrangements for macroprudential policy from those for crisis management.

## **Structural reform**

Increasing the labor force, reducing labor market duality, and strengthening competitiveness of the service sector are crucial for sustainable and inclusive growth in Korea. The authorities are pursuing the 70 percent Roadmap, consisting of: (1) solidifying grounds for overall job creation through promoting start-ups, intensifying deregulation, encouraging innovations, reducing working

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<sup>4</sup> According to a stress test performed by Moody's in 2012, Korean financial market would be able to endure an additional 30 percent housing price drop and continuation of economic recession for two years.

<sup>5</sup> WP/13/165, Institutional Arrangements for Macroprudential Policy in Asia

hours and strengthening service sectors; (2) taking tailored measures for promoting female and youth employment through expanding childcare benefits, creating flexible part time jobs, streamlining the job information system and reducing skill mismatches.

Being mindful that job creation will be limited without addressing adequately the labor market duality, the authorities continue to pursue labor market reform through reducing working hours, raising the retirement age and moving towards a performance-based wage system.

Policy priority is also placed on strengthening the service sector through streamlining deregulation, boosting productivity, and leveling the playing field. Further deregulation will be pursued in high value-added service industries, including healthcare, medical services, education and software industries which will be a part of the future growth engines in Korea.