

**Republic of Korea: 2009 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Korea**

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 2009 Article IV consultation with the Republic of Korea, the following documents have been released and are included in this package:

- The staff report for the 2009 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on July 7, 2009, 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 July 23, 2009. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff statement of August 7, 2009, updating information on recent developments.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its August 7, 2009 discussion of the staff report that concluded the Article IV consultation.
- A statement by the Executive Director for the Republic of Korea.

The document listed below has been or will be separately released.

Selected Issues Paper

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INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

**Staff Report for the 2009 Article IV Consultation**

Prepared by Staff Representatives for the 2009 Consultation with Korea

Approved by Mahmood Pradhan and Aasim Husain

July 23, 2009

- **This report is based on discussions held in Seoul during June 25–July 7.** The staff team comprised Mr. Lall (Head), Ms. Karasulu, Messrs. Lueth, Eskesen (all APD), and Ariyapruchya (MCM). Mr. Lee (OED) also participated.
- **Counterparts.** The mission met with Minister of Strategy and Finance Yoon, Bank of Korea (BOK) Governor Lee, Financial Services Commission Chairman Chin, Financial Supervisory Services Governor Kim, and other senior officials, academics, and private sector representatives.
- **Context of past surveillance.** The Fund and the authorities have agreed on the broad policy priorities in recent years. Directors found Korea’s financial system to be healthy, but noted that banks’ reliance on wholesale funding exposes them to elevated liquidity risk. Directors also encouraged upgrading of banks’ risk assessment to address potential risks from lending to SMEs and the real estate and construction sector.
- **Statistical base.** Adequate to conduct effective surveillance, but fiscal reporting needs to be improved. Korea subscribes to the SDDS.
- **The exchange rate is freely floating.** Korea has accepted the obligations of Article VIII. The exchange system is free of restrictions on the making of payments and transfers for current international transactions. 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).

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## EXECUTIVE SUMMARY AND STAFF APPRAISAL

**Like other very open economies, Korea was hard hit by the global financial crisis during the last quarter of 2008.** Capital left the country at a rate surpassing even that during the Asian crisis, resulting in sharply lower asset prices, dislocations in money markets, and a spike in bank CDS spreads reflecting the sector's heavy reliance on wholesale funding. This was followed by the largest export slump on record which quickly spilled over into domestic demand. Overall, the Korean economy contracted by 5.1 percent quarter/quarter (q/q) (not annualized) in the last quarter of 2008, among the sharpest contractions worldwide.

**The authorities' speedy and comprehensive response helped stabilize the economy by early 2009.** Generous provision of won and dollar liquidity, including by drawing down official reserves, led to a quick recovery in money markets and prevented external defaults. Sizeable monetary and fiscal stimulus boosted confidence and supported economic activity. And the setup of recapitalization and toxic asset funds preempted the risk of prospective loan delinquencies turning into major deleveraging on the part of banks. As a result, activity gathered strength over the course of the first half of 2009.

**However, the recent growth momentum is likely to moderate and the recovery will be drawn out.** As the impulse from the front-loaded fiscal stimulus and export gains from the steep depreciation of the won in early 2009 fade, the pickup in growth is unlikely to be sustained. Combined with a sluggish recovery in demand from trading partners, and highly leveraged households and small- and medium-sized enterprises (SMEs), Korean growth is projected at  $-1\frac{3}{4}$  percent in 2009 and 2.5 percent in 2010. There is a distinct possibility that weak global exports will weigh on Korean growth well beyond 2010, as Western consumers permanently increase their savings rates. Other risks to the outlook are another bout of global risk aversion, rising oil prices, or—on the upside—a stronger than anticipated impact from stimulus measures in Korea and abroad.

### Fiscal policy

**The authorities are to be commended for their expansionary fiscal stance, which they should maintain through 2010.** The structural deficit in 2009 is expected to expand by  $2\frac{3}{4}$  percentage points of GDP, well above the G20 average. Stimulus measures are also appropriately weighted towards the expenditure side, including public investment and targeted transfers, which should maximize its growth impact, estimated at  $1-1\frac{1}{2}$  percentage points of GDP. Given Korea's ample fiscal space and little evidence of funding pressures, the fiscal stance should be maintained in 2010, until a self-sustained recovery takes hold.

**However, with abrupt deleveraging avoided and the economy stabilized, a roll back of the quasi-fiscal support measures targeted at SMEs could be initiated, given their distortionary character.** The authorities raised the amount of available SME credit guarantees, increased the guarantee coverage to 95 percent for most loans, and 100 percent

for some, and guided banks to roll over all SME loans falling due in 2009. These measures may have had their merits in the early stages of the crisis, but rolling them back would help ensure that banks have incentives to move ahead with restructuring SMEs, while conventional fiscal and monetary policies can be relied upon to stabilize output.

**Announcement of a medium-term fiscal consolidation plan would assure investors and boost the impact of the current stimulus.** The authorities' plan to balance the budget (excluding social security) over the medium term is appropriate and should be underpinned by revenue raising measures and a streamlining of non-age related expenditures, and further pension reform. This adjustment would also leave sufficient room to allow for contingent liabilities associated with recent financial market measures, which should be transparently reported in the budget.

### **Monetary and exchange rate policies**

**Monetary policy accommodation should be maintained for now, while concerns about asset price appreciation are best addressed through prudential regulation.** Given the absence of inflationary pressures and a large projected output gap, the current accommodative policy stance is appropriate. While asset prices are rightfully on the authorities' radar screen, they do not seem out of line with regional trends.

**Foreign exchange intervention in the spot market should remain confined to smoothing operations.** The exchange rate has undershot most estimates of its medium-term equilibrium level, but is likely to return to equilibrium as capital inflows continue to gather strength.

### **Financial sector policies**

**Banks are likely to withstand a deterioration in asset quality and schemes to support their balance sheets could be more unambiguously linked to restructuring efforts.** Given highly leveraged SMEs and households, nonperforming loans are bound to increase in the current weak economic environment. However, banks are in a position to absorb these losses, especially after recent capital raising efforts. In this context, access to the recapitalization fund should no longer be linked to credit extension to SMEs, but be made clearly conditional on banks' efforts to restructure SMEs.

**While the crisis response framework has performed relatively well during the recent crisis, there may be scope for further improvement.** A more formal framework such as a Financial Stability Council could help improve financial policy coordination between the government, the regulator, and the central bank. It would also ensure that the BOK has sufficient real-time information to better fulfill its lender-of-last-resort mandate.

**In light of recent financial sector stresses, the authorities may want to consider some upgrades to bank supervision and regulation.** In the short term, there is scope to improve stress testing within banks and by the regulator. Over the medium term, the authorities may

also want to consider prudential regulation with respect to banks' wholesale funding, as is currently being contemplated in Australia and New Zealand, counter-cyclical capital requirements, and other lessons from the crisis currently being discussed in international fora. These issues will be further explored during the FSAP update scheduled for 2010–11.

**Given the scale of the downturn, the authorities should also take a fresh look at the bankruptcy regime.** In particular, a decriminalization of the personal bankruptcy regime would ensure that entrepreneurs do not procrastinate on needed restructuring.

### **Structural policies**

**The weakness of demand by Western consumers, possibly for years to come, has given added urgency to a recalibration of Korea's export-led growth model.** As a matter of priority, tax incentives that favor the export-oriented manufacturing sector over the service sector should be removed. Moreover, opening up the service sector to competition, including from abroad, and moving expeditiously on the restructuring of SMEs would narrow the productivity gap between the tradables and nontradables sector. Finally, reducing employment protection for regular workers would facilitate a reallocation of labor towards the nontradables sector. Higher labor participation rates in turn would counter the fall in total factor productivity associated with the shift of economic activity towards the less productive nontradables sector.

## I. INTRODUCTION

1. **Korea is facing its biggest economic challenge since the 1997–98 crisis.** Korea's openness to trade and financial flows—the foundation of its enviable growth record and rapid recovery after the Asian crisis—left it particularly exposed to the tightening of global financial conditions and the sharp decline in trade that followed. The authorities have responded forcefully to the dual onslaught of massive capital outflows and collapsing exports and, thereby, avoided major tail events so far. However, the downturn is expected to be protracted.
2. **The current environment also presents an opportunity for Korea to prepare for a different post-crisis global environment.** Few view the current global recession as a typical cyclical downturn. Following a substantial accumulation of debt, households in key export destinations will likely need to shore up balance sheets over an extended period, which could suppress Asian export growth long after the global recovery has taken hold. Similarly, a more stringent regulatory regime at the global level could lead to a higher cost and lower volume of credit long after financial institutions' balance sheets have been restored to health. These possibilities need to be taken into account when designing the strategy for a strong and durable economic recovery in Korea, and preparing for the challenges of a rapidly aging population.

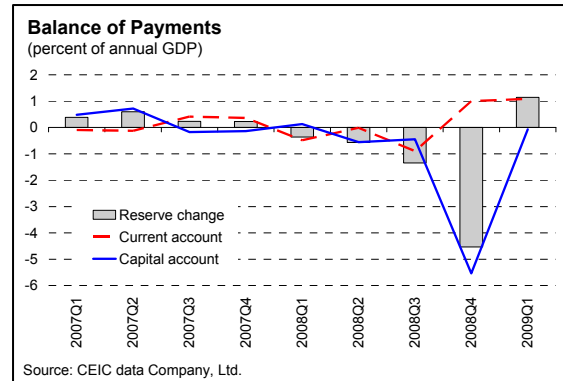
## II. RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

### A. Recent Economic Developments: Recovering from the Shock

3. **In the aftermath of the collapse of Lehman Brothers, Korea experienced the dual onslaught of a sudden stop in capital flows and collapsing exports.**
  - With the seizure of international money markets in September 2008, Korean domestic banks and foreign bank branches faced a sharp reduction in their credit lines, and rollover rates on short-term external bank debt dropped to around 40 percent. As a result, the capital account deteriorated by over 6 percentage points of GDP, compared to 5½ percentage points of GDP during the Asian crisis. Both the won and equity markets declined around 30 percent, severe dollar shortage spilled over into domestic money markets, and the perceived default risk of Korean banks, which rely heavily on wholesale funding, increased by more than anywhere else in the region.
  - Shortly thereafter, Korea suffered its greatest export slump on record. At the low point in January, exports were down 35 percent year/year (y/y), compared to a fall of 22 percent y/y when the dotcom bubble burst in 2001. Given its openness to trade, the external shock quickly spilled over to domestic demand: real investment contracted by 6½ percent q/q and private consumption fell by a striking 4½ percent q/q. Overall, the Korean economy contracted by 5.1 percent q/q (not annualized) in the last quarter of 2008, among the sharpest contractions worldwide.



4. **The authorities responded with a timely and comprehensive set of financial market and macro-stabilization measures.** The authorities set aside \$55 billion in foreign exchange reserves to provide as swaps or loans to banks and trade-related businesses, effectively substituting for loans previously provided by foreign creditors. They administered major monetary and fiscal stimulus to arrest a further slide in confidence and sustain the real economy. Finally, they set up a bank recapitalization fund and a toxic asset fund to shield the banking sector from the downturn and prevent major deleveraging.



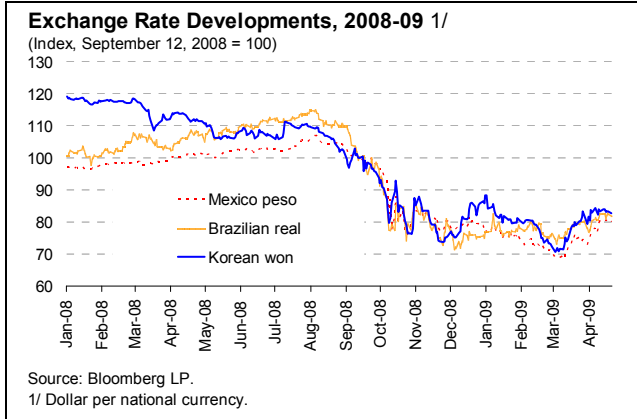
5. **The steep exchange rate depreciation helped fend off deflationary pressures.** The BOK intervened only exceptionally, confined spot market intervention to smoothing operations, and secured swap lines from other central banks totaling \$90 billion.<sup>1</sup> The weak won redirected domestic demand from imports to domestic production and, in combination with falling oil prices, turned the current account from a deficit of 3¾ percent of GDP in the third quarter of 2008 to a surplus of 4½ percent of GDP in the first quarter of this year. As a result, reserves fell by just \$38 billion in the last quarter of 2008 to \$200 billion and have since risen to \$232 billion. Moreover, the weak won has sustained core inflation, at 3.5 percent in June, while headline inflation has declined to 2 percent on the back of softer commodity prices, slightly below the target range of the BOK.

6. **Defaults on banks' external obligations and a credit crunch have been avoided and economic activity stabilized in the first quarter of 2009.** Bank credit continues to grow—at 8 percent y/y—and domestic bond issuance in the first five months of 2009 (relative to GDP) is close to an all-time high. In the first quarter of 2009, government consumption and construction investment rose by 3¾ and 5¼ percent q/q, respectively, as a direct result of the fiscal stimulus, and private consumption recorded a mild recovery of 0.4 percent q/q. As a result, the economy expanded by 0.1 percent q/q in the first quarter, thereby avoiding a technical recession. Economic activity continues to improve with exports, industrial production, and service sector activity well above their end-2008 lows and business and consumer confidence back in expansionary territory.

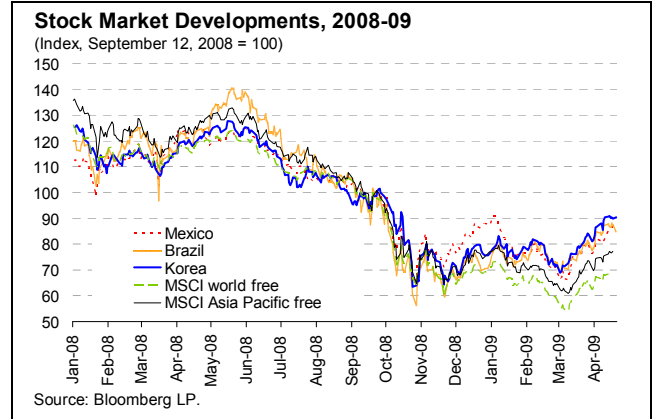
<sup>1</sup> Out of this, \$16.35 billion was drawn at the peak.

**Figure 1. Korea: The Sudden Stop in Capital Flows**

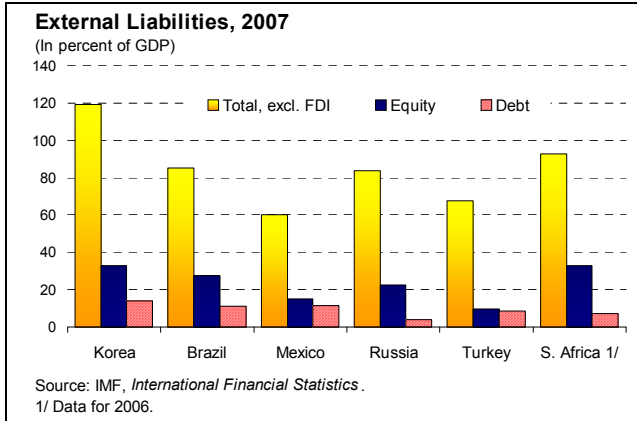
*International investors did not discriminate much between Korea and other liquid emerging markets, as evidenced by exchange rates...*



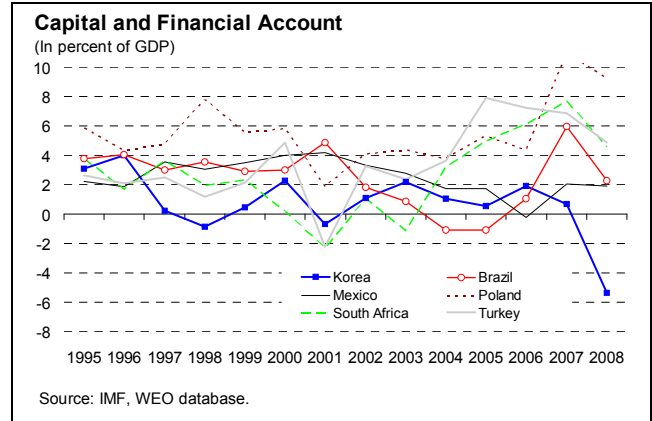
*...and stock market indices.*



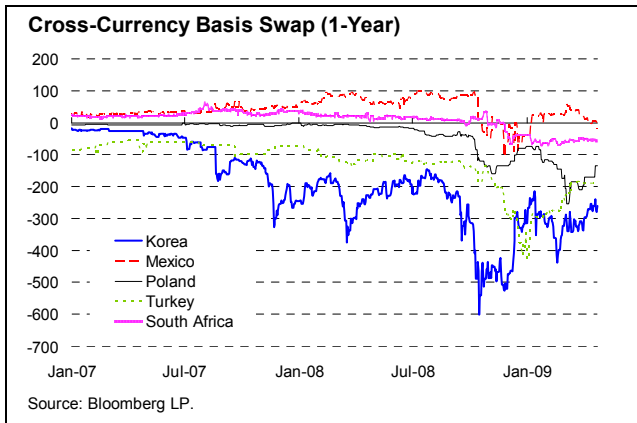
*However, since Korea is financially more open than other emerging markets,...*



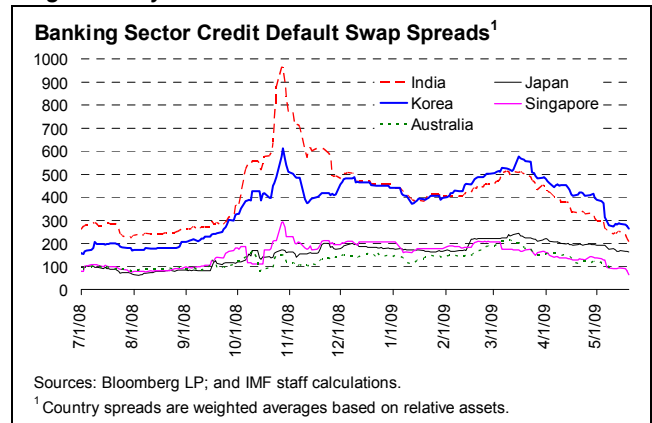
*...it was hit much harder, as evidenced by a larger capital account deficit,...*



*...and larger dollar funding pressures.*

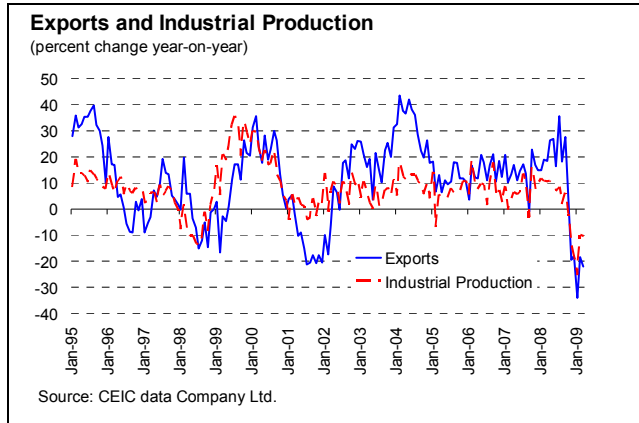


*Exacerbated by Korean banks' reliance on wholesale financing, bank CDS spreads widened significantly.*

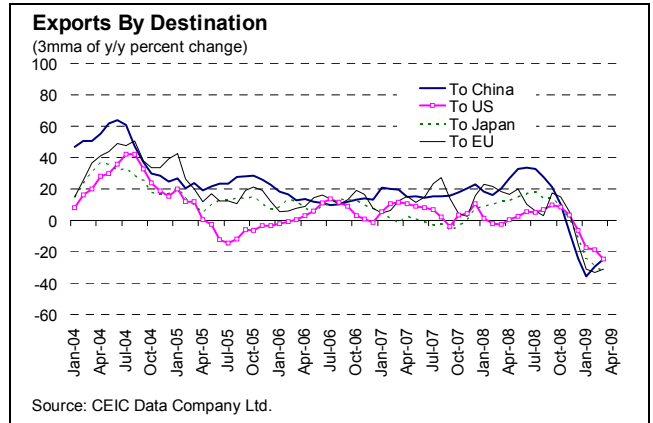


**Figure 2. Korea: The External Demand Shock**

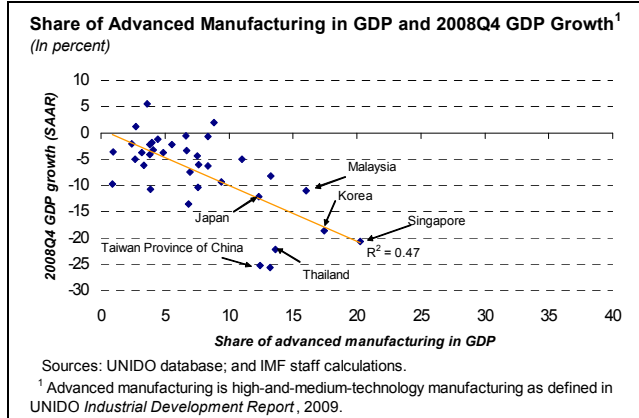
*Korea suffered the greatest export slump on record,...*



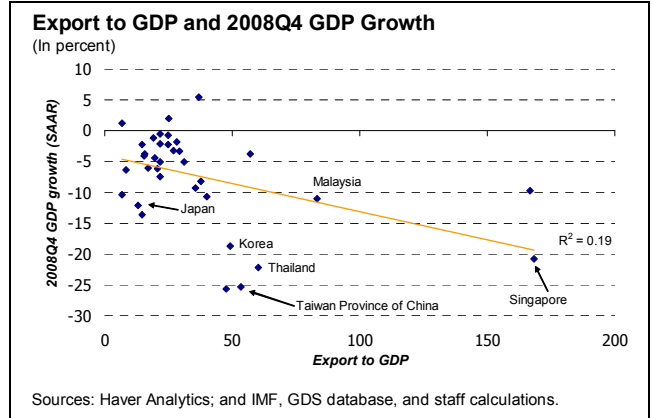
*...which cut across all markets and was particularly pronounced for exports to China.*



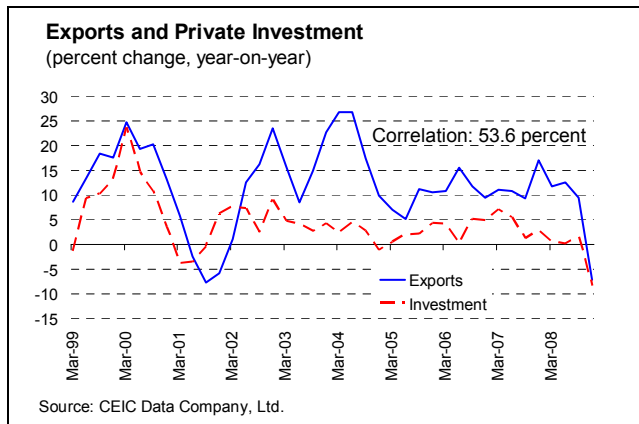
*What made Korea particularly vulnerable, was its specialization in high-end manufacturing...*



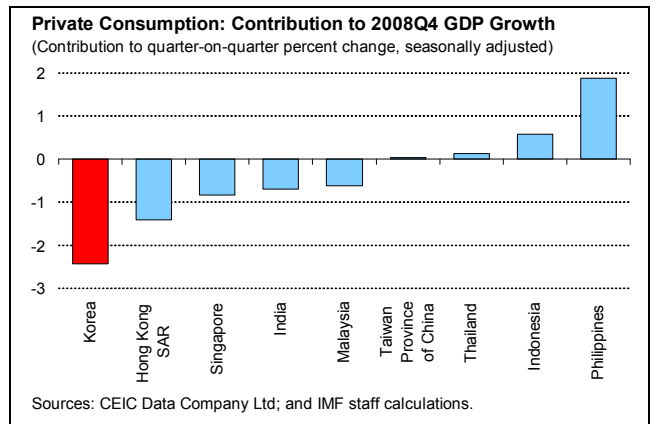
*...and its openness to trade,*



*which propagated the shock quickly to capital investment...*

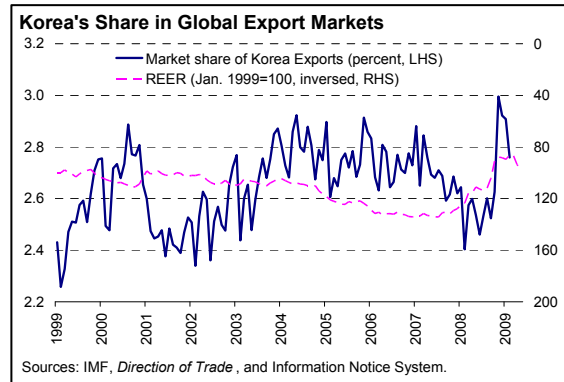


*...and consumption.*



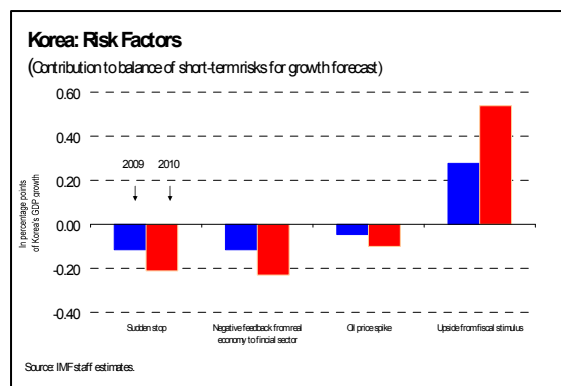
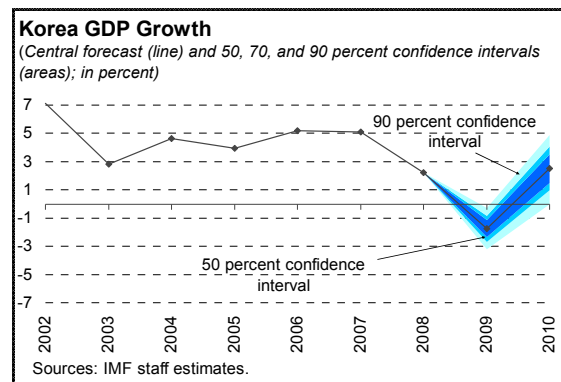
## B. Outlook and Risks: A Drawn-Out Recovery

7. **The recent pickup in economic activity is likely to moderate and lead to a drawn-out recovery.** The rebound is to a considerable extent driven by the weak won and the front-loaded fiscal stimulus. The won has begun to strengthen, while the sequential impact of the stimulus will peter out over successive quarters. With economic conditions in the United States and Europe projected to remain weak through 2010, maintaining growth momentum will be challenging. Bleak export prospects should continue to depress facility investment, while the record stock of unsold homes will weigh on construction investment. Unemployment is expected to peak only in the third quarter of 2009 and weigh on consumption for an extended period of time. Moreover, deleveraging by financial institutions is expected to constrain credit growth. As a result, the economy is projected to contract by 1¾ percent in 2009 and grow by 2.5 percent in 2010, while inflation is projected to fall to 1½ percent in late 2009, and recover thereafter.



8. **Risks to the outlook are broadly balanced with the upside from massive stimulus measures offset by various downside risks.**

- The greatest upside risk stems from the impact of monetary and fiscal stimulus. The outturn for the first quarter of 2009 suggests that stimulus measures, implemented expeditiously, may be more effective than anticipated. Stimulus measures abroad could also prove more effective than anticipated.
- Over the short-term, the greatest downside risk facing the economy is another sudden reversal in capital flows, triggered, for example, by heightened risk aversion among Western European banks (see Box 1). While it is unlikely that Korean borrowers would be forced into large-scale defaults on external liabilities under such circumstances, the resulting tightening of financial conditions and a further delay in the European recovery would reduce growth significantly.



### Box 1. Downside Risk Scenario: Another Bout of Global Risk Aversion

**While financial market volatility has come down markedly from the heights of the Lehman collapse, another sudden stop in capital flows remains a possibility.** Excess liquidity has been a global phenomenon and asset bubbles have built up well beyond the U.S. sub-prime mortgage market. Some of these imbalances may still unravel and impact the global financial system. One case in point is overextension in Eastern Europe, where any defaults could quickly spill over to Korea through the common link of Western European banks. The latter account for 31 percent of Korea's total external debt according to BIS data as of end-December.

**In the event of a large scale reversal of capital flows, Korea would probably avoid the tail event of external defaults.**

- Current reserves of \$232 billion exceed 2009 and 2010 external financing needs of \$201 billion, defined as external debt amortization net of the current account surplus. Hence, even if roll-over rates of external debt were to fall to very low levels, reserves would be sufficient to cover debt payments throughout 2010. As a comparison, during the Asian crisis roll-over rates of short-term external debt fell to 50 percent.
- The default risk of domestic banks seems manageable, despite their reliance on wholesale financing. Offshore wholesale financing of domestic banks at short maturities amounted to only \$45 billion at end-December, which amounts to an estimated 4 percent of their total funding or 20 percent of official reserves. Moreover, Korea has very strict bank regulations in terms of maturity and currency mismatches and so the ratio of short-term foreign exchange assets to liabilities (due in three months or less) was 104 percent at end-June.
- It is unlikely that steep exchange rate devaluation would trigger defaults. Although foreign currency open positions by sector are not available, data on external debt and external assets (as defined by the residency principle) suggests that only foreign bank branches have significant exchange rate exposure in the short term, while positions beyond the short-term would be covered by BOK reserves.

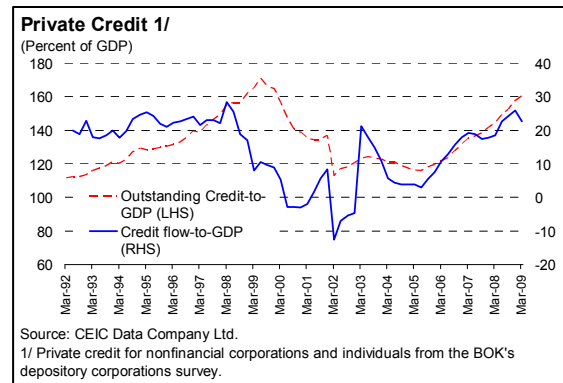
<b>Net Open Positions, End-2008 1/</b> (In billions of U.S. dollars)		
	Total	Short-term
Government	-12	1
Central bank	176	187
Domestic banks	-28	0
Foreign bank branches	-61	-60
Nonbank financial corporations	-11	-5
Public corporations	-9	0
Private corporations	-88	6

1/ External assets minus external debt.

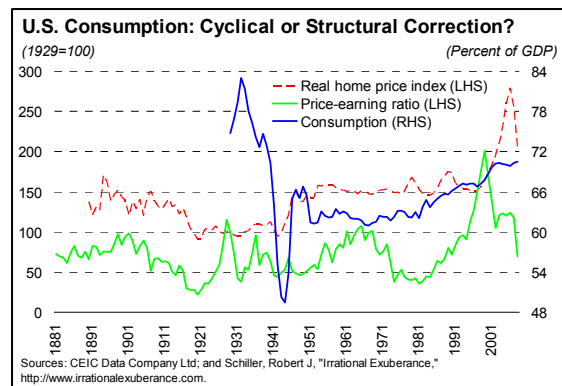
**However, Korea would still experience a severe tightening of financial conditions with a knock-on effect on growth.**

- Faced with falling roll-over rates on their external debt, banks would have to obtain foreign currency by liquidating assets—denominated both in foreign currency and in won. This would affect credit growth and could lead to an outright credit contraction.
- Falling stock prices would depress private consumption and investment. With foreign participation in the stock market amounting to about 30 percent, stock prices would fall in response to a global shock. With Korean households holding 15 percent of their financial assets in stocks, consumption is bound to fall. Companies would issue fewer shares—indeed, companies issued 70 percent fewer shares in 2008 than in 2007—and cut down on investment.
- Rising interest rates would further dampen investment and demand for durable goods. It is estimated that foreigners (both nonresidents and resident branches of foreign banks) account for 27 percent of all holdings of outstanding treasury and central bank bonds, which could lead to a spike in interest rates should external debt flows reverse.

- Over the short to medium term, the greatest downside risk is a negative feedback loop from the real economy to the financial sector, or a spike in oil prices. Fueled by capital inflows and low interest rates, private credit grew from 120 percent of GDP in mid-2002 to 160 percent of GDP by end-2008, and is now close to the all time high reached during the Asian crisis. Depending on the state of corporate and household balance sheets, bank deleveraging could be substantial and protracted. While lackluster global activity should keep oil prices in check, geopolitical events or speculation could raise prices markedly.



- Over the next decade, the global environment will arguably be less conducive to growth than it was over the past decade. It is likely that the time of abundant global liquidity has come to an end, as the trend in financial deregulation is being revisited and few continue to believe that asset prices should be ignored in the conduct of monetary policy. Similarly, there may be much less support for the global economy from Western consumers over the long term as house and stock prices return to more sustainable levels.



### Authorities' views

9. **The authorities were somewhat more upbeat about growth prospects in the second half, and expect the economy to contract by 1.5 percent in 2009.** They maintained that the growth impact of front-loaded fiscal spending did not necessarily translate into a subsequent petering out of fiscal stimulus due to the lag between budgetary execution and final demand, particularly for transfers and capital expenditure. While the recent won recovery was likely to have a dampening effect on growth, in their view it was also reflective of improved sentiment and would support domestic investment by lowering the cost of imported capital goods. The authorities also felt that the lagged effect of unemployment was likely to be cushioned by public works programs introduced as part of the fiscal stimulus package.

10. **In 2010, the authorities expect growth to rise to 4 percent, but acknowledged downside risks from lackluster growth in the G3 countries.** The authorities were in broad agreement with staff's global growth assumptions, but indicated that Korea was well placed to profit from solid growth in China and other emerging markets, given its specialization in advanced manufacturing. Risks from weak demand in the United States and Europe were acknowledged, but they noted a shift of Korean exports towards the vast pool of consumers in emerging markets.

### III. POLICY DISCUSSIONS

#### A. Fiscal Policy: Countering the Cycle While Safeguarding Sustainability

##### Background

11. **Conventional fiscal stimulus has been a crucial line of defense during the current downturn.** The government introduced two fiscal stimulus packages for 2009: the first package in the original budget amounted to about 2 percent of GDP, while the second, passed in April, amounted to 1.7 percent of GDP.

Announced Fiscal Stimulus Packages (Percent of GDP)		
	2009	2010
<b>Revenue measures</b>	<b>-1.0</b>	<b>-1.2</b>
Permanent tax cuts	-0.7	-1.0
Temporary measures	-0.3	-0.2
<b>Expenditure measures</b>	<b>2.6</b>	<b>...</b>
Investment	1.0	...
SME support	0.8	...
Support for unemployed and poor	0.8	...
Other	0.1	...
<b>Total</b>	<b>3.6</b>	<b>1.2</b>

12. **The authorities have also undertaken extensive quasi-fiscal measures to boost bank lending to SMEs, which account for 80-90 percent of employment.** They expanded the available amount of SME loan guarantees, announced automatic rollovers of guarantees expiring in 2009, and increased the guarantee coverage per loan. In addition, the authorities injected capital into policy banks, encouraged commercial banks to roll over all SME loans falling due in 2009 (16 percent of GDP), and established targets for SME loan growth.<sup>2</sup>

##### Staff views

13. **The size and composition of the 2009 fiscal stimulus have been appropriate.** The fiscal stimulus, defined as the change in the structural deficit (including social security), is projected at 2¾ percentage points of GDP and exceeds the G20 target of 2 percent of GDP by a significant margin. It also aptly focuses on spending measures such as infrastructure

Composition of Fiscal Stimulus in 2009 (In percent)		
	G20	Korea
<b>Expenditure Measures</b>	<b>77</b>	<b>73</b>
Infrastructure	32	28
SMEs	1	21
Safety nets	20	22
Housing	5	0
Strategic Sectors	4	0
Other expenditure measures	16	2
<b>Revenue measures</b>	<b>23</b>	<b>27</b>
Personal income tax	8	6
Indirect taxes	4	3
Corporate income tax	10	16
Other revenue measures	1	1

<sup>2</sup> For a cross-country perspective on SME financial support measures, see Box 2.

## **Box 2. Measures to Ensure Adequate Credit Flow: A Cross-Country Perspective**

Korea's support measures for SMEs have been among the most generous in the world after Japan, owing to the sector's large share in employment. Public capital injections into banks have been modest by international standards reflecting Korea's peripheral role in the current crisis. By the same token, toxic asset programs have been set up as a contingency measure, and no public money has been spent so far.

### **SME credit facilitation**

Korea's expansion of SME financial support facilities, already among the most generous in the world prior to the crisis, is only rivaled by Japan. Credit guarantee schemes for SMEs have been expanded by 1.8 percent of GDP, compared to 5.9 percent of GDP in Japan, 0.8 percent of GDP in the United Kingdom, and 0.4 percent of GDP in Mexico. Maximum guarantee coverage per loan has been expanded to 100 percent in both Korea and Japan, compared to 90 percent in Taiwan Province of China, 85 percent in India, 75 percent in the United Kingdom, and 50 percent in Mexico. Fees for these guarantees are comparable to other countries—1.2 percent of the outstanding guarantee, compared to 0.5 percent in Taiwan Province of China, and 2 percent in Mexico and the United Kingdom. Similarly, the expansion of subsidized lending facilities for SMEs has matched those of other countries—0.2 percent of GDP, compared to 0.2 percent of GDP in India and Germany, and 2 percent of GDP in Japan.

### **Bank recapitalization**

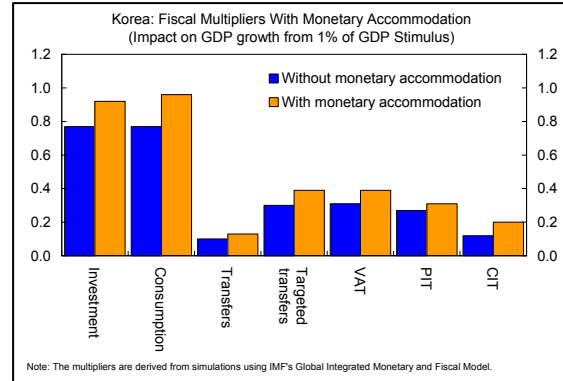
Public capital injections into Korean banks have been modest by international standards. The government has injected W 4 trillion into public financial institutions, while commercial banks have drawn W 4 trillion from the W 20 trillion recapitalization fund. The Korean government's W 8 trillion, or \$6 billion capital injections, account for less than 1.5 percent of the \$470 billion in public capital injections worldwide. Not surprisingly, Korea's capital injections pale against the more than \$230 billion provided in the United States or the more than \$50 billion made available in the United Kingdom. However, Korean capital injections also compare favorably to those of China or Russia (each around \$20 billion), which like Korea have been at the periphery of the current crisis. This is due to Korean banks' solid capital adequacy ratios at the outset of the crisis—12.3 percent at end-2007—and the relative ease of raising private capital (\$15 billion) after the onset of the crisis.

### **Toxic asset management**

With the W 40 trillion Restructuring Fund—W 462 billion drawn so far—Korea is one of a few countries worldwide that have established a program to purchase toxic bank assets. Reflecting the difficulties in valuing toxic assets, Germany and the United States are among the few G20 countries that have committed public funds to purchases of risky assets. The United States has redesigned its program midway, seeking to solve the valuation problem through private sector participation. Other countries, such as Spain, Italy, and the United Kingdom have capped bank losses by issuing guarantees on existing or new bank lending. Korea is confident that it can handle the valuation problem, given the expertise acquired during the Asian crisis: to date, Korea's Asset Management Corporation has recovered 110 percent on the toxic assets it bought in the wake of the Asian crisis.



outlays and targeted transfers for liquidity constrained households, which typically have the highest immediate growth impact. The tax cuts are not expected to have a significant short-term impact on growth, but could support the recovery once it is under way. Based on model-generated multipliers, staff estimates that discretionary measures could lift growth by 1–1½ percentage points in 2009.<sup>3</sup>



14. **Weighing Korea’s fiscal space against the current economic outlook, it seems too early to withdraw fiscal stimulus in 2010.** This implies that the structural deficit in 2010 should be at least as large as in 2009. Under current policies, government debt (including government guaranteed debt) would rise to a manageable 40 percent of GDP by end-2009; and although the yield curve has steepened somewhat in response to the government’s increased funding needs, this has not offset the effect of lower policy rates.<sup>4</sup> Hence, crowding out of private spending or a Ricardian increase in private saving is not a major policy concern at this stage.

15. **However, with a credit crunch averted consideration needs to be given to an exit strategy from distortionary SME support measures.** Given the magnitude of the shock and the risk of abrupt deleveraging, some of the credit facilitation measures for SMEs may have had their merits. However, credit guarantees that were extended in response to severe downturns in the past—for example, in 1998 and 2001—persisted long after the downturns ended, and have been partly blamed for the structural financial problems the SME sector is facing today. As a high priority, the maximum loan guarantee coverage should be reduced to the customary 60-80 percent, from 100 percent currently. Moreover, the guidance to commercial banks to roll over maturing SME debt should not be renewed in 2010. Finally, the authorities may want to consider committing to a time-bound path for a significant reduction of SME credit guarantees (and subsidized loans provided by BOK through commercial banks).

<sup>3</sup> The selected issues paper “Counter-Cyclical Fiscal Policy—Does It Work in Korea’s Open Economy?” provides additional background on the growth impact of the fiscal stimulus measures.

<sup>4</sup> The recent abolition of the withholding tax on interest income and capital gains for foreigners who invest in Korean Treasury Bonds and Monetary Stabilization Bonds should lead to the inclusion of Korea in the global bond index and could further counter the steepening of the yield curve. Based on Korea’s prospective weight in the global bond index, it is estimated that the share of nonresidents in the Korean bond market would rise from 8 percent to around 20 percent.

16. **A medium-term fiscal consolidation plan would bolster the effectiveness of the current stimulus and assure investors about the authorities' intention to guard against policy imbalances,**

**especially in the face of looming demographic**

**pressures.** Aiming for a balanced budget (excluding social security) over the medium-term—the authorities' goal prior to the current crisis—still seems appropriate and would

require discretionary measures of 3¾ percentage points of GDP. This adjustment path would lead public debt to peak at 47 percent of GDP in 2011 and also leave sufficient room for fiscal contingencies related to recent financial sector support measures, which should be transparently reported in the budget (see DSA Appendix). On the revenue side, the adjustment could be brought about by broadening the base for personal and corporate income taxes (by eliminating extensive allowances and incentives, including the temporary investment tax credit), as well as increases in the VAT rate and social security contributions. On the expenditure side, there is scope for streamlining non-age-related outlays and further pension reform, which would help provide room for a needed expansion of the social safety net.

#### Authorities' views

17. **The authorities agreed with staff that it was too early to exit from conventional fiscal stimulus measures, and were mindful of medium-term fiscal pressures.** Despite a more optimistic growth outlook for 2010, the authorities agreed that there were downside risks and, consequently, planned not to withdraw fiscal stimulus until a self-sustained recovery was firmly established. The authorities plan to announce a fiscal consolidation plan in October, which will aim for a balanced budget (excluding social security contributions) over the medium term. However, the detailed measures underlying the medium-term consolidation strategy are still being worked out.

18. **The authorities are well aware of the disincentives associated with SME financial support policies and have started to reverse some of the measures introduced at the height of the crisis.** Given the speed of deleveraging in late 2008, generous SME support was seen as necessary to avert a credit crunch that would have left viable firms without access to financing. With liquidity conditions back to normal, the authorities acknowledged that the focus needed to shift towards addressing the structural weaknesses of the sector. As a first step, they have relaxed the targets for SME loan growth and indicated that the guidance to roll-over all SME bank loans would be withdrawn in 2010. However, a rollback of SME support measures to pre-crisis levels was seen as politically difficult at present.

Contingent Liabilities Associated with Crisis Measures 1/		
(In trillions of won, unless otherwise specified)		
	Announced	Use so far
Government guarantee for banks' foreign exchange debts up to \$100 billion (Oct 19)	130.0	1.3
Government announces that it will buy unsold homes (Oct 21)	5.0	1.5
Creation of a bond fund to purchase bonds and commercial paper (Nov 13)	10.0	0.0
KAMCO to purchase nonperforming loans from Mutual Savings Banks (Dec 3)	1.3	1.2
BOK extends Aggregate Credit Ceiling loans to SME (Oct 23)	2.5	2.5
Launch of a Bank Recapitalization Fund (Dec 18)	20.0	4.0
Capital injections into state-owned financial institutions (Oct 19)	4.0	4.0
Increase in credit guarantee fund	18.0	...
Launch of the Restructuring Fund to purchase mostly toxic assets (Mar 13)	40.0	0.0
<b>Total</b>	<b>230.8</b>	<b>14.4</b>
percent of GDP	22.6	1.4

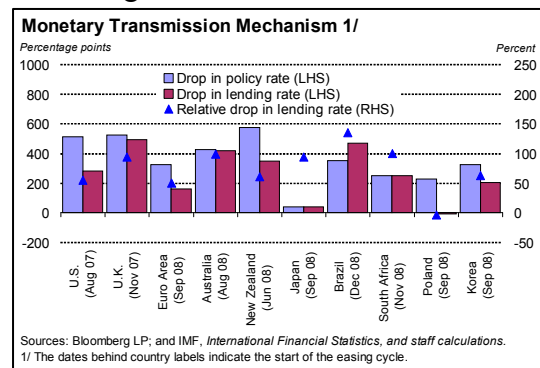
1/ Dates in parenthesis indicate when measure was announced.

## B. Monetary and Exchange Rate Policies: Appropriate for Now

### Background

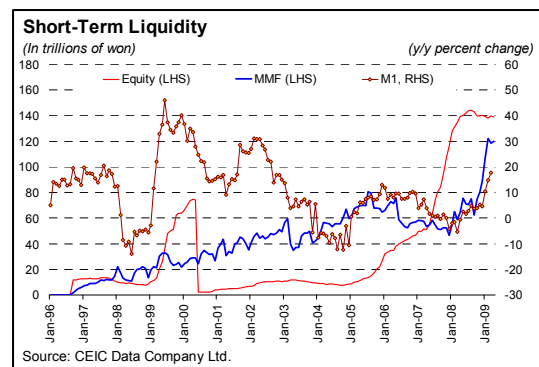
19. **The BOK undertook a wide range of policy measures to ensure the adequate flow of credit and support the rapidly deteriorating economy.** It cut interest rates by a cumulative 325 basis points between October and February to 2 percent. BOK also broadened the list of eligible counterparties and collateral in its repo operations and relaxed banks' liquidity requirements. BOK further set aside W 5 trillion (\$4 billion) to assist financial institutions to purchase corporate bonds and commercial paper, and increased its ceiling for subsidized SME lending by W 3½ trillion to W 10 trillion (\$8 billion).

20. **As a result, disruptions to the monetary transmission mechanism were short lived.** Short-term interest spreads, which shot up in the immediate aftermath of the Lehman collapse, returned to pre-crisis levels in late-2008, and lending rates are now at an all time low. Similarly, bond spreads of high grade issuers have returned to pre-crisis levels, although they remain elevated for lower rated corporates. By international standards, the monetary transmission mechanism seems to be working fairly well: Among a set of comparator countries, Korea is placed in the middle of the field. Moreover, some of the countries exhibiting a greater responsiveness of lending rates to policy rates started the easing cycle earlier, giving the monetary transmission process more time to run its course.



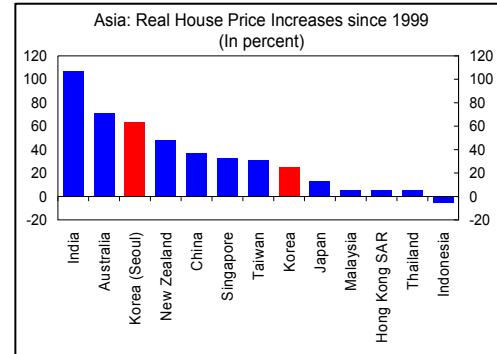
### Staff views

21. **The BOK should maintain its accommodative stance for now and address potential asset price inflation with prudential regulation.** With the output gap projected at -6¼ percent a year from now, the current stance should be maintained for now. While there are signs of excess liquidity, stock market valuations and house prices remain well in line with global peers (see Box 3) and do not warrant an immediate monetary policy response. If pressures on asset prices intensify, the first line of defense should be prudential regulations, especially on mortgage lending.



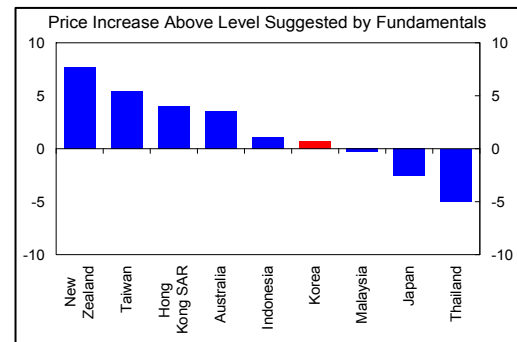
### Box 3. Korea: Housing Market—Are Further Losses Looming?

**Korea's housing market has trended up since the Asian crisis.** House prices have increased by around 25 percent in real terms since 1999. This is slower than the average for Asia Pacific of around 31 percent, but above the 17 percent average excluding fast appreciating countries such as India, Australia, and New Zealand. The run-up in real prices in Korea has largely been driven by higher prices in Seoul, up by more than 60 percent since 1999. This is well-above the price increases seen for other metropolitan areas, including Singapore and Hong Kong. In particular the southern districts of Seoul have experienced rapid real price increases since the Asian crisis, up by close to 100 percent at the 2006 peak. Since the onset of the current global economic crisis, however, real prices have waned across Asia, including in Korea (-3.5 percent in April). In Korea, prices even started to flatten in early 2007 in response to policy measures to cool the market, including tax measures, selected price controls, and prudential measures.

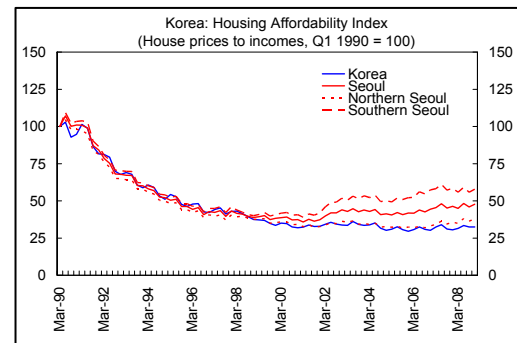


**Despite the fast run-up in house prices since the Asian crisis, home valuations in Korea do not on average appear to be significantly out of line with fundamentals.** To get a sense of house price alignment with fundamentals, house price growth was modeled as a function of an affordability index, growth in disposable income, short- and long-term interest rates, credit and equity price growth, and changes in the working-age population.<sup>1</sup> The results of this exercise suggest that house prices in Korea are on average broadly in line with fundamentals.

Moreover, a look at house prices relative to income over a longer time period shows that they are still more affordable compared to the early 1990s, even for the faster growing districts of Seoul. That being said, the current economic slowdown is restraining prices as incomes shrink and banks tighten credit standards. The spillovers from the current slowdown are also showing up in a significant jump (19 percent y/y in May) in the stock of unsold homes and steep declines in construction and construction permits.

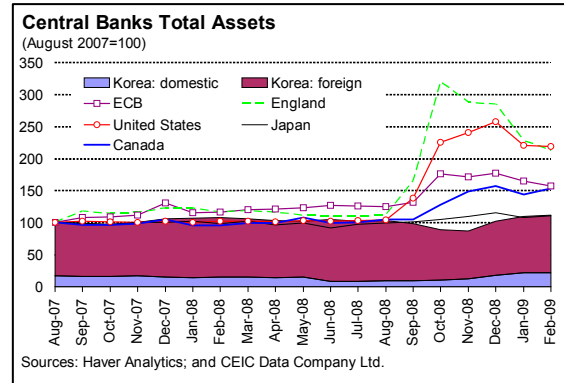


**The authorities introduced a number of measures at the height of the crisis to reduce downside risks to the housing market, but have recently scaled some of these back.** The initial response was broadly appropriate given the heightened level of uncertainty at the time. Back then, the government announced that public institutions would buy unsold houses and land from construction companies. Loan-to-value and debt-to-income limits for certain areas were relaxed and the number of speculative zones with stricter prudential regulations was reduced. Moreover, tax relief was provided for purchases of multiple houses and on the proceeds of new houses bought until February 11, 2010 (except in Seoul) and sold within the next five years. Finally, the period after which purchase rights to apartments in the metropolitan area could be resold was shortened from 5–10 years to 1–5 years. To address a potential re-emergence of upward price pressures in selected Seoul neighborhoods, the authorities recently lowered the required loan-to-value ratios for these areas. This selective approach is appropriate given the absence of nationwide pressures in the housing market, and could be pursued further if house prices continue to rise in specific areas.



<sup>1</sup> See *Asia and Pacific, Regional Economic Outlook*, May 2009

22. **The impact of unconventional monetary policy on BOK’s balance sheet has been limited and should be easy to unwind.** The expansion of domestic assets was largely offset by a decline in foreign assets, limiting the overall expansion of the balance sheet. Some of this asset swap was automatic and the direct consequence of BOK’s decision to substitute for foreign capital flows by lending out of its foreign currency reserves. With the policy rate well above zero and global as well as domestic funding conditions easing, a gradual unwinding of these measures, as is under way, should continue.



23. **Foreign exchange intervention in the spot market should remain confined to smoothing operations.** As a result of massive capital outflows, the exchange rate has moved considerably below most estimates of its long-term equilibrium level. However, as evidenced by the recent pickup in capital inflows, this should be a temporary phenomenon. Intervention should remain confined to smoothing operations, given the reasonable reserve coverage and the questionable effectiveness of intervention in the current volatile environment.

Exchange Rate Misalignment According to Spring CGER Exercise (In percent)	
Equilibrium REER approach	-41
Macro balance approach	-9
External sustainability approach	-14
<b>Memorandum Items</b>	
Expected percentage change in REER 5-years ahead	
Consensus forecast	37
Forward rate	10
NEER appreciation since reference period	13
1/ A positive number denotes an overvaluation. The reference period is February 25 to March 25, 2009.	

**Authorities’ views**

24. **The authorities agreed with the need for an accommodative monetary stance, but remained concerned about its effect on asset prices.** The authorities felt that the monetary stance was appropriate for now, but in line with their more upbeat assessment of economic prospects they remained attuned to signs of excess liquidity. Moreover, they took little comfort from the fact that house prices had fallen until recently, given the upturn in mortgage-related lending and rising house prices in some localized markets. They agreed that prudential regulation should be the first line of defense against frothy asset markets, as evidenced by a recent tightening of loan-to-value ratios in selected Seoul neighborhoods. However, the authorities did not rule out interest rate hikes should more generalized asset price rises become a concern.

25. **The authorities reiterated their commitment to a freely floating exchange rate.** Prior to 2009, intervention was confined to smoothing operations. So far in 2009, the authorities abstained completely from exchange market intervention, as evidenced by the

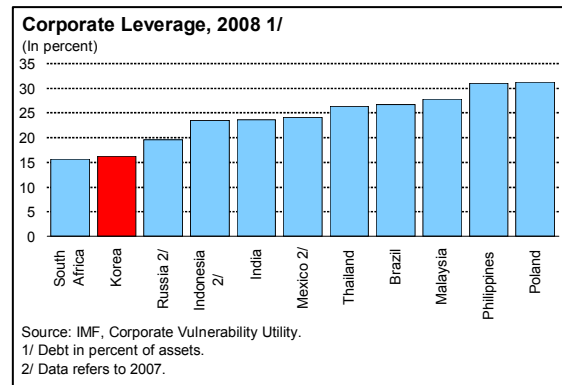
won's volatility and appreciation since early March. The unwinding of dollar liquidity provision has accounted for the recent increase in official reserves.

### C. Financial Sector Policies: Bracing for Fallout from the Real Economy

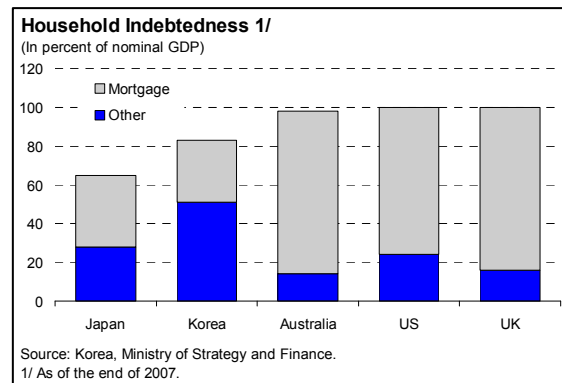
#### Background

#### 26. Corporate and household vulnerabilities are bound to erode banks' relatively strong capital positions.

- While the corporate sector as a whole entered the current crisis in a relatively strong position, there are pockets of significant vulnerability, particularly in the SME sector. Based on balance sheet information and asset price volatility of listed companies, it is estimated that creditor losses could reach 4.1 percent of GDP, with losses for banks amounting to 3.1 percent of total loans.<sup>5</sup>



- Household debt as a percent of disposable income has been on an upward trend since the Asian crisis and is higher than in the United States and Japan. Moreover, at 50 percent of GDP, non-mortgage household debt is much higher than in comparator countries. As stock market valuations tumbled, debt relative to financial assets has spiked recently, and while well below 100 percent, exceeds the ratio in other countries by a wide margin.



27. **In anticipation of a substantial rise in banks' NPLs, the authorities are pursuing a strategy that includes capital injections and purchases of impaired assets.** Banks have since late-2008, under guidance from the supervisor, raised their capital adequacy ratios (CARs) to 12.9 percent. The authorities have also established a W 20 trillion bank recapitalization fund (1.6 percent of risk weighted assets) and in the first quarter of 2009,

<sup>5</sup> For more details, please refer to selected issues paper "The Impact of the Global Recession on Korea's Corporate Sector."

eight banks drew a total of W 4 trillion from the fund. In addition, the Korea Asset Management Corporation (KAMCO) stands ready to issue government-guaranteed bonds totaling W 40 trillion (\$30 billion) mainly to purchase NPLs and troubled assets from financial institutions.<sup>6</sup>

### Staff views

28. **Banks are well positioned to withstand a significant deterioration in asset quality.** According to staff estimates, the NPL ratio could reach 6.4 percent under the baseline, which would reduce banks' capital adequacy ratio to 10 percent. Only under a very extreme scenario—G7 growth of minus 7.8 percent—would the CAR fall below the regulatory minimum of 8 percent.<sup>7</sup>

29. **There may be a need to link capital injections and purchases of nonperforming loans more clearly to progress on bank-led restructuring of SMEs.** While less disruptive than an after-the-fact recapitalization, the current strategy may weaken banks' incentives to actively pursue company restructuring. In fact, access to the recapitalization fund has been explicitly linked to the provision of SME credit and, hence, undermines restructuring efforts. Similarly, given the time and expertise required to restructure debtor companies, it may be easier for banks to sell impaired assets to KAMCO rather than engage in costly restructuring. In this context, capital support to banks and purchases of impaired assets could be more clearly linked to restructuring efforts.

30. **While the crisis response framework has performed relatively well during the recent crisis, there may be scope for further improvement.** The global liquidity crisis and the new emphasis on macro-prudential oversight have highlighted the interconnectedness of financial supervision, monetary policy, and lender-of-last-resort policies. Following the examples of Australia, New Zealand, and Hong Kong SAR, a more formal framework such as a Financial Stability Council could help improve financial policy coordination and information sharing between supervisors, the central bank, and the government.

31. **In light of recent financial sector stresses, the authorities may want to consider some upgrades to bank supervision and regulation.** As pointed out during last year's Article IV consultation, there is scope to improve stress testing within banks and the regulator and the FSAP update envisaged for late 2010 will follow up further on this issue. The authorities may also want to consider additional prudential regulation with respect to banks' wholesale financing, given its macro stability implications. Counter-cyclical capital

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<sup>6</sup> For a cross-country perspective on bank recapitalization and toxic assets programs, see Box 2.

<sup>7</sup> The projected baseline NPL ratio differs from that in paragraph 26, because it also takes into account defaults on household loans.

requirements and other lessons from the global financial crisis could also be explored in line with the evolving international debate.

32. **The scale of the downturn gives added urgency to further improvements in Korea's corporate and personal bankruptcy regime.** In 2006, Korea enacted a new unified insolvency law, which has greatly reduced uncertainties and streamlined court procedures. However, there is scope for further improvement, including by introducing an automatic stay on assets and removing the requirement for prior court approval when submitting a restructuring plan. Moreover, decriminalizing personal bankruptcies—loan defaults are treated as a criminal offense—and extending exemptions for personal assets may induce entrepreneurs to declare bankruptcy early on.

#### **Authorities' views**

33. **The authorities underscored that the recapitalization fund and KAMCO restructuring fund had fulfilled important functions in the early phase of the crisis, but acknowledged that there was scope to revisit some of these functions.** The funds had been set up as a contingency measure and were meant to assure investors that the government was aware of the risks to the banking system. This strategy was seen to have succeeded, as several banks have been able to tap international capital markets in recent months without recourse to the government's guarantee on external debt. The funds had also helped support the real economy by preempting an excessive degree of deleveraging. With economic conditions stabilizing, the authorities agreed that the modalities of accessing the recapitalization fund needed to be more clearly aligned with the broader restructuring strategy. On the other hand, they did not share the concern that banks would overuse the KAMCO fund instead of engaging in time consuming restructuring. Recent plans by banks to set up their own asset purchase vehicle is seen as evidence that KAMCO's pricing of impaired assets is perceived as conservative.

34. **The authorities recognize the need for greater coordination among the central bank and government agencies, but value a clear delineation of supervisory responsibilities in maintaining the BOK's independence in the context of the inflation targeting framework.** They acknowledged that BOK needed better access to information to act as a lender of last resort in times of crisis and noted that a formal agreement to this effect is being considered. The authorities also saw an increased role for macro-prudential regulation in line with international consensus on this issue. They pointed out that BOK has established financial stability as an important policy objective in the conduct of monetary policy.

35. **Regulators saw scope for improved stress testing and are following with interest the international dialogue on wholesale funding regulation.** The authorities want to develop stress testing to a stage where it can be used as a basis for regulatory action and are allocating more resources for this purpose. With respect to banks' wholesale financing, they

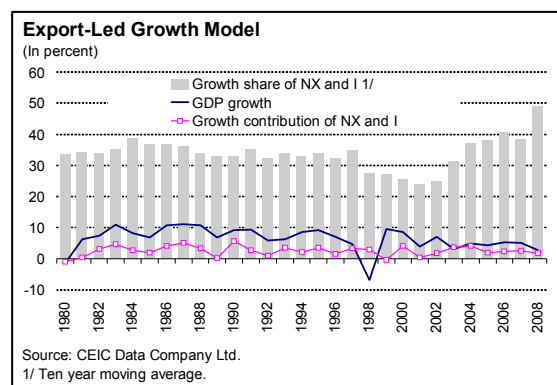


pointed out that Korea has one of the strictest regulations in terms of foreign exchange maturity mismatches, while domestic funding pressures could be addressed through BOK's liquidity facilities. Notwithstanding, they were closely following the deliberations of the Financial Stability Board and the Basel Committee on Banking Supervision with respect to wholesale funding regulation and other lessons from the crisis.

#### D. Structural Policies: Laying the Foundations For A Sound Recovery

##### Background

36. **Korea's growth relies heavily on the tradables sector, and increasingly so.** During 2001–08, net exports and investment—which is heavily geared towards the tradables sector—accounted for 55 percent of growth, up from 27 percent in the 1990s. This bias towards the tradables sector is mirrored on the production side. Labor productivity growth in the services sector has been about 1.2 percent since 2000, down from 2.6 percent in the 1980s, and significantly lower than the 6.7 percent for the manufacturing sector. To a large extent, low service sector productivity reflects the poor state of the SME sector, which accounts for 80 percent of the sector's output. According to BOK, the ratio of listed SMEs with interest burdens in excess of operating income reached 44 percent in 2007.



##### Staff views

37. **Putting the SME sector on a sound footing and rebalancing growth towards the nontradables sector seems key for a lasting recovery.** Rebalancing growth will require removing the bias towards exports and increase service sector productivity. This would support potential growth in the post-crisis environment when external demand and capital inflows from advanced countries may prove permanently lower. The three major avenues to attain these goals are SME restructuring, service sector deregulation, and labor market reform.

38. **The authorities have launched important initiatives in each of these fields, but progress remains uneven.** The authorities recently stepped up a bank-led restructuring program begun in 2004, and of 861 SMEs screened since June 2009, 77 have been found to be in need of restructuring and 36 have been diagnosed unviable. The free-trade agreement with the United States, whose ratification is pending in both legislatures, takes steps to open up the service sector in areas such as law, accounting, and finance, but not health and education. The government has also undertaken some important labor market reforms, but employment protection of regular workers remains high by international standards.

39. **Progress on SME restructuring is contingent on the right incentive structure and mechanism to address the social adjustment costs.** The bank-led approach to SME restructuring seems appropriate, in principle, given limited court capacity to deal with a large number of SMEs and the banks' information advantage. However, extensive loan guarantees and mandated loan roll-overs have created disincentives on the part of banks and borrowers, respectively. There are also a large number of small SMEs where the cost of restructuring outweighs the benefits. Given the underlying structural problems, debt relief or maturity extension in these cases does not seem a compelling option. Instead, public transfer programs may be a more effective use of public funds.

40. **Raising service sector productivity through deregulation should support potential growth and strengthen domestic demand.** The historic bias towards an export-led growth strategy could be reduced by eliminating the preferential tax treatment for the manufacturing sector. Moreover, the service sector could be opened up to more competition, including from abroad. According to a recent OECD study, a third of service business lines impose entry barriers, and restrictions on services imports and FDI remain high by industrialized country standards.

41. **Labor market reform would also support growth both from the supply and demand side.** Past staff advice to reduce employment protection for regular workers and expand social protection of non-regular workers is still appropriate. More labor market flexibility would facilitate a reallocation of labor from the tradables to the nontradables sector, while better social protection would strengthen domestic demand by reducing precautionary savings. Moreover, increasing labor market participation of women, the old, and the young would help offset the projected fall in total factor productivity associated with a shift of economic activity to the less productive nontradables sector.

#### **Authorities' views**

42. **The authorities recognize the need to rebalance growth towards the nontradables sector and have already taken several initiatives to this effect.** The next phase of the restructuring process, scheduled from July to November 2009, will explicitly target SMEs, which make up the lion's share of the service sector. The government announced further plans to develop the service industry on May 8: Nine service industries have been chosen on the basis of potential for job creation, value added, and growth and will be nurtured through streamlined regulation and increased competition. The government has also signaled its intention to equalize tax treatment between the manufacturing sector and these service sectors, although by extending preferential tax treatment to selected services. In the area of labor reform, the government is considering ways to facilitate part time employment, as it should help to raise the share of women, students, and elderly in the labor force.

Table 1. Korea: Selected Economic Indicators, 2005–10

Nominal GDP (2008): \$930.7 billion  
 Main exports (percent of total, 2008): Electronics (26), vessels (10), and road vehicles (8).  
 GDP per capita (2008): \$19,148  
 Unemployment rate (2008): 3.2 percent  
 FDI (2008): \$2.2 billion  
 Public debt (2008): 33.6 percent of GDP  
 Foreign public debt (2008): 3.6 percent of total public debt

	2005	2006	2007	2008	Projections	
					2009	2010
Real GDP (percent change)	4.0	5.2	5.1	2.2	-1.8	2.5
Total domestic demand	3.9	4.9	4.5	1.5	-5.1	2.2
Final domestic demand	3.7	4.6	4.9	0.7	-2.8	1.4
Consumption	4.6	5.1	5.1	1.6	-1.4	1.3
Gross fixed investment	1.9	3.4	4.2	-1.7	-6.4	1.6
Stock building 1/	0.2	0.3	-0.3	0.8	-2.2	0.8
Net foreign balance 1/	0.3	0.3	0.7	1.1	2.7	0.7
Nominal GDP (in trillions of won)	865.2	908.7	975.0	1,023.9	1,038.3	1,087.0
Saving and investment (in percent of GDP)						
Gross national saving	31.5	30.2	30.0	30.7	28.8	29.5
Gross domestic investment	29.7	29.6	29.4	31.4	25.5	27.4
Current account balance	1.8	0.6	0.6	-0.7	3.2	2.1
Prices (percent change)						
CPI inflation (end of period)	2.6	2.1	3.6	4.1	1.7	3.0
Core inflation (average)	2.3	1.8	2.3	4.3	3.5	2.0
GDP deflator	0.7	-0.1	2.1	2.7	3.2	2.2
Real effective exchange rate	12.2	7.4	0.1	-19.8	...	...
Trade (percent change)						
Export volume	9.1	13.2	10.4	6.8	-6.3	5.8
Import volume	6.4	10.5	9.0	0.9	-12.8	4.3
Terms of trade	-7.3	-6.6	-2.5	-14.3	4.0	-3.7
Consolidated central government (in percent of GDP)						
Revenue	22.1	23.1	25.0	24.5	23.7	22.7
Expenditure	20.3	21.3	21.5	23.3	26.6	26.8
Overall balance	1.8	1.7	3.5	1.2	-2.9	-4.0
Excluding Social Security Funds	-0.9	-1.2	0.4	-1.6	-5.4	-6.6
Money and credit (end of period)						
Overnight call rate 2/	3.8	4.6	5.0	2.9	2.0	...
Three-year AA- corporate bond yield 2/	5.5	5.3	6.8	7.7	5.3	...
M3 growth 3/	7.4	10.5	10.0	9.1	7.2	...
Balance of payments (in billion U.S. dollars)						
Exports, f.o.b.	289.0	331.8	379.0	433.4	345.4	373.5
Imports, f.o.b.	256.3	303.9	350.9	427.4	304.9	337.9
Oil imports	42.6	55.9	60.3	85.9	50.8	64.0
Current account balance	15.0	5.4	5.9	-6.4	25.6	17.9
Gross international reserves (end of period)	210.3	238.9	262.1	201.1	244.2	276.9
In percent of short-term debt (residual maturity)	239.6	172.5	130.8	104.5	126.7	136.5
External debt (in billion U.S. dollars)						
Total external debt (end of period)	187.9	260.1	383.2	381.1	382.2	405.8
Of which: Short-term (end of period)	65.9	113.7	160.2	151.1	151.1	158.3
Total external debt (in percent of GDP)	22.2	27.3	36.5	40.9	48.0	48.1
Debt service ratio 4/	7.9	7.4	7.5	10.2	11.3	10.7

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

1/ Contribution to GDP growth.

2/ Data for 2009 are as of July 13.

3/ Data for 2009 are as of May.

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

**Table 2. Korea: Balance of Payments, 2004–09**

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

	2004	2005	2006	2007	2008	Proj. 2009
Current account balance	28.2	15.0	5.4	5.9	-6.4	25.6
Trade balance	37.6	32.7	27.9	28.2	6.0	40.5
Exports	257.7	289.0	331.8	379.0	433.4	345.4
(growth rate, in percent)	30.6	12.1	14.8	14.2	14.3	-20.3
Imports	220.1	256.3	303.9	350.9	427.4	304.9
(growth rate, in percent)	25.6	16.4	18.6	15.4	21.8	-28.7
Services	-8.0	-13.7	-19.0	-19.8	-16.7	0.3
Income	1.1	-1.6	0.5	1.0	5.1	-14.6
Current transfers	-2.4	-2.5	-4.1	-3.5	-0.8	-0.6
Financial and capital account balance	9.4	7.0	18.5	7.6	-50.5	17.9
Financial account	11.2	9.3	21.6	10.0	-50.4	20.4
Portfolio investment, net	8.6	-1.7	-22.7	-20.6	-29.7	7.7
Direct investment, net	4.6	2.0	-4.5	-13.8	-10.6	-3.0
Inflows	9.2	6.3	3.6	1.8	2.2	1.0
Outflows	-4.7	-4.3	-8.1	-15.6	-12.8	-4.0
Other investment, assets	-8.1	-2.7	-7.9	-16.8	-13.3	12.0
Other investment, liabilities	6.1	11.7	56.8	61.2	3.2	3.6
Of which: trade credits	8.1	7.8	13.1	13.6	6.5	5.2
Of which: short-term loans	3.3	5.7	42.4	34.5	-22.0	-2.0
Of which: medium- and long-term loans	-2.4	-2.5	2.2	8.0	2.0	-0.4
Capital account	-1.8	-2.3	-3.1	-2.4	0.0	-2.5
Net errors and omissions	2.9	0.1	-1.2	2.1	0.9	0.0
Overall balance (1+2+3)	40.5	22.1	22.6	15.6	-56.0	43.5
Financing	-40.5	-22.1	-22.6	-15.6	56.0	-43.5
Change in usable reserves (increase -)	-38.7	-19.8	-22.1	-15.1	56.4	-43.0
Net IMF purchases	0.0	0.0	0.0	0.0	0.0	0.0
World Bank/AsDB 1/	-1.8	-2.2	-0.5	-0.5	-0.5	-0.4
Memorandum items:						
Current account balance (in percent of GDP)	3.9	1.8	0.6	0.6	-0.7	3.2
Trade balance (in percent of GDP)	5.2	3.9	2.9	2.7	0.6	5.1
Gross reserves	199.0	210.3	238.9	262.1	201.1	244.2
(in months of imports of goods and services)	8.8	8.0	7.7	7.2	4.6	8.0
External debt	172.3	187.9	260.1	383.2	381.1	382.2
(in percent of GDP)	23.9	22.2	27.3	36.5	40.9	48.0
Short-term external debt (inc. trade credits)	56.3	65.9	113.7	160.2	151.1	151.1
Nominal GDP	721.4	844.8	951.2	1049.1	930.7	795.6

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

1/ These World Bank and Asian Development Bank loans were extended as exceptional financing in the 1997-98 crisis.

Table 3. Korea: Consolidated Central Government Operations, 2004–09

	2004	2005	2006	2007	2008	Proj. 2009
(In trillions of won)						
Revenue	178.8	191.4	209.6	243.6	250.7	245.7
Tax revenue	117.8	127.5	138.0	161.5	167.3	160.3
Social security contributions	22.8	24.9	27.3	29.7	32.9	34.2
Nontax and capital revenue	38.1	39.1	44.2	52.4	50.5	51.2
Expenditure and net lending	161.5	175.9	193.9	209.8	238.8	275.9
Current expenditure 1/	133.1	148.3	161.7	169.7	196.9	211.5
Interest	8.7	10.1	12.2	13.4	16.5	16.7
Non-interest	124.4	138.2	149.5	156.2	180.4	194.8
Capital expenditure	27.0	24.6	26.5	33.0	36.5	45.0
Net lending	1.4	3.0	5.7	7.1	5.5	19.4
Overall balance	17.2	15.5	15.6	33.8	11.9	-30.2
<i>Of which: Social Security Fund balance</i>	21.2	23.6	26.4	30.2	28.0	26.1
Excluding Social Security Funds	-4.0	-8.1	-10.8	3.6	-16.1	-56.3
(In percent of GDP)						
Revenue	21.6	22.1	23.1	25.0	24.5	23.7
Tax revenue	14.2	14.7	15.2	16.6	16.3	15.4
Social security contributions	2.8	2.9	3.0	3.1	3.2	3.3
Nontax and capital revenue	4.6	4.5	4.9	5.4	4.9	4.9
Expenditure and net lending	19.5	20.3	21.3	21.5	23.3	26.6
Current expenditure	16.1	17.1	17.8	17.4	19.2	20.4
Interest	1.1	1.2	1.3	1.4	1.6	1.6
Non-interest	15.0	16.0	16.5	16.0	17.6	18.8
Capital expenditure	3.3	2.8	2.9	3.4	3.6	4.3
Net lending	0.2	0.3	0.6	0.7	0.5	1.9
Overall balance	2.1	1.8	1.7	3.5	1.2	-2.9
<i>Of which: Social Security Fund balance</i>	2.6	2.7	2.9	3.1	2.7	2.5
Excluding Social Security Funds	-0.5	-0.9	-1.2	0.4	-1.6	-5.4
Overall structural balance	2.1	1.9	1.7	3.5	1.4	-1.4
Primary balance	3.1	3.0	3.1	4.8	2.8	-1.3
Memorandum item:						
Nominal GDP (trillion won)	826.9	865.2	908.7	975.0	1,023.9	1,038.3

Sources: Ministry of Planning and Budget; and IMF staff estimates and projections.

1/ The conversion of KDIC and KAMCO bonds is excluded, amounting to W 13 trillion in 2003, and W 12 trillion annually until 2006.

**Table 4. Korea: Indicators of Financial and External Vulnerability, 2004–09**  
(In percent of GDP, unless otherwise indicated)

	2004	2005	2006	2007	2008	2009	Date
<b>Financial indicators</b>							
Consolidated central government debt 1/	31.6	33.9	34.1	33.0	31.8	39.9	Proj.
Broad money (M3, percent change, 12-month basis)	7.1	7.4	10.5	10.0	9.1	7.2	May-09
Private sector credit (Dep. Corp. survey, percent change, 12-month basis)	0.8	8.5	16.2	14.7	16.8	9.6	May-09
One month call borrowing rate	3.3	3.8	4.6	5.0	2.9	1.9	Jun-09
One month call borrowing rate (real)	0.2	1.1	2.5	1.4	-1.2	-0.1	Jun-09
<b>External indicators</b>							
Exports (percent change, 12-month basis in US\$)	30.6	12.1	14.8	14.2	14.3	-27.3	May-09
Imports (percent change, 12-month basis in US\$)	25.6	16.4	18.6	15.4	21.8	-39.4	May-09
Terms of trade (percent change, 12-month basis)	-4.2	-7.3	-6.6	-2.5	-14.3	14.9	May-09
Current account balance (projection for full year)	3.9	1.8	0.6	0.6	-0.7	3.2	Proj.
Capital and financial account balance (projection for full year)	1.3	0.8	1.9	0.7	-5.4	2.2	Proj.
<i>Of which:</i> Inward portfolio investment (debt securities etc.)	2.2	1.1	0.0	2.3	-11.6	-0.9	Proj.
Other investment (loans, trade credits etc.)	0.6	1.1	5.9	5.8	0.3	0.4	Proj.
Inward foreign direct investment in the form of debt or loans	0.2	0.1	0.1	0.1	0.2	...	...
Gross official reserves (in US\$ billion)	199.0	210.3	238.9	262.1	201.1	231.7	Jun-09
Central bank short-term foreign liabilities (in US\$ billion)	2.0	2.2	3.9	9.6	17.1	...	...
Short-term foreign liabilities of the financial sector (in US\$ billion)	47.0	55.1	100.7	140.2	120.2	...	...
Official reserves in months of imports GS (projection for full year)	8.8	8.0	7.7	7.2	4.6	8.0	Proj.
Broad money (M3) to reserves	6.3	6.5	6.9	6.9	7.3	6.7	May-09
Reserves to total short-term external debt (in percent) 2/	254.3	239.6	172.5	130.8	104.5	126.7	Proj.
Total external debt	23.9	22.2	27.3	36.5	40.9	48.0	Proj.
<i>Of which:</i> Public sector debt	3.3	2.6	3.0	5.8	6.5	...	...
<i>Of which:</i> Short-term debt	7.8	7.8	12.0	15.3	16.2	19.0	Proj.
Total external debt to exports GS (in percent)	57.5	56.2	68.1	86.6	74.8	93.9	Proj.
External interest payments to exports GS (in percent)	1.1	1.4	1.8	2.2	1.7	1.1	Proj.
External amortization payments to exports GS (in percent)	9.6	6.6	5.7	5.6	7.9	10.2	Proj.
Exchange rate (per US\$, period average)	1,146	1,024	955	929	1,100	1,317	Jul 13, 09
REER appreciation (+) (12-month basis)	1.8	12.2	7.4	0.1	-18.0	-11.9	May-09
<b>Financial market indicators</b>							
Stock market index (KOSPI)	896	1379	1434	1897	1124	1378	Jul 13, 09
Stock market index (KOSPI, percent change, 12-month basis)	10.5	54.0	4.0	32.3	-40.7	-11.6	Jul 13, 09
Foreign currency debt rating (Moody's/S&P)	A3/A-	A3/A	A3/A	A2/A	A2/A	A2/A	Jul 13, 09

Sources: Korean authorities; private market sources; and IMF staff estimates and projections.

1/ Including government guaranteed restructuring bonds issued by KDIC and KAMCO.

2/ Short-term debt measured on a residual maturity basis.

Table 5. Korea: Financial Soundness Indicators, 2002–08

	2002	2003	2004	2005	2006	2007	2008
<b>Financial Sector</b>							
	(In percent)						
Total loans/GDP	113.5	92.4	88.8	91.9	102.4	110.1	125.8
Commercial banks	64.5	65.1	61.9	63.3	71.0	75.2	83.5
Other financial institutions	49.0	27.3	26.8	28.6	31.3	34.9	42.3
<b>Bank loans</b>							
	(Year-on-year percent change)						
SMEs	23.5	17.9	3.0	4.7	17.7	22.4	12.7
Households	38.3	13.8	8.9	10.7	13.4	5.1	6.9
Large companies	0.4	-13.3	-11.1	15.9	-4.6	31.2	65.7
	(In percent)						
FX loans/total loans to SMEs	5.5	5.5	5.0	5.5	6.9	5.2	...
<b>Banks 1/</b>							
	(In percent)						
Capital adequacy ratio	11.3	11.2	12.1	13.0	12.8	12.3	12.3
Tier 1 capital ratio	7.2	7.0	8.0	9.3	9.2	9.0	8.8
Return on assets	0.6	0.2	0.9	1.3	1.1	1.1	0.5
Net interest margin	2.7	2.6	2.6	2.8	2.6	2.4	2.3
<b>Substandard or below loans, share</b>							
	(In percent of total loans)						
Commercial banks	2.4	2.8	2.0	1.3	0.9	0.7	1.2
Specialized banks	2.1	2.4	1.7	1.1	0.7	0.7	1.1
Mutual savings banks	11.3	11.8	13.0	13.8	10.5	8.8	9.1
Credit unions	6.1	6.3	6.0	5.4	4.5	3.8	3.5
<b>Corporate Sector</b>							
	(In percent)						
Corporate debt/GDP 2/	110.9	109.2	105.0	104.4	111.8	117.5	144.0
Delinquency ratio (domestic commercial bank loans)	2.0	2.1	2.1	1.5	1.2	1.0	1.6
<b>Debt ratio to:</b>							
Equity	135.4	123.4	104.2	100.9	98.9	108.0	124.5
Total assets	31.7	28.3	24.0	22.9	22.4	25.1	26.4
Sales	29.8	26.6	20.7	19.9	19.9	23.6	24.5
Interest coverage ratio 3/	260.3	367.1	575.8	525.4	439.3	425.7	408.7
Current assets/current liabilities	106.1	109.8	117.0	121.4	120.5	119.6	112.3
Operating income/sales	6.7	6.9	7.6	6.1	5.3	5.8	5.9
Financial expenses/sales	-2.6	-1.9	-1.3	-1.2	-1.2	-1.4	-1.4
Ordinary income/sales	4.7	4.7	7.8	6.6	5.8	6.1	3.1
<b>Household Sector</b>							
	(In percent of GDP)						
Household credit	62.5	59.8	60.1	62.6	62.6	62.5	68.8
Of which: Commercial banks	31.6	33.9	35.0	36.7	37.3	36.0	38.8
<b>Delinquency ratio (all bank loans)</b>							
	(In percent)						
Households	1.5	1.8	1.7	1.1	0.7	0.6	0.6
Credit card 4/	8.5	7.8	4.1	2.2	0.1	1.3	1.8
Housing prices, percent change	16.4	5.7	-2.1	4.0	11.6	3.1	3.1
Of which: Seoul	22.5	6.8	-1.4	6.3	18.9	5.4	5.0

Sources: Bank of Korea; Financial Supervisory Service; and CEIC Data Company Ltd.

1/ Includes nationwide commercial banks, regional banks, and specialized banks.

2/ Includes nonfinancial corporations.

3/ Operating income to gross interest payments. Operating income treats depreciation as an expense, so this ratio is lower than calculations using earnings before interest, taxes, and depreciation allowance (EBITDA).

4/ Over 1 month.

**Table 6. Korea: Medium-Term Projections, 2007–14**  
(In units indicated)

	2007	2008	Staff Projections					
			2009	2010	2011	2012	2013	2014
<b>Real GDP (percent change) 1/</b>	5.1	2.2	-1.8	2.5	5.2	5.0	4.7	4.5
Total domestic demand	4.5	1.5	-5.1	2.2	4.7	4.1	4.3	4.5
Final domestic demand	4.9	0.7	-2.8	1.4	4.7	4.1	4.3	4.5
Consumption	5.1	1.6	-1.4	1.3	4.8	4.0	4.3	4.6
Gross fixed investment	4.2	-1.7	-6.4	1.6	4.5	4.5	4.3	4.3
Stock building 2/	-0.3	0.8	-2.2	0.8	0.0	0.0	0.0	0.0
Net foreign balance 2/	0.7	1.1	2.7	0.7	0.9	1.2	0.8	0.4
<b>Prices, period average (percent change)</b>								
Consumer price	2.5	4.7	2.0	2.6	3.0	3.0	3.0	3.0
GDP deflator	2.1	2.7	3.2	2.2	2.5	3.2	3.4	2.7
<b>Savings and investment (percent of GDP)</b>								
Gross national savings	30.0	30.7	28.8	29.5	30.2	30.6	30.7	30.6
Gross domestic investment	29.4	31.4	25.5	27.4	28.2	28.6	28.6	28.4
Current account balance	0.6	-0.7	3.2	2.1	2.1	2.1	2.1	2.1
<b>Consolidated central government (in percent of GDP)</b>								
Revenue	25.0	24.5	23.7	22.7	23.2	23.8	24.4	25.0
Expenditure	21.5	23.3	26.6	26.8	24.8	24.1	23.3	22.8
Balance 3/	3.5	1.2	-2.9	-4.0	-1.6	-0.3	1.0	2.1
Excluding Social Security Funds	0.4	-1.6	-5.4	-6.6	-4.2	-2.9	-1.5	-0.5
Debt, domestic plus external 4/	29.6	29.1	35.2	41.1	42.3	41.8	40.2	37.9
Government guaranteed restructuring bonds 4/	3.4	2.7	4.7	5.6	4.9	4.3	3.8	3.3
<b>Trade (percent change)</b>								
Merchandise exports	14.2	14.3	-20.3	8.1	12.5	10.9	13.4	13.1
Volumes 5/	10.4	6.8	-6.3	5.8	9.3	9.8	9.8	9.8
Merchandise imports	15.4	21.8	-28.7	10.8	14.8	12.6	13.6	13.4
Volumes 5/	9.0	0.9	-12.8	4.3	8.8	8.6	10.1	11.0
Terms of trade	-2.5	-14.3	4.0	-3.7	-2.5	-2.5	0.1	0.9
<b>Balance of payments (billions of U.S. dollars)</b>								
Current account	5.9	-6.4	25.6	17.9	18.8	20.6	23.4	25.0
Trade balance	28.2	6.0	40.5	35.7	32.3	29.4	32.7	35.6
Merchandise exports	379.0	433.4	345.4	373.5	420.2	466.1	528.7	598.0
Merchandise imports	350.9	427.4	304.9	337.9	387.9	436.7	496.0	562.4
<b>External debt</b>								
In billions of U.S. dollars 6/	383.2	381.1	382.2	405.8	428.2	450.2	473.1	497.1
(as percent of GDP)	36.5	40.9	48.0	48.1	46.7	45.0	43.4	42.2
Debt service ratio 7/	7.5	10.2	11.3	10.7	11.8	12.4	11.5	10.7
<b>Memorandum items:</b>								
Nominal GDP (trillion won)	975	1,024	1,038	1,087	1,172	1,270	1,375	1,476
Per capita GDP (U.S. dollars)	21,651	19,148	16,354	17,301	18,771	20,448	22,213	23,994
Output gap (percent of potential GDP)	0.0	-0.9	-5.7	-6.3	-4.4	-2.7	-1.3	-0.1

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

1/ Potential growth is assumed to be around 3 percent over the projection period, compared to 4.6 percent prior to the crisis.

2/ Contribution to GDP.

3/ Excluding privatization receipts and conversion of KDIC/KAMCO bonds into treasury bonds.

4/ During 2003-06, ₩ 49 trillion in government guaranteed KDIC/KAMCO bonds have been converted into treasury bonds.

5/ Customs clearance basis.

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

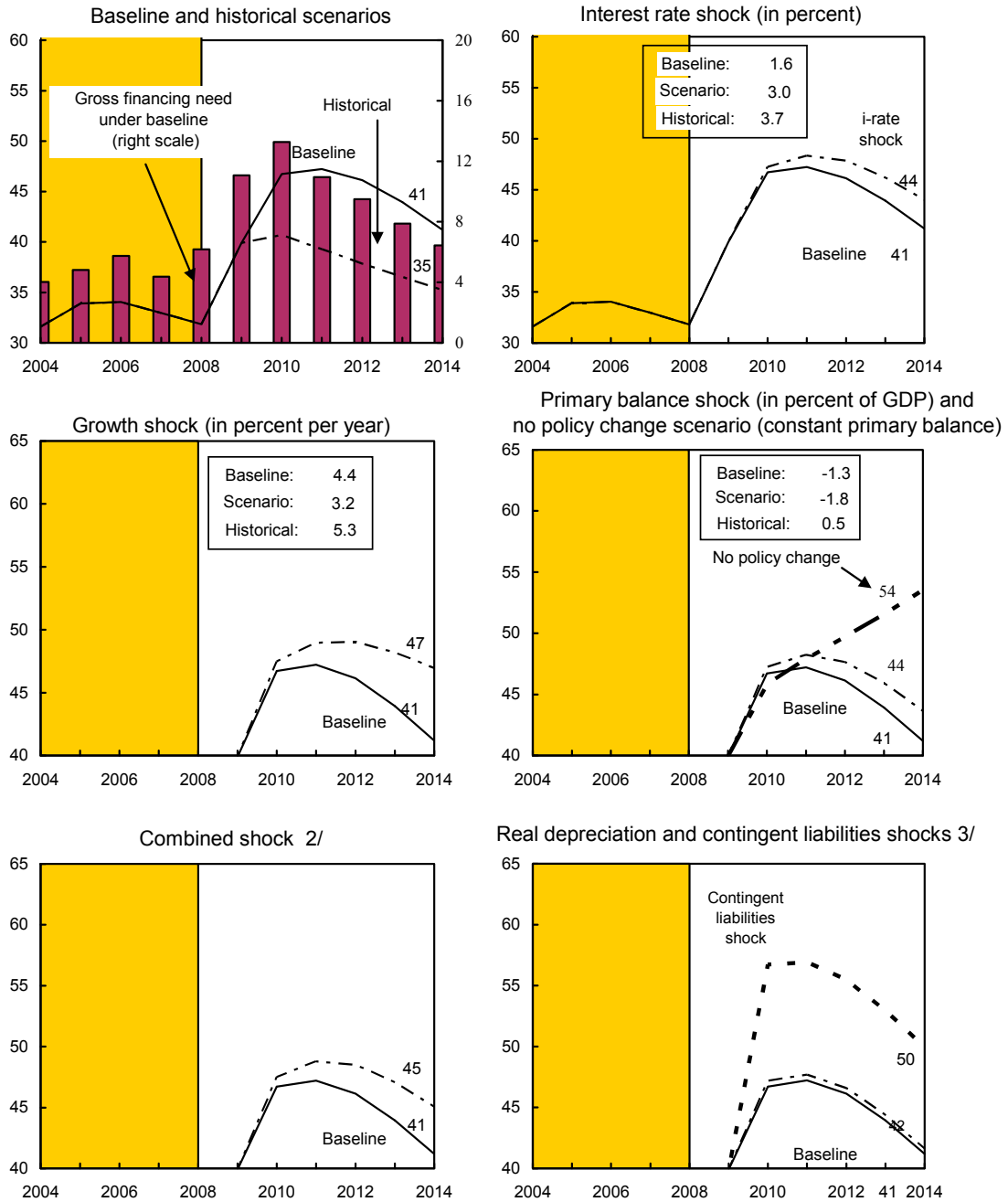
7/ Debt service on medium- and long-term debt in percent of exports of goods and services.



**APPENDIX: DEBT SUSTAINABILITY ANALYSIS**

**Korea's government debt is sustainable predicated on a resumption of medium-term fiscal consolidation.** In the baseline scenario, the authorities are assumed to resume fiscal consolidation plans over the medium term, targeting a balanced budget (excluding the surplus of social security funds) by 2015. To achieve this, staff assumes that the authorities take measures on the revenue side (CIT and PIT base broadening and, possibly, a hike in VAT rates) and expenditure side (pension reform and streamlining of non-aging related expenditures). In this scenario, it is further assumed that the Korean Asset Management Company (KAMCO) will issue W 30 trillion (around 3 percent of GDP) in government guaranteed bonds to buy up bad loans and other impaired assets of financial institutions over a period of two years (partly repaying these through re-sale of assets), which is counted towards the broader debt measure considered in this exercise. Under these assumptions, government debt will initially increase quite steeply, mostly due the widening of the primary deficit (excluding social security funds) led by the discretionary fiscal loosening in response to the crisis and the cyclical revenue losses during current economic downturn. It will peak at around 47 percent in 2011, before declining to 41 percent at the end of the forecast horizon as the structural primary balance flips to a surplus as the consolidation measures kick in, underscoring their importance. While the debt dynamics are broadly favorable, they remain vulnerable to shocks, especially a macroeconomic shock or the realization of contingent liabilities (i.e., if KAMCO has to issue more guaranteed bonds or if contingent liabilities related to guarantees of SME loans and bank's external debt are realized). However, even if it is assumed that 50 percent of the guarantees issued in response to the crisis are called, the debt dynamics do not become adverse.

Figure A1. Korea: Public Debt Sustainability: Bound Tests 1/  
(Public debt in percent of GDP)



Sources: International Monetary Fund, Korea desk data; and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

3/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2009, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

**Table A1. Korea: Public Sector Debt Sustainability Framework, 2004-2014**

(In percent of GDP, unless otherwise indicated)

	Actual					Projections						Debt-stabilizing primary balance 9/
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
<b>1 Baseline: Public sector debt 1/</b>	31.6	33.9	34.1	33.0	31.8	<b>39.9</b>	<b>46.7</b>	<b>47.2</b>	<b>46.1</b>	<b>43.9</b>	<b>41.2</b>	
<i>Of which: foreign-currency denominated</i>	1.7	1.4	1.2	1.1	0.9	1.0	0.9	0.8	0.7	0.6	0.6	<b>-1.5</b>
2 Change in public sector debt	0.8	2.3	0.2	-1.1	-1.1	8.1	6.8	0.5	-1.1	-2.2	-2.7	
3 Identified debt-creating flows (4+7+12)	-3.5	-2.0	-2.7	-3.4	-0.8	8.1	6.8	0.5	-1.1	-2.2	-2.7	
4 Primary deficit (excluding social security funds)	-0.6	-0.2	-0.2	-1.8	0.0	3.8	4.9	2.2	0.9	-0.4	-1.1	
5 Revenue and grants	17.6	17.9	18.7	20.3	20.1	19.3	18.2	18.6	19.1	19.7	20.2	
6 Primary (noninterest) expenditure	17.0	17.7	18.5	18.5	20.0	23.1	23.0	20.9	20.0	19.3	19.0	
7 Automatic debt dynamics 2/	-1.5	-0.3	-0.4	-0.9	0.4	1.2	0.0	-1.5	-1.7	-1.6	-1.4	
8 Contribution from interest rate/growth differential 3/	-1.2	-0.2	-0.3	-0.9	0.0	1.2	0.0	-1.5	-1.7	-1.6	-1.4	
9 <i>Of which: contribution from real interest rate</i>	0.1	1.0	1.4	0.7	0.7	0.6	0.9	0.8	0.5	0.4	0.4	
10 <i>Of which: contribution from real GDP growth</i>	-1.3	-1.2	-1.7	-1.6	-0.7	0.6	-0.9	-2.3	-2.2	-2.0	-1.8	
11 Contribution from exchange rate depreciation 4/	-0.3	0.0	-0.1	0.0	0.4	...	...	...	...	...	...	
12 Other identified debt-creating flows	-1.5	-1.5	-2.1	-0.8	-1.2	3.1	2.0	-0.3	-0.3	-0.2	-0.2	
13 Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14 Recognition of implicit or contingent liabilities (KAMCO/KDIC debt)	-1.5	-1.2	-2.0	-0.3	-0.5	2.0	1.1	-0.2	-0.2	-0.2	-0.2	
15 Other (including foreign exchange stabilization bonds)	0.0	-0.3	-0.1	-0.4	-0.7	1.1	0.9	0.0	-0.1	0.0	0.0	
16 Residual, including asset changes (2-3) 5/	4.3	4.3	2.8	2.3	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	
Public sector debt-to-revenue ratio 1/	179.8	189.2	182.5	162.5	158.7	206.8	257.1	253.5	241.1	223.3	204.2	
<b>Gross financing need 6/</b>	4.0	4.8	5.7	4.4	6.2	11.1	13.3	11.0	9.5	7.9	6.4	
In billions of U.S. dollars	29.0	40.7	54.7	45.7	57.5	88.0	111.9	100.4	95.0	85.8	75.8	
<b>Scenario with key variables at their historical averages 7/</b>						<b>39.9</b>	<b>40.7</b>	<b>39.3</b>	<b>37.8</b>	<b>36.5</b>	<b>35.2</b>	<b>-0.8</b>
<b>Scenario with no policy change (constant primary balance) in 2009-2014</b>						<b>39.9</b>	<b>45.8</b>	<b>47.9</b>	<b>49.7</b>	<b>51.6</b>	<b>53.5</b>	<b>-1.9</b>
<b>Key macroeconomic and fiscal assumptions underlying baseline</b>												
Real GDP growth (in percent)	4.6	4.0	5.2	5.1	2.2	-1.8	2.5	5.2	5.0	4.7	4.5	
Average nominal interest rate on public debt (in percent) 8/	3.7	3.9	4.1	4.3	5.1	5.1	4.6	4.5	4.5	4.5	3.9	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	0.7	3.2	4.3	2.3	2.4	1.9	2.5	2.0	1.4	1.0	1.2	
Nominal appreciation (increase in U.S. dollar value of local currency, in percent)	15.2	2.3	8.8	-0.7	-25.7	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	3.0	0.7	-0.1	2.1	2.7	3.2	2.2	2.5	3.2	3.4	2.7	
Growth of real primary spending (deflated by GDP deflator, in percent)	1.8	8.1	10.1	5.2	10.4	13.4	2.2	-4.7	0.7	1.0	3.0	
Primary deficit	-0.6	-0.2	-0.2	-1.8	0.0	3.8	4.9	2.2	0.9	-0.4	-1.1	

1/ Gross debt of central government and guaranteed debt issued by the Korea Asset Management Company (KAMCO) and Korean Deposit Insurance Corporation (KDIC).

2/ Derived as  $[(r - \pi(1+g) - g + \alpha\epsilon(1+r))/(1+g+\pi+\pi\alpha)]$  times previous period debt ratio, with  $r$  = interest rate;  $\pi$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;  $\alpha$  = share of foreign-currency denominated debt; and  $\epsilon$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

3/ The real interest rate contribution is derived from the denominator in footnote 2/ as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

4/ The exchange rate contribution is derived from the numerator in footnote 2/ as  $\alpha\epsilon(1+r)$ .

5/ For projections, this line includes exchange rate changes.

6/ Defined as public sector deficit, plus amortization of medium- and long-term public sector debt, plus short-term debt at end of previous period.

7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.

8/ Derived as nominal interest expenditure divided by previous period debt stock.

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.

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

**Staff Report for the 2009 Article IV Consultation—Informational Annex**

Prepared by the Asia and Pacific Department

July 23, 2009

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**ANNEX I: KOREA—FUND RELATIONS**

(As of May 31, 2009)

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

<b>II. General Resources Account:</b>	<b>SDR Million</b>	<b>% Quota</b>
Quota	2,927.3	100.0
Fund Holdings of Currency	2388.9	81.61
Reserve Position in Fund	538.4	18.4

<b>III. SDR Department:</b>	<b>SDR Million</b>	<b>% Allocation</b>
Net cumulative allocation	72.9	100.0
Holdings	56.8	77.9

**IV. Outstanding Purchases and Loans:** None**V. Latest Financial Arrangements:**

<u>Type</u>	<u>Approval Date</u>	<u>Expiration Date</u>	<u>Amount Approved (SDR Million)</u>	<u>Amount Drawn (SDR Million)</u>
Stand-by	12/04/1997	12/03/2000	15,500.00	14,412.50
Of which: SRF	12/18/1997	12/17/1998	9,950.00	9,950.00
Stand-by	07/12/1985	03/10/1987	280.00	160.00
Stand-by	07/08/1983	03/31/1985	575.78	575.78

**VI. Projected Obligations to the Fund****(SDR million; based on existing use of resources and present holdings of SDRs):**

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Principal					
Charges/Interest	0.04	0.08	0.08	0.08	0.08
Total	0.04	0.08	0.08	0.08	0.08

**VII. Exchange Rate Arrangement:**

Korea's exchange rate system is classified as "free floating." Previously, the exchange rate against the U.S. dollar was allowed to float only within specified margins around the previous day's weighted average exchange rate in the interbank market. The margins were widened five times between March 1990 and November 1997 (most recently to +/-10 percent), and on December 16, 1997 were eliminated altogether. On July 6, 2009, the exchange rate was W 1268.5=US\$1. 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).

**VIII. Last Article IV Consultation:**

Korea is on a 12-month consultation cycle. Staff discussions for the 2008 Article IV consultation were conducted on a mission to Seoul during June 12-24, 2008. The Article IV consultation was concluded by the Executive Board on September 8, 2008. In addition, a staff visit took place during December 4-10, 2008.

## IX. FSAP and ROSC Participation:

**MCM:** The final FSAP mission was conducted during October 2002. The mission completed the FSAP by assessing the short-term vulnerability of the financial sector to macroeconomic and sectoral shocks and analyzing overall financial sector soundness and developmental challenges, including issues arising from the draft standards assessments. A follow-up technical assistance mission on the supervision of derivatives markets was held in Seoul during January 9–20, 2003. The Financial System Stability Assessment report has been published (Country Report No. 03/81) and is available on the web through the following link: <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 April 2001, and a report was drafted and finalized on November 28, 2001. The report has been published and is available on the web through the link: <http://www.imf.org/external/pubs/ft/scr/2003/cr03127.pdf>.

## X. Technical Assistance:

**FAD:** 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. A mission visited Seoul during August 31–September 16, 2005 to provide technical assistance on the reform of tax policy and administration.

**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.

## XI. Resident Representative:

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

## ANNEX II: KOREA—STATISTICAL ISSUES

Data provision is adequate for surveillance. Korea has been a subscriber to the Special Data Dissemination Standard (SDDS) since September 1996. During 2007–08, most SDDS requirements were met. Korea makes use of the timeliness flexibility option for two data categories: the analytical accounts of the banking sector and public sector operations. Recently, central government operations data have been disseminated with delays due to temporary technical capacity constraints. A data ROSC was published in May 2003.

### *Real Sector Statistics*

The overall structure of the **national accounts** follows the recommendations of the *1993 System of National Accounts*. 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.

The **Consumer Price Index** (CPI) covers 38 urban areas (about 80 percent of the urban population) and is defined to exclude farm and fishing households. The CPI could be further improved by extending coverage to rural areas. The consumption basket is updated every five years; currently, expenditure weights are derived from the *2005 Family Income and Expenditure Survey*. The geometric mean of price changes should be used as a suitable alternative to the ratio of arithmetic means of prices.

The **Producer Price Index** (PPI) covers all domestic industrial activities and a large segment of service activity, as well as free trade zones and bonded warehouses. The weights are based on 2005 revenue shares. 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. A geometric mean of price relatives should be used rather than an arithmetic mean.

### *Government Finance Statistics*

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 generally follow the recommendations of the *Manual on Government Finance Statistics 1986*. The data cover the budgetary units of the central government and certain extra-budgetary funds owned or managed by budgetary units. These statistics are produced by the Digital Budget and Accounting System (D-Brain), which integrates the preparation of budget data, accounting reports, and the generation of fiscal statistics on a monthly basis. The D-Brain provides for automatic crosschecks at different levels of the compilation process.

Consolidated GFS data on the **general government** are not provided to the IMF for publication in the *Government Finance Statistics Yearbook (GFSY)* or the *International Financial Statistics (IFS)*, while the last year for which GFS for the consolidated central government were reported for publication in the *GFSY* and the *IFS* is 2005. Certain fiscal data for general government is reported on national websites.

### ***Monetary and Financial Statistics***

Following the recommendations of the 2001 data ROSC mission, revised monetary aggregates have been compiled since early 2002. These aggregates almost fully comply with the IMF's *Monetary and Financial Statistical Manual*. Data relating to foreign assets and foreign liabilities are affected by the Bank of Korea's (BOK) practice of valuing its financial assets and liabilities at book value (rather than at market value) and revaluing its foreign currency-denominated assets and liabilities twice yearly (rather than on a monthly basis). The authorities have begun reporting monetary data to STA using Standardized Report Forms, but the data show discrepancies from those reported using the old forms. The authorities have been informed of the problem, and resolution is pending.

Korea participated in the pilot project—Coordinated Compilation Exercise—for *Financial Soundness Indicators (FSIs)* conducted by the IMF's Statistics Department. Indicators as of end-2005 were submitted along with metadata, which are now available to the public through the IMF's website at:

<http://dsbb.imf.org/Applications/web/fsi/fsicountrycategorylist/?strcode=KOR>.

### ***External Sector Statistics***

The overall quality of the monthly balance of payments statistics is good. The BOK implemented the fifth edition of the IMF's *Balance of Payments Manual (BPM5)* in early 1998, but some deviations remain in the classification and sectorization of certain transactions. There is also incomplete coverage of transactions via intercompany accounts and noncash transactions. Data on reinvested earnings on direct investment are not compiled, except for the net profits/losses of overseas branches of domestic banks. In the financial account, the direct investment data do not include trade credits or short-term loans with affiliated entities, which are recorded as part of other investment. The BOK is scheduled to develop the classification and sectorization, including the compilation of data on reinvested earnings on direct investment, in the capital and financial account this year.

The quality of the quarterly **external debt** statistics has greatly improved since the financial crisis. 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 generally 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.



## Annex II: Korea—Table of Common Indicators Required for Surveillance

(As of July 17, 2009)

	Date of Latest Observation	Date Received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of Publication <sup>6</sup>	Memo Items:	
						Data Quality – Methodological Soundness <sup>7</sup>	Data Quality – Accuracy and Reliability <sup>8</sup>
Exchange Rates	7/23/2009	7/22/2009	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	Jun 2009	Jul. 2009	M	M	M		
Reserve/Base Money	Jun. 2009	Jul. 2009	M	M	M	LO, O, LO, LNO	LO, O, O, O
Broad Money	May 2009	Jul. 2009	M	M	M		
Central Bank Balance Sheet	Jun. 2009	Jul. 2009	M	M	M		
Consolidated Balance Sheet of the Banking System	May 2009	Jul. 2009	M	M	M		
Interest Rates <sup>2</sup>	7/23/2009	7/23/2009	D	D	D		
Consumer Price Index	Jun. 2009	Jul. 2009	M	M	M	O, LO, O, O	O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>	NA	NA	NA	NA	NA	O, LNO, LO, O	O, NA, O, NA
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	Mar. 2009	Jun. 2009	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	Q4 2008	May 2009	Q	Q	Q		
External Current Account Balance	May 2009	Jun. 2009	M	M	M	O, LO, LO, LO	LO, O, O, O
Exports and Imports of Goods and Services	Jun. 2009	Jul. 2009	M	M	M		
GDP/GNP	Q1 2009	Jun. 2009	Q	Q	Q	LO, LO, O, LO	O, LNO, O, O
Gross External Debt	Q1 2009	Jun. 2009	Q	Q	Q		
International Investment Position <sup>9</sup>	Q1 2009	Jul. 2009	Q	Q	Q		

<sup>1</sup> Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

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

<sup>7</sup> Reflects the assessment provided in the data ROSC or the Substantive Update (published on May 2003, and based on the findings of the mission that took place during April 11-25, 2001) 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>8</sup> Same as footnote 7, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, and revision studies.

<sup>9</sup> Includes external gross financial asset and liability positions vis-a-vis nonresidents.

**Statement by vj g'IMF Staff Representative on the Republic of Korea**  
**August 7, 2009**

1. This statement provides additional information that has become available since the circulation of the staff report. The information does not change the thrust of the staff appraisal.
2. **Recent data point to a rebound in economic activity consistent with staff projections.** Real GDP grew by 2.3 percent (q/q, sa) in the second quarter driven by a pickup in consumption and exports. Consumption was supported by fiscal stimulus measures (including PIT cuts, temporary tax relief on car sales and targeted cash transfers) and a recovery in consumer confidence. Exports continue to benefit from the undervalued exchange rate, global restocking, and fiscal measures abroad that have supported the sale of Korean exports such as motor vehicles and flat screen TVs.
3. **July trade data confirm that the export recovery continues, albeit at a slower pace than in June.** Export growth was 4 percent m/m sa, slower than the 15.9 percent m/m, sa in June and down by 20.1 percent y/y. Imports also showed signs of recovery, recording positive growth for a second consecutive month (3.2 percent, m/m, sa), mainly due to an up-tick in capital goods imports, bringing the y/y decline to 35.8 percent.
4. **Official reserves increased by \$5.8 billion to \$237.5 billion in July.** The increase is attributed to valuation gains of non-dollar denominated reserves, interest and dividend income, as well as the unwinding of outstanding dollar swaps and loans.
5. **Inflation continued to decline in July.** CPI inflation dropped to 1.6 percent (y/y) from 2.0 percent in June and core inflation receded to 3.2 percent (y/y) from 3.5 percent, against the background of the still substantial output gap.



INTERNATIONAL MONETARY FUND

*Public Information Notice*

EXTERNAL  
RELATIONS  
DEPARTMENT

Public Information Notice (PIN) No. 09/103  
FOR IMMEDIATE RELEASE  
August 9, 2009

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

## **IMF Executive Board Concludes 2009 Article IV Consultation with the Republic of Korea**

On August 7, 2009, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV Consultation with the Republic of Korea.<sup>1</sup>

### **Background**

Like other very open economies, Korea was hit hard by the global financial crisis towards the last quarter of 2008. Capital left the country at a faster pace than during the 1997-98 crisis, resulting in sharply lower asset prices, dislocations in money markets, and a spike in bank CDS spreads reflecting the sector's heavy reliance on wholesale funding. This was followed by the largest export slump on record, which quickly spilled over into domestic demand. Overall, the Korean economy contracted by 5.1 percent quarter/quarter (not annualized) in the last quarter of 2008, among the sharpest contractions worldwide.

The authorities responded with a timely and comprehensive set of financial market and macro-stabilization measures. The authorities set aside US\$55 billion in foreign exchange reserves to provide swaps or loans to banks and trade-related businesses, effectively substituting for loans previously provided by foreign creditors. The Bank of Korea (BOK) cut interest rates by a cumulative 325 basis points between October and February and relaxed conditions for its repo operations. On the fiscal front, the authorities enacted a 2009 fiscal stimulus package equivalent to 3.6 percent of GDP and provided generous quasi-fiscal support for ailing small and medium-

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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. 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.

sized enterprises (SMEs), mostly in the form of credit guarantees. Finally, they set up a bank recapitalization fund and a toxic asset fund to shield the banking sector from the downturn and prevent major deleveraging.

The steep exchange rate devaluation helped fend off deflationary pressures. The BOK intervened only exceptionally, confined spot market intervention to smoothing operations and secured swap lines from other central banks totaling US\$90 billion. The weak won redirected domestic demand from imports to domestic production and, in combination with falling oil prices, turned the current account into a solid surplus in the first quarter of this year. Reserves declined by US\$38 billion in the last quarter of 2008 to US\$200 billion and have since recovered. Moreover, the weak won has sustained core inflation, at 3.5 percent in June, while headline inflation has declined to 2 percent on the back of softer commodity prices.

External defaults and a credit crunch have been avoided and economic activity stabilized in the first quarter of 2009. Bank credit continues to grow at a healthy pace and domestic bond issuance in the first five months of 2009 (relative to GDP) is close to an all-time high. In the first quarter of 2009, government consumption, construction investment, and private consumption rose as a direct result of the fiscal stimulus, and the economy expanded by 0.1 percent q/q. Economic activity continues to improve with exports, industrial production, and service sector activity well above their end-2008 lows and business and consumer confidence back in expansionary territory.

Going forward, the recent growth momentum is likely to moderate during the second half of 2009 and be followed by a drawn-out recovery. As the impulse from the front-loaded fiscal stimulus and export gains from the steep depreciation of the won in early 2009 fade, the pickup in growth is unlikely to be sustained at the same pace. Faced with a sluggish recovery in demand from trading partners, and highly leveraged households and SMEs, Korean growth is projected at -1¾ percent in 2009 and 2.5 percent in 2010. There is a distinct possibility that weak global exports will weigh on Korean growth well beyond 2010, as Western consumers permanently increase their savings rates. Other risks to the outlook are another bout of global risk aversion, rising oil prices, or—on the upside—a stronger impact from stimulus measures in Korea and abroad.

### **Executive Board Assessment**

Executive Directors noted that, despite strong macroeconomic policies and limited direct financial sector exposure to subprime assets, Korea was hard hit by the global financial crisis. The sudden withdrawal of capital and the collapse of external and domestic demand had led to a sharp contraction in output in late 2008. Directors commended the authorities for their speedy and comprehensive measures, which have successfully stabilized the economy and the financial system.

Directors observed that, as domestic demand is constrained by highly leveraged households and small- and medium-size enterprises (SMEs), Korea's recovery hinges critically on external demand and global financial conditions. While a moderate recovery is likely to take hold next

year, in line with global growth prospects, the possibility of another bout of global risk aversion poses a downside risk. Accordingly, Directors agreed that macroeconomic policies should continue to focus on supporting growth until a self-sustained recovery is firmly established.

Directors supported the sizeable and frontloaded fiscal stimulus package and the intention to maintain fiscal stimulus in 2010 given the uncertain outlook. Noting the distortionary nature of quasi-fiscal measures to support SMEs, they welcomed the authorities' plan to withdraw such support gradually as conditions permit. Directors looked forward to the announcement of a medium-term fiscal consolidation plan with concrete revenue and expenditure measures.

Directors agreed that the current accommodative monetary policy stance is appropriate. While vigilant monitoring of monetary conditions continues to be necessary, with their impact on asset prices taken into account in monetary policy deliberations, concerns about rising house prices are best addressed through prudential regulations, pending housing market reforms.

Directors took note of the staff's assessment that the won is undervalued relative to its medium-term equilibrium level, and expected this trend to be reversed as capital inflows regain momentum. They endorsed Korea's free floating exchange rate regime, and emphasized that foreign exchange intervention should remain limited to smoothing volatility. Some Directors acknowledged that Korea's large reserve buffers had helped provide liquidity and confidence to markets in times of crisis, while a few others pointed to the potential costs of holding excessive reserves, including from the global perspective.

Directors agreed that the financial system is well-positioned to withstand deterioration in asset quality associated with the economic downturn. They were encouraged by the success of preemptive bank recapitalization in preventing a credit crunch, and welcomed the establishment of a fund to purchase impaired assets. Directors underscored the importance of linking future capital injections more clearly to progress on bank-led restructuring of SMEs. Given banks' increased reliance on wholesale funding, consideration should be given to introducing prudential regulations limiting banks' wholesale financing, and improving stress testing by banks and regulators.

Directors observed that the crisis response framework has worked well. They encouraged the authorities to consider a more formal approach to coordinating financial policies and sharing information among the government, the financial regulators, and the central bank. They also recommended further improvements to the insolvency regime, including through decriminalizing personal bankruptcies.

Directors noted that the current global crisis has highlighted the urgency of rebalancing Korea's growth toward the nontradable sector, and welcomed the authorities' renewed efforts to address structural weaknesses. This would require, as a matter of priority, eliminating the preferential tax treatment of the manufacturing sector, deregulating the service sector, and expediting SME restructuring. Reducing employment protection for regular workers and expanding social protection for nonregular workers would help improve labor market flexibility.

**Public Information Notices (PINs)** form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

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**Korea: Selected Economic Indicators, 2005–10**


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	2005	2006	2007	2008	IMF Staff Projections	
					2009	2010
Real GDP (percent change)	4.0	5.2	5.1	2.2	-1.8	2.5
Consumption	4.6	5.1	5.1	1.6	-1.4	1.3
Gross fixed investment	1.9	3.4	4.2	-1.7	-6.4	1.6
Net foreign balance 1/	0.3	0.3	0.7	1.1	2.7	0.7
Prices (percent change)						
Consumer prices (end of period)	2.6	2.1	3.6	4.1	1.7	3.0
GDP deflator	0.7	-0.1	2.1	2.7	3.2	2.2
Labor market (in percent)						
Unemployment rate	3.7	3.5	3.3	3.2	3.8	3.6
Wage growth, manufacturing	7.8	5.6	6.8	6.0	5.0	6.0
Consolidated central government (In percent of GDP)						
Revenues 2/	22.1	23.1	25.0	24.5	23.7	22.7
Expenditure	20.3	21.3	21.5	23.3	26.6	26.8
Balance 2/	1.8	1.7	3.5	1.2	-2.9	-4.0
Money and interest rates (in percent)						
Overnight call rate	3.8	4.6	5.0	2.9	...	...
M3 growth	7.4	10.5	10.0	9.1	...	...
Yield on corporate bonds	5.5	5.3	6.8	7.7	...	...
Balance of payments						
Current account balance (In billions of U.S. dollar)	15.0	5.4	5.9	-6.4	25.6	17.9
Current account balance (In percent of GDP)	1.8	0.6	0.6	-0.7	3.2	2.1
Won per U.S. dollar (Period average)	1024	955	929	1102	...	...

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Sources: Data provided by the Korean authorities; and IMF staff estimates and projections.

1/ Contribution to GDP growth.

2/ Excluding privatization receipts and rollover of KDIC/KAMCO bonds.

**Statement by Hi-Su Lee, Executive Director for Republic of Korea, and  
Suk Kwon Na, Advisor to the Executive Director  
August 7, 2009**

1. My authorities greatly appreciate the productive policy dialogue during the Article IV consultation and the staff's high-quality papers. Staff's recommendations and timely guidance accord with their keen interest in the Korean economy. There is a broad consensus between the authorities and staff on most aspects of the staff assessment. My authorities will give due consideration to the staff recommendations, together with strengthened monitoring and preparedness for the possible developments in the years to come.

***Recent Economic Developments and Near-Term Risks***

2. Given the nature of a "once-in-a-century" crisis, Korea's export-driven economy experienced an unprecedented reversal of capital flows and a collapse in exports. With Korean financial institutions facing a sharp reduction in their credit lines and rollover rates on short-term external bank debt dropping to around 40 percent, the Korean economy experienced a sharp contraction in the last quarter of 2008.

3. Placing utmost emphasis on quick resolution of the impending crisis, the authorities responded with several comprehensive policy packages as well as sectoral policy measures, in line with the G-20 leaders' commitment through the global recovery plan. With these measures bearing fruit, the Korean economy is one of the first to recover from the global contraction. As economic activity continues to improve, the first quarter growth rate in 2009 marked a positive number at 0.1 percent in qoq terms. More pleasingly, the growth rate in the second quarter climbed to 2.3 percent, consistent with the increase in monthly industrial production over the last six consecutive months, which almost recovered to its pre-crisis level in June 2008. Such recent improvements are consistent with the OECD's analysis that the composite leading indicators of Korea are improving at the fastest pace during the current crisis. The authorities view that stronger-than-expected recovery momentum came not only from the fiscal stimulus and depreciation of the Korean Won, but also from the relative strength of financial institutions' balance sheets and Korea's well-balanced diversification of export markets and products. This has contributed to a quick improvement in market confidence, in particular with the consumer confidence index in July 2009 recording the highest in the recent seven years and the KOSPI index rising to more than 1,500 from the 1,018 in early March 2009.

4. The clear thing to be noted is that these promising results have not made the authorities complacent and they are cognizant of the still-existing risks facing Korea. They view as major downside risks a more pronounced negative feedback loop between the real economy and the financial sector, as well as oil price hikes. Moreover, while receding, the risk of a sudden stop in financial flows still remains. The authorities fully recognize the implication of Mr. Blanchard's observation at the WEMD discussion in early July that Asia's economic fortunes are inextricably linked to a recovery in advanced economies, and agree



with him that the recent pickup in Asia's exports tends to be based on restocking by advanced economy importers and increased exports to China.

### ***Macroeconomic Outlook and the Authorities' Policy Focus***

5. Given the foregoing, the authorities project that the annual growth rate for this year will amount to around -1.5 percent of GDP, a little bit higher than staff's -1.8 percent of GDP. The authorities' more optimistic forecasts are more distinct from staff's in terms of the growth rate for 2010, which they project at around 4 percent, compared to 2.5 percent by staff. They interpret that a robust growth momentum will be supported next year by the global recovery and subsequent increase in domestic demand, given Korea's specialization in advanced manufacturing and its well-positioning to profit from solid growth in China and other emerging markets. They agree with staff that inflation is projected to stay low at around 2 percent in the second half of 2009 and increase thereafter following the more evident recovery and the recent increase in oil prices.

6. In the beginning of this year, the Korean government has prepared three major responses to achieve its 2009 Economic Policy Direction: (i) short-term measures to maintain the current employment level; (ii) measures to prepare for the future; and (iii) measures to enhance capabilities to revitalize the economy. Entering the second half of 2009, the authorities consider that the uncertainty regarding the pace and persistence of economic recovery still remains strong, in that the impact of front-loaded fiscal spending is likely to be smaller in the second half. In this regard, they stand ready to put more emphasis on pursuing both (i) the strengthening of the economic recovery momentum through maintaining expansionary policy for the time being, and (ii) acceleration of structural reforms on which less attention has been taken in the first half of 2009. In terms of preparing for the post-crisis, the authorities will strive to enhance potential growth, which has been lowered recently, by increasing R&D investment, seeking an eco-friendly green development as a new growth engine, and implementing deregulation.

### ***Fiscal Policy***

7. To efficiently counter the economic downturn, the authorities have implemented a decisive fiscal stimulus package, which includes introducing a supplementary budget amounting to 28.6 trillion won in April 2009, as well as adopting front-loaded budget implementation, resulting in 62.5 percent of budget expenditure being implemented at end-June. This notwithstanding, the authorities observed that a self-sustained recovery has not been fully established, with still-existing room for downside risks. Thus, they agree with staff that it seems too early to withdraw the fiscal stimulus in 2010.

8. Another big issue is medium-term fiscal consolidation efforts. As pointed out in several Article IV discussions in the recent past, it is clear that the success of the current policy package depends on continued trust in the sustainability of the fiscal position. The authorities fully recognize that credibility would be enhanced by concrete expenditure and

revenue measures to achieve the desired adjustment, and that long-term sustainability would also be strengthened by structural reforms to limit the rise in aging-related costs. In this regard, they plan to announce a medium-term fiscal consolidation plan covering 2009 through 2013 in October 2009. This plan will include both revenue and expenditure measures, along with a detailed examination of their pros and cons. Furthermore, while accepting that early action in aging-related pension and healthcare costs would help to create fiscal space, the authorities will do more in the coming months, including by finalizing the pension-related Acts which are now pending in the National Assembly, such as the Government Employment Pension Act and the Korea Faculty Pension Act.

9. Although the generous SME support introduced thus far has worked effectively, the authorities are well-aware of the disincentives of such measures and will start to devote more attention to the structural weaknesses of the SME sector. They have already started to withdraw some support measures, such as reduction of the targets for SME loan growth. They will take a gradual approach in accordance with the prevailing market situations and sectoral needs.

#### ***Monetary and Exchange Rate Policies***

10. The authorities consider that the risks of disinflation in the economy are low and that monetary policy should currently focus on mitigating the downturn as well as on enhancing resilience to any additional shocks. Thus, they are of the view that there is still need for an accommodative monetary stance. Given the emerging signs of excess liquidity and money shift to the asset-related market, the authorities are strengthening their close and vigilant monitoring of the monetary situation and its impact on asset prices, while taking some precautionary measures focusing on prudential regulation.

11. Regarding the so-called exit strategy, the authorities view that it is important for countries to start *thinking now* about how and when they would manage the exit from loose monetary policy, considering that exiting from low policy rates too early could snuff out the recovery. In addition, as the risks of exiting too late are broadly matched by the risks of exiting early, the authorities fully agree with Mr. Viñals' call during the WEMD discussion for a delicate balancing act in terms of choosing the right time to begin tightening of policy.

12. Foreign reserves are recovering from the low of \$200.5 billion at end-November 2008, increasing to 231.7 billion at end-June 2009, ranking Korea as the 6<sup>th</sup> largest holder in the world. Indeed, one lesson learnt from the crisis is that countries with large reserve buffers have typically performed better during the crisis. Therefore, the authorities will maintain the sufficient buffer of reserves to deal with any further bouts of capital withdrawal. However, given that reducing global reserve accumulation is critical for the efficiency of investment and sustainable recovery in global growth, the authorities view that standing bilateral and multilateral currency swap arrangements should be expanded. On the other hand, they appreciate the Fund's efforts to introduce credible alternative to self-insurance, such as the

FCL and HAPAs, and look forward to the Fund's further work, including the general SDR allocation.

### ***Financial Policies***

13. Although the volume of loans to household and corporate sectors is not bigger than that in other advanced countries and banks' NPL ratios have been quite well-managed thus far, the authorities are fully aware that uncertainties could change the current situation in a short period of time. As staff pointed out, the center of downside risk to the banking sector in the period ahead is a negative feedback loop from the real economy. For this reason, the authorities have paid sustained attention to the growing volume of corporate and household loans. Being well aware of the positive relation between these loans and banks' NPLs, the authorities are dealing with this concern through proactive measures, such as the establishment of a bank recapitalization fund and a new corporate restructuring fund, totaling KRW 20 trillion and KRW 40 trillion, respectively. Also, the authorities announced recently that they will push commercial banks to reduce the NPL ratio, which is currently 1.5%, down to 1.0% by the end of this year. In fact, access to the foregoing recapitalization fund has been clearly related to banks' provision of SME credit thus far and has resulted in undermining banks' incentives for restructuring efforts. Reflecting the currently improved financial situation, the authorities believe that now is the time to shift the focus of such access to the broader restructuring strategy. Specifically, President Lee recently stressed the importance of preemptive corporate restructuring and asked the authorities to report monthly on the status of the restructuring.

14. The need for strengthened prudential regulation regarding banks' wholesale financing is also well-recognized by the authorities. In the interest of remaining vigilant in this area, the authorities are closely following the discussion at the Financial Stability Board and the Basel Committee and actively communicate with them.

### ***Structural Policies***

15. The authorities fully agree with staff on the strong need for a rebalanced growth for years to come. Given the persistent lag in labor productivity in the services and SME sectors, more tangible efforts will be poured into such areas. We are pleased to note that the authorities started to accelerate their deregulation efforts in January 2009 by applying the "Sunset Law" to all types of government regulation, whose application will be automatically suspended or whose feasibility should be reviewed again on its expiration date.

16. In the services sector, the authorities are redoubling their efforts to create jobs and improve growth infrastructure by announcing "Service PROGRESS III" in January 2009, following "Service PROGRESS II" announced in September 2008. As an implementation plan, they prepared detailed plans to further develop service industries in May 2009, which aim to properly regulate the service sector, encourage competition in the sector and correct any unfair support compared to that provided to the manufacturing industry.

17. The authorities are pursuing free trade agreements (FTAs) with various countries to promote trade liberalization and to enhance the economy's competitiveness. As a result of its continued efforts, Korea has now effective FTAs with 18 countries including Chile, India, Singapore, EFTA and ASEAN member countries, and is in the process of negotiating agreements with various countries, such as the EU, Japan, Australia and Canada.

18. In addition, the authorities set the Korean economy's longer term vision as "Low Carbon Green Growth". They are recognizing environment-conscious growth as a prerequisite to develop a new economic growth path. In this regard, they announced a National Framework Plan for Green Growth and its 5-year implementation plan in July 2009.

### ***Global Cooperation and Korea's Role***

19. At such a crucial time like now, the Korean authorities are committed to actively participate in global dialogues, such as the G-20 and the IMFC meetings, and strive to give meaningful input to the standard-setting organizations. In the case of G-20 meetings, as one of the Troika countries and the next Chairman in year 2010, Korea continues to play a role in initiating the agenda and specifying the implementation plans. Regarding efforts to ensure the Fund's resources, the Korean authorities will do their role in accordance with their economic weight in the world economy, as demonstrated by the announcement of its \$10 billion contribution in May 2009.

### ***Conclusion***

20. While delighted at the encouraging signs of quick recovery in the first half of 2009, my Korean authorities acknowledge that this is only the start of the long road to sustained economic prosperity. They thus stand ready to take additional measures, if deemed appropriate, to accomplish the government's social and economic objectives. With close monitoring and crucial examination of the situation when making policy choices, the authorities will weigh up each measure to determine fully the effects it will have on jobs and public finances, and grasp the opportunity to overhaul the country's weakening sectors.

21. Finally, my Korean authorities wish to express their utmost appreciation to the Fund and its staff for their continued and appropriate policy advice in addressing the risks facing the country. They also extend their deepest gratitude to the Fund's mission chief, Mr. Subir Lall, and his team, for their hard work and frank and insightful advice in supporting Korea's economic plan.