

Republic of Korea: 2008 Article IV Consultation—Staff Report; Staff Supplement; 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 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 2008 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on **June 24, 2008** 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 August 8, 2008.** 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 supplement of **September 5, 2008** updating information on recent developments.
- a Public Information Notice (PIN) summarizing the **views of the Executive Board as expressed during its September 8, 2008 discussion** of the staff report that concluded the Article IV consultation.
- a statement by the Executive Director for the Republic of Korea.

The document(s) listed below have been or will be separately released.

Selected Issues Paper

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Staff Report for the 2008 Article IV Consultation

Prepared by the Staff Representatives for the 2008 Consultation with the Republic of Korea

Approved by Daniel Citrin and Martin Fetherston

August 8, 2008

- **This report is based on discussions held in Seoul during June 12–24.** The staff team comprised Messrs. Schiff (Head), Khatri, Lueth, and Syed (all APD), Mr. Dodd (MCM), and Ms. Karasulu (Resident Representative). Mr. Yoon (OED) also participated.
- **Counterparts.** The mission met with Minister of Strategy and Finance Kang, Bank of Korea (BOK) Governor Lee, Financial Services Commission Chairman Jun, Financial Supervisory Service Governor Kim, Blue House Senior Secretaries B. Bahk and J. Bahk, 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 have stressed the need to address long-term challenges to Korea's growth, notably by revitalizing the small-and medium-sized enterprise sector, enhancing service sector productivity, developing the financial sector, modernizing the labor market, and accommodating aging-related fiscal pressures.
- **Statistical base.** Adequate to conduct effective surveillance, but fiscal reporting needs to be improved. Korea subscribes to the SDDS.
- **Korea's exchange rate is market determined.** 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

Outlook

- **Korea's business cycle is turning downward while inflation pressures have increased.** After reaching 5 percent in 2007, real GDP growth is expected to fall to around 4 percent this year in line with the deteriorating external environment, before recovering to 4¼ percent next year. Risks are mainly external and on the downside, but a volatile domestic political environment also clouds the outlook. Inflation pressures have risen, largely due to higher global commodity prices, but should ease as growth slows. Headline inflation hit 5½ percent in June, and has exceeded the BOK's target range for eight consecutive months.
- **The current account has fallen into deficit, reflecting a deterioration in Korea's terms of trade.** Despite still solid export growth, higher commodity prices have led imports to rise even more sharply, while the services account deficit remains sizable. A current account deficit of around 1¼ percent of GDP is expected this year, declining to 1 percent in 2009.
- **Korea has not escaped the global financial turmoil unscathed.** While the direct impact has been small, indirect effects have been notable as stock prices have declined; volatility has increased; spreads on external debt have widened; and the won has depreciated sharply. Some financial sector vulnerabilities have emerged, notably liquidity risks for banks reliant on wholesale funding, but should be manageable.
- **The exchange rate appears broadly appropriately valued.** The won is largely market determined and, despite the recent depreciation, there are no clear signs of misalignment.

Key Issues and Policy Discussions

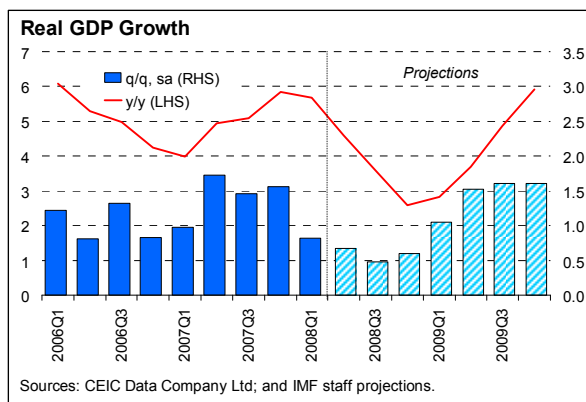
- **Staff and the authorities agreed that monetary policy should, for now, remain focused on inflation.** An increase in policy rates would be appropriate at this time, with potential scope for some accommodation in coming quarters should inflation moderate and growth remain soft. Staff cautioned against seeking to influence the exchange rate level to combat inflation, urging reliance instead on the BOK's inflation targeting framework.
- **Financial risks are being addressed.** Supervisors are focused on limiting liquidity risks, but enhanced stress-testing and contingency planning would also help. Short-term external debt has risen sharply in recent years and should be monitored, but risks remain moderate. Overall bank loan quality is strong but an economic slowdown could reveal vulnerabilities, particularly in SME lending. Increased financial sector competition, in light of the Capital Market Consolidation Act taking effect in 2009, should contribute to growth but will require enhanced financial oversight to meet new regulatory challenges.
- **Plans for addressing long-term challenges are broadly in line with past Fund advice.** The government aims to address structural challenges to growth through deregulation, privatization, and tax cuts. However, it is important to ensure that lower tax rates and tax incentives do not compromise longer-term fiscal sustainability, especially in light of Korea's aging population.

I. INTRODUCTION

1. **Difficult global conditions have made this a challenging year for Korea.** First, against the backdrop of a global slowdown, economic activity in Korea is moderating, while surging global commodity prices and a weakening of the won are contributing to rising domestic inflation. Second, while the Korean financial system remains in good health, increased global volatility has raised near-term risks, and ongoing structural changes to the financial sector present challenges as well as opportunities to incorporate lessons learned from the global financial crisis. Korea also faces longer-term challenges to its impressive record of economic growth, which the new government aims to address with a wide-ranging set of reforms.

II. RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

2. **In line with a deteriorating external environment, the business cycle in Korea is turning downward** (Figure 1). Growth is expected to moderate to 4.1 percent this year, having slowed to 0.8 percent (q/q, s.a.) in the first quarter of the year and a similar pace in the second quarter, according to preliminary data (Table 1). Exports have remained strong, but domestic demand has softened, with employment growth and investment weakening, and consumer and business confidence declining sharply. The housing market remains subdued, burdened by regulations imposed in the last two years and supply overhang. In the rest of 2008, continued slow global growth is likely to constrain exports and investment while high food and fuel prices limit consumption gains. The economy is expected to regain momentum early next year, in line with Korea's trading partners, with annual growth reaching 4.3 percent.

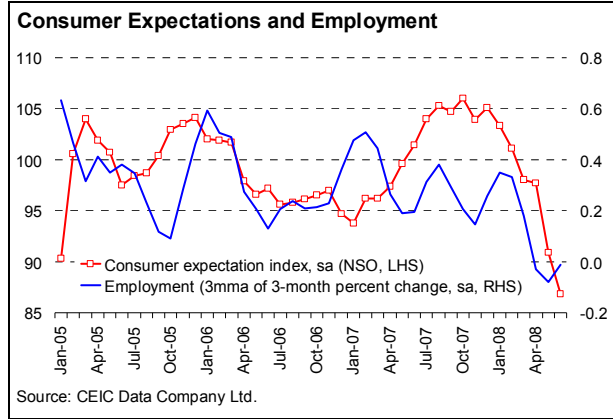


Korea: Key Economic Indicators			
	2007	2008	2009
		Proj.	
Real GDP growth	5.0	4.1	4.3
CPI Inflation (average)	2.5	4.9	4.2
Current Account (billion \$)	6.0	-12.7	-10.3
(percent of GDP)	0.6	-1.3	-1.0
Memorandum Items			
Global growth	4.9	4.1	3.9
Oil price (\$/bbl, annual avg.)	71.1	116.5	125.0

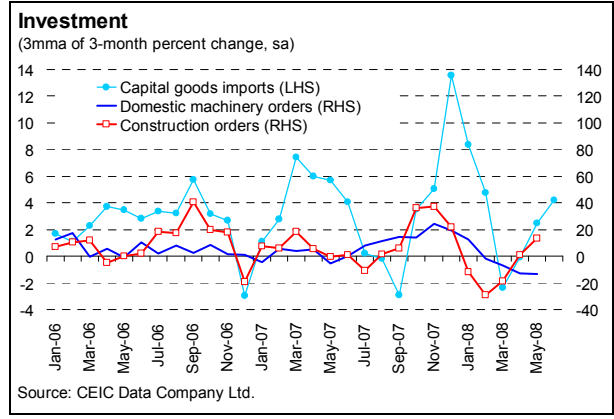
Sources: CEIC Data Company Ltd; and IMF staff projections.

Figure 1. Recent Real Sector Developments

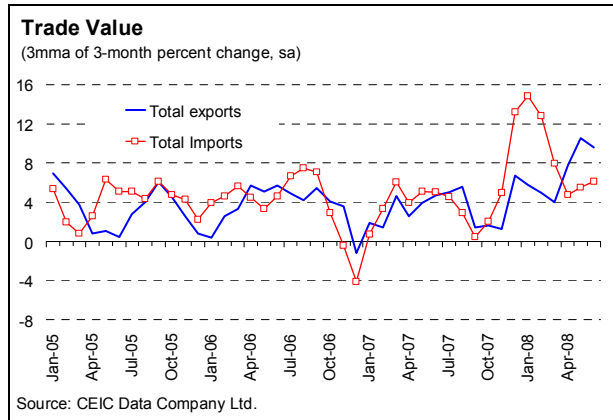
Most consumption indicators point downward...



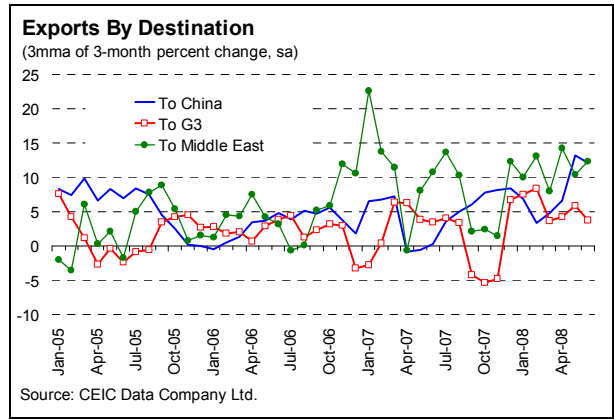
...while recent investment trends are more mixed.



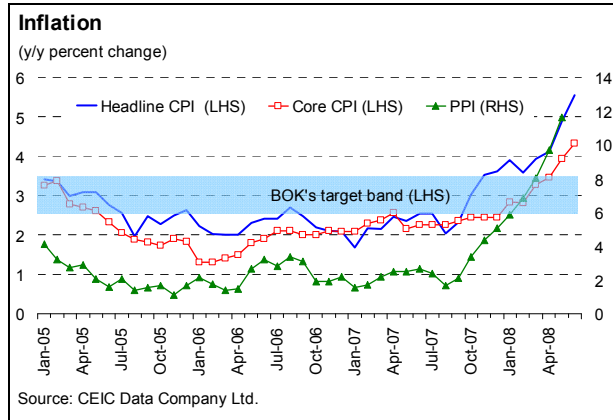
Exports have remained buoyant so far...



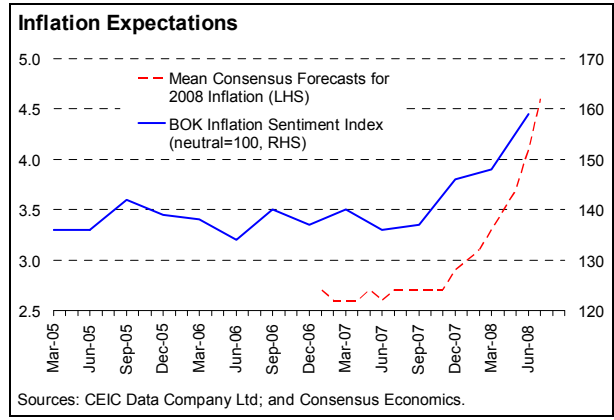
...with nontraditional markets playing an increasing role.



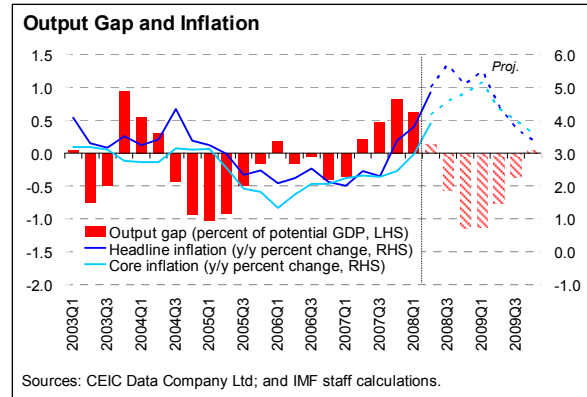
Inflationary pressures have picked up...



...as have inflationary expectations.



3. **At the same time, rising global commodity prices have led to a sharp increase in inflation pressures.** Headline inflation hit a near ten-year high of 5½ percent in June, and has exceeded the Bank of Korea (BOK) target range of 2½–3½ percent for eight consecutive months. Pressures from higher global commodity prices are being supported by still-strong money and credit growth and won depreciation. Core inflation is trending up, suggesting growing second-round effects, and inflation expectations are rising. While wage pressures are not yet evident, major labor negotiations are due this summer. However, under staff's central scenario, a negative output gap and moderating food and fuel price inflation should help bring headline inflation down starting the first quarter of next year, returning to the target band in the last quarter.



4. **The current account, hit hard by the deterioration in Korea's terms of trade, has been in deficit for most of 2008, but shows signs of improvement.** Export growth has remained robust through the second quarter (23 percent y/y), as weaker exports to the United States have been offset by growth in exports to China, the EU, Latin America and the Middle East (Figure 2). However, higher commodity prices have led imports to rise even more sharply (30 percent y/y). While the services deficit remains large, as Koreans continue to travel abroad, including for education, both trade and service balances have improved in recent months owing to a weaker won. A current account deficit of 1¼ percent of GDP is expected this year, declining to 1 percent in 2009 (Table 2). On the capital account, net equity and FDI outflows have more than offset bond and other inflows, mainly short-term bank borrowing (Figure 3).

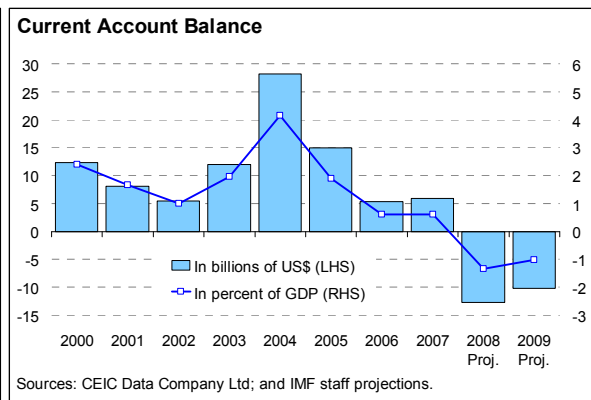
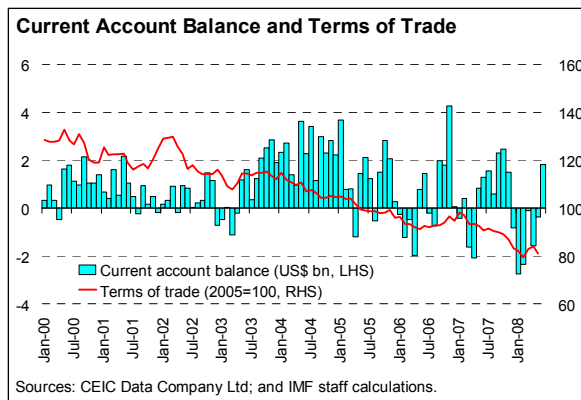
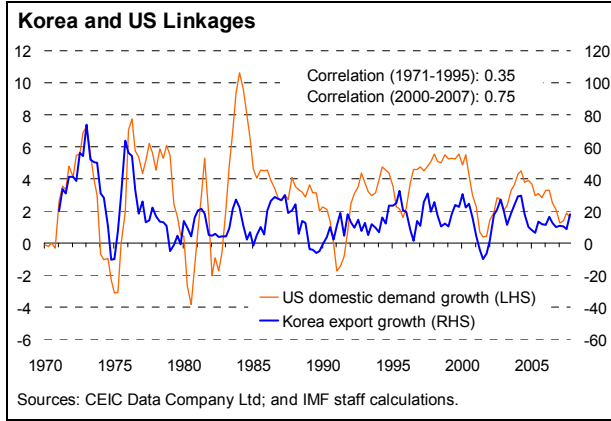
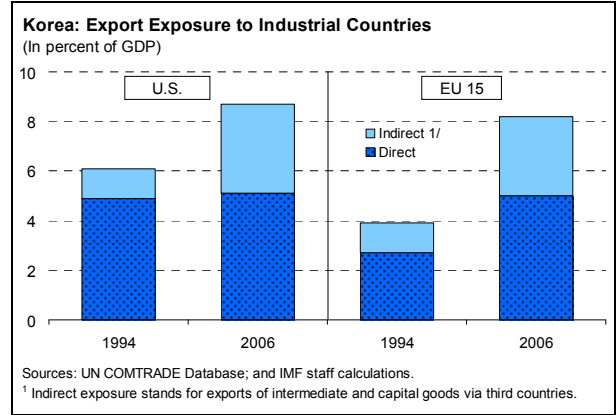


Figure 2. Trade Linkages

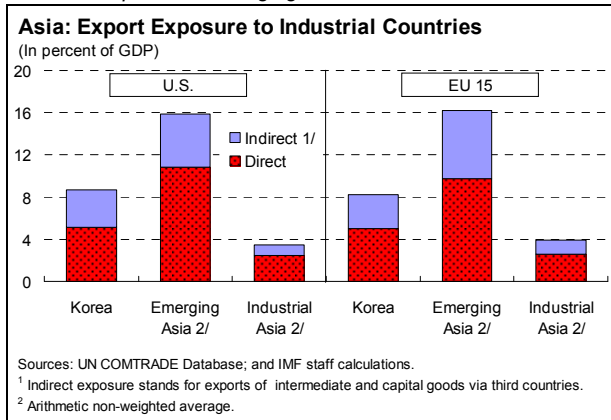
Korea is unlikely to decouple from the U.S. slowdown...



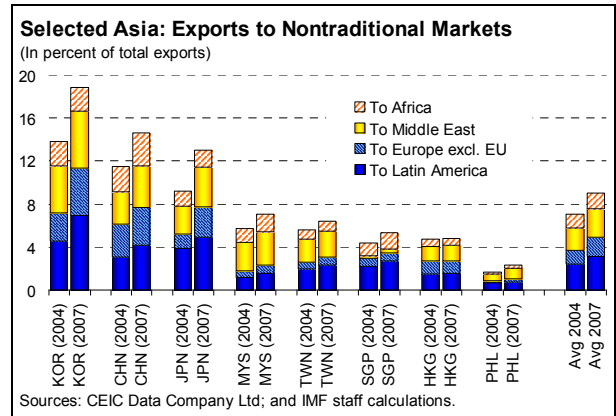
...and indirect effects, through regional supply chains, and overall exposures have increased over time.



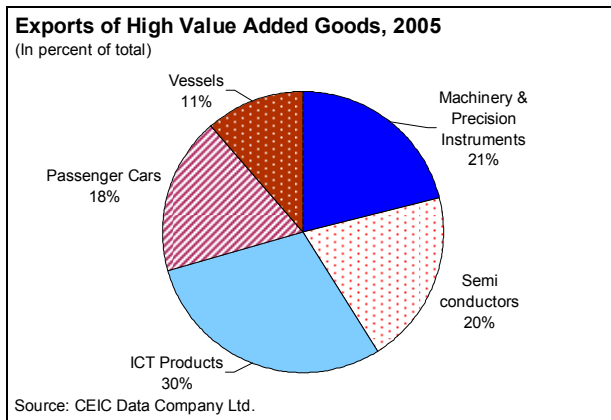
However, overall exposure to the U.S. and the E.U. looks modest compared to Emerging Asia...



...and increasingly well-diversified export markets...



...and diversified products, should provide some cushion...



...but the overall impact will depend on how the global slowdown plays out.

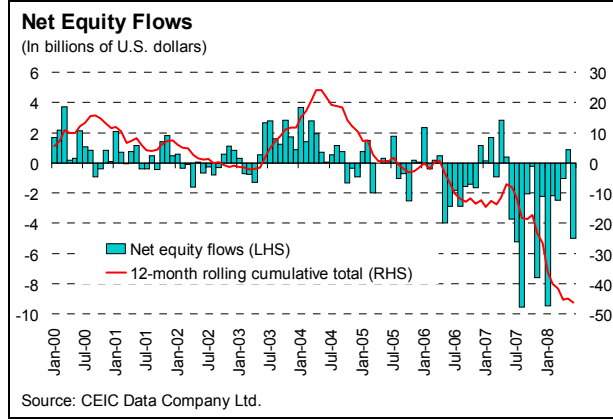
Impact of U.S. Slowdown on Asia¹
(In percentage points)

	VAR with Financial Variables	Cross-Country Regressions	2001 Recession
Japan	0.2	0.3	0.7
China	0.0	0.1	0.2
India	0.0	-0.2	-0.1
Hong Kong SAR	0.8	1.0	1.5
Korea	0.1	0.1	0.5
Singapore	0.9	1.1	4.1
Taiwan POC	0.9	1.2	2.9
Asia²	0.2	0.3	0.6
Emerging Asia²	0.2	0.2	0.5

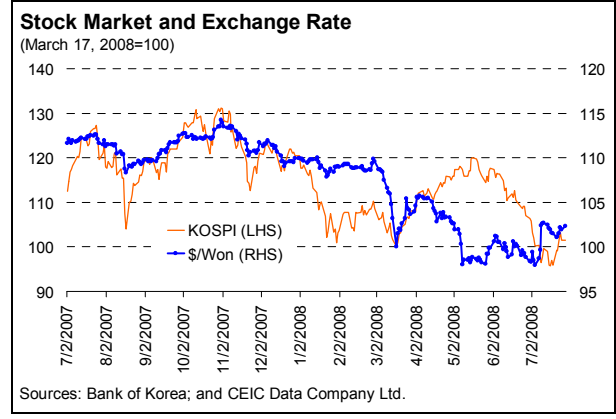
Source: APD Regional Economic Outlook, April 2008.
¹ Scaled to 1 percentage point.
² Weighted average using nominal GDP at market exchange rates.

Figure 3. Capital Flows

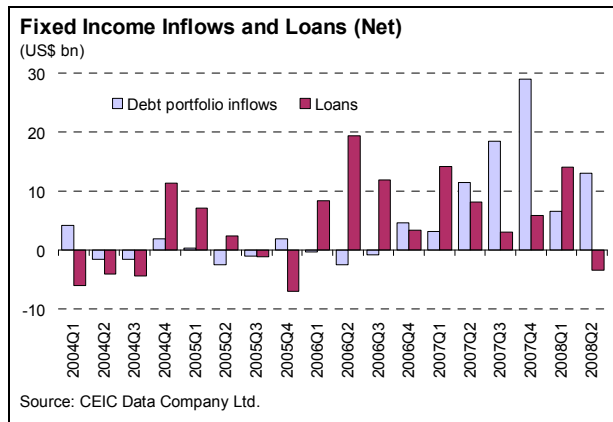
Equity sales by foreigners have accelerated with the global credit crunch...



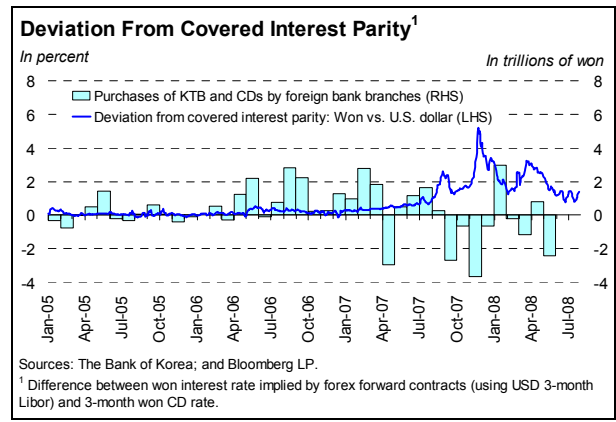
... depressing both the stock market and the exchange rate.



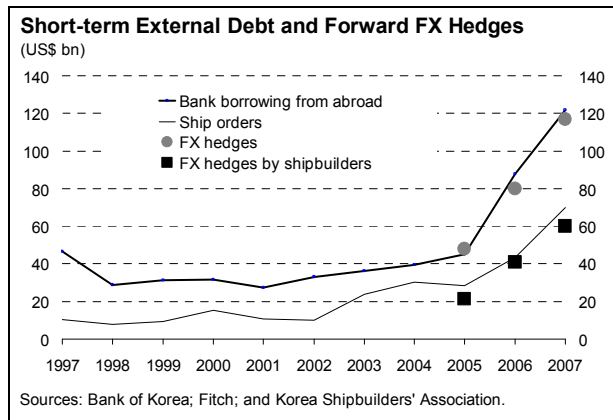
However, fixed income and loan inflows have continued...



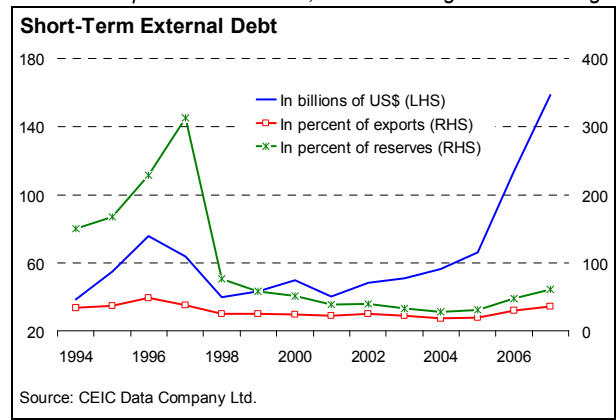
... in the context of persistent arbitrage opportunities...



... and hedging of future foreign exchange receipts.



Short-term external debt has risen, albeit from low levels relative to exports and reserves, and shows signs of stabilizing.



5. **Korea's economy has demonstrated resilience in the face of the global financial turmoil, but has not escaped unscathed.** The direct impact of the global credit crisis has been small.¹ Nevertheless, indirect effects have been significant and broadly in line with regional developments: stock prices have declined; financial market volatility has increased; spreads on external debt have widened; and the won has depreciated by around 7¾ percent against the dollar and by around 13 percent in real effective terms so far this year (Figure 4). Some financial sector risks have also emerged in the context of the global credit market strains, as discussed below.

6. **Risks to the outlook are sizable for both growth and inflation.** While the baseline scenario is relatively benign, with only a modest slowdown and a gradual return of inflation to its target range, there are more than the usual uncertainties surrounding these projections. A sharper or more prolonged global slowdown or further volatility in global financial conditions would have a significant impact on Korea's growth. While Korea's trade exposure to the United States and Europe is modest by Asian standards, financial effects could be larger, related to lower asset prices; increased volatility of capital flows and exchange rates; dampened confidence; and tighter liquidity and credit conditions. Should commodity prices rise further or wage pressures and other second-round effects become stronger, inflation could remain high, worsening the growth-inflation tradeoff.² On the upside, domestic demand could prove more resilient than expected, in particular if the government's pro-growth policies are enacted.

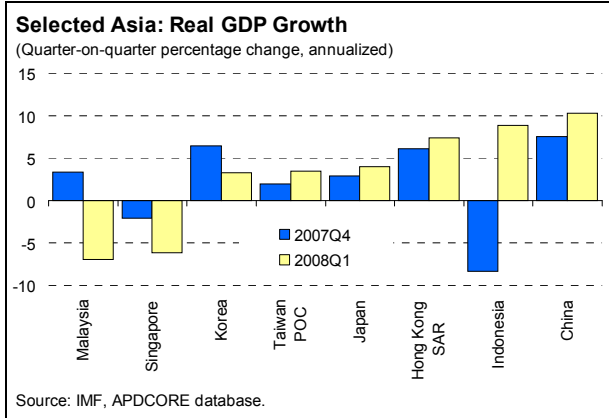
7. **A fractious political environment exacerbates the uncertainty in the outlook.** Lee Myung-bak won the December 2007 presidential election, and his conservative Grand National Party won a slim majority in parliamentary elections in April. However, large public protests—sparked by health concerns surrounding the decision to restart U.S. beef imports—have dogged the administration since early May, resulting in a plummeting of the president's approval ratings and a cabinet reshuffle. The administration's ability to implement its economic agenda, which aims to raise potential growth, may be restricted in the immediate aftermath.

¹ Holdings by Korean banks of subprime-related RMBS and CDOs is reported to be around \$660 million, and net exposure to structured investments around \$2 billion (or 2 percent of banks' equity). Reported exposure of Korean banks and insurance companies to securities issued by Fannie Mae and Freddie Mac is also small, at around \$550 million.

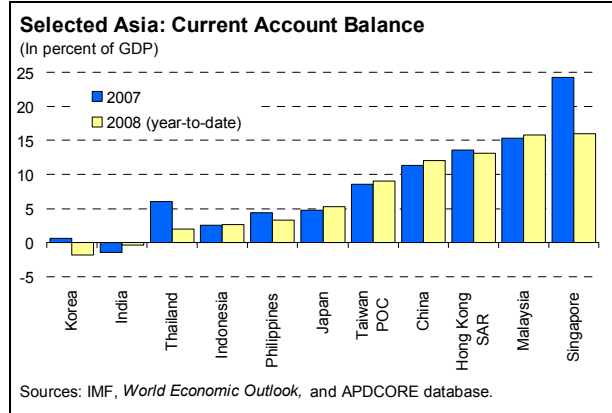
² A selected issues paper examines the macroeconomic impact of alternative shocks and outlines potential monetary policy responses. The results suggest that a 50 percent increase in oil prices relative to the baseline from the third quarter of this year would increase annual average inflation by around 0.2 percentage points in 2008 and 0.5 percentage points in 2009.

Figure 4. The Regional Context

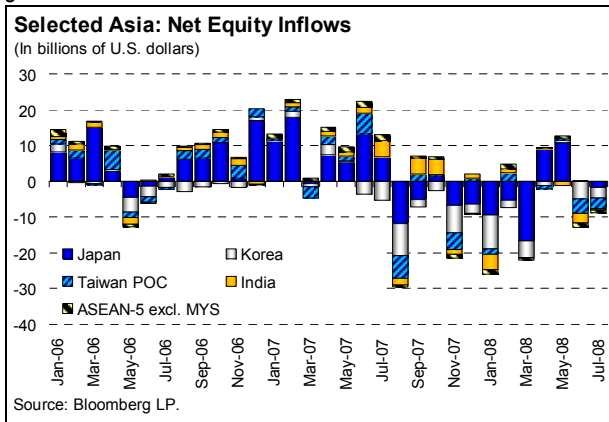
Unlike some parts of Asia, the Korean economy is already beginning to slow in line with external developments...



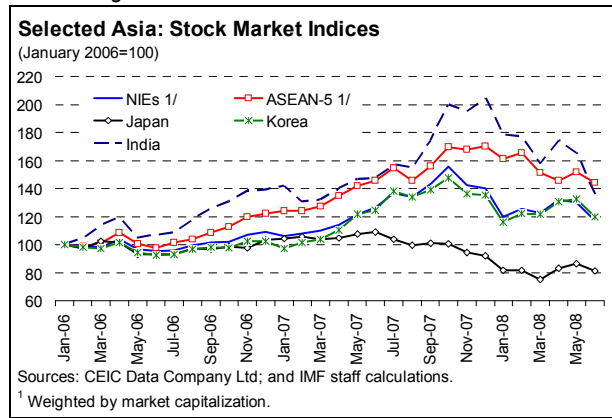
...and is one of the only major Asian economies to be running a current account deficit.



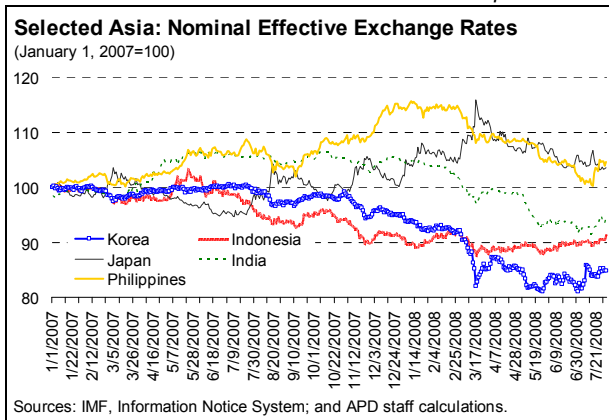
There have been sizable equity outflows since the start of the global credit crisis...



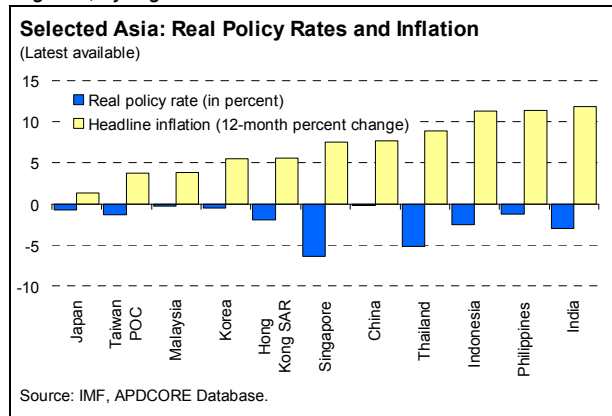
... depressing the Korean stock market, which has declined in line with regional trends...



...and contributing to a sharp depreciation in the won, which has been one of the weakest Asian currencies over this period.



Inflation remains relatively low, and real interest rates less negative, by regional standards.



III. POLICY DISCUSSIONS

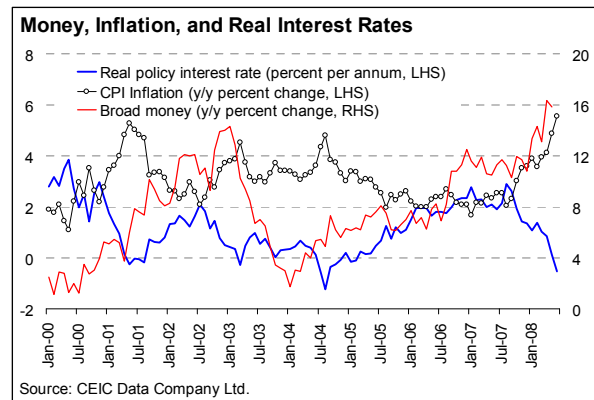
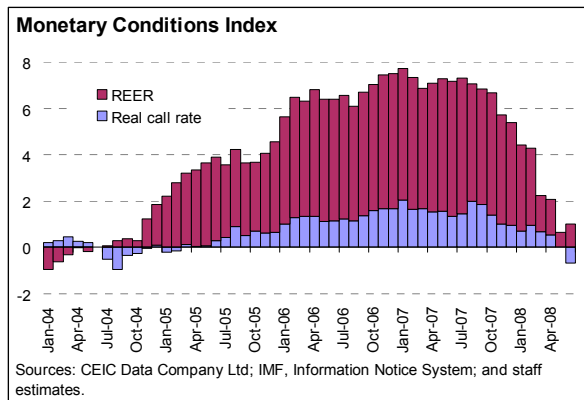
8. **Against the backdrop of the global financial turmoil and slowdown and higher commodity prices, discussions focused on policies to address near-term vulnerabilities facing Korea.** Staff discussed with the authorities the macroeconomic policy mix needed to respond to the slowdown and inflation pressures; discussed how best to address financial sector risks, both in the near term and in the context of ongoing financial reforms; and revisited selected structural issues, in the context of the new administration's policy agenda.

A. Macroeconomic Policies: Getting the Balance Right

Macroeconomic policies should be focused on ensuring that inflation expectations remain well anchored. A rise in policy interest rates would be appropriate at this time, with potential scope for more accommodative policy later, should inflation moderate and the economy remain soft. Korea's flexible exchange rate regime has served the country well in the past and continues to be appropriate, with any efforts to influence the value of the won for an extended period of time likely to be costly and ineffective.

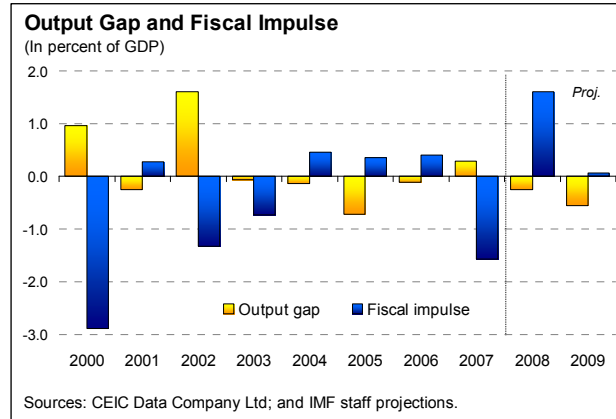
Background

9. **Monetary policy has been on hold for a year.** Policy rates have been held steady at 5 percent since last August, and have turned mildly negative in real terms. Monetary conditions have loosened significantly in recent months with the decline in real interest rates and the real effective exchange rate, while money and credit growth are robust.



10. This year's fiscal stance provides an expansionary impulse.

The 2007 fiscal outturn, a surplus of almost ½ percent of GDP (excluding the social security fund), was about 2 percentage points of GDP better than expected, mainly reflecting higher than anticipated tax revenues, around half of which is estimated to reflect improvements in tax administration (Table 3).³ With growth expected to slow below potential this year,



the projected 2008 deficit of 1¼ percent of GDP provides an expansionary fiscal impulse of around 1½ percent of GDP. In particular, several measures have been announced after the passage of the 2008 budget, including ½ percent of GDP in fuel tax and tariff cuts enacted in April and an additional package of ½ percent of GDP in loosely targeted tax rebates and subsidies to address higher fuel prices presented in June.^{4 5}

11. The exchange rate is largely market determined and, despite the recent sharp depreciation, remains broadly in line with fundamentals. Various estimates suggest that the exchange rate is close to its long-run equilibrium and competitiveness is solid, with double-digit export growth for the past five years; increased diversification of exports markets; and a steady share of world exports (Box 1). Intervention—which has historically largely been limited to smoothing volatility—has reportedly been stepped up since June to support the won, in the context of rising price pressures.⁶

³ Major steps taken include increasing incentives for credit card use, enabling improved detection of incomes of the self-employed and SMEs, and increasing penalties for tax evasion.

⁴ While the 2008 budget targets a deficit of around 1 percent of GDP (excluding the social security fund), it is predicated on very conservative revenue projections. Base-broadening measures and high corporate profitability in 2007, as well as significantly higher-than-budgeted oil prices, are likely to result in a sizable overperformance again this year. This should largely offset revenue losses from the measures announced since the passage of the budget.

⁵ The latter package consists of tax rebates of up to W 240,000 (around \$240) covering 78 percent of wage earners and 87 percent of the self-employed, amounting to about 0.3 percent of GDP; an oil subsidy for bus drivers, shippers, truckers, farmers and fishermen linked to diesel prices, amounting to around 0.1 percent of GDP; and transfers of 0.1 percent of GDP to two state-owned utility companies to compensate for a freeze in utility charges during the first half of the year. A similar package is being considered for next year.

⁶ The BOK does not provide intervention data, but reserves have declined by around \$14½ billion so far this year, with a \$10½ billion fall in July.

Box 1. Assessing the Exchange Rate and External Stability

While the won has depreciated sharply this year, staff finds that its recent movements are broadly in line with fundamentals—mainly the terms of trade—and the currency remains close to equilibrium. Relatedly, staff finds that the underlying current account is close to equilibrium and risks to external stability are modest.

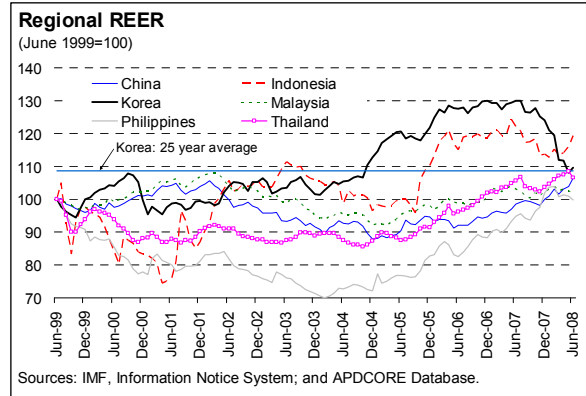
Over the medium term, Korea’s real effective exchange rate (REER) has been in line with the region. From this perspective, the recent fall in the won has reversed a three-year appreciation that was exceptional by regional standards.

In addition, Korea’s REER is now in line with its 25-year average. This need not be viewed as an equilibrium level but is a reasonable proxy for a currency’s purchasing power-parity (PPP) value, given estimates in the literature of the half-life of deviations from PPP.

A mid-cycle update of the February CGER exercise also suggests that the won and the current account are close to equilibrium.

- According to the equilibrium REER approach, Korea’s equilibrium exchange rate depreciated by 2 percent on account of higher oil prices since February. With the actual REER falling by 11 percent since then, this implies that the won is now undervalued by 15 percent, compared to 6 percent in February.
- According to the macro balance approach, the current account norm moved to a deficit of ½ percent of GDP, from a balanced account in February, reflecting the deterioration in the oil balance. With an underlying current account deficit of 1.1 percent of GDP, this implies that the won is now overvalued by 2 percent, compared to 4 percent in February.
- According to the external sustainability approach, a current account deficit of 1.3 percent of GDP stabilizes Korea’s NFA position. This implies zero misalignment.

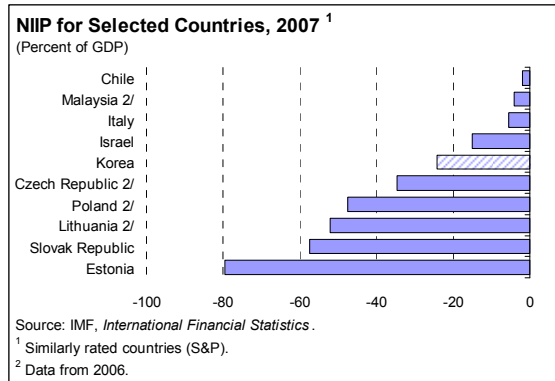
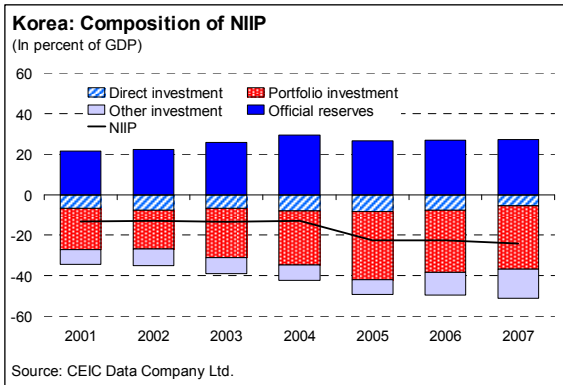
The increasing size and the change in composition of Korea’s net international investment position (NIIP) add modestly to external vulnerability, but the external position remains stable. The NIIP declined from a negative 13 percent of GDP in 2004 to a negative 24 percent in 2007 and the composition of liabilities shifted toward equity and short-term debt. However, the NIIP remains modest by international standards and the deterioration owes much to Korea’s strong stock market performance in 2005 and bank borrowing that is backed by export proceeds from ship orders (Box 2).



	February 2008 Assessment	July 2008 Staff Update
Equilibrium REER approach	-6	-15
Macro balance approach	4	2
External sustainability approach	0	0

Expected percentage change in REER 5-years ahead	
Consensus forecast	1
Forward rate	3

¹ A positive number denotes an overvaluation.



Discussions

12. **Staff and the authorities agreed that with price pressures growing rapidly, efforts should be focused on ensuring that inflation expectations remain well anchored.** In particular, with liquidity and credit growth robust and a still-positive output gap, the mainly cost-push inflation could morph into a more pervasive inflation, raising sharply inflation expectations. In staff's view, an increase in policy rates would be appropriate at this time. While acknowledging the authorities' concerns about potential effects on household balance sheets, staff argued that an entrenchment of rising inflation expectations could require a more forceful—and more costly—tightening later and constrain economic growth.⁷ With headline inflation likely to remain above the target range for some time, staff also stressed the importance of the BOK communicating clearly the consistency of price developments with the inflation targeting framework, whose credibility is facing its strongest test since its adoption. Looking ahead, staff saw potential scope for more accommodative monetary policies in the coming quarters, should inflation begin to moderate and growth remain soft. Should commodity prices rise further, policy options would become more difficult, but staff stressed that remaining ahead of the curve on inflation should continue to be a key objective. The authorities broadly agreed with this assessment, although not necessarily with the need for a rate hike at this time. On the other hand, the BOK also saw accommodation as less likely given their more optimistic growth outlook.

13. **While the authorities saw a role for the exchange rate in combating inflation, staff argued that exchange rate flexibility, with intervention limited to smoothing, remained appropriate.** The authorities reiterated that they viewed recent interventions as temporary and were not seeking to target a particular exchange rate level, but saw slowing the depreciation of the won as part of their arsenal in combating price pressures. Staff argued that intervention would be costly and unlikely to be effective in maintaining the exchange rate above its equilibrium for an extended period. Moreover, to maximize the effectiveness of the inflation targeting framework, efforts to combat inflation should be focused on the policy interest rate.

14. **This year's fiscal stance appears broadly appropriate, with only limited scope for further stimulus.** Staff argued that, in the context of a sharper or more prolonged slowdown, automatic stabilizers should first be allowed to operate. With growth remaining below potential, there could be room for further modest stimulus in the context of the 2009 budget, in particular to protect the most vulnerable, should commodity prices rise further. In this regard, staff stressed the need to ensure that any future transfers are

⁷ A selected issues paper examines the sensitivity of household balance sheets to various shocks. The results suggest that a 300 bps increase in interest rates could increase households' debt-at-risk by about 17 percentage points (to 39 percent of total debt) and debt service-to-income ratios by 16 percentage points (to around 53 percent). These effects are 2–3 times larger than from a 100bps increase.

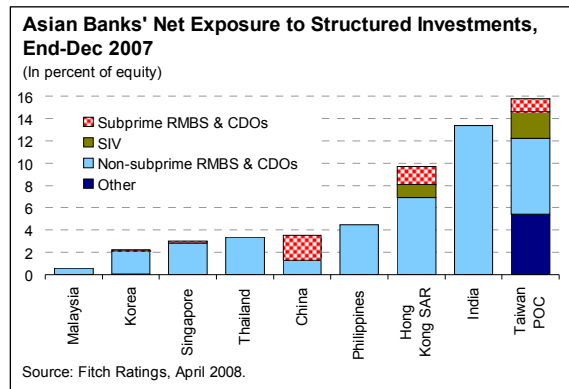
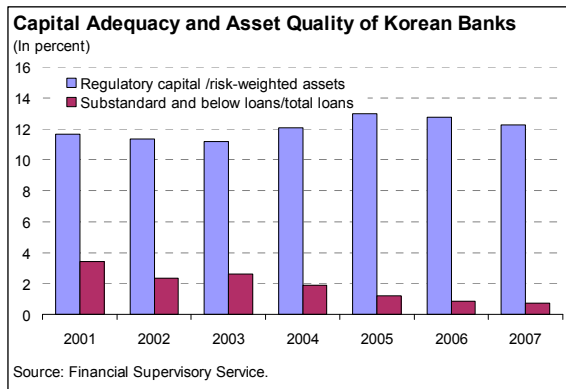
well-timed and better targeted than under this year's package, and cautioned against further cuts in fuel taxes or price controls, which would encourage oil consumption in a time of scarcity and may provide benefits disproportionately to the well-off. The authorities agreed in principle, but fell short of ruling out such measures if oil prices continued to rise. Given Korea's medium-term fiscal challenges, staff emphasized that any measures taken should be easily reversible; the authorities concurred and indicated that packages announced since the passage of the budget were explicitly temporary.

B. Addressing Financial Sector Risks: Preparing for Volatility

While the Korean financial system remains healthy, the global turmoil has exposed some vulnerabilities. Korean banks, which are heavily reliant on wholesale funding, could face liquidity risk should global credit conditions deteriorate further. Short-term external debt, which has risen sharply, should also be monitored closely, although risks remain moderate. While overall bank loan quality is strong, risks could emerge in the context of a slowdown, particularly in SME lending. Moreover, household debt is high, and susceptible to interest rate and income shocks.

Background

15. **The Korean financial sector remains generally healthy** (Table 4). Banks are well capitalized, with nonperforming loans below 1 percent and high levels of provisioning. Moreover, direct exposures of Korean banks to the problem subprime assets have been limited.

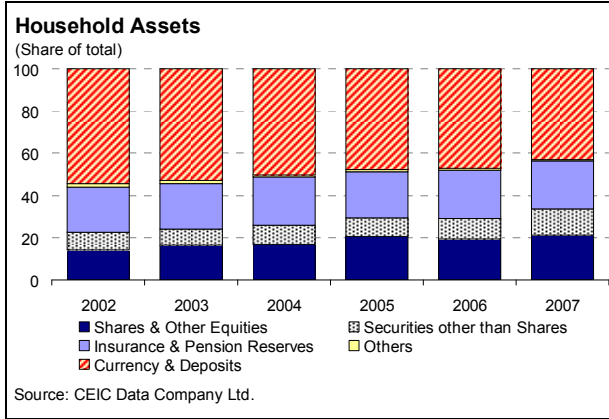


16. **Nevertheless pockets of concern remain, in particular in the context of the ongoing global financial crisis:**

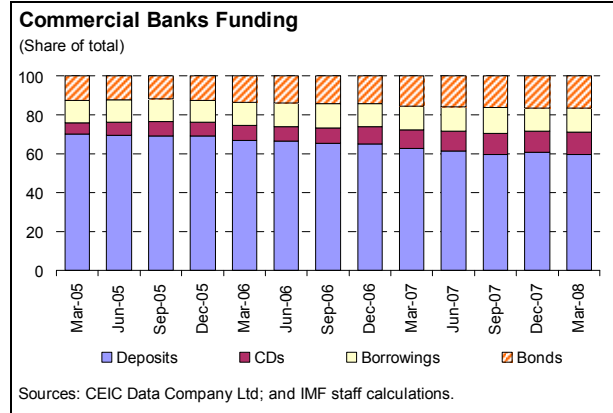
- **Elevated global credit strains have drawn attention to banks reliant on wholesale financing as vulnerable to heightened liquidity risk.** Korean banks have some of the highest loan-to-deposit ratios in the region, reflecting an ongoing shift away from bank deposits by households and an interest-income-focused business model of banks (Figure 5). These factors have increased reliance on wholesale financing to fund

Figure 5. Liquidity Risk in the Banking Sector

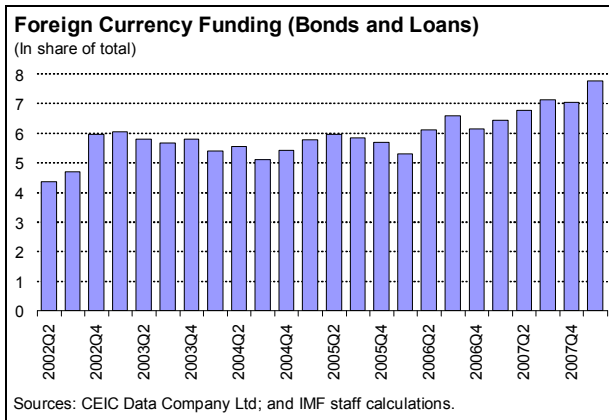
As household portfolios have shifted assets away from cash and deposits...



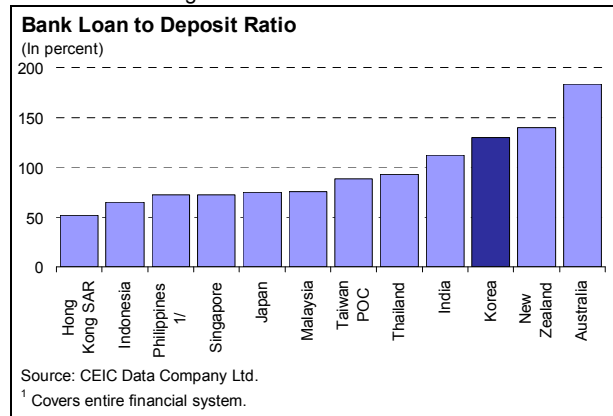
... wholesale financing of Korean commercial banks has increased to around 40 percent of total funding....



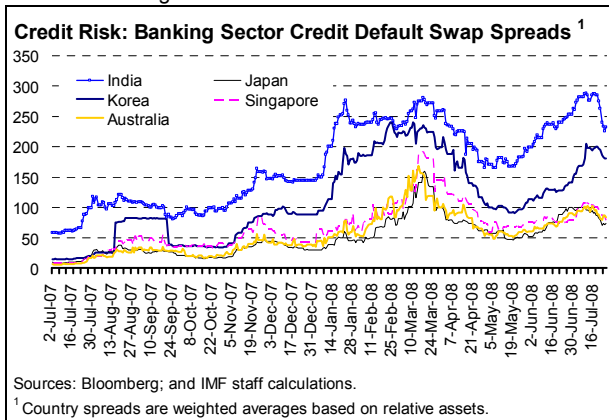
...although the share of foreign currency funding has remained modest.



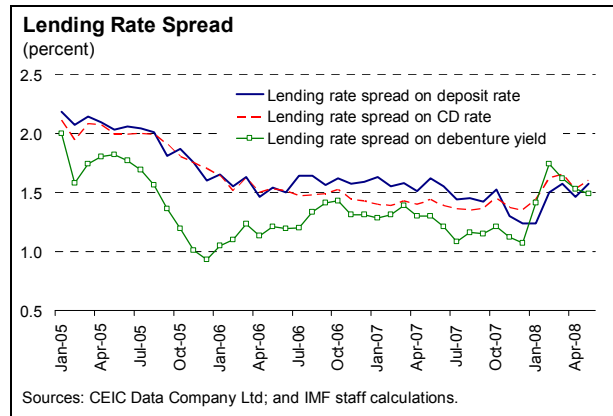
The global credit crunch focused attention on banks with high wholesale financing levels...



... and elevated CDS spreads (and relative equity prices) for Korean banks signal concern...



...and banks' lending spreads remain below 2005-06 levels.



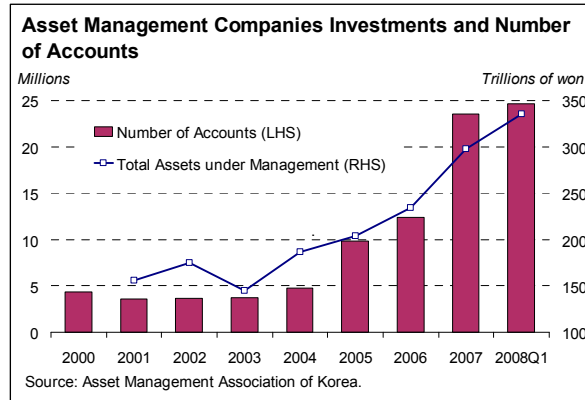
lending operations, which could expose Korean banks to liquidity risk should global credit conditions deteriorate further. However, foreign currency funding of Korean banks remains modest, at 7 percent of total funding, suggesting that risks are manageable.

- **A rapid withdrawal of funds from one or more asset management companies (AMCs) could also present liquidity risks.**

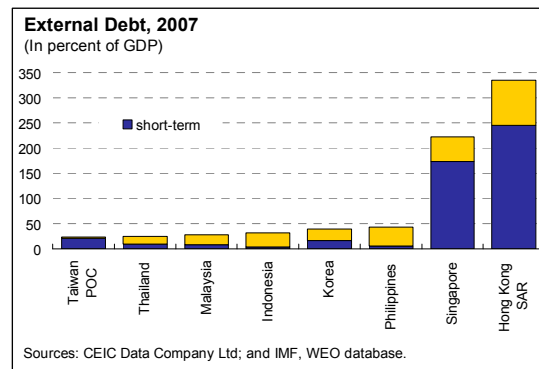
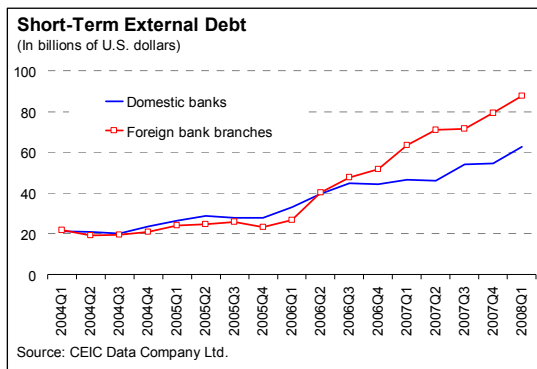
Assets of AMCs have grown rapidly in recent years, and a deterioration in the global financial environment could leave them vulnerable to a sharp turnaround.

Given the important role of AMCs

in the money market (where they provide around 40 percent of funds), this could spill over to broader liquidity conditions and affect confidence in the financial system.⁸



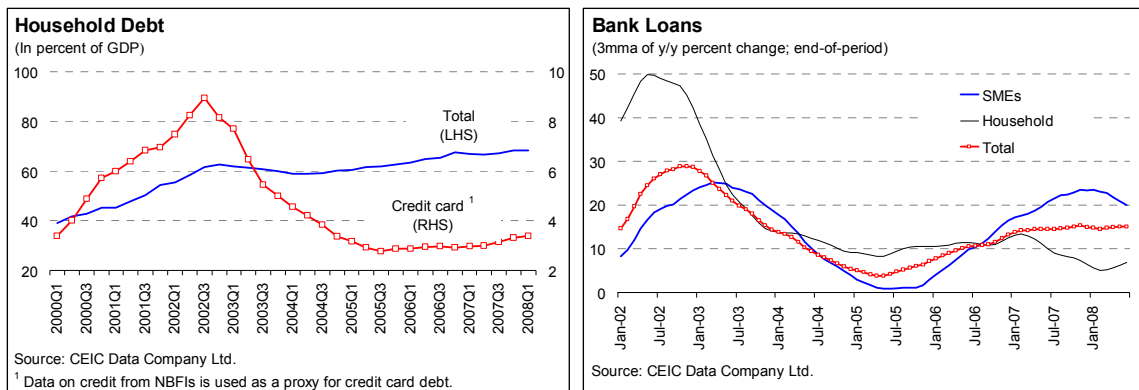
- **Short-term external debt, largely borrowing by foreign bank branches, has risen sharply in the last two years.** Such borrowing has been largely the counterpart to hedging-related forward contracts and, more recently, to take advantage of arbitrage opportunities in the sovereign bond market. In response, in the second half of 2007, the authorities adopted several policies that effectively tightened foreign currency funding, adding to concerns about dollar liquidity risks and contributing to the persistent deviations from covered interest parity.⁹ While sudden reversals of these flows could prove disruptive, their size and nature do not currently raise alarm bells, and such borrowing has shown recent signs of slowing (Box 2).



⁸ Receipts from redemptions by AMC investors might be re-deposited with banks but there may be timing issues which would add to liquidity risk for banks.

⁹ Beyond the extensive use of moral suasion, restrictions were imposed on foreign currency loans in August 2007; and the maximum tax deductible on interest paid on related-party loans for domestic branches of foreign banks was reduced from six to three times capital (the “thin-cap” rule) in January, but reversed in July.

- While banks' overall asset quality is strong, an economic slowdown could reveal new vulnerabilities.** The sustained rapid growth of lending to SMEs, at nearly 20 percent (y/y), carries risks, in particular as their profits are low and there is little evidence that increased borrowing has been translated into higher investment. Another concern is a possible deterioration of asset quality related to exposures to the slumping construction and real estate development sectors, especially for mutual savings banks (MSBs) but, given the modest size of MSBs, these risks are not systemic. In addition, the high level of household debt at nearly 70 percent of GDP—most of which is variable rate—raises the sensitivity of balance sheets to credit and income shocks, while the expiration of grace periods on newer amortizing loans could pose a challenge over the next several years.¹⁰



Discussions

17. **The authorities agreed with staff on the nature of the liquidity risks faced by Korean banks, and have strengthened their oversight of these in the wake of the global financial turmoil.** Financial regulators have strengthened monitoring of short-term liquid asset ratios and have been tracking domestic banks' external debt on a daily basis since last August. Staff agreed that these measures are helpful, but stressed that recent international experience points to the need for strengthening stress-testing—in particular to allow for the possibility of large and multiple shocks and to account for the possible evaporation of liquidity in some asset classes during crises—as well as closer integration of such tests with banks' contingency plans. Staff also suggested that the BOK and financial regulator should ensure that their own stress tests adequately account for the possibility of multiple shocks, contagion between financial institutions, and macroeconomic effects, and are linked to their

¹⁰ In 2008 and 2009, 10 percent and 23 percent, respectively, of total housing loans outstanding as of the second half of 2007 will be affected.

Box 2. External Debt Developments

Korea's total external liabilities increased by \$152 billion since end-2006 to \$412 billion, or nearly 40 percent of GDP, in the first quarter of 2008. More than 40 percent of the increase has been short-term borrowing, raising concerns about the possibility of increased volatility or rapid reversals of flows.

However, concerns should not be exaggerated. External debt is not unusually high by standard vulnerability indicators (Table 5), or compared to countries with similar credit ratings. In addition:

- Around half of the increase in short-term borrowing has been in the context of banks providing currency hedging.** Typically, exporters (particularly shipbuilders) and domestic investors abroad sell expected dollar receipts forward to domestic banks and foreign bank branches (FBB) in Korea, which borrow dollars abroad to match their currency exposure. The rapid increase in hedging related debt flows has reflected a sharp rise in ship orders and exporters' hedging ratios and increased outward investment (Figure 3).¹ Such borrowing has been particularly pronounced for FBBs: as a large portion of their borrowing comes from their headquarters, rollover risk would not be subject to the counterparty risk that has hampered interbank markets globally. Nevertheless, close monitoring and cooperation with parent supervisors would need to continue.
- Another 11 percent of the rise in external debt reflects advance receipts for ship exports, which show up as trade credits until delivery.** As this debt is backed by future exports, little risk would seem to be attached.
- Around 25 percent of the overall increase in external debt relates to purchases of Korean sovereign bonds by nonresidents.** This is won denominated and driven by the possibility of arbitrage gains. While such flows could be reversed, foreign holdings of Korean sovereign bonds remain quite modest, at less than 10 percent of the total. Domestic banks have also increased their foreign currency external borrowing since 2006, although their reliance on external funding remains limited.

Recent BOP data suggest that external debt has begun to moderate and this trend is expected to continue.

Reduced forward selling could be expected from a slowing in both the growth of ship orders and investment abroad by Korean residents in the context of the global slowdown. Recent exchange rate developments may also reduce desired hedging ratios, as much of the previous hedging was in the context of an appreciating trend for the won.

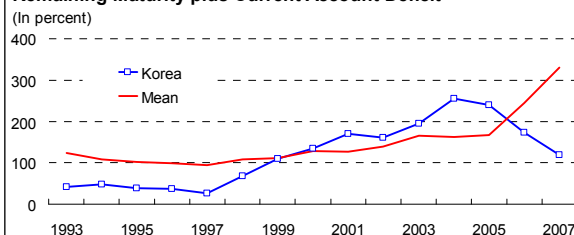
¹ For more details, see Box 1 of *Republic of Korea: 2007 Article IV Consultation—Staff Report* (IMF Country Report No. 07/344).

Korea's External Debt, 2006-2008Q1
(In billions of US\$)

	2006 Q4	2007 Q4	2008 Q1	change (2008Q1- 2006Q4)
Gross External Debt	260.1	382.2	412.5	152
Short-term	113.7	160.3	176.5	63
Long-term	146.3	221.9	236.0	90
Gen. Govt. and BOK	19.9	53.3	58.0	38
Banks	136.5	194.0	214.4	78
Domestic banks	82.1	110.2	122.1	40
Short-term	44.3	54.6	62.6	18
Foreign bank branches	54.4	83.8	92.3	38
Short-term Loans	50.3	75.7	83.5	33
Other Sectors	103.6	134.8	140.1	37
Long-term	89.9	116.5	121.5	32
Bonds and notes	30.7	41.4	42.1	11
Trade credits	35.0	47.2	51.0	16

Source: Bank of Korea.

Gross International Reserves to Short-Term External Debt at Remaining Maturity plus Current Account Deficit^{1,2}
(In percent)



Source: IMF, Vulnerability Exercise Database, March 2008.

¹ Reserves (end of current year) in percent of ST debt at original maturity (end current year) plus amortization of MLT debt and current account deficit (following year). The current account is set to zero if it is in surplus.

² Covers 49 countries.

contingency planning. Finally, staff underlined the importance of reviewing communication and cooperation between supervisors, the central bank and the government to ensure the necessary procedures are in place to coordinate responses under stress scenarios. The authorities were receptive to these suggestions and are in the process of developing an official coordination forum to complement ongoing monthly inter-agency meetings.

18. **The authorities indicated that options for providing liquidity during extreme financing stress were adequate.** The authorities felt that there was sufficient scope for providing liquidity support to banks if needed, given the large stock of eligible collateral in the form of outstanding public bonds on bank balance sheets (around \$73 billion or around 19 percent of total wholesale funding of commercial banks) and with the repo facility established in March providing overnight liquidity to banks, with access confidential to address potential stigma. In addition, the BOK has the ability to relax collateral requirements at short notice, and under exceptional circumstances, open market operations could also be used to provide liquidity to individual banks or financial companies. Providing liquidity to nonbanks is less straightforward—it would likely require the BOK to do so indirectly via banks—and more problematic as a policy.

19. **Staff argued that preparedness for increased volatility also calls for a push to reform the money market.** Korea’s money market is overly dependent on unsecured call money, reflecting insufficient pricing of credit risk and the costs of administering repos. As recent events in advanced economies have shown, having an effective repo market is especially important under stress conditions. A strategy to deepen money markets in Korea has been developed, and several key steps—including the abolishment of the withholding tax on repos for domestic financial institutions—have been taken. Despite this progress, however, there has not been a meaningful increase in secured lending to date. Staff emphasized that a concerted effort was needed to complete the money market reform agenda.¹¹

20. **While the run-up in short-term external debt merits close monitoring, staff stressed that policies aimed at restricting capital inflows should be avoided.** The authorities agreed, although they were understandably concerned about potential vulnerabilities, and market views of such. Staff cautioned that measures aimed at limiting external borrowing were unlikely to prove effective for long, and could be counterproductive: such limits would tend to increase arbitrage opportunities encouraging potentially more volatile or less transparent inflows, and could have an adverse impact on investor confidence. Attempts to fine-tune capital flows by changing regulations, such as the changes to the “thin cap” rule, are likely to have similar drawbacks. Staff felt that policies

¹¹ Main remaining elements include the introduction of a master repo agreement to reduce transaction costs and the adoption of a transaction-based fee structure to encourage repo agreements with longer-term maturities.

should instead continue to focus on strengthening the financial sector's resilience to volatility and shocks by deepening markets and enhancing financial oversight.

21. **Staff suggested that other still-modest risks to asset quality could be addressed by continuing to strengthen risk management in financial institutions.** Adoption by banks of appropriate risk-assessment methods will be necessitated by the move from rules-based to risk-based supervision under Basel II, to which Korea is in the process of transitioning. The authorities agreed, and also noted that they were monitoring SME lending and default rates daily, particularly in the construction and wholesale/retail sectors, and that some measures had already been taken, such as ceilings on project finance lending by MSBs imposed late last year. With household debt increasing faster than income in recent years, the authorities were also carefully assessing any signs of a potential deterioration in debt servicing capacity. The authorities also indicated that they were monitoring the ongoing transition to amortizing loans closely, but thought that risks were small given that the delinquency rate on mortgages is very low, at 0.37 percent, and had declined in the past year.

C. The Future of Korea's Financial Sector: Fostering Growth and Innovation

Financial sector development has lagged overall economic development and deficiencies have been recognized by the authorities, as demonstrated in the Capital Market Consolidation Act (CMCA) that comes into effect in February 2009. Looking ahead, structural changes to the financial sector will present both challenges and opportunities.

Background

22. **The Capital Markets Consolidation Act (CMCA) should bring important benefits, but will also present new challenges for Korean banks and regulators.** The CMCA will remove restrictions that separate securities, futures, asset management, trust services, and other financial services businesses, and introduce a negative list for new financial products. The Act is also expected to lead to consolidation of the securities industry and emergence of domestic investment banks. Increased competition should generate efficiency gains, improve the allocation of capital, and raise the role of the financial sector in generating long-term growth. However, it will also place a premium on enhancing financial oversight and may increase wholesale funding dependence of banks, raising vulnerabilities and necessitating a change in their business models. With financial sector reforms, the government also plans to reduce the role of public banks and proposes to gradually raise the equity limit on nonfinancial corporate ownership of financial institutions from the current 4 percent to 10 percent.¹²

¹² A selected issues paper discusses financial sector challenges in the face of the CMCA.

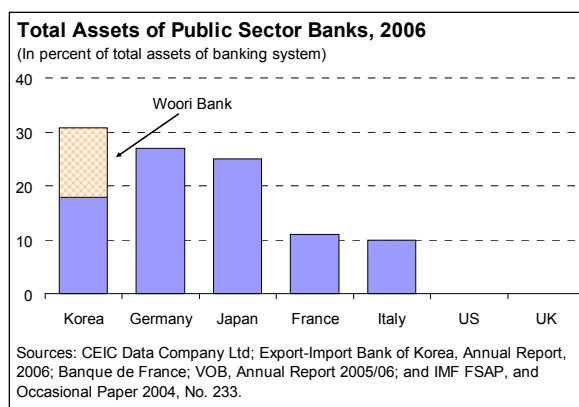
23. **The establishment of the Korea Investment Corporation (KIC) was, in part, aimed at developing an asset management industry, but it has so far played a small role in this regard.** However, the KIC has recently expanded its assets under management.¹³ KIC is a member of the International Working Group of Sovereign Wealth Funds, and is supportive of efforts to develop a voluntary code for such funds.

Discussions

24. **Staff stressed that financial oversight will need to evolve to address the changing nature of the sector.** Emphasis will need to be placed on adapting regulation to limit the scope for regulatory arbitrage; development by regulators and supervisors of skills to deal with more complex institutions and products; and ensuring that regulation does not stifle financial development. In this process, it will be critical to ensure that enhanced regulatory and supervision capacity precedes market growth and rapid innovation—indeed, a proper regulatory framework should be conducive to market development—and that supervision remains independent.¹⁴ In the context of ongoing global financial stresses, staff suggested that the timing of the adoption of the CMCA also provides an important opportunity to reflect the lessons from the current crisis (Box 3). The authorities agreed with staff’s assessment of the risks associated with the introduction of the CMCA, stressing in particular the challenges faced in building quickly supervisory skills to deal with the new environment.

25. **Staff welcomed the government’s plans to reduce the role of public banks.**

The planned privatization of Woori Bank, IBK and KDB could contribute importantly to the development of the financial sector. However, staff reiterated concerns regarding a potential loosening of restrictions on nonfinancial corporates owning banks, notably with regard to connected lending. The authorities explained that their objective was to move



closer to advanced country standards and to broaden the investor base for financial institutions. While staff appreciated that the authorities are taking a measured approach, they underlined the need to ensure that any changes not threaten progress made on corporate governance. While the desire to bring new capital to the financial sector is

¹³ KIC’s assets under management are expected to increase from \$20 billion to \$30 billion this year, and it recently purchased a \$2 billion stake in Merrill Lynch.

¹⁴ In February, the Financial Supervisory Commission took over the financial policy making functions of the Ministry of Finance and was renamed the Financial Services Commission (FSC).

Box 3. Key Lessons from the U.S. Financial Crisis¹

The financial crisis that arose from subprime mortgage failures in the United States serves as a portent for financial policy makers in Korea. The rapid spread of the crisis occurred despite a U.S. financial system characterized by well capitalized banks and securities firms, highly liquid securities and derivatives markets, low credit spreads and high degrees of funding liquidity. With Korea's financial system expected to become more dynamic and competitive in the coming years, lessons that can be drawn from the crisis include:

- **Financial innovation needs to be accompanied by commensurate improvements in sophistication and oversight.** Although Korea's mortgage market is comprised of few mortgage backed securities, the market for other asset backed securities (ABS) is sizable and there are strong prospects for innovations. In anticipation of these developments, Korean policy makers need to bear in mind the risks from innovation. Specifically, more complex financial instruments often rely on valuation models that are imperfect and inadequately tested. That was the case with pricing of various tranches of credit risk in the U.S. mortgage instruments. In addition, ABS and CDO instruments can contain a variety of assets and this raises the cost of due diligence, necessitates higher disclosure requirements, and makes market surveillance more difficult.
- **Over-the-counter (OTC) financial markets, such as those for securities and derivatives, can freeze up during times of crisis.** In the United States, OTC markets for CDOs, credit derivatives, municipal bonds, asset-backed commercial paper and student loan backed securities, suffered from market trading illiquidity during various phases of the financial crisis. Korea's financial system is also comprised of OTC markets for a range of financial instruments, and policy makers will need to consider measures to make trading liquidity more resilient to market turmoil. Toward this end, Brazilian authorities recently have proposed measures to address this problem by requiring OTC dealers to post binding bid and ask quotes to the market.
- **Funding risk at banks is often highly correlated with that in other financial markets.** The U.S. financial crisis has highlighted the strong linkage between the funding risk of money center banks and rollover risk in the broader financial system. In particular, problems in the asset-backed commercial paper and auction rate securities markets led to banks absorbing huge sums of these assets on their balance sheets, leading to demand for additional funding and capital. The global credit crunch hit Korean banks through their foreign currency borrowing activities, and in November-December 2007 they reverted to using foreign exchange swaps to obtain U.S. dollar credit. In the home market, Korean banks, with high loan-to-deposit ratios, depend heavily on their ability to rollover CDs and intermediate term notes in a money market that is comprised largely of asset management companies.
- **Over 80 percent of U.S. subprime mortgages were adjustable rate (ARMs), and an even greater percentage of payment problems have come from ARMs.** Korea similarly relies heavily on ARMs although policy efforts are slowly increasing the use of fixed rate mortgages.

¹ A selected issues paper discusses potential lessons in more detail.

understandable, staff suggested that there may be less risky approaches, including issuing equity more broadly and bringing in foreign and institutional investors, including a suitably reformed pension fund.

26. **With a rapid rise in assets and plans for more active investment, reform of the governance structure of the National Pension Fund (NPF) is increasingly important.** NPF assets will rise to about 50 percent of GDP by 2030 and there are plans to allocate a larger share to equity and foreign assets. Staff welcomed the government's plans to reform the fund's governance structure, with greater accountability and independence of the governing board and increased reliance on private expert management. Staff urged that these reforms be complemented by simple and transparent investment objectives, focused on maximizing risk-adjusted returns. Staff also encouraged the authorities to consider moving away from strict portfolio restrictions, to enable optimal diversification. These changes would bring the governance structure of the NPF even closer to best international practice while helping to raise investment returns and enhance its role as an institutional investor in the Korean economy.

D. Revisiting Key Structural Challenges: Raising Potential Growth

The new government's economic agenda targets potential growth of 7 percent over the medium-term. Many policies—including plans to improve the investment climate through labor reform and deregulation, and to privatize public enterprises—are in line with past Fund advice. However, plans for reducing tax rates and increasing incentives should be in the context of a broader tax reform plan that addresses long-run fiscal pressures.

Background

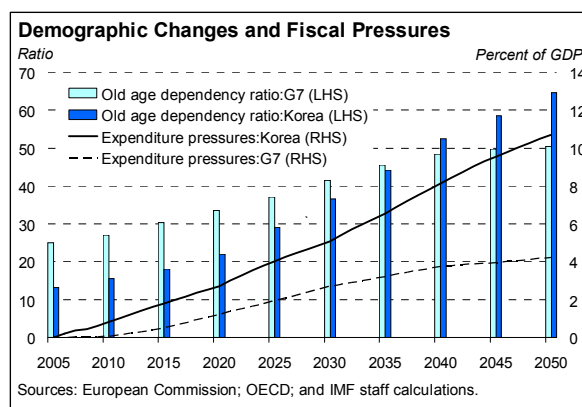
27. **In the absence of reforms, Korea's potential growth is projected to decline steadily over the long term,** from around 4½ percent to 2½ percent by 2030 (Table 6). However, implementing structural reforms, particularly to boost service sector productivity, develop the financial sector and raise labor force participation, would boost long-run potential growth.

28. **The new government aims to raise potential growth through a number of pro-business reforms.** A centerpiece of the strategy is promoting investment through: regulatory reforms, starting with a comprehensive review of existing business regulations; simplifying tax laws; lowering the corporate tax rate to 10–20 percent (from 13–25 percent) and doubling the low-tax threshold; and easing geographic investment restrictions around the Seoul metropolitan area. In addition, the government aims to enhance labor market flexibility through stricter implementation of labor laws and the promotion of a performance (rather than seniority)-based wage system.

Discussions

29. **Staff welcomed the government’s focus on raising potential growth.** Staff underlined the importance of addressing the lagging productivity in the services sector and in SMEs, which will need to be key growth drivers in the future.

30. **However, staff cautioned that plans to lower the corporate tax burden to raise investment need to be carefully designed.** While lowering corporate tax rates may have a positive impact on investment, new tax incentives would likely be less cost effective, and would narrow the tax base and introduce distortions into business decisions (Box 4). Given Korea’s long-run fiscal challenges, staff stressed that any tax rate



cuts should be part of comprehensive, and at least revenue-neutral, package, including a reduction in tax incentives. While the authorities argued that a lower overall tax burden could be offset over the medium term by efficiency gains and cutting waste on the spending side, staff cautioned against relying exclusively on such a strategy given the modest size of Korea’s government and the scale of expected aging-related fiscal pressures.¹⁵ More generally, staff suggested that a concrete policy for dealing with the long-run fiscal pressures associated with aging needs to be articulated, perhaps in the form of a regular Long Term Fiscal Report.

IV. STAFF APPRAISAL

31. **Korea’s economy is facing challenging global circumstances.** While exports have shown resilience, the global slowdown will likely limit further gains and constrain investment during the rest of the year. High global food and fuel prices are expected to weigh on consumption and are contributing to rapidly rising prices. As a result, growth is expected to moderate to 4.1 percent this year, before picking up in 2009, while weaker domestic demand and stabilizing commodity prices should help slow inflation early next year. This outlook is subject to substantial uncertainty, with the possibility remaining of a deeper global slowdown, further volatility in global financial conditions, or still higher oil prices.

32. **In this context, macroeconomic policies should focus for now on controlling inflation.** In particular, ensuring that inflation expectations remain well-anchored is critical for sustained strong economic growth and may require an increase in policy rates. Should

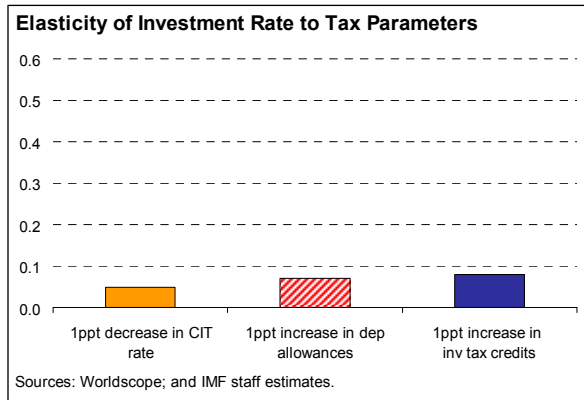
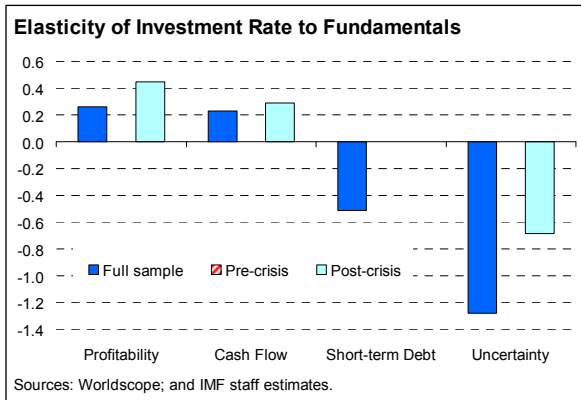
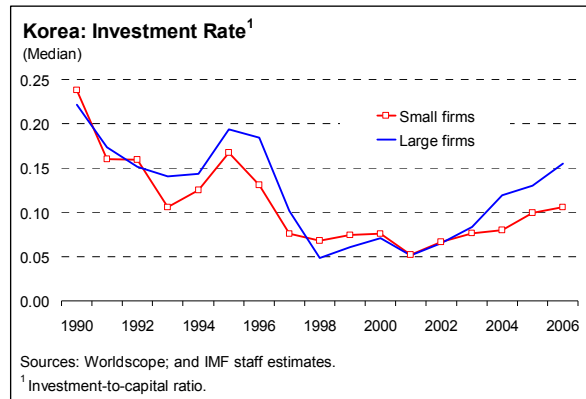
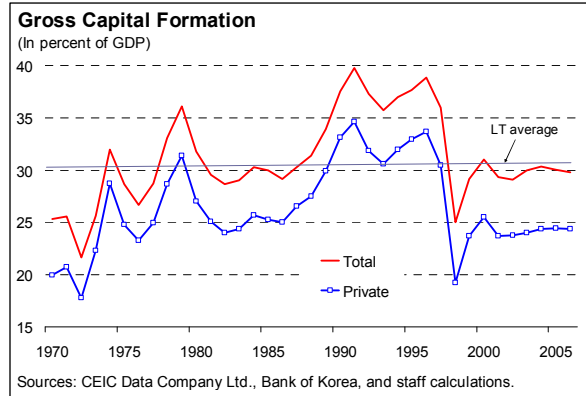
¹⁵ In the absence of reform, public age-related expenditure could increase by up to 11 percent of GDP by 2050.

Box 4. How Can Investment be Promoted in Korea?¹

Like elsewhere in the region, Korea has witnessed a sizeable decline in investment since the Asian crisis. Comparing the period 2000–07 to 1990–97, aggregate investment has declined by 7½ percentage points. These broad trends have been mirrored in much of emerging Asia.

Current investment levels in Korea are close to their long-term average, but small firms have tended to lag behind. While larger firms have tended to recover strongly since the crisis, investment by smaller firms has lagged, largely reflecting weaker fundamentals, notably lower profitability and liquidity.

The determinants of investment in Korea have changed over time. It is difficult to find any significant association between investment and a range of fundamentals in the pre-crisis period, which suggests that firms may have been guilty of “irrational exuberance.” In the post-crisis period, however, investment has been positively related to profit expectations and the availability of financing and negatively associated with short-term gearing ratios and uncertainty. While corporate taxes tend to reduce investment, the impact is small relative to other factors. There is also evidence of heterogeneity, with small and domestically-oriented firms more sensitive to profitability and facing greater financing constraints, large firms more affected by uncertainty, and sluggishness in service sector investment mainly reflecting weaker fundamentals.



The results suggest that a return to pre-crisis highs is unlikely to be sustainable, and that a strategy for promoting investment in Korea should focus on small firms. Measures most likely to be effective include: developing capital markets to provide more market-based financing and venture capital; promoting restructuring by SMEs, including by reducing credit guarantees; lowering uncertainty, including about policies related to the operating environment faced by firms; and improving the business climate, notably through deregulation and labor market flexibility. While reducing tax rates could also help, the impact is likely to be smaller, especially since effective tax rates in Korea are not particularly high by OECD standards.

¹ A selected issues paper analyzes the determinants of investment in Korea in more detail.

inflation begin to moderate and the economy remain soft in coming quarters, there may be scope for more accommodative policies. There could be room for modest fiscal stimulus in the 2009 budget, in particular to protect the most vulnerable should commodity prices rise further, but measures taken should be targeted, well-timed, and reversible. Korea's flexible exchange rate regime, with intervention limited to smoothing excessive volatility, has served the country well in the past and continues to be appropriate. In this context, utilizing intervention as a tool to combat inflation should be avoided; the inflation targeting framework remains the most appropriate policy tool to achieve this objective.

33. **While the Korean financial system remains sound, the ongoing global financial turmoil has raised some concerns.** International credit market stresses have underlined that banks reliant on wholesale funding may be exposed to greater liquidity risk. Supervisors are focused on limiting such risks, but international experience suggests that enhanced stress-testing and contingency planning would also help. Short-term external debt has risen sharply in recent years, as a counterpart to hedging activity, and more recently, with foreign purchases of sovereign bonds. This debt should be closely monitored, but its sources and uses are very different from those a decade ago, and risks remain moderate. Overall bank loan quality is strong but an economic slowdown could reveal some vulnerabilities, particularly in SME lending, which merits continued close attention. These risks point to the importance of banks continuing to strengthen risk management, including under their transition to Basel II.

34. **Looking ahead, structural changes to the financial sector will present both challenges and opportunities.** Increased financial sector competition, in light of the CMCA taking effect in 2009, should contribute to growth, but will require financial regulators to meet new challenges, including risks from more complex institutions and products. It will be critical to ensure that enhanced regulatory and supervision capacity precedes market growth and rapid innovation, and that financial supervision remains independent. The government's push to privatize remaining public sector banks is welcome but plans to ease restrictions on nonfinancial corporate ownership of banks should proceed in step with further improvements in corporate governance.

35. **The government aims to address structural challenges to Korea's impressive growth record, including through deregulation, privatization, and tax cuts.** While these plans are mostly welcome, proposals for reducing any tax rates should be in the context of a broader plan to concretely address long-run fiscal pressures, notably those associated with Korea's rapidly aging population.

36. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Table 1. Korea: Selected Economic Indicators, 2004–09

Nominal GDP (2007): \$969.7 billion
 Main exports (percent of total, 2007): Electronics (36), road vehicles (13), and vessels (7).
 GDP per capita (2007): \$20,011
 Unemployment rate (2007): 3.3 percent
 FDI (2007): \$1.6 billion
 Public debt (2007): 32.1 percent of GDP
 Foreign public debt (2007): 3.2 percent of total public debt

	2004	2005	2006	2007	2008 Proj.	2009
Real GDP (percent change)	4.7	4.2	5.1	5.0	4.1	4.3
Total domestic demand	1.8	3.3	4.5	4.0	3.0	4.1
Final domestic demand	1.0	3.4	4.4	4.5	2.5	4.1
Consumption	0.4	3.9	4.8	4.7	3.0	3.6
Gross fixed investment	2.1	2.4	3.6	4.0	1.6	5.3
Stock building 1/	0.8	-0.1	0.1	-0.4	0.4	0.0
Net foreign balance 1/	3.3	1.3	1.3	1.3	1.2	0.6
Nominal GDP (in trillions of won)	779.4	810.5	848.0	901.2	950.4	1,020.8
Saving and investment (in percent of GDP)						
Gross national saving	34.5	32.0	30.5	30.0	28.5	29.0
Gross domestic investment	30.4	30.1	29.8	29.4	29.9	30.0
Current account balance	4.1	1.9	0.6	0.6	-1.3	-1.0
Prices (percent change)						
CPI inflation (end of period)	3.0	2.6	2.1	3.6	5.6	3.3
Core inflation (average)	2.9	2.3	1.8	2.3	4.1	4.3
GDP deflator	2.7	-0.2	-0.5	1.2	1.3	2.9
Real effective exchange rate 2/	1.8	12.1	7.4	0.1	-9.8	...
Trade (percent change)						
Export volume	22.5	9.1	13.2	10.4	8.6	8.7
Import volume	11.8	6.4	10.5	9.0	9.4	9.7
Terms of trade	-4.2	-7.3	-6.6	-2.5	-6.0	1.5
Consolidated central government (in percent of GDP) 3/						
Revenue	22.9	23.6	24.7	27.0	26.1	25.8
Expenditure 4/	20.7	21.7	22.9	23.3	24.5	24.0
Overall balance 4/	2.2	1.9	1.8	3.8	1.6	1.8
Excluding Social Security Funds	-0.5	-1.0	-1.3	0.4	-1.3	-1.5
Money and credit (end of period)						
Overnight call rate 5/	3.3	3.8	4.6	5.0	5.0	...
Three-year AA- corporate bond yield 5/	3.7	5.5	5.3	6.8	6.9	...
M3 growth 6/	7.1	7.4	10.5	10.0	13.2	...
Balance of payments (in billion U.S. dollars)						
Exports, f.o.b.	257.7	289.0	331.8	379.0	437.2	489.7
Imports, c.i.f.	220.1	256.3	303.9	349.6	432.1	481.6
Oil imports	29.9	42.6	55.9	60.3	101.7	113.6
Current account balance	28.2	15.0	5.4	6.0	-12.7	-10.3
Gross international reserves (end of period)	199.0	210.3	238.9	262.1	253.1	250.8
In percent of short-term debt	254.3	239.6	172.5	130.9	105.8	95.4
External debt (in billion U.S. dollars)						
Total external debt (end of period)	172.3	187.9	260.1	382.2	456.8	503.3
Of which: Short-term (end of period)	56.3	65.9	113.7	160.3	191.4	210.2
Total external debt (in percent of GDP)	25.3	23.7	29.3	39.4	48.1	49.3
Debt service ratio 7/	10.7	7.9	7.4	7.5	8.4	9.6

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

1/ Contribution to GDP growth.

2/ Data for 2008 are for April.

3/ Refers to budget plans for 2008 and 2009, with staff adjustments.

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

5/ Data for 2008 are as of July 28.

6/ Data for 2008 are as of May.

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

Table 2. Korea: Balance of Payments, 2004–08

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

	2004	2005	2006	2007	2008 Proj.
Current account balance	28.2	15.0	5.4	6.0	-12.7
Trade balance	37.6	32.7	27.9	29.4	5.1
Exports	257.7	289.0	331.8	379.0	437.2
(growth rate, in percent)	30.6	12.1	14.8	14.2	15.4
Imports	220.1	256.3	303.9	349.6	432.1
(growth rate, in percent)	25.6	16.4	18.6	15.0	23.6
Services	-8.0	-13.7	-19.0	-20.6	-14.0
Income	1.1	-1.6	0.5	0.8	-0.1
Current transfers	-2.4	-2.5	-4.1	-3.6	-3.7
Financial and capital account balance	9.4	7.0	18.5	6.7	4.1
Financial account	11.2	9.3	21.6	9.1	6.6
Portfolio investment, net	8.6	-1.7	-22.7	-19.1	-18.0
Direct investment, net	4.6	2.0	-4.5	-13.7	-8.5
Inflows	9.2	6.3	3.6	1.6	1.5
Outflows	-4.7	-4.3	-8.1	-15.3	-10.0
Other investment, assets	-8.1	-2.7	-7.9	-18.4	-10.0
Other investment, liabilities	6.1	11.7	56.8	60.3	43.1
of which trade credits	8.1	7.8	13.1	13.5	15.6
of which short-term loans	3.3	5.7	42.4	34.0	25.0
of which medium and long-term loans	-2.4	-2.5	2.2	8.1	1.5
Capital account	-1.8	-2.3	-3.1	-2.4	-2.5
Net errors and omissions	2.9	0.1	-1.2	2.9	0.0
Overall balance (1+2+3)	40.5	22.1	22.6	15.6	-8.6
Financing	-40.5	-22.1	-22.6	-15.6	8.6
Change in usable reserves (increase -)	-38.7	-19.8	-22.1	-15.1	9.1
Net IMF purchases	0.0	0.0	0.0	0.0	0.0
World Bank/AsDB 1/	-1.8	-2.2	-0.5	-0.5	-0.5
Memorandum items:					
Current account balance (in percent of GDP)	4.1	1.9	0.6	0.6	-1.3
Trade balance (in percent of GDP)	5.5	4.1	3.1	3.0	0.5
Gross reserves	199.0	210.3	238.9	262.1	253.1
(in months of imports of goods and services)	8.8	8.0	7.7	7.3	5.8
External debt	172.3	187.9	260.1	382.2	456.8
(in percent of GDP)	25.3	23.7	29.3	39.4	48.1
Short-term external debt (inc. trade credits)	56.3	65.9	113.7	160.3	191.4
Nominal GDP	680.0	791.4	887.7	969.7	950.4

Sources: Korean authorities; and Fund 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, 2004–08

	2004	2005	2006	2007	2008 Proj.
(In trillions of won)					
Revenue	178.8	191.4	209.6	243.6	248.2
Tax revenue	117.8	127.5	138.0	161.5	166.6
Social security contributions	22.8	24.9	27.3	29.7	31.8
Nontax and capital revenue	38.1	39.1	44.2	52.4	49.8
Expenditure and net lending	161.5	175.9	193.9	209.8	233.0
Current expenditure 1/	133.1	148.3	161.7	169.7	191.9
Interest	8.7	10.1	12.2	13.4	14.3
<i>Of which: bank restructuring</i>	3.1	1.6	0.8	0.0	0.0
Non-interest	124.4	138.2	149.5	156.2	177.7
Capital expenditure	27.0	24.6	26.5	33.0	35.9
Net lending 2/	1.4	3.0	5.7	7.1	5.1
Overall balance	17.2	15.5	15.6	33.8	15.2
<i>Of which: Social Security Fund balance</i>	21.2	23.6	26.4	30.2	28.0
Excluding Social Security Funds	-4.0	-8.1	-10.8	3.6	-12.8
Financing	-17.2	-15.5	-15.6	-33.8	-15.2
Domestic financing	-14.6	-12.7	-14.8	-33.0	-15.2
<i>Of which: Privatization</i>	0.0	0.0	0.0	0.0	0.0
External financing	-2.6	-2.8	-0.8	-0.8	0.0
(In percent of GDP)					
Revenue	22.9	23.6	24.7	27.0	26.1
Tax revenue	15.1	15.7	16.3	17.9	17.5
Social security contributions	2.9	3.1	3.2	3.3	3.3
Nontax and capital revenue	4.9	4.8	5.2	5.8	5.2
Expenditure and net lending	20.7	21.7	22.9	23.3	24.5
Current expenditure	17.1	18.3	19.1	18.8	20.2
Interest	1.1	1.2	1.4	1.5	1.5
Non-interest	16.0	17.0	17.6	17.3	18.7
Capital expenditure	3.5	3.0	3.1	3.7	3.8
Net lending	0.2	0.4	0.7	0.8	0.5
Overall balance	2.2	1.9	1.8	3.8	1.6
<i>Of which: Social Security Fund balance</i>	2.7	2.9	3.1	3.4	2.9
Excluding Social Security Funds	-0.5	-1.0	-1.3	0.4	-1.3
Primary balance	3.3	3.2	3.3	5.2	3.1
Memorandum items :					
Privatization receipts	0.0	0.0	0.0	0.0	0.0
Conversion of KDIC/KAMCO bonds	-1.5	-1.5	-1.4	...	...
Nominal GDP (trillion won)	779.4	810.5	848.0	901.2	950.4

Sources: Ministry of Planning and Budget; and Fund 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.

2/ Excludes privatization receipts.

Table 4. Korea: Financial Soundness Indicators, 2001–07

	2001	2002	2003	2004	2005	2006	2007
Financial Sector	(In percent)						
Total loans/GDP	103.6	119.5	97.8	94.2	98.1	109.7	119.2
Commercial banks	60.9	67.9	68.9	65.7	67.6	76.1	81.4
Other financial institutions	42.6	51.6	28.9	28.5	30.5	33.6	37.8
Bank loans	(Year-on-year percent change)						
SMEs	7.9	23.5	17.9	3.0	4.7	17.7	22.4
Households	38.9	38.3	13.8	8.9	10.7	13.4	5.1
Large companies	-27.3	0.4	-13.3	-11.1	15.9	-4.6	31.2
	(In percent)						
FX loans/total loans to SMEs	...	5.5	5.5	5.0	5.5	6.9	5.2
Banks 1/	(In percent)						
Capital adequacy ratio	11.7	11.3	11.2	12.1	13.0	12.8	12.3
Tier 1 capital ratio	7.7	7.2	7.0	8.0	9.3	9.2	8.9
Return on assets	0.7	0.6	0.2	0.9	1.3	1.1	1.1
Net interest margin	2.6	2.7	2.6	2.6	2.8	2.6	2.4
Substandard or below loans, share	(In percent of total loans)						
Commercial banks	3.3	2.4	2.8	2.0	1.3	0.9	0.7
Specialized banks	3.6	2.1	2.4	1.7	1.1	0.7	0.7
Mutual savings banks	15.7	11.3	11.8	13.0	13.8	10.5	8.8
Credit unions	9.9	6.1	6.3	6.0	5.4	4.5	3.8
Corporate Sector	(In percent)						
Corporate debt/GDP 2/	...	116.7	115.8	111.5	111.2	120.5	127.3
Delinquency ratio (domestic commercial bank loans)	2.1	2.0	2.1	2.1	1.5	1.2	1.0
Debt ratio to:							
Equity	182.2	135.4	123.4	104.2	100.9	98.9	...
Total assets	39.8	31.7	28.3	24.0	22.9	22.4	...
Sales	40.1	29.8	26.6	20.7	19.9	19.9	...
Interest coverage ratio 3/	132.6	260.3	367.1	575.8	525.4	439.3	469.8
Current assets/current liabilities	97.9	106.1	109.8	117.0	121.4	120.5	...
Operating income/sales	5.5	6.7	6.9	7.6	6.1	5.3	...
Financial expenses/sales	-4.2	-2.6	-1.9	-1.3	-1.2	-1.2	...
Ordinary income/sales	0.4	4.7	4.7	7.8	6.5	5.7	...
Household Sector	(In percent of GDP)						
Household credit	54.4	62.5	59.8	60.1	62.6	67.5	68.3
Of which : Commercial banks	25.0	31.6	33.9	35.0	36.7	40.2	39.4
Delinquency ratio (all bank loans)	(In percent)						
Households	1.3	1.5	1.8	1.7	1.1	0.7	0.6
Credit card 4/	7.3	8.5	7.8	4.1	2.2	0.1	1.3
Housing prices, percent change	9.9	16.4	5.7	-2.1	4.0	11.6	3.1
Of which : Seoul	13.0	22.5	6.8	-1.4	6.3	18.9	5.4

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 5. Korea: Indicators of Financial and External Vulnerability, 2003–08
(In percent of GDP, unless otherwise indicated)

	2003	2004	2005	2006	2007	2008	
							Date
Financial indicators							
Consolidated central government debt 1/	32.6	33.5	36.2	36.5	35.7	35.9	Proj.
Broad money (M3, percent change, 12-month basis)	4.7	7.1	7.4	10.5	10.4	13.2	May-08
Private sector credit (Dep. Corp. survey, percent change, 12-month basis)	2.3	0.8	8.5	16.2	16.8	19.8	May-08
One month call borrowing rate	3.9	3.3	3.8	4.6	5.0	5.0	Jun-08
One month call borrowing rate (real)	0.5	0.2	1.1	2.5	3.3	-0.5	Jun-08
External indicators							
Exports (percent change, 12-month basis in US\$)	20.7	30.6	12.1	14.8	14.2	30.5	Jun-08
Imports (percent change, 12-month basis in US\$)	18.0	25.6	16.4	18.6	15.0	33.0	Jun-08
Terms of trade (percent change, 12-month basis)	-6.1	-4.2	-7.3	-6.6	-2.5	-12.4	May-08
Current account balance (projection for full year)	2.0	4.1	1.9	0.6	0.6	-1.3	Proj.
Capital and financial account balance (projection for full year)	3.0	1.4	0.9	2.1	0.7	0.4	Proj.
<i>Of which:</i> Inward portfolio investment (debt securities etc.)	3.5	2.4	1.1	0.0	2.4	0.5	Proj.
Other investment (loans, trade credits etc.)	0.4	0.6	1.2	6.3	6.2	4.5	Proj.
Inward foreign direct investment in the form of debt or loans	0.1	0.2	0.1	0.1	0.1	...	
Gross official reserves (in US\$ billion)	155.3	199.0	210.3	238.9	262.1	258.1	Jun-08
Central bank short-term foreign liabilities (in US\$ billion)	2.1	2.0	2.2	3.9	8.2	...	...
Short-term foreign liabilities of the financial sector (in US\$ billion)	27.0	30.0	32.2	40.4	60.2	...	...
Official reserves in months of imports GS (projection for full year)	8.6	8.8	8.0	7.7	7.3	5.8	Proj.
Broad money (M3) to reserves	6.5	6.3	6.5	6.9	6.9	6.9	May-08
Reserves to total short term external debt (in percent) 2/	194.9	254.3	239.6	172.5	130.9	105.8	Proj.
Total external debt	25.9	25.3	23.7	29.3	39.4	48.1	Proj.
<i>Of which:</i> Public sector debt	1.9	1.5	1.1	1.2	3.3	...	...
<i>Of which:</i> Short-term debt	8.4	8.3	8.3	12.8	16.5	20.1	Proj.
Total external debt to exports GS (in percent)	68.4	57.5	56.2	68.1	86.5	89.0	Proj.
External interest payments to exports GS (in percent)	1.4	1.1	1.4	1.7	1.9	0.6	Proj.
External amortization payments to exports GS (in percent)	11.7	9.6	6.6	5.7	5.6	7.8	Proj.
Exchange rate (per US\$, period average)	1,192	1,146	1,024	955	929	1,006	Jul 28, 08
REER appreciation (+) (12-month basis)	1.7	1.8	12.1	7.4	0.1	-13.2	Apr-08
Financial market indicators							
Stock market index (KOSPI)	811	894	1379	1434	1360	1598	Jul 28, 08
Stock market index (KOSPI, percent change, 12-month basis)	29.2	10.2	54.3	4.0	-5.2	-15.1	Jul 28, 08
Foreign currency debt rating (Moody's/S&P)	A3/A-	A3/A-	A3/A	A3/A		A2/A	Jul 28, 08

Sources: Korean authorities; private market sources; and Fund 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 6. Korea: Medium-Term Projections, 2006–13
(In units indicated)

	2006	2007	2008	2009	2010	2011	2012	2013
	Staff Projections							
Real GDP (percent change)	5.1	5.0	4.1	4.3	4.9	4.8	4.7	4.6
Total domestic demand	4.5	4.0	3.0	4.1	4.6	4.6	4.5	4.5
Final domestic demand	4.4	4.5	2.5	4.1	4.6	4.6	4.5	4.5
Consumption	4.8	4.7	3.0	3.6	4.2	4.2	4.0	4.0
Gross fixed investment	3.6	4.0	1.6	5.3	5.6	5.6	5.6	5.7
Stock building 1/	0.1	-0.4	0.4	0.0	0.0	0.0	0.0	0.0
Net foreign balance 1/	1.3	1.3	1.2	0.6	0.8	0.8	0.7	0.7
Prices, period average (percent change)								
Consumer price	2.2	2.5	4.9	4.2	3.0	3.0	3.0	3.0
GDP deflator	-0.5	1.2	1.3	2.9	2.1	2.3	2.3	2.6
Savings and investment (percent of GDP)								
Gross national savings	30.5	30.0	28.5	29.0	29.1	29.1	29.2	29.3
Gross domestic investment	29.8	29.4	29.9	30.0	30.0	30.1	30.2	30.2
Current account balance	0.6	0.6	-1.3	-1.0	-0.9	-0.9	-1.0	-0.9
Consolidated central government (in percent of GDP)								
Revenue	24.7	27.0	26.1	25.8	25.7	25.7	25.7	25.6
Expenditure	22.9	23.3	24.5	24.0	23.5	23.2	23.0	22.7
Balance 2/	1.8	3.8	1.6	1.8	2.3	2.5	2.7	2.9
Excluding Social Security Funds	-1.3	0.4	-1.3	-1.5	-1.3	-1.2	-1.0	-0.8
Debt, domestic plus external 3/	32.2	32.1	32.8	32.9	33.0	32.8	32.4	31.7
Government guaranteed restructuring bonds 3/	4.3	3.6	3.1	2.6	2.1	1.6	1.2	0.8
Trade (percent change)								
Merchandise exports	14.8	14.2	15.4	12.0	11.6	12.0	12.2	12.2
Volumes 4/	13.2	10.4	8.6	8.7	10.8	10.8	10.5	10.4
Merchandise imports	18.6	15.0	23.6	11.5	11.8	12.1	12.2	12.0
Volumes 4/	10.5	9.0	9.4	9.7	11.6	11.7	11.5	11.4
Terms of trade	-6.6	-2.5	-6.0	1.5	0.5	0.7	0.9	1.0
Balance of payments (billions of U.S. dollars)								
Current account	5.4	6.0	-12.7	-10.3	-10.1	-11.1	-12.5	-11.7
Trade balance	27.9	29.4	5.1	8.1	7.8	7.9	9.1	11.0
Merchandise exports	331.8	379.0	437.2	489.7	546.3	611.8	686.4	769.9
Merchandise imports	303.9	349.6	432.1	481.6	538.5	603.9	677.4	759.0
External debt								
In billion of U.S. dollars 5/	260.1	382.2	456.8	503.3	540.8	578.7	618.2	660.8
(as percent of GDP)	29.3	39.4	48.1	49.3	49.5	49.4	49.2	49.0
Debt service ratio 6/	7.4	7.5	8.4	9.6	10.7	10.3	9.9	9.5
Memorandum items:								
Nominal GDP (trillion won)	848	901	950	1,021	1,093	1,172	1,256	1,348
Per capita GDP (U.S. dollars)	18,380	20,011	19,575	20,982	22,429	23,999	25,656	27,481
Output gap (percent of potential GDP)	-0.1	0.3	-0.3	-0.6	-0.3	-0.1	-0.1	0.0

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

1/ Contribution to GDP.

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

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

4/ Customs clearance basis.

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

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

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Staff Report for the 2008 Article IV Consultation—Informational Annex

Prepared by the Asia and Pacific Department

August 8, 2008

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Annex I: Korea—Fund Relations

(As of June 30, 2008)

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

II. General Resources Account:	SDR Million	% Quota
Quota	2,927.3	100.0
Fund Holdings of Currency	2,711.2	92.6
Reserve Position in Fund	216.1	7.4

III. SDR Department:	SDR Million	% Allocation
Net cumulative allocation	72.9	100.0
Holdings	53.2	72.9

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>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Principal					
Charges/Interest	0.30	0.60	0.60	0.60	0.60
Total	0.30	0.60	0.60	0.60	0.60

VII. **Exchange Rate Arrangement:**

Korea's exchange rate system is classified as "independently 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 August 7, 2008, the exchange rate was W 1016.5=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 2007 Article IV consultation were conducted on a mission to Seoul during May 31-June 13, 2007. The Article IV consultation was concluded by the Executive Board on September 12, 2007. In addition, a staff visit took place during November 1-8, 2007.

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 macroprudential and derivatives supervision during October 27–November 7, 2005, on the reform and development of the foreign exchange market during March 30–April 13, 2006, on strengthening the debt management function and further development of the government securities market during September 20–October 2, 2006, and on measures to deepen the money market during December 4–14, 2007.

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 will be closed in September 2008. Ms. Meral Karasulu has been the Resident Representative since September 2006.

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*. Constant price (base year 2000) and nominal GDP estimates are compiled using the production and expenditure approaches; nominal GDP estimates are also compiled using the income approach. While the size of the informal sector has not been measured, informal activities (including some illicit activities) are expected to be reflected in the next revision of the national accounts. The commodity flow technique could be improved by moving to the Supply and Use Table framework, but there have been difficulties in developing requisite source data.

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). Also, some banks are using nationality rather than the residency criteria (as defined in the *Balance of Payments Manual*, fifth edition) to distinguish between resident and nonresident individual and household accounts, affecting the accurate measurement of net foreign assets of the banking sector. 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 quarterly **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 non-cash 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 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 29, 2008)

	Date of Latest Observation	Date Received	Frequency of Data ⁶	Frequency of Reporting ⁶	Frequency of Publication ⁶	Memo Items:	
						Data Quality – Methodological Soundness ⁷	Data Quality – Accuracy and Reliability ⁸
Exchange Rates	7/29/2008	7/29/2008	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	Jun. 2008	Jul. 2008	M	M	M		
Reserve/Base Money	Jun. 2008	Jul. 2008	M	M	M	LO, O, LO, LNO	LO, O, O, O
Broad Money	May 2008	Jul. 2008	M	M	M		
Central Bank Balance Sheet	Jun. 2008	Jul. 2008	M	M	M		
Consolidated Balance Sheet of the Banking System	May 2008	Jul. 2008	M	M	M		
Interest Rates ²	7/29/2008	7/29/2008	D	D	D		
Consumer Price Index	Jun. 2008	Jul. 2008	M	M	M	O, LO, O, O	O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing ³ – General Government ⁴	NA	NA	NA	NA	NA	O, LNO, LO, O	O, NA, O, NA
Revenue, Expenditure, Balance and Composition of Financing ³ – Central Government	Mar. 2008	Jun. 2008	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt ⁵	Q4 2007	May 2008	Q	Q	Q		
External Current Account Balance	Jun. 2008	Jul. 2008	M	M	M	O, LO, LO, LO	LO, O, O, O
Exports and Imports of Goods and Services	Jun. 2008	Jul. 2008	M	M	M		
GDP/GNP	Q1 2008	Jun. 2008	Q	Q	Q	LO, LO, O, LO	O, LNO, O, O
Gross External Debt	Q1 2008	Jun. 2008	Q	Q	Q		
International Investment Position ⁹	Q1 2008	Jul. 2008	Q	Q	Q		

¹ Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

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

³ Foreign, domestic bank, and domestic nonbank financing.

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

⁵ Including currency and maturity composition.

⁶ Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

⁷ 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).

⁸ Same as footnote 7, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, and revision studies.

⁹ Includes external gross financial asset and liability positions vis-a-vis nonresidents.

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Staff Report for the 2008 Article IV Consultation

Supplementary Information

Prepared by the Asia and Pacific Department

September 5, 2008

1. This supplement to the staff report summarizes the main developments since the staff report was issued on August 11, 2008. Staff projections and the thrust of the staff appraisal remain unchanged.
2. Recent data releases indicate that, as expected, growth is slowing while inflationary pressures remain elevated.
 - In line with staff projections and preliminary estimates, second quarter GDP data suggest that the economy expanded by 0.8 percent (q/q seasonally adjusted), the same rate as the previous quarter. Domestic demand weakness continued but net exports remained robust.
 - Exports have continued to perform well, rising by 33 percent (y/y) in July, on resilient demand from emerging markets. However, the current account swung back into a sizeable deficit of about \$2½ billion in July, with an oil-price-related surge in imports (46 percent, y/y) and increased spending on overseas travel. The financial account deficit rose to \$5½ billion from \$4 billion in June, reflecting continued large net equity outflows. Preliminary August trade data indicate that, despite some slowing, both import and export growth remained robust. Reserves fell by around \$4 billion in August, pointing to a slowdown in intervention.
 - Indicators of domestic demand point to a continued moderation of growth, consistent with staff projections. Business confidence stabilized in August, albeit at low levels, while consumer confidence fell further in July, to a near eight-year low. On a sequential basis (m/m seasonally adjusted), industrial output declined by 0.2 percent in July, but real retail sales growth rebounded to 5.1 percent after two months of contraction and service sector output picked up by 1.8 percent after remaining flat during May-June. Employment growth also picked up in July to 0.16 percent, the fastest pace since January, but remains relatively sluggish.

- Headline inflation fell slightly to 5.6 percent (y/y) in August from a decade-high of 5.9 percent in July, helped by the decline in global oil prices, but remained above the Bank of Korea's (BOK) target range for the tenth consecutive month. However, there is increasing evidence of second-round effects, with core inflation edging up from 4.6 percent to 4.7 percent.
3. The won has weakened further since August 11, falling by around $8\frac{1}{4}$ percent against the dollar to a near-five year low and around $6\frac{3}{4}$ percent in nominal effective terms. In the last two sessions, the won has recovered by $2\frac{2}{3}$ percent against the dollar. Two of the three CGER approaches—the macro balance and external sustainability approach—continue to show the won as appropriately valued. However, the average of the three approaches yields an undervaluation of around 7 percent. The Korean stock market has declined to a 17-month low, down nearly 26 percent for the year, broadly in line with other Asian emerging markets. Foreign investors have continued their sell-off, albeit at a slower pace, with their net selling falling to \$3 billion in August from \$5 billion in July. In staff's view, underlying macroeconomic and financial vulnerabilities remain as assessed in the Staff Report.
4. The BOK tightened monetary policy in August. After a one-year pause, the BOK raised its policy rate by 25 bps, to $5\frac{1}{4}$ percent, citing continued concern about liquidity growth and the need to anchor inflation expectations. This year's fiscal stimulus package and corporate tax reform legislation are still pending approval in parliament.



INTERNATIONAL MONETARY FUND

Public Information Notice

EXTERNAL
RELATIONS
DEPARTMENT

Public Information Notice (PIN) No. 08/117
FOR IMMEDIATE RELEASE
September 12, 2008

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2008 Article IV Consultation with the Republic of Korea

On September 8, 2008, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with the Republic of Korea.¹

Background

Difficult global conditions have made this a challenging year for Korea. First, against the backdrop of a global slowdown, economic activity in Korea is moderating. Second, surging global commodity prices and a weakening of the won are contributing to rising domestic inflation. Finally, while the Korean financial system remains in good health, increased global volatility has raised near-term risks, and ongoing structural changes to the financial sector present opportunities but also challenges to financial oversight.

After reaching 5 percent in 2007, growth is expected to moderate to 4.1 percent this year, before recovering to 4.3 percent in 2009. Headline inflation reached 5.6 percent in August, exceeding the Bank of Korea's target of 2½–3½ percent for a tenth consecutive month. However, slowing domestic demand and moderating food and fuel price inflation should help bring headline inflation down early next year. Reflecting a sharp deterioration in Korea's terms of trade, a current account deficit of 1¼ percent of GDP is

¹ 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.

expected this year, declining to about 1 percent in 2009. This outlook is subject to substantial uncertainty, with the possibility remaining of a deeper global slowdown, further volatility in global financial conditions, or still higher oil prices.

After a one-year pause, monetary policy was tightened in August, with the Bank of Korea raising its policy rate by 25 basis points to 5¼ percent, citing concerns about liquidity growth and the need to anchor inflation expectations. This year's fiscal stance provides an expansionary impulse of about 1½ percent of GDP, including about 1 percent of GDP in measures adopted after the budget, to address higher fuel prices. Despite the recent sharp depreciation, the exchange rate remains broadly in line with fundamentals. Intervention has been stepped up since June to smooth volatility and support the won.

The direct impact of the global financial crisis has been small, owing to limited exposure to subprime assets, but Korea has not escaped the turmoil unscathed: stock prices have declined; volatility has increased; and spreads on external debt have widened. Some concerns have also arisen regarding the financial sector. In particular, the heavy reliance of Korean banks on wholesale financing, has led supervisors to focus efforts on containing liquidity risk. In addition, while overall bank loan quality is strong, an economic slowdown could reveal some vulnerabilities, particularly in small- and medium-sized enterprise (SME) lending. Short-term external debt has risen sharply in recent years, as a counterpart to hedging activity, and more recently, with foreign purchases of sovereign bonds. This debt should be monitored, but its sources and uses are very different from those a decade ago, and risks remain moderate.

Looking ahead, structural changes to the financial sector will present both challenges and opportunities. Increased financial sector competition, in light of the Capital Market Consolidation Act taking effect in 2009, should contribute to growth, but will also require enhanced financial oversight to meet new regulatory challenges, including from more complex institutions and products. Korea also faces longer-term challenges to its impressive record of economic growth from population aging, the erosion of its low-skilled manufacturing base and lagging service sector productivity. The government aims to address these with a wide-ranging set of reforms, including through deregulation, privatization, and tax cuts.

Executive Board Assessment

Executive Directors commended the authorities for their continued skillful economic management, which has contributed to the resilience of the Korean economy in the face of challenging global circumstances. Korea's growth momentum has been supported by strong exports. The overall health of the financial sector and limited direct subprime exposures have contained the direct impact of the global financial turbulence. Nevertheless, growth has softened, equity prices and the won have weakened, and high oil prices have contributed to higher inflation. While baseline projections point to only a

modest slowing of growth and a return of inflation to the Bank of Korea's target band during 2009, risks are skewed to the downside.

Directors supported the authorities' macroeconomic policy mix for addressing the difficult challenges facing Korea, in particular the priority being given to controlling inflation. Noting the recent indications of second round effects of commodity price increases, they emphasized that keeping expectations well-anchored is crucial to avoid more forceful, and more damaging, tightening later. Directors therefore welcomed the August policy rate hike. Going forward, some Directors suggested that the balance of risks may call for further tightening, while some others saw merit in proceeding cautiously. Directors also highlighted the importance of effective communication regarding monetary policy and inflation developments in keeping inflation expectations well-anchored. They noted that a more accommodative monetary policy could be envisaged if inflation eases and growth remains soft.

Directors agreed that the won remains broadly appropriately valued, despite the recent depreciation. They considered that Korea's flexible exchange rate regime continues to be appropriate, and generally supported the view that foreign exchange intervention should remain limited to smoothing excessive volatility. Directors stressed that Korea's inflation targeting framework remains the most effective policy tool for addressing inflation. At the same time, some Directors suggested that exchange rate management could also have a role in containing inflation.

Directors saw the slightly expansionary fiscal stance in 2008 as broadly appropriate. They underscored, however, that the scope for further fiscal stimulus is limited given the inflation pressures and the medium-term fiscal challenges facing Korea. Any further transfers to protect the vulnerable against high oil prices should be temporary, timely, and well targeted.

Directors noted that Korea's financial system remains healthy, although the ongoing financial turbulence has raised vulnerabilities. Global credit market stresses have highlighted that banks reliant on wholesale funding are subject to elevated liquidity risk. In that context, Directors agreed that the strengthening of liquidity risk management by banks and regulators in line with emerging best practices is a priority. Short-term external debt has increased in recent years and warrants close monitoring, although risks remain moderate. While loan quality is strong, Directors encouraged continued upgrading of banks' risk assessment, in line with the introduction of Basel II, noting that this would help address potential risks from lending exposures to SMEs and the real estate and construction sectors during a downturn.

Directors welcomed the Capital Market Consolidation Act, taking effect early next year, as an important step to develop Korea's financial sector and support long-term growth by increasing competition and the scope for innovation. They agreed that enhanced financial oversight will be needed to meet new regulatory challenges, including those

associated with more complex financial institutions and products. Directors therefore welcomed the authorities' efforts to strengthen risk monitoring and enhance regulatory and supervisory capacity ahead of domestic market growth and innovation. Directors also welcomed the authorities' intention to privatize remaining state-owned banks, while emphasizing that any loosening of constraints on bank ownership by nonfinancial corporates should not threaten hard-won progress on corporate governance.

Directors commended the authorities' reform efforts to address long-term challenges to Korea's impressive growth record. They supported the plans to boost investment and growth through privatization and deregulation. Directors encouraged the authorities to meet head-on the longer-term implications of an aging society. They underscored, in this context, that proposals for reducing taxes should be part of a broader reform plan to address longer-run fiscal challenges.

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. The [staff report](#) (use the free [Adobe Acrobat Reader](#) to view this pdf file) for the 2008 Article IV Consultation with the Republic of Korea is also available.

Korea: Selected Economic Indicators

	2004	2005	2006	2007	2008 IMF Staff Projections	2009 IMF Staff Projections
Real GDP (percent change)	4.7	4.2	5.1	5.0	4.1	4.3
Consumption	0.4	3.9	4.8	4.7	3.0	3.6
Gross fixed investment	2.1	2.4	3.6	4.0	1.6	5.3
Net foreign balance 1/	3.3	1.3	1.3	1.3	1.2	0.6
Prices (percent change)						
Consumer prices (end of period)	3.0	2.6	2.1	3.6	5.6	3.3
GDP deflator	2.7	-0.2	-0.5	1.2	1.3	2.9
Labor market (in percent)						
Unemployment rate	3.7	3.7	3.5	3.3	...	...
Wage growth, manufacturing	10.0	7.8	5.6	6.8	...	...
Consolidated central government (In percent of GDP)						
Revenues 2/	22.9	23.6	24.7	27.0	26.1	25.8
Expenditure	20.7	21.7	22.9	23.3	24.5	24.0
Balance 2/	2.2	1.9	1.8	3.8	1.6	1.8
Money and interest rates (in percent)						
Overnight call rate	3.3	3.8	4.6	5.0	...	...
M3 growth	7.1	7.4	10.5	10.0	...	...
Yield on corporate bonds	3.7	5.5	5.3	6.8	...	...
Balance of payments						
Current account balance (In billions of U.S. dollar)	28.2	15.0	5.4	6.0	-12.7	-10.3
Current account balance (In percent of GDP)	4.1	1.9	0.6	0.6	-1.3	-1.0
Won per U.S. dollar (Period average)	1,146	1,024	955	929	...	...

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 Richard Murray, Executive Director for Korea
and Jong-Won Yoon, Senior Advisor to Executive Director
September 8, 2008**

My authorities greatly appreciate the productive policy dialogue during the Article IV consultation, and thank staff for their high-quality papers. Issues covered in the staff papers reflect pertinent risks and challenges that the Korean economy is facing, and there has been a broad consensus between the authorities and staff on most aspects of the staff assessments. My authorities will give due consideration to the staff recommendations on macroeconomic policies and structural reforms.

Challenges and New Administration's Focus

The Korean economy is facing both cyclical and structural challenges. The worsening of the external environment, including the ongoing financial turmoil, global slowdown, and higher oil prices, have cast clouds on both the growth and inflation outlook. In particular, the continued terms-of-trade deterioration during the current decade has caused real income to grow much slower than output growth, worsening consumer and business sentiment. On the structural front, intensified competition is incessantly demanding restructuring of SMEs at a faster pace than they can absorb smoothly. In addition, the rapid ageing of the society will not only reduce growth potential through lower factor inputs, but also cast an increasing burden on long-term fiscal sustainability. While the authorities have striven to meet these challenges, which are not new in nature, these are still ongoing, calling for constant efforts for further structural adjustment.

Against this backdrop, and despite socio-political headwinds caused by protests against restarting U.S. beef importation due to food safety concerns and insufficient consensus-building, the Lee Myung-Bak Administration, installed in late February this year, is strengthening efforts to reinvigorate the reform momentum. With efforts to build greater public consensus, the new administration has embarked on major reform measures. The policy initiatives include fostering a business-friendly environment through deregulation and privatization, strengthening structural adjustment of the economy, and securing macroeconomic stability with priority on containing inflation. While these efforts will require painful adjustment and might not be popular in the initial phase, the authorities are confident of the fruits that will be borne over time through these reforms, to which they are fully committed.

Macroeconomic Outlook

The near-term prospects are not favorable, given the adverse external conditions. After achieving 5 percent growth in 2007, slightly higher than potential, the economy is experiencing a downturn with risks tilted to the downside. Employment increases in the first half of 2008 have significantly slowed to 191,000, compared to 277,000 in the same period

last year. While continued strong exports (20.4 percent, y.o.y., for the first half year), aided by rapid increases to non-traditional markets, contributed to the first half year GDP growth performance at 5.3 percent, weakening domestic demand is dragging down growth. The authorities project this year's growth to slow to mid 4 percent level, slightly higher than the staff estimate. However, they are cognizant that the economy is running at a slower pace since the second quarter, and stay alert to the possibility that the economic downturn would continue for more than a year, depending on future developments in the external environment.

Like most countries, higher food and fuel prices pushed up CPI inflation well above the target range (2.5-3.5 percent) from 2.5 percent last year to 5.6 percent in August (4.7 percent in terms of core inflation). Given declining output growth and slack in the labor market,¹ the authorities expect CPI inflation to return to within the target range next year if oil prices stabilize. Nevertheless, they are closely watching inflation developments so that the current cost push inflation is not entrenched into higher inflation expectation. Higher oil prices are also likely to keep the external current account in deficit. Considering the improvement in the service account deficit due to a weaker won and lower income growth, the authorities expect that the current account deficit in 2008 would remain at about 1 percent of GDP, with further improvements in coming years.

While the Korean financial market has remained resilient, the global financial turmoil and the negative terms-of-trade shock have increased volatility in the financial market. The stock market indices declined 22.3 percent as of end-August this year, and spreads on external debt have increased. Partly reflecting the impact of the oil price shock, to which the Korean economy is considered particularly vulnerable, the won/US dollar exchange rate has depreciated sharply by 16.3 percent as of end-August this year, considerably more than other currencies. Given renewed risks and concerns in the financial sector and the impact of the adverse external environment on the Korean economy, the authorities are closely monitoring financial and foreign exchange market developments so as to preserve market stability.

Macroeconomic Policy Responses

Prospects of declining output and job growth, rising inflation, and heightened financial market risks have posed a difficult policy dilemma, and there is not much room to maneuver. Under trade-offs among growth, inflation, and financial market stability, the authorities are striving to maintain a delicate balance among these objectives with greater emphasis on containing inflation. The authorities' policy mix includes tackling inflationary pressures mainly through monetary policy; providing a modest fiscal impulse with the spending focus on protecting the vulnerable, and keeping exchange rate flexibility, while minimizing financial sector vulnerabilities through strengthening financial oversight.

¹ In addition to the significant decline in employment growth, there is little sign yet for a wage-inflation spiral. Despite higher inflation, negotiated wage increases remained at 5.1 percent for the first half, compared to 4.8 percent for the same period last year, which is broadly in line with the recent trend.

Considering the declining output growth, the cost-push nature of current inflation, and concerns about the impact of an interest rate hike on the household and SME sector balance sheets, **monetary policy** has remained in cautious mood until recently, with the policy rate left unchanged. With consumer price inflation continuing to exceed the target range since November 2007, however, the Monetary Policy Committee raised the policy rate by 25 basis points to 5.25 percent in August in order to contain inflation expectations which have gathered strength influenced by the recent sharp rise in headline inflation. The monetary authorities will carefully review the need for a further move, considering inflation, economic activity, and the financial market conditions. We found useful the staff's analysis on stress testing household debt for interest rate rises (Chapter II of selected issues). However, we note the need to consider other channels that could affect household balance sheets, including through asset markets. Staff's emphasis on the importance of clear communication with the public on the consistency of price developments within the IT framework is well taken.

The foreign **exchange market** situation has changed drastically since early this year. Contrary to the continued appreciation pressures that dominated the market for several years, the won has weakened significantly this year, reflecting the impact of higher oil prices as well as net equity selling by foreign investors in the midst of the global financial strain. Market participants, who used to be bullish on the Korean won, have moved in the other direction with the expectation of further won depreciation. Despite the market whims and the relatively high pass-through of exchange rate changes to inflation, the authorities have maintained the floating regime, which has served the country well, while limiting intervention only to temporary smoothing operations.

On the role of the exchange rate in controlling inflation, we agree with staff that there is little room for the exchange rate to play, and inflation should be tackled through monetary policy. This would be particularly the case for Korea, given the past experience in the mid 1990s when inflation consideration had led to an overvalued won and reserve depletion. Nevertheless, we interestingly note a recent IMF occasional paper which suggested that the bigger role for the exchange rate in inflation targeting for emerging market countries reflects a number of factors, such as higher exchange rate volatility, a high pass-through from exchange rate changes to inflation, and less developed financial markets.²

Fiscal policy this year will be slightly expansionary, relative to the contractionary stance in 2007. The 2008 budget envisages the overall deficit, excluding social security funds, at around 1 percent of GDP. However, the authorities have announced plans to provide temporary support to protect the vulnerable from higher oil prices. Part of the greater-than-expected revenue gains attained last year will be utilized to finance this additional spending. On the revenue front, the broadened revenue base and improved tax administration resulted

² Draft IMF Occasional Paper, "What Role for the Exchange Rate in Inflation Targeting for Emerging Market Countries?", Mark Stone and others, June 2008.

in unexpected revenue gains in 2007 of more than 2 percent of GDP, a large portion of which is expected to continue in the future. Given the unexpectedly heightened revenue burden from 24.7 percent in 2006 to 27 percent of GDP last year, the authorities now have some room for lowering overall the tax burden in line with the policy initiative to protect the vulnerable and to foster a business-friendly environment. In this regard, the authorities recently announced a plan to lower the tax burden, including the phase-down of corporate income tax from 25 to 20 percent and the lowering of personal income tax by 2 percentage points by 2010. Cautious of the looming longer-term fiscal challenges, however, the authorities will continue to keep long-standing fiscal prudence by maintaining a broadly balanced fiscal position over the medium-term, including through implementing further expenditure consolidation in tandem with the tax cuts.

Financial Sector Risk and Reform

We welcome the greater coverage of financial sector issues in the staff papers, which is particularly relevant and useful at this current juncture. While the Korean financial sector has remained healthy, the authorities are cognizant that the current global financial turmoil and the economic downturn could easily raise risks and vulnerabilities in the financial market. In this regard, the authorities have been vigilant in monitoring risk factors based on an early warning system and strengthened regulatory and supervisory oversight over financial institutions and markets.

On banks' increased reliance on wholesale funding and the related liquidity risk, we appreciate staff's analysis (Chapter III in selected issues) which examined the global banking sector trend, the implications for the Korean banking sector, and the policy recommendations relevant for Korea. To address the heightened liquidity risk, the authorities have been closely monitoring banks' liquidity indicators, strengthening regulation on banks' liquidity risk management, implementing money market reform, as well as encouraging banks to diversify funding and income sources, such as expansion of fee-based businesses. Further efforts will be made in line with the staff recommendations, which include strengthening of stress testing and its integration into contingency planning; introduction of international best practice on liquidity risk management; and completion of the money market reform agenda.

External short-term debt has rapidly increased by more than US\$60 billion since end-2006, which has drawn continued attention from the authorities. As staff noted, a majority of these flows is driven by hedging-related demand and, recently, there are some signs of moderation of this trend. Nevertheless, the authorities will continue to monitor market developments, given the potential destabilizing impact of reversals of short-term capital flows.

Significant progress has been made in advancing the financial sector, including the implementation of the Capital Markets Consolidation Act (CMCA) and plans to privatize public banks. By consolidating the Securities and Exchange Act, Futures Trading Act, and other capital market-related laws, the CMCA will unleash financial innovation and

competition through deregulation, providing unprecedented impetus for structurally changing the future financial landscape. Given the CMCA's potential impact on financial market stability, the authorities have stepped up preparations for its smooth implementation. The preparations include the recent inter-government committee's review on improving operational regulations for financial institutions; improving financial consumer protection; and enhancing regulatory and supervisory capacity. The new administration's initiative to reduce the role of public banks will provide additional momentum for financial sector development.

Structural Reform

As indicated above, the new administration has strengthened policy efforts to enhance growth potential by promoting investment and raising total factor productivity. The policy priorities include deregulation through greatly relaxing cumbersome business regulations; simplifying laws and regulations; lowering the tax burden while keeping long-term fiscal sustainability; enhancing the competitiveness of the service sector; supporting SME restructuring; and enhancing labor market flexibility.

In this regard, we welcome staff's analysis on the determinants of investment in Korea (Chapter V in selected issues). The staff's stress on the need to focus on SMEs and service industry in boosting investment is consistent with the government's *Service-PROGRESS Initiative*, designed to improve competitiveness of the service industry, such as tourism, medical service, and knowledge-based services.