

Republic of Korea: 2007 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 2007 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 2007 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on June 13, 2007 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 14, 2007. 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 7, 2007 updating information on recent developments.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its September 12, 2007 discussion of the staff report that concluded the Article IV consultation.
- A statement by the Executive Director for the Republic of Korea.

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

Selected Issues Paper

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

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
700 19th Street, N.W. • Washington, D.C. 20431
Telephone: (202) 623-7430 • Telefax: (202) 623-7201
E-mail: publications@imf.org • Internet: <http://www.imf.org>

Price: \$18.00 a copy

**International Monetary Fund
Washington, D.C.**

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Staff Report for the 2007 Article IV Consultation

Prepared by the Asia and Pacific Department
(In consultation with other departments)

Approved by Daniel Citrin and Michael Hadjimichael

August 14, 2007

- **This report is based on discussions held in Seoul during May 31–June 13.** The staff team comprised Messrs. Schiff (Head), Semblat, Chensavasdijai and Syed (all APD), Mr. Frydl (MCM), and Ms. Karasulu (Resident Representative). Mr. Yoon (OED) also participated.
- **Counterparts.** The mission met with Deputy Prime Minister (and Finance Minister) Kwon, Bank of Korea (BOK) Governor Lee, Financial Supervisory Commission Governor Yoon, and other senior officials, academics, and private sector representatives.
- **Context of past surveillance.** In recent years, the Fund and the authorities have agreed on the broad policy priorities. Directors have emphasized that Korea needed to address challenges to growth, notably by reviving the small-and medium-sized enterprise sector, modernizing the labor market and developing the financial sector.
- **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).

Contents	Page
Executive Summary	3
I. Introduction.....	4
II. Recent Economic Developments and Outlook	4
III. Policy Discussions	8
A. Smoothly Navigating the Near Term	8
B. Dealing with Financial Risks	12
C. Addressing Longer-Term Challenges	15
IV. Staff Appraisal	22
 Boxes	
1. Korea’s Recent Experience with Capital Inflows	6
2. Assessment of Korea’s Competitiveness	11
3. Mortgage Market Development	13
4. Debt Sustainability in Korea	17
5. Past Recommendations and Progress in Structural Areas	21
 Tables	
1. Selected Economic Indicators, 2003–08	24
2. Balance of Payments, 2003–07	25
3. Consolidated Central Government Operations, 2003–07	26
4. Financial Soundness Indicators, 2000–06	27
5. Medium-Term Projections, 2005–12	28
6. Indicators of Financial and External Vulnerability, 2002–07	29
7. Fiscal Scenarios, 2007–50	30

EXECUTIVE SUMMARY

Outlook

- **Korea's growth performance remains solid and inflation pressures are contained.** After reaching 5 percent last year, real GDP growth of 4¾ percent is expected this year and 5 percent next year. Export performance continues to be strong while domestic demand has been resilient. Risks are mostly to the downside. Inflation has remained persistently below the BOK target range of 2½–3½ percent, although the recent spike in oil prices could push headline inflation temporarily to the mid-range of the target.
- **The current account is expected to be broadly in balance this year and next, while net capital flows should moderate.** Momentum in exports should continue and offset an increased oil import bill, but the service account is expected to widen as Koreans increasingly travel abroad. The recent surge in gross capital inflows is expected to decelerate, as hedging by shipbuilders starts to plateau. Outflows are also increasing rapidly, driven by tax incentives and a desire for portfolio diversification.
- **The exchange rate appears appropriately valued.** The won has appreciated against all major currencies and especially the yen since 2003, but there are no clear signs of misalignment.

Key issues and policy discussions

- **With inflation pressures largely absent, staff sees room for more accommodative monetary policy should growth slow.** The BOK is more cautious and has resumed its tightening, given concerns over the growth of monetary aggregates and asset prices.
- **Financial risks are manageable.** A decline in housing prices would not impact the financial system as LTV ratios and NPLs are low, but consumption could suffer given the importance of short-maturity bullet loans. Accelerating ongoing development of the mortgage market would help reduce this risk. SME lending has risen rapidly, but banks have improved their risk management practices.
- **Long-term challenges are more difficult.** Population aging is expected to generate enormous fiscal pressures and a range of measures will be needed. The authorities are well aware of the challenges, but public dialog is at an early stage. Long-term growth prospects need also to be improved. With its labor force declining, its low-skilled manufacturing base eroding and service sector productivity low, Korea may see its potential growth decline. Policies to ensure that manufacturing continues to move up the value chain and to raise service sector productivity are needed.

I. INTRODUCTION

1. **In the decade since the Asian crisis, Korea has staged an impressive economic recovery.** Since 1998, growth has averaged nearly 6 percent per year, led by strong exports, and average per capita income has increased to more than \$18,000. Korean firms have adapted successfully to a rapidly changing global economy, with a number of companies emerging as leaders in their industries. And, as the health of the corporate and financial sectors has improved dramatically and sizable international reserves have been accumulated, Korea's vulnerabilities have declined to low levels.

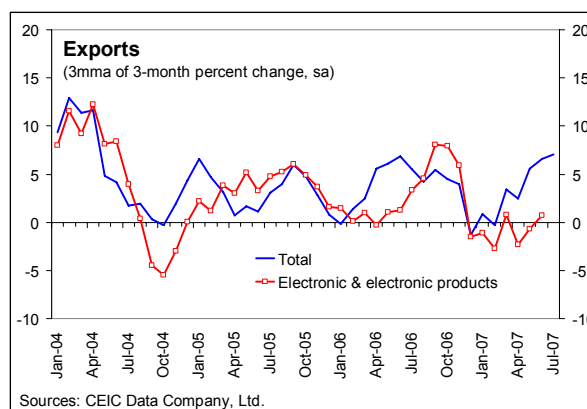
2. **However, as old challenges have been overcome, new ones have emerged.** In the near term, a benign economic outlook remains vulnerable to global developments, while several risks to the domestic financial sector have arisen. These challenges appear manageable, but over the longer term, Korea will confront more difficult issues that could affect growth and, if not addressed, ultimately threaten its external stability. Notably, a rapidly aging population will likely generate large fiscal pressures and contribute to a declining labor force. The latter, combined with the ongoing erosion of Korea's low-skilled manufacturing base and stagnant service sector productivity, threatens to limit Korea's long-term growth. Despite the longer-term nature of these problems, early action is needed to reduce adjustment costs and ensure Korea's continued economic success.

II. RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

3. **Korea's growth remains healthy.** In 2006, real GDP growth reached 5 percent, the highest in four years, led by strong exports, which rose by nearly 15 percent in the face of a strong appreciation of the won. Activity moderated in late 2006, but a pickup is expected over the remainder of 2007, bringing growth to 4¾ percent for the year. Exports are projected to remain strong as vessels exports surge and the IT sector recovers in the second half of this year. At the same time, domestic demand is showing resilience. Facility investment is expected to rise this year, but a significant recovery in construction activity is not in the cards given the subdued housing market. Consumption is expected to be supported by a solid labor

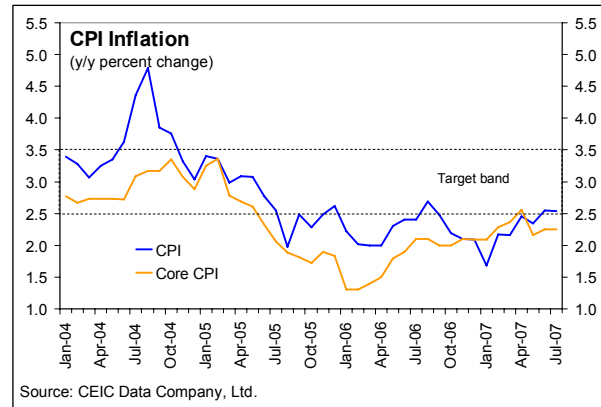
Korea: Real GDP Growth (Annual percentage change)			
	2006	2007	2008
		Proj.	Proj.
Real GDP	5.0	4.8	5.0
Total consumption	4.5	4.1	3.7
Investment	3.2	5.5	3.7
Of which: construction	-0.4	1.7	1.4
Net exports (contribution)	1.6	0.7	1.3

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

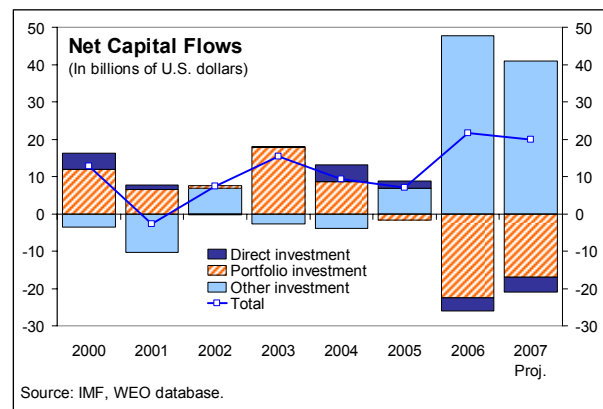
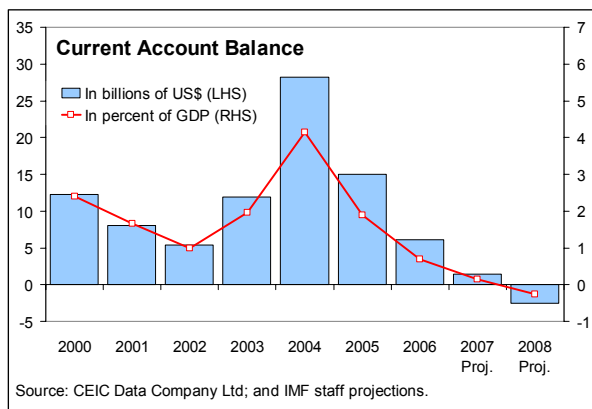


market and equity prices, but to remain constrained by modest real income gains, high household debt and a weak housing market. For 2008, a broad continuation of these trends should allow Korea to grow by about 5 percent.

4. **Price pressures remain well contained.** Headline consumer price inflation remains at the lower edge of the BOK target range of 2½–3½ percent. Inflation is projected to rise temporarily to around 3 percent by the end of 2007 as oil prices edge higher, but core inflation is expected to remain low as wage pressures are mild and capacity utilization, while rising, remains moderate.



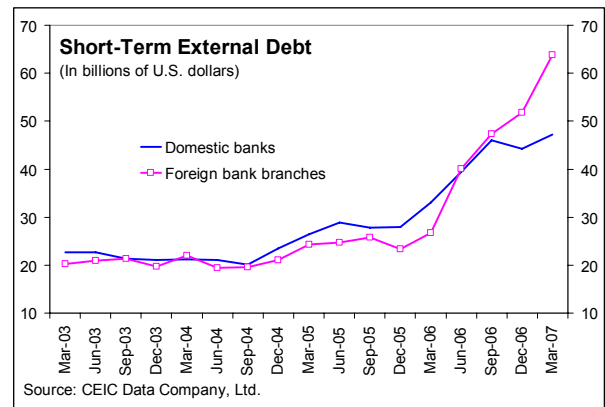
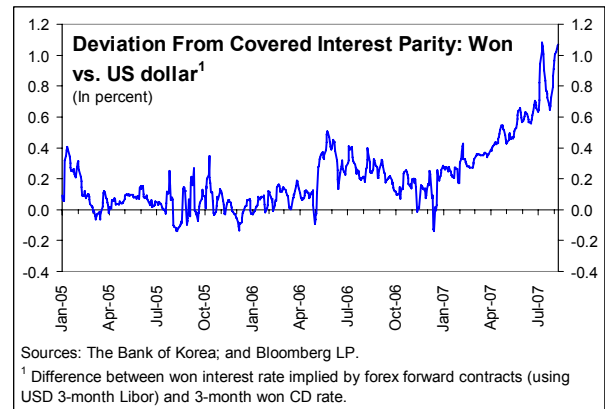
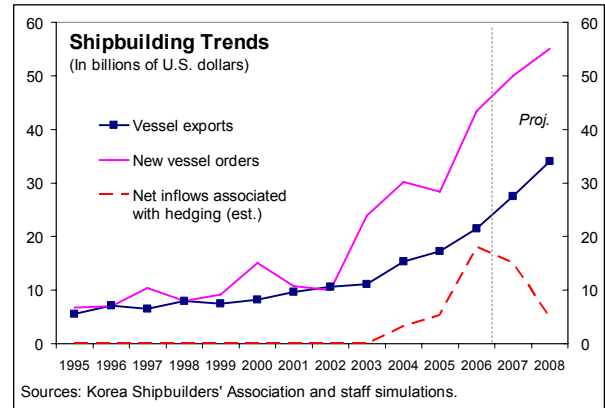
5. **The external current account surplus is projected to remain in broad balance, while the recent surge in capital inflows should ebb.** The continued strong export performance should be offset by higher oil prices. The services account is expected to continue to widen as Koreans increasingly travel abroad, including for education. Short-term external borrowing has surged by \$60 billion since the beginning of 2006 as exporters of ships and heavy manufacturing have increased their hedging of future receipts and more recently as arbitrage opportunities have arisen (Box 1). For the remainder of the year and next year, inflows are projected to moderate as shipbuilders' new hedging slows and recent curbs on short-term borrowing by foreign bank branches reduce, at least temporarily, the ability to benefit from arbitrage opportunities. At the same time, gross outflows are expected to increase significantly, owing to a desire for portfolio diversification and recent changes in the tax treatment of capital gains from abroad.



Box 1. Korea's Recent Experience with Capital Inflows

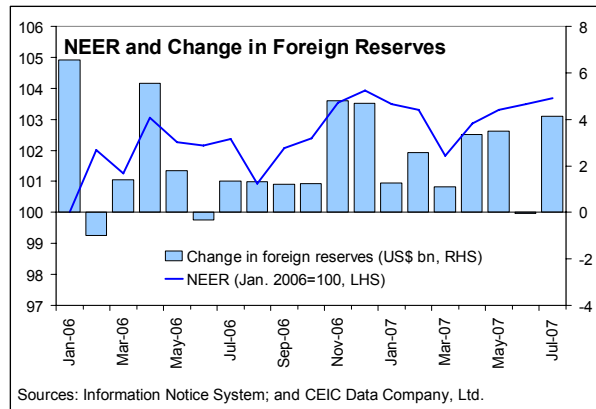
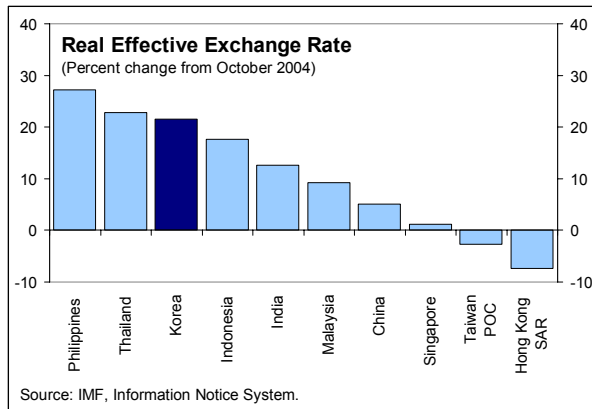
Hedging activity by shipbuilders has contributed significantly to the recent surge in capital inflows. Korea's shipbuilding industry has become a major source of exports and the outlook is very favorable. With Korea home to seven of the world's ten largest shipbuilding companies, it is benefiting greatly from a surge in global trade, oil prices and energy demand. Exports of vessels have increased by 25 percent per year on average since 2004. Shipbuilders' order books are full for the next three years, with orders at the top three shipbuilders expected to reach \$50 billion for this year. Korean shipbuilders only began to hedge their foreign exchange exposure in 2004, and have recently increased their hedging ratio to around 70 percent reportedly, in anticipation of continued won appreciation. Typically, exporters sell expected dollar receipts forward to domestic banks and foreign bank branches in Korea, which then borrow dollars abroad to match their own currency exposure, thereby creating a capital inflow. Hedging and associated capital inflows are projected to decline this year and next: shipbuilders have already achieved their desired hedging ratios, orders should rise more slowly due to capacity constraints, and some existing forward contracts will become due and be unwound.

In addition, banks have been actively engaged in covered interest parity (CIP) arbitrage activities.¹ Given the persistent deviation in CIP, local branches of foreign banks in Korea have borrowed dollars short-term, sold these dollars for won on the spot market, then bought CDs or other domestic bonds, and sold forward the won for dollars generating riskless profits. This has contributed to the rapid increase in short-term external debt and to the fivefold increase to 16 trillion won (about \$17 billion) in net buying of Treasury bonds and Monetary Stabilization Bonds by local branches of foreign banks. To stem the rapid increase in short-term external debt, beginning in early 2007, the authorities first used moral suasion which had the effect of raising the CIP deviation. More recently, they have announced several measures, including the reduction of the nontaxable amount that foreign bank branches can borrow from their parent companies abroad starting January 2008. This announcement appears to have further fueled the deviation.



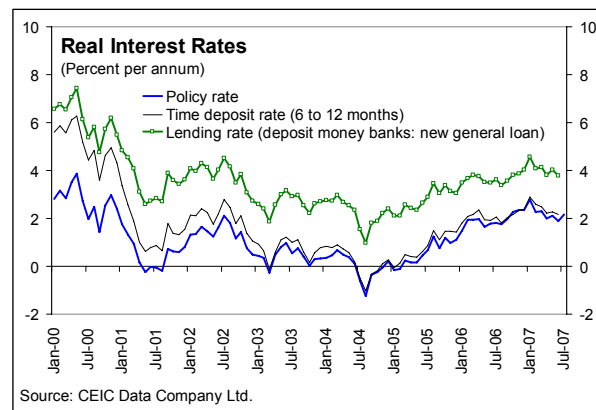
¹ According to Covered Interest Parity (CIP), the interest rate difference between two countries should equal the difference between the forward and the spot exchange rate between the two currencies.

6. **The won has continued to appreciate, but more slowly in 2006–07.** Overall appreciation since October 2004 has reached around 20 percent in real effective terms, among the highest in emerging Asia. Since the beginning of 2006, the won has strengthened by 4 percent in real effective terms. To smooth volatility in the foreign exchange market and prevent a too rapid appreciation of the won, the authorities have intervened at times. Since the start of 2006, estimated interventions have been modest, averaging around \$1 billion per month or about $\frac{3}{4}$ percent of turnover in the onshore spot foreign exchange market.



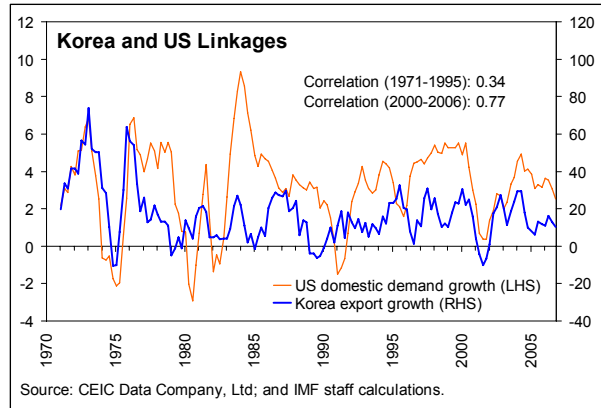
7. **After a long pause, monetary policy tightening has recently resumed while the fiscal stance remains neutral.**

The BOK raised the overnight call rate five times during 2005-06 and then paused for a year (in the meantime though, it raised the reserve requirement ratio on won and foreign currency deposits). The BOK resumed its tightening in July 2007. Real interest rates are near their highest level in five years. The fiscal deficit (excluding social security



fund) in 2006, $\frac{1}{4}$ percent of GDP, was $\frac{1}{4}$ percentage point higher than in 2005. This year's budget targets a deficit of $\frac{1}{2}$ percent of GDP, with a 1 percentage point of GDP revenue increase, reflecting in part housing tax hikes, offset by increased spending on the social safety net, education, and research and development. Given the late 2006 economic slowdown, expenditure was front-loaded to the first half of the year. However, a modest overperformance for the year as a whole can again be expected, in line with established practice of spending less than budgeted. A similarly neutral stance is envisaged for 2008, with continued re-allocation of expenditure towards social spending.

8. **Near-term risks are tilted modestly to the downside.** On the domestic front, the recovery in domestic demand, in particular consumption, is not yet well established and could slow if corporate profits do not improve or if the equity market corrects. On the external front, a further increase in oil prices could depress domestic demand while raising inflation pressures. Further global financial turbulence could generate a reverse of recent inflows to Korea and dampen investor and consumer confidence. Finally, a sharper or more prolonged slowdown in the United States could have a significant impact on Korea's exports.



9. **The political environment is complex but is not expected to create major uncertainties.** A presidential election will take place in December 2007 and parliamentary elections are scheduled for April 2008. While the ruling party has lost its majority in parliament, two key pieces of legislation—the Capital Market Consolidation Act and the pension reform—have recently been adopted and the broad direction of economic policy is unlikely to change following the elections. Tensions have also eased on the North Korea nuclear issue and in part as a result, Moody's has recently upgraded Korea's sovereign debt rating to A2.

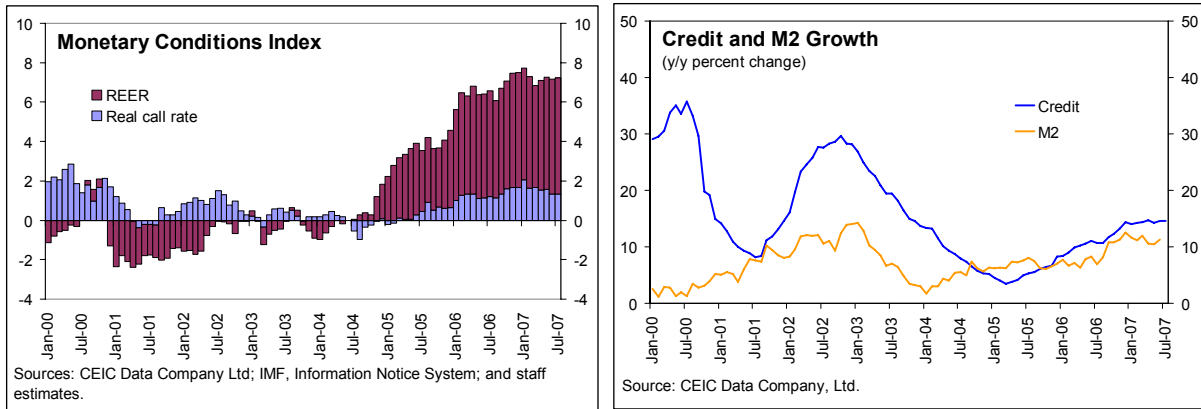
III. POLICY DISCUSSIONS

Near-term risks to the Korean economy are manageable and discussions focused on how to maintain smooth sailing. The mission identified several vulnerabilities to the financial sector, but risks are limited and being addressed. Long-term challenges are more daunting: the rapid aging of the Korean population could threaten Korea's fiscal and external sustainability while the erosion of its low-skilled manufacturing base and low service sector productivity could affect its competitiveness and growth prospects.

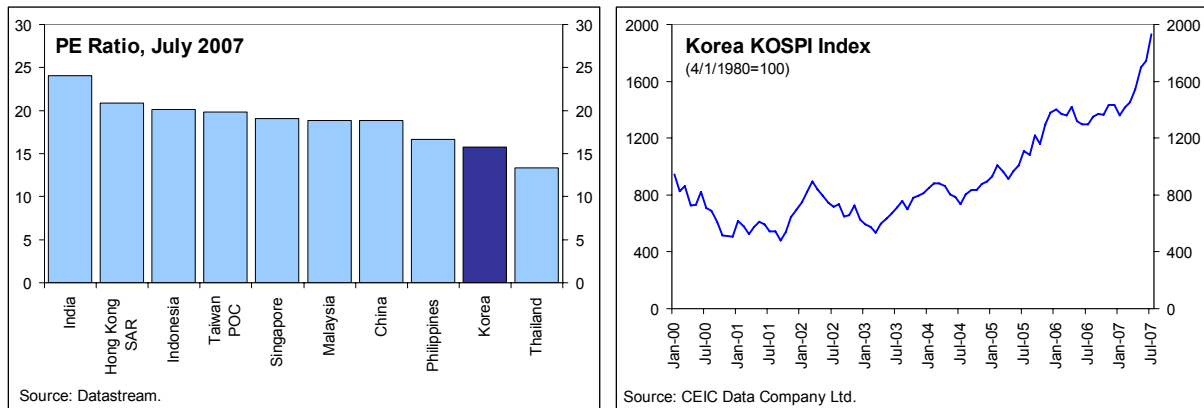
A. Smoothly Navigating the Near Term

10. **While monetary tightening has resumed, staff argued that there is scope for a more accommodative policy should growth slow.** Monetary conditions are now fairly tight, with real interest rates near a post-crisis high and the won strong.¹ Inflation is likely to remain at or below the mid-point of the target band and consumption growth remains moderate and is subject to downside risks. Should these risks emerge, an easing could be

¹ The index is computed with a weight of 0.75 for the change in the real call rate and 0.25 for the change in the real effective exchange rate, with June 2004 as the base.



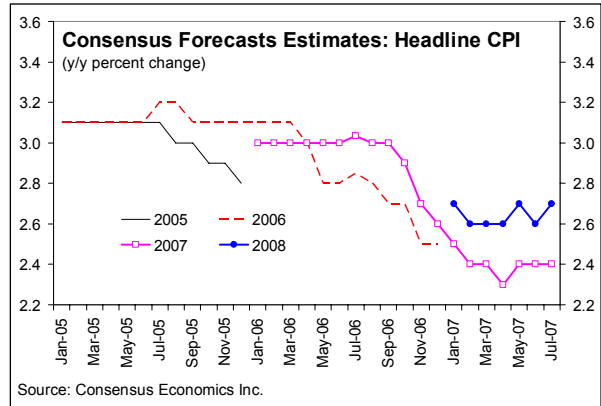
appropriate. Moreover, staff argued that monetary policy should be focused on the inflation targeting framework. Credit growth may have picked up since early 2005, prompting some concerns among policymakers, but this has been from very low levels, and the pace remains moderate. Concerns about specific types of credit growth, such as credit to SMEs are best dealt with via prudential oversight. Equity prices have also risen rapidly this year, but valuations do not appear stretched by historical or regional standards.² Finally if short-term capital inflows surge again, a reduction in the policy interest rate could, should inflation pressures remain low, be appropriate.



11. **The authorities, however, did not see much room for lower rates.** The BOK agreed that there were only modest inflationary pressures. However, they remained biased toward tightening, arguing that credit growth and rapidly rising asset prices could, if left unchecked, eventually feed into higher inflation, asset bubbles and an increase in nonperforming loans. Moreover the BOK noted that past tightening only had limited success in slowing liquidity growth as, because of sizable arbitrage activities, long-term yields had not followed the rise in the overnight call rate. In contrast, the BOK argued that the increase in reserve requirements on won deposits had more impact. Staff and the authorities agreed

² Korean stocks have historically traded at a lower PE ratio than comparable companies in other countries because of foreign investors' concerns about corporate governance.

that development of the money market would help strengthen the monetary transmission mechanism and limit future recourse to reserve requirements. In this context, subsequent to the mission, the BOK announced that it would move its policy rate from the overnight call rate to a 7-day repo rate. This should help develop the repo market and expand the short end of the yield curve beyond the overnight call rate. Staff also argued that, in light of the BOK's strong track record in delivering low inflation—and in reducing inflation expectations—some thought could be given to lowering the inflation target.



12. **There is limited scope for a more accommodative fiscal policy in the near term.** The current broadly neutral stance is about right under current circumstances. Should the economy experience a downturn, the mission recommended that automatic stabilizers be allowed to operate fully but argued that given Korea's large medium-term fiscal challenges the scope for more stimulative fiscal policy was limited. The authorities agreed and also noted that institutional constraints limited their ability to use countercyclical policy.³

13. **Exchange rate flexibility has served Korea well, and intervention in the foreign exchange market should be limited to smoothing volatility.** Strong export performance and healthy profits across a range of industries suggest that Korea's external competitiveness remains solid overall. At the same time, various estimates point to a broadly appropriate valuation of the Korean won (Box 2). The authorities reiterated that they are not seeking to determine the exchange rate, but expressed concerns that the sizable appreciation of the won, in particular against the yen, has affected profitability in some sectors. If faced with temporary exchange rate pressure, the mission noted that smoothing operations could—with due concern for the associated costs—be appropriate. The authorities agreed and added that recent steps to liberalize and encourage capital outflows had also helped limit pressure on the won, while allowing Korean residents to diversify their wealth.

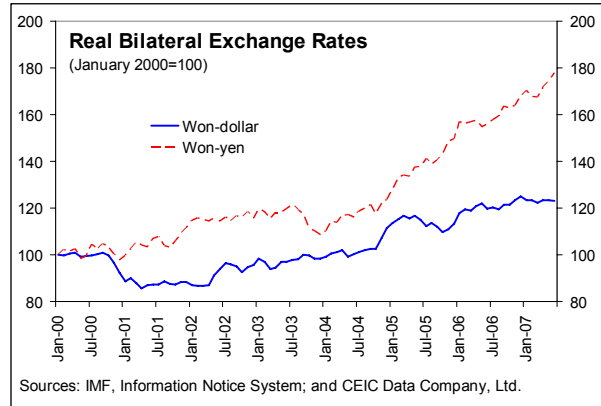
14. **The rising deviation from covered interest parity (CIP) may be pointing to a policy dilemma.** Concerned with the rapid increase in short-term external debt, and the associated pressure on the won, the authorities have taken several measures. Subsequent to the mission and after issuing initial warnings to foreign bank branches in March, the authorities have decided to lower the nontaxable amount that foreign bank branches can borrow from their parent companies from 6 times capital to 3 ("thin capitalization rule"),

³ The National Fiscal Management Act passed in late 2006 severely limits the government's ability to issue supplementary budgets, which had become a regular feature in recent years.

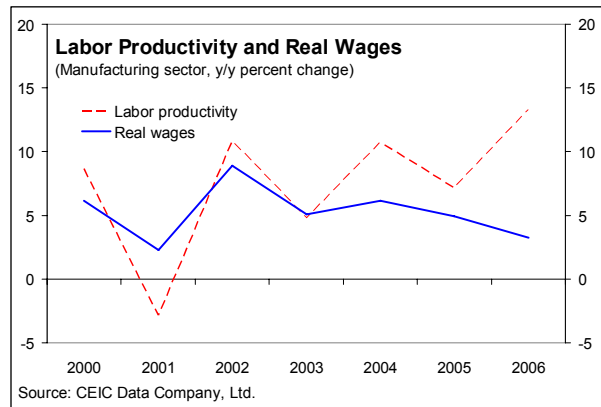
Box 2. Assessment of Korea's Competitiveness¹

Despite a steady won appreciation in recent years, Korea's external competitiveness has remained strong.

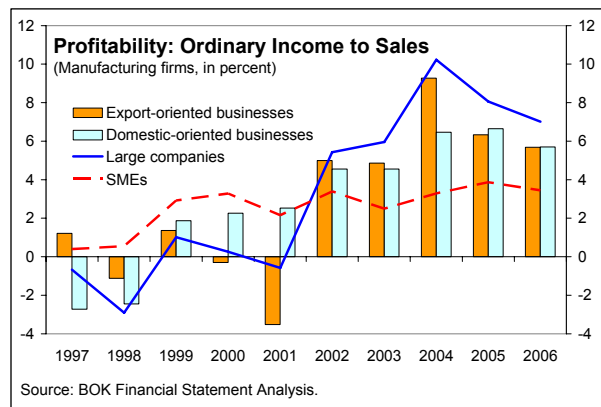
Exports continue to record double-digit growth, and Korea's share of world exports has remained steady at about 3 percent over the same period. CGER-type analysis suggests that the exchange rate remains broadly in line with fundamentals, with estimates of the deviation of the won from its equilibrium ranging between -4 and +14 percent, depending on the methodology for exchange rate assessment. The won appreciation is also consistent with Korea's strong labor productivity growth in manufacturing, averaging 10 percent during 2004–06, primarily driven by technological innovation.



Nevertheless, the strengthening of the won, in particular vis-à-vis the Japanese yen, is hurting Korea's competitiveness in some sectors. The won has appreciated by 60 percent against the yen in real terms since end-2003. As Japan is Korea's main competitor in major export industries, including electronics and automobiles, the won appreciation against the yen is squeezing profit margins of some Korean companies, notably automakers who have recorded a fall in profit margin from 7 to 4½ percent since 2003.



The strong won appreciation is also having an impact on SMEs. Profits at many large companies have remained at healthy, albeit reduced levels, as foreign exchange hedging and the shift of operations overseas as well as other cost-cutting measures have helped them mitigate the impact of the appreciation. However, producers of low value-added goods as well as some SMEs are coping with difficulty, partly due to increased competitive pressures from China and other low-cost countries and slow progress on some structural reforms.

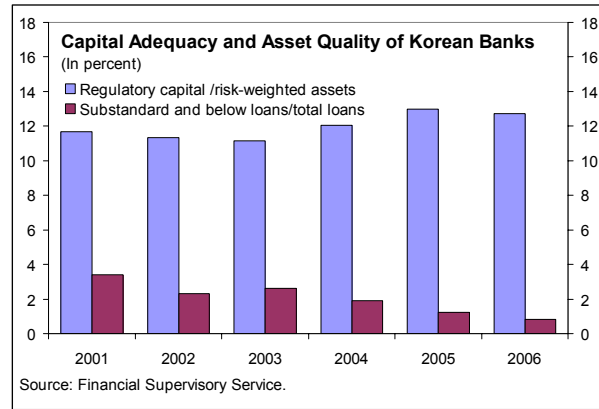


¹ A Selected Issues paper will assess Korea's competitiveness.

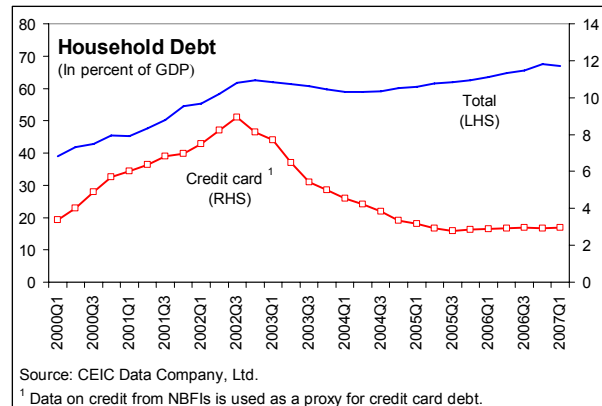
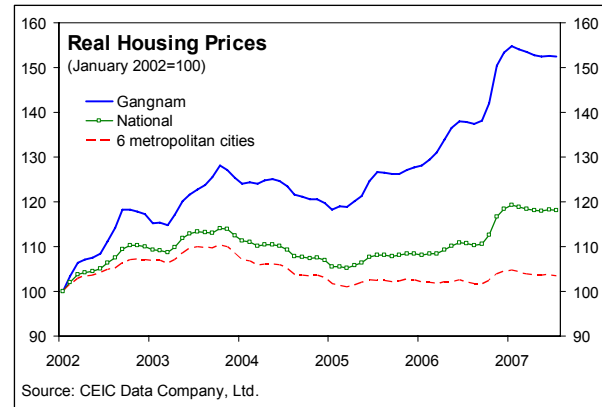
starting January 2008 and to limit the use of foreign exchange loans by banks to real demand (financing imports and real investment), beginning August 2007. By signaling the intent to prevent further arbitrage activities, these measures may have triggered a further widening of the deviation. This reflects rising tensions between the objective of preventing a too rapid appreciation of the exchange rate and that of tightening monetary policy. Staff had noted that given the relatively benign nature of the short-term foreign borrowing—largely borrowing of foreign bank branches from parent companies—there were only limited concerns that these would increase Korea’s vulnerabilities. Moreover, the recently announced measures are not consistent with the authorities’ stated objective of complete capital account liberalization.

B. Dealing with Financial Risks

15. **The Korean financial sector is in good health overall, but there are pockets of concern.** Asset quality, profitability, and capital adequacy have all increased and risk assessment practices as well as credit information have improved in recent years. The banking system is well-placed to deal with shocks although there are risks that bear close watch. Staff and the authorities were in broad agreement on the nature of risks and the necessary steps to contain them.



16. **A decline in housing prices would not affect significantly the financial sector, but could dampen consumption.** Real housing prices rose by 11 percent nationwide last year. Concerns about the run-up in house prices led to a wide range of steps to cool the housing market, including tax measures, selected price controls, and tighter loan-to-value (LTV) and debt-to-income (DTI) ratios for mortgages. These actions led to a sharp slowdown in house price inflation and a fall-off in mortgage lending—through May, mortgage lending by banks was flat for the year—and a further downturn in prices cannot be ruled out. Staff noted that although banks are not highly exposed—LTV ratios average around 50 percent and NPLs are low—sharp declines in housing

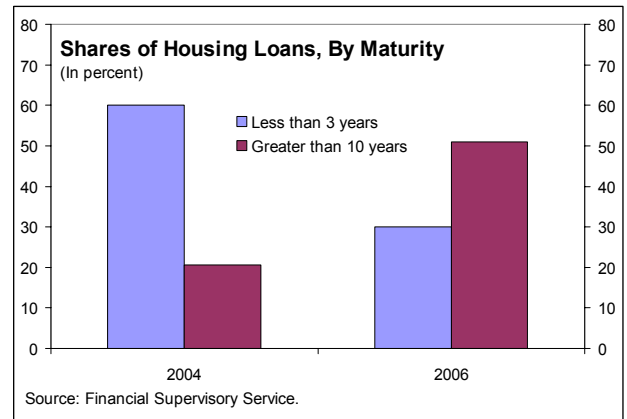


prices could complicate the ability of households that still have short-term bullet type mortgages to roll over their debt. Against the background of high household debt, this could affect consumption.⁴ These risks are declining as households have increasingly replaced short-term bullet loans with longer-term amortizing mortgages, although some households may face difficulties meeting higher monthly payments when grace periods expire. Over the medium term, remaining risks from the mortgage market can be addressed by further financial sector development (Box 3).

Box 3. Mortgage Market Development¹

Mortgage structures are changing. Loan maturities have lengthened in response to government encouragement and tax incentives. Between 2004 and 2006, the share of outstanding mortgages of maturity 3 years or less fell from 60 to 30 percent, while the share of those over 10 years rose from 21 to 51 percent. Over the same period, the share of amortizing mortgages rose from less than one quarter to more than one half. Some borrowers shifted to an amortizing loan with a 3–5 year grace period.

Further mortgage market development can strengthen macro-financial stability by spreading the risks. Increased use of fixed-rate mortgages would shift interest rate risk away from households while development of mortgage-backed securities (MBS) would give lenders increased risk management capability. The latter would need to go hand in hand with strengthened supervision to ensure that both mortgage



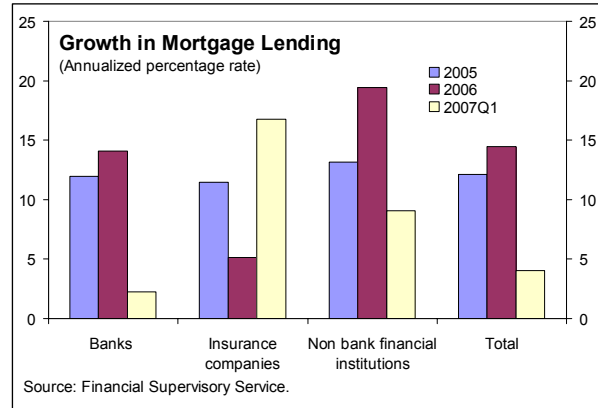
originators and regulated MBS buyers adhere to good standards of risk assessment. In 2004, the Korea Housing Finance Corporation (KHFC) was set up to promote these ends but the response has been slow. Fixed-rate mortgages are less than 10 percent of the total and outstanding MBS in Korea are only about 1½ percent of the total debt market. Financial conditions going forward may better support development: the spread between fixed and variable-rate loans has narrowed and the rising bank loan-to-deposit ratio indicates tighter funding conditions that could make securitization more attractive.

A number of steps can be taken to mitigate risks and develop the mortgage market. Prudential regulations can be harmonized across lenders and geographic areas so as to promote the standardization of mortgage products and facilitate securitization. Fixed-rate loans can be promoted by developing a long-term bond benchmark and OTC derivatives hedges. Finally, the KHFC can broaden its support for securitization by offering credit enhancement for private sector MBS and securitizing capped adjustable-rate mortgages.

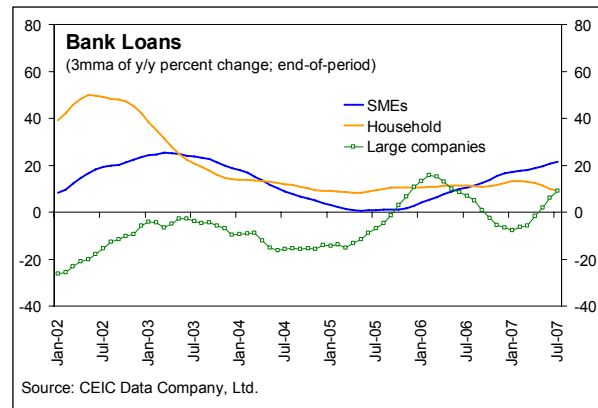
¹ A Selected Issues paper will examine policies to increase efficiency and reduce risks in the mortgage market.

⁴ Consumers could also return to reliance on credit cards, with such debt bottoming out following the 2002-03 crisis. However, credit card company balance sheets have strengthened and prudential standards and risk assessment in this area have improved since the crisis.

17. **Mortgage lending by nonbanks should also be closely monitored.** Regulatory arbitrage may be contributing to a rise in mortgage lending by the nonbanks. Staff noted that some of these institutions have extended mortgage loans at LTV ratios that are higher than banks and, in some aspects, they have faced less stringent prudential regulations. But there does not appear to be a systemic risk, since the sector remains small, accounting for around 4 percent of financial sector assets.



18. **Recent rapid growth in bank lending to SMEs has also raised concerns.** The financial supervisor noted that this increase was partly driven by higher demand and also improved credit assessment systems for SME loans by banks. However, with banks increasingly competing to lend to SMEs (which exhibit relatively low profitability as a group), the staff noted that there was a risk that looser credit standards could lead to a rise in NPLs, especially should the economy slow.⁵ The financial supervisor shared this view and noted its intention to strengthen monitoring of SME lending including through on-site examinations. At the same time, the BOK decided to reduce its below-market rate funding for bank lending to SMEs.



19. **Staff suggested that the most effective way to address these still-modest concerns is to continue to upgrade the risk assessment models of banks and harmonize prudential standards with the nonbanks.** This would be consistent with the planned move from rules-based to risk-based supervision under Basel II. The recent tightening of prudential standards on mortgage lending appears to have contributed to a stabilization of housing prices, but may also be spurring lending by nonbanks as well as potentially more risky SME loans. Staff pointed to the need to broaden the coverage of prudential regulations to nonbanks, on an equal footing with banks where feasible. The authorities were in broad agreement and, subsequent to the mission, the financial regulator announced its intention to bring nonbanks'

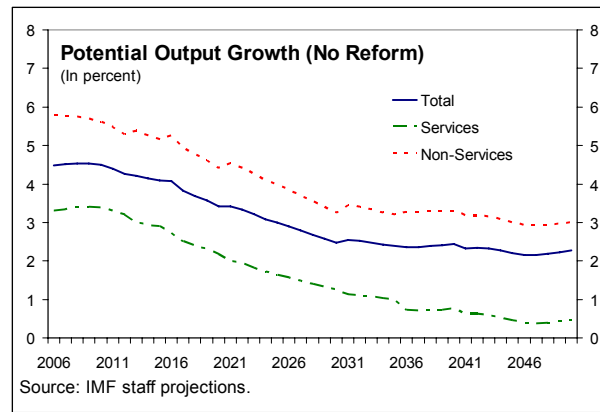
⁵ About 18 percent of SME loans are government-guaranteed, so that the government bears some risk. Government guarantees have declined to 5.3 percent of GDP from 8 percent in 2001.

prudential standards on mortgages in terms of LTV, DTI, and loan classification more in line with those of banks.

B. Addressing Longer-Term Challenges

20. **Korea’s medium-term prospects are generally favorable and vulnerabilities are low, but the country faces difficult long-run challenges.** With a fertility rate of just over 1—among the lowest in the world—and a rising life expectancy, the old age dependency ratio is expected to increase from 15 percent to 65 percent by 2050. These changes will generate significant public expenditure pressures and, with the labor force set to decline starting in about 10 years, will complicate efforts to maintain strong economic growth. Growth prospects are also threatened by competition in manufacturing from lower wage countries and weak productivity in services. Responding early on will help promote a smooth adjustment to these challenges, thereby ensuring Korea’s continued external stability.

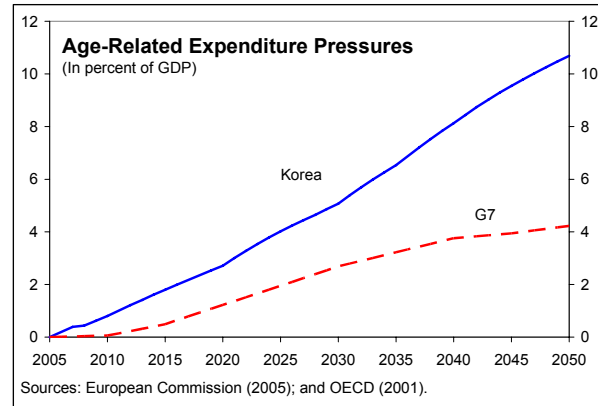
21. **Reflecting these developments, potential growth is projected, in the absence of reforms, to decline rapidly.** In the medium term, staff anticipates growth to remain at around 4½ percent, with a current account broadly in balance. However, potential growth is expected to decline to 2½ percent by 2030 and 2 percent by 2050. About ¾ of this decline would come from the shrinking labor force, with the rest coming from the shift of labor from the manufacturing sector to the services sector whose productivity growth is meager.⁶ Implementing reforms in the service sector could boost long-run potential growth to 3 percent, while raising labor force participation would boost potential growth further.



⁶ See “Korea’s Transition to a Knowledge-Based Economy: Prospects and Challenges Ahead” in *Republic of Korea—Selected Issues*, 2006.

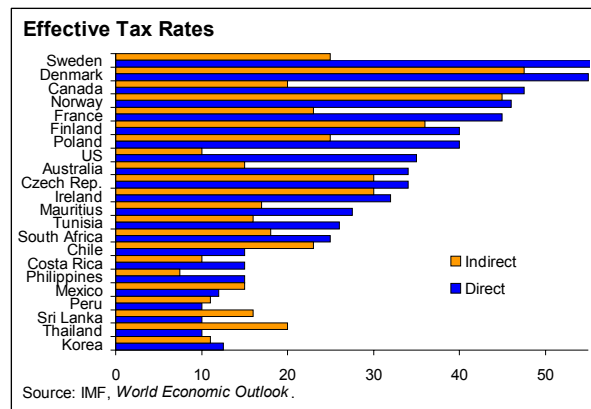
Long-Term Fiscal Pressures⁷

22. **Korea faces a number of long-term pressures that will strain its public finances in the coming decades.** Owing to the rapid aging of its population, pensions and health care spending are projected to rise by as much as 11 percent of GDP by 2050. As a result, without a strong response, public debt will rise rapidly and growth will be constrained (Box 4 and Table 7). In addition, the desire to strengthen Korea's social safety net and the highly uncertain but potentially large costs associated with possible reunification with North Korea underline the need to address age-related spending pressures early.



23. **Addressing these emerging fiscal pressures will require action on a range of fronts.** Staff emphasized that the full range of fiscal tools, including tax policy and administration and expenditure reform, will likely be required to address these risks. Ultimately, the weights placed on each of these instruments would need to reflect not only economic considerations but also social and political requirements.

24. **Staff argued that there is considerable scope to raise revenues over the medium term.** At 25 percent, Korea's revenue-to-GDP ratio is modest by OECD standards, and considerable gains could be achieved by base broadening and improved tax administration. These gains should be fully exploited before considering raising tax rates. In particular, personal income tax yields, just 3 percent of GDP, could be raised significantly by eliminating tax exemptions and taking steps to reduce underreporting of income, and similar base broadening for the corporate income tax and VAT are also possible. The authorities concurred on the need for base broadening, but plan to focus in the near term on raising auditing capacities and increasing penalties for evasion.



⁷ A Selected Issues paper utilizing the Fund's Global Fiscal Model (GFM) to analyze Korea's long-term fiscal policy options was a key input into the discussions.

Box 4. Debt Sustainability in Korea

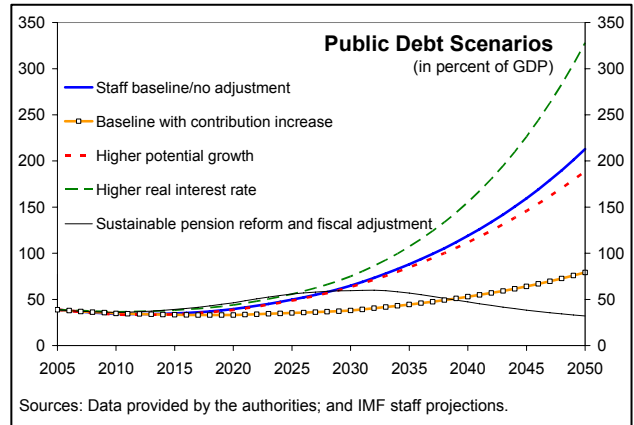
At just over 33 percent of GDP, Korea's public debt ratio is relatively low by OECD standards, where the average is around 55 percent. Over the next 15 years, while Korea's relatively new pension system continues to accumulate assets and the old-age dependency ratio remains low, the gross debt ratio will, even in the absence of adjustment, stay below 50 percent of GDP. However over the long term, as Korea experiences rapid population aging, fiscal pressures related to pensions, health and long-term care will mount. As a result, starting around 2025, both the fiscal deficit and gross public debt as well as the external current account deficit would—absent any adjustment—enter an unsustainable upward trend.

The authorities view staff's baseline as overstating the long-term debt level because public health insurance contributions should, by law, cover 80 percent of health care costs. Based on the assumption that the required increase in contributions takes place, public debt remains lower, at around 80 percent of GDP in 2050, than the more than 200 percent under staff's baseline. Staff recognizes that this mechanism may reduce debt, but views the increases in contributions as a necessary fiscal measure, because they still require discretionary action. Moreover, contributions would need to almost triple over the period, which could prove difficult to sustain.

While raising Korea's potential growth would help alleviate some of these pressures, it will not on its own be enough to achieve long-term debt sustainability. An increase in growth to around 3 percent would reduce debt by around 20 percent of GDP in 2050, but the debt path would still be unsustainable.¹

Further parametric reforms are needed to put the pension system on a sustainable footing. In response to aging pressures, the pension benefit replacement rate has recently been reduced from 60 to 40 percent of wages, to be phased in from 2008 to 2028. While the reform will push the depletion of the pensions system's assets forward by about fifteen years, it will have limited impact on the long-term debt profile since it does not put the system on a sustainable footing. To do so, options include a higher contribution rate or a faster-than-planned increase in the retirement age.

To achieve debt and external sustainability, additional fiscal adjustment will be required. Even with reforms to put the pension system on a sustainable path, health care and long-term care expenditures will continue to increase at a rapid pace. Additional measures to raise fiscal revenues or contain other expenditure would be needed to put the fiscal deficit and the public debt ratio on a sustainable path over the long-term. For instance, in the absence of any change in health insurance contributions, the effective personal income tax (PIT) rate needs to be increased gradually by a cumulative 7½ percentage points between 2021–35 to stabilize debt at around 35 percent of GDP in the long run. While adjustment could be delayed somewhat, the fiscal effort required to ensure stability would be greater and the long-term debt level would be higher.



Korea: Fiscal Scenarios, 2010-50 1/					
(In percent of GDP, consolidated central government, unless otherwise indicated)					
	Projections				
	2010	2020	2030	2040	2050
Staff baseline/no adjustment					
Overall Balance	1.6	-0.5	-4.2	-10.9	-20.4
Primary Balance	2.0	-0.6	-3.2	-6.5	-8.8
Gross Public Debt	35.5	43.6	72.5	129.6	222.9
Pension Fund Assets	28.6	45.1	55.2	54.8	37.8
Baseline with contribution increase 2/					
Overall Balance	2.0	1.5	0.1	-3.0	-7.2
Primary Balance	2.4	0.8	-0.9	-3.2	-4.6
Gross Public Debt	34.8	33.0	38.0	52.9	79.2
Pension Fund Assets	28.6	45.1	55.2	54.8	37.8
Sustainable pension reform 3/					
Overall Balance	1.4	0.6	-1.2	-6.2	-13.3
Primary Balance	1.9	0.3	-1.3	-4.6	-7.0
Gross Public Debt	36.1	47.0	78.4	133.3	215.7
Pension Fund Assets	28.6	51.8	80.6	105.2	113.7
Sustainable pension reform and fiscal adjustment 4/					
Overall Balance	1.4	0.9	3.5	5.0	3.8
Primary Balance	1.9	0.6	2.2	1.6	-0.9
Gross Public Debt	35.8	46.3	59.4	47.3	32.1
Pension Fund Assets	28.6	51.8	80.6	105.2	113.7

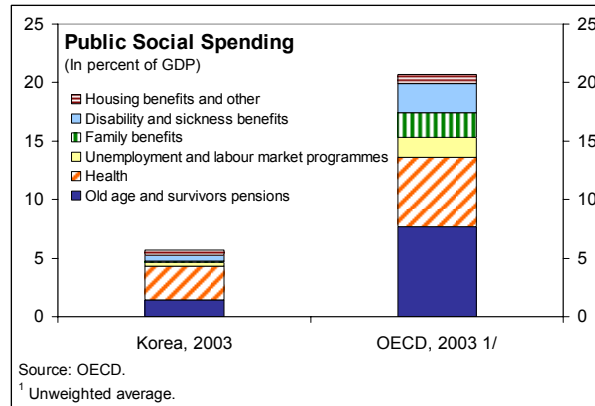
Sources: Data provided by the authorities; and IMF staff projections.

1/ Overall and primary balance include social security funds.
2/ Assumes hike in public health insurance contributions sufficient to cover 80 percent of rise in health care costs.
3/ Assumes hike in pension contribution rate from 9 to 18 percent during 2011-2030.
4/ Assumes hike in pension contribution rate from 9 to 18 percent during 2011-2030 and effective personal income tax rate increased by 7.6 percentage points during 2021-2035.

¹The baseline assumes that real interest rates are at their 10-year historical average, i.e., 3 percent. The chart shows the effect of assuming a rate closer to 8 percent, i.e., the 10-year average plus two standard deviations.

25. Major changes may be required to limit age-related pressures while slowing the growth in other spending. While the recent reduction in the pension replacement rate will

delay the depletion of public pension system assets, it does not ensure sustainability. To do so, options include a hike in contribution rates and a more rapid-than-planned rise in the pension eligibility age from the current 60. Separately, the civil service pension system needs reform to allow the elimination of central government subsidies. The authorities hoped that the next review of the pension system,



planned for 2008, would focus attention on these issues. Staff supported plans to strengthen the social safety net, including the introduction of a basic old-age pension in 2008 and an earned income tax credit from 2009. Korea's social spending is low relative to OECD averages. Moreover, if designed properly, a strengthened safety net could have important benefits, not only in protecting the poor, but also by allowing an easing of labor mobility and raising the role of automatic stabilizers in macroeconomic management. However, staff stressed that any expansion of social spending should be accompanied by a rise in spending effectiveness and a correspondingly larger rebalancing away from other expenditures, including public investment and economic services.⁸ In this context, the authorities aim to slow non-age-related public spending growth over the medium term and are exploring the possibility of greater private sector involvement in investment projects.

26. Staff stressed that acting sooner would reduce significantly the economic costs of adjustment. Delaying necessary measures would mean that significantly larger tax hikes or deeper cuts in non-age-related spending would ultimately be required to stabilize debt, with more serious implications for long-term growth.⁹ The authorities broadly agreed, while stressing that public dialogue needs to be intensified to achieve a broad consensus on these issues. While the government's *Vision 2030* report was an initial attempt to inform the public of future fiscal pressures, staff suggested that the government consider publishing a regular long-term fiscal report (as in several OECD countries) to help define the scope of the problem more precisely and develop and evaluate policy options. The authorities agreed in

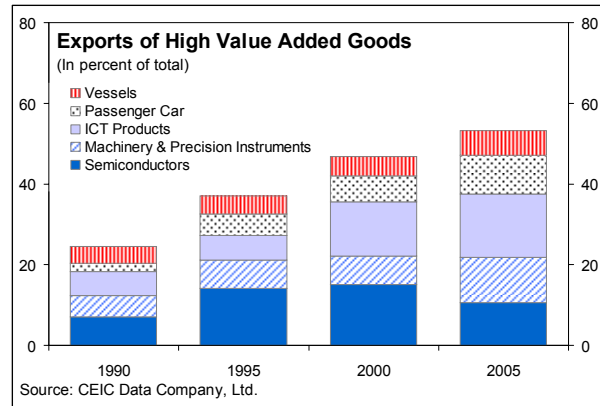
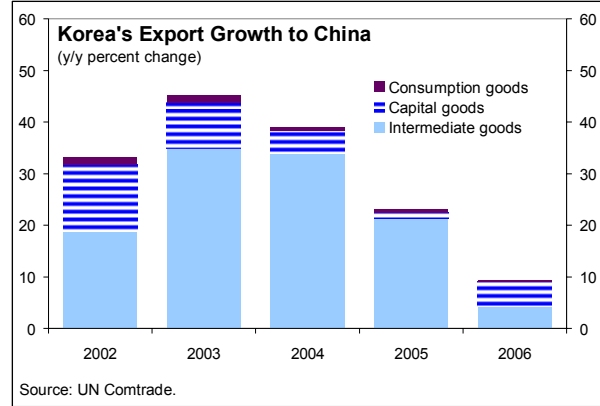
⁸ According to the OECD, Korea allocates a high share of total public spending (for general government) to investment (around 8 percent of GDP compared to the OECD average of about 3 percent) and economic affairs (5½ percent of GDP compared to the OECD average of under 4 percent).

⁹ Staff analysis suggests that if the effective tax rate is allowed to increase continuously from 2021 until 2035, the effective PIT rate hike needed for fiscal sustainability could be limited to 7½ percentage points, compared to 9 percentage points if reform is delayed and prolonged from 2025 until 2045. Moreover, at 70 percent of GDP, the long-run debt level would be twice as high in the delayed reform scenario.

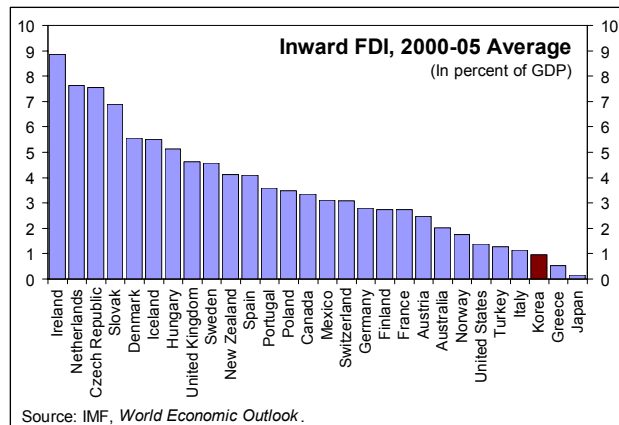
principle, noting that such a report might enhance the much-needed public discussion in this area.

Responding to New Global Challenges

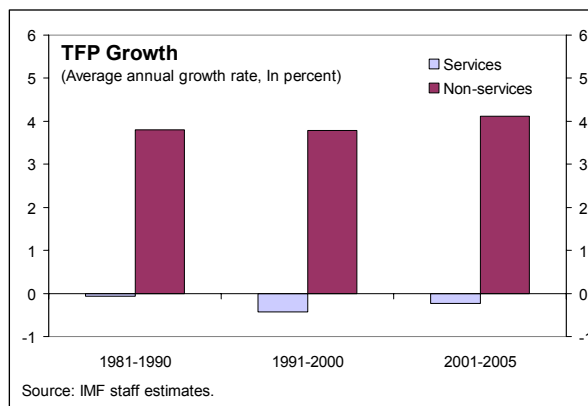
27. **Korea has thrived in the globalized economy, but now finds its manufacturing base, in particular at the low-skilled end, being threatened.** In recent years, Korea’s export performance has been impressive, with large manufacturers specializing in high value-added products and experiencing strong productivity growth driven by technological innovation. Producers of lower value-added goods, though, have been squeezed by competition from low-wage countries. Korean SMEs—which account for about half of manufacturing output and 90 percent of total employment—have had a particularly difficult time. Staff emphasized that looking ahead, things may not get any easier: Korea’s competitiveness has been supported to some extent by China’s emergence as a regional production hub, from which Korea has benefited as a supplier of intermediate goods. Recently, however, there are signs that the potential for such gains is shrinking as China raises the local content of its exports and begins to compete in higher value-added export markets.



28. **To maintain adequate competitiveness, policies should aim at ensuring that manufacturing continues to move up the value chain, and raising services productivity.** Staff stressed that Korea needs to create a more conducive investment climate, including for FDI, which is low compared to other OECD countries. Necessary steps are well-known and include: opening and deregulating the services sector; enhancing labor market

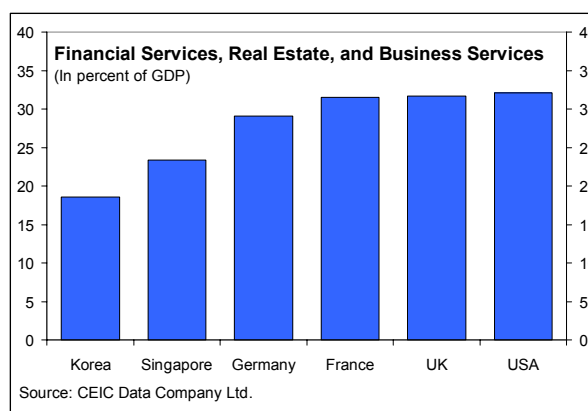


flexibility; improving access to market financing for small and knowledge-based enterprises; and easing the burden imposed on those using bankruptcy laws (Box 5).¹⁰ The authorities broadly agreed, but appear more focused on industry-specific solutions such as the elimination of the value-added tax for the tourism sector. Staff noted that such sector-specific measures could introduce distortions and erode the tax base, and that broader efforts to ease regulations and open the services sector to competition would be preferable.



29. **The Korean authorities are looking to free trade agreements to help them achieve these goals.** The recently concluded Korea–U.S. FTA will, if passed by respective legislatures, expand access of Korean manufacturers to the U.S. market, with 94 percent of merchandise trade becoming tariff-free within three years. The direct impact on services productivity will likely be modest, given the limited scope of the FTA on the services side, but the agreement could have a significant indirect effect if it attracts additional FDI and jump-starts structural reforms. The authorities appear intent on completing additional FTAs, including with the EU, but remain committed to multilateral liberalization.

30. **Financial sector development is critical to raising competitiveness.** Continued development, as envisaged in the plan to create a regional financial hub, would be key in Korea’s economic transformation to a high valued-added and service-oriented economy, both directly—Korea’s financial sector makes a relatively modest contribution to GDP—and via its impact on the level and efficiency of investment. The plan for financial development rests on two key pillars: foreign exchange market liberalization and financial market deregulation. Notwithstanding recent measures to curb short-term foreign borrowing,



¹⁰ To boost productivity growth in Korea, the OECD also recommends policies to upgrade the R&D framework, including through closer linkages between businesses, universities, and the government, as well as reforms of the education system to improve its quality, especially at the tertiary level.

considerable progress has been made on the former in the past year, and staff welcomed the recent approval by parliament of the Capital Market Consolidation Act.¹¹ The passage of the law, which eases barriers between financial activities, is expected to generate consolidation of the securities industry, and lead to the emergence of strong investment banks.

Box 5. Past Recommendations and Progress in Structural Areas

SMEs:

Fund recommendations: encourage growth of promising SMEs by scaling back public credit guarantees and deregulating commercial credit insurance; reforming collateral laws to allow for a wider range of securitization; improving the flow of information to credit bureaus; and reforming the corporate and personal bankruptcy system.

Policy developments: public credit guarantees have been reduced as a share of GDP but remain sizable. There are plans to open up the credit insurance market to private financial companies and to give credit bureaus access to SME credit information collected by public agencies. Collateral laws are being reviewed.

Service sector:

Fund recommendations: raise productivity by opening up and deregulating services, notably in health and education, including through trade liberalization.

Policy developments: focus has been on sector-specific plans and special economic zones rather than more comprehensive reforms. A recently signed FTA between Korea and the United States would open some services to competition but does not cover the health and education sectors.

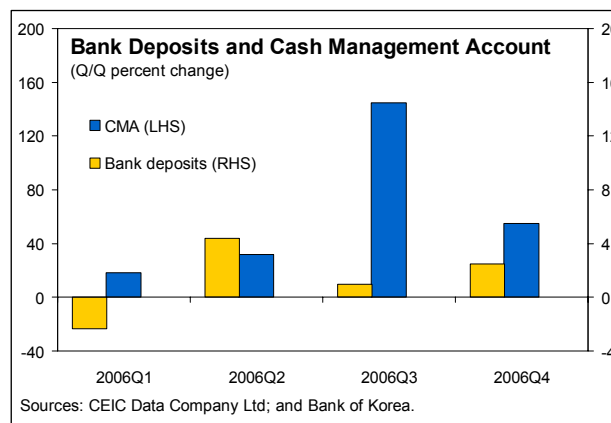
Labor market:

Fund recommendations: increase labor market flexibility by reducing employment protection of regular workers and expanding and strengthening the social safety net.

Policy developments: a new labor law, aimed at converting nonregular workers to regular status, has been implemented. This law will help reduce the duality in the labor market, but this process should go hand in hand with increased labor flexibility for regular workers.

¹¹ See “A Financial Big Bang in Seoul? The Development of the Financial Sector in Korea” in *Republic of Korea—Selected Issues*, 2006.

31. **Staff and the authorities agreed that subsequent changes may be needed following the passage of the Capital Market Consolidation Act.** With investment banks expected to capture a growing share of financial intermediation, staff noted that banks may face increasing competitive pressure. In fact, banks have already felt increasing pressure on their deposit base from the growing popularity of Cash Management Accounts (CMA) offered by securities firms. The authorities noted the need for banks to raise non-interest income and indicated their intention to eventually ease banks' access to capital market activities and study whether to move ultimately to a universal banking system.¹² Finally, changes to financial sector oversight, including a shift of the institutional setting for the supervisory agency from institution-based to product-based, will be needed to conform to the new environment and ensure that sufficient clarity and flexibility is provided for financial sector innovation to flourish.



IV. STAFF APPRAISAL

32. **Korea's economic prospects continue to be favorable.** Korea has achieved an impressive recovery since the Asian crisis with growth averaging 6 percent per year. This performance reflects its increased integration with the global economy and substantial economic restructuring. For 2007-08, the outlook remains positive: growth is expected to be in line with potential, with inflation contained. The current account should remain in balance, and net capital inflows should slow following the recent surge.

33. **With inflation pressures contained, the BOK could loosen monetary policy if growth disappoints.** More generally, monetary policy should be framed against the inflation targeting framework, and asset prices and credit growth considerations, while important, should not be overriding. To reflect the recent experience with monetary aggregates and the inflation performance, some consideration could also be given to revising downward the inflation target range.

34. **Korea's exchange rate appears appropriately valued.** The won has appreciated rapidly over the past few years against all major currencies, but various indicators of exchange rate valuation do not point to any misalignment and the overall export performance has remained strong. Intervention in the foreign exchange market should be limited to smoothing volatility.

¹² Banks currently have access to capital markets through their related financial holding companies.

35. **Some pockets of financial risks have emerged, but they are manageable.** A decline in housing prices, while not a threat to banks, could affect consumption. Despite the recent improvement in bank's risk management practices, the recent rapid growth in SME lending could lead to a rise in NPLs, especially should the economy slow. Dealing with those risks would require the continuation of upgrading the risk assessment models of banks consistent with the introduction of Basel II.
36. **Over the longer term, Korea will be faced with a very rapid aging of the population generating enormous fiscal pressures.** Addressing these pressures will require action on a range of fronts, including raising tax revenues through base broadening and improved tax administration. Expenditure reforms will also be needed, notably through pension reform, and a reorientation of spending away from public investment into the social safety net. Of course, the pressure could be eased should potential output growth be faster than anticipated.
37. **Another long-term challenge will be to sustain Korea's competitiveness.** Doing so would require policies to create a more conducive investment climate, including for FDI, opening and deregulating the services sector and enhancing labor market flexibility.
38. **Further financial sector development, including that of capital markets would also be needed.** In this respect, the adoption by Parliament of the Capital Market Consolidation Act is a major step forward. This law is expected to contribute significantly to the emergence of strong investment banks and to the development of capital markets. Subsequent changes may be needed, notably to ease further barriers between bank and capital market activities, and in adapting financial sector oversight to the new environment.
39. **Developing the financial sector would also help addressing risks from the mortgage market.** Emphasis should be on further developing the government bond market and hedging instruments to accelerate the spread of conventional mortgages. Steps should also be taken to encourage the expansion of the market for securitized mortgages.
40. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Table 1. Korea: Selected Economic Indicators, 2003–08

Nominal GDP (2006): US\$887.5 billion
 Main exports (percent of total, 2006): Electronics (37), road vehicles (13), and vessels (7).
 GDP per capita (2006): US\$18,376
 Unemployment rate (2006): 3.5 percent
 FDI (2006): \$3.6 billion
 Public debt (2006): 32.2 percent of GDP
 Foreign public debt (2006): 3.5 percent of total public debt

	2003	2004	2005	2006	2007–2008 Proj.	
Real GDP (percent change)	3.1	4.7	4.2	5.0	4.8	5.0
Total domestic demand	0.5	1.8	3.3	4.0	4.3	4.0
Final domestic demand	1.0	1.0	3.4	4.1	4.6	3.7
Consumption	-0.3	0.4	3.9	4.5	4.1	3.7
Gross fixed investment	4.0	2.1	2.4	3.2	5.5	3.7
Stock building 1/	-0.5	0.8	-0.1	-0.1	-0.2	0.3
Net foreign balance 1/	2.5	3.3	1.3	1.6	0.7	1.3
Nominal GDP (in trillions of won)	724.7	779.4	810.5	847.9	880.8	933.8
Saving and investment (in percent of GDP)						
Gross national saving	31.9	34.5	32.0	30.5	29.9	29.5
Gross domestic investment	30.0	30.4	30.1	29.8	29.7	29.8
Current account balance	2.0	4.1	1.9	0.7	0.1	-0.3
Prices (percent change)						
CPI inflation (end of period)	3.4	3.0	2.6	2.1	2.8	2.5
Core inflation (average)	3.1	2.9	2.3	1.8	2.4	2.5
GDP deflator	2.7	2.7	-0.2	-0.4	-0.9	1.0
Real effective exchange rate 2/	1.7	1.8	12.1	7.5	1.5	...
Trade (percent change)						
Export volume	16.7	22.5	9.2	14.5	12.2	13.4
Import volume	7.3	11.8	6.4	10.2	13.1	13.9
Terms of trade	-6.1	-4.3	-7.4	-7.4	-1.5	-0.2
Consolidated central government (in percent of GDP) 3/						
Revenues	23.7	22.9	23.6	24.7	25.7	26.0
Expenditure 4/	21.1	20.7	21.7	22.9	23.8	23.6
Overall balance 4/	2.7	2.2	1.9	1.8	1.9	2.5
Excluding Social Security Funds	0.0	-0.5	-1.0	-1.3	-1.2	-1.2
Money and credit (end of period)						
Overnight call rate 5/	3.8	3.3	3.7	4.5	5.0	...
Three-year AA- corporate bond yield 5/	5.6	3.7	5.5	5.2	5.7	...
M3 growth 6/	4.7	7.1	7.4	10.5	10.6	...
Balance of payments (in billion U.S. dollars)						
Exports, f.o.b.	197.3	257.7	289.0	331.8	381.8	438.7
Imports, c.i.f.	175.3	220.1	256.3	302.6	356.6	412.4
Oil imports	23.1	29.9	42.6	55.9	57.8	64.9
Current account balance	11.9	28.2	15.0	6.1	1.4	-2.6
Gross international reserves (end of period)	155.3	199.0	210.3	238.9	257.2	264.6
In percent of short-term debt	194.9	254.3	239.6	172.7	139.8	125.6
External debt (in billion U.S. dollars)						
Total external debt (end of period)	157.4	172.3	187.9	263.4	338.8	384.8
Of which: Short-term (end of period)	50.8	56.3	65.9	113.6	150.0	172.3
Total external debt (in percent of GDP)	25.9	25.3	23.7	29.7	35.8	38.3
Debt service ratio 7/	13.1	10.7	7.9	7.4	7.6	8.9

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

1/ Contribution to GDP growth.

2/ Data for 2007 are for May.

3/ Refer to budget plans for 2007 and 2008, with staff adjustments.

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

5/ Data for 2007 are as of August 9.

6/ Data for 2007 are as of June.

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

Table 2. Korea: Balance of Payments, 2003–07
(In billions of U.S. dollars, unless otherwise indicated)

	2003	2004	2005	2006	2007 Proj.
Current account balance	11.9	28.2	15.0	6.1	1.4
Trade balance	22.0	37.6	32.7	29.2	25.2
Exports	197.3	257.7	289.0	331.8	381.8
(growth rate, in percent)	20.7	30.6	12.1	14.8	15.1
Imports	175.3	220.1	256.3	302.6	356.6
(growth rate, in percent)	18.0	25.6	16.4	18.1	17.8
Services	-7.4	-8.0	-13.7	-18.8	-24.7
Income	0.3	1.1	-1.6	-0.5	5.0
Current transfers	-2.9	-2.4	-2.5	-3.8	-4.1
Financial and capital account balance	18.3	9.4	7.0	19.1	17.4
Financial account	19.7	11.2	9.3	22.2	20.4
Portfolio investment, net	17.9	8.6	-1.7	-22.5	-17.0
Direct investment, net	0.1	4.6	2.0	-3.5	-4.0
Inflows	3.5	9.2	6.3	3.6	5.0
Outflows	-3.4	-4.7	-4.3	-7.1	-9.0
Other investment, assets	-5.1	-8.1	-2.7	-8.8	-9.5
Other investment, liabilities	6.8	6.1	11.7	56.9	50.9
of which trade credits	6.3	8.1	7.8	14.1	16.4
of which short-term loans	0.1	3.3	5.7	42.2	30.0
of which medium and long-term loans	-0.7	-2.4	-2.5	1.6	4.5
Capital account	-1.4	-1.8	-2.3	-3.0	-3.0
Net errors and omissions	0.0	2.9	0.1	-2.6	0.0
Overall balance (1+2+3)	30.3	40.5	22.1	22.6	18.8
Financing	-30.3	-40.5	-22.1	-22.6	-18.8
Change in usable reserves (increase -)	-25.8	-38.7	-19.8	-22.1	-18.3
Net IMF purchases	0.0	0.0	0.0	0.0	0.0
World Bank/AsDB 1/	-4.4	-1.8	-2.2	-0.5	-0.5
Memorandum items:					
Current account balance (in percent of GDP)	2.0	4.1	1.9	0.7	0.1
Trade balance (in percent of GDP)	3.6	5.5	4.1	3.3	2.7
Gross reserves	155.3	199.0	210.3	238.9	257.2
(in months of imports of goods and services)	8.6	8.8	8.0	7.7	7.0
External debt	157.4	172.3	187.9	263.4	338.8
(in percent of GDP)	25.9	25.3	23.7	29.7	35.8
Short-term external debt (inc. trade credits)	50.8	56.3	65.9	113.6	150.0
Nominal GDP	608.2	680.0	791.4	887.5	947.1

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, 2003–07

	2003	2004	2005	2006	2007 Proj.
(In trillions of won)					
Revenue	171.9	178.8	191.4	209.6	226.1
Tax revenue	114.7	117.8	127.5	138.0	148.3
Social security contributions	20.7	22.8	24.9	27.3	30.6
Nontax and capital revenue	36.6	38.1	39.1	44.2	47.2
Expenditure and net lending	152.6	161.5	175.9	193.9	209.4
Current expenditure 1/	124.4	133.1	148.3	161.7	168.3
Interest	7.8	8.7	10.1	11.0	12.8
<i>Of which: bank restructuring</i>	3.2	3.1	1.6	0.8	0.0
Non-interest	116.6	124.4	138.2	150.7	155.5
Capital expenditure	30.6	27.0	24.6	26.5	33.5
Net lending 2/	-2.4	1.4	3.0	5.7	7.7
Overall balance	19.3	17.2	15.5	15.6	16.6
<i>Of which: Social Security Fund balance</i>	19.6	21.2	23.6	26.4	27.0
Excluding Social Security Funds	-0.3	-4.0	-8.1	-10.8	-10.4
Financing	-19.3	-17.2	-15.5	-15.6	-16.6
Domestic financing	-13.2	-14.6	-12.7	-14.8	-15.7
<i>Of which: Privatization</i>	1.3	0.0	0.0	0.0	0.0
External financing	-6.2	-2.6	-2.8	-0.8	-0.9
(In percent of GDP)					
Revenue	23.7	22.9	23.6	24.7	25.7
Tax revenue	15.8	15.1	15.7	16.3	16.8
Social security contributions	2.9	2.9	3.1	3.2	3.5
Nontax and capital revenue	5.0	4.9	4.8	5.2	5.4
Expenditure and net lending	21.1	20.7	21.7	22.9	23.8
Current expenditure	17.2	17.1	18.3	19.1	19.1
Interest	1.1	1.1	1.2	1.3	1.5
Non-interest	16.1	16.0	17.0	17.8	17.7
Capital expenditure	4.2	3.5	3.0	3.1	3.8
Net lending	-0.3	0.2	0.4	0.7	0.9
Overall balance	2.7	2.2	1.9	1.8	1.9
<i>Of which: Social Security Fund balance</i>	2.7	2.7	2.9	3.1	3.1
Excluding Social Security Funds	0.0	-0.5	-1.0	-1.3	-1.2
Primary balance	3.7	3.3	3.2	3.1	3.3
Memorandum items :					
Privatization receipts	0.2	0.0	0.0	0.0	0.0
Conversion of KDIC/KAMCO bonds	-1.8	-1.5	-1.5	-1.4	...
Nominal GDP (trillion won)	724.7	779.4	810.5	847.9	880.8

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, 2000–06

	2000	2001	2002	2003	2004	2005	2006
Financial Sector							
	(In percent)						
Total loans/GDP	107.4	103.6	119.5	97.8	94.2	98.1	109.7
Commercial banks	62.5	60.9	67.9	68.9	65.7	67.6	76.1
Other financial institutions	44.9	42.6	51.6	28.9	28.5	30.5	33.6
Bank loans							
	(Year-on-year percent change)						
SMEs	10.9	7.9	23.5	17.9	3.0	4.7	17.7
Households	25.9	38.9	38.3	13.8	8.9	10.7	13.4
Large companies	3.6	-27.3	0.4	-13.3	-11.1	15.9	-4.6
	(In percent)						
FX loans/total loans to SMEs	...	...	5.5	5.5	5.0	5.5	6.9
Banks 1/							
	(In percent)						
Capital adequacy ratio	10.6	11.7	11.3	11.2	12.1	13.0	12.8
Tier 1 capital ratio	6.7	7.7	7.2	7.0	8.0	9.3	9.2
Return on assets	-0.6	0.7	0.6	0.2	0.9	1.3	1.1
Net interest margin	2.4	2.6	2.7	2.6	2.6	2.8	2.6
Substandard or below loans, share							
	(In percent of total loans)						
Commercial banks	...	3.3	2.4	2.8	2.0	1.3	0.9
Specialized banks	...	3.6	2.1	2.4	1.7	1.1	0.7
Mutual savings banks	...	15.7	11.3	11.8	13.0	13.8	10.5
Credit unions	...	9.9	6.1	6.3	6.0	5.4	4.5
Corporate Sector							
	(In percent)						
Corporate debt/GDP	118.0	114.2	107.2	105.8	101.3	101.6	...
Delinquency ratio (domestic commercial bank loans)	3.4	2.1	2.0	2.1	2.1	1.5	1.2
Debt ratio to:							
Equity	210.6	182.2	135.4	123.4	104.2	100.9	98.9
Total assets	41.2	39.8	31.7	28.3	24.0	22.9	22.4
Sales	42.7	40.1	29.8	26.6	20.7	19.9	19.9
Interest coverage ratio 2/							
Current assets/current liabilities	157.2	132.6	260.3	367.1	575.8	525.4	439.3
Operating income/sales	7.4	5.5	6.7	6.9	7.6	6.1	5.3
Financial expenses/sales	-4.7	-4.2	-2.6	-1.9	-1.3	-1.2	-1.2
Ordinary income/sales	1.3	0.4	4.7	4.7	7.8	6.5	5.7
Household Sector							
	(In percent of GDP)						
Household credit	45.4	54.4	62.5	59.8	60.1	62.6	67.5
Of which: Commercial banks	18.2	25.0	31.6	33.9	35.0	36.7	40.1
Delinquency ratio (all bank loans)							
	(In percent)						
Households	2.5	1.3	1.5	1.8	1.7	1.1	0.7
Credit card	7.5	7.3	11.9	10.5	5.5	3.2	2.6
Housing prices, percent change							
Of which: Seoul	0.4	9.9	16.4	5.7	-2.1	4.0	11.6
	3.0	13.0	22.5	6.8	-1.4	6.3	18.9

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

1/ This includes nationwide commercial banks, regional banks and specialized banks.

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

Table 5. Korea: Medium-Term Projections, 2005–12
(In units indicated)

	2005	2006	2007	2008	2009	2010	2011	2012
			Staff Projections					
Real GDP (percent change)	4.2	5.0	4.8	5.0	4.6	4.5	4.5	4.5
Total domestic demand	3.3	4.0	4.3	4.0	4.2	4.3	4.4	4.5
Final domestic demand	3.4	4.1	4.6	3.7	4.2	4.3	4.4	4.5
Consumption	3.9	4.5	4.1	3.7	4.0	4.0	4.0	4.0
Gross fixed investment	2.4	3.2	5.5	3.7	4.6	4.9	5.2	5.5
Stock building 1/	-0.1	-0.1	-0.2	0.3	0.0	0.0	0.0	0.0
Net foreign balance 1/	1.3	1.6	0.7	1.3	0.9	0.7	0.7	0.6
Prices, period average (percent change)								
Consumer price	2.8	2.2	2.5	2.5	2.5	2.5	2.5	2.5
GDP deflator	-0.2	-0.4	-0.9	1.0	1.4	1.7	1.7	2.0
Savings and investment (percent of GDP)								
Gross national savings	32.0	30.5	29.9	29.5	29.1	28.9	28.7	28.7
Gross domestic investment	30.1	29.8	29.7	29.8	29.8	29.8	29.9	30.1
Current account balance	1.9	0.7	0.1	-0.3	-0.7	-0.9	-1.2	-1.4
Consolidated central government (in percent of GDP)								
Revenues	23.6	24.7	25.7	26.0	26.3	26.5	26.6	26.8
Expenditure	21.7	22.9	23.8	23.6	23.6	23.7	23.7	23.7
Balance 2/	1.9	1.8	1.9	2.5	2.6	2.8	2.9	3.1
Excluding Social Security Funds	-1.0	-1.3	-1.2	-1.2	-1.1	-0.9	-0.9	-0.8
Debt, domestic plus external 3/	29.5	32.2	33.3	33.6	33.7	33.6	33.3	32.9
Government guaranteed restructuring bonds 3/	6.7	4.3	3.7	3.1	2.5	2.0	1.5	1.0
Trade (percent change)								
Merchandise exports	12.1	14.8	15.1	14.9	12.3	11.0	10.7	10.9
Volumes 4/	9.2	14.5	12.2	13.4	11.7	10.4	10.2	10.0
Merchandise imports	16.4	18.1	17.8	15.6	13.0	11.2	11.3	11.3
Volumes 4/	6.4	10.2	13.1	13.9	12.6	11.2	11.1	10.9
Terms of trade	-7.4	-7.4	-1.5	-0.2	0.2	0.5	0.2	0.4
Balance of payments (billion U.S. dollars)								
Current account	15.0	6.1	1.4	-2.6	-7.4	-10.1	-14.3	-17.8
Trade balance	32.7	29.2	25.2	26.3	26.5	28.1	28.0	28.7
Merchandise exports	289.0	331.8	381.8	438.7	492.4	546.5	604.9	670.9
Merchandise imports	256.3	302.6	356.6	412.4	465.9	518.3	576.9	642.2
External debt								
In billion of U.S. dollars 5/	187.9	263.4	338.8	384.8	426.1	464.8	506.2	550.5
(as percent of GDP)	23.7	29.7	35.8	38.3	40.0	41.0	42.0	42.9
Debt service ratio 6/	7.9	7.4	7.6	8.9	8.8	8.8	8.7	8.6
Memorandum items:								
Nominal GDP (trillion won)	811	848	881	934	991	1,054	1,121	1,194
Per capita GDP (U.S. dollars)	16,440	18,376	19,571	20,706	21,929	23,273	24,701	26,272
Output gap (percent of potential GDP)	-0.7	-0.2	0.2	0.4	0.2	0.0	0.0	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, ₩ 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.

Table 6. Korea: Indicators of Financial and External Vulnerability, 2002–07
(In percent of GDP, unless otherwise indicated)

	2002	2003	2004	2005	2006	2007	
							Date
Financial indicators							
Consolidated central government debt 1/	32.4	32.6	33.5	36.2	36.5	37.0	Proj.
Broad money (M3, percent change, 12-month basis)	13.6	4.7	7.1	7.4	10.5	10.6	Jun-07
Private sector credit (Dep. Corp. survey, percent change, 12-month basis)	16.8	2.3	0.8	8.5	16.2	14.2	Jun-07
One month call borrowing rate	4.3	3.9	3.3	3.8	4.5	4.8	Jul-07
One month call borrowing rate (real)	0.5	0.5	0.2	1.1	2.4	2.2	Jul-07
External indicators							
Exports (percent change, 12-month basis in US\$)	7.9	20.7	30.6	12.1	14.8	11.7	Jun-07
Imports (percent change, 12-month basis in US\$)	7.7	18.0	25.6	16.4	18.1	10.3	Jun-07
Terms of trade (percent change, 12-month basis)	-0.5	-6.1	-4.3	-7.4	-7.4	-0.3	May-07
Current account balance (projection for full year)	1.0	2.0	4.1	1.9	0.7	0.1	Proj.
Capital and financial account balance (projection for full year)	1.1	3.0	1.4	0.9	2.2	1.8	Proj.
<i>Of which:</i> Inward portfolio investment (debt securities etc.)	0.8	3.5	2.4	1.1	0.0	3.2	Proj.
Other investment (loans, trade credits etc.)	1.0	0.4	0.6	1.2	6.4	5.3	Proj.
Inward foreign direct investment in the form of debt or loans	0.1	0.1	0.2	0.1	0.1	...	...
Gross official reserves (in US\$ billion)	121.3	155.3	199.0	210.3	238.9	254.8	Jul-07
Central bank short-term foreign liabilities (in US\$ billion)	2.0	2.1	2.0	2.2	3.9	...	...
Short-term foreign liabilities of the financial sector (in US\$ billion)	20.3	27.0	30.0	32.2	40.8	...	...
Official reserves in months of imports GS (projection for full year)	7.9	8.6	8.8	8.0	7.7	7.0	Proj.
Broad money (M3) to reserves	8.0	6.5	6.3	6.5	6.9	6.9	Jun-07
Reserves to total short term external debt (in percent) 2/	161.4	194.9	254.3	239.6	172.7	139.8	Proj.
Total external debt	25.9	25.9	25.3	23.7	29.7	35.8	Proj.
<i>Of which:</i> Public sector debt	3.2	1.9	1.5	1.1	1.2	...	...
<i>Of which:</i> Short-term debt	8.8	8.4	8.3	8.3	12.8	15.8	Proj.
Total external debt to exports GS (in percent)	73.8	68.4	57.5	56.2	68.6	76.4	Proj.
External interest payments to exports GS (in percent)	2.1	1.4	1.1	1.4	1.7	2.0	Proj.
External amortization payments to exports GS (in percent)	10.4	11.7	9.6	6.6	5.7	5.6	Proj.
Exchange rate (per US\$, period average)	1,252	1,192	1,146	1,024	955	923	Aug 9, 07
REER appreciation (+) (12-month basis)	4.9	1.7	1.8	12.1	7.4	1.5	May-07
Financial market indicators							
Stock market index (KOSPI)	628	811	894	1379	1434	1909	Aug 9, 07
Stock market index (KOSPI, percent change, 12-month basis)	-9.5	29.2	10.2	54.3	4.0	45.2	Aug 9, 07
Foreign currency debt rating (Moody's/S&P)	A3/A-	A3/A-	A3/A-	A3/A	A3/A	A2/A	Aug 9, 07

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 7. Korea: Fiscal Scenarios, 2007–50
(In percent of GDP, consolidated central government, unless otherwise indicated)

	Projections									
	2007	2008	2009	2010	2011	2012	2020	2030	2040	2050
Staff baseline/no adjustment										
Revenue	23.7	23.7	23.7	23.7	23.7	23.7	23.6	23.5	23.6	23.6
Expenditure	21.8	22.0	22.0	22.1	22.3	22.4	24.1	27.8	34.4	44.0
Net interest payments	0.8	0.6	0.5	0.4	0.3	0.2	-0.1	1.0	4.4	11.5
Overall balance	1.9	1.8	1.7	1.6	1.4	1.3	-0.5	-4.2	-10.9	-20.4
Excluding SSF	-1.4	-1.8	-1.9	-2.0	-2.2	-2.4	-4.5	-7.5	-12.2	-19.8
Primary balance	2.7	2.4	2.2	2.0	1.7	1.5	-0.6	-3.2	-6.5	-8.8
Gross public debt	37.0	36.5	36.1	35.5	35.6	35.9	43.6	72.5	129.6	222.9
Pension fund assets	23.8	25.5	27.2	28.6	30.5	32.4	45.1	55.2	54.8	37.8
Memorandum items (deviation from steady state):										
GDP	0.30	0.44	0.57	0.71	0.85	0.99	2.21	3.89	5.65	6.98
Current account	-0.24	-0.33	-0.41	-0.52	-0.63	-0.75	-2.13	-4.97	-9.48	-15.74
Payroll rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Effective PIT rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Baseline with contribution increase 1/										
Revenue	23.9	24.0	24.1	24.2	24.2	24.3	25.0	25.9	26.8	27.8
Expenditure	21.9	22.0	22.0	22.1	22.2	22.3	23.5	25.8	29.9	34.9
Net interest payments	0.9	0.7	0.6	0.4	0.3	0.2	-0.7	-1.0	-0.1	2.5
Overall balance	2.0	2.0	2.1	2.0	2.0	2.0	1.5	0.1	-3.0	-7.2
Excluding SSF	-1.3	-1.6	-1.6	-1.5	-1.7	-1.7	-2.5	-3.1	-4.4	-6.6
Primary balance	2.8	2.6	2.6	2.4	2.2	2.1	0.8	-0.9	-3.2	-4.6
Gross public debt	37.0	36.3	35.7	34.8	34.5	34.2	33.0	38.0	52.9	79.2
Pension fund assets	23.8	25.5	27.2	28.6	30.5	32.4	45.1	55.2	54.8	37.8
Memorandum items (deviation from steady state):										
GDP	0.2	0.3	0.4	0.5	0.5	0.6	1.4	2.6	4.0	5.2
Current account	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.6	-1.7	-3.8	-6.6
Payroll rate	0.2	0.3	0.4	0.5	0.6	0.6	1.4	2.3	3.2	4.1
Effective PIT rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sustainable pension reform 2/										
Revenue	23.7	23.7	23.6	23.6	23.7	23.8	24.5	25.4	25.4	25.4
Expenditure	21.9	22.0	22.0	22.2	22.3	22.4	23.9	26.6	31.6	38.7
Net interest payments	0.8	0.7	0.6	0.4	0.3	0.3	-0.3	-0.1	1.6	6.3
Overall balance	1.8	1.6	1.6	1.4	1.4	1.4	0.6	-1.2	-6.2	-13.3
Excluding SSF	-1.6	-1.9	-2.0	-2.1	-2.4	-2.6	-4.9	-7.9	-11.9	-18.4
Primary balance	2.6	2.3	2.2	1.9	1.7	1.6	0.3	-1.3	-4.6	-7.0
Gross public debt	37.3	36.8	36.5	36.1	36.4	36.9	47.0	78.4	133.3	215.7
Pension fund assets	23.8	25.5	27.2	28.6	30.6	32.7	51.8	80.6	105.2	113.7
Memorandum items (deviation from steady state):										
GDP	0.23	0.34	0.44	0.55	0.65	0.74	1.59	2.85	4.52	5.94
Current account	-0.32	-0.39	-0.45	-0.51	-0.56	-0.61	-1.32	-3.07	-6.48	-11.34
Payroll rate	0.00	0.00	0.00	0.00	0.09	0.19	0.93	1.85	1.85	1.85
Effective PIT rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sustainable pension reform and fiscal adjustment 3/										
Revenue	23.7	23.7	23.7	23.7	23.8	23.9	24.7	29.0	31.8	31.6
Expenditure	22.0	22.1	22.1	22.2	22.4	22.5	23.8	25.5	26.7	27.8
Net interest payments	0.8	0.7	0.6	0.4	0.3	0.2	-0.3	-1.3	-3.4	-4.7
Overall balance	1.8	1.6	1.6	1.4	1.4	1.4	0.9	3.5	5.0	3.8
Excluding SSF	-1.6	-1.9	-2.0	-2.1	-2.4	-2.6	-4.6	-3.3	-0.7	-1.3
Primary balance	2.6	2.3	2.2	1.9	1.7	1.6	0.6	2.2	1.6	-0.9
Gross public debt	37.1	36.6	36.3	35.8	36.2	36.7	46.3	59.4	47.3	32.1
Pension fund assets	23.8	25.5	27.2	28.6	30.6	32.7	51.8	80.6	105.2	113.7
Memorandum items (deviation from steady state):										
GDP	0.27	0.37	0.45	0.55	0.62	0.69	0.72	-0.36	1.00	2.58
Current account	-0.22	-0.24	-0.26	-0.28	-0.28	-0.28	0.49	2.01	1.31	1.01
Payroll rate	0.00	0.00	0.00	0.00	0.09	0.19	0.93	1.85	1.85	1.85
Effective PIT rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70	7.59	7.59

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

1/ Assumes hike in public health insurance contributions sufficient to cover 80 percent of rise in health care costs.

2/ Assumes hike in pension contribution rate from 9 to 18 percent during 2011-2030.

3/ Assumes hike in pension contribution rate from 9 to 18 percent during 2011-2030 and effective personal income tax rate increased by 7.6 percentage points during 2021-2035.

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Staff Report for the 2007 Article IV Consultation—Informational Annex

Prepared by the Asia and Pacific Department
(In consultation with other departments)

August 14, 2007

	Contents	Page
I.	Fund Relations	2
II.	Statistical Issues	4

Appendix I: Korea—Fund Relations

(As of June 30, 2007)

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	2,700.9	92.2
Reserve Position in Fund	226.4	7.7

III. SDR Department:	SDR Million	% Allocation
Net cumulative allocation	72.9	100.0
Holdings	40.3	55.3

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 SDR's):

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Principal					
Charges/Interest	0.70	1.39	1.38	1.38	1.38
Total	0.70	1.39	1.38	1.38	1.38

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 14, 2007, the exchange rate was W 932=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 2006 Article IV consultation were conducted on a mission to Seoul during May 25-June 8, 2006. The Article IV consultation was concluded by the Executive Board on September 29, 2006. In addition, a staff visit took place during November 2-10, 2006.

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: A mission conducted a high-level technical seminar during May 16–22, 2000 on the development of the foreign exchange market. The seminar covered issues in supervision, market monitoring, derivatives instruments, and market microstructure. 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, and on strengthening the debt management function and further development of the government securities market during September 20–October 2, 2006.

STA: A technical assistance mission 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.

XI. Resident Representative:

The resident representative office in Seoul was opened in March 1998. Ms. Meral Karasulu has been the Resident Representative since September 2006.

Appendix II: Korea—Statistical Issues

The statistical base is adequate to conduct effective surveillance. Korea has been a subscriber to the Special Data Dissemination Standard (SDDS) since September 1996. During 2006 there were occasional dissemination delays for some data categories, particularly for central government operations.

Real Sector

The overall structure of the **national accounts** follows the *1993 System of National Accounts*; the transition from the *1968 SNA* was completed in March 2004. Constant (base year 2000) and current price estimates of GDP are produced using the production and expenditure approaches, and current price accounts 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 obtaining required basic data.

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

The scope of 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 2000 revenue shares. The PPI could be improved by 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.

Fiscal Sector

Two sets of government finance statistics (GFS) are compiled for the **central government**, using national definitions and using internationally recognized standards. Concepts and definitions used in the latter generally follow the recommendations of the *Manual on Government Finance Statistics 1986 (GFSM 1986)*. The data cover the budgetary units of the central government (including social security funds owned and/or managed by the government) and the extra-budgetary funds owned or managed by these units. These statistics are produced from the National Financial Information System (NAFIS), which integrates the preparation of budget data, accounting reports, and the generation of fiscal statistics on a monthly basis. The NAFIS provides for automatic crosschecks at different levels of the compilation process.

Consolidated data on the **general government** consistent with international standards are not compiled, with the central government accounting for about 75 percent of general government operations. The last year for which GFS were reported for publication in the *GFS Yearbook* was 2005.

Monetary Sector

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 *Monetary and Financial Statistical Manual (MFSM 2000)*. Data relating to foreign assets and foreign liabilities are affected by the BOK's practices of valuing its financial assets and financial 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 residency 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 the new Standardized Reporting 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.

External Sector

The overall quality of the monthly **balance of payments** data 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. Following liberalization, the coverage of the balance of payments statistics has become less comprehensive, as residents were permitted to conduct transactions via accounts with banks abroad. There is also incomplete coverage of transactions via intercompany accounts, and non-cash transactions. The BOK has developed an array of statistical techniques and collection systems to improve the coverage, classification, and timeliness of source data, especially in services transactions.

The quality of quarterly **external debt** statistics has greatly improved since the financial crisis. Since September 2003, the statistics have been compiled on a residency basis according to the Debt Guide (IMF). In early 2007, the BOK switched from annual to quarterly reporting of the **International Investment Position (IIP)**, with quarterly data reported for 2001–06.

Data dissemination on international reserves and foreign currency liquidity generally meets the **SDDS specifications** for periodicity, timeliness, and advance release calendar. In late April 2006, the authorities decided to disseminate foreign reserves on a monthly basis rather than twice a month, as had been done since 1997.

Appendix II
Korea: Table of Common Indicators Required for Surveillance
(As of July 30, 2007)

	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	7/30/07	7/30/07	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	Jun. 2007	Jul. 2007	M	M	M		
Reserve/Base Money	May 2007	Jun. 2007	M	M	M	LO, O, LO, LNO	LO, O, O, O
Broad Money	May 2007	Jun. 2007	M	M	M		
Central Bank Balance Sheet	Apr. 2007	Jul. 2007	M	M	M		
Consolidated Balance Sheet of the Banking System	Apr. 2007	Jul. 2007	M	M	M		
Interest Rates ²	7/30/07	7/30/07	D	D	D		
Consumer Price Index	Jun. 2007	Jul. 2007	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	May 2007	Jul. 2007	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt ⁵	Q1 2007	Jun. 2007	Q	Q	Q		
External Current Account Balance	May 2007	Jun. 2007	M	M	M	O, LO, LO, LO	LO, O, O, O
Exports and Imports of Goods and Services	May 2007	Jun. 2007	M	M	M		
GDP/GNP	Q1 2007	Jun. 2007	Q	Q	Q	LO, LO, O, LO	O, LNO, O, O
Gross External Debt	Q1 2007	Jun. 2007	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 15, 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.

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Staff Report for the 2007 Article IV Consultation

Supplementary Information

Prepared by the Asia and Pacific Department

September 7, 2007

1. This supplement to the staff report summarizes the main developments since the staff report was issued on August 15, 2007. The thrust of the staff appraisal remains unchanged.
2. The Bank of Korea (BOK) tightened further monetary policy in August. For the second consecutive month, the BOK raised its policy rate by 25 bps, to 5.0 percent, citing continued concern with rapid money and credit growth, but signaled that interest rates were now near neutral levels. At its monthly monetary policy meeting on September 7, the BOK left rates unchanged.
3. The impact of the ongoing global credit market crisis in Korea has been manageable, notwithstanding a significant increase in volatility:
 - Korean financial institutions appear to have limited exposure to the U.S. subprime market. Current estimates are that direct exposure by banks amounts to less than 0.1 percent of total banking assets, with some additional small exposure for insurance and asset management companies.
 - The won has weakened modestly over the period since July 20, falling by 2½ percent against the dollar and just over 3 percent in nominal effective terms. There has been no indication of official foreign exchange intervention.
 - After an initial sharp drop, the Korean stock market has rebounded, broadly in line with other emerging markets. The KOSPI is down 5 percent since July 20, but has increased 15 percent since August 17. The market remains up more than 31 percent up since the start of the year. However, foreign investors have continued their sell-off, with net selling by foreign investors reaching \$9½ billion in August, compared with \$5 billion for July.
 - Domestic corporate spreads remain broadly unchanged but accessing overseas funding has become more difficult and several large firms have indicated their

intention to freeze overseas bond issuance. Net external borrowing by foreign bank branches from home offices also are reported to have slowed in July, but this appears to be more a reflection of window guidance by the financial regulator and the recently introduced thin capitalization rules than market turbulence.

- The authorities have taken several steps in response to the increased volatility. Immediately following the onset of the global turbulence, the BOK announced that they stood ready to provide liquidity to financial markets if needed. In addition, the Ministry of Finance and Economy has set up a task force along with the BOK and financial regulators to monitor both domestic and international markets on a daily basis and to devise contingency plans.

Korea: Developments Since the Subprime Crisis (Percent change, unless otherwise indicated)		
	Year-to-date	Since July 20, 2007
Exchange rate (Won per US\$)	-1.0	-2.5
Nominal effective exchange rate	-2.9	-3.1
Stock market index (KOSPI)	31.4	-5.0
External debt spread 1/	19	15
1/ Basis points change.		

4. Recent data releases indicate that growth remains solid, with inflation modest.
 - Second quarter GDP data indicate that growth reached 1.8 percent (q/q seasonally adjusted), marginally higher than earlier flash estimates, led by strong facilities investment and exports.
 - Exports have continued to perform well in the third quarter. Exports rose by 20 percent (y/y) in July, on strength in both the high tech sector and heavy industry, and the current account recorded a sizable surplus of \$1.5 billion. Preliminary August trade data indicate export growth remained robust.
 - Indicators of domestic demand are solid. Industrial output expanded by 2.1 percent (m/m seasonally adjusted) in July, led by increased production of semiconductors. In addition, business confidence remained strong in August, despite the financial volatility. Both of these developments point to likely continued strong investment. On the consumption side, data are more mixed. In July, while service sector output rose 0.7 percent (m/m seasonally adjusted), it moderated from June, and large store sales were flat. However, consumer confidence rose in August.

- In August, headline inflation declined by ½ percentage point, to 2 percent (y/y), below the lower edge of the BOK’s target band. The decline, which is expected to be temporary, reflects food and oil prices. Core inflation was unchanged at 2.3 percent.
5. Staff projections have changed only marginally since the issuance of the staff report, reflecting the downgrading of global growth prospects:
- Growth projections for this year remain unchanged, but 2008 growth has been lowered by 0.2 percentage point, to 4.8 percent, reflecting weaker external demand.
 - Both exports and imports are projected to moderate compared with projections in the staff report, with the current account still broadly balanced. In light of ongoing global financial turbulence, however, staff’s projections of net capital inflows and reserves have been lowered for 2007, with some turnaround expected next year.
 - Key downside risks continue to be those highlighted in the staff report—further financial market turmoil, a sharper-than-expected U.S. slowdown, or higher oil prices—but these risks have increased in line with recent global developments.

Korea: Staff Report and Revised Projections				
	2007		2008	
	Proj.	Rev. Proj.	Proj.	Rev. Proj.
Real GDP growth	4.8	4.8	5.0	4.8
Export volume growth	12.2	12.1	13.4	11.5
Current account balance 1/	1.4	1.4	-2.6	-3.4
Financial and capital account balance 1/	17.4	0.9	10.4	22.0
Gross international reserves 1/	257	241	265	259
1/ In billions of U.S. dollars.				



INTERNATIONAL MONETARY FUND

Public Information Notice

EXTERNAL
RELATIONS
DEPARTMENT

Public Information Notice (PIN) No. 07/118
FOR IMMEDIATE RELEASE
September 24, 2007

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

IMF Executive Board Concludes 2007 Article IV Consultation with the Republic of Korea

On September 12, 2007, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with the Republic of Korea.¹

Background

Korea is enjoying its longest uninterrupted period of economic expansion—17 consecutive quarters—since the Asian crisis. Growth reached 5 percent in 2006, buoyed by strong exports, and is only expected to slow marginally to 4¾ percent this year. Inflation has remained below the Bank of Korea's target range of 2½ to 3½ percent over the last year, and unemployment has fallen to a four-year low. The current account is expected to remain broadly in balance, with strong exports being offset by a higher oil import bill and a further widening of the services deficit. Gross capital inflows have increased since 2006, reflecting hedging by exporters and arbitrage activities, but are expected to moderate.

On the policy front, the fiscal stance remains neutral, although this year's budget has been front-loaded in response to the late 2006 slowdown. On the other hand, after a lengthy pause, monetary tightening has recently resumed, with the Bank of Korea twice raising its target rate by 25 basis points, to 5 percent, in response to concerns about

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.

rapid money and credit growth. After having appreciated for several years, the won has stabilized in 2007, and appears broadly appropriately valued. To smooth volatility and prevent the won from appreciating too rapidly, the authorities have at times intervened in the foreign exchange market in modest amounts.

The impact of the ongoing global financial turbulence has so far been manageable but downside risks to the outlook have increased, with the nascent consumption recovery vulnerable to a downturn in asset markets, a hard landing in the United States, or the possibility of further hikes in oil prices. The financial sector is generally in good health, and risks appear modest. Housing prices have stabilized in recent months, and any decline would not affect the financial system significantly given low nonperforming loans(NPLs) and loan-to-value ratios. At the same time, while lending to small- and medium-sized enterprises(SMEs) has accelerated, vulnerability appears limited given improvements in risk management practices.

Over the medium term, Korea faces more daunting challenges. A rapidly aging population will generate strong fiscal pressures through large outlays for pensions and health care. In addition, the expected decline in the labor force, combined with the ongoing erosion of its low-skilled manufacturing base and sluggish service sector productivity, could affect growth and threaten external stability.

Executive Board Assessment

Executive Directors welcomed the strong recovery that Korea has made since the Asian crisis and its success in adapting to the changing global landscape, which have been supported by the authorities' forward-looking and prudent economic policies. In recent years, growth has been buoyed by strong exports and resilience in domestic demand. Notwithstanding some increase in volatility in the Korean equity market, Korea has thus far weathered well the ongoing turbulence in the global financial system.

Directors observed that Korea's near-term outlook is favorable, with growth likely to remain robust and inflation contained. However, they cautioned that the risks in the global environment have increased, as indicated by recent world market developments.

Directors considered that, with inflation pressures well contained, there is scope for loosening monetary policy were downside risks to materialize. They encouraged the authorities to further develop the money market to strengthen the monetary transmission mechanism, which would help limit further recourse to reserve requirements. Directors saw less room for maneuver on the fiscal side, in light of Korea's considerable medium-term fiscal challenges. The broadly neutral fiscal stance therefore remains appropriate.

Directors agreed that the won appears broadly appropriately valued. External competitiveness remains strong despite the large appreciation of the won vis-à-vis most major currencies over the last few years. Going forward, Directors agreed that the

exchange rate should continue to be market determined, with intervention in the foreign exchange market limited to smoothing volatility.

Directors welcomed the progress that has been made in recent years in strengthening Korea's financial sector, as reflected in improvements in financial soundness indicators, risk assessment practices, and credit information. As a result of these reforms, vulnerabilities are low and the financial sector appears to be well-placed to deal with shocks. However, there remain pockets of domestic risk that bear close watch. A decline in housing prices could affect consumption, in particular as a sizable share of households still hold short-term bullet-type mortgages. Also, notwithstanding recent improvements in risk management practices at banks, the recent rapid growth in lending to small- and medium-sized enterprises could lead to an increase in nonperforming loans, particularly if the economy were to slow. Directors saw the further development of the mortgage market and continued upgrading of banks' risk assessment models, in line with the introduction of Basel II, as effective ways of mitigating these risks.

Directors considered that further financial sector development would support Korea's economic performance over the longer term, as well as assist in dealing with potentially volatile capital flows. In this respect, they welcomed the recent passage of the Capital Market Consolidation Act, which should contribute significantly to the emergence of strong investment banks and a resilient capital market.

Directors observed that Korea will confront the burden of an aging society in coming decades, as have many industrial countries. Addressing the resulting fiscal pressures will require action on a number of fronts, notably increasing tax revenues through base broadening and improved tax administration, further pension reform, and reorientation of public spending toward high-priority areas. Directors appreciated the authorities' ongoing efforts to address these challenges, and stressed that comprehensive and timely reforms would ease adjustment. At the same time, they commended the authorities' efforts to inform the public of long-term fiscal pressures through their Vision 2030 initiative. Some called for the regular publication of a comprehensive long-term fiscal report.

Directors noted that Korea's manufacturers are likely to face increasingly intense competition from lower-wage countries, while services sector productivity remains relatively low. To maintain competitiveness in global markets and sustain high rates of growth over the long term, Directors encouraged the authorities to continue taking steps to liberalize the services sector, enhance labor market flexibility, and improve the investment climate, notably for foreign direct investment. They supported the authorities' intention to use free trade agreements to help achieve some of these goals, while remaining committed to multilateral trade liberalization initiatives.

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.

Korea: Selected Economic Indicators

	2003	2004	2005	2006	2007 IMF Staff Projections	2008 IMF Staff Projections
Real GDP (percent change)	3.1	4.7	4.2	5.0	4.8	4.8
Consumption	-0.3	0.4	3.9	4.5	4.2	3.7
Gross fixed investment	4.0	2.1	2.4	3.2	5.4	3.3
Net foreign balance 1/	2.5	3.3	1.3	1.6	0.6	1.3
Prices (percent change)						
Consumer prices (end of period)	3.4	3.0	2.6	2.1	2.8	2.5
GDP deflator	2.7	2.7	-0.2	-0.4	-0.8	1.2
Labor market (in percent)						
Unemployment rate	3.6	3.7	3.7	3.5	...	...
Wage growth, manufacturing	8.7	10.0	7.8	5.6	...	...
Consolidated central government (In percent of GDP)						
Revenues 2/	23.7	22.9	23.6	24.7	25.6	26.0
Expenditure	21.1	20.7	21.7	22.9	23.8	23.5
Balance 2/	2.7	2.2	1.9	1.8	1.9	2.5
Money and interest rates (In percent)						
Overnight call rate	3.8	3.3	3.7	4.5	...	...
M3 growth	4.7	7.1	7.4	10.5	...	...
Yield on corporate bonds	5.6	3.7	5.5	5.2	...	...
Balance of payments						
Current account balance (In billions of U.S. dollar)	11.9	28.2	15.0	6.1	1.4	-3.4
Current account balance (In percent of GDP)	2.0	4.1	1.9	0.7	0.2	-0.3
Won per U.S. dollar (Period average)	1,192	1,146	1,024	955	...	...

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 12, 2007**

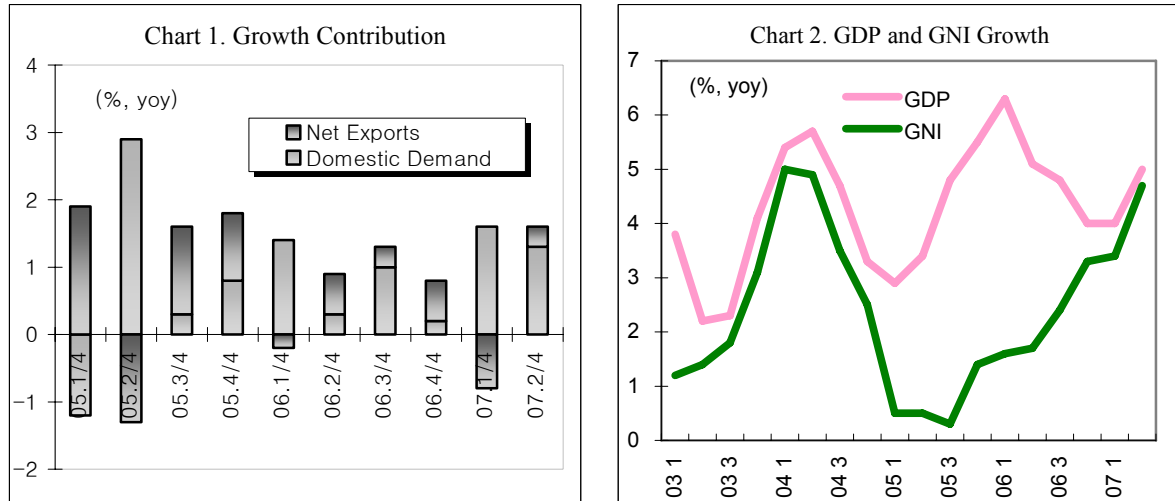
We welcome the constructive policy dialogue during the Article IV consultation, and thank staff for the high-quality papers which provided a candid assessment of the Korean economy. There was broad agreement between the authorities and staff on most issues, and staff's policy recommendations will be properly taken into account in future policy deliberations.

Ten years have passed since the Asian financial crisis severely hit the Korean economy. Since then, painful but rewarding structural reforms and sound macroeconomic policies have led to a successful transformation of the economy, with per capita GDP expected to reach nearly US\$20,000 this year from US\$7,523 in 1998. Despite this achievement, daunting longer-term challenges remain, for which the authorities are preparing.

Recent developments and outlook

The economy continued to expand robustly at its potential growth rate, marking the longest continued expansion since the 1997 crisis. Second quarter GDP growth stood at 1.8 percent (q/q) which is the highest since 2003. A strong recovery of domestic demand together with brisk exports have led to more balanced growth this year (Chart 1). Modest growth of private consumption, which the authorities consider appropriate given the still-high household debt level, is backed by solid employment performance and a recovery of real incomes (Chart 2). Facility investment has rebounded strongly, and construction investment is also returning to a positive growth. CPI inflation remains low at 2 percent despite higher oil prices, and the current account has moved from around 4 percent of GDP in 2004 to roughly balance this year. Reflecting continued structural reform efforts and enhanced vigilance on possible vulnerabilities based on an early warning and crisis prevention system, the authorities have adequately addressed potential structural risks to the economy with preemptive policy responses where needed.¹

¹ The early warning and crisis prevention system consists of 5 sectors with sub-sectors, covering various risk segments of the economy. Based on the system, the authorities closely monitor potential risk factors and produce a summary report on a monthly basis.



Over the near term, the Korean economy is expected to continue growing robustly at close to 5 percent with stable price inflation. The external current account is expected to stay in balance. As staff indicated, risks appear to be tilted to the downside especially on the external front, including a possible slowdown of global demand, increased volatility of international financial markets and a worsening of the terms of trade such as from higher oil prices. The recent turmoil in the international financial markets associated with the subprime mortgage shakeout in the U.S. led to greater volatility in the Korean financial markets, but the impact so far has been limited.

Short-term policy responses

The macroeconomic policy stance will remain neutral, but flexible to market developments given downside risks ahead. The steady appreciation of the won has had a contractionary impact on the economy, reducing the growth contribution of net exports, but buoyant domestic demand has helped the economy to grow at a solid pace. Given the favorable near-term outlook, the authorities will continue the current neutral policy stance, but stand ready to adjust it should the downside risks materialize.

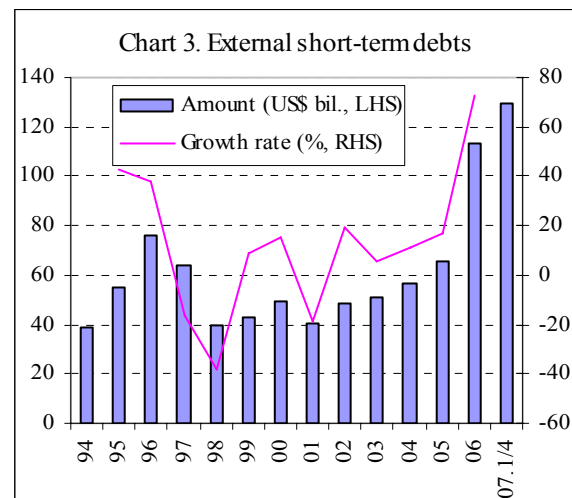
Fiscal policy continues to be prudent despite increasing spending pressures. According to an interim report released this week, the revenue this year is expected to exceed the budget by 11 trillion won, due in part to a broadened revenue base. As a result, the overall balance will record a surplus of around 3 percent of GDP, being roughly balanced excluding social security funds. As the authorities plan to use a majority of the revenue increase to repay debt, the debt-to-GDP ratio is expected to decline accordingly. With next year's budget to be submitted to the National Assembly in September, the current prudent fiscal stance will continue. In addition, the revenue base will be further broadened and spending adjusted to achieve a greater focus on social spending, education and R&D.

Given the downside risks and growing uncertainties on global financial markets, the Bank of Korea (BOK) will remain flexible in setting policies. This year, the BOK raised its policy rate twice to 5 percent in response to the solid economic recovery. Due to this increase and, more importantly, a rapid real appreciation of the won, overall monetary conditions have tightened. However, further adjustment will be dependent on data, given the considerable uncertainties on the global financial markets and global demand. Regarding the inflation target framework, the authorities will examine the adequacy of its target range in the future review, based on expected future inflation developments.

Despite continued large capital inflows, the authorities have demonstrated their firm commitment to a flexible exchange rate policy. As pointed out in the staff report, the real exchange rate has appreciated significantly in recent years, and in particular the bilateral rate with respect to the Japanese yen has risen by more than 50 percent since 2004. Despite growing domestic criticism and concerns over the deterioration of external competitiveness, the authorities have continued to let the exchange rate be determined in the market, limiting market intervention only for short-term smoothing operations. The remaining restrictions on capital account transactions have also been removed expeditiously, with a gradual rise in capital outflows helping alleviate the strong pressures on the won.

These efforts notwithstanding, short-term capital inflows have rapidly increased, driven by interest arbitrage opportunities, including yen carry trades, as well as hedging activities by some large exporters (Chart 3).² The recent surge in capital inflows raised the following two concerns by the authorities.

- First, the rapid rise of short-term debt could impair macroeconomic stability, as an abrupt unwinding could lead to unwarranted instability in financial markets. This concern unfortunately turned out to be a reality in the recent episode of global financial turbulence which might not yet have ended its course, with carry trades playing some role in the process.
- Second, small and medium-sized enterprises (SMEs) increased their exposure to external short-term debts, largely unhedged. As a result, a sudden change in market



² External short-term debts increased 72 percent in 2006 and another 15 percent for the first quarter this year. As a result, the ratio of short-term debts rose from 35.1 percent in 2005 to 45.3 percent in the first quarter this year. More than half of short-term debts has been lent to SMEs.

sentiments could badly affect their financial position which has already weakened due to intensified global competition and the rapid appreciation of the won. This, in turn, could exacerbate the on-going structural adjustment of SMEs which account for almost 90 percent of total employment.

In order to address these risks, the authorities have taken preventive prudential measures. They include aligning capitalization rule for foreign bank branches with domestic firms and limiting the use of foreign exchange loans by banks for real demand transactions, (i.e., financing imports and real investment). Notwithstanding these particular prudential measures, the authorities will continue to remove the remaining restrictions on capital flows and complete the liberalization by 2009 as announced, which will help further deepen the foreign exchange markets and promote Korea's financial hub strategy.

Financial market stability

The authorities broadly shared the staff's view on financial sector health. The regulators are paying close attention to risks, including in housing as well as SME loans. However, the possibility of systemic risk from these factors seems limited given heightened prudential standards, but the authorities are closely watching market developments and reviewing their possible impact. Differences in prudential standards on mortgage loans between banks and nonbanks have recently been aligned considerably so as to prevent rooms for regulatory arbitrage.

Due consideration will be given to policy suggestions on developing the mortgage market, including long-maturity and fix-term mortgages, which will help spread interest risks borne by households and reduce housing-related risks in the financial sector.

Long-term fiscal challenges

Being fully cognizant of the grave consequences of the demographic change, the authorities have implemented a comprehensive policy package to cope with the long-term challenges. Based on a Basic Act enacted in 2005, the authorities have been taking measures, which aim at raising fertility, promoting female labor participation, cultivating ageing-friendly industries, and expanding a socioeconomic infrastructure for elderly welfare.

Besides these efforts, the authorities have initiated policy plans to address the population ageing-related fiscal burden. Given the formidable fiscal burden, the authorities are fully committed to preserving long-term fiscal sustainability. A long-term roadmap report, *Vision 2030*, was prepared last year, which reviewed the long-term fiscal implication from population ageing and drew up policy directions to deal with long-term spending pressures especially in the area of pensions, health and long-term care. The thrust of policy responses identified in this report is broadly consistent with staff's recommendations. They include enhancing revenues through broadening the base and

strengthening tax administration to be followed by rate increases; consolidating expenditure through further rationalization of spending and a shift in its composition; and restraining the anticipated pension and health care-related fiscal burden. Policies are being implemented in this direction, and will be refined over time. For instance, the recently passed pension reform bill, which improved pension sustainability considerably, is an important step forward. Further measures are to be considered in 2008 as part of the regular five-year general review, in which additional reform of the public pensions as well as reform of the occupational pension system will be deliberated.

The authorities fully agree with staff of the importance of early action and the need for additional fiscal adjustments through wide-ranging measures. The analysis in Chapter 1 of Selected Issues is useful, as it provides a review of various policy options and their macroeconomic implication over the long-term horizon. However, despite the “highly illustrative” nature of the analysis, it could have been more useful if the analysis had been based on more plausible assumptions. For example, the staff baseline did not reflect the current legal stipulations, not to mention the well-known, long-standing fiscal conservatism in Korea. Under the National Health Insurance (NHI) Act, the government is mandated to subsidize only 20 percent of the NHI’s anticipated revenues and the remainder to be financed through insurance payment revenues. Contrary to this legislation which has already been enacted, the staff baseline assumed a considerably higher fiscal subsidization to the NHI. While projections based on overly simplifying assumptions and a mechanical plugging-in of numbers may be effective in scaring the public about long-run fiscal sustainability, they are too “illustrative” to draw any practical implications.

In contrast, the long-term fiscal projections by the Korea Institute of Public Finance (KIPF) based on the current legislation showed that the government debt-to GDP ratio would rise to around 80 percent in 2050, which is significantly lower than the staff baseline. Given the KIPF’s more realistic, but still-high long-term debt level as well as spending pressures in other areas, the authorities remain committed to fiscal prudence, which is evidenced by the aforementioned conservative fiscal stance and various preemptive reform measures.³

Enhancing growth potential

The authorities have strengthened policy efforts to enhance long-term growth potential, considering the anticipated decline of labor inputs over time and intensified competition, especially from neighboring countries. The policy priorities include promoting competition and technical innovation through greater integration into the world economy; strengthening competitiveness of SMEs; and enhancing productivity of service industries, including financial sector development.

³ KIPF’s long-term simulation showed that, if the permanent portion of the expected revenue increase this year is carried into the future, the debt-to-GDP ratio would decline by around 13 percentage points of GDP in 2050.

There has been significant progress on this front. The Korea-U.S. FTA was successfully concluded, and now awaits legislators' approval in both countries. A new labor law has been implemented to better protect vulnerable workers and enhance labor market flexibility. The Capital Market Consolidation Act, which has been passed by the National Assembly, will further spur competition and financial innovation, thereby considerably changing the financial landscape. Deregulation and market opening in the non-financial service sector are vigorously being pursued, including in the business, education and medical service areas.

Reforms in some areas have been less ambitious so far due to practical limitations such as difficulties in achieving broad public consensus. For example, staff indicated the exclusion of health and education sectors in the Korea-U.S. FTA coverage, but this reflects intense controversies over their public goods nature and the resulting difficulties to garner broad public support. Nevertheless, the on-going efforts to deregulate and open up these sectors will help promote competition and raise productivity, and further reforms will be pushed forward as efforts to achieve broader public consensus are undertaken.