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Macroeconomic Developments

The Korean economy appears to remain on an overall recovery track, although its strength has slightly weakened in Q2 2011. It is showing a steady pace of growth with an increase in export and an improvement in employment conditions. The Korean economy is expected to continue its recovery, but it will probably weaken in H2 2011. The upward trend of exports will likely slightly moderate in H2 because the global economy has shown signs of slowdown and downside risks are growing.

Overview

Despite signs of global economy slowdown and lingering downside risks, the Korean economy appears to remain on an overall recovery track. The economy is expected to weaken in the second half of 2011 due to sluggish growth in private consumption and exports and we have revised our earlier projection of 4.4% growth downward to 3.9% this year. Current account surplus has been revised upward slightly due to slower growth in imports. Growth opportunities of and profitability look stable in the Q3 although growth should be limited. With the possibility of loans becoming distressed, credit finance companies and mutual cooperations will be required to improve their credit risk management. The asset size and profitability of securities firms in Q4 2011 are expected to fall because of negative external factors, such as debt crisis in the Eurozone and uncertainty in the US economic rebound.

Outlook for 2011

The Korean economy is expected to continue its recovery, but it will probably weaken in H2 2011. We forecast GDP growth rate at 3.9% YoY this year led by the expansion in export growth and private consumption. By expenditure, exports and private consumption are each expected to increase by 10.8% and 2.6% YoY. We also expect facilities investment and construction investment to be 7.3% and Δ4.4% YoY in 2011.

Exports and imports are expected to increase by 20.1%
and 24.7%, respectively, in 2011. Therefore, the balance of payments is expected to register a current account surplus of USD15.4 billion in 2011, smaller than the USD28.2 billion figure from the previous year. The reduction should occur mainly from a faster recovery of imports than exports and heightened raw materials prices.

**Financial Markets**

Money market rates increased for the most part in H2 2011 compared to H1 following a change in the Bank of Korea's monetary policy. Meanwhile, long-term market interest rates were influenced by the increase in the base rate as well as external risks. With the BOK expected to maintain its stance on monetary policy, the yield on Treasury bonds (3yr) is expected to be 3.5% in H2 2011.

In 2011, the KRW/USD exchange rate is expected to average KRW1,111 down from the KRW/USD 1,156 in 2010. Throughout the remaining period of 2011, the KRW/USD is expected to stay at a somewhat elevated level with high volatility. This is because of strong risk aversion, which has led to large sell-offs of emerging market assets in the international financial markets, does not look like it is going to easily disappear until the eurozone forwards a concrete plan for Europe's fiscal crisis.

The Korea Composite Index (KOSPI) ended Q3 2011 at 1,770 points, down 331 points from the end of the previous quarter. The index was negatively affected by the resurfacing of the fiscal crisis in the euro zone and by concerns over the global economic recession stemming from a stagnant US growth. In Q4, the KOSPI is expected to hold steady around its present level.

**Money and Credit**

In July and August, the low rate of growth in the money supply continued mainly as a result of the tight-money
policy. While the average growth rate of M2, or broad money in July and August, increased to 3.6% y.o.y., 0.1%p higher than the second quarter, those of reserve base and M1 fell to 11.5% and 4.6%, respectively.

In Q3 2011, total commercial bank lending to corporates and households increased by KRW13.8 trillion and KRW5.5 trillion won. Overall, bank lending will not increase much as banks will be expected to focus on improving their risk management in line with higher levels of global uncertainty.

Financial Industries

In Q2 2011 Korean banks’ assets decreased slightly whereas the net income showed a huge increase. Both NPL ratio and coverage ratio slightly ameliorated. Both BIS ratio and Tier 1 ratio continued to improve. In Q4 2011, growth opportunities lies in loans and improvement in profitability will manifest in interest income. While asset soundness is expected to be maintained, capital adequacy ratio is expected to slightly deteriorate.

In Q2 2011, except for venture capital companies and mutual savings banks (MSBs), most non-banking financial institutions experienced asset growth. The net income of non-banking financial institutions was positive except for MSBs. The SBL of credit card companies, credit finance companies and Mutual Credits (MCs) was improved slightly or largely unchanged. But the loan soundness ratios of MSBs deteriorated significantly. The capital adequacy ratio of MCs and credit finance companies increased, but the ratio of credit cards companies and MSBs decreased.

The assets of securities companies increased 23.1% in Q2 2011 from the same quarter last year. Profits also went up from increased brokerage commissions and asset management service fees. Capital adequacy deteriorated due to increased interest rate risk in bond holdings. The asset size and profitability of securities firms in Q4 2011 are expected to fall because of negative
external factors, such as debt crisis in eurozone and uncertainty in the US economic rebound.

At the end of Q1 FY2011, premium income of life insurers recorded KRW19.5 trillion, up 1.4% y.o.y. Direct premiums written for non-life insurers during the same period were up 14.0% y.o.y. to KRW13.4 trillion. While total assets and premium income of both life insurers and non-life insurers are forecast to maintain the growth trend during Q3 FY2011, the growth rate could weaken somewhat due to continued uncertainties in the global and domestic financial market environment.

**Current Issues**

The first paper analyzes how non-banking financial companies’ interest rates have been determined and finds that lending rates related not credit risk or target rates but overall economic condition. The main reason that lending rates are insensitive to a market rates would be low price elasticity of loan with imperfect market competition between financial companies and asymmetric information. Therefore, in conclusion, a couple of ways to enhance market competition and efficiency are discussed.

The second paper deals with lagging high yield bond market. The high yield bond market has been in doldrums since the onset of the global financial crisis in 2008. A well functioning high yield bond market is important for the economy: it helps not only firms' restructuring by funding LBOs and M&As, but also growth companies to raise capital. Against such background, we propose the policy measures that would promote the high yield sector: making investment protocols of institutional investors attuned to their appetite, the introduction of fund credit rating system, and enhancing the risk underwriting of security companies and others.

The last paper suggests ways to develop the securities lending transaction in Korea. In Korea, there has been
continuous system improvement to activate security lending but there still are inconvenient to check details on each security lending transaction. The Balance of stock lending transaction in Korea shows a upturn trend again in recent year after rapidly decreasing. Also, the balance of domestic bond lending transaction has shown a continuous increasing trend and domestic investors take absolutely high proportion in loan and borrowing of bond lending transaction. Overall, security lending market can enhance liquidity of the market and function of price discovery and contribute to advancement of the domestic capital market by giving an opportunity to increase revenue to borrowers and lenders. Therefore it is beneficial to develop it.
I. Macroeconomic Developments

The Korean economy appears to remain on an overall recovery track, although it has slowed its pace in Q2 2011. Exports continued to show high growth and domestic demand has steadily increased. We forecast GDP growth rate at 3.9% YoY this year, a drop of 0.5%p from the August forecast, led by the expansion in export growth and private consumption. Growth is also forecasted to be 3.9% YoY in H2 this year. Strong growth in exports will moderate slightly in H2 because the global economy has shown signs of slowdown amid increased downside risks. We expect inflation to slowdown to the mid-3% level in Q4 largely due to the base effect but shall be limited in any case of won depreciation. Overall, risks concerning the European fiscal crisis is expected to overshadow any rosy expectations of the economy and uncertainty will remain the keyword in Q4.

A. Demand and Supply

1. Aggregate Demand

The Korean economy appears to remain on an overall recovery track, although its strength has slightly weakened in Q2 2011. Exports continued to show high growth and domestic demand has steadily increased. Labor market conditions have also remained on track for improvement. Still, there are lingering uncertainties as to the economic growth path owing to internal and external risks.

Real GDP (chained volume measure) increased 3.4% YoY in Q2 2011. On the production side, manufacturing saw high growth, and other sectors also notched positive growth except for construction. Although manufacturing and services each increased by 7.2% and 2.6% YoY, construction sank by $\triangle 7.6\%$ YoY in Q2 2011. On the expenditure side, private consumption and exports showed sustained growth. However, investment shrunk in Q2 following the previous quarter. (Table 1.1).

Domestic shipments and exports maintained their
upward trend in spite of a slower pace of increase. These had gone up by 2.7% and 6.3% YoY in August 2011 (Figure 1.1).

Industrial production and service industry production continued to increase. The industrial production index increased by 4.0% and 4.8% YoY in July and August following a 7.2% upswing in Q1 2011 (Figure 1.2). The service industry activity index registered an increase of 3.8% and 4.8% YoY in July and August 2011 (Figure 1.3).

Economic Growth

The Korean economy has continued its growth trend in spite of domestic and external uncertainties. All expenditure sectors have been in an upswing and exports, in particular, have contributed considerably to the growth. The Korean economy is expected to continue its recovery, but it will probably weaken in H2 2011.

The economic growth rate increased by 3.4% YoY, which has slightly weakened decreasing in 0.8%p than Q1, in Q2 2011 and 0.9% over the previous quarter. All expenditure sectors have maintained their upward trend except for those of construction investment. In particular, private consumption and goods exports contributed to a sustained upturn to positive ground.

Exports in the national accounts grew 9.6% YoY in Q2, centering around those of communication equipment and ships. Imports also increased 7.9% YoY in Q2 due to increased demand for imports of such items as machinery and metal products.

The trade surplus totaled USD1.4 billion despite unfavorable economic conditions, following an increase of USD479.0 million in August. Exports increased by 19.6% YoY to USD47.1 billion. It continued to grow on the strength of key export items such as petroleum products and automobiles. Meanwhile, imports grew 30.5% to USD45.7 billion. Notably, imports of raw materials increased centering on shipments of crude oil (56.7%) and gas (104.0%).

Table 1.1 Economic Growth Trends

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<th>2011</th>
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<tr>
<td></td>
<td>2Q (q.o.q)</td>
<td>3Q (q.o.q)</td>
</tr>
<tr>
<td>G D P</td>
<td>7.5 (1.4)</td>
<td>4.4 (0.6)</td>
</tr>
<tr>
<td>Consumption, %</td>
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<td>Private</td>
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<tr>
<td>Government, %</td>
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<td>2.5</td>
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<td>Investment, %</td>
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<td>6.8</td>
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<tr>
<td>Construction, %</td>
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<tr>
<td>Facilities, %</td>
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<tr>
<td>Exports, %</td>
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<tr>
<td>Imports, %</td>
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<td>14.7</td>
</tr>
<tr>
<td>GNI, %</td>
<td>5.6</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: BOK.
1.1 Domestic Demand

Aggregate consumption growth increased to 2.8% YoY in Q2 2011 from 2.5% YoY in the previous quarter. Private consumption increased modestly by growing to 3.0% YoY while government consumption also slightly increased, recording 2.1% growth from a year ago (Table 1.1).

Facilities investment declined 1.1% YoY in Q2 2011 with construction investment down 6.8% over the same period a year ago. Facilities investment’s contribution to the real GDP growth was $\Delta 1.2\%$ in Q2 2011 (Table 1.2).

Private Consumption

Private consumption in the national accounts, which has continued its robust growth of around 3% since Q3 2009, increased by 3.0% YoY in Q2 2011. This resulted from an improvement in labor market conditions with increasing employment and real wages (Table 1.1). Consumption-related indicators also suggested that the modest upward pace would continue.

The consumer goods sales index went up by 5.2% YoY in August, similar to the previous month increasing 5.3% in July. By sector, sales of durable, quasi-durable showed increases of 12.2%, 4.0%, respectively, in August compared to 12.6%, 3.9% in last month. Non-durable goods also went up recording 2.5% in August (Figure 1.6).

The service sector also managed positive growth. The service industry activity index increased 3.8% and 4.8% YoY in July and August 2011 (Table 1.3).

At the sector level, finance & insurance, transportation, wholesale & retail, and health & social work sectors contributed to output growth, while the real estate & leasing was sluggish due to the real estate downturn, recording $\Delta 3.4\%$ YoY in August (Table 1.3).

Meanwhile, consumer confidence has weakened owing
to negative domestic and external uncertainties. The Consumer Expectations Index, a measure of prospects six months ahead, recorded 78 in September to drop below the benchmark of 100.

The Consumer Evaluation Index, a measure of current sentiment compared with those six months earlier, recorded 64 in September, down 4.0 points from 68 in August (Figure 1.7).

Real gross national income (GNI) increased 0.6% YoY in Q2 2011 and declined by 1.8% over the previous quarter, reflecting improved terms of trade with steeper price increases for exports than imports (Figure 1.8).

Facilities Investment

Facilities investment growth in the national accounts decreased 1.1% YoY in Q2 2011 reflecting the decrease of 6.8% YoY in construction investments (Table 1.1). But facilities investments, including those for machinery and transport equipment, increased by 7.5%.

Estimated equipment investment growth (current value) decreased 3.7% in August due to the drop in machinery, which decreased by 6.0% YoY, in spite of the increase in transportation equipment went up by 10.5% YoY (Figure 1.9).

Domestic machinery orders (current value), a leading indicator, registered 6.0% growth in August from -4.4% in July due to the rise in both private and public sectors.

The Business Survey Index (BSI) produced by the Bank of Korea, which measures the level of confidence in the Korean economy, declined to 86 points in Q3 2011, from 91 points in Q1 (Figure 1.10). Similar indices produced by the Federation of Korean Industries and the Korea Chamber of Commerce & Industry decreased slightly.

Construction investment, a leading indicator, shows the temporary confusion. Domestic construction orders

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<tbody>
<tr>
<td>Service Industry Activity</td>
<td>2.7</td>
<td>3.4</td>
<td>3.5</td>
<td>3.8</td>
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<td>Wholesale &amp; Retail</td>
<td>4.0</td>
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<td>3.5</td>
<td>3.0</td>
<td>4.1</td>
<td>4.6</td>
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<td>Hotels &amp; Restaurants</td>
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<td>1.9</td>
<td>1.8</td>
<td>2.6</td>
<td>0.9</td>
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<td>3.4</td>
<td>6.7</td>
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<td>6.0</td>
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<td>Finance &amp; Insurance</td>
<td>7.2</td>
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<td>7.8</td>
<td>10.6</td>
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<td>Real Estate &amp; Leasing</td>
<td>△17.7</td>
<td>△11.5</td>
<td>△4.8</td>
<td>△3.5</td>
<td>△3.4</td>
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<td>Business Activities</td>
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<td>5.5</td>
<td>4.9</td>
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<td>Education</td>
<td>1.1</td>
<td>0.2</td>
<td>0.8</td>
<td>1.9</td>
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<tr>
<td>Health &amp; Social Work</td>
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<td>5.0</td>
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<td>4.8</td>
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<td>Culture &amp; Sporting</td>
<td>2.4</td>
<td>1.2</td>
<td>1.4</td>
<td>3.1</td>
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Source: NSO.
jumped by 75.4% growth in August 2011 influenced by the rise in both private sector (103.9% YoY) and public sector (13.4% YoY). Meanwhile, Construction completed (current value) decreased by 3.2% in August, a slower pace of decrease compared to the previous month from $\triangle 8.8\%$ in July, due to the drop in private sectors (Figure I.11).

The Bank of Korea, which adopted an expansionary monetary policy from October 2008 raised the Base Rate in January from 2.5% to 2.75%, in March from 2.75% to 3.0%, and again in July from 3.0% to 3.25% due to concerns about consumer price inflation. Looking ahead, the readjustment of bank interest rates will do what is needed to bring about the continuation of the recent improving pattern of economic movements and financial market stabilization (Figure I.12).

1.2 External Demand and the Balance of Payments

Sungwook Park (swpark@kif.re.kr)

Global growth has weakened in most advanced economies and become more uneven. Fiscal and financial uncertainties still remain unsettled and downside risks are growing.

The US economy increased at an annual rate of 1.3% QoQ in Q2 2011 from an increase of 0.4% QoQ in Q1 2011. The increase of the US economy in Q2 2011 primarily reflected positive contributions from federal government spending and exports. Federal government expenditures increased 1.9% QoQ in Q2 2011, following a decrease of 9.4% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011. Personal consumption expenditures increased 0.7% QoQ in Q2 2011, following an increase of 2.1% QoQ in Q1 2011.
In contrast, State and local government expenditures decreased $2.8\%$ QoQ in Q2 2011, following a decrease of $3.4\%$ QoQ in Q1 2011. And also the US unemployment rate held at $9.1\%$ in August of 2011, the same as in July of 2011.

The eurozone economy grew $0.2\%$ QoQ in Q2 2011 from an increase of $0.8\%$ QoQ in Q1 2011. Economic growth in the eurozone continued its downward trend caused by the sovereign debt problems in southern Europe. Eurozone consumption expenditure decreased $0.2\%$ QoQ in Q2 2011, while gross fixed capital formation increased $0.2\%$ QoQ in Q2 2011. Exports rose by $1.0\%$ QoQ in the eurozone. Imports grew by $0.5\%$ QoQ in the eurozone in Q2 2011. Meanwhile, eurozone unemployment rate was still high at $10.0\%$ in August of 2011.

Japan’s GDP decreased at an annual pace of $2.1\%$ QoQ in Q2 2011. The Japanese economy seems to be gradually getting out of the impact of the March earthquake and tsunami. Confidence has also picked up, but uncertainties still remain. Private consumption was unchanged QoQ in Q2 2011 from a decrease of $0.6\%$ QoQ in Q1 2011. Private residential investment decreased $1.8\%$ QoQ in Q2 2011, compared with an increase of $0.2\%$ QoQ in Q1 2011. Public demand recorded $1.2\%$ QoQ in Q2 2011, compared with an increase of $0.6\%$ QoQ in Q1 2011. Exports of goods & services decreased $4.9\%$ QoQ in Q2 2011, down from $0.0\%$ QoQ in Q1 2011. The unemployment rate recorded $4.3\%$ in August of 2011, slightly down from $4.7\%$ in July of 2011.

The Chinese economy grew $9.5\%$ YoY in Q2 2011, down from an increase of $9.7\%$ YoY in Q1 2011. The Chinese economy has maintained a steady growth rate for both domestic demand and exports even while inflation pressures remain high. Total retail sales of consumer goods increased $16.8\%$ YoY in Q2 2011. Investment in fixed assets rose $25.6\%$ YoY during the same period. China’s consumer price index recorded $6.4\%$ YoY in Q2 2011. Imports and exports increased YoY by $17.9\%$ and $19.3\%$, respectively, in Q2 2011.

### Table I.4 Major Countries’ Economic Growth

<table>
<thead>
<tr>
<th>Country</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>China</td>
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<td>Germany</td>
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<td>France</td>
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<tr>
<td>Greece</td>
<td>2010</td>
<td>2011</td>
<td></td>
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Note: 1) QoQ, Seasonally Adjusted Annual Rate  
2) QoQ, Seasonally Adjusted  
3) YoY

Source: Bloomberg.

### Table I.5 Major Countries’ Unemployment Rates

<table>
<thead>
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<th>Country</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<td>2010</td>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>2010</td>
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<tr>
<td>Eurozone</td>
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<td>2011</td>
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Source: Bloomberg.

### Table I.6 Balance of Payments

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<th>Country</th>
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<th>2010</th>
<th>2011</th>
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Source: BOK.
Korea’s current account surplus recorded USD5.5 billion in Q2 2011, up from USD2.6 billion in Q1 2011. More recently, the current account surplus recorded USD4.2 billion from July to August of 2011.

The goods account surplus recorded USD7.7 billion in Q2 2011 from USD5.8 billion in Q1 2011.

The services account deficit stood at USD0.8 billion in Q2 2011 from USD2.5 billion in Q1 2011. In particular, travel expenses recorded a deficit of USD2.3 billion in Q2 2011.

The income account shifted to a deficit of USD0.8 billion in Q2 2011 from a surplus of USD0.4 billion in Q1 2011. Meanwhile, the current transfers account deficit recorded USD0.6 billion during Q2 2011 from a deficit of USD1.1 billion deficit in Q1 2011.

Exports (customs-cleared basis) rose 18.7% YoY in Q2 2011 from an increase of 29.6% YoY in Q1 2011. Imports increased 27.2% YoY in Q2 2011 from an increase of 26.0% YoY in Q1 2011.

Export volume in most key industries grew significantly, although the growth rates slowed somewhat in Q2 2011. In particular, petrochemicals, automobile parts, machinery, steel, automobiles, textiles, and vessels have continued to expand. Wireless communication equipment also apparently rose 22.7% in Q2 2011 compared to previous quarter. However, home appliances and semiconductors decreased 1.8% & 3.2% YoY in Q2 2011 from an increase of 10.9% & 14.2% YoY in Q1 2011, respectively.

Exports (customs-cleared basis) rose 18.7% YoY in Q2 2011 from an increase of 29.6% YoY in Q1 2011. Imports increased 27.2% YoY in Q2 2011 from an increase of 26.0% YoY in Q1 2011.

Korea’s current account surplus recorded USD5.5 billion in Q2 2011, up from USD2.6 billion in Q1 2011. More recently, the current account surplus recorded USD4.2 billion from July to August of 2011.

The goods account surplus recorded USD7.7 billion in Q2 2011 from USD5.8 billion in Q1 2011.

The services account deficit stood at USD0.8 billion in Q2 2011 from USD2.5 billion in Q1 2011. In particular, travel expenses recorded a deficit of USD2.3 billion in Q2 2011.

The income account shifted to a deficit of USD0.8 billion in Q2 2011 from a surplus of USD0.4 billion in Q1 2011. Meanwhile, the current transfers account deficit recorded USD0.6 billion during Q2 2011 from a deficit of USD1.1 billion deficit in Q1 2011.

Growth rates of Korea’s exports to major trading partners generally increased in Q2 2011 except those to Latin America. Exports to China, Korea’s top overseas market, grew 14.3% YoY in Q2 2011. Exports to ASEAN countries and the US rose 32.7% and 17.6% YoY, respectively, in Q2 2011. In the meantime, shipping abroad to the EU slowed sharply to 2.5% YoY in
Q2 2011, reflecting Europe’s fiscal woes. Exports to the Middle East recorded 10.8% YoY or USD8.4 billion during the same period.

### Potential Growth

The potential growth measured by smoothing (HP-Filtering) real GDP growth rates has been still hovering around 3%. This means real GDP growth can attain 3% without inflation or other adverse effects by fully utilizing its resources. Recently, however, it has increased slightly. This was mainly because real GDP growth has been high since the 2009 on the strength of the world economic recovery.

Potential growth, in a long-term perspective, peaked at 10.8% during 1986 and 1987. Since then, the rate has been in a steady decline. The major factor behind the downward trend is population changes like the low birthrate and a rapidly aging demographic. Births per female in 2000 and 2010 was 1.21 on average, compared to 1.62 in 1987 and 1996. Meanwhile, the birth rate increased in recent years after falling to 1.076 in 2005, but the number of newly-born babies remained unchanged. These factors might lead to a long-run slowdown in input growth. Further, the global financial crisis also harmed potential growth.

### Total Factor Productivity

Growth accounting analysis using the Cobb-Douglas production function with human capital shows that TFP (Total Factor Productivity) made up 1.01% of the 4.58% real GDP growth for the period from 2000 to 2010. It accounts for effects in total output not explained by the amount of inputs used in production. During the period from 2000 to 2010, TFP’s portion of real GDP growth was 22.2% (TFP/GDP growth), lower than the 23.2% for the 10 years from 1987 to 1996 (Table 1.10).
Meanwhile, in 2010, TFP’s contribution turned to positive after two consecutive years of negative figures, as real GDP increased 6.2% in 2010. During 2008 and 2009, the contribution of TFP growth was negative.

Especially, in 2009, it was $\Delta 1.0\%$ of the 0.2% real GDP growth (based on 2005 prices) after comprising $\Delta 0.3\%$ of the 2.3% real GDP growth in 2008. It was because employment in 2009 decreased 0.3% and gross capital formation decreased 15.0%, due to the global financial crisis (Figure 1.15). Decreasing TFP during the global financial crisis indicates that the economy has been less efficient.

R&D intensity (R&D expenditures as a percentage of GDP) which is considered to be one of the most important determinants of TFP growth has been increasing steadily (Figure 1.16). This shows that TFP growth will remain robust as long as R&D is conducted efficiently and effectively.

### Labor Input and Human Capital

From 2000 to 2010, the annual contribution of labor to economic growth averaged 1.04\%, down from 2.11\% between 1987 and 1996 (Table 1.10). This slowdown can largely be attributed to the slower growth of the labor force, or economically active population, over the past decade (Figure 1.17). During this period, the average population growth of those aged 15-64 dipped to 0.58% from 1.67% between 1987 and 1996 (Figure 1.17). Also, labor’s portion of real GDP growth (labor/GDP growth) over the past decade fell to 22.6% from 24.3% for the prior 10 year period.

This indicates that the Korean economy has become less labor-intensive. As the population growth rates decreases, the slowdown in labor is expected to continue for many years to come (Figure 1.17).

The annual contribution of human capital or quality of labor to economic growth averaged 0.55\% from 2000 to 2010, lower than 0.39\% for the 10 years from 1987 to 1996 (Table 1.10). However, the quality of labor, measured in terms of average years of schooling, has
Physical Capital

Slow physical capital growth is the primary factor behind the long-run slowdown in potential economic growth. In recent years, its slowdown has been much more pronounced than that of either labor inputs or human capital (Figure 1.15).

The average annual contribution of physical capital to economic growth from 2000 to 2010 was 1.98%p, 1.64%p off the 3.62%p attained in the 1987 to 1996 period (Table 1.10). Meanwhile, in 2010, equipment investment growth was 25.0%, which may increase future capital accumulation, with the economic recovery and the base effects of 2009.

From a long-run perspective, a slowdown in the rate of capital accumulation usually occurs in a developing country that is coming off several decades of rapid growth. In Korea’s case, the capital-output ratio has been rising steadily, implying that many previous investment opportunities have been drying up (Figure 1.20).
B. Inflation

Kyoobok Lee (leekb@kif.re.kr)

1. Oil and Import Prices

Crude oil Prices

Crude oil prices (including WTI, Brent and Dubai) were volatile in Q3 2011, mainly affected by the global economic & financial market conditions and crude oil supply.

In July, crude oil prices increased as oil products from North Sea was expected to decrease in August because of the maintenance of the major oil fields like Brent, Oseberg and Ekofisk. Also, weak dollar made the oil prices increase. The dollar index, which is a measure of the value of the US dollar relative to a basket of foreign currencies including euro, Japanese yen, pound sterling, Canadian dollar, Swedish krona and Swiss franc, decreased 0.5% at the end of July from June.

Meanwhile, early-August, crude oil prices deceased amid growing concerns over government debt and the likely impact on the global economy, and dubai oil fell to $103.7 a barrel from $116.0 a barrel as of the end of July. On the other hand, from mid-August to early-September, crude oil prices increased from expectations of the US economic stimulation. However, crude oil prices fell again mainly due to the strong dollar and concerns on the global economic slowdown affected by European sovereign debt crisis.

As economic outlook became more uncertain, non-commercial crude oil net purchase also decreased. In Q3, those decreased 29%, or 1.9 million contracts, compared to 2.7 million contracts of Q2 2011.

Consequently, recent Brent and Dubai oil prices were hovering between USD101 and USD105 a barrel and WTI was around $80 a barrel.
Import Prices

Although prices of capital goods decreased 4.7% y.o.y. amid the price of intermediate materials rising by just 5.1% y.o.y. in Q3, import prices of all items (won-denominated) increased by 11.3% y.o.y. during the same periods as import prices of raw materials (won-denominated) increased 25.5% y.o.y..

Among raw materials prices, those for agricultural products, forest product, and mineral fuel increased by 16.3%, 22.7%, and 28.9% y.o.y. respectively from July to September.

On the other hand, US dollar-denominated import prices rose by 21.6% y.o.y. in Q3, which was higher than won-denominated import prices. Raw materials and semi-finished prices denominated in USD each rose by 37.2% and 14.9% y.o.y. Prices of capital and consumer goods also increased by 4.1% and 8.4% y.o.y. during the same period.

These gaps between won-denominated import prices and dollar-denominated import prices were attributed to y.o.y. appreciation of the Korea won (KRW) against the dollar (USD) by 8.2%. The KRW/USD exchange rate averaged KRW1,086 from July to September this year compared to KRW1,183 during the same period in 2010.

Similarly, while US dollar-denominated export prices rose by 11.6% from July to September, those denominated in KRW increased by only 2.1% y.o.y.
2. Domestic Inflation

Consumer prices’ growth exceeding BOK’s inflation target of 2~4% since 2011 increased compared to Q2. Moreover, producer prices’ growth was above 6% since April 2011.

Producer Prices

In Q3 2011, producer prices rose by 6.2% y.o.y., 0.2%p lower than in Q2, as the growth of goods prices decreased to 7.7% from 7.9% in Q2 and those of service prices decreased to 1.9% from 2.2% in Q2. Meanwhile electric power, water & gas supply increased 5.7% y.o.y., compared to 4.6% in Q2 2011.

Specifically, from July and September, prices in agricultural and forest & marine products increased 5.1%, lower than the 6.7% in Q2. Unseasonable weather in July and August raised their prices by 12.3% before falling by 7.1% in September. On the other hand, prices of industrial products rose by 8.1% y.o.y., lower than the 8.2% in Q2, but still high. Among industrial products, prices in petroleum & derivatives increased 22.9% during the same periods mainly due to the increase in the price of crude oil.

Prices in services lagged behind the industrials, increasing by only 1.9% y.o.y.. Prices in the financial services, including brokerage fees and premiums, rose by 3.2%, the prices in professional and scientific & technical services, including architectural design, engineering and fees for CPAs and tax accountants, rose by 3.0% and prices in transportation service increased by 2.8%. Meanwhile, the price of leasing & renting fell by 0.5% y.o.y. and telecommunication service prices decreased by 0.8%.

Consumer Prices

The Consumer Price Index (CPI) rose 4.8% y.o.y. in Q3 2011, higher than the 4.2% increase in Q2 2011.

More specifically, in Q3, consumer prices for agricul-
The increase in CPI for basic necessities rose to 4.6% in Q3 from 4.0% in Q2. Core CPI, excluding food and fuel, also rose to 3.9% in Q3, up 0.4%p from the previous quarter.

On the other hand, in September, CPI growth slowed to 4.3% after rising to 5.3% in August, mainly due to the base effect and the slower rate of increase for agricultural, forestry and fishing products.

**Real Wages**

In Q2 2011, real wages for all industries fell by an average of 2.8% y.o.y. although nominal wages increased 1.4%.

While real wages of the construction and the food & lodging sector rose 12.8%, 10.4% y.o.y. respectively, those in manufacturing and transport fell 3.1%, 3.0% y.o.y., respectively. Moreover, real wages of education services and real estate sectors decreased by 10.7%, 7.8% y.o.y. respectively.
According to a recent IMF forecast, global activity in 2011 was lower than previously expected. The world economy is expected to grow 4.0% in 2011 with advanced economies growing 1.6% and emerging and developing economies 6.4% in 2011. Advanced economies are to slow down noticeably due to Europe’s fiscal crisis and slower-than-expected recovery of the US economy.

The US economy is expected to grow by 1.5% in 2011, lower than 3.0% it did in 2010. Growth could suffer further if the temporary payroll tax cuts and increased unemployment insurance are not extended into 2012. Overall, the speed of recovery is expected to be slow for a considerable period.

The IMF forecasts 9.5% growth for the Chinese economy in 2011, down from 10.3% in 2010. The Chinese economy has shown signs of cooling down somewhat due to the sluggish demand from advanced economies and tightened monetary policy. Nevertheless, the chance of a hard-landing seems to be remote because the Chinese government has strong policy measures to cope with adverse economic shocks and willingness to support the economy, if needed, before the leadership change next year.

The Japanese economy is expected to contract by 0.5% in 2011. Japan is slowly recovering from the March earthquake, but high levels of public debt and upward pressure on its currency is expected to hold back a rapid recovery.

The eurozone is forecast to grow 1.6% in 2011. The ongoing financial instability will be a drag on economic 

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**Table I.12 Economic Outlook for Major Trade Partners**

(Unit: annualized GDP y.o.y. %)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>Projections</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>2011</td>
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<td>Japan</td>
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<td>Euro Area</td>
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</table>

Source: International Monetary Fund, World Economic Outlook (IMF WEO) (Sept. 2011).

**Table I.13 Economic Outlook for Other Countries**

(Unit: %)

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<th>Countries</th>
<th>2010</th>
<th>Projections</th>
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</thead>
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<td></td>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>Emerging and Developing Economies</td>
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<td>Commonwealth of Independent States</td>
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<td>Developing Asia</td>
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<td>Latin America and the Caribbean</td>
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<td>Middle East and North Africa</td>
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<td>Sub-Saharan Africa</td>
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</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>4.5</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Source: IMF WEO (Sept. 2011).
activity through lower consumer and corporate confidence and financing.

In emerging & developing economies, the growth is expected to be 6.4% in 2011. The slowdown in advanced economies will gradually dampen external demand for their exports.

In Korea, the balance of payments is expected to register a current account surplus of USD15.4 billion in 2011, lower than the USD28.2 billion recorded a year earlier. Growth in exports and imports is expected to increase by 20.1% and 24.7% for the year.

2. Economic Growth

Myong-Hwal Lee (mhlee@kif.re.kr)

The Korean economy has continued its growth trend in spite of domestic and external uncertainties. On the production side, manufacturing and services increased by 8.4% and 2.7% YoY in H1 2011. On the expenditure side, private consumption and exports have continued robust growth. Meanwhile, employment conditions also have remained on track for improvement. The number of people employed has continued to increase by around 300~400 thousand persons YoY since October last year, and the unemployment rate declined to 3.4% in Q2 from 4.2% in Q1 2011.

Meanwhile, the upward trend in CCI and CLI has been sluggish as a number of potentially negative domestic and external uncertainties appeared in Q2. The cyclical component of the Composite Coincident Index (CCI), which reflects the current economic situation, remained unchanged from the previous month, registering 100.9 in August 2011. The 12-month smoothed changes in the Composite Leading Index (CLI), which predicts turning points in the business cycle, registered 2.0% in August, same as the previous month.

The global economy has weakened and downside risks are growing. Although the emerging market economies have continued good performances, the recovery in
major advanced economies, including the US and Europe has exhibited signs of further weakening that will put downward pressure on growth. In September 2011, the IMF projected that the global economy will grow by 4.0% in 2011, a drop of 0.3%p from the July forecast.

The risk factors are growing concerns over the global economies that will have adverse effects on the world economic outlook. The possibility of a double dip recession in the US is a cause of the delayed recovery in the global economy. In addition, the contagion of the euro zone’s sovereign debt crisis, which is spreading to Spain and Italy, has resurfaced repeatedly as a risk factor in the global financial markets. Finally, in China, concerns about inflation have set in motion the process of policy tightening that may be bring about a hard landing.

The upward trend in inflation, which recorded 5.3% YoY in August, is the main concern for Korea’s economy. However, the trend of rising prices is expected to slow down after H2 this year due to stabilization in oil prices. Household debt, which is in excess of KRW800 trillion, is one of the serious potential risk factors. The problems surrounding real estate PF loans and mutual savings banks may add to the uncertainties in financial markets. Finally, foreign capital inflows and outflows have been so volatile that of foreign currency liquidity is concerned.

**Gross Domestic Product**

The Korean economy is expected to continue its recovery, but it will probably weaken in H2 2011. Exports, in particular, have contributed considerably to the growth, increasing by 13.0% in H1. However, the upward trend in exports will likely moderate slightly in H2 because the global economy has shown signs of abating while downside risks are growing.

We forecast GDP growth rate at 3.9% YoY this year, a drop of 0.5%p from the August forecast, led by the expansion in export growth and private consumption. Growth is also forecasted to be 3.9% YoY in H2 this year.

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**Table I.15 2011 Macroeconomic Outlook**

(Unit: %, y.o.y.)

<table>
<thead>
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<th></th>
<th>2010</th>
<th>2011</th>
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<tbody>
<tr>
<td></td>
<td>1st half</td>
<td>2nd half</td>
<td>Year</td>
<td>1st half</td>
</tr>
<tr>
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<td>4.5</td>
<td>6.2</td>
<td>3.8</td>
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<tr>
<td>Consumption</td>
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<td>3.2</td>
<td>3.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Private</td>
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<td>4.1</td>
<td>2.9</td>
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<tr>
<td>Investment</td>
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<td>7.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Construction</td>
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<td>△3.0</td>
<td>△1.4</td>
<td>△9.0</td>
</tr>
<tr>
<td>Facilities</td>
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<td>21.0</td>
<td>25.0</td>
<td>9.4</td>
</tr>
<tr>
<td>Exports</td>
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<td>13.7</td>
<td>14.5</td>
<td>13.0</td>
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<tr>
<td>Imports</td>
<td>19.7</td>
<td>14.5</td>
<td>16.9</td>
<td>9.3</td>
</tr>
</tbody>
</table>

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**Figure I.30 Rate of Change in Inventories**

Source: NSO.

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**Figure I.31 Consumption Indices**

Source: NSO.
Private consumption is expected to increase by 2.6% in 2011 and 2.4% in H2 with increase in employment and real wages. However, the declines in real purchasing power and consumer sentiment due to increase in inflation and the growing household debt burden as well as a decrease in stock price due to global fiscal crisis will restrict the increase in private consumption.

Facilities investment is also forecasted to increase by 7.3% in 2011 and 5.4% in H2. However, the recovery trend is expected to be slightly limited because of the downside risk factors in facilities investment, such as global and domestic economic uncertainties and signs of slowdown in global economic growth.

Construction investment, which decreased by 9.0% YoY in H1, is forecasted to decline by 4.4% in 2011 for lack of funding and the non-performance of PF loans. In the H2, it is anticipated to record $0.3\%$ mainly due to SOC investment in the public sector.

### 3. Inflation

Inflation, as measured by changes in the CPI, is forecast to be 4.2% in 2H 2011. Even though it recorded 4.8% in Q3, it is expected to fall to mid $3\%$ level in Q4.

This is mainly because there will be base effect. Oil and raw material prices have increased rapidly since Q4 2010, so on a y.o.y basis the growth rate for oil and raw material prices will likely fall. Furthermore, prices for agricultural and forest & marine products are expected to stabilize, notwithstanding any unexpected unseasonal weather.

However, the slowdown in inflation will be limited because the second-round effect on inflation was led with businesses passing on higher costs and KRW might depreciate against the USD if uncertainty over the global economy persists.
For the remainder of the year the Bank of Korea is expected to leave the base rate unchanged due to heightened risks in the European fiscal crisis. The Korean Won is expected to hover at the current level of 1,100 amid higher volatility and we forecast an annual average of 1,111 in 2011. In the stock market, both downside and upside risks co-exist, and therefore we expect range trading until the year end. Growth opportunities for Korean banks are expected to show a steady increase in Q3 2011. Improvements in economic conditions and banks’ efforts to expand loans will offer a better chance for growth. In Q4 2011, both the assets and profitability of securities firms are expected to decrease owing to uncertainty. Growth in total assets and premium income of both the life and non-life insurance companies will continue in Q3, while uncertainties in the financial markets will limit any significant increase.

A. Asset Prices

1. Recent Trends

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Interest Rates

In Q3 2011, money market rates were hovered as the Bank of Korea has maintained the base rate at 3.25% since June 2011. In July, it was expected that the BOK would raise the base rates to respond to the inflationary pressures and the run-up in international commodity prices. But the rate remained unchanged as concerns over the global economic slowdown was increasing and international financial markets uncertainty deepening. Hence the short-term market rates, which are influenced by the base rate, also remained largely unchanged.

Consequently, in mid-October, the 91-day CD rates and the 91-day CP rates hovered around 3.58% and 3.71% respectively.

On the other hand, long-term market interest rates, influenced by both the upward adjustment in the base rate and external risks, fell markedly since August. External risks, such as sovereign debt concerns in the
As a result, 3-yr treasury bond yields, which peaked at 3.85% at the beginning of August decreased to 3.31% in mid-September. It rose recently above 3.4%.

Corporate bond yields moved in tandem with treasury yields. After corporate bond yields for AA- 3yr paper increased to 4.59% in the beginning of August before falling to 4.1% on September 14, 2011. It rose recently over 4.2%. Consequently, the credit spreads on corporate bonds sustained the level of 70~80bps over treasuries.

**Exchange Rates**

In Q3 2011, the Korean currency (KRW) depreciated ∆8.6% against the US dollar (USD) from the end of Q2 2011. The depreciation of the KRW was mainly due to eurozone fiscal crisis. The turbulence in the international financial markets has made foreign investors more risk averse and gave cause to withdraw from emerging markets like Korea. Consequently, the KRW/USD exchange rate stood at KRW1,179.5 at the end of September 2011.

The EUR fell by ∆6.2% to USD1.3576 at the end of Q3 from USD1.4474 at the end of Q2 2011. The depreciation reflected the anxiety about eurozone fiscal crisis. Concerns about increased default risk of Greece sovereign debt, downgrading of Italy’s credit rate, and rumors about liquidity shortage of French banks were among those that pushed the value of the EUR lower.

The JPY appreciated 5.2% to USD76.76 by the end of Q3 from USD80.72 at the end of Q2 2011. Despite the downgrade of Japanese sovereign debt by Moody’s, the JPY against the USD appreciated mainly due to heightened safe-haven demand in the volatile global financial markets.
The Korea Composite Index (KOSPI) ended Q3 2011 at 1,770 points, down 331 points from the end of the previous quarter. In July, the KOSPI continued the upward trend from the last quarter climbing 2,181 points on the 7th. But in early August the KOSPI plunged reacting to the news of worse than expected US economic indicators and of the downgrade of the US sovereign credit rating by Standard & Poors. Since then fears about the global economic recession stemming from a stagnant US growth and about the fiscal crisis in the euro zone continued putting downward pressure on the KOSPI. The KOSPI fell to 1,653 points on September 26 as the Federal Open Market Committee (FOMC) result and the downgrade of credit ratings of some global banks caught the market by surprise.

In Q4 2011, the KOSPI is forecasted to have balanced upside and downside risks. But uncertainty surrounding the euro zone and the execution of ‘Operation Twist’ by the Federal Reserve would bring about volatility in the stock market.

Foreign investors sold a net of KRW4,544 billion in equities in Q3 2011. In July, foreign investors purchased equities expecting the fiscal crisis in the euro zone to moderate. But with concerns over the global economic recession and the fiscal crisis in the euro zone resurfacing, foreign investors turned net sellers of equities in August. On the other hand, domestic institutional investors purchased a net of KRW4,395 billion as pension funds raised their net buying extensively in August. Retail investors made a net purchase of KRW149 billion in equities in the quarter.

Equity issuances in the KOSPI and KOSDAQ during the first two months of Q3 amounted to KRW239 billion on a monthly average basis, down 81% from the previous quarter (Table III.2). This resulted from sea-
sonal causes such as semiannual settlement and from deferring IPO’s due to global financial market instability.

2. Outlook for 2011

Interest Rates

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The Bank of Korea is expected to leave the base rate unchanged until the end of 2011.

Market rates are therefore expected to be stable around the current level (Treasury yields: mid 3%, corporate bond yields rated AA-: around 4.3%). In this case, Treasury yields for 3-yr notes and 3-yr corporate bond yields rated AA- are expected to record to be in the 3.5% and 4.3% range in H2 2011.

Exchange Rate

Sungwook Park (swpark@kif.re.kr)

In 2011, the KRW/USD exchange rate is expected to average KRW1,111 from KRW1,156 in 2010. Throughout the remaining period of 2011, the KRW/USD is expected to hover at a somewhat elevated level with high volatility. This is because of strong risk aversion, which has led to large sell-offs of emerging market assets in the international financial markets, does not look like it will disappear easily until the euro-zone finalizes plans to address the fiscal crisis.

Stock Prices

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In Q4 2011, the downside risks for Korean equities include a global economic recession and the fallout from the debt crisis in the euro zone. Furthermore, risk appetite would likely decrease from the increasing financial market volatility and worries about further
sell-off by foreign investors.

The upside risks, however, are expected to balance out the downside risks. The euro zone is pushing ahead with increasing the scale of the European Financial Stability Facility (EFSF) which could support Greece and other ailing countries. And various asset prices might increase owing to central banks’ quantitative easing such as ‘Operation twist.’ As a result, the KOSPI in Q4 is expected to hold steady around its present level.

B. Money and Credit

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In July and August, the low rate of growth in the money supply continued mainly as a result of the tight-money policy. While the average growth rate of M2, or broad money in July and August, increased to 3.6% y.o.y., 0.1%p higher than the second quarter, those of reserve base and M1 fell to 11.5%, 4.6% respectively.

Monetary Aggregates

The average reserve base increased by 11.5% y.o.y. between July and August, lower than the 11.8% in Q2. This was mainly because growth in new bank notes & coins fell to 15.3% during the two month period, lower than the 17.5% Q2. Also, BOK’s liabilities to depository institutions increased 8.1% in July and August 2011, 1.2%p higher than in Q2 2011.

The amount of outstanding Monetary Stabilization Bonds (MSBs), used to measure and monitor market liquidity, increased slightly to KRW169.9 trillion won at the end of August 2011, up KRW2.9 trillion from the end of June 2011. But monthly average issuance in MSBs decreased to KRW1.7 trillion between July and August from KRW2.0 trillion in Q2 2011.

In the July and August, the M2 growth, which was...
3.5% in Q2, was 3.6% as the flow of funds from overseas fell. With continued deficits in the capital account, the current account during July and August of 2011 decreased by USD2.259 billion compared to the same period in 2010. From July to August, the average outstanding CD decreased by 43.8%, or KRW24.0 trillion y.o.y., after falling by 53.3% in Q2 2011. Also, that of MMF decreased by 31.2% during the same period. Meanwhile, beneficial certificates increased by 2.3% compared to \( \triangle 5.1 \) in Q2.

Savings deposits’ average outstanding (under 2-yr maturity) increased by 11.0%, or KRW82.5 trillion y.o.y. leading M2 growth in July and August.

On the other hand, in only August, M2 increased by 4.0% mainly because of bank lending growth rose.

The averaged growth of Lf (liquidity aggregates of financial institutions, previously M3) increased to 5.1% in July and August, from 4.3% in Q2 2011.

### Business and Household Credit

Total depository banks’ corporate lending at the end of September 2011 was KRW553.6 trillion, which was made up of KRW444.9 trillion in small- and medium-sized enterprise (SME) loans and KRW108.7 trillion in large enterprise (LE) loans.

Total depository banks’ corporate lending increased KRW13.8 trillion in Q3. Lending to LEs increased by KRW9.2 trillion as banks met greater demand for working capital and lower lending rates with efforts to expand their lending to LEs. Lending to SMEs also increased by KRW4.6 trillion from KRW2.9 trillion in Q2. On the other hand, in August, lending to SMEs increased by only KRW0.1 trillion as loans were repaid at the start of August.

In Q3, household lending increased by KRW5.5 trillion, lower than the KRW4.3 trillion won increase in Q2 as the banks reined in lending in accordance with the government policy to the effect.

### Table II.3 Q.o.Q Changes in Bank Loans

<table>
<thead>
<tr>
<th>(Unit: tril. won)</th>
<th>1Q</th>
<th>2Q</th>
<th>3Q</th>
<th>Jul.</th>
<th>Aug.</th>
<th>Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Loans</td>
<td>12.6</td>
<td>10.1</td>
<td>13.8</td>
<td>5.9</td>
<td>3.1</td>
<td>4.8</td>
</tr>
<tr>
<td>(LEs)</td>
<td>5.0</td>
<td>7.2</td>
<td>8.2</td>
<td>3.2</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>(SMEs)</td>
<td>7.7</td>
<td>2.9</td>
<td>4.6</td>
<td>2.8</td>
<td>0.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Household Loans</td>
<td>3.0</td>
<td>9.1</td>
<td>5.5</td>
<td>2.3</td>
<td>2.5</td>
<td>0.6</td>
</tr>
<tr>
<td>(Mortgage)</td>
<td>4.7</td>
<td>6.1</td>
<td>4.3</td>
<td>1.9</td>
<td>1.2</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Note: 1) Includes mortgage loans.  
2) Monthly data is over the previous month.  
Source: BOK.

### Table II.4 Corporate Direct Financing

<table>
<thead>
<tr>
<th>(Unit: tril. won)</th>
<th>1Q</th>
<th>2Q</th>
<th>3Q</th>
<th>Jul.</th>
<th>Aug.</th>
<th>Sep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock issuance(^{\text{b}})</td>
<td>3.3</td>
<td>3.4</td>
<td>0.6</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Net issuance of CP(^{\text{c}})</td>
<td>1.2</td>
<td>(\triangle 2.2)</td>
<td>6.3</td>
<td>3.6</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Net issuance of corporate bonds</td>
<td>4.1</td>
<td>5.1</td>
<td>4.8</td>
<td>1.0</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>8.5</td>
<td>6.3</td>
<td>11.6</td>
<td>5.0</td>
<td>3.3</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Note: 1) Excludes financial institutions.  
2) KOSPI and KOSDAQ.  
3) Based on securities companies and merchant banking accounts at banks.  
Source: BOK.
Corporate direct financing increased by KRW11.6 trillion in Q3 2011, compared to KRW6.3 trillion in Q2. More specifically, corporate bond issuance through public offerings increased by KRW4.8 trillion in Q3, less than that in Q2, but still large. Net CP issuance increased by KRW6.3 trillion mainly due to demand for working capital.

Meanwhile, financing through the stock the market increasing by only KRW0.6 trillion in Q3 as the KOSPI declined.

Beneficiary certificates at investment trust management companies (ITMCs) increased except for bond-types during Q3 2011. Deposits in equity-type investment funds increased by KRW2.4 trillion during the quarter. Also new-type and bond-equity-type deposits increased by KRW3.7 trillion won and KRW0.6 trillion respectively during the quarter. But bond-type investments decreased by KRW1.1 trillion.

**Outlook for 2011**

In Q4 2011, corporate bank lending and household bank lending will not rise much because of increasing global uncertainties and strengthening of government regulations. Banks are therefore expected to focus on improving their risk management instead of increasing asset growth.
C. Financial Industries

1. Banking Industry

Hyoungsik Noh (hsnoh@kif.re.kr)

Asset Growth

The Korean banks’ assets decreased slightly to KRW1,913 trillion during Q2 2011, down 0.4% from the previous quarter. Yet, this is up 1.8% from a year ago. While banking accounts stayed nearly flat, trust accounts decreased by 3.6% over the previous quarter. In banking accounts, cash and due from banks and securities decreased by KRW3.5 trillion and KRW9.0 trillion whereas loans and discounts increased by KRW13.9 trillion. Trust accounts that had showed a steady growth since Q1 2009 decreased as a result of decreases in repos, loans and discounts, and bond accounts.

Total loans by Korean banks were KRW982.5 trillion, a 1.9% increase from the previous quarter, the highest quarterly growth since Q3 2008. This pick up was mainly driven by an increase in household loans by KRW9.1 trillion. Mortgage loans showed a steady increase, up 1.9% from the previous quarter thanks to ongoing low level of interest rates and banks’ efforts to expand their mortgage lending. Other loans, including via overdraft accounts, also rose to KRW147.8 trillion reflecting seasonal factors. Corporate loans increased 1.8% from the previous quarter driven by bank loans to large enterprises, which hit KRW99.6 trillion, up by 7.9% from the previous quarter. SME loans showed a slow increase of KRW2.4 trillion, up by 0.5%. This was primarily the result of domestic banks’ efforts to increase lending to large enterprises and high demand of short-term working capital. Slow growth in SME loans is attributable to banks’ writing off bad debts and repayments of loans out for SMEs’ settlement funds.

Figure 2.10 Assets of Korean Banks (Unit: tril. won)

Note: 1) End of period.
Source: FSS.
Profitability

In Q2 2011, Korean banks achieved KRW5.9 trillion in net income based on K-IFRS, up markedly by 31.3% from the previous quarter. This huge jump is more vivid when compared to the figure a year ago of KRW1.3 trillion. The strong growth was driven by a hike in non-interest income. Especially, a one-off gain of KRW3.2 trillion from the sale of shares in Hyundai Engineering and Construction was the primary factor of the increase in profitability. Out of net income, KRW0.5 trillion will be reserved for loan loss aiming at mitigating the decline in loan loss provisions under K-IFRS. Considering loan loss reserve, which make up for additional loan loss provisions under K-IFRS, it is not easy to see that there was a significant improvement in profitability of domestic banks.

Despite a slight decline in NIM, interest income managed to grow by KRW0.1 trillion hitting KRW9.8 trillion as a result of a big increase in interest bearing assets. However, interest income’s share in total income (the sum of non-interest income and interest income) decreased to 67.6%, down from 81.5% in the previous quarter.

Non-interest income increased significantly to KRW4.7 trillion, up 147.4% from a year earlier or up 113.6% over the previous quarter.

Korean banks’ loan loss provisions increased to KRW2.6 trillion, up by KRW0.2 trillion from the previous quarter or down by KRW3.4 trillion over a year ago.

Soundness and Capital Adequacy

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Korean banks’ loan loss provisions increased to KRW2.6 trillion, up by KRW0.2 trillion from the previous quarter or down by KRW3.4 trillion over a year ago.

Soundness and Capital Adequacy

The asset soundness of Korean banks greatly improved as the NPL ratio eased to 1.73%, down by 0.27%p over the previous quarter, thanks to aggressive leveling down of bad debts. This is the record low since real estate PF loans had emerged as a serious problem in Q2 2010. While new bad debts increased to KRW6.2 trillion, cleaning up of bad debts through write-offs and
The sales of NPL to PF Normalization Bank led to a decrease in NPL by KRW3.2 trillion over the previous quarter.

Korean banks’ ability to absorb loan losses expressed in NPL coverage ratio recovered to 118.0% from the figure of 107.6% in the previous quarter.

The BIS capital adequacy ratio of Korean banks in Q2 2011 was 14.40%, up 0.08%p over the previous quarter or up 0.11%p from a year earlier. The Tier 1 ratio climbed to 12.08%, up 0.82%p over the previous quarter or up 0.75%p from a year earlier, which is more pronounced that the BIS ratio. While Tier 1 capital increased by KRW4.3 trillion, non-qualified supplementary capital among subordinated debts increased by KRW2.6 trillion resulting in a mere increase of KRW1.3 trillion in BIS capital. The quality of capital improved due to the relatively fast growth in Tier 1 capital.

**Outlook**

Growth opportunities for Korean banks are expected to lie in cash and due from banks and loans in Q4 2011. It seems that an inflow of savings deposits from mutual saving banks will continue for a while because of the possibility of additional restructuring as well as an air of anxiety about troubled mutual saving banks.

In Q4 2011, corporate loans are expected to grow slightly owing to bank’s efforts to expand loans and demand of working capital. Household loans are expected to slow down due to the enhancement of the regulation to household debt level.

Interest income is expected to show a slight recovery due to a rise in NIM. Non-interest income is expected to scale down because of little chance of capital gains from equity sales and good chance of devaluation in securities under the current global financial woes. Funding costs have a room for improvement through the inflow of market funds.
Despite the worries about growth of new NPLs, it is expected that Korean banks will manage to maintain asset soundness in Q4 2011 through the preemptive recognition of latent distress in the weakest areas and efforts of leveling down of bad debts. It is still necessary to be proactive in managing soundness of SME loans under the slow pace of economic growth and sedate real estate markets.

The capital adequacy of Korean banks is expected to deteriorate slightly. Relatively faster growth in risk-weighted assets than Tier 1 capital is expected to put capital adequacy ratio under pressure. This pressure can be mitigated by a reduction of bad debts.
2. Non-Banking Financial Institutions

Credit Card Companies

During the second quarter of 2011, the total assets of credit card companies increased 3.8% to 76.4 trillion won, up from 73.6 trillion won in the previous quarter (Figure 2.14). Card assets, which comprise the largest portion of total assets, increased by 1.1% to 57.6 trillion won q.o.q. from receivables on credit card lump sum sales and receivables on credit card installment sales. The outstanding balance of loan & factoring increased from 2.9 trillion to 4.1 trillion won. Because of the decrease in operating lease assets and increased installment financing assets for machinery, lease & installment assets stayed flat at 2.8 trillion won. An increase in cash and cash equivalents led to an increase of current & fixed assets of 7.5% to 8.6 trillion from 8.0 trillion won.

Total net income in Q2 2011 soared 3.5% to 534.6 billion won from 516.3 billion won q.o.q. (Figure 2.15). Because loan loss provisions regulations were strengthened, total net income decreased compared to those of Q4 2010. Shinhan Card recorded net profits of 192.7 billion won as the most profitable credit card company, which was down 22.7% from 249.3 billion won q.o.q. Samsung Card registered profits of 111.0 billion won, which was up from 101.9 billion won q.o.q. The net income of Kookmin Card, recent spun off from the bank, realized 68.2 billion won.

There was a decrease in the adjusted average capital ratio, which decreased from the previous quarter’s 26.7% to 26.6% (Table 2.7). This decrease was due to the increase of adjusted total asset caused by competitive sales expansion. Thanks to the continuing increase in debt repayment ability of the households, the combined delinquency ratio of credit card companies decreased during 29 months. But in Q2 2011, delinquency ratio slightly worsened. Meanwhile, the sub-
standard & below loan (SBL) ratio stood at 1.1%, 0.1%p lower than in the previous quarter. ROA and ROE declined 0.4%p and 1.6%p, respectively.

Credit card companies need to keep their existing customers due to the competition with the recently spun off credit card companies from banks. As financial authority has strengthened the regulations on financial indicators such as asset growth rate and total marketing costs, their asset growth is expected to shrink.

**Credit Finance Companies Other than Credit Card Companies**

During Q2 2011, total assets of credit finance companies increased 1.0% to 72.7 trillion from 72.0 trillion won in the preceding quarter (Table II.8). Total assets maintained growth since Q3 2009. The total assets of leasing companies and installment financing companies grew 2.7% to 26.3 trillion won and 1.5% to 41.6 trillion won, respectively. The total assets of venture capital companies decreased by 9.3% to 4.9 trillion won due to a decrease of corporate investments. Total durables installment assets in credit finance companies increased by 1.3% to 11.6 trillion won (Figure II.16). As there was an increase in new car purchases, increased new auto capital was the main factor of the durables installment assets growth. Because of a decrease in the sales growth of foreign cars, the operating lease assets reduced to 7.0 trillion won (Figure II.16). As housing trades increased from 320 thousand houses to 330 thousand houses, the house installment assets increased 16.0% to 1.1 trillion won.

The net income of credit finance companies was 418.5 billion won, an increase of 8.2% q.o.q. from 386.9 billion won (Table II.9). The total net income of installment companies went up 279.9 billion won from 233.9 billion won, while the net income of leasing companies decreased to 111.9 billion won from 137.3 billion won.

Owing to a net income surplus, the ROA of most credit finance companies increased. Meanwhile, the SBL ratio of credit financing companies declined. Espe-
cially, since the ratio of the venture capital companies indicated 4.0% in Q4 2008, the ratio recorded the lowest at 3.7%. Meanwhile, except for the venture capital companies, the capital adequacy ratio of credit finance companies slightly improved.

The increase in the competitive pressure by credit cards purchase of car and durable goods is increasing operating costs. Due to European recession, the growth of the Venture capital companies is expected to atrophy.

**Mutual Savings Banks (MSBs)**

In the second half of FY2010 (2011.1.1~6.30), decreased loans led the decline in total assets although call loans and cash increased significantly. Mutual savings bank (MSB) failures were also a large factor of decreasing total assets of MSB. Total MSB assets fell 11.5% to stand at 76.9 trillion won. As MSB business suspensions were imposed, deposit account holders withdrew funds, bringing deposits down by 7.4% to 71.1 trillion won. Loans decreased by 9.9% to 58.3 trillion won for this period (Figure 1.17). Because of the discontinued new project financing loans and quickly increased loan loss provisions were main factor of decrease of loans assets.

During the second half of FY2010, the net income of MSBs recorded a deficit of 53,157 billion, which was due to the net operating income deficit of the suspended savings banks. Especially 68 MSBs out of 104 MSBs recorded deficits. As the net income of MSBs indicated a deficit, ROA was $\triangle 6.7\%$. Since indicating at $\triangle 31.97\%$ during the second half of FY2001, it showed the worst figures. In addition, the SBL ratio, which shows the asset soundness of MSBs, worsened from 10.8% to 26.6% over H2 FY2010. This deterioration was due to increased SBL PF loans. Meanwhile, the BIS capital adequacy ratio of MSBs indicated 1.1%. 22 savings banks were recorded minus BIS capital ratio.

In H1 FY2011, due to strengthened regulatory standards on loan soundness by Financial Supervisory Service (FSS), MSBs will be expected to increase the proportion of safer-asset investment rather than realestate-

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### Table 1.10 Financial Indicators of MSBs

(Unit: bil. won, %)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>$\triangle 2.06%$</td>
<td>1.343</td>
<td>$\triangle 10.26%$</td>
<td>$\triangle 6.01%$</td>
<td>$\triangle 53.157%$</td>
</tr>
<tr>
<td>ROA</td>
<td>$\triangle 0.1%$</td>
<td>0.2</td>
<td>$\triangle 0.9%$</td>
<td>$\triangle 0.7%$</td>
<td>$\triangle 6.7%$</td>
</tr>
<tr>
<td>BIS Capital Ratio</td>
<td>9.4</td>
<td>9.3</td>
<td>9.0</td>
<td>9.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Substandard &amp; Below Loans Ratio</td>
<td>10.3</td>
<td>9.3</td>
<td>10.6</td>
<td>10.8</td>
<td>26.6</td>
</tr>
</tbody>
</table>

Note: Net income is calculated biannually.

Source: FSS.
related loans. To strengthen their competitiveness, MSBs will need to enhance their profitability. Because the restructuring of the MSB industry is now in progress, MSBs will have to raise capital by issuing stocks to expand capital adequacy. In spite of high interest rates, deposits of MSBs will continue to decrease because of reduced reliability.

**Mutual Credits (MCs)**

This category includes agricultural cooperatives (ACs), fisheries cooperatives (FICs), forestry cooperatives (FOCs) and credit unions (CUs). During Q2 2011, the total assets of mutual credit institutions (MCs) increased slightly by 1.3% q.o.q. to stand at 314.9 trillion won (Table II.11). Total deposits rose by 1.1% to 258.7 trillion won from 256.0 trillion won. Because of the increased tax-free savings limits and balloon effect of mutual savings banks failures, the upward trend in deposits continued over time. Total credits rose about 3.7% from 186.2 trillion won to 189.9 trillion won. Since Q4 2010, loans increased more rapidly than deposits, so the ratio of credits to deposits increased over Q2 2011.

Because of increased operating revenues from loans to retail borrowers, mutual credit institutions registered positive net income (Table II.12). The total combined net income of MCs was 827.7 billion won in Q2 2011. In the previous quarter, FOC income indicated a deficit of 18.0 billion won. But this quarter, the income inverted to positive direction. Furthermore, CUs, ACs and FICs registered a net income of 145.5 billion won, 613.0 billion won and 36.4 billion won, respectively. Except for ACs, MCs ROA was improved. The ratio of ACs declined slightly to 0.2%p, while the ROA of FOCs increased to 0.7% from △1.6%. Loan soundness improved partially. With the exception of ACs which stood at the same level, delinquency ratio of most MCs increased. Especially, FICs rearranged insolvent obligations in Q2 2011. Also, the SBL ratio of ACs and FICs fell by 0.1%p to 1.9%, and by 0.2%p to 3.5%. Most of the MCs loan-loss reserve ratio increased. However FICs loan-loss reserve ratio deteriorated slightly. MCs

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**Table II.11 Total Assets & Ratio of Credits to Deposits at Mutual Credits**

(Unit: tril. won, %)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2Q 3Q 4Q 1Q 2Q</td>
<td>2Q 3Q 4Q 1Q 2Q</td>
</tr>
<tr>
<td>Total Assets</td>
<td>294.5 300.1 310.5 310.8 314.9</td>
<td>314.9</td>
</tr>
<tr>
<td>Credits</td>
<td>178.0 181.3 194.9 186.2 189.9</td>
<td>194.9</td>
</tr>
<tr>
<td>Deposits</td>
<td>242.2 246.6 254.3 256.0 258.7</td>
<td>258.7</td>
</tr>
<tr>
<td>Ratio of Credits to Deposits</td>
<td>73.5 73.5 72.7 72.8 73.4</td>
<td>73.4</td>
</tr>
</tbody>
</table>

Source: FSS.

**Table II.12 Financial Indicators of Mutual Credits**

(Unit: bil. won, %)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3Q 4Q 1Q 2Q</td>
<td>2Q 3Q 4Q 1Q 2Q</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>112.3 37.7 116.3 145.5</td>
<td>145.5</td>
</tr>
<tr>
<td>Agricultural</td>
<td>437.4 △241.3 820.2 613.0</td>
<td>613.0</td>
</tr>
<tr>
<td>Fisheries</td>
<td>15.8 39.6 11.8 36.4</td>
<td>36.4</td>
</tr>
<tr>
<td>Forestry</td>
<td>9.3 12.4 △18.0 32.7</td>
<td>32.7</td>
</tr>
<tr>
<td>Total</td>
<td>574.8 △151.6 930.2 827.7</td>
<td>827.7</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>0.9 0.8 1.0 1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Agricultural</td>
<td>1.0 0.6 1.4 1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Fisheries</td>
<td>0.6 0.7 0.3 0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Forestry</td>
<td>1.1 1.1 △1.6 0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>ROA</td>
<td>7.3 6.5 7.0 6.8</td>
<td>6.8</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>3.8 3.1 3.6 3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Agricultural</td>
<td>6.7 5.6 5.8 5.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Fisheries</td>
<td>7.7 6.3 7.4 7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Delinquency ratio</td>
<td>4.0 3.7 3.7 3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>2.0 2.0 2.0 1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Agricultural</td>
<td>3.7 3.3 3.7 3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Fisheries</td>
<td>3.5 3.2 3.7 3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Substandard &amp; below loans ratio</td>
<td>130.8 106.2 106.3 106.4</td>
<td>106.4</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>163.0 180.9 172.5 173.3</td>
<td>173.3</td>
</tr>
<tr>
<td>Agricultural</td>
<td>122.1 129.6 130.7 125.9</td>
<td>125.9</td>
</tr>
<tr>
<td>Fisheries</td>
<td>110.8 112.7 112.8 114.9</td>
<td>114.9</td>
</tr>
<tr>
<td>Loan-loss reserve ratio</td>
<td>3.5 3.4 3.4 3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>7.9 8.0 8.1 8.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Agricultural</td>
<td>2.2 2.4 2.1 2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Fisheries</td>
<td>11.3 11.3 10.8 11.4</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Notes: 1) Loan-loss reserve ratio is the ratio of reserved allowances for the credit losses of mutual credits relative to the minimum required allowances for the credit losses.
2) Net income is calculated quarterly.

Source: FSS.
faced developed capital adequacy compared with the previous quarter.

Due to the balloon effect of savings banks restructuring, new deposit accounts will increase consistently. So MCs asset growth and profitability will improve. However, in case of a rise in the base rate of interest, there is the potential of insolvent risk from existing household loans.

3. Securities Industry

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Assets

Securities firms’ assets increased by 23.1% to KRW248 trillion during Q2, up from KRW201.6 trillion a year earlier (Figure Ⅱ.18). This was mainly attributable to the increase in receivables by KRW27.1 trillion won.

The ratio of securities firms’ asset size to commercial banks’ asset size increased by 3.8%p, up from 17.1% during the same quarter last year. While commercial banks’ asset size increased by 0.7%p, securities firms’ asset size increased significantly over the same period. This is because the asset size of commercial banks has remained stable after the global financial crisis. The HHI (market concentration index) of securities firms was only 392, significantly lower than that of commercial banks at 1,479. This indicates that market share is not concentrated in a few securities companies.

Profitability

In Q2 2011, securities firms’ profits increased by 65.9% over the same period last year to KRW992 billion (Figure Ⅱ.19). Brokerage commissions increased due to the increased trading volume while fees from asset management services increased significantly due to the increased investments in wrap accounts. Gains from securities holdings also increased as stock prices rose from the market rally.
Capital Adequacy

The net capital ratio (net capital over total risk, an indicator of the capital adequacy of securities companies) fell 42%p from 556% at the end of Q1 2011 to 514% at the end of Q2 2011 (Figure 20). Total risk increased by 3.4% from the last quarter, while net operating capital decreased by 4.2% over the same period.

As securities firms expanded their bond holdings, risks related to interest rates increased. There have been ups and downs in the ratio over last a few years. However, it does not indicate that securities firms increased their investment banking businesses actively. They are exposed mainly to market risks from holding securities. As market indicators, such as stock price and interest rates, move their total risk have ups and downs. Although the ratio decreased in Q2 2011, it is still well above the FSC’s recommended level of 150%.

Outlook

In Q4 2011, the assets of securities firms are expected to decrease. The debt crisis in the euro zone will intensify uncertainty on the financial markets. In addition, uncertainty over a possible rebound in the U.S. economy still lingers. Investors are likely to prefer safe assets until the uncertainties become more manageable.

Profitability is expected to decrease as fees related to asset management services will be pushed down to relieve investors’ costs. If the external factors, such as the debt crisis in eurozone and uncertainty over the economic rebound in the U.S., worsen brokerage commissions will also decrease. Unless they can develop new financial instruments with stable returns, profits will deteriorate.

Capital adequacy is expected to deteriorate due to volatile financial markets. However, it will remain within a sound level. Since the net capital ratio is still over 500%, securities firms have cushion to absorb the negative impact from the world financial markets.

| Table 2.13 Total Value of Stock Trading & Commission Income (Unit: tril. won) |
|-----------------------------|-----------------------------|
|                            | 10.2Q(4–6) | 11.2Q(4–6) |
| Total Value of Trading     | 350         | 477         |
| Commission Income          | 1.91        | 2.15        |

Source: FSS, KRX.

Figure 20 Net Capital Ratio of Securities Companies

(Unit: %)

Source: FSS.
4. Insurance Industry

At the end of Q1 FY2011, the total assets of life insurance industry amounted KRW425 trillion, a 2.0% increase over the previous quarter mainly due to continued increase in the inflow of premium income and increase in appraised value of securities invested. Premium income was KRW19.5 trillion, up 1.4% y.o.y. This upward trend of both total assets and premium income seems to have persisted into Q2 FY2011 as well. Meanwhile, total claims paid by life insurers increased 12.3% y.o.y. to KRW12.7 billion (Table II.14).

The respective percentages of premium income from death insurance, pure endowment insurance, endowment insurance, and group insurance were 50.4%, 28.9%, 19.3%, and 1.4% (Figure II.21). The share of endowment insurance increased 1.8%p while pure endowment insurance, death insurance, group insurance decreased 0.3%p, 1.5%p, and 0.1%p respectively y.o.y. The share of premium income from endowment insurance continued to trend higher, thanks to its relative competitiveness to other savings type financial products under a low interest rate trend environment and the continued slowdown in the real estate market. The proportion of premium income of pure endowment insurance decreased although its premium income rose by 1.5%p thanks to steady demand for after-retirement products. The share of death insurance fell slightly in spite of an increase in demand for whole life insurance. Meanwhile, the proportion of group insurance continued to trend lower.

As of Q1 FY2011, the market share of top three life insurers, small & medium-sized life insurers, and foreign life insurers were 50.4%, 27.7%, and 21.9% respectively. The market share of the top three life insurers declined again, by 1.9%p, mainly due to somewhat poor performance in sales of death insurance. The
market share of small & medium-sized life insurers increased by 2.1%p y.o.y.

While the market share of foreign life insurers recently has been stagnating somewhat, it has been known that some of foreign life insurers are looking to expand.

At the end of Q1 FY2011 the total operating profits of the life insurance industry was KRW7.7 trillion, up 5.3% over the same period last year. Underwriting profits increased 9.8% y.o.y. to KRW3.5 trillion, while investment profits showed a 1.8% rise to KRW4.2 trillion. The growth in underwriting profits occurred mainly due to an increase of 0.5% in operating revenue and a fall of 2.3% in operating cost y.o.y. On the investment side, while operating revenue increased 2.7%p y.o.y thanks to the increase in interest income and profits on disposals of marketable securities, operating cost showed stronger growth (6.7%p). Meanwhile, at the end of Q1 FY2011, the net profits of life insurance industry reached KRW1.09 trillion.

Non-Life Insurance

As of the end of June 2011, total assets of the non-life insurance industry was KRW112.9 trillion, a 10.4% increase over the end of the previous quarter. This was mainly driven by the continued increase in an inflow of written premiums, investment returns on assets, and improvement in loss ration of automobile insurance. Written premiums during Q1 FY2011 were up 14.0% y.o.y. to KRW13.4 trillion, which is attributed to continued growth in sales of long-term non-life insurance and individual pension insurance. Total claims paid by non-life insurers increased 21.0% y.o.y. to KRW5.1 trillion while total management expenses decreased 3.0% y.o.y. to KRW2.4 trillion (Table II.15).

As shown in Figure II.24, the market share of long-term non-life insurance, automobile insurance, special type insurance, individual pension insurance, guarantee insurance, marine insurance, and special type insurance, personal pension insurance, guarantee insurance, marine insurance, and fire insurance accounted for,
respectively, were 57.3%, 23.9%, 8.2%, 5.7%, 2.6%, 1.8%, and 0.6% of total premiums. Compared to the same period last year, the share of long-term non-life insurance and personal pension insurance increased 0.6%p and 1.0%p while the share of automobile insurance, special type insurance, guarantee insurance, and fire insurance decreased 1.1%p, 0.3%p, 0.1%p, and 0.1%p respectively y.o.y. The share of automobile insurance decreased although its written premiums grew from stronger growth in the sales of long-term non-life insurance. The proportion of long-term non-life insurance continued trending higher thanks to continued growth in sales of savings-type insurances and steady demand for property, casualty, and illness insurance.

As of the end of June 2011, the top five non-life insurers still dominated the non-life insurance market (77.7%), rising 1.4%p y.o.y., which is mainly driven by continued growth of both long-term non-life insurance and individual pension insurance. The market share of SME non-life insurers dropped by 1.1%p y.o.y to 19.5% while those of foreign non-life insurers went up 0.3%p y.o.y to 2.8%. In particular, the growth rate of written premiums for SME non-life insurers (8.1%) were weaker those of top five non-life insurers (16.1%) during the period y.o.y.

At the end of June 2011, non-life insurers’ total operating profits recorded KRW0.96 trillion, a 42.4% increase over the same period last year. Investment profits were KRW0.91 trillion, a 16.3% increase over the same period last year thanks to the increase in profits on the disposal of marketable securities. In underwriting, the continued deficit trend has been shifted to a surplus of KRW0.04 trillion won during the period, which is mainly attributed to continued growth in sales of long-term non-life insurance and improvement in the loss ratio in automobile insurance.

**Outlook**

Total assets and premium income of the life insurance companies in Q2 FY2011 maintained its growth trend
through further growth in the retirement pension market, continued improvement in performance of savings-type products, among others. While this is expected to continue during Q3 FY2011, the growth rate could weaken due to the prevailing uncertainties in global and domestic financial markets. Meanwhile, savings type insurance products, which are mainly driven by increased demand for pension products under a rapidly aging society, are expected to continue its upturn trend. The upturn trend of savings-type insurance products should grow stronger through the called “safety asset preference” trend with financial markets growing more uncertain. The retirement pension market is expected to expand further thanks to various institutional supporting programs and steadily increasing demand for after-retirement products. Meanwhile, life insurers’ rate of return on investments are expected to fall as the ongoing low interest rate policy is forecast to continue and financial markets are getting more vulnerable and fluctuated. In particular, life insurers are more vulnerable in a low interest trend since more than 60% of invested assets of life insurance company is configured as interest based assets.

In Q3 FY2011, total assets and premium income of non-life insurance companies are expected to continue trending higher. However, due to the uncertainties in the financial markets and the possibility of an economic slowdown, the growth rate is expected to weaken somewhat for non-life insurers as well. For the long-term non-life insurance and savings type products are expected to maintain the upturn trend, while protection type products are expected to show somewhat better performance. Meanwhile, under the recently continued inflation trend, there are concerns that the loss ratio of automobile insurance and medical expense insurance are rising due to an increase in labor costs and medical expenses, among others. On the investment business side non-life insurers, like life insurers, have to pay attention to the possibility of a fall in the rate of return on investment and investment income as the global financial crisis deepens.
A. Analysis of the Determinant of Non-banking Financial Companies' Interest Rates

Kyoobok Lee (leekb@kif.re.kr)

1. Background

During the global financial crisis, market interest rates and bank lending rates decreased along with BOK’s base rate adjustments. But non-banking financial corporates maintained high lending rates, and it burdened low income households who were the main client base for nonbank financial companies. Especially, since H1 2010 the high lending rates of non-banking financial companies have been socially criticized.

2. Current Lending & Deposit rates of Non-banking Financial Corporates

(1) Lending Rates

Recently, overall lending rates of mutual credits and credit unions are 6~8% and those of savings banks and capital services companies are hovering around 15%, which is 7~10%p higher than those of deposit banks. But if considering only credit loans, such as excluding corporate loans and installment financing, the figure would increase higher than 15%. For example, capital services’ credit loans rates by weighted average was 29.46%.

Viewing the credit loans rates by credit ratings, capital services companies’ interest rates for higher ratings group was approximately 20%. On the other hand, the rates for lower ratings group was late in the high 30% range. Also while savings banks lending rates for higher credit ratings was 15%, those for lower credit ratings was 24%.
Comparing each company, the gap between high-lending rates and low lending rates for same credit ratings of capital services companies was above 10%p for high credit ratings and those decreased as credit ratings fell, then finally 6%p at ratings 9. Meanwhile, in the case of savings banks, the lower credit rating the larger was the gap, which means that there are various lending rates for low credit-rating borrowers.

(2) Deposit Rates

Deposit rates of non-banking financial companies was moving in a range of 4~5%, 1~2%p higher than those of deposit banks.

Capital services companies usually raised a fund by issuing corporate bonds of which the interest rate spread between the corporate bonds (A+) and treasury bond (3yr) was averaged 1.5%p from January 2006 to January 2011. During the global financial crisis, the credit spread increased 5%p as capital services’ corporate bonds yields rose above 9%, but the spread shrank to 1.6%p in 2010 as financial market uncertainty eased.

(3) Loan-Deposit Margin

Since the end of 2007, the loan-deposit margin of the savings banks exceeded those of deposit banks. Especially in Q2 2011, while the margin of deposit banks was 2.07%p, those of savings banks expanded to 10.74%p. As a result, the gap between savings banks’ margin and deposit banks’ margin expanded by 8.67%p, meanwhile those of credit unions and mutual credits were 0.87%p, △0.13%p in Q2 2011.
3. Analysis of Determinant of Non-banking Financial Companies’ Interest Rates

(1) Lending Rates

In general, fund-raising expense and credit spread are important parts of determining lending rates. An analysis of the determinant of lending rates showed that lending rates of savings banks didn’t response to call rates, but was closely related with economic growth.

The response of deposit banks’ lending rates to call rates was best and the next was mutual credits, followed by credit unions, and savings banks. Meanwhile, the response extent order of lending rates to GDP growth was savings banks, mutual credits, deposit banks, and credit unions, in that order. The cross correlation of call rates and lending rates, analyzing a time lag correlation between two variables, resulted in a similar conclusion.

Savings banks was expected to be sensitive to credit risk because loans to low credit-rating borrowers was significant. However, in analysis, it was not. This was because the savings banks’ lending rates might not change along with the credit risk as maximum credit risk was already reflected to the lending rates. Instead, savings banks diversified its business strategy, reflected by business conditions, to customers who considered capital availability to be important.

On the other hand, in the case of savings banks, the ratio of sales, general and administrative expense to sales did not influence lending rates.

(2) Deposit Rates

An analysis of the determinant of deposit rates showed that financial companies’ deposit rates was more closely related with call rates comparing the correlations of lending rates and call rates. Particularly, deposit rates of savings banks was closely related with call rates, more than those of credit unions and mutual

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**Table III.6 OLS for Lending Rates**

<table>
<thead>
<tr>
<th>periods</th>
<th>deposit banks</th>
<th>credit unions</th>
<th>savings banks</th>
<th>mutual credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>call rates change</td>
<td>0.892*** (8.332)**</td>
<td>0.223*** (1.934)**</td>
<td>0.094*** (0.643)**</td>
<td>0.263*** (2.606)**</td>
</tr>
<tr>
<td>GDP growth</td>
<td>Δ0.126*** (5.386)**</td>
<td>Δ0.114*** (3.459)**</td>
<td>Δ0.019*** (1.339)**</td>
<td>Δ0.126*** (3.329)**</td>
</tr>
<tr>
<td>credit risk change(-1)</td>
<td>0.000 (0.371)***</td>
<td>0.002*** (0.227)**</td>
<td>0.013*** (1.151)**</td>
<td>Δ0.003*** (0.358)**</td>
</tr>
<tr>
<td>constant</td>
<td>0.133*** (2.449)**</td>
<td>0.078*** (1.251)**</td>
<td>0.112*** (1.525)**</td>
<td>0.090*** (1.688)**</td>
</tr>
<tr>
<td>R²</td>
<td>0.782</td>
<td>0.193</td>
<td>0.427</td>
<td>0.341</td>
</tr>
<tr>
<td>R²</td>
<td>0.745</td>
<td>0.058</td>
<td>0.332</td>
<td>0.231</td>
</tr>
<tr>
<td>D.W.</td>
<td>1.951</td>
<td>1.871</td>
<td>1.299</td>
<td>1.882</td>
</tr>
</tbody>
</table>

Note: 1) GDP growth used seasonally adjusted q.o.q. growth, 2) call rates and credit risk used q.o.q. change, 3) For solving autocorrelation of residuals, add AR(1), 4) ***, **, * mean statistically significant by level of 1%, 5%, 10%.

**Table III.7 Cross-correlation Between Target Rates and Lending Rates**

<table>
<thead>
<tr>
<th>lag (month)</th>
<th>deposit banks</th>
<th>credit unions</th>
<th>mutual credits</th>
<th>savings banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>t=0</td>
<td>0.654*</td>
<td>0.045*</td>
<td>0.175</td>
<td>Δ0.024</td>
</tr>
<tr>
<td>t=1</td>
<td>0.716*</td>
<td>0.126*</td>
<td>0.453*</td>
<td>0.199</td>
</tr>
<tr>
<td>t=2</td>
<td>0.607*</td>
<td>0.246*</td>
<td>0.606*</td>
<td>0.209</td>
</tr>
<tr>
<td>t=3</td>
<td>0.314*</td>
<td>0.328*</td>
<td>0.695*</td>
<td>0.157</td>
</tr>
</tbody>
</table>

Note: 1) From January of 2004 to April of 2010.

**Table III.8 OLS for Deposit Rates**

<table>
<thead>
<tr>
<th>periods</th>
<th>deposit banks</th>
<th>credit unions</th>
<th>savings banks</th>
<th>mutual credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>call rates change</td>
<td>1.300*** (9.741)**</td>
<td>0.616*** (4.302)**</td>
<td>0.960*** (5.614)**</td>
<td>0.820*** (5.783)**</td>
</tr>
<tr>
<td>GDP growth</td>
<td>Δ0.199*** (4.732)**</td>
<td>Δ0.172*** (3.580)**</td>
<td>Δ0.283*** (4.921)**</td>
<td>Δ0.186*** (3.830)**</td>
</tr>
<tr>
<td>credit risk change(-1)</td>
<td>0.001*** (0.125)</td>
<td>0.000*** (0.028)</td>
<td>0.001*** (0.065)</td>
<td>-0.004 (-0.384)</td>
</tr>
<tr>
<td>constant</td>
<td>0.214*** (2.998)**</td>
<td>0.151*** (1.882)**</td>
<td>0.271*** (3.373)**</td>
<td>0.187*** (2.543)**</td>
</tr>
<tr>
<td>R²</td>
<td>0.825</td>
<td>0.530</td>
<td>0.634</td>
<td>0.616</td>
</tr>
<tr>
<td>R²</td>
<td>0.795</td>
<td>0.452</td>
<td>0.573</td>
<td>0.552</td>
</tr>
<tr>
<td>D.W.</td>
<td>1.877</td>
<td>1.843</td>
<td>2.034</td>
<td>1.965</td>
</tr>
</tbody>
</table>

Note: 1) GDP growth used seasonally adjusted q.o.q. growth, 2) call rates and credit risk used q.o.q. change, 3) For solving autocorrelation of residuals, add AR(1), 4) ***, **, * mean statistically significant by level of 1%, 5%, 10%.
credits, but less than those of deposit banks (deposit banks > savings banks > mutual banks > credit unions). These results were similar to the analysis of cross-correlogram of call rates and deposit rates.

Meanwhile, the response extent of deposit rates to GDP growth was savings banks, deposit banks, mutual banks, and credit unions in that order.

(3) Loan-Deposit Margin

In the case of savings banks, the response of loan-deposit margin to call rates was best because loan-deposit margin was calculated by lending rates minus deposit rates, and affected by the determinants of lending deposit rates.

While the lending rates of savings banks did not react to call rates, deposit rates of savings banks was closely related with call rates. Hence, when call rates fell, the loan-deposit margins of savings banks greatly expanded. According to the analysis of loan-deposit rates, 1%p decrease in call rates made loan-deposit margins of savings banks increase by 0.86%p, comparing the figure of 0.40%p of deposit banks.

On the other hand, a 1%p increase in GDP growth raised the loan-deposit margin of savings banks by 0.09%p, 0.02%p higher than those of deposit banks, but its statistical significance was low.

Consequently, since the recent global financial crisis, the main reason that savings banks’ loan-deposit margin expanded more than those of deposit banks was because of the fall in call rates along with a fall in GDP.

Comparing the periods of base rate increases and decreases, while the loan-deposit margin of non-banking financial companies increased more than those of deposit banks during the periods of base rate decreases, the margin of non-banking financial companies decreased less than those of deposit banks during periods when the base rate was increased. Because the base rate was decreased recently due to worsened economic conditions.

### Table III.9 Cross-correlation Between Target Rates and Deposit Rates

<table>
<thead>
<tr>
<th>lag (month)</th>
<th>deposit banks</th>
<th>credit unions</th>
<th>mutual credits</th>
<th>savings banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>t=0</td>
<td>0.643*</td>
<td>0.340*</td>
<td>0.453*</td>
<td>0.263*</td>
</tr>
<tr>
<td>t=1</td>
<td>0.685*</td>
<td>0.608*</td>
<td>0.623*</td>
<td>0.537*</td>
</tr>
<tr>
<td>t=2</td>
<td>0.669*</td>
<td>0.734*</td>
<td>0.701*</td>
<td>0.685*</td>
</tr>
<tr>
<td>t=3</td>
<td>0.446*</td>
<td>0.771*</td>
<td>0.625*</td>
<td>0.639*</td>
</tr>
</tbody>
</table>

Note: 1) From January of 2004 to April of 2010.

### Table III.10 OLS for Loan-Deposit Margin

<table>
<thead>
<tr>
<th>periods</th>
<th>deposit banks</th>
<th>credit unions</th>
<th>savings banks</th>
<th>mutual credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Q 2004~ 1Q 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>call rates change</td>
<td>( \Delta 0.404 ) (1.840)***</td>
<td>( \Delta 0.679 ) (4.291)***</td>
<td>( \Delta 0.636 ) (5.105)***</td>
<td>( \Delta 0.540 ) (4.566)***</td>
</tr>
<tr>
<td>GDP growth</td>
<td>0.073 (4.307)***</td>
<td>0.073 (1.791)*</td>
<td>0.089 (1.394)</td>
<td>0.050 (1.156)</td>
</tr>
<tr>
<td>credit risk change(-1)</td>
<td>0.001 (0.361)</td>
<td>0.003 (0.347)</td>
<td>0.014 (1.133)</td>
<td>0.002 (0.227)</td>
</tr>
<tr>
<td>constant</td>
<td>( \Delta 0.081 ) (2.683)***</td>
<td>( \Delta 0.093 ) (1.621)***</td>
<td>( \Delta 0.160 ) (1.906)***</td>
<td>( \Delta 0.087 ) (1.476)***</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.757</td>
<td>0.763</td>
<td>0.568</td>
<td>0.515</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.716</td>
<td>0.373</td>
<td>0.496</td>
<td>0.434</td>
</tr>
<tr>
<td>D.W.</td>
<td>1.833</td>
<td>1.989</td>
<td>1.511</td>
<td>2.042</td>
</tr>
</tbody>
</table>

Note: 1) GDP growth used seasonally adjusted q.o.q. growth. 2) call rates and credit risk used q.o.q. change. 3) For solving autocorrelation of residuals, add AR(1), 4) ***, **, * mean statistically significant by level of 1%, 5%, 10%.
conditions, the lending rates of savings banks were more sensitive to GDP growth.

4. Conclusions and Implications

Analysis of the determinants of lending rates showed that lending rates related not credit risk or target rates but economic condition. Especially, the main reasons that lending rates of savings banks and capital services companies are insensitive to a market rates were low price elasticity of demand and the market conditions with imperfect market competition and asymmetric information.

Therefore, enhancing market competition and efficiency through expanding substitutional goods and easing asymmetric information were needed for reasonable lending rates of non-banking companies.

Moreover, lowering the ceiling of the legal interest rates made less interest burden in a short-term view, and eventually this would give low-income house economic stability and help non-banking companies to enhance the ability of risk management.
B. How to Boost the Lagging High Yield Bond Market

Hyungjoon Ray Lim (hjlim@kif.re.kr)

1. Background

As the economy bounced back strongly in 2010 and in Q1 2011, the credit cycle also took an upturn. Nevertheless, the high yield bond market has still been in doldrums. A well functioning high yield bond market is important: it helps not only firms’ restructuring by funding leveraged buyouts and merger and acquisitions, but also growth companies to raise capital.

We consider what would be necessary for boosting the stagnated high yield bond market: realistic investment protocols of institutional investors, the introduction of fund credit rating system, enhancing the risk underwriting of security companies and others.

2. Non-prime (high yield) Bond Market in Korea

It is customary to categorize the corporate bonds into two groups: investment grade and non-investment grade. Investment grade bonds range from AAA rated bonds to BBB- rated ones. They are thought to have small credit risks and for that reason, most institutional investment vehicles including mutual funds stipulate that they invest only in investment grade space. On the other hand, non-investment grade bonds, or high yield bonds, with credit rating of BBB+ or below have significant default risks and therefore investors ask higher yields for such bonds. In Korea, many investors also shun BBB+ to BBB- rated bonds, so bonds are often categorized into prime (AAA~A-) and non-prime (BBB+ or below). For this reason, we focus on non-prime bonds instead of non-investment grade bonds in this report.

The high yield bond market is stagnated compared with

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**Table III.11 Issued Amount of Corporate Bonds by Credit Ratings**

(Unit: KRW bil.)

<table>
<thead>
<tr>
<th>Number of Corporate bonds</th>
<th>Number</th>
<th>Ratio</th>
<th>Amount</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>240</td>
<td>29.0%</td>
<td>214,745</td>
<td>28.5%</td>
</tr>
<tr>
<td>AA</td>
<td>186</td>
<td>22.5%</td>
<td>245,343</td>
<td>32.5%</td>
</tr>
<tr>
<td>A</td>
<td>286</td>
<td>34.5%</td>
<td>234,506</td>
<td>31.1%</td>
</tr>
<tr>
<td>BBB</td>
<td>88</td>
<td>10.6%</td>
<td>44,647</td>
<td>5.9%</td>
</tr>
<tr>
<td>BB</td>
<td>21</td>
<td>2.5%</td>
<td>8,700</td>
<td>1.2%</td>
</tr>
<tr>
<td>CCC</td>
<td>6</td>
<td>0.7%</td>
<td>6,350</td>
<td>0.8%</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>0.1%</td>
<td>60</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>828</td>
<td>100%</td>
<td>754,351</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: 2009.3.2 ~ 2010.9.13.

Source: FnGuide.
prime bond market. From March 2009 to September 2010, the issuance of high yield bonds amounted only to KRW1.5 trillion won, 1.8% of all corporate bond issuance. Even in terms of non-prime bonds, essentially further including BBB+ to BBB- rated bonds, only KRW5.97 trillion worth of bonds had been issued, which was only 7.9% of all issuance.

The contrast between prime and non-prime sector has been magnified since 2009. Due to global financial crisis, credit market plunged across various spectrums in 2008~2009. Since then, however, prime bond market boomed as investors sought higher yield than Korean treasuries. Owing to the stabilization of financial market and economic recovery, in August 2010, the credit spread of prime bonds fell to 98bp, the pre-crisis level. On the other hand, the credit spread of non-prime bonds still hovered around 692bp. This is a unique phenomenon: even in the US, Europe, and Japan where economic recovery was more sluggish than Korea’s, the non-prime bond credit spread fell back to pre-crisis level.

3. How to Boost the Non-prime Bond Market

Well functioning non-prime bond market is quite beneficial to the economy. Since banks cannot easily finance leveraged buy-outs, mergers or acquisitions, non-prime bond market can fill the gap raising capital for firms’ restructuring. In addition, non-prime bond market could help small, but promising firms to fund for growth. In such light, we consider how we can boost the non-prime market.

1) Increasing Institutional Investors’ Participation

For the non-prime bond market to take off, expanding the institutional investor base is critical. Investing unit is much larger for bonds and non-prime bonds even contain significant credit and liquidity risks. Therefore, investing in non-prime bonds require a large pool of
capital for risk management, which do not suit most individual investors. Furthermore, even among institutional investors, banks and insurance companies cannot increase their exposure to non-prime bonds much because of Basel III and RBC regulation, respectively. Thus, policy measures to promote the non-prime bond market have to target pension funds and asset management companies.

Pension funds do not have much exposure to non-prime bonds for now due to their internal investing guidelines, which were tightened after the global financial crisis. Those guidelines are too tight for their risk appetite and needs to be relaxed. National Pension System is even considering investing in commodities and with such risk appetite, they do not have to shun low grade corporate bonds.

Like pension funds, there is little exposure to non-prime bonds for mutual funds. Even in 2006 when high-yield funds peaked, high-yield funds amounted only to KRW1.6 trillion (and prime bonds and treasuries took up most of portfolios) and at the end of 2010, they shrunk to KRW40.8 billion.

The reason for such slump is that the terms and conditions restrict the credit rating of individual bond in the portfolio. It leaves little room for bonds with the rating below BBB- and to revise this terms, it needs strict referee from the FSS. Rather than restricting the rating of each bond, we could use the credit rating of the whole portfolio, using the credit rating of the fund as a regulatory benchmark. Of course, considering rating a time-varying portfolio is more difficult, we need a careful introduction.

2) Enhancing Risk Underwriting of Security Firms

For non-prime bond market to mature and develop, the existence of security firms are essential that evaluates credit risks, underwrites such risks, and has good reputation and various client networks. Unfortunately, so-called ‘lowering commission’ practice is still prevalent
that security companies take a loss by underwriting bonds at higher prices and selling them to investors at lower prices. Under these circumstances, there is little room for underwriting high credit risks and thus little room for no-prime bond market.

Preventing security companies from selling underwritten bonds at lower than purchased prices for a given period might help end this practice. Then security companies that lacks risk underwriting abilities would be crowded out from the primary market and it would eventually help developing of non-prime bond market.

Security companies can also issue non-prime bonds backed securities (ABS) and use tranching and ABCP vehicles. To broaden institutional investor base, reducing credit and liquidity risks that would involve in investing in non-prime bonds is necessary. By pooling non-prime bonds and tranching them, credit risks can be lowered while ABCP conduits would shorten the maturity.

3) Improving Credit Rating Agencies

One of the biggest reason why non-prime bond market has not recovered despite the pick-up in the credit cycle is the market do not have confidence in the credit ratings attached to corporate bonds. For example, the default rate of BBB rated corporate bonds was actually higher than that of BB rated ones for a certain credit rating agency in 2010. Unless credit rating agencies impartially and correctly evaluate the credit risks of corporate bonds, the investor would not readily purchase the corporate bonds that have not negligible default risks. Regulating and improving the credit rating agencies has been one of the most difficult task for financial supervisors and regulators, though.
C. Developing Securities Lending Transactions in Korea

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1. Concept of Securities Lending Transaction

Securities lending transactions mean financial transactions where security holders (lenders) receive commissions and lend securities to institutions (borrowers) as an investment strategy. The borrowers should repay the same amount and the same kind of securities within a stipulated time. The main purpose of securities lending transactions to investors is to implement an investment strategy of preventing default risk and increasing returns on holding securities. Securities lending transactions are closely related to a borrower’s short selling for arbitrage trading that makes profits by using price differences among securities or financial markets.

Securities lending transactions were begun to resolve an increase in default risk that arises due to growing security market size. In terms of supply side, securities lending transactions have been developed as beneficial owners of securities carrying out the role of suppliers through various improvement of the market system. In the demand side, it is closely related to the development of a derivatives market.

Most security lending transactions occur to cover short selling position and there are diverse participants such as lenders, borrowers, intermediaries, etc. Difference in transaction attributes and commission systems arises in relation to various transaction channels between lenders and borrowers. Also, details of security lending transactions are various according to the type of collateral.
2. Current Status of Overseas Security Lending Markets

(1) U.S. market

Security lending markets in U.S. is mainly operated by private institutions, and the roles of participating institutions are mixed. Regulation on the security lending terms and conditions are based on the mutually agreed contracts. However, there are some binding regulations to assure transparency and fairness of transactions. FRB’s ‘Regulation T’ specifies obligation to submit collateral. Also, banks are under regulation by FRB and OCC and broker-dealers must comply with ‘Security Exchange Act’, ‘Consumer Protection Law’, and regulation by self-regulatory organization.

U.S. has a much bigger security lending market compared to other countries. The size of stock lending market in the U.S. is 367 billion dollar and it is 19 and 13 times bigger than that of U.K. and Japan, respectively. Also, the size of the bond lending market in the U.S. is 9 times bigger than U.K. market.

(2) U.K. and Japanese market

The securities lending market in the U.K. has developed as borrowing institutions were expanding in 1974. CREST (Center of Securities Depository) provides collateral management services related to securities lending. In U.K., the collateral ratio using securities is about 70% and this ratio is higher than the cash collateral ratio, which is popular in other countries, such as in the U.S. In the U.S., the collateral ratio using cash is about 95%.

The Japanese securities lending market had developed with increasing demand for arbitrage trading as Japanese corporations issued convertible bonds and equity-linked warrants in the middle of 1980s. However, the size of securities lending markets is decreasing due to the recent financial market downturn.
3. Current Situation In Korea

There has been continuous system improvement to develop securities lending since August 1996 when securities lending was started by the Korea Securities Depository (KSD). Supervisory authorities promoted the improvement of a disclosure system to reduce asymmetric information problems among participants in the financial markets. Despite such continuous market system improvements, there are still inconveniences to check details on each securities lending transaction under the ‘Capital Market Law’, which governs the securities lending market.

There are major regulations on securities lending transactions under the ‘Capital Market Law.’ For securities to be lent through intermediaries, borrowers must provide ‘securities or cash’ as collateral to intermediaries. In the case of direct security lending, parties determines terms and conditions of a transaction including collateral for each transaction. In Korea, securities that are possible for lending are limited to listed stocks, listed bonds, ETF, and so on.

Currently, participants in Korea’s securities lending market are clearly classified into lenders, borrowers, and intermediaries unlike in the U.S. Lenders include foreign investors, pension funds, asset management companies, insurance companies, banks, security companies, among others. And borrowers mainly include foreign investors, securities companies. Intermediaries such as KSD and Korea Securities Finance Corporation (KSFC) perform the work related to intermediation of securities lending transactions and management of securities and collateral. Securities companies are also included in intermediaries that are in charge of intermediation of loan transactions only.

(1) Stock lending Transactions

The balance of stock lending transactions shows an upturn trend again after rapidly decreasing due to the prohibition of short-selling during the global financial crisis and the large redemption of stocks by foreign
investors for security lending. Domestic stock lending transactions are mostly conducted through the KSD. Foreign investors take an absolutely high proportion of loan and borrowing in stock loan transactions. Recently, domestic investors’ proportion of loan and borrowing of stock loan transaction has been increasing.

Most of the stocks that are borrowed by foreigners are presumed to be related to short covering. Foreign investors use a covered short-selling strategy as the purpose of arbitrage or hedging while domestic investors are passive in a covered short selling strategy overall.

(2) Bond lending Transactions

The balance of domestic bond lending transactions has shown a continuous increasing trend and it is expected to grow consistently. Unlike stock lending transactions, bond lending transaction are mainly conducted through the KSFC. Also, domestic investors take absolutely high proportion in loan and borrowing of bond lending transactions.

Foreign investors’ bond lending transactions are mostly conducted among foreign investors due to the unique practice of domestic bond market participants. The reason why foreign investors are not participating much in bond lending transactions is that it is unattractive for them to execute a bond spot-forward related trading strategy.

4. The Way To Develop Security Lending Market

Generally, the effect of the security lending market to the capital market can be summarized as enhancing the liquidity of the market and function of price discovery. In the industrial aspect, it contributes to the advancement of the domestic capital market by giving an opportunity to increase revenue to borrowers and lenders. Therefore it is beneficial to develop it. In order
to develop it in Korea, there are some things to consider.

First, it is required to verify market efficiency under the current market system where it approves exclusiveness of particular institutions as well as competitiveness among institutions. And it is considerable to attempt to integrate or unify systems which are varied by intermediaries, if possible. Second, through introduction of hedge funds that use a short-selling strategy most daringly, we need to increase demand for borrowing. Also, domestic banks should develop business models, like the trust banks in the US. Third, it is necessary to alleviate regulations on short selling, such as limitation on short selling of stocks in the financial sector. Also, we need to consider a way that can increase overall supply and demand. Introduction of automatic loan service to prepare default risk and improvement of the system related to a stock purchase right regarding stock lending may be key aspects to activate the market. Finally, as a security lending transaction is closely related with short-selling, it is necessary to confirm that market disturbance due to short-selling is not severe.