2010 Fixed-Income Market Outlook

Long Journey Ahead

- 2010 Fixed-Income Rate Outlook and Investment Strategies: Modest Upswing to Continue
- Brace for Credit Market Aftershock; Keep Eye on Changes in Banks’ Deposit Structure
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HRC Fixed-Income Analysis Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Contact Number</th>
<th>Division</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dongjun Shin</td>
<td>2014.1768</td>
<td>Fixed Income</td>
<td><a href="mailto:dongjun.shin@hdsrc.com">dongjun.shin@hdsrc.com</a></td>
</tr>
<tr>
<td>Sangkeun Park</td>
<td>2014.1707</td>
<td>Credit</td>
<td><a href="mailto:sangkeun.park@hdsrc.com">sangkeun.park@hdsrc.com</a></td>
</tr>
<tr>
<td>Yoonjung Yi</td>
<td>2014.1769</td>
<td>Credit</td>
<td><a href="mailto:yoonjung.yi@hdsrc.com">yoonjung.yi@hdsrc.com</a></td>
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<tr>
<td>Yuna Park</td>
<td>2014.1706</td>
<td>RA</td>
<td><a href="mailto:yuna.park@hdsrc.com">yuna.park@hdsrc.com</a></td>
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2010 Fixed-Income Rate Outlook and Investment Strategies: Modest Upswing to Continue

Fixed-income rate to continue to rise despite slackening growth momentum

Fixed-income rate will likely keep rising in 2010 due to: 1) easing concerns about a double dip in the US economy and improved fundamentals of the Korean economy (e.g., shift to qualitative growth); 2) policy rate hikes around the world; 3) reduced appeal of fixed-income investment compared to time deposit; and 4) demand-supply imbalance. Despite a YoY drop in leading economic indicators, fixed-income rate should rise for the first time since the introduction of mark-to-market valuation. The fixed-income rate should increase modestly and the annual high, to be reached in 4Q10, is unlikely to top 5.0%.

Yield curve strategy for each quarter and different pace of fixed-income rate hike

Fixed-income rate is expected to rise at a moderate pace until mid-1Q10 when fundamentals of the Korean economy will likely turn weak while external factors improve. With the high rate of time deposit moderating a drop in short-term rate, the spread between 1-year and 3-year bonds and the spread between 3-year and 5-year bonds should widen. Bond rate hike should accelerate in 2Q10 and 4Q10, but at a different pace. Bearish flattening of the yield curve will likely take place in 2Q10 in advance reflection of base rate hikes. Bearish steepening of the yield curve should occur in 4Q10 prior to fundamentals’ entry into long-term upswing. In 3Q10, the global economy’s leading indicators should peak out. Two-year bonds should yield the most outstanding returns.

<table>
<thead>
<tr>
<th>2010 fixed-income rate outlook</th>
<th>1QF</th>
<th>2QF</th>
<th>3QF</th>
<th>4QF</th>
<th>Avg. (F)</th>
</tr>
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<tr>
<td>3-yr KTB</td>
<td>4.22</td>
<td>4.45</td>
<td>4.40</td>
<td>4.58</td>
<td>4.41</td>
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<td>5-yr KTB</td>
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<td>4.95</td>
<td>5.24</td>
<td>4.98</td>
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<tr>
<td>3-yr bank debenture (AAA)</td>
<td>4.90</td>
<td>5.10</td>
<td>5.05</td>
<td>5.22</td>
<td>5.07</td>
</tr>
<tr>
<td>3-yr corporate bond (AA-)</td>
<td>5.12</td>
<td>5.28</td>
<td>5.25</td>
<td>5.38</td>
<td>5.26</td>
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<tr>
<td>Base rate (quarter-end)</td>
<td>2.00</td>
<td>2.25</td>
<td>2.50</td>
<td>2.75</td>
<td>2.27</td>
</tr>
</tbody>
</table>

Source: Hyundai Securities

Expected rate trend in 2010

Source: Hyundai Securities
Brace for Credit Market Aftershock; Keep Eye on Changes in Banks’ Deposit Structure

Despite eased credit risks, market remains on alert; Investment strategies differentiated depending on credit ratings and industry

Credit risks are diminishing, as signs of economic recovery become more visible and the financial market is fully capitalized again. Despite reduced risks, some industries, such as shipping and shipbuilding, remain sensitive to many issues at home and abroad. Credit spread varies and is unlikely to narrow for companies rated BBB (due to slow abatement of credit risks) and industries that have yet to undergo restructuring.

Bank debentures have the strongest investment appeal followed by corporate bonds, credit-finance company bonds, and public bonds

Due to an increase in public works and preemptive restructuring, increased issuance of public bonds and non-performing loan (NPL) asset-backed securities (ABS) should pose a burden to demand-supply dynamics. However, the overall credit market demand-supply balance should remain stable, as the issuance of bank debentures has decreased due to regulations on banks’ loan-to-deposit (LTD) ratio. Bank debentures boast strongest investment merit followed by corporate bonds, credit-finance company bonds and public bonds, considering reduced credit risks and demand-supply dynamics.

Regulation of banks’ LTD ratio to lead to changes in deposit structure

Financial authorities are considering regulating banks’ LTD ratio. Domestic commercial banks’ LTD ratio stands at 114%, far higher than 80-90% of those in emerging markets. Deposit shortfall is about KRW80tr. With deposit growth outpacing loan growth for the time being due to a restriction on LTD ratio, issuance of bank debentures should decrease. LTD ratio restriction is a factor that would narrow the spread for bank debentures, but should be negative for demand-supply balance of the overall bond market due to the crowding-out effect of deposits.

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>LTD Ratio (as of FY08)</th>
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</thead>
<tbody>
<tr>
<td>RBS (A/Europe)</td>
<td>138</td>
</tr>
<tr>
<td>Kookmin Bank (A/Europe)</td>
<td>125</td>
</tr>
<tr>
<td>Shinhan Bank (A/Europe)</td>
<td>113</td>
</tr>
<tr>
<td>Wells Fargo (A/US)</td>
<td>106</td>
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<tr>
<td>ICICI (BB/India)</td>
<td>101</td>
</tr>
<tr>
<td>BoA (A+/US)</td>
<td>96</td>
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<tr>
<td>BNP Paribas (BBB+/Europe)</td>
<td>95</td>
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<tr>
<td>Shinhan (A2/Korea)</td>
<td>93</td>
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<tr>
<td>HSBC (AA-/Europe)</td>
<td>89</td>
</tr>
<tr>
<td>Sberbank (BBB+/Russia)</td>
<td>86</td>
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<tr>
<td>Megabank (A-/Taiwan)</td>
<td>82</td>
</tr>
<tr>
<td>ICICI (BB/India)</td>
<td>74</td>
</tr>
<tr>
<td>Bank of China (A-/China)</td>
<td>69</td>
</tr>
<tr>
<td>Abu Dhabi Bank (A+/UAE)</td>
<td>67</td>
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<tr>
<td>Mizuho (A+/Japan)</td>
<td>62</td>
</tr>
</tbody>
</table>

Note: * Based on 1H09 figures for Kookmin Bank and Shinhan Bank; excluding certificate of deposit (CD)

Source: Bloomberg, Hyundai Securities
2010 Fixed-Income Rate Outlook and Investment Strategies

Modest Upswing to Continue

Bond rates to keep rising

Each time leading economic indicators’ YoY growth took a downturn, fixed-income rate fell without fail. Expectations are high for a continued drop in fixed-income rate due to concerns about the Korean economy peaking out and the government’s strong willingness to delay base rate hikes.

However, fixed-income rate will likely keep rising in 2010, due to: 1) easing concerns about a double dip in the US economy and improved fundamentals of the Korean economy (e.g., shift to qualitative growth); 2) implementation of exit strategies around the world, including policy rate hikes; 3) weakened appeal of fixed-income investment compared to time deposit; and 4) demand-supply imbalance. Despite a YoY drop in leading economic indicators, fixed-income rate should rise for the first time since the introduction of mark-to-market valuation. The rate should increase modestly and the annual high to be reached in 4Q10 is unlikely to top 5.0%.

Korean economy’s ongoing transition to qualitative growth

The Korean economy will see its growth momentum slacken YoY in 2010. Inventory adjustment has ended, however, and inventory restocking has ensued. The domestic economy is expected to shift to qualitative growth thanks to increased contribution by the private sector. Although there were concerns about growth slowdown due to a dramatic turnaround in 2009, the Korean economy is expected to grow 0.9%QoQ in 1H10 and 1.2%QoQ in 2H10, which are sound figures considering the average 1.0%QoQ growth since 2000. In addition, an improvement in the US economy should ease concerns about the slackening growth momentum of the Korean economy.

US economy to form self-sustained demand base in 2H10

The global economy will continue to grow modestly, but remain in a low-growth phase. Emerging markets such as China will likely make a greater contribution to growth in 2010, but major momentum that drives the global economy will come from the US economy and changes in the dollar’s value. The US economy will likely hit the peak in 2Q-3Q10 terms of production, but form self-sustained demand base in 2H10 in terms of consumption.

Modest interest rate hikes in 1Q10 due to mixed signals

Chances are high that a YoY growth in Korea’s leading economic indicators will drop while non-farm payrolls in the US rise until end-1Q10. That is, fundamentals of the domestic economy will be sluggish while external factors will likely improve. Volatility will increase, but bond rates are expected to rise gradually in reflection of external factors. Monetary stabilization bonds (MSB) with 1-year or shorter maturity have low carry-trade returns and its rate is unlikely to drop further. However, given foreigners’ demand for arbitrage transaction and banks’ increased capacity to manage short-term funds following a review of LTD ratio restriction, short-term bond rate is highly likely to stabilize. Due to concentrated issuance of Korea treasury bonds (KTB) and corporate bonds on early execution of budgets, the spread between 3-year KTB and 1-year MSB, and between 5-year and 3-year KTBs should widen. Carry trade returns for 1-year bank debentures are high.
With inventory adjustment and fiscal expansion producing results in the US, non-farm job creation should start rising in 1Q10. Adjustment of household debts, the main culprit behind weak consumption, is expected to enter its final leg in 2Q10, and concerns about a double dip should dissipate. On the other hand, rising inflationary pressure should prompt intensive discussions on the Fed’s exit strategies, including Federal Fund Rate (FFR) hikes. In 2Q10, people will likely become sensitive to dissipation of dollar carry trade due to a temporary appreciation of the dollar.

Upward pressure on interest rate is expected to hit the peak in emerging nations including Asia in 2Q10 when the GDP gap turns to positive. The Bank of Korea is expected to raise base rate at end-2Q10, pushing up the base rate to 2.75% by end-2010.

The rise in fixed-income rate should accelerate from end-1Q10. In advance reflection of base rate hikes, 3-year KTB rate should rise to about 4.60%, the peak level of 2009. Judging by their performance in 2009, 1-year MSBs are the worst performing item when expectations for base rate hikes are reflected in advance. On the other hand, 10-year or longer bonds or 3-month bonds deliver an outstanding performance.

US unemployment rate should hit the highest level between mid-2Q10 and mid-3Q10. However, with leading economic indicators peaking out in advanced nations including the US, concerns may arise about the global economy’s growth momentum. Increased fixed-income rate should be reversed to a certain extent in 3Q10. As a result, 3-year KTB rate should be lowered to about 4.30%. If a double dip turns out to be a remote chance as expected, both KTB and IRS (interest rate swaps) with mid-term maturity of around two years should produce excellent returns based on yield curve. The yield curve for 2-year or longer bonds is expected to undergo bullish steepening.

Fixed-income rate hike may accelerate in 4Q10 as in 2Q10. Expectations will likely grow for Korea’s leading economic indicators’ YoY growth taking an upturn. Due to the positive outlook that the global economy will enter long-lasting upswing in 2011, there should be rising demand to normalize base rate. As fundamentals should improve a notch, long-term bonds rate should rise more rapidly.

Investors need to employ differentiated strategies to cope with changes in the yield curve prior to 2Q10 and 4Q10 when bond rate hike will likely accelerate. In advance reflection of base rate hikes, the yield curve for bonds with 1-year or longer maturity should undergo bearish flattening in 2Q10. On the other hand, the yield curve for long-term bonds should see bearish steepening to adjust to improved fundamentals in 4Q10. Prior to 2Q10, it would be better to build a barbell-shaped portfolio (centering on bonds with maturity of less than 1 year and long-term-bonds) and sell short-term IRS (with maturity of 1 or 2 years). In 4Q10, the spread between 5-year and 3-year KTBs should expand markedly. It should be advantageous to employ a butterfly position by buying 3-year and 10-year bonds while selling 5-year bonds.
Global imbalances to be addressed via weak dollar

Emerging countries’ greater contribution to global economic growth

Weakening Dollar; Adjustment of Global Imbalances

The key issues for 2010 are the weak dollar and the adjustment of global imbalances. The global economy, which had been propped up by consumption in advanced nations, is currently undergoing a demand adjustment through dollar depreciation. Global imbalances (widening current account gaps) are being eased. Advanced nations’ current account deficits and emerging countries’ current account surpluses are decreasing simultaneously.

The weak dollar has changed the direction of capital flow toward emerging countries. Due to rising asset value on capital inflow and increased domestic demand following currency appreciation, emerging countries have become a buttress of the frail global economy. Since the Plaza Accord in 1985, the weak dollar has served as a tool to boost non-US region’s contribution to global economic growth. The IMF forecasted zero contributions from advanced nations to global economic growth in 2009.

<table>
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<th>Fig 1: 2010 fixed-income rate outlook</th>
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<tr>
<td>(Quarterly avg., %)</td>
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<td></td>
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<tr>
<td>3-yr KTB</td>
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<tr>
<td>5-yr KTB</td>
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<td>3-yr bank debenture (AAA)</td>
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<td>3-yr corporate bond (AA-)</td>
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<tr>
<td>Base rate (quarter-end)</td>
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Source: Hyundai Securities

Fig 2: Expected rate trend in 2010

Fig 3: Expected credit spread btwn. 3- and 5-year bonds

<table>
<thead>
<tr>
<th>02 03 04 05 06 07 08 09 10</th>
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<tbody>
<tr>
<td>%</td>
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<td>Base interest rate</td>
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Source: Hyundai Securities

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<td>Bank debenture spread</td>
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Source: Hyundai Securities

<table>
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<th>Quarter</th>
<th>3-yr KTB</th>
<th>5-yr KTB</th>
<th>3-yr corporate bond (AA-)</th>
<th>3-yr bank debenture (AAA)</th>
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<tr>
<td>1QF</td>
<td>4.22</td>
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<td>2.27</td>
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Source: Hyundai Securities
Fig 4: Current accounts: Global imbalances are being addressed

Source: IMF

Fig 5: The weak dollar; greater non-US region's contribution to global economic growth

Source: IMF, Hyundai Securities

Fig 6: GDP gap: Growing pressure on East Asian nations to normalize base rates

Source: IMF
Growing pressure on East Asian nations to raise interest rates

Emerging economies recovered, rapidly helped by massive current account surpluses and an increase in asset values on capital influx. The GDP gap in East Asia is expected to turn to positive in 3Q10. This will likely happen for the US in 2012 and for Europe in 2013.

With the GDP gap likely to turn to positive and concerns growing about asset bubble, the pressure to raise interest rates in emerging countries is also rising. In particular, real policy rate in Korea, which is going through a fast economic growth, is low compared to other nations. Only four nations (India, Israel, Hong Kong, and the UK) have policy rate lower than Korea’s.

Emerging countries opt for appreciation of their currencies instead of interest rate hikes

There is a concern that base rate hikes could quicken capital influx. The IMF, G-20 nations, and advanced nations, which are under deflationary pressure amid the weak economy, are officially calling on emerging countries to delay implementation of exit strategies. Emerging countries have allowed appreciation of their currencies instead of raising base rates to curb asset bubble and inflationary pressure. At the same time, they adopt policies to moderate the growth pace of current account surplus and stimulate domestic demand. It is natural that they control foreign currency liquidity to stem the excessive inflows of speculative capital. In the same vein, Korea has delayed base rate hikes, allowed the won’s appreciation and beefed up measures to control foreign currency liquidity.
Korean Economy to See Slackening Growth Momentum, but Shift to Qualitative Growth

Concerns about economy peaking out

A YoY growth in Korea’s leading economic indicators will likely peak out soon and is expected to take a downturn in 1Q10 at the latest. With the completion of inventory adjustment, there are growing signs that inventory cycle will hit the ceiling. The president and financial authorities have frequently stated that it is too early to adopt exit strategies such as base rate hikes. In addition, Dubai debt moratorium has raised concerns that government measures taken up so far may crumble. All these factors could push down the fixed-income rate.

Ongoing transition to qualitative growth

The Korean economy’s V-shaped recovery has ended. Growth momentum should inevitably slacken YoY in 2010. A YoY growth in domestic economic indicators should peak out in 1Q10 and keep falling until 4Q10. The economy will likely grow 0.9%QoQ in 1H10 and 1.2%QoQ in 2H10. Despite concerns about slowed growth in 2010 on a dramatic turnaround in 2009, the outlook is roseate, considering the average 1.0%QoQ growth rate since 2000. The pace of growth should decelerate YoY in 2010, but it is meaningful that the Korean economy should shift to qualitative growth thanks to increased contributions from the private sector.

Ongoing transition to inventory restocking

The Korean economy passed the trough in 4Q09. Consumption and facility investment checked bottom in 3Q09 and the unemployment rate is near its peak. The domestic economy is shifting to inventory restocking after inventory adjustment. Capacity utilization rate exceeds 78%, the average since 1991. Companies need to make facility investment and increase new hiring.

Fig 8: Cyclical expansion expected according to inventory cycle

Source: NSO
Gradual recovery

The global economy is expected to continue a gradual recovery in 2010, although it will remain in a low-growth mode. The US economy is expected to hit the peak in 2Q-3Q10 in term of production, but demand will begin to grow only from that point on.

1H10 to see benefits of inventory de-stocking and fiscal spending

The US economy usually lags the Korean economy by six months. It bottomed out in 3Q09, and inventory de-stocking is currently under way. Industrial production picks up when inventory re-stocking begins. In 1H10, the US economy is expected to continue a gradual recovery after the completion of inventory de-stocking and amid the effects of fiscal spending.

US economy on recovery path

In 1Q01, consumption and facility investment will check the bottom, and in 2Q10, inflationary pressure and the dollar will begin to strengthen and de-leveraging of households will likely come to an end. Jobless rate will show meaningful signs of downturn in 2Q-3Q10, and consumption and facility investment should find a sustainable base of demand in 2H10.

US Economy: Gradual Recovery in Demand, Rise in Inflation, Dollar Appreciation
Factors behind sluggish consumption

The sluggish US consumption can be attributed to: 1) de-leveraging by households and a slowdown in the growth rate of debts; and 2) the sluggish labor market and decreased labor income. The home prices have succeeded in rebounding for now.

Household debts to pass bottom in 2Q10

While households de-leverage, demand and consumption are bound to slow down. Since mortgage loans account for 76% of US household debts, household consumption is greatly affected by home prices. When home prices rise, household debts begin to rise one year later. Given that US home price index began to rebound in 1Q09 and the YoY growth rate in the index began to turn up in 2Q09, household debts are expected to pass the bottom in 2Q10 at the latest. Indeed, real estate loans, which account for 56% of total loans by US commercial banks, have been showing signs of growth since mid-Oct.
Pace of decline in employment and labor income slowing

Improvement in corporate earnings, employment, and income to lead to consumption growth in 2H10

New hires in non-farm areas, which bottomed out in Mar 2009, are steadily increasing. Given the 14-to-19-month time lag between the inflection points in non-farm new hires and jobless rate since the mid-1980s, the jobless rate is expected to peak out some time between mid-2Q10 and mid-3Q10.

Since US corporate margins began to improve based on the weak dollar, labor income (number of employees x weekly work hours x hourly wages) began to slow down the pace of YoY decline from 2H09 and finally turned up. Real personal consumption expenditures also turned upward slightly YoY after 14 months in Aug 2009. They are expected to continue to grow YoY in 2H10, after the jobless rate peaks out.

**Fig 12: US household debts to hit bottom in 2Q10**

Source: Thomson Datastream

**Fig 13: Real estate loans by US commercial banks showing signs of growth**

Source: US Fed
Core CPI to see upward pressures strengthen from 2Q10

The core personal consumption expenditures (PCE), which the US Fed considers as a critical factor in its measurement of inflationary pressure, move in line with the core CPI. The CPI shows price changes in selected goods and services, but PCE reflects only price changes in items for which actual spending occurred. Therefore, PCE tends to be slightly lower than the CPI. (Based on the YoY growth rate, the gap between the two has been 0.2%p on average since 2000.)

Food, shelter, and energy expenditures account for the largest (43%) of the CPI basket. Shelter, among these, makes up 33% of the index. The core CPI that factors out shelter is above the Fed’s comfort zone of 1-2%. It takes about a year before price changes in real estate market affects shelter price index. This means that shelter price, which has worked to lower the core CPI so far, will begin to have upward influence from 2Q10. More generally, the weak dollar is also working toward stronger inflationary pressures.
Fig 16: US inflationary pressures to turn up from 2Q10

Source: Thomson Datastream

Fig 17: It takes one year before home prices affect shelter price index

Source: Thomson Datastream

Fig 18: Weak dollar adds to inflationary pressures

Note: Values reversed
Source: Thomson Datastream
Inflationary pressures and economic recovery to activate exit strategies in 2Q10

As inflationary pressures gradually arise from 2H-1Q10 and employment and household debts grow from 2Q10, concerns over a double-dip recession will be cleared. Discussions on exit strategies including a base rate increase will be carried out more vigorously. The Fed’s purchase of mortgage-backed securities will have been finished in Mar 2010. Between 2H-1Q10 and 2Q10, upward pressures on fixed income rates will increase domestically and globally.

Appreciation of the dollar, unwinding of carry trades, and base rate increase by BOK

After hitting the low of JYP80/USD and USD1.6/EUR, the dollar is expected to gain temporarily in 2Q10. The unwinding of the dollar carry trades will amplify volatility. In Asia’s emerging markets, where the GDP gap is to turn positive, inflationary pressures will peak in 2Q10. As concerns over a double-dip recession are cleared, the Bank of Korea (BOK) will begin to raise the base rate in 2Q10. In 2H10, the US Fed will begin to raise its rates to a normal level. At the same time, as the capital flight to higher rates becomes prominent, countries with high debt ratio may face high risks.

In 3Q10, US leading indicators are likely to slow down. However, as consumption recovers markedly in 4Q10, the dollar is expected to weaken again in reflection of increased appetite for risk assets.
Declines in Bond Rates to be Limited despite Downturn in Leading Indicators

Historically, fixed income rates invariably turned downward when leading indicators retreated. The fixed income market, which once anticipated a 100bp rise in the base rate earlier in the year, now reflects the monetary authorities’ strong commitment to keep the rate low. The rate of 3-year KTB, which had ascended to 4.62% at end-Oct from 3.26% in the year’s beginning, sharply fell to 4.05% early Dec amid crushed expectations of a higher base rate and the usual year-end vacuum in demand. Practically, the BOK is highly likely to delay a base rate increase. The market consensus now is that fixed income rates will trend down for some time.

However, we believe the declines in fixed income rates will be limited. Rather, they should move relatively stably until mid-1Q10 and gradually trend up until end-2010. However, as in 2009, the high point of the 3-year KTB rate is unlikely to top 5%.

When leading indicators turn downward, the market expects the BOK to lower its base rate or at least stop raising it. This leads to a decline in fixed income rates. What we are seeing now is a reversal of the earlier rises in fixed income rates that occurred in anticipation of a base rate increase.

We can estimate how far the retreat in fixed income rates would proceed based on what happened in last Feb. On Feb 12, the central bank lowered its base rate by 50bp to 2%. At that time, there was zero possibility of a base rate increase, and investors were confused amid the probability of a further rate cut and concerns over the expected inflation. In the short span between Feb 12 and the month’s end, the spread of 3-year KTB rate over the base rate expanded to 157-200bp, reflecting amplified volatility.

Since the introduction of mark-to-market valuation in 2000, the spread of 3-year KTB rate over the base rate averaged at 99bp. However, at the end of last Feb, the spread did not fall due to the following: 1) a surge in KTB supply; 2) rises in the expected inflation in the mid-/long term due to excess liquidity; and 3) the emergence of a liquidity trap in the mid-/long term. The market intuitively priced all these factors at 57-100bp, or even higher, considering there were lingering expectations of a base rate cut. At that time, a base rate increase was not expected at all.
3-year KTB rate of 4.05% signals burdensome valuation

Given the consensus that the base rate will begin an upcycle at least in 1Q10, it would be unreasonable to ascribe less than 50bp to the expected rise in the base rate. The lowest possible pricing would be 25bp. We can then measure the maximum extent of declines in the 3-year KTB rate by summing up the lowest spread of 157bp at end-Feb and the expected base rate increase of 25-50bp spread in 1Q10. When the spread falls below 207bp, the valuation would become burdensome, and the narrowest possible spread would be 182bp. The range corresponds to 4.07-3.82% for the 3-year KTB rate. It is meaningful that the 3-year KTB rate stopped declining at 4.05% early Dec.

Base rate hike possible for normalization

BOK could raise the base rate for the sake of normalization even though leading economic indicators may decline. In 2002, when the concept of mark-to-market valuation was new, understanding of leading economic indicators was not clear. Of note, we published a report about leading economic indicators’ technical points and their computation based on various moving average values at the same time. In 2004,
we focused on when leading economic indicators would take a downturn. There were a multitude of reports that predicted inflection points.

At end-2005, the BOK raised the base rate, despite leading economic indicators’ likely downturns. The fixed income market expected the base rate hikes would be no more than symbolic gestures. Betraying such expectations, however, the BOK raised the base rate by a whopping 125bp in eleven months. At that time, the BOK used the phrase “normalization of too-low base rates” to soothe the market.

Korea’s leading economic indicators are likely to take a downturn, but the US economy will likely continue to ride an upcycle through 1H10 at least. A global economic turnaround will decelerate a slowdown in Korea’s economic momentum. Since Korea’s leading economic indicators are considerably high, they are not likely to slide into the negative territory, but to take an upturn yet again in 4Q10.

High Interests on Time Deposits to Deter Coupon Rate Dips

Interest rates on time deposits at banks (competing products of bonds) are currently at the highest level except for the period right after the Lehman Brothers collapse. Unlike equities, which have no caps on prices, bonds are fixed-income products, from which investors will receive fixed interests and principal upon maturity. If bond products are to compete with time deposits with fixed interests, investors need the conviction that interest rates will ride a downcycle and bond products will give significant capital gains.

Note: For time deposits, weighted average deposit rates were used; Nov 2009 estimate is a forecast
Source: BOK, Hyundai Securities
Korean financial institutions can earn a maximum of approximately 3.4% interests on six-month time deposits and 4.3% on one-year products. In the case of public institutions such as Korea Post and some corporations, an additional 0.5-0.6%p interest rate could be added.

If an investor purchases 1-year MSB with a coupon rate of 3.23% as of Dec 4, and sells the bond six months later, the investor can sell the MSB, which has six months left until maturity, at a coupon rate of 2.67% as long as the current yield curve persists. In this case, the relevant MSB delivers a carry-trade return of 3.79% when rolling effect is taken into consideration. When coupon rates go up while carrying the bond, carry-trade return falls. A 25bp rise in yield curve at the time of selling pushes down the carry-trade return to 3.54%. A base interest rate hike would have already started or impending six months later in early Jun 2010. Bonds outperforming just 14bp over the fixed interest rate of 3.40% on time deposit are not attractive for a carry trade.

When coupon rate falls, interest rate on banks’ time deposit also decline in general. However, when banks trimmed interest rate on time deposit recently, they did so after coupon rate fell and by a three-to-four-times smaller margin. This contrasts with banks’ move in raising time deposit rate rapidly before coupon rate rises. In fact, 1-year MSB and 3-year KTB saw their coupon rates plunge 49bp and 57bp, respectively, after end-Oct, but the highest interest rate given on time deposits did not budge, or only some banks cut the interest rate by 15-20bp. The more bonds’ coupon rate falls, the less attractive the bonds become than deposits.

Banks cannot cut their time deposit rate rapidly due to a combination of various problems, such as the early reflection of a base rate hike, asset quality control by financial authorities, and a huge amount of deposits becoming due. After the Lehman Brothers debacle, foreign credit rating agencies had issues with Korean banks’ high LTD ratios. With financing through bank debentures becoming difficult, the spread between bank
debentures and three-year KTBs widened to as much as 340bp at end-2008 from the past average of 60bp. Against this backdrop, banks raised funds by selling special high-interest deposit products, whose maturity is approaching. Those that are due in 4Q09 alone exceed KRW110tr.

With a view to boosting bank asset quality, the supervisory authorities are examining ways to require banks to lower LTD ratios (excepting CDs) to 100% or below after a grace period. The LTD ratio (except CDs) stood at 127% as of end-Jun 2009. Banks are not in a position to lower the deposit interest rate by the same amount as the fall in the bond coupon rate because they want customers to roll over the huge amount of matured deposits. The deposits, whose maturity has been extended, will become due throughout 2010. Factoring out deposits with no maturity (i.e., demand savings deposits), won-denominated deposits at commercial banks will become due in only 7.6 months on average as of Sep 2009.
Bond investors shifting to other instruments is negative for bond supply-demand balance

Needless to say, there are bond institutional investors that raise funds through call loans instead of deposits. The same is true for arbitrage transactions by foreigners. However, it is a negative factor for the supply-demand balance in the bond market if some institutional investors turn to time deposits.

Banks have more leeway in short-term fund management

Banks will have more leeway in managing short-term funds when time deposits increase. Since the duration of deposits is short (less than one year), banks will prefer benchmark or short-term bonds, which are highly liquid, in their bond investments. However, increased demand for bonds by banks will not have such a positive impact on the bond supply-demand balance because some institutional investors will turn to time deposits instead of bonds.

Six-month carry-trade return on 1- to 1.5-year bank debentures more attractive than on 1-year MSBs

Despite the solid rolling effect stemming from the steep yield curve of short-term bonds, MSBs with a one-year or shorter maturity (coupon rate of 3.23% as of Dec 4) are not so attractive for carry trade. The three-month carry-trade return also is not attractive. This indicates that short-term bonds’ coupon rate faces downward rigidity. When both risks and yields are taken into consideration, a six-month carry-trade return on 1- to 1.5-year bank debentures is more appealing than that on MSBs. These bank debentures look to have their credit spreads narrow amid an improved supply-demand balance. As long as the yield curve does not rise by more than 100bp six months later, investment in bank debentures can outperform that in time deposits.

Driven by a downturn in leading indicators and a delayed base rate hike, bond’s coupon rate may fall further temporarily as mid/long-term bonds narrow their spreads with one-year MSBs. However, a long-term fall in the coupon rate is unlikely with only the curve flattening (for the spreads between two-year and one-year MSBs and between three-year KTBs and one-year MSBs) at a time when the coupon rate for bonds that mature in less than one year faces downward rigidity.

Deposit and one-year MSB rate spread acting as spread between three-year KTBs and one-year MSBs

When leading indicators fell, the spread between three-year KTBs and one-year MSBs always moved inversely to the base rate. The coupon rate on three-year KTBs fell below that on one-year MSBs and moved inversely against the base rate or fell until it became close to it. When there was downward resistance, the coupon rate took a rebound. Currently, banks’ time deposit interest rate, which is more than 200bp higher than the base rate, is serving as a lower limit as the base rate did in the past. At the same time, the one-year MSB rate, which is 90bp lower than the three-year KTB rate, is replacing the three-year KTB rate in its role of testing the lower limit. Investment in bonds becomes less attractive the moment the six-month carry-trade return on one-year MSBs (rolling effect considered) becomes the same or lower than the interest rate on six-month time deposits. The six-month carry-trade return on one-year MSBs is highly unlikely to fall below 3.10% if the interest rate on time deposits remains at the current level.
KTB and agency bond issuance concentrated in 1H10

Amid reflationary policies and use of much of the fiscal budget early on, KTBs and agency bonds will likely be issued heavily in 1H10. Bond demand from the National Pension Fund, the largest long-term bond buyer, is projected to return to a normal level in 2010 compared to that in 2009. This will contribute to widening the spreads of mid/long-term bonds in 2010 until foreigners stream into the bond market after Korea is included in the World Government Bond Index (WGBI). The proportion of five-year KTBs, which the National Pension Fund purchased heavily, will increase in overall issuance and its spread therewith. Spreads between three-year KTBs and one-year MSBs and between five-year KTBs and three-year KTBs will widen, and those between 10-year KTBs and 5-year KTBs will narrow.
Influence of Foreigners and WGBI

The shift in foreigners’ investment pattern is surprising. In the past seven months, the balance of foreigners’ investment in the Korean bond market increased KRW22.5tr. The balance has reached an all-time high of KRW57tr, indicating foreigners increased their exposure to bonds by 40% in the past seven months.

The hot issue that haunted investors at end-2008 was the exodus of foreign capital. At that time, nothing was surprising about the foreign capital outflow, and the market was just busy estimating the size of it. Amid the broad-based pessimism then, our overseas sales branches let us know that some foreign investors showed interest in purchasing Korean bonds. Investors in Asia were looking for an alternative to US Treasury Bonds, whose coupon rate became too low. Hedge funds that survived the financial turmoil were looking for a short-term instrument that they could invest in until they become certain the equities market had reached trough. Now, Japanese investors are interested in Korean bonds, but due to these investors’ overly conservative approach, the inflow from them is not as large as that in 2008.

Currently, foreign investors’ arbitrage transactions that involve investment in Korean one-year MSBs (instead of one-year treasury bonds in their countries) and FX hedging outperform their investment in one-year treasury bonds for their own countries by around 200bp. For minor currencies, excess returns become significantly low when the bid-offer spread and FX hedging costs are considered. When it comes to China, Taiwan, India, and the Philippines, it has become more profitable for Korean investors to purchase treasury bonds in these nations for arbitrage. At end-2008, it was very advantageous for foreigners (except those in Iceland) to pursue arbitrage transactions for MSBs in Korea, with the excess return reaching approximately 400-700bp.

The size of arbitrage transactions by foreigners will dwindle gradually, but foreigners will steadily continue investing in short-term bonds. In order for foreigners to enjoy greater returns, the swap rate (which is the cost of hedging against FX risks) needs to be lower, and the gap between domestic and overseas interest rates has to widen. The swap rate refers to the forward exchange rate minus the spot exchange rate divided by the spot exchange rate. When the swap rate shifted into positive territory from Aug, basic investment conditions for foreigners went sour. Due to early reflection of a base rate hike in Korea, the spread between the one-year MSB rate and the 12-month Libor rate expanded, maintaining good conditions for arbitrage investment. Conversely, this means that arbitrage transactions by foreigners may shrink rapidly if discussions of exit strategies take shape in the US after 1Q10.

The foreign capital outflow is not likely to deal a large blow. As in 2008, most foreigners are purchasing bonds with less than two-year maturities. Bonds with less than three-month maturities account for as much as 30-40% of foreigners’ total bond net buying. Therefore, the shock will be feeble as long as the foreign currency market works smoothly.
Investment in 5-year and 10-year non-benchmark bonds to benefit when Korea is included in WGBI

Expectations are high for Korea’s possible reclassification into the WGBI. When we look at the proportion and balance of KTBs of each maturity in the additional market index under the WGBI, KTBs will likely benefit from reclassification across the board, except those with one- to three-year maturities. When the number of constituents is considered, non-benchmark 5-year and 10-year treasury bonds stand to benefit.

Foreigners’ purchase of treasury bonds increased markedly before and after Malaysia was included in the WGBI recently. Foreigners’ investment patterns associated with Asian treasury bonds are similar overall. The surge in investment in KTBs since 2007 and in Malaysian treasury bonds since 2008 has something to do with the swap basis (CRS minus IRS). Arbitrage transactions increased sharply in the two nations as the negative basis widened more than in the past. An inflow of more than USD15bn in long-term investment money associated with the WGBI reclassification is a positive factor that can lower the coupon rate, which in turn will improve the supply-demand
dynamics of mid/long-term treasury bonds. However, this can be offset by arbitrage trading for short-term bonds. Therefore, investors have to pay attention to how things unfold but should not be too hopeful.

**Fig 30: Proportion of KTBs by maturity in WGBI additional market index**

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<th>% of KTB balance</th>
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<td>1-3 yrs</td>
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<td></td>
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<tr>
<td>3-5 yrs</td>
<td>43.9</td>
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<td>5-7 yrs</td>
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<td>7-10 yrs</td>
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<tr>
<td>10 yrs or longer</td>
<td>11.8</td>
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</table>

Note: As of end-Nov 2009
Source: Citigroup, KIS Pricing

**Fig 31: Foreigners’ investment patterns in Asian treasury bonds**

Source: Bloomberg, ADB, Hyundai Securities
Pay Attention to Changes in Banks’ Deposit Structure

Market still sensitive despite eased credit risks; Differences by rating and industry

Liquidity crunch eased in 2009

The credit crunch caused by the financial crisis eased substantially in 2009. Liquidity for corporations improved as corporate bond issuance increased sharply in 1H09. The credit spread also narrowed to the level seen before the Lehman Brothers debacle. Foreign currency liquidity, which led to a credit crunch in Korea, also improved owing to a Korea-US currency swap and the government’s guarantee for bank debentures. Restructuring efforts in construction and shipbuilding industries as well as the recapitalization of financial institutions helped reduce uncertainties in the Korean economy.

Fig 32: Issuance of agency bonds and bank debentures increased in 2009

![Graph showing issuance of agency bonds and bank debentures]

Source: KIS Pricing

Fig 33: Credit spread narrowed markedly

![Graph showing credit spread]

Note: Spreads with three-year KTBs
Source: Three major private credit rating agencies
With continuing stimulus programs, the recovery of developed economies including the US is drawing near. Preemptive restructuring prevented the credit risks of a specific sector from spreading to the general economy. However, the pace of economic recovery is slow, and risks lie dormant at home and abroad amid uncertain economic conditions. Therefore, credit risks are expected to ease at a slow and steady clip. Furthermore, restructuring centered on debt rollovers rather than on debt-to-equity swaps, so the actual debt burden was not relieved much, and risks remain in industries despite restructuring.

As the economy went through a drastic contraction and recovery, credit spreads have varied by credit grade and industry. While companies with solid fundamentals expanded issuance of corporate bonds and improved their liquidity, subprime companies are still in a fix. With continued uncertainties at home and abroad, the credit spreads of industries and companies that exposed weaknesses amid economic changes will differ.
The Korean financial market still appears weak in terms of credit issues. With global credit risks arising following the Lehman Brothers collapse, credit risks rapidly spread to Korean industries with insufficient liquidity. As of late, with Dubai World’s call for a moratorium on its debt, the credit risks of builders and shipping lines are emerging yet again. Whenever global credit issues come to the fore, consequent uncertainties and concerns spill over to the domestic market.

The domestic financial market is reflecting a risk premium in corporate bond rates based on vulnerability to credit issues. Comparison of corporate bond yields with the base rate immediately after the 2008 demise of Lehman Brothers and the current base rate shows that the number of corporate bonds with wider credit spreads relative to the base yield increased significantly. This phenomenon is especially pronounced for bonds rated between A+ and A-. This is due to growing jitters for the construction and shipping markets, which are seeing weak financial structures and delayed recovery. The market already assumes that the credit ratings of some A-rated sectors and companies will actually be one to two grades lower.

Such progress made with regard to credit issues hints that the domestic financial market still has great potential to stumble. That is, there is a limit to the extent to which the risk premium can be reduced unless financial structures actually improve via active removal of NPLs and restructuring. It is difficult to enhance the fundamental health of the financial market with continuous fiscal spending alone.
Additional global credit issues are highly likely to emerge going forward due to insufficient restructuring. Whenever credit issues surface, domestic market unease may also rise, and demand for corporate bonds issued by related sectors and companies will contract. But demand for those issued by companies with sound credit and financial stability will continue. As a result, credit spreads will likely stand at both extremes.

As for the shipping and shipbuilding industries, the credit spread is unlikely to narrow for the time being. The support measures of purchasing vessels via KAMCO’s and KDB’s shipping funds are being implemented, but they are insufficient. The market slump is also expected to continue for some time. The credit spread is highly likely to remain unstable until adequate credit ratings and bond rates are secured for each company.

On the other hand, the credit spread will likely be relatively stable for banks and capital companies, which carried out preemptive restructuring, as the overall capital buffer is improving due to aggressive fund raising and asset downsizing. However, the basis for downward stabilization of the credit spread has not yet been fully realized, as an earnings uptrend (asset quality, profitability, etc.) has yet to show.

Preparing the basis for earnings improvement via restructuring is a precondition for stabilizing the credit spread. In the process of curbing the spread of credit risk to the overall financial market in the aftermath of SK Global’s accounting fraud in 2003, credit card companies took self-help actions for about two years, including debt-to-equity swaps, capital increases, foreign investment attraction, and credit line increases. In the process, the authorities applied stricter asset quality standards,¹ resulting in aggressive NPL write-offs and an early termination to the process of weeding out bad credit card companies from good ones. As such, the market’s aversion to bonds issued by credit card companies eased, and investors started to buy bonds issued by those with sound asset quality. The demand-supply balance also improved as the number of outstanding

¹ Under the stricter quality standard for credit card companies’ re-aged loans, credit card companies have to establish provisions for re-aged loans in addition to provisions for delinquencies that occurred before re-aged loans were provided (just as banks are required to).
bonds issued by credit card companies decreased sharply due to rapid progress made in restructuring, (e.g., banks merged credit card companies affiliated with them). With the basis for earnings turnaround for credit card companies secured, the credit spread stabilized downward in 2005.

The upcoming restructuring process is unlikely to bring a great shock to the financial market. The financial market already reached consensus on which sectors are weak and accordingly has reflected risk premiums in the credit spread. Rather, delayed restructuring will likely be more risky, as it will raise potential uncertainties and leave the financial market weak to global credit risks. Market participants’ differing views on companies in a high-credit-risk industry could scare investors away from the entire industry. It seems that restructuring guidelines that can remove uncertainties are needed.

In Descending Order of Appeal: Bank Debentures, Corporate Bonds, Credit-Finance Company Bonds, and Agency Bonds

KRW45tr worth of bank debentures are to mature by Apr 2010, but bank debentures are expected to be in a net redemption status. Hence, the demand-supply balance will likely be in good shape. Since the financial authorities reviewed the introduction of the LTD ratio regulation, banks have been raising funds mostly via deposits, and they seem to be in need of further expansion in the deposit base. While investors have yet to decide where to invest their money, loan growth also slowed down due to real estate market regulations, including the DTI ratio regulation.

Agency bond issuance is expected to increase. The government is increasing public projects via public companies as a part of efforts to stimulate the economy. Newly established public companies like Korea Finance Corporation and Korea Student Aid Foundation also are expected to issue bonds. Bond issuance related to major national projects including the Four River Restoration project and Sejong City project will likely
expanding as well. Agency bond issuance is expected to increase by more than KRW20tr in 2010. Excluding those issued by new public companies, issuance will be similar to the 2009 level.

With net issuance rising, the oversupply burden will likely increase. Outstanding special bonds amounted to KRW164tr as of end-Nov, up KRW64tr from KRW100tr at end-2007. Excluding bonds issued by new public companies, the net issuance of agency bonds is estimated at KRW40tr in 2010. A mounting fiscal deficit will increase the number of public projects carried out by public companies and raise pressure for agency bond issuance. In line with expansion in public projects, public companies (including those located in provincial areas) are expected to see continuous losses and poorer financial health. Pressure for a wider spread may increase for agency bonds.

Unlike credit card companies, whose business foundation is stable, the extent of risk differs from one credit-finance company to another. Hence, care must be exercised in choosing bonds. First, the delinquency rate is on an uptrend for credit-finance companies. Second, operating cash flows are weak overall as business dried up following reductions in asset size in 2009. Third, financial structures have yet to improve, as cost burdens resulting from ownership of non-performing assets continue. Fourth, overall restructuring of the economy is not sufficient. Therefore, the spread of bonds issued by credit-finance companies affiliated with banks and those issued by blue-chip auto finance companies with a captive market will be relatively stable, as they can secure liquidity via largest shareholders in emergencies. On the other hand, bonds issued by credit-finance companies, with large outstanding loans and high proportion of real estate PF and ship financing, will likely continue to be avoided.

Corporate bond issuance declined from 2H09 as enough funds were raised via large-scale issuance of blue-chip corporate bonds in 1H09. Corporate bond issuance is expected to decrease YoY in 2010 because additional funding is not urgently needed. However, companies and financial institutions involved in M&A deals and asset disposal (which are expected to increase in 2010) may need money. Since LBO loans have restrictions, bonds may be issued to fund the deals, centering on blue-chip companies. Semiconductors, IT, and other industries that are in good shape will likely resume capex and issue corporate bonds as well.

When a private bad bank is established, NPL-related ABS issuance will likely begin in earnest. With the possibility of greater nonperformance among SME and individual loans, NPL-related ABS issuance is expected to increase.
Fig 39: Bond maturity concentrated in 1H10

Source: KIS Pricing

Fig 40: Total value of outstanding agency bonds to keep increasing in 2010

Source: KIS Pricing

Fig 41: Delinquency rate of credit-finance companies

Source: FSS
Credit spread to narrow gradually, but volatility to rise depending on events

Increase exposure centering on blue-chip bonds with low credit risk

In descending order of appeal: Bank debentures, corporate bonds, credit-finance company bonds, and agency bonds

The credit spread is expected to narrow in reflection of eased risks and the improved demand-supply balance of bank debentures but at a slower pace after bank debentures mature at the beginning of the year. Unease about economic recovery and the low market liquidity of bonds with credit risks will result in a wider spread as events unfold. Major events in 1H10 will likely include a policy rate increase at end-1H10, domestic and overseas credit market developments, and large-scale M&A deals.

In view of remaining risks, a blue-chip bond-centered investment strategy is still needed. The opportunity for excess returns exists with corporate bonds rated BBB, but credit risks and low liquidity are burdensome. Upcoming events in 2010 may temporarily widen the spread, but it will likely continue to decrease over the long haul. If the spread increases, we recommend increasing exposure relative to benchmark.

Bank debentures seem the most appealing and will likely remain in a net redemption status due to LTD ratio regulation. Market liquidity is in fairly good shape, and the demand-supply balance also is expected to improve as the proportion of the outstanding amount relative to benchmark decreases. Corporate bonds will be a sound choice as well because issuance declined. Top-flight corporate bonds rated AA- and higher may be issued due to M&A deals, but only temporarily. As for A-rated corporate bonds, reduction in credit risks is expected to result in a narrower spread. Careful selection among companies is needed for corporate bonds and credit-finance company bonds due to remaining credit risks. Agency bonds are the least appealing in light of strong pressure for issuance and concerns over deterioration in the financial health of public companies.
Banks’ Deposit Structure to Change on LTD Ratio Regulation

Financial authorities are considering regulating the LTD ratio in order to reinforce the asset quality of banks. Details are not yet decided, but the standard LTD ratio will likely be set at less than 100%. With regard to CDs, they will likely be gradually excluded from deposits. The LTD ratio is about 110% when CDs are included in deposits but rises to 127% when they are excluded. The LTD ratio of banks other than special banks like KDB is 99% when CDs are included and 114% when excluded.

The LTD ratio is an indicator of banks’ financial stability, including liquidity risks. If the LTD ratio is high, financial costs increase, and the stability of financial institutions decreases as they may increase borrowings via debenture issuance instead of relying on deposits. This surfaced as a risk factor for domestic banks immediately after the financial crisis broke out.

A uniform comparison of LTD ratios is not easy since they differ according to the peculiar traits of financial markets in various regions and countries. In the case of the US, which has advanced direct-financing and ABS markets, the LTD ratio is relatively low, whereas that in Europe is relatively high. The LTD ratio of banks in emerging Asian markets stands at 80-90%.
Bank debentures to be in net redemption status due to short-term expansion in deposits; ABS market to grow in mid/long term

If LTD ratio regulation materializes, the most practical measure that banks can adopt will be increasing deposits. Reducing loans is another option, but it is not very realistic: 1) because it necessitates loan recovery, meeting the standard LTD ratio in the short term will not be easy without harming asset quality; 2) the foundation for business operation may deteriorate in the mid/long term; and 3) the measure would contravene the government’s economic stimulus policies. Banks will inevitably increase deposits, but they may face difficulty in finding a smart way to manage their portfolios. Hence, net redemption may take place for bank debentures. The proportion of bank debentures will likely be reduced in line with an increase in deposits.

Banks may not be able to stick to their strategy of increasing deposits in the long term. Increasing sales of high-interest, special deposit products will raise banks’ cost burden and are less stable because those products are sensitive to the market rate. The maturity of deposits is also shorter than that of loans. From a mid/long-term perspective, banks should reduce loan assets while simultaneously expanding the deposit base. The ABS market could thus be activated, enabling banks to reduce loan assets without harming their business foundation.

The credit spread of bank debentures is expected to narrow as the demand-supply balance improves on an increase in deposits and a decrease in issuance. When banks were competing to increase assets in the past, loan growth outpaced deposit growth, raising bank debenture issuance. However, the proportion of debentures may decline gradually as deposit growth may outpace loan growth for some time. Money will flow into deposits, impacting negatively on the fixed-income market. As banks are selling special deposit products in order to expand deposit bases, capital that is sensitive to the interest rate is moving out from bonds into deposits. The LTD regulation will not be short-lived and will bring changes to financing structures and hence is a mid/long-term negative for the fixed-income market. If CDs are excluded from deposits and the 100% 

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**Fig 45: LTD ratio of major global banks (based on FY-end 2008)**

Note: * Kookmin Bank and Shinhan Bank based on 1H09; CDs excluded
Source: Bloomberg, FSS
LTD ratio is to be met, a whopping KRW80tr worth of loans must be reduced. However, the temporary increase in capital to result from the process of decreasing the LTD ratio will expand bank’s short-term portfolio management capacity. The demand-supply balance of short-term debentures has room to slightly improve.

**Fig 46: Amount of loans in excess of standard LTD ratio of 100% (excl. special banks)**

![Graph showing amount of loans in excess of standard LTD ratio](image1)

*Source: FSS*

**Fig 47: Amount of loans in excess of standard LTD ratio of 100% (incl. special banks)**

![Graph showing amount of loans in excess of standard LTD ratio](image2)

*Source: FSS*
Issuance conditions deteriorated for special banks like KDB

Compared to ordinary banks with sound deposit bases, special banks like KDB have high LTD ratios. Also, the LTD ratio remains at a relatively sound level for regional banks compared to that of ordinary banks, which were engaged in fierce competition to increase assets. In the early stages, LTD regulation may not be applied evenly to ordinary banks and special banks but may be applied uniformly as time passes. Since privatization is planned for most special banks, debenture issuance will likely become harder for them.

Loan growth will likely be determined by deposit growth for the time being. Due to the characteristics of deposits, funds will be raised more slowly than with debenture issuance, and loan growth will inevitably contract. The liquidity crunch may grow slightly worse for SMEs and individual borrowers.
Fig 50: LTD ratio trend by bank

Source: FSS
NOTES

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NOTES
## Research Center

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**Contact Information**: (822) 2014 ext.  E-mail + @hdsrc.com
BRANCHES

RESEARCH CENTER
Hyundai Securities Co., Ltd.
6F Hyundai Sec. Bldg.
34-4 Youido-Dong Youngdungpo-Ku
Seoul Korea, 150-010
Yong-Won Suh / (822) 2014.1701 / yongw.suh@hdsrc.com

SALES & SALES TRADING DESK
Hyundai Securities Co., Ltd.
11F Hyundai Sec. Bldg.
34-4 Youido-Dong Youngdungpo-Ku
Seoul Korea, 150-010
Yong Chul Lee / General Manager / (822) 2014.1520 / yclee@stockmarket.co.kr
Jang Moon Kim / Equity sales / (822) 2014.1522 / jmkim@stockmarket.co.kr
JT Kim / Equity sales & Trading / (822)2014.1535 / jtkim@bloomberg.net
Paul Chang / Sales Trading / (822) 2014.1524 / paulchang@bloomberg.net
Toll-Free USA: 877-311-5936, HK: 800-90-0137, SINGAPORE: 800-8211-199

GLOBAL SALES NETWORK
Asia
Hyundai Securities (Hong Kong) Ltd.
Suite 2301-04, Citic Tower
Tim Mei Avenue, Central
Hong Kong
YH Nam / (852) 2901.2622 / yhnam@hdsa.com.hk
Dickson Lam / (852) 2901.2688 / dicksonlam@bloomberg.net
Shawn Kim / (852) 2901.2677 / shkim9726@hdsa.com.hk
IVY Kim / (852) 2901.2697 / ivykim@hdsa.com.hk

U.K.
Hyundai Securities (Europe) Ltd.
Neptune House, Triton Court
14 Finsbury Square
London EC2A 1BR
Yoonwoo Park / (4420) 7786.8604 / yoonpark@hyunsec.com
Kevin Jee / (4420) 7786-8604 / kevinjee@hyunsec.com
Jin Song / (4420) 7786-8603 / jinsong@hyunsec.com

Japan
Hyundai Securities (Japan) Ltd.
7th Floor, L Ningyocho Bldg.,
2-7-10, Nihonbashi-Ningyo-Cho
Chuo-Ku, Tokyo 103-0013 Japan
Simon Choi / (813) 3661.3809 / simonchoi@hdtokyo.com
Han Lim Ryu / (813) 3661.3763 / hlyu@hdtokyo.com

USA
Hyundai Securities (America), Inc.
1370 Avenue of the Americas, 22nd Floor
New York, NY 10019 USA
David Kim / (1-212) 265.2881 / davidkim@hds-us.com
John Gil / (1-212) 265.2771 / john@hds-us.com