

# The Development of Korean Mortgage Securitization Market

Speech by Mr. SEO Jong Dae

July 31, 2013

# Talking Points

▶ **Korean Housing Finance Market**

▶ **KHFC Overview**

▶ **KHFC MBS and Covered Bond**

▶ **Driving Factors behind Korean Securitization Market Growth**

▶ **Recent Developments on Korean Covered Bond Act & Outlook**

# Korean Housing Market in a Nutshell

## Korean Housing Market Overview

### Population

- Total 50 mn
- 10 mn live in Seoul with another 15 mn living in the Seoul metropolitan area

### Housing Overview

- Total housing stock is 17mn units
- Apartments account for 47.1%

*(mn, units)*

Apartment	Detached house	Others	Total
8.2 (47.1%)	6.9 (39.6%)	2.2 (13.3%)	17.3 (100.0%)

*Source : Korean Statistical Information Service, Housing Census, 2010*

- Average floor space of an apartment is 85 sq.m.
- Average price of an apartment is KRW 3 mn (USD 2,700) per sq.m.
- Owner occupied houses account for 54.2%

*(mn, units)*

Owner occupied	Rent	Others	Total
9.4 (54.2%)	7.5 (43.2%)	0.4 (2.6%)	17.3 (100.0%)

*Source : Korean Statistical Information Service, Housing Census, 2010*

### Property Title

- Evidenced by registration at the Real Estate Property Registration Office

### Creditor Environment

- If the proceeds from the auction is not enough, the creditor can seize or lay claims on other assets of the borrower (full recourse)

*Source : MOSF, BOK and IMF as of 2012*

# Brief History of Korean Housing Finance Market

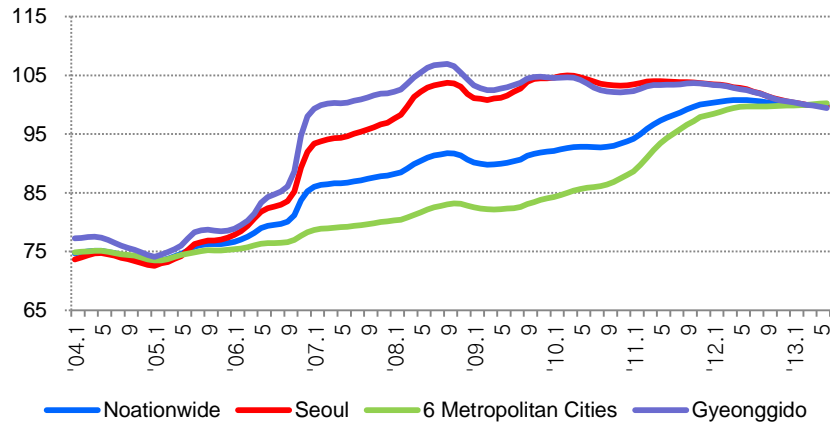
*Consistent Growth Since the Implementation of Economic Development Plan*

- 1960** **Economic Development Plan launched**
  - Urbanization → Housing Shortage Problem → House Price ↑ → Need for Housing Financing
- 1973** **Korea Housing Bank launched National Housing Account**
- 1981** **Korea Housing Bank launched National Housing Fund**
- 1997** **Housing finance market was changed with deregulation after Asian financial crisis**
  - KHB was privatized in 1997, and commercial banks entered the market
  - Mortgage loan balance grew at an annual growth rate of 12%
- 1998** **Asset-Backed Securitization Act was enacted**
- 1999** **Korea Mortgage Corporation (KoMoCo) was established**
- 2002** **LTV was introduced**
- 2004** **Korea Housing Finance Corporation(KHFC) was established**
  - Signed transfer agreement with KoMoCo
  - Took over Public Housing Finance Credit Guarantee Fund business
- 2005** **DTI was introduced**
- Today** **'Conforming Loan' was launched to support the soft landing of household debt**
  - Banks are now primary mortgage lenders with 79% market share
  - KHFC's mortgage market share is around 10%

# Korean Housing Finance Market Overview

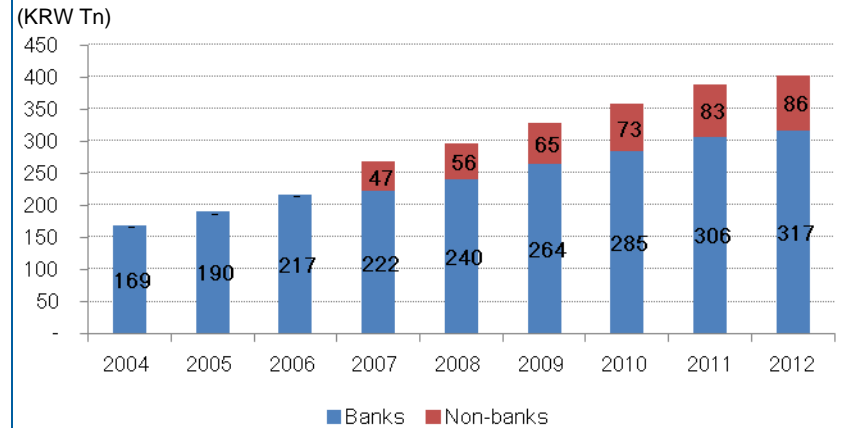
*The Market Has Grown to be Robust, Substantial and Resilient*

## Housing Price Index



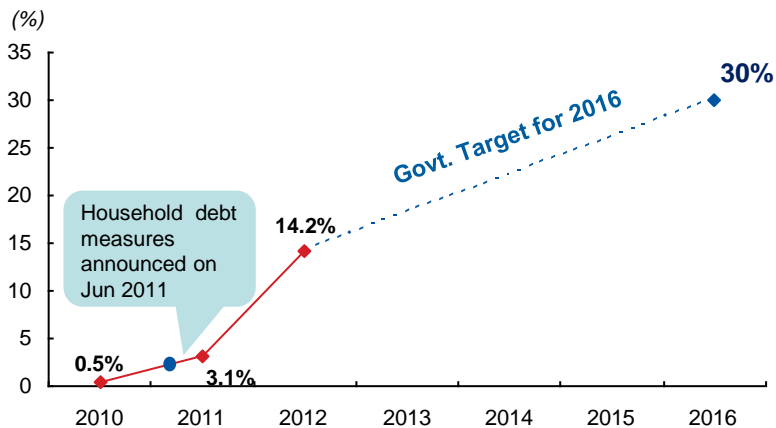
Note: 6 Metropolitan Cities are Busan, Daegu, Daejeon, Kwangju, Incheon and Ulsan

## Mortgage Loan Outstanding



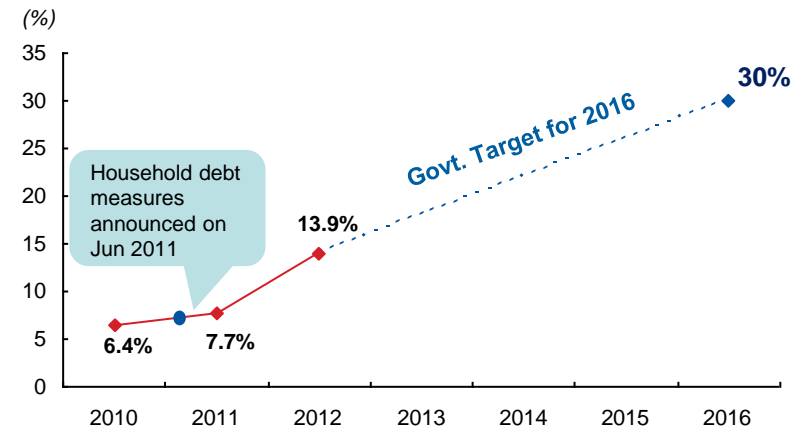
Source: BOK

## Fixed Rate Loan Share Trend



Source: FSS, as of 2012 end

## Installment Loan Share Trend



Source: FSS, as of 2012 end

# Korean Housing Finance Market Overview (Cont'd)

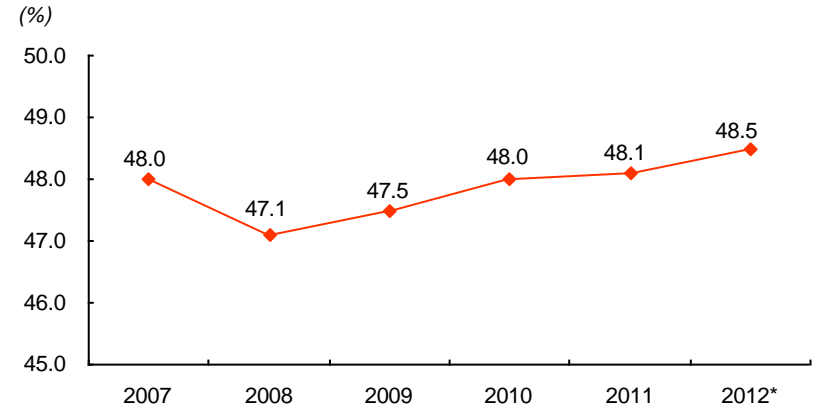
## Sound Loan Performance and Cautious Government Supervision

### LTV / DTI Regulation

Current LTV / DTI Restriction	
<b>LTV Limit</b>	<b>Floating Rate : 60%</b> <b>Fixed Rate : 70%</b>
<b>DTI Limit</b>	<b>40%~60%</b>

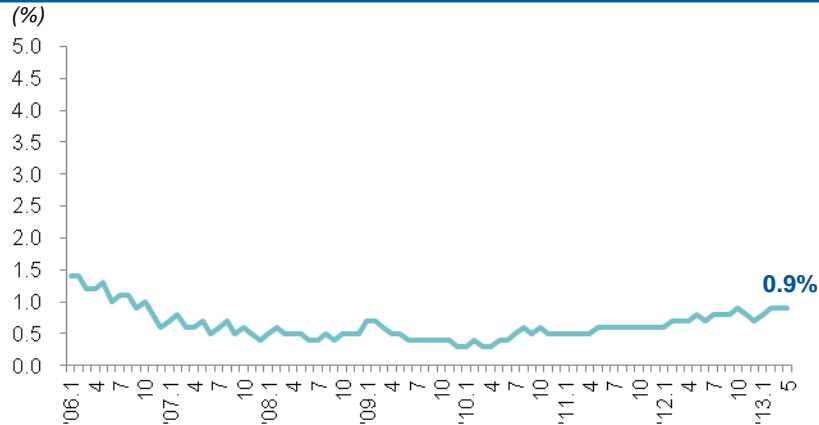
Source: FSS

### Average LTV Ratio



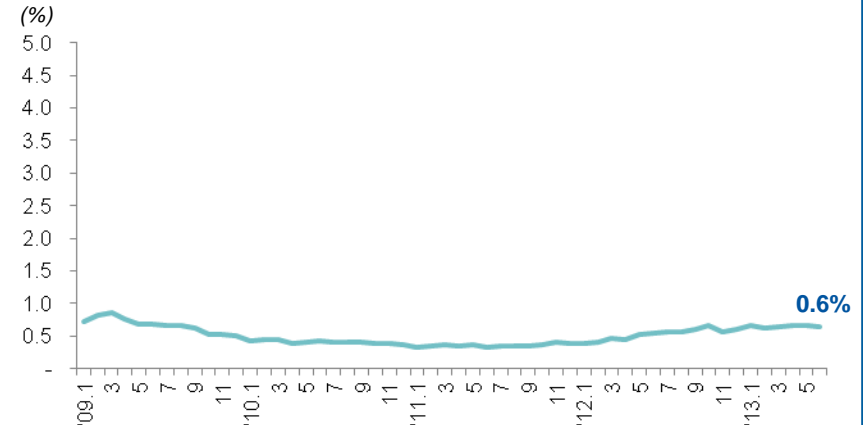
\* As of March 2012, all other figures based on year-end values  
Source: FSS

### Delinquency Ratio - Banks



Source: FSS, as of May 2013

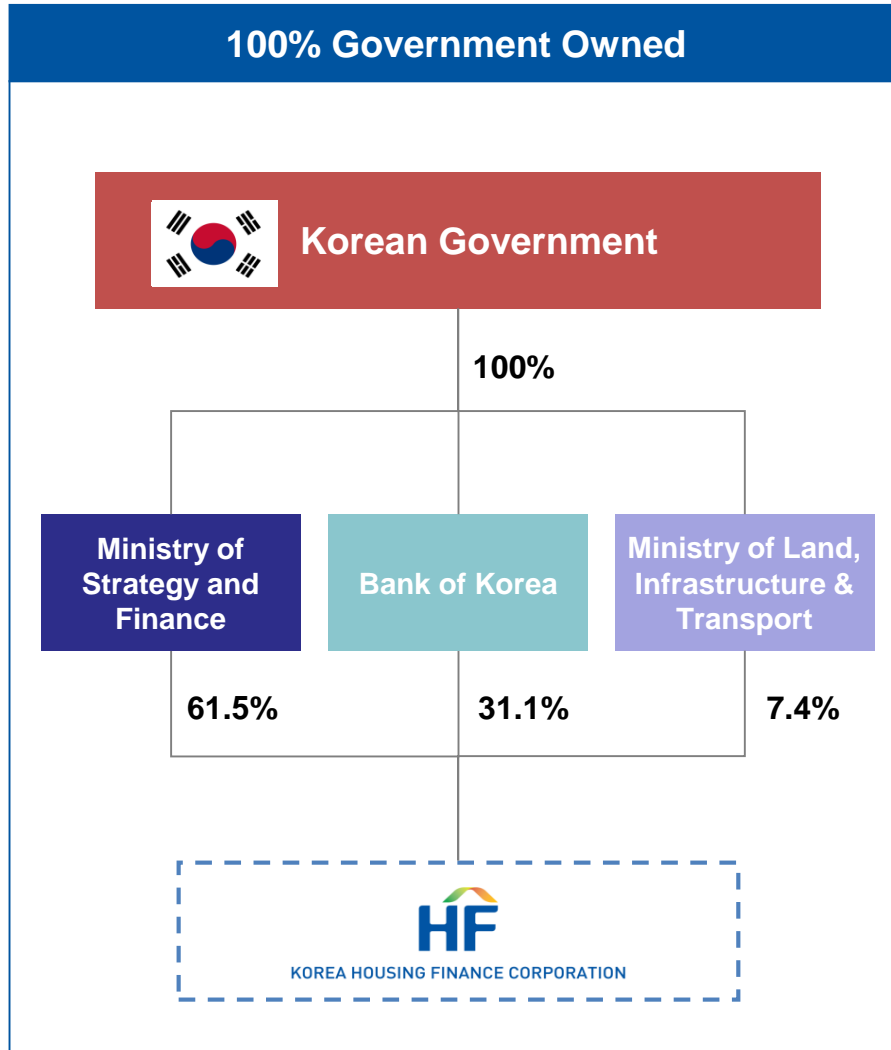
### Delinquency Ratio - KHFC



Source: KHFC, as of June 2013

# KHFC Overview

## Leading the Role in Developing Korean Mortgage Securitization Market



Company Snapshot	
<b>Established</b>	<ul style="list-style-type: none"> <li>March 2004</li> </ul>
<b>Key Policy Roles</b>	<ul style="list-style-type: none"> <li>Promote stable and robust housing market</li> <li>Facilitate stable supply of long-term fixed mortgage loans</li> </ul>
<b>Credit Ratings</b>	<ul style="list-style-type: none"> <li>Sovereign equal ratings</li> <li>Aa3 (Moody's) / A+ (S&amp;P) / AA- (Fitch)</li> </ul>
<b>Key Product</b>	<ul style="list-style-type: none"> <li>Long-term fixed rate installment loans</li> <li>Provided total of KRW 76 tn (USD 70 bn) since inception</li> <li>Originated through 20 participating institutions</li> </ul>
<b>Funding Activities</b>	<ul style="list-style-type: none"> <li>150 MBS transactions totaling KRW 72 tn (USD 65 bn)</li> <li>3 cross-border and 5 domestic covered bond transactions totaling KRW 3 tn (USD 2.7 bn)</li> </ul>

Source: KHFC, as of June 2013

# Mortgage Origination

## Supplying Long-term Fixed Rate KHFC Mortgage Loans & Conforming Loans

- Government has set a goal to increase fixed rate mortgage loans up to 30% of the total mortgage loans by 2016 in order to control household debt
- In line with such measures, KHFC provides long-term, fixed rate installment mortgage loan products

< Securitized Loans by KHFC >

	KHFC Mortgage Loans	Conforming Loans
✓ Origination & Servicing	KHFC	Banks
✓ Mortgage Rate Decision	KHFC	Banks
✓ Purchasing Price	Par	Market Price

	KHFC Mortgage Loans & Conforming Loans	Other Commercial Bank Mortgage Loans
<b>Borrower Eligibility</b>	<ul style="list-style-type: none"> <li>Income proof required, CB grade eligibility</li> </ul>	<ul style="list-style-type: none"> <li>Same</li> </ul>
<b>Maximum LTV</b>	<ul style="list-style-type: none"> <li>70%</li> </ul>	<ul style="list-style-type: none"> <li>60%</li> </ul>
<b>Loan Limit</b>	<ul style="list-style-type: none"> <li>KRW 500 mn (USD 0.5 mn)</li> </ul>	<ul style="list-style-type: none"> <li>No restriction</li> </ul>
<b>Collateral</b>	<ul style="list-style-type: none"> <li>Max. price of KRW 900 mn (USD 0.8 mn)</li> </ul>	<ul style="list-style-type: none"> <li>No restriction</li> </ul>
<b>Interest Rate</b>	<ul style="list-style-type: none"> <li>Fixed</li> </ul>	<ul style="list-style-type: none"> <li>Floating or Hybrid</li> </ul>
<b>Securitization</b>	<ul style="list-style-type: none"> <li>MBS or Covered Bond by KHFC</li> </ul>	<ul style="list-style-type: none"> <li>No securitization</li> </ul>



# Mortgage Funding

## Leading MBS Market and Pioneering Covered Bond Market

- The KHFC Act enables KHFC to issue two types of mortgage-backed instruments to fund its mortgage business

### MBS (Article 32)

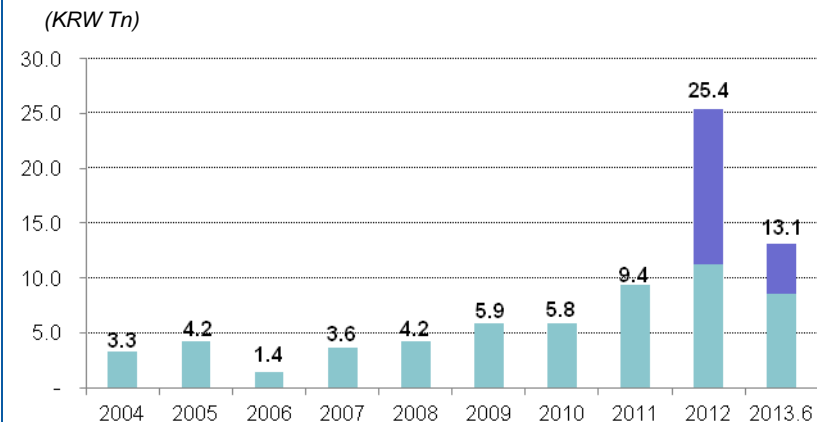
- A trust is set up and the trust assets are excluded from insolvency estate of KHFC

### Covered Bond (Article 31)

- Having a statutory priority right, the Cover Pool is ring-fenced from KHFC default
- Covered Bond holders have dual recourse to KHFC and the Cover Pool

- Since its inception, KHFC issued MBS and Covered bonds totaling KRW 74.9 trillion (USD 68.1 billion)

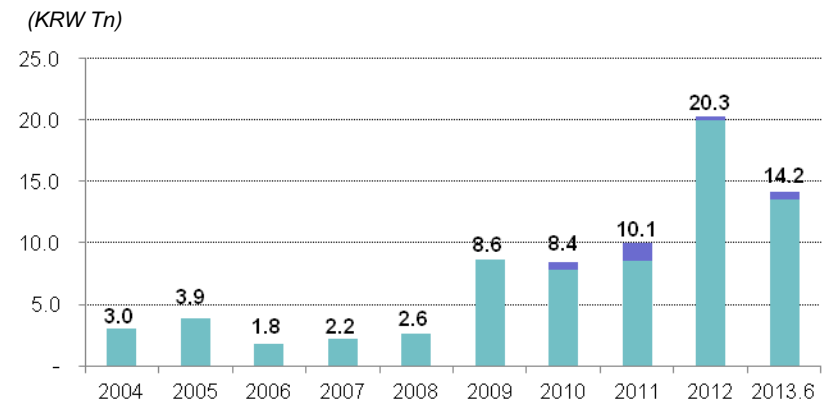
### Mortgage Loan Origination



Source: KHFC

■ Bogaemjari Loans ■ Conforming Loans

### MBS & Covered Bond Issuances

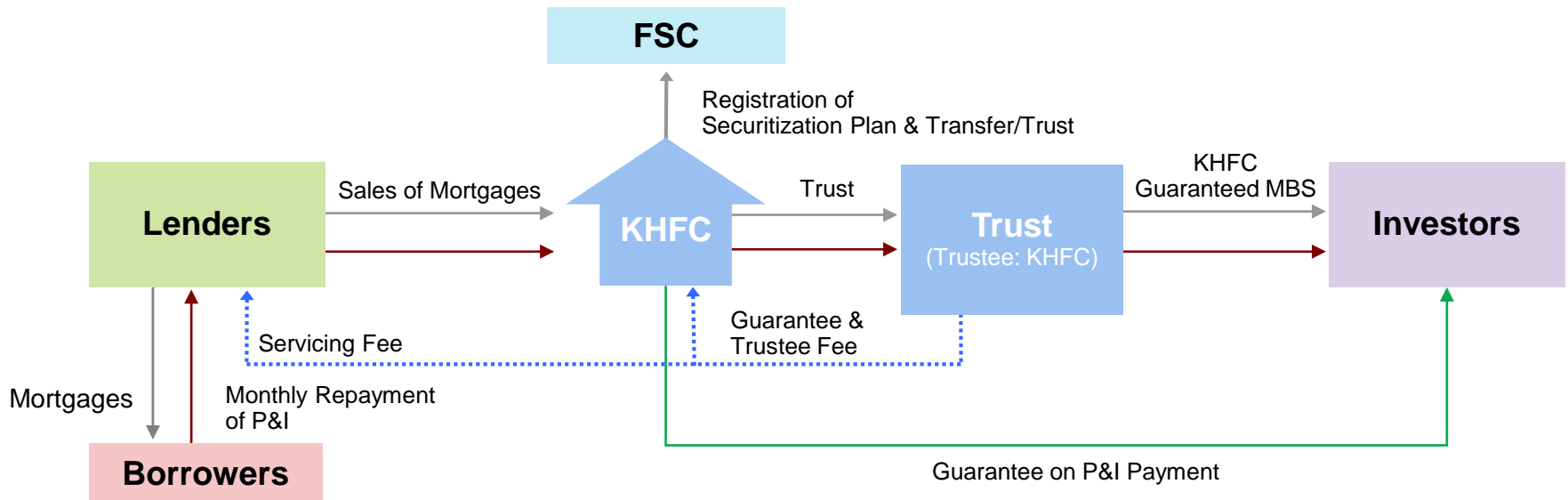


Source: KHFC

■ MBS ■ Covered Bond

# KHFC MBS Structure

Providing 100% Guarantee on Senior MBS P&I payment



<b>Underlying Assets</b>	<ul style="list-style-type: none"> <li>▪ KHFC Mortgage Loans &amp; Conforming Loans</li> </ul>
<b>Issuance Amount</b>	<ul style="list-style-type: none"> <li>▪ KRW 500 billion ~1 trillion (per issuance)</li> </ul>
<b>Issuer</b>	<ul style="list-style-type: none"> <li>▪ Trust (Trustee: KHFC)</li> </ul>
<b>Issuance Structure</b>	<ul style="list-style-type: none"> <li>▪ Multiple tranches with each tranche having a different tenor</li> <li>▪ 1, 2, 3yr tranches are not callable</li> <li>▪ Sequentially Partially Callable tranches</li> </ul>
<b>MBS Coupon &amp; Issuance procedure</b>	<ul style="list-style-type: none"> <li>▪ Fixed-rate Coupon</li> <li>▪ AAA Credit rating, Deposited in KSD, Listed in KRX</li> </ul>
<b>Servicer</b>	<ul style="list-style-type: none"> <li>▪ Participating Lenders (or KHFC in case of u-Bogeumjari Loans)</li> </ul>

# KHFC Covered Bond Overview

*The Only Institution With Statute To Issue Covered Bond*



## Korea Housing Finance Corp

- Executed 15 July 2010
- 144A / Reg S
- USD 500mn notes with 5.5-year maturity and 4.125% coupon
- KHFC's first ever overseas funding in the international capital markets
- Asia's very first statutory covered bonds
- Book size was USD 2.75bn with orders from 130 accounts

### International Awards



2010  
**Best Deal Korea**  
**Best Securitisation Deal Asia Pacific**  
*KHFC Covered Bonds*



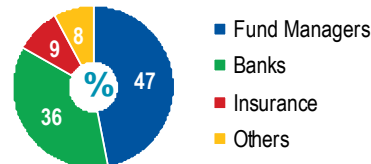
2010  
**South Korea Deal of the Year**  
*KHFC Covered Bonds*



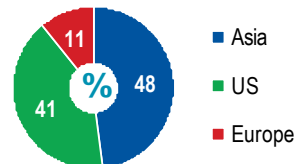
## Korea Housing Finance Corp

- Executed 25 July 2011
- 144A / Reg S
- USD 500mn notes with 5.5-year maturity and 3.500% coupon
- KHFC's second covered bond issuance in international bond market
- Highly successful transaction despite volatile market environment
- Book size: USD 1.5bn with orders from 121 accounts

### Distribution by Investor Type



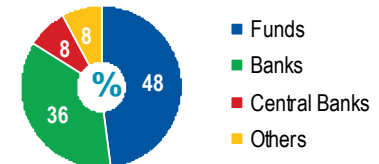
### Distribution by Geography



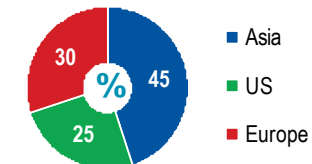
## Korea Housing Finance Corp

- Executed 7 March 2013
- 144A / Reg S
- USD500 mn notes with 5.5-year maturity and 1.625% coupon
- KHFC's third covered bond issuance in international bond market
- Achieved one of the tightest pricing among recent Korean quasi-sovereign bonds
- Book size: USD 1.7bn with orders from 91 accounts

### Distribution by Investor Type



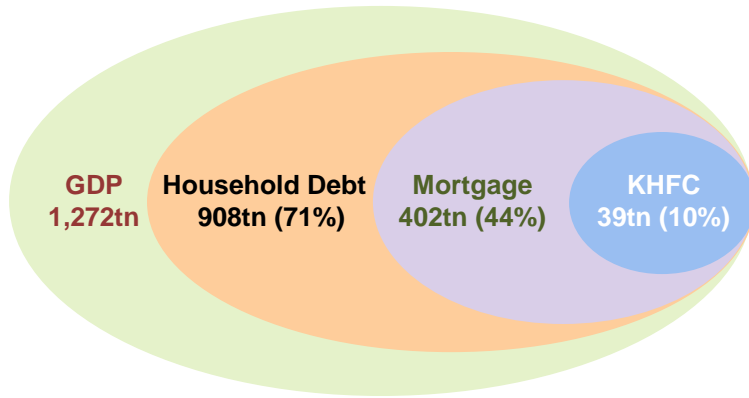
### Distribution by Geography



# KHFC's Achievement and Challenge

## Playing Integral Role in the Korea Housing Finance Market

### Market Share - Mortgage



Source: BOK, KHFC

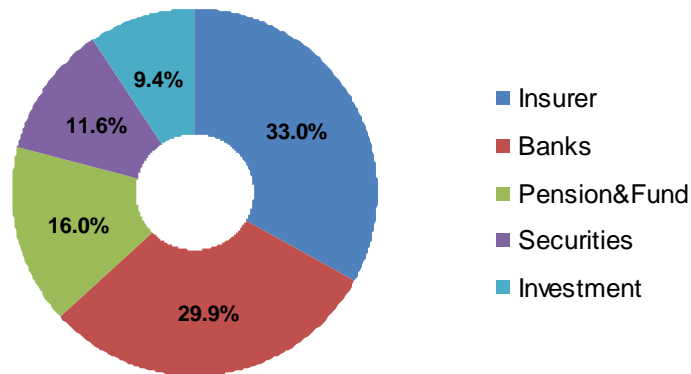
### Market Share - MBS

(End of June, 2013, TN, %)

	Amount	Portion
Bond Balance	1474.4	100.0
KTB	447.6	30.4
Special Bond	335.8	22.8
Bank Bond	174.4	11.8
KHFC	45.0	3.1
Others	471.6	32.0

Source: KFIA, KHFC

### MBS Investor Breakdown



Source: KHFC as of June 2013

### Pool Information Disclosure

- **Current:** Disclosure of cover assets through KHFC Homepage
  - Information including payment history, outstanding balance, prepayment rate and delinquency rate
- **On-going Plan:** Enhanced disclosure system through Bloomberg
  - Additional disclosure to include expected MBS repayment schedule, secondary trading levels, and other secondary market data

# Driving Factors behind Korean Securitization Market Growth

## *Advanced Legal and Institutional Environment*

### Legislative Framework for Mortgage Securitization

- Introduction and support of the legal framework for securitization market growth
  - 1998: Legislation of the ABS Act
  - 1999: Legislation of the Korea Mortgage Corporation Act
  - 2004: Legislation of the KHFC Act

### Institutional Framework for Enhancing Asset Quality

- Information sharing and management system covering delinquent borrowers through the Korea Federation of Banks
- Monitoring of credit information through commercial credit bureau agencies
- Efficient valuation system for collateralized assets
- Implementation of prudent regulatory measures such as LTV and DTI since 2002

### Policy Support for Fixed Rate Mortgages

- Borrower incentive through benefits on income tax over adjustable rate mortgages
- Banks required to maintain a certain percentage of fixed-rate loans
- Banks are encouraged to securitize mortgage assets through KHFC

# Driving Factors behind Korean Securitization Market Growth (Cont')

## Government's Strong Support for KHFC

Capital Injection to KHFC			
Date	Institution		Amount (KRW bn)
2004	Feb	Bank of Korea	310.0
	Mar	Ministry of Strategy & Finance	10.0
	Jun	Ministry of Land, Infrastructure & Transport	56.6
2007	Jun	Ministry of Strategy & Finance	50.0
2008	Jan	Ministry of Land, Infrastructure & Transport	50.0
	Dec	Ministry of Strategy & Finance	200.0
2009	Jan	Ministry of Strategy & Finance	150.0
	Jan	Ministry of Strategy & Finance	50.0
	May	Ministry of Strategy & Finance	200.0
2012	Jul	Bank of Korea	135.0
2013	Mar	Ministry of Strategy & Finance	120.0
	Jun	Ministry of Strategy & Finance	100.0
<b>Total</b>			<b>1,431.6</b>



### Financial Support

- **Compensation of losses by the Government (Article 51)**
- **Borrowings from the Government (Article 53)**
- Authorized capital of KRW 2 tn (USD 1.8 bn) by the Government (Article 5)
- Mortgage Interest Subsidies
- Tax reduction for mortgage purchase from banks

### Regulatory Support

- Legislative help from National Assembly
- Favorable regulatory requirements for financial ratios
- **0% risk weight for KHFC's MBS**
- **Only institution with statute to issue Covered Bonds (Article 31)**

### Operational Support

- **KHFC's President appointed by President of Korea**
- Non-Standing BOD members are nominated by the government
- Oversight from the government
  - Approval of business plan and budget
  - Monitoring of capital adequacy, liquidity, risk management

# Recent Developments on the Korean Covered Bond Act

*Covered Bond Act will Come into Force in the Near Future*



# Korean Covered Bond Act Overview

## *Establishing the Legal Framework for the Statutory Covered Bonds*

### Eligible Issuer

- Banks
- Korea Housing Finance Corporation / Korea Finance Corporation
- Equity capital of KRW 100bn (USD 92mn)
- Capital ratio of 10% or above

### Cover Assets

- Residential mortgage loans (LTV 70% or lower)
- Loans extended to central / local governments
- Government bonds and municipal bonds
- Cash or certificate of deposits (not exceeding 15% of total cover pool)

### Minimum Collateralization Ratio

- 105% of the outstanding amount of the covered bond

### Issuance Limit

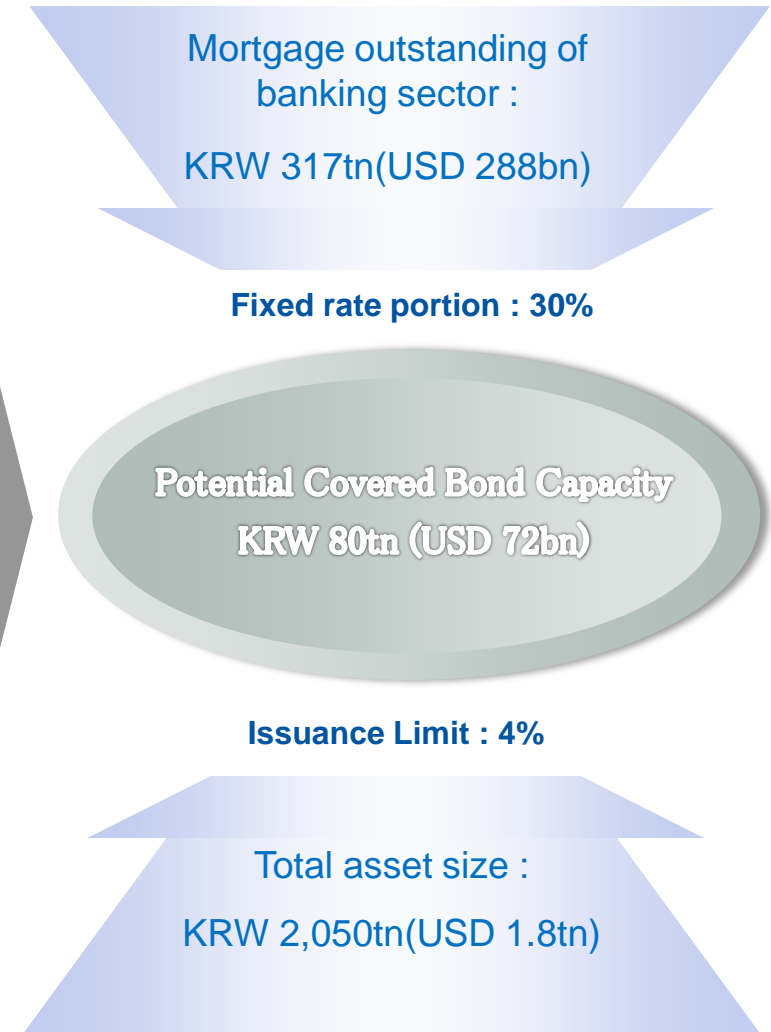
- Within 8% of the issuer's total assets



# Outlook on Korean Covered Bonds

## Covered Bond to Gain Momentum as a Means to Fund Fixed Rate Loans

- Covered bonds to be actively utilized by banks as a way of funding fixed rate loans
- On-shore funding :  
Banks to fund part of their fixed rate loan portfolios through issuing their own covered bonds instead of selling assets to KHFC for securitizations
- Off-shore funding :  
Banks to issue covered bonds as an alternative funding to senior unsecured bonds to achieve more competitive pricing



# Thank You

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