

# 출장 보고서: 2011 주택정책 국제회의 미국 연구진과의 과제 협의

조만, KDI 국제정책대학원  
(2011.09.16)

## □ 출장 목적:

- ① 2011 대표공동과제, “글로벌 금융위기 이후 선진적 주택정책 패러다임 모색,” 관련 동년 12월 12-13일 개최 예정인 국제학술대회의 미국 참여진과 발표 주제에 대한 구체적인 논의
- ② 특별히 최근에 세미나 참여의사를 밝힌 IMF 연구진과 발표논문에 대한 논의

## □ 방문기관 및 면담자 (방문 기간 - 2011.08.28(일) ~ 2011.08.31(수))

- **Federal Reserve Board (Fed)** (Monday, 10:00 – 11:00)
  - Dr. Matteo Iacoviello, Deputy Associate Director, Division of Research and Statistics
- **George Washington University (GWU)** (Monday, 14:00 – 16:00)
  - Dr. Min Hwang, Associate Professor
- **International Monetary Fund (IMF)** (Tuesday, 10:00 – 12:00)
  - Dr. Giovanni Dell’Arricia, Advisor, Macro-Financial Unit, Research Department
  - Dr. Deniz Igan, Senior Economist, Research Department
- **Renaud Associate and The World Bank** (Tuesday, 12:00 – 14:00)
  - Dr. Bertrand Renaud, President, Renaud Associates
- **Integrated Financial Engineering (IFE) Group** (Tuesday, 16:00 – 18:00)
  - Dr. Tyler Yang, CEO
  - Dr. Henry Buist, Vice President
- **The Wharton School** (Wednesday, 12:00 – 15:00)
  - Dr. Susan Wachter, Professor

## □ 결과 요약: 주택정책 국제 세미나 미국 연구진과의 과제 협의

- 연방준비은행의 Dr. Iacoviello 는 12 월 국제 세미나에서 다음 사항에 중점을 두어 발표하기로 결정: (1) Iacoviello/Neri(2010)<sup>1</sup> 를 비롯한 주택시장-거시경제 연계성 관련

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<sup>1</sup> Iacoviello, M. & Neri, S., 2010. "Housing Market Spillovers: Evidence from an Estimated DSGE

미국의 주요 논문 결과의 요약; (2) DSGE 모형이 주택-거시경제 연계성의 특정 및 정책 분석에 있어서 가지는 장·단점; (3) 한국과 같은 개방형 경제가 가지는 특징과 이의 시사점 (거시-부동산 연계성 연구에 있어서); (4) 시스템리스크를 동반하는 부동산시장 사이클에 대응하는 정책수단에 대한 분석; (5) 관련 연구가 한국 등 신흥시장국에 주는 시사점. Dr. Iacoviello 는 대표공동과제에도 참여하기를 희망하였으나, 연방준비은행의 내부 규정으로 인하여 12 월 국제 세미나에서 발표만 하기로 합의하였음.

- Professor Min Hwang 은 이미 연구계획서를 제출하였고, 이를 토대로 중점 분석 사항에 대한 구체적인 논의를 하였음. 미국의 C&D(Construction & Development)대출에 관련된 이론 및 실증분석 결과를 먼저 정리하고, 글로벌금융위기 전후의 시장변화에 대한 실증분석을 연구의 주요 토픽으로 계획하고 있음. 본 논문은 12 월 세미나 및 KDI 대표공동과제의 일부로 진행하고 있으며, 과제의 일부로 상업용부동산 뿐만 아니라 주거용부동산 개발금융에 대한 분석도 함께 수행하기로 하였고, 미국의 경험이 한국의 개발금융시장에 주는 시사점도 정리하기로 하였음.
- IMF 의 Dr. Giovanni Dell'Arricia 와 Dr. Deniz Igan 과의 회의에서는 최근 발표된 IMF Working Paper("How to deal with real estate booms: Lessons from country experience")와 현재 진행 중인 후속연구의 내용에 대하여 논의하였고, 12 월 국제회의에서 부동산시장으로부터 야기될 수 있는 시스템리스크의 관리를 위한 정책수단에 대하여 12 월 12 일 패널세션에서 'Lead presentation'을 하기로 합의함 (통화정책, 재정정책, 거시건전성 규제 등의 구체적 정책수단에 대한 분석결과 포함). 이 외에도 토론자 및 기타 세미나에서 필요한 역할을 담당하기로 합의함.
- Dr. Renaud 는 현재 KDI 의 기본과제로 진행 중인 동아시아 6 개국 부동산시장의 비교·분석(PM - 조만)의 12 월까지의 연구결과를 바탕으로 임대주택정책, 주거용 모기지대출 및 개발금융정책 등에 관하여 12 월 13 일 패널 세션에서 'Lead presentation'을 담당하기로 합의함. 이는 우리나라를 포함한 동아시아 국가들의 시장여건 및 정책환경에 대한 활발한 논의를 유도하기 위한 목적임. Dr. Renaud 는 이 외에도 세션체어 및 기타 세미나에서 필요한 역할을 담당하기로 합의함.
- Dr. Tyler Yang 은 12 월 세미나 및 대표공동과제에서 서브프라임모기지 사태 이후 미국에서의 정책개혁 현황을 개관하고, 특별히 대출심사 기준, 자기자본 규제의 구체적인 방법들에 대한 실증분석을 실시할 예정이고, 모기지보험 제도의 변화 가능성 및 이의 신흥시장국에 대한 시사점을 분석할 예정임. (현재 Dr. Tyler Yang 은 미국의 공공모기지 보험 제공 기관인 Federal Housing Administration(FHA)의 자기자본적정성에 대한 연례 평가를 6 년째 수행하고 있음.)
- Dr. Susan Wachter 와는 12 월 세미나에서의 keynote speech 내용에 대해서 논의하였음 (첨부 1, p. 8 의 내용 참조). 또한, keynote speaker 를 1 인 추가하는 경우 적절한 인사를 추천받았고, 여기에는 Charles Goodhart (London School of Economics), Mark Zandi (Moody's Economy.com), Eugene Ludwig (former Chairman of the Office of the Comptroller of the Currency, OCC)이 포함되었음.
- 위 논의의 결과로 12 월 세미나에 대한 계획을 첨부 1 과 같이 작성하였고, 현재 모든 해와 참여자의 발표내용은 잠정적으로 확정된 상황임.

## 첨부 1. 세미나 소개 및 세션 구성안 (2011.09.16 일 현재)

- Background: The Real Asset Research Team (RART) of Korea Development Institute (KDI)<sup>2</sup> has recently launched its flagship long-term research project of 2011, entitled as "Search for Advanced Housing Policy in the Era after the Global Finance Crisis (GFC)." The project aims to explore new paradigms in housing policy in the post-GFC era, with a research team consisting of leading domestic and international researchers in relevant fields. Included as our key research topics are macroeconomic linkages (of real estate sector), rental housing, construction and development finance, and residential and non-residential mortgage finance (each of which will be briefly described below). Toward the end of this year, we would like to hold an international conference by inviting global thought leaders, as a forum for exchanging new ideas, sharing our research outcomes available by that time, and jointly-thinking about international best practices in respective research area.
- On Conference Agenda: Since the onset of economic development in 1960s, the Korean government has been heavily involved in virtually all aspects of housing market, i.e., in the demand-side with various tax policies and contract savings schemes, in the supply-side with land use restrictions and price controls (of new housing units), and in the financing-side with the directed credit policy and a small scale subsidized mortgage lending program. Nonetheless, there have been milestone policy shifts along the way, such as the large-scale construction drive in the early 1990s, and the liberalization of residential mortgage lending after the Asian Financial Crisis (AFC) in the late 1990s. Another important long-term domestic trend is the fundamental socio-demographic transition due to the aging population and the very low birth rate, with the expectation that the total headcount in Korea is expected to decline after 2020. Yet, thanks to an increase in one- or two-person families, the number of households is predicted to grow over time.

Going forward, we expect that the conventional policy focus of ensuring affordable housing for low-income, less-creditworthy, and other underserved consumer cohorts, will, and should, continue to receive due attention. However, learning lessons from GFC, we believe that there will be renewed emphasis on other aspects of housing policy, e.g., more balanced public assistance between owning vs. renting, micro- and macro-prudential regulations on mortgage lending, and stabilization of construction (or quantity) cycle via appropriate financing scheme. To explore these and other issues, we put the following as key topics for the planned conference.

- ① **Macro linkages:** It is fair to say that, for a long while, housing/urban economists have tended to employ a partial equilibrium approach when analyzing the behavior of housing markets by assuming that macroeconomic factors (such as GDP and employment growth) influenced, but were not

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<sup>2</sup> Since its inception in 1971, KDI has been the premier economic think tank in Korea. For the purpose of enhancing real estate related research capability, KDI created RART in March 2011.

influenced by, housing market outcomes. It is also the case that many academic macroeconomists have until GFC tended to adopt a very distant if not dismissive view of the impact of housing which they took as just one of many goods and services, whose financing and asset value dynamics are only a peripheral research topic at best. This mode of thinking is changing as demonstrated by a series post-GFC studies in this regard, such as Brunnermeier (2009), Iacoviello (2009), Leamer (2009), Case, Quigley, and Shiller (2010), and (2011), Iacoviello and Neri (2011), Lee (2011), to name just a few. Some of the research questions we want to pose for the conference include: What would be sound modeling approaches to handling the complex and simultaneous relationships between housing and key macroeconomic variables? How can one handle interactions between owner-occupied and renter-occupied markets along with other critical housing market issues such as financing methods? And, in terms of systemic stability, what indicators can and should be used as part of an Early Warning System (EWS) to detect emerging and systemically-important risks out of the housing sector?

- ② **Rental housing:** In Korea, the rental housing sector is very much under-developed, with less than 10 percent of housing stock being used solely for renting and more than half of them being government-run. Furthermore, there is unique rental contract in Korea, referred to as *Chonse*,<sup>3</sup> that is a complicating factor in modeling the sector and a potential de-stabilizer to the housing market and macroeconomy. Hence, there exists a great deal of interest here to learn from experience of other countries in policy making toward this submarket. For instance, as a post-GFC policy shift, the U.S. government has recently announced a housing policy reform such that, while reducing subsidies in the ownership market, its role in supporting affordable rental housing was going to be expanded.<sup>4</sup> In this conference, we will attempt to assess past experience of, as well as on-going policy reform in, the U.S., European and Asian countries. Discussions to that end will encompass the appropriate role of government in general – national as well as local - in rental housing market, as well as specific policy instruments that have proven to be effective in providing low-income, borrowing-constrained, and senior households. Some of specific policy instruments to be examined include rental subsidy programs (in the U.S. and European countries), housing voucher programs, the Low Income Housing Tax Credits (LIHTC) in the U.S., tax expenditure programs for rental housing in Germany and other European countries, and various innovative financing and

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<sup>3</sup> Under a chonse contract, the tenant pays a lump sum up-front deposit as large as 50 % or more of the asset value of the house at the beginning of the lease, which is fully refundable at the termination of the lease. The tenant does not pay monthly rents during the lease period. Chonse deposit is sometimes used by the landlord to purchase the house to lease to the tenant, and hence operates as an informal financing mechanism for home purchase. (Quoted from Kim and Cho (2011), p. 843)

<sup>4</sup> See URL below for the white paper jointly published by the U.S. Treasury Department and the Housing and Urban Development Department:  
<http://www.treasury.gov/initiatives/Documents/Reforming%20America%27s%20Housing%20Finance%20Market.pdf>

credit enhancement schemes (e.g., CMBS, REIT, and credit enhanced bond products).<sup>5</sup>

- ③ **Residential mortgage lending policy:** The residential mortgage lending sector in Korea expanded rapidly after the AFC of 1997-1998. The mortgage debt outstanding (MDO) has risen to 34% of GDP from a level of about 10% before the crisis. Yet, there have been growing pains in this expansion process with several areas of improvement being observed in terms of loan product design and underwriting; risk-sharing arrangements between borrowers, lenders, and other market participants; and, funding methods.<sup>6</sup> In several Asian countries such as China, Hong Kong, and Singapore, regulated LTV and DTI ratios are often used by financial authorities as housing market stabilizers rather than merely as risk assessment tools for lenders. As a post-GFC trend in this vein, there has been a growing volume of research that explicitly relates residential mortgage lending to housing price and quantity cycles such as Ellis (2008) for a global cross-section of countries, Pavlov and Wachter (2009) and (2011) and, Mian and Sufi (2009) and Duca, Muelbauer and Murphy (2009) for the U.S.). In the conference, we plan to survey post-GFC developments, in the U.S. and Europe in particular, of new modes of government intervention in residential mortgage lending and their implications to Korea and other Asian countries. Some of relevant and emerging policy issues to be examined include domestic and international mortgage underwriting standards (e.g., QRM and HCM in the U.S.), micro- and macro-prudence regulations, protection of financial consumers, new approaches in capital requirement (e.g., Basle III, dynamic and product-specific capital requirements), and role of micro data in setting policy parameters such as the use of HMDA data in defining High Cost Mortgages (HCM) in the U.S.
- ④ **Financing Real Estate Development:** Another important area of research in Korea is the financing of real estate developers. Owing to the ample liquidity and the low interest rate environment in the mid-2000s, a new form of construction loan, the PF (Project Financing) Loan, had flourished until 2008 as a financing vehicle for residential and non-residential development projects. Rather similar to the U.S. case of subprime mortgage-MBS products, the typical Korean PF loans are characterized by very high leverage (3% or less equity to total project cost) and a complex product design. Currently, the share of non-performing PF Loans, especially among those underwritten by the provincial savings banks, amounts to 25%, impairing financial safety and soundness of lending institutions as the inventory of unsold new housing units is piling up. In consequence, we are currently looking into more sound and prudent ways to finance development projects. Indirect investment vehicles such as REPEF (Real Estate Private Equity Funds) and development REITs are being discussed as possible alternatives. Here again, we would very much like to survey theoretical

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<sup>5</sup> As a sign of growing research interest on subsidized rental housing, a series of papers will be presented in the upcoming AREUEA Mid-year Conference, <http://www.areuea.org/conferences/pdf/2011myprogram.pdf>.

<sup>6</sup> See Cho and Kim (2011) for further details on the current state of the Korean mortgage market.

and empirical evidences of relevancy and to gather lessons from other countries' experience to draw policy implications for Korea and other countries.

- Logistics: The timing for the conference is tentatively set as two days in December 2011, December 12<sup>th</sup> (Monday) and 13<sup>th</sup> (Tuesday). For conference participants, we will offer top-quality accommodation in Seoul, business class air fare, and appropriate honorarium. As we update and finalize the conference agenda, we will inform you. Meanwhile, if you have any question about the meeting, please let us know by using the following correspondence information.

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# A New Paradigm in Housing Policy: Conference Agenda

(Two-day conference on December 12<sup>th</sup> & 13<sup>th</sup>, 2011)

## Keynote speakers:

- Susan Wachter, The Wharton School of University of Pennsylvania (Confirmed), **“Post-GFC Policy Shifts in Rental Housing and Mortgage Financing”** (Topics to be covered: (1) What lessons can we draw upon GFC in terms of owning vs. renting in housing consumption, and in terms of residential and non-residential mortgage finance? (2) What are current states of policy debate in the U.S. and Europe in reforming mortgage finance system and providing government-supported rental housing in the post-GFC era?; (3) What research and policy implications specific to emerging market countries can we draw from GFC in these policy areas?)
- Charles Goodhart, London School of Economics (To be confirmed), **“Macro Linkages of Housing: Analytical and Policy Challenges Ahead”** (Topics to be covered: (1) What do we know about channels and causal relationships between three housing-related cycles – price, quantity, and credit cycles – and macroeconomy?; (2) What modeling and data challenges do we have to overcome in advancing research in this front, both in macroeconomists’ perspective and in housing/real estate economists’ perspective?; (3) What implications can we draw upon based on existing body of knowledge, in terms of macro-prudential regulation and other relevant policy areas, and can there be policy implications specific to emerging market countries?)

## Session (1): Macro Linkages of Housing:

Session Chair: TBD

### **Housing and the Macroeconomy: The U.S. Case**

Matteo Iacoviello<sup>7</sup>, Federal Reserve Board, U.S.A. (Confirmed)

### **Housing and the Macroeconomy: The European Case**

Gabriel Lee, University of Regensburg, Germany (Confirmed)

### **Housing and the Macroeconomy: the Korean Case**

Seung Hwan Seo, Yonsei University, Young Il Kim and In Ho Song, KDI

Discussants: TBD

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<sup>7</sup> A workshop will be organized to have a focused discussion on modeling issues (e.g., DSGE and its alternatives) in capturing macro-linkages of housing, in which Dr. Iacoviello will lead discussion with interested researchers from KDI, BOK, and other organizations.

### **Session (2): Mortgage Lending and New Policy Paradigm**

Session Chair: Bertrand Renaud

#### **Mortgage Pricing and Risk-Based Capital Framework: Post-GFC Development and Implications to Emerging Market Countries**

Tyler Yang, Integrated Financial Engineering (Confirmed)

#### **Post-GFC Regulatory Framework for the EU Mortgage Market**

Achim Dubel, finpolconsult.de and The World Bank (Confirmed)

#### **Mortgage Credit Cycles and Macro- & Micro-prudential regulations: An International Comparison**

Man Cho, KDI School of Public Policy and Management

Discussants: TBD

### **Session (3): Panel Discussion on Macro Linkages**

Session Chair: TBD

Lead presenter: Giovanni Dell'Ariccia and Denis Igan, International Monetary Fund

Panelists: TBD from presenters and chairs in Sessions (1) & (2)

### **Session (4): Rental Housing**

Session Chair: Kyung-Hwan Kim

#### **Rental Housing Policy in the U.S.: Before and after GFC**

Stephen Malpezzi, Professor, University of Wisconsin (Confirmed)

#### **Rental Housing Policy in European Countries: Similarities and Dissimilarities**

Claude Taffin, The World Bank (Confirmed)

#### **Idiosyncracies in the Korean Rental Housing Market and New Policy Directions**

Chang Moo Lee, Hanyang University, Yong Man Lee, Hansung University, and Eui Chul Jung, Kunkook Univeristy

Discussants: TBD

**Session (5): Construction & Developer Financing**

Session Chair: Jae Young Son

**Construction Financing: Theory, Best Practices, and New Policy Direction**

Min Hwang, George Washington University (Confirmed)

**Construction Financing in Taiwan: Current State and Policy Regime**

Chin Oh Chang, National Chengchi University in Taiwan (To be confirmed)

**PF Lending Debacle in Korea and Post-Crisis Policy Direction**

Jae Young Son, Kunkook University, and Jin Kim, Seoul Research Institute of Economic Development

Discussants: TBD

**Session (6): Panel Discussion on Housing Policy**

Session Chair: Susan Wachter

Lead presenter: Bertrand Renaud, The World Bank

Panelists: TBD from presenters and chairs in Sessions (4) & (5)