

HOUSING FINANCE INTERNATIONAL

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Winter 2014



- **The affordability of private mortgage schemes in Lebanon, 2004-2010: a paradox revealed**
- **Celebrating 20 years of democracy within South Africa: a human settlements perspective**
- **Fundamental questions on the legal framework for covered bonds**
- **UK buy-to-let comes of age – investment returns compared**
- **Real estate economics: changing social environments and the harmonization of tradition and innovation**
- **The International Union for Housing Finance 1914-2014: a 100 year perspective**

International Union for Housing Finance

Housing Finance International

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Editor's introduction

House prices affordability and leverage

↳ By Andrew Heywood

We are often encouraged to think about housing need at Christmas, and this year is no exception. The post and email are clogged with messages from charities calling attention to the plight of different groups and soliciting much-needed funds. It often appears to the recipient that there is something of an unseemly scramble as different organisations try to obtain a bigger share of public generosity, tempered as it must be by the effects of public austerity and falling real incomes.

The festive season is thus a timely reminder that while the proportion of national wealth that comprises housing has risen since the First World War in many developed economies including both the UK and France the problems for those whose access to that wealth is limited or non-existent have not gone away.

There have been tremendous financial gains for many from the rise in home ownership as those who succeed in getting a foot on the housing ladder reap the benefits of home ownership as a leveraged investment. England epitomises that trend: At the end of the First World War around 75% of households were in the Private Rented Sector¹. As late as 1981 only 57% of households were home owners. Home ownership finally peaked in 2004 at 71%. In terms of financial gain, one has only to look at the Land Registry House Price Index. In 1995 the index stood at 100. By October 2014, in spite of the downswing caused by the banking crisis of 2007-09, the index stood at 288. For anyone with a high LTV mortgage, that means a substantial leveraged gain as Rob Thomas points out in his article on buy-to-let in this issue. A home owner in London would have seen the index rise from 100 to an eye-watering 505 over the same period! Of course such gains for some come at a price for others. Affordability in England has become stretched to the point where access to home ownership has become so restricted that home ownership has been falling for the past decade, now standing at 65% (50% in London and falling faster). The ratio of median house prices to median incomes currently stands at 6.72 for England as a whole and at 10.41 for Inner London. When one considers that according to the Bank of England in early 2014 only c. 2.6% of mortgage loans were issued with a loan to value

above 90% and an income multiple above 3.5 for a single income, the problem becomes obvious.

In itself a fall in the level of home ownership may not be so undesirable. After all, in a globalised economy with less job security and more labour mobility than a generation ago some might argue that enhanced rental markets may actually serve society better.

The real difficulty for housing policy makers in the 21st century is that as house prices became less affordable over the past 30 years, simultaneously governments were reducing their direct involvement in the provision of housing and often privatising housing assets that might once have served those unable to access home ownership. Again, England epitomises the trend that can be traced across a number of developed economies. In the 1980's the Government moved from direct on-balance sheet funding of social rented housing to devolving such development to Housing Associations funded via a combination of private finance and ever diminishing supply-side grant. The actual numbers of homes developed was allowed to plummet, and as public subsidy reduced, various expedients such as shared ownership, intermediate rent and now so-called Affordable Rent (up to 80% of a market rent) have led to "affordable" housing becoming gradually less affordable for those most in need. Add to that the privatisation of 2.5 million social rented homes via the Right to Buy and one arrives at a situation where the increasing numbers of households who cannot buy a home must take their chances in the Private Rented Sector, while the problem of housing the neediest grows ever more acute. No wonder the calls from housing charities grow more strident as the Season of Goodwill approaches.

In this issue of HFI issues of affordability, tenure change and leverage loom large. In our first article Abdallah Nassereddine offers an excellent article assessing the affordability of homes purchased under private mortgage schemes in the Lebanon. He identifies a number of problems in relation to affordability including the paradox that one of the surest ways to afford a home in the Lebanon is to live and work elsewhere in order to send in remittances from overseas!

In South Africa, the end of Apartheid in 1991 gave a new Government the opportunity to begin to tackle the accumulated shortages and deficiencies in housing for the majority. In a fascinating article Pierre Venter trace the development of public housing policy and practice over the past two decades.

While covered bonds stood up to the stresses of the banking crisis relatively well when compared to mortgage-backed securities, that crisis raised a range of legal and regulatory issues. In the new financial climate Otmar Stöcker asks and answers a series of key questions about the developing regulatory and legal environment for covered bonds. The article is ideal for those who want a clear overview of this important funding mechanism.

Buy-to-let (i.e. individuals buying property to rent using a mortgage) is still the predominant funding mechanism for the rapidly expanding Private Rented Sector in the UK. In a thought-provoking article that some may find controversial, Rob Thomas illustrates the way that highly leveraged investment in the Private Rented Sector has proved very profitable for most investor landlords over the past 20 years in spite of the vicissitudes of the housing market during that period.

The Japanese housing and mortgage market has been a source of considerable interest in recent years. In an interesting article, based on his presentation to the IUHF Centenary Munich conference, Masato Koumura traces the transmutation of the Government Housing Loan Corporation [GHLC] into Japan Housing Finance [JHF] in 2007, and offers important insights into the role of JHF in promoting lending and environmental sustainability.

Finally, Alex Pollock of the USA offers a witty and insightful article, based on his speech to the IUHF Munich Conference. Mr Pollock traces the development of the IUHF and of mortgage finance over the past 100 years against the backdrop of major changes in population and the composition of nation states, the growth in home ownership and changes to the financial environment.

Best wishes to all our readers including those celebrating Christmas and/or the New Year!

¹ The statistics for this editorial are taken from those published by the Department for Communities and local Government.

Contributors' biographies

Masato Koumura is the Senior Executive Vice President and a member of the Board of Japan Housing Finance Agency (JHF). He has had a long career as a government officer at the Ministry of Land, Infrastructure and Transport (MLIT).

Abdallah Nassereddine is Assistant Dean at the Faculty of Business Administration at Beirut Arab University and Associate Professor in Economics. He holds a PhD in Economics from the University of Kent in the UK. He worked for several universities in the UK such as Westminster Business School and University of Greenwich. He is involved in several EU funded projects such as UNAM and ELEMENT.

Alex J. Pollock is a resident fellow at the American Enterprise Institute, Washington DC, USA. He was President and CEO of the Federal Home Loan Bank of Chicago 1991-2004, and President of the IUHF 1999-2001.

Zaigham M. Rizvi is Secretary General of the Asia Pacific Union for Housing Finance, email: zaigham2r@yahoo.com

Kecia Rust is the co-ordinator of FinMark Trust's Centre for Affordable Housing Finance in Africa, and manages the Secretariat of the African Union for Housing Finance. She is a housing policy specialist and is particularly interested in access to housing finance and the functioning of affordable property markets. Kecia holds a Masters of Management degree (1998), earned from the Graduate School of Public and Development Management, University of the Witwatersrand. She lives in Johannesburg, South Africa.

Otmar M. Stöcker is Managing Director and Head of the "Public Finance" Department in the Association of German Pfandbrief Banks in Berlin. He is responsible for German Pfandbrief law, public finance, comparison of covered bond legislation and mortgage finance in Europe, US, Canada and Japan. He chairs the expert group "Round Table on Security Rights over Real Property in Europe". Furthermore he initiated and chairs a new research group, called "Round Table Covered Bond Legislation".

Rob Thomas has worked as an economist at the Bank of England, a financial analyst at UBS and initiated and ran the European mortgage finance agency project for some of Europe's leading banks. He is currently Director of Business Development and Research at The Wriglesworth Consultancy.

Pierre Venter is a housing specialist who has over 25 years' experience in housing within the banking environment. He holds a Bachelor of Commerce degree, a Master of Science Degree in Housing (Building) and a banking diploma, together with a number of property diplomas/certificates. Pierre is employed by The Banking Association South Africa as General Manager, Human Settlements within the Market Conduct Division, which includes oversight for the various property, physical infrastructure, agriculture and sustainable finance committees.

Mark Weinrich holds graduate degrees in political science and economics from the University of Freiburg, Germany. He is the manager of the Department of International Affairs at the Association of Private German Bausparkassen. He is the Head of the Department of Economic Affairs for the International Union for Housing Finance in Brussels.

Housing finance news from Africa: AUHF celebrates its 30th anniversary

↳ By Kecia Rust, Secretariat, African Union for Housing Finance

The African Union for Housing Finance celebrated its 30th anniversary last month, in Cape Town, South Africa, at a gala dinner held alongside its conference and annual general meeting. The Conference attracted 109 delegates, 54 of them members of the AUHF, from 19 countries – Angola, Botswana, China, Germany, Ghana, Italy, Kenya, Lesotho, Namibia, Nigeria, Russia, South Africa, Swaziland, Tanzania, The Gambia, the UK, the USA, Zambia and Zimbabwe.

The theme of the conference was on alternative building technologies [ABTs] for affordable housing construction. Across the two days, a diverse array of speakers gave presentations on new green technologies and their financing, rapid construction methodologies, affordable construction technologies, the perspectives of consumers, construction financing for affordable housing, and bottom of the pyramid construction and financing approaches. The issues raised were not straightforward: while ABTs appear to offer opportunities for more rapid construction, enabling scale delivery, they are not cheaper. They do contribute towards improved air quality and energy efficiency, and reduce the long term operating costs of housing, but they are not easily accepted by consumers. Some speakers suggested that energy spent on addressing the acceptability of ABTs might be better spent on just getting more affordable housing built across the continent. Others offered suggestions for targeted interventions: a specific approach to making the incremental housing process more efficient and affordable for low income consumers; the use of locally available materials to enhance sustainability; and opportunities to be found in mainstreaming ABTs – taking the “alternative” out of alternative building materials.

South Africa’s Human Settlements Minister for the Western Cape Province, Mr Bonginkosi Madikizela gave the keynote address, highlighting the challenges encountered in using ABTs to deliver two phases of a subsidised housing project. The experience had demonstrated that ABTs had a number of benefits: houses could be assembled in 40% less time than traditional brick and mortar houses,

and had less demand for skilled labour. The main benefit of the ABT approach was its impact on air quality: houses were cooler in the summer, and warmer in the winter, reducing the need for additional air conditioning and heating. But, houses built with ABTs were not cheaper. This aspect was also raised by Andreas Zehnder, President of the IUHF, who gave the welcoming address. He argued that the impact on energy efficiency would have long term benefits for the homeowner, reducing the operating costs of homeownership, while also contributing towards a decreased reliance on the national energy grid. For this reason, he argued that it was in governments’ interest to support the development of green mortgages that would enable more affordable financing of housing that necessarily involved higher costs up front.

The real challenge to the acceptance and wider use of ABTs, however, is consumer acceptance. This insight was expressed by a number of other speakers, who argued that consumer acceptance could only be won if housing built with ABTs was demonstrably cheaper, and if it looked like more traditional approaches. On the other hand, others argued that if the alternative approach were incremental, this might be something that consumers might more readily accept. Another challenge to the adoption of ABTs was that there were few suppliers, and that consumers were then dependent on the original installers, creating a sort of monopoly in the sector, which added to costs.

Shelter Afrique’s CEO, James Mugerwa, spoke about the potential of modern methods of construction as levers for achieving scale and affordability. Highlighting the enormous and growing demand across the continent, he said that the debate could not be limited to consumer hesitancy. A single minded, large scale housing supply programme was required across the continent to meet the needs and through this approach, reduce costs. While traditional approaches may be preferred, he argued that they were insufficient and that the scale required demanded a new approach. Shelter Afrique was therefore promoting

those modern methods of construction processes which they saw offered significant potential for achieving scale. Drawing on concepts from the automobile industry, he argued for the need to deconstruct the house into its component parts, enabling an incremental housing process. Mass production could then be personalised over time as households improved their housing individually.

Yogesh Narsing presented an innovative programme being implemented by South African cement giant, PPC. At the core of the approach is a “housing decision service” that PPC offers, providing advice and information, debt and budget support, and transactional support for home purchase, building and improvements. Households are supported in their housing decision making process, and provided with options they can afford, both in the short term (in terms of the capital costs of the house) and in the longer term operating costs. Ruth Odera from Habitat for Humanity International presented a similar approach which HFHI calls “housing support services”.

A session on the second day asked why there were so few developers of affordable housing in Africa. Debra Erb from OPIC suggested that stumbling blocks in the housing delivery chain made it difficult for developers to participate effectively, and so they opted for other targets outside of the residential sector. Developers are not innovation leaders, she argued, and execution risk is very high. The market was difficult for new entrants, and there were capital limitations that undermined developers operating at any level of scale. Debra Erb argued that coordinated government programmes that support (both financially and administratively) a sustainable housing delivery approach were needed.

The conference concluded on the second day with a gala dinner to celebrate the AUHF’s 30 years.

Presentations can be downloaded from the AUHF website: <http://www.auhf.co.za/conference/next-frontier-affordable-housing-alternative-building-technologies/>

Asia-Pacific Union for Housing Finance: News Update

↳ By Zaigham Mahmood Rizvi

Afghanistan:

The year 2014 has been a difficult year for the country in pursuing new projects in the Financial Sector including housing finance due to the challenges of the Election. Successful and peaceful completion of Elections in Afghanistan is by itself a landmark achievement for the country leading to its smooth transition to democracy. Things will start moving, hopefully fast-track once the Finance Minister is appointed. The newly elected President Mr. Ashraf Ghani seems very keen on housing and job creation. He has promised the Afghan people that he will create one million jobs. Housing and long term mortgages is top of his agenda.

Afghanistan is moving forward in its plans to set up Long Term Liquidity Facility Institution to ensure availability of long term funds for housing finance by the Banks and Financial Institutions. Afghanistan has approached Asian Development banks and IFC/World bank for assistance in setting up this institution.

The Credit report and Collateral Registry are fully functional in Afghanistan, and all the banks are reporting their lending activities and all details to the registry. Afghanistan now has a credit scoring system and approximately 40 billion Afghanis are registered with the immovable collateral registry. The system is in process of adding immovable properties as well.

Thailand:

AEC 2015 offers opportunities for Thai developers:

A recent report in The Nation said *the* ASEAN Economic Community [AEC] 2015 will offer new expansion opportunities for Thai property developers even though many of them will face new competition from regional developers.

Chainid Ngowsirimane, Property Perfect's CEO said AEC 2015 will expand Thai property development firms' residential market from 65

million people to a regional market of 600 million. However, he also warned that it would also open the local property market to regional developers. Several Thai property firms have already started expanding overseas. Pruksa Real Estate Plc is now in Vietnam, India and the Maldives, Land & Houses Plc has entered California, Sansiri Plc is in London and Central Pattana Plc is investing in Italy and China.

Large Thai condo developers optimistic:

The Bangkok Post recently noted that new condominium developments in August and September outpaced units launched in the first half of 2014.

Large property developers, the article said expressed stronger confidence in the market's prospects.

Prasert Taedullayasatit, the President of the Thai Condominium Association's [TCA] and Pruksa Real Estate Plc's Managing Director said even with the current momentum, total housing starts will still decline by about 10% in 2014.

In August and September, newly launched condominiums from seven Stock Exchange of Thailand listed developers reached Bt70 billion (\$US2.19 billion) compared with 54 billion (\$US1.69 billion) in the first half of 2014.

The TCA expects Thailand's full-year housing market launches to reach Bt310 billion (\$US9.68 billion) and its 2015 forecast is Bt350 billion (\$US10.9 billion).

Samma Kitsin, director-general of the Real Estate Information Center (REIC), said listed developers whose combined market share was greater than 50% were confident the economy would improve significantly next year.

The REIC's index of housing developer expectations over the next six months, surveying

listed developers, revealed high confidence of 75 points, up from 71.6 in the second quarter.

The index of non-listed housing developers was unchanged at 63 points. Respondents include 30 Stock Exchange of Thailand-listed firms and 136 non-listed companies.

Pakistan:

Credit Guarantee Scheme:

Keeping in view the impediments to primary market of housing finance in Pakistan and enhancing financing from the financial institutions, a housing finance credit guarantee scheme for low income groups is being devised to promote affordable housing and to enhance confidence of commercial banks to lend to the lower income groups. The technicalities of the scheme are being discussed with the Ministry of Finance and it is expected to be launched soon.

Housing sector: HBFC receives Rs11 billion equity injection:

The House Building Finance Company Limited [HBFCL], has announced that HBFCL it has received an equity injection of Rs 11 billion from the federal government. The equity injection will play an important role in increasing the HBFCL's footprint in the mortgage market. Finance Ministry and the State Bank of Pakistan [SBP] had decided in the beginning of the current fiscal year that loans acquired by the HBFC from the SBP would be converted into equity. HBFC is the sole specialized housing bank in Pakistan and enjoys a 24% share in the housing finance market.

Online property trading possible in Pakistan (Published June 23, 2014):

The classified websites of properties provide a window of information to users about market

trends. These also connect buyers and sellers and vice versa saving time and cost while providing investment insight at the finger tips. Down the road, website portals/mobile apps will be the first choice for consumers searching for properties as it allows easy evaluation of the market before going out in the market, said Saad Arshad, Lamudi.pk Country Director.

Low-income Housing Project in Province of Sindh:

The Province of Sindh is to develop 200,000 low-income housing units under Private-Public-Partnership [PPP] model in association with the Association of Builders and Developers [ABAD]. The model being developed is along the same lines as the model that Rajasthan State of India has successfully used to develop low-income housing schemes in the State of Rajasthan, India. A high powered Advisory Board has been set up to execute the plan.

Bangladesh:

Bangladesh faces an acute shortage of affordable housing both in the urban and rural areas. The housing scenario in the country is not sat-

isfactory. People use cultivable land to meet the housing demand. As a result the cultivable land is going to be depleted in future if this trend persists. The country needs strong urban planning, linked to low-income housing in order to address the massive shortage of housing for economically weaker segments of society.

For the past few years the economy of Bangladesh has been growing fast. Now Bangladesh is the 33rd economy on the global scene according to the IMF. Lack of planned housing is driving the country to a devastating future, no natural beauty will remain intact and the whole country will be a mess.

The State-Owned Bangladesh House Building Finance Corporation (BHBFC) is expanding its home loan coverage to rural areas aimed at developing planned and modern housing in villages, while protecting cropland from indiscriminate use. The BHBFC will offer cheaper loans for construction of the 385 four-storied building in 22 rural areas across the country involving Tk 3.13 billion. The 385 apartment buildings will have 3000 flats, providing around 18,000 people with comfortable and affordable accommodation while cropland would be

protected from misuse. The Banks and Financial Institutions Division of the Finance Ministry has already finalized the project titled “**Financial and Technical Assistance for Rural Housing of Bangladesh**” and sent it to the Planning Ministry to take the necessary steps to implement the project.

Japan:

Being covered under a separate article.

Event to mark the 100th anniversary of the IUHF

↳ By Mark Weinrich

The International Union for Housing Finance celebrated its 100th anniversary in Munich on September 11-12. It was a great event with more than 130 participants from 40 countries. Under the motto “Building the Future” the conference tackled the industry’s most pressing issues in their local context and global interaction. The advantages and drawbacks of funding instruments like contractual savings systems, covered bonds and mortgage backed securities were discussed as well as the role specialised mortgage lenders can play. Regulatory developments in the field of housing finance were another major topic. In particular, the economic cost-benefits of the new rules in different countries were analysed. Furthermore, the linkages between the housing finance market and the wider economy were explored and policies, institutions and instruments that have stabilising effects on the housing and housing finance markets identified.

Mr. Andreas Zehnder, the President of the International Union for Housing Finance, started the conference with an address that offered hindsight about the past, insight into the present, and foresight for the future of the International Union for Housing Finance. He stressed in particular that the spirit of international cooperation and open dialogue among equal partners have been the cornerstone of the International Union since its foundation. The International Union for Housing Finance plays an important role in providing knowledge, information and understanding about housing finance systems and instruments in varying economic, financial, and political contexts.

Mr. Walter Buser from the City Council of Munich welcomed the delegates in the name of the city of Munich. He highlighted the challenges of the fast growing city of Munich with respect to housing. The limited amount of land makes it necessary for the city planning strategy to focus on densification and the reallocation of land while also taking into account the potential of the outskirts for housing developments. Furthermore, Mr. Buser explained the Munich

model of “socially responsible land use”, which is an instrument to co-finance urban development and social housing by the beneficiaries of new building rights so that the city budget is relieved.

The first and second sessions discussed housing finance institutions and instruments. **Mr. Alex Pollock, Resident Fellow at the American Enterprise Institute in the United States**, began the session with a reflection on the century since the first International Union for Housing Finance meeting in 1914. An article based on his presentation appears in this issue of HFI.

Mr. Tony Ward, CEO Home Funding in the UK presented on mortgage backed securities [MBS] – a highly leveraged financial instrument. The market for MBS shut down due to the global financial crisis although the UK and European market did not have the severe problems of the United States with its flood of defaults on MBS. Mr. Ward claims that it is an excellent funding instrument as it matches funds to maturity, has undergone stress tests, and is subject to continuing external oversight. According to Mr. Ward leveraged funding is an important part of the funding mix although he sees the necessity to address several weaknesses like the over-reliance on rating agencies and lack of transparency but also that originators may not have “skin in the game”.

Mr. Herbert Pfeiffer, President of the European Federation of Building Societies, confirmed in his presentation that savings are an important part of a sustainable housing finance system. Markets that rely heavily on leveraged finance are prone to boom-bust cycles. Contractual savings systems for housing offer a loan-linked form of saving. They have a stabilising effect as they support customers to save up equity and are closed deposit taking systems almost independent of the capital market. Contractual savings systems for housing are designed to provide long-term funds to be specifically channeled into the housing sector. The loans are long-term, with fixed interest rates and in local currency.

Mr. András G. Botos, Secretary General of the Association of Hungarian Mortgage Banks, gave the delegates an overview on covered bonds. 33 countries have special legislation concerning Covered Bonds, most of them located in Europe. Mr. Botos noted that a covered bond structure is quite simple compared to a MBS structure so that transparency is high and transactions costs are low. Investors have double recourse to the issuer and the cover pool. Cover-pool assets remain on the balance sheet of the issuer, so credit risk is retained by the originator which aligns incentives with those of investors. No mortgage bank has defaulted on any covered bond and the asset class survived the financial crisis comparatively unharmed.

As **Mr. Kapil Wadhawan, Chairman and Managing Director of Dewan Housing Finance in India**, had to cancel at short notice, his speech was read by Mark Weinrich, Head of the Department of Economic Affairs of the International Union for Housing Finance. In his speech, Mr. Wadhawan pointed to the fact that the strong growth and urbanisation of India requires considerable investment in housing. In particular, affordable housing solutions for the economically weaker part of the population are required. However, the mortgage industry in India is severely under penetrated. Main sources of housing finance are public sector banks and housing finance companies [HFCs]. HFCs have short turn-around-times, a good reach in rural areas, provide end-to-end solutions and benefit from their specialization in mortgage lending. Although banks usually lack these advantages they have a more stable funding model with better risk management and governance capabilities. Mr. Wadhawan therefore suggested the creation of institutions that combine the strengths of banks and HFCs in order to address the housing finance needs of India.

The third session explored the regulatory developments in the field of housing finance. **Mr. Stephen A. O’Connor, Senior Vice President of the Mortgage Bankers Association in the**

United States of America, started the session by explaining the post-crisis mortgage regulation in the United States that is bringing about a complete overhaul of mortgage rules. The two key areas are the protection of the financial system and the protection of consumers. In particular the latter area has attracted a lot of attention because of the misuse of products, misaligned incentives and asymmetrical information given to some low-income and less sophisticated consumers who were vulnerable targets. The new regulation tries to protect consumers better while preserving access to affordable mortgage credit. Mr. O'Connor pointed out that the sheer number of new rules has depressed income in the housing finance industry and that other important challenges like the structural reform of the secondary market have not been solved yet.

Mr. Adrian Steiner from the DG market of the European Commission explained the delegates how the European Union tries to ensure responsible lending and borrowing behavior in Europe. The main provisions of the mortgage credit directive include consumer information requirements, principle-based rules and standards for the performance of services, a consumer creditworthiness assessment obligation, provisions on early repayment, provisions on foreign currency loans, provisions on tying practices, some high-level principles (e.g. those covering financial education, property valuation and arrears and foreclosures) and a passport for credit intermediaries who meet the admission requirements in their home Member State. The Directive establishes a Union-wide level of consumer protection for the mortgage credit market while not precluding Member States from having more stringent provisions in order to protect consumers.

Mr. Ulrich von Zanthier from KPMG Germany presented a study that summarises the results of a survey which focused on evolving regulatory requirements for German banks and the costs related to those requirements. Although the study concludes that regulatory initiatives since 2010 have contributed to financial market stability, it also shows that new regulations have come with high implementation costs for banks. Higher capital and liquidity requirements constitute the largest impacts, but the study also describes direct cost increases in various budget categories such as risk control/risk management, compliance, accounting/finance, internal auditing and IT. The study concludes that pending developments (e.g., financial transaction tax, leverage ratio) should more seriously take account of implementation costs in order to avoid undue negative effects on the banking sector, potentially pushing some financial services into non-regulated areas.

Mr. Cas Coovadia, Managing Director of the Banking Association South Africa, stated in his presentation that developed and developing environments face similar challenges with respect to the new regulatory rules: lower return on capital, slower growth potential, impact on longer-term financing, and potentially an increase in the cost of lending. However, markets with affordability constraints and a housing supply backlog may face particularly negative consequences due to the regulatory burden. The "one size fits all" approach of BASEL III might hamper the development of primary mortgage market in their infancy. Mr. Coovadia is concerned that the new regulation might lead to a diversion of business from banks to "shadow banks" and calls for a greater consideration of the individual countries' circumstances.

The fourth and fifth session explored the linkages between the housing finance market and the wider economy. **Mr. Masato Koumura, Senior Executive Vice President of the Japan Housing Finance Agency (JHF)** noted that the development of the housing finance system in the past century has been a main driver for economic development in many countries and contributed to the stabilisation of society. An article based on his presentation is included in this issue of HFI.

Mr. Thorsten Beck, full professor at the Faculty of Finance of the Cass Business School in the United Kingdom, presented a study which uses cross-country data on housing finance depth and penetration for up to 148 countries. The results indicate that mortgage market development is very much dependent on the general development of the financial system. Mortgage finance is part of a "lengthening financial contracts" agenda. There is also evidence that mortgage markets are a "luxury good" as they seem to develop only at relatively high levels of gross domestic product per capita. Government subsidies and support are not positively correlated with mortgage market development beyond institution building (e.g. price stability and the efficiency of contractual and information frameworks). The study comes also to the conclusion that there is a trade-off between deepening markets and stability: Housing boom-and-bust cycles have been at the core of many banking crises over the past century.

Ms. Åsa Johansson, Senior Economist at the OECD in France, presented a cross-country study which identified best practice for sounder housing policies in a number of areas. The study comes to the conclusion that innovations in mortgage markets should be combined with appropriate regulatory oversight and prudential regulation. Attention should also be given to the supply responsiveness of housing by improving land-

use, planning regulations and tax incentives. Furthermore, the favourable tax treatment of housing (e.g. tax deductibility of mortgage interest payments) should be removed as it adversely affects macroeconomic stability and tends to be regressive. Governments should also consider introducing rent allowances to enhance housing opportunities. In case of rents that are far out of line with market values a redesign of rent controls is sensible.

Mr. Eduardo Rottmann, board member of the Brazilian Appraisal Institute [IBAPE], described in his speech the several unique features of the Brazilian housing and mortgage market: in particular, there are a Labor Tax Severance Fund [FGTS] and a system of tax-free savings deposits in banks [SBPE]. The mortgage market and house prices have seen a rapid expansion in the past few years, due to better economic conditions and improvements in regulation. This has raised fears of a house price bubble. Mr. Rottmann argued that a soft landing of housing prices in Brazil is likely and that there is no bubble that can "pop". The conditions for the expansion of housing finance were sound and conservative loan-to-value-ratios as well as serious credit ratings were the rule.

Mr. Zaigham Rizvi, Secretary General of the Asia-Pacific Union for Housing Finance, illustrated the particular challenges faced by OIC member countries with respect to housing and housing finance. OIC member countries represent about one quarter of the world population and every second poor person on the planet. OIC member countries need around 8.2 million new housing units p.a. but institutionalised housing finance is usually at its infancy. In particular the poor part of the population is hit by a massive housing backlog. Mr. Rizvi suggests that specialised lenders are needed to finance the low-income segment. In general, the regulatory framework needs to be strengthened and red tape to be cut, Sharia-compliant products should be developed and the development of long term funding facilities for developers should be encouraged.

Mr. Michael Yam, President of the Real Estate and Housing Developers Association of Malaysia, gave an introduction to the housing delivery system of Malaysia. Since the 1960's the Malaysian government has pursued a dedicated housing policy which has further developed and progressed. The Government requires that 30% of any development has to be low cost houses which are sold at a controlled maximum price. Furthermore, a certain percentage of new housing has to be sold to *bumiputra* owners at a small discount. Developers use cross subsidies to finance these legal requirements. The rules are

complemented with the “sell-then-build” system: house buyers usually buy units off-plan and pay for these on a schedule of payment enacted in a special Housing Development Act. The housing finance market is supported by Cagamas which basically functions as a liquidity facility for primary lenders. Despite the success of the system, developers face several challenges: Compliance costs have risen as land prices, construction and financing costs have increased – this has caused considerable pressure on margins.

Mr. José Luis Romero Hicks, Executive Secretary of the Grupo de Apoyo a la Vivienda in Mexico, provided an insight into the Mexican housing and housing finance market. Mexico’s mortgage market is characterised by the important

role of saving and loan schemes provided by the quasi-public agencies Infonavit and FOVISSSTE. Due to reforms and socioeconomic improvements the production of new homes has increased dramatically and financing options were greatly expanded for previously-underserved markets. However, the demand for affordable and decent housing still far outstrips the supply and the number of households continues to increase at a fast pace. As house prices have kept in line with consumer prices, there is no price bubble. Mr. Hicks concludes that the successful reform path has to be continued in order to meet Mexico’s broad range of housing needs in a sustainable manner.

The keynote address to the conference was delivered by Mr. Christian Felber, Initiator of

the “Bank for the Common Good” and the “Economy for the Common Good”. In his presentation Mr. Felber gave an outlook on a monetary and financial policy proposal that offers a completely new approach. The basic idea is that a democratic community should redefine the rules by which money comes into circulation and is used. Money creation should be separated from financial intermediation. Money enters into circulation as “gift” and is fully valid central bank money. In general, banks and companies should serve the common-good by pursuing a Common Good Charter.

All presentations are available on the conference website: <http://www.housingfinance2014.org/programme/>

Can banks resist the real estate temptation?

↳ By Alex J. Pollock

“Strewn all over was the wreckage of the banks which had become entangled in the financing of real estate promotions and had died of exposure to optimism.”

That memorable statement is from Jesse Jones, the head of the 1930s U.S. Reconstruction Finance Corporation, describing Chicago in 1932. But it applies to many banking sectors in many countries, before and since, of course including the destructive real estate bubbles of our 21st century. Having financing available for real estate, especially for home ownership, is a good idea, but not when leverage and optimism run to extremes, as they often do, historically speaking. Real estate is the most common element in credit over-expansions and busts and a permanent temptation to banks.

An extreme reaction to this, in the opposite, conservative direction, was taken by the original U.S. National Banking Act of 1863-64, enacted during the presidency of Abraham Lincoln, in the middle of the American Civil War. This act created the U.S. national banks, which were designed, among other things, to supply a uniform currency to the entire country. In revised form, it is still in force today: the U.S. now has about 1,100 national banks and 4,600 banks chartered by individual states.

The authors of the National Banking Act took a dim view of having real estate loans included in the assets of the banks whose liabilities were to provide the nation’s money. They addressed their concern in quite a straightforward way: the new national banks were simply prohibited from making any real estate loans at all. That’s right: no real estate loans.

The prohibition did not apply to the state-chartered banks, so that the U.S. Comptroller of the

Currency could report in 1891, for example, that “The [bank] failures for the current year have been numerous.... The unfavorable conditions were greatly aggravated by the collapse of unwise speculation in real estate.”

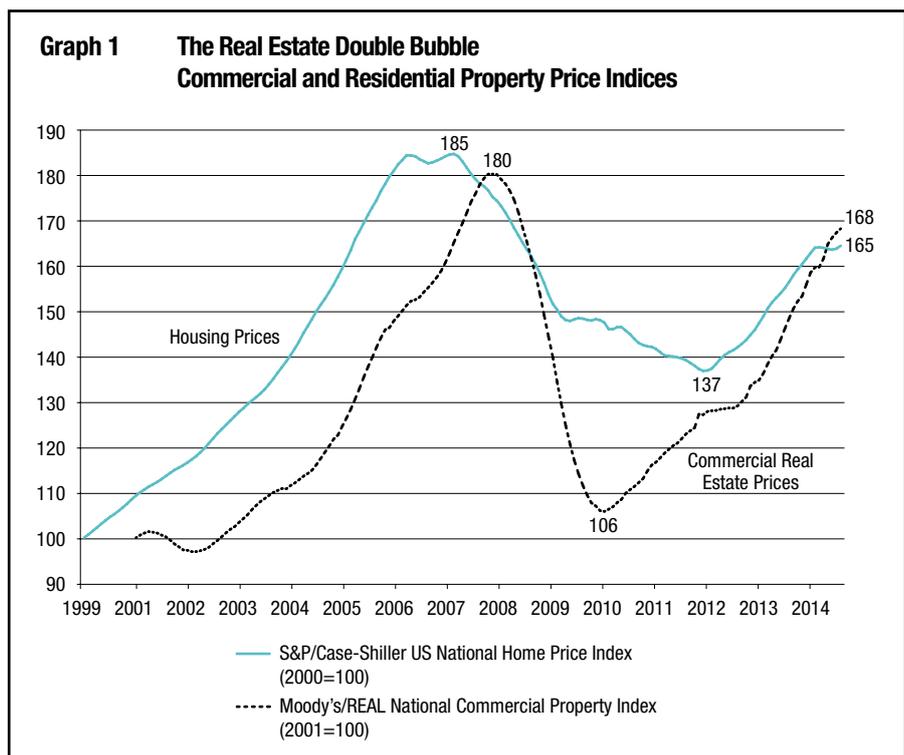
That observation from 1891 sounds familiar indeed, for those who lived through or have studied the financial crises of the 1970s, 1980s, 1990s and 2000s.

The American bubble of the 2000s, while usually referred to as a “housing bubble,” was in fact a double bubble of both housing and commercial real estate, at the same time. The collapse of

both bubbles of course wrecked many banks: 481 U.S. banks failed between 2007 and 2012. Interestingly, zero U.S. banks failed in 2005 and 2006, when the double bubble was nearing its maximum inflation. As long as real estate prices keep going up, everything seems fine and everybody is happy. That is the core of banking’s real estate temptation, over and over.

Graph 1 shows the double bubble in U.S. real estate prices, both inflating dramatically in the early 2000s, collapsing, then recovering.

The massive price inflation of the two real estate sectors, which was accompanied by credit infla-



tion in both, was about the same. Note that commercial real estate prices then fell more rapidly and much further than house prices. Peak to trough house prices fell 26% in five years. Commercial real estate prices fell 41% in two years. After that, the commercial real estate recovery was much faster, up 59% from its trough, while house prices are up 20% from theirs. Notably, five years after the end of the U.S. financial crisis, both are now at about the same level, 68% and 65% over where they started the century. Their wild rides remind us how much real estate prices can change!

In particular, house prices are back over their long-term trend line. For the twelve months ended in September, 2014, according to the S&P/Case-Shiller index, national house prices increased 4.9%. During the same period, inflation was 1.7%, so the inflation-adjusted increase was 3.2%. This is a rapid increase compared to the long-term average increase of 1% or less per year in inflation-adjusted

So where do we go from here, especially considering the Federal Reserve's manipulation of interest rates to artificially low levels and its earnest desire to promote asset price inflation, especially in houses? "That," as Hamlet said, "is the question." I don't know and I don't think anybody else, including the Federal Reserve, knows either.

The first relaxation in the National Banking Act's prohibition of real estate lending was in 1913, when national banks were allowed to make some loans on farm land. After that, the statutory restrictions on real estate lending were progressively loosened, little by little, for seventy years, until they disappeared in the 1980s. The result, not surprising in retrospect, is that American banks, national as well as state-chartered, have a huge concentration in real estate credit.

Graph 2 shows a history of real estate loans as a per cent of all loans of American banks, contrasting it with the share of commercial and industrial loans.

At the peak of the double bubble, real estate loans were 56% of all U.S. bank loans (they went even higher in the bust). This was 2.6 times their total commercial and industrial loans. They are still half of all loans, even after the double crashes. For the 5,200 U.S. banks with assets of less than \$1 billion each, real estate loans were 75% of total loans at the peak, and are still a remarkable 74%. Real estate not only dominates the loan portfolios of U.S. banks, but also their securities portfolios—representing 60% of securities, having risen to 74% at the double peak.

An old legal definition of banks in the United States was that they were institutions which took demand deposits and made commercial loans. This definition is completely out of date in both respects. What business are U.S. banks in? Principally, by far, the financing of real estate, with government-guaranteed time and savings deposits.

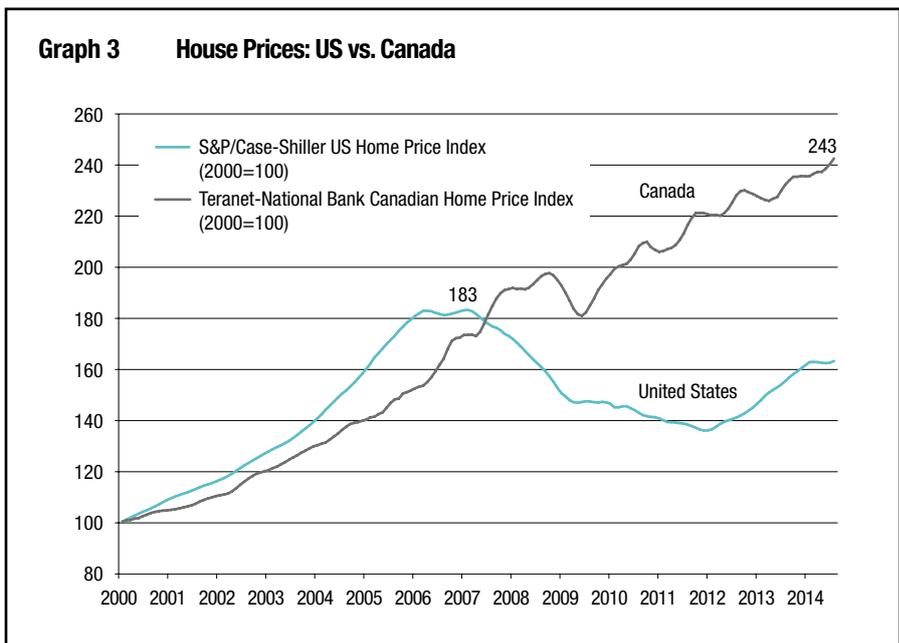
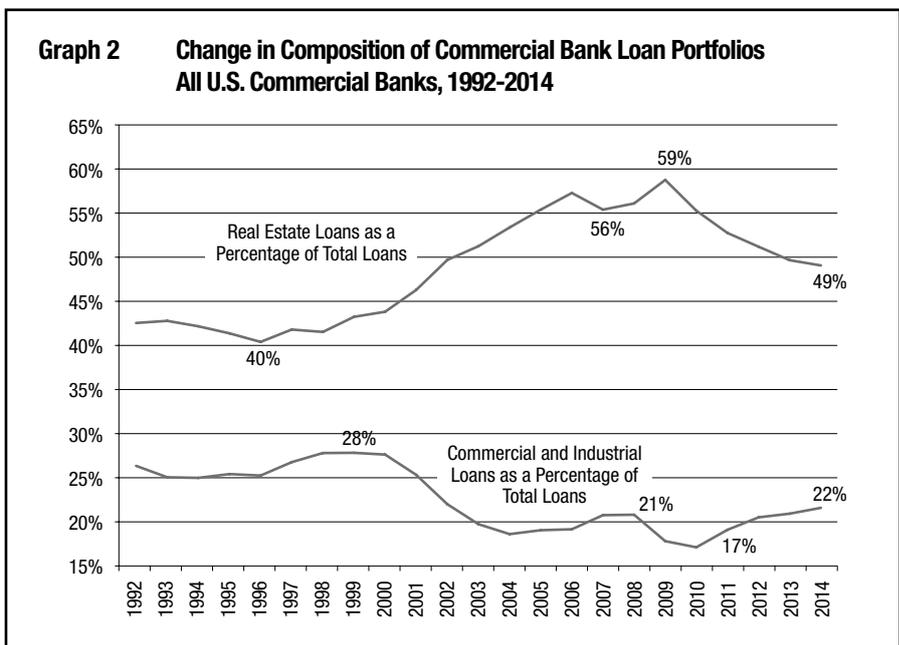
Just think about the ability to raise government-guaranteed deposits, so you can run at high leverage yourself, while using the deposits for highly leveraged real estate financing, especially when prices are rising rapidly—there you have the real estate temptation summed up.

Addendum on Canadian House Prices

Canada continues to be a notable example of remarkably rising house prices, as shown in Graph 3.

Loans secured by real estate constitute 60% of the loans of Canadian banks.

All asset price bubbles end, and so must this one. But when and with a bang or a whimper? Will Canada be the next to suffer from the eternal real estate temptation?



Affordability of public private mortgage schemes in Lebanon in 2004-2010: a paradox revealed

↳ By Abdallah Nassereddine

1. Introduction

Lebanon's house prices witnessed double-digit annual growth in 2004-2010, with major increases taking place after 2006. According to the Global Property Guide, over that period, the square meter of an average residential floor area of Beirut increased at a compounded annual rate of growth [CARG] of 20%. For a country that has no council or social rented houses to support low and middle income families, housing affordability has become a major issue. In an effort to ease the route into home ownership, in 2004, the Lebanese Central Bank [BDL] designed a regulatory framework aiming to enhance the role of private banks in funding the two existing housing finance institutions; the Housing Bank [HB] and the Public Housing Institution [PHI]. It also introduced a new subsidized mortgage scheme in 2009 to incentivize private banks to grant more housing loans. This paper aims to provide a description of these mortgage schemes and assesses their effectiveness in improving purchase and repayment housing affordability in Lebanon from 2004 to 2010.

The regulatory framework of the BDL has a distinguishing feature worth exploring and assessing. It is designed to benefit from a large and sustainable inflow of remittances by exempting housing loans from reserve requirements. For instance, according to the World Bank, remittances have steadily increased in Lebanon to reach over US\$7 billion since 2008, more than 20% of the country's nominal GDP, and they are the main source of deposits of Lebanese private banks. This amount is one of the highest in the world and is higher in absolute terms than in much larger economies such as the United Kingdom and Brazil.

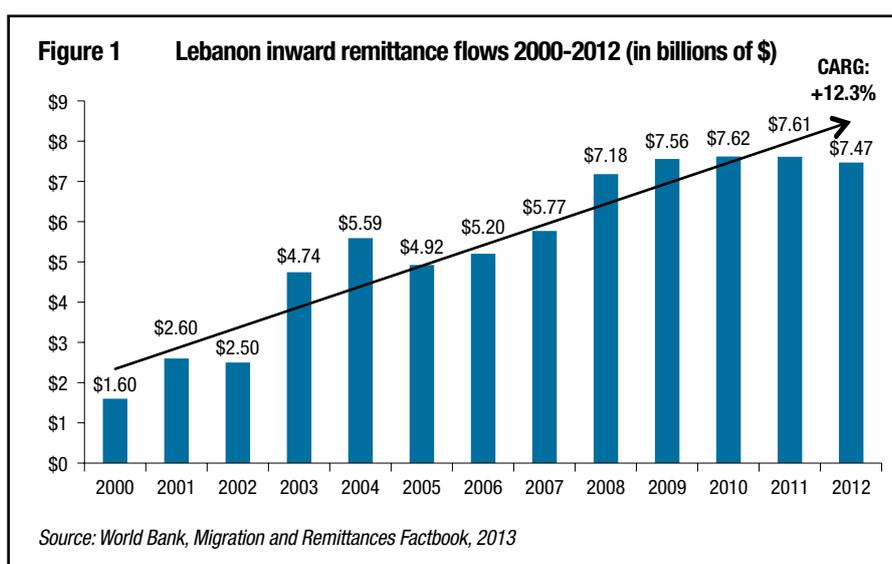
The paper begins with a description of the public-private cooperation in the mortgage market in Lebanon. The measurement of affordability is then discussed in the light of the data availability and the characteristics of the Lebanese mortgage market. The effectiveness of this collaboration is then assessed for each of the mortgage schemes in terms of purchase and repayment affordability. Finally, policy recommendations and policy guidance for economies with similar characteristics are presented in the last section.

2. Public-private cooperation in the mortgage market

The public-private cooperation in the Lebanese mortgage market includes, on one hand the Central Bank of Lebanon [BDL] setting the conditions for exempting housing loans from

reserve requirements, and on the other, private banks carrying sizeable volumes of much-needed deposits originating in large part from remittances. Figure 1 shows the rising flow of remittances growing at almost US\$0.5bn per year for the period 2000-2012.

The BDL's intervention in the mortgage market is regulated by the basic decision no 7835¹ which encourages lending by exempting several categories of loans from reserve requirements. In its initial version on 2 June 2001, decision no 7835 makes no reference to housing loans, but subsequent versions of the decision include the HB's loans, the PHI's loans, and the BDL subsidized housing loans. On 13 July 2004, the intermediate decision no 8781 added to the list of exempt loans the private banks' funding of the HB as well as their housing loans in collaboration with the PHI. In comparison, BDL subsidized housing loans were introduced much later on 9 May 2009, based on the intermediate



¹ Basic decisions are executive decisions implemented by the Central Bank of Lebanon (Banque du Liban, BDL) to regulate banking operations. BDL makes amendments to the articles of these basic decisions through intermediate decisions.

decision no 10142. The exemption rate from reserve requirements was changed several times between 60% and 100%.

2.1 The Housing Bank [HB]

As shown in figure 2, the HB pools its resources from private banks, the BDL, and the National Fund for Social Security. The HB's funds coming from private banks include its share of the HB capital. Since 2004, private banks could partially fund the HB loans from their required reserves.

According to the Housing Bank's chairman Joseph Sassine in an interview with the bimonthly Lebanese magazine "Almughtareb" in 2012², over the 35 years from 1975 to 2010, the bank granted 7,629 loans, most of those after 2004, when the intermediate decision no 8784 was introduced. For instance, over a 3-year period only, between 2008 and 2010, the HB granted circa 3,000 loans, over two-thirds the number of mortgages it granted in the preceding 32 years.

2.2 The Public Housing Institution [PHI]

The Government established the PHI in 1997 to grant housing loans to low and middle income households. However, and as in the case of the HB, the role of the PHI was enhanced only later when the decision no 8784 was introduced in 2004.

The PHI can grant loans directly to borrowers or indirectly through private banks in the framework of a protocol of cooperation signed with the Association of Banks in Lebanon [ABL]. Based on this protocol, private banks can lend a maximum of 80% of the house value from their required reserves at the BDL. As to the repayment of the loan, the PHI pays the interest on behalf of the borrowers to the private bank over the first half of the loan period and the borrowers will only pay the principal during that period. Over the second half of the loan period, the borrowers reimburse the interest to the PHI. This allows the mortgage payment to be more manageable to borrowers, and the PHI recovers this advance from borrowers in the second half. The structure of this mortgage scheme is illustrated in figure 3.

Figure 4 shows the number of loans granted by the PHI annually over the period 1999-2012. The figure shows clearly that the number of loans has remarkably increased since 2004 when the intermediate decision no 8784 was introduced.

Figure 2 The Housing Bank funding structure

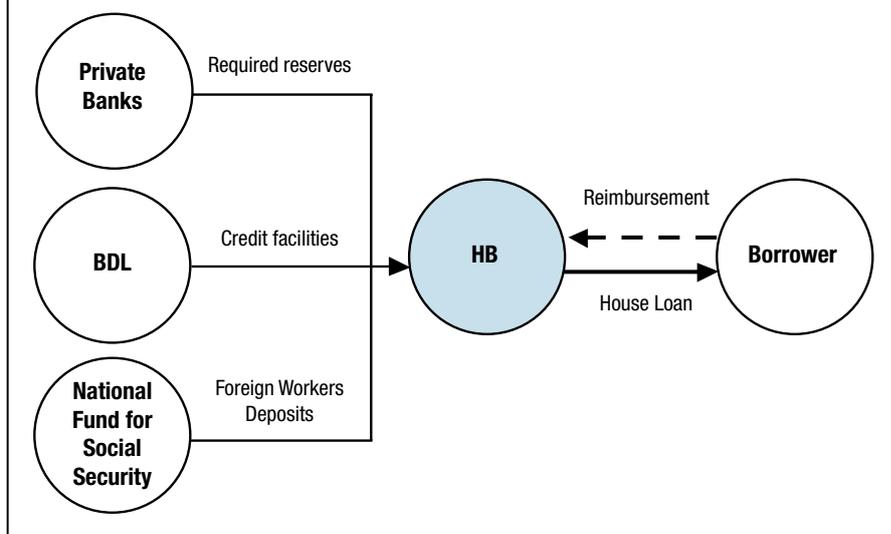


Figure 3 The Public housing institution funding structure

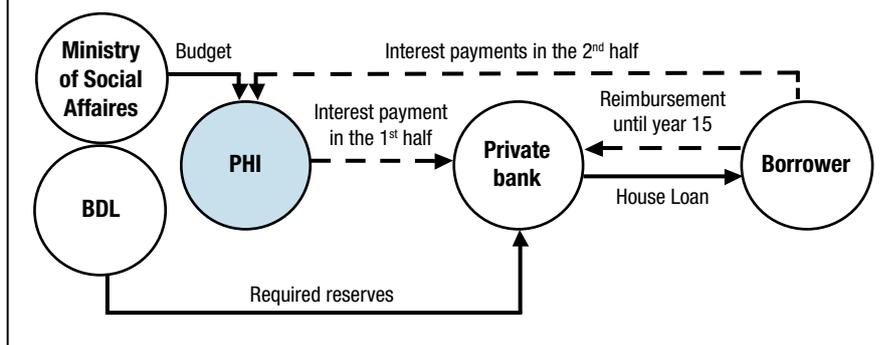
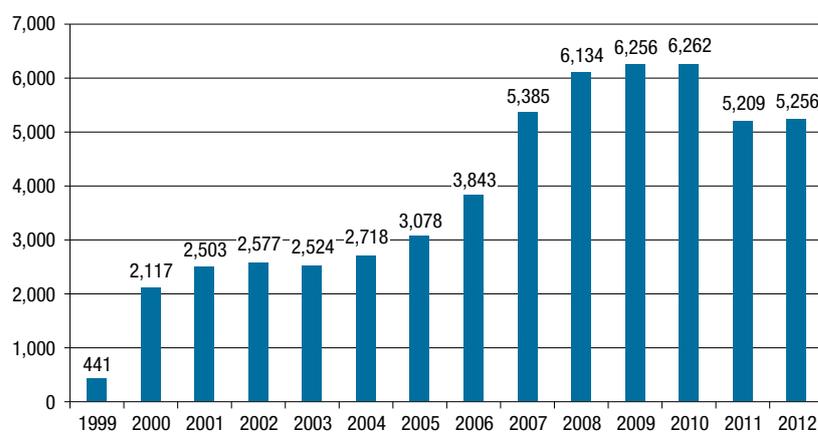


Figure 4 Number of loans granted by the PHI 1999-2012

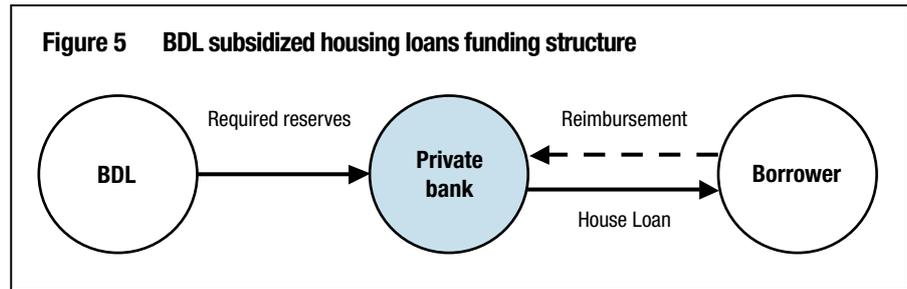


Source: The Public Housing Institution

² <http://www.almughtareb.com/housingbank>

2.3 BDL housing loans

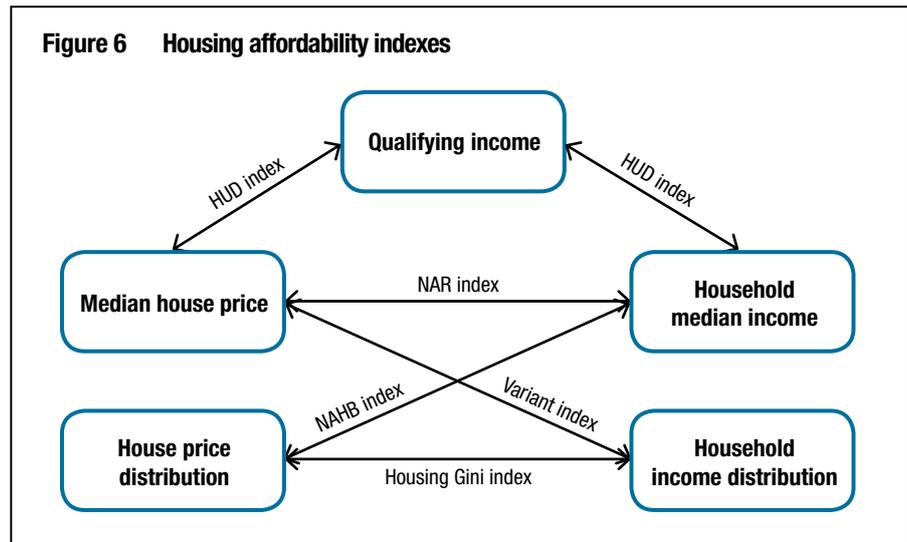
On 21 August 2009, the BDL allowed housing loans granted by private banks outside the framework of the HB and the PHI to benefit from the reserve requirements exemption. Under this scheme, 60% of the value of the loan is exempted from the reserve requirements. As shown in figure 5, private banks use their mandatory reserves at the BDL to fund housing loans.



3. Measuring housing affordability in Lebanon

Almost all existing measurements of purchase affordability developed by practitioners, mortgage lenders, housing agencies, and policy makers are based on the ratio of a measure of housing cost to a measure of household income. The differences occur mainly because the housing cost and household income can be measured in several ways, and these result in two broad approaches for measuring housing affordability; the ratio approach and the residual income approach (Stone, 2006).

Figure 6 shows a simplified illustration of the most widely used measures of housing affordability based on the ratio approach. Two values are mostly used to calculate the housing cost: the mean level of house prices and the distribution of house prices. Similarly, household income has three aspects that appear to be highly relevant to the calculation of housing affordability: the mean level of income, the distribution of income, and the propensity to save. These measurements improved over the years by using more effective estimates of the cost of housing as well as more accurate unit-record data³ (Linneman & Megbolugbe, 1992; Bourassa, 1996). The Department of Housing and Urban Development index [HUD] considers housing to be affordable if no more than 30% of gross monthly income is spent on total housing costs (Department of Housing and Urban Development, 2014). The National Association of Realtors index [NAR] measures the ability of a family earning the median income to purchase a median-priced home (National Association of Realtors, 2014). The Variant Housing Affordability index measures the percentage of households that can buy a median-priced home. The National Association of Home Builders and Wells Fargo [NAHR] measures the percentage of homes available to the median-income household (National Association of Home Builders, 2014).



Using the distribution of house prices and that of households' income result in the calculation of the Housing Gini Index and provides an accurate understanding of the distribution of housing affordability in comparison to calculations that are based on mean values.

However, when housing purchase affordability needs to be measured in relation to the conditions of mortgage finance, as is the case in this paper, house prices are replaced by the "qualifying income" and the repayment affordability is also calculated. The concept of purchase affordability in this context entails the down payment and the qualifying income to get a mortgage, while that of repayment affordability is used to measure the vulnerability of repayment and reimbursement in the advent a change in interest rate and household income.

Given the objective of this paper, the qualifying income is calculated based on the measurements developed by Gan and Li (2009). As such, purchase affordability is measured using the Housing Affordability Index [HAI] as a ratio of the average household disposable income to the

qualifying income required to meet payments on a typical dwelling (Struyk, 2005). As for repayment affordability, the Debt Service Ratio [DSR] is measured as the monthly mortgage payment compared to the household monthly disposable income (Brounen, et al., 2006). The impact on affordability is examined from 2004 when the public-private cooperation in the mortgage market was formally functioning, to 2010, the year up to which house prices kept increasing.

Gan and Hill (2009) use the Affordability Limit [AL] to calculate the qualifying income. In their own words, "a house with a price Y is deemed to be affordable for a household with gross income X if Y/X is less than AL. Otherwise the house is deemed to be unaffordable" (Gan and Hill, 2009, p. 4). Let α be the proportion of gross income a household can allocate to mortgage payments. Usually, α must be less than 1/3 of the monthly income. Let N be the term of the loan which is usually less than 30 years, and i the mortgage interest rate. As such, the present value of the total repayment of the loan is given by:

$$PV = \sum_{n=1}^N (\alpha X) / (1 + i)^n$$

³ Unit-record data includes the details for all properties sold during a period of time. This includes mainly the size of the property and the price at which the property is sold. This data allows observers to draw conclusions about the distribution of house prices.

A slight modification is brought to the borrowing constraint provided by Gan and Hill (2009) because their formula is not entirely compatible with the PHI scheme that blocks a percentage of the loan for the entire loan period and is only returned to the customer once the loan has been fully repaid. For instance, the PHI will keep a percentage of the loan deposited at the bank, and this amount is not used toward buying the property⁴. This proportion can't be paid into the house price and reduces the customer's ability to afford a house. As a result, the borrowing constraint is written as follows:

$$\sum_{n=1}^N \left[\frac{\alpha X}{(1+i)^n} \right] \geq Y + G - D,$$

Where Y is the price of the house, G is a fraction of the loan blocked by the bank, and D is the down payment.

Let β be the maximum proportion of the house price that the customer can borrow. In other words, β determines the loan to value amount [LTV] that the bank is willing to lend under the mortgage conditions. The down payment D and the LTV are written as:

$$D = \beta Y$$

$$LTV = (1 - \beta)Y$$

However, under the PHI scheme, a proportion of LTV is blocked and can't be used toward payment of the house. G is written as:

$$G = \gamma(LTV) = \gamma [(1 - \beta)Y] \\ = [\gamma (1 - \beta)]Y$$

As such, the right hand side of the borrowing constraint can be rewritten as:

$$Y + G - D = Y + [\gamma(1 - \beta)]Y - \beta Y \\ = (1 + \gamma - \gamma\beta - \beta)Y$$

The borrowing constraint can be rewritten as follow:

$$\alpha X \geq (1 + \gamma - \gamma\beta - \beta)Y \left[\frac{i}{1 - (1+i)^{-N}} \right]$$

As a result the affordable limit is given by the following formula:

$$AL = \left[\frac{\alpha}{(1 + \gamma - \gamma\beta - \beta)} \right] \left[\frac{1 - (1+i)^{-N}}{i} \right]$$

4. Data

Table 1 shows the mortgage conditions of the HB, the PHI, and the BDL subsidized housing loans to calculate AL and the qualifying income for each mortgage scheme.

Several real-estate and market research companies such as Ramco and Infopro provide house price data for Beirut but there is a remarkable shortage of data for other regions of the country. Even the data for Beirut is not produced at regular intervals consistently and this makes it difficult to track house prices over time. On the other hand, the average value of real estate transactions used in several banks' real estate reports (i.e. Audi Bank; Credit Libanais), does not distinguish between residential, commercial, or land transactions.

Due the shortage of data for house prices, a 150 square meter apartment is used as a benchmark in line with the National Development Strategy Report published by the Ministry of Social Affairs in Lebanon in 2011⁵. Based on the price hike that took place in Lebanon, a 150 square meter apartment valued at \$60,000 in 2004 (US\$400 per square meter) would be estimated to be valued at circa \$180,000 in 2010 (US\$1,200 per square metre)⁶.

Because of the lack of income distribution data to measure the HAI, three income brackets are used to reflect it; the Gross National Income [GNI], the Gross National Disposable Income [GNDI], and the income data of the Living Conditions of Households [LCH] surveys compiled by the Central Administration of Statistics in 2004 and

Table 1: Public-private mortgage schemes in numbers 2004-2010

Scheme	Interest rate i	Fixed or variable i	Minimum β	Maximum α	γ	Maximum N (in years)	Loan ceiling (in millions of LBP ¹)	Salary requirement
Housing Bank	<u>2004-2005:</u> 8% <u>2006-2008:</u> 6% <u>2009-:</u> 4.99% ²	Variable	20%	1/3	N/A	20	2004: 200 2009: 450 2008: 800	Minimum ($MW^3 \times 3$)
Public Housing Institution	<u>2004-2009:</u> 40% of 2-year TB ⁴ yield + 3.5% <u>2010:</u> 20% of 2-year TB yield + 3.9%	Variable	10%	1/3	N/A	30	2004: 120 2009: 180 2011: 270	Maximum ($MW \times 10$)
BDL loans	<u>2009-:</u> 40% of 1-year TB yield + 3%	Variable	20%	1/3	N/A	15 ⁵	N/A	Minimum 3.75 Million LBP

¹Fixed Exchange Rate: US\$1 = 1,500 LBP; ²rate=4.5% if monthly income < ($MW \times 10$) and rate=4.99% if income > ($MW \times 10$). In addition, rate=4.99% if house price < 300 million LBP and rate = 5.5% if house price > 300 million LBP; ³Minimum Wage; ⁴Treasury Bills. ⁵The repayment period was extended to 20 years based on decision no 10783 on 27/12/2011 and further extended to 30 years based on decision 11356 on 25 February 2013.

Source: Housing Bank; Public Housing Institution; Banque du Liban.

⁴ For example, if the borrower gets a loan of \$180,000, the PHI will block 10% of that amount, equivalent to \$18,000 as a deposit that the borrower can't access during the loan period. As a result, the borrower can only use \$162,000 toward the purchase of a home.

⁵ Moreover, according to the LCH surveys in 2004 and 2007, almost 60% of houses in Lebanon have a floor-area of between 80 and 180 square meters, with a very large number of those between 120 and 180 square meters. As such, it is assumed that 150 square meters represents a median size apartment and the primary choice of buyers.

⁶ The growth of house prices is based on the Global Property Guide on investment trends around the world in 2012. The report focuses strictly on a number of suburbs of Beirut, and estimates house prices per square meter at \$1,200 in 2004 compared to an average of circa \$3500 in 2012. As such, it is then assumed that house prices witnessed an annual compound growth rate of 20% over the period 2004-2010.

2007. Based on this income typology, it is possible to assess housing affordability for a wider spectrum of Lebanese households.

The GNI and GNDI data are both available up to 2010 from the Lebanon National Accounts published by the Economic Accounts Mission of the Council of Ministers. The GNI is calculated by adding the net factor income from abroad to the GDP⁷. The net factor income from abroad includes income from labour, interest, and others. In other words, the GNI per household corresponds to the average household income of a middle or upper middle income household. According to Capelli and Vaggi (2013) the GNI is sometimes considered as the best indicator of the standard of living.

The GNDI is calculated by adding the net current transfers (remittances) to the GNI. The GNDI data reflects the average purchasing power of a Lebanese household living abroad. As explained in the IMF report, in Lebanon, the GNDI is much higher than the GNI due to the large Lebanese population residing abroad which “illustrates the fact that the Lebanese economy is much more than its territory and that the role of the Diaspora is essential to explain economic developments in the country” (Mottu & Nakhle, 2011, page 3). Finally, the third income bracket is the income data of the LCH surveys that reflect the lower middle income households⁸.

Figure 7 HAI using GNI and GNDI

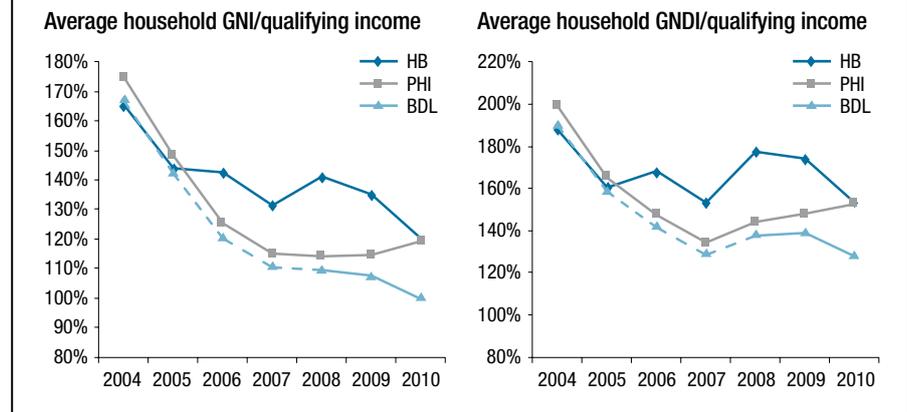
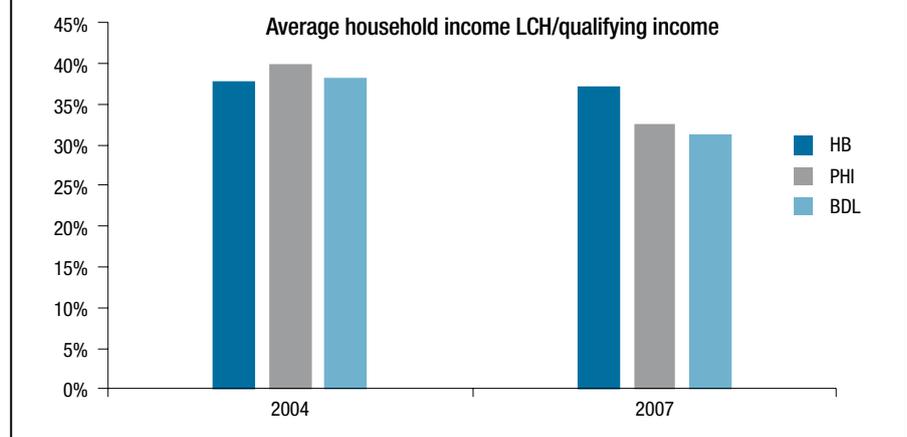


Figure 8 HAI using the LCH income



5. Results

5.1 Housing Affordability Index [HAI]

Figure 7 shows the HAI of the average household GNI and GNDI. A value of less than 100 indicates that a household would have less than the income required to afford a mortgage on a 150 square meter apartment. The HAI of the PHI and HB mortgage schemes have clearly deteriorated over the period 2004–2010. In 2004, the average household GNI was around 175% of the qualifying income but fell to circa 120% in 2010. The increase in house prices has made home ownership less affordable despite the significant efforts of the BDL to bring interest rates down.

Moreover, the results reveal that the PHI mortgage scheme is not the most affordable as widely believed in Lebanon. This is mainly due to the structure of the scheme that blocks 10% of the loan to the end of loan period making it more difficult to climb on to the property ladder. At the same time, the HAI of the BDL mortgage scheme put in place in 2009 sunk below 100% in 2010, making it not affordable based on the GNI per household.

In contrast, in figure 7, the HAI increases slightly over the period 2007–2008 for the GNDI per household. In fact, it is well known that Lebanon witnessed an unprecedented inflow of capital over that period which caused substantial

increases of the GNDI. Despite the sharp rise in house prices, it seems that remittances play a crucial role to prevent the deterioration of housing affordability. The HAI was at circa 200% in 2004 on the HB and PHI schemes and was down to below 160% in 2010.

The household annual incomes of the LCH surveys are circa US\$5,600 and \$8,148 in 2004 and 2007 respectively. These figures are far lower than the average GNI and GNDI figures and provide a totally different picture of housing affordability in Lebanon. As shown in figure 8, the HAI is below 50%, which shows that on average, Lebanese residents earn less than half of the qualifying income. It also shows that the

⁷ As stated in the National Economic Accounts report in 2006: “The generation and allocation of the primary income account records GDP and all primary income received by domestic economic agents in terms of resources; and of the primary income paid by domestic economic agents in terms of uses. The balance of this account yields the second significant aggregate, namely, the gross national income [GNI].” (p. 54).

⁸ In order to calculate the average household disposable income, the number of households is needed. The LCH surveys in 2004 and 2007 provide the number of households for those years. The number of households for 2004, which is equal to 879,400, is used as an approximation for the years of 2006 and 2007, while the number for 2007 is 888,813 and is also used for the years 2008, 2009, and 2010. This assumption is plausible because, as stated in the survey in 2007, the Lebanese population hasn’t witnessed substantial changes and has only increased by 0.11% between 2004 and 2007. This is also true for the average household size that remained almost the same at 4.27 and 4.23 in 2004 and 2007 respectively.

Figure 9 The down payment for each mortgage scheme

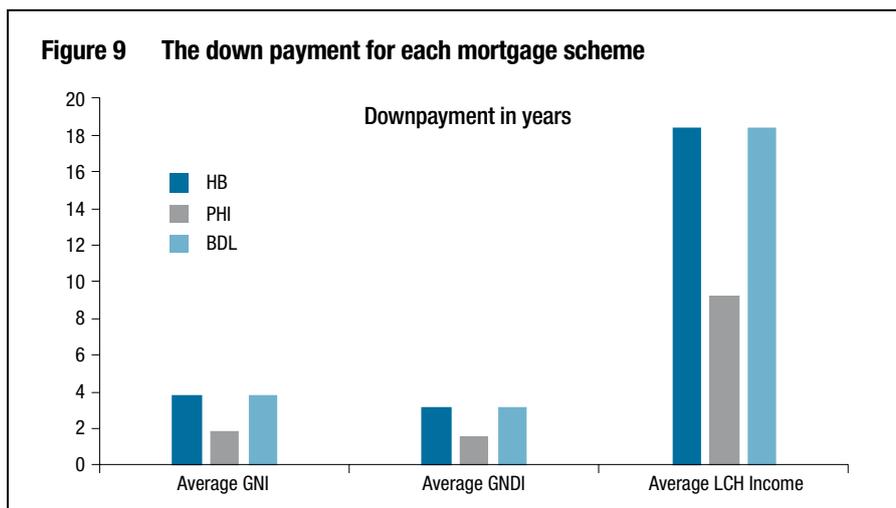
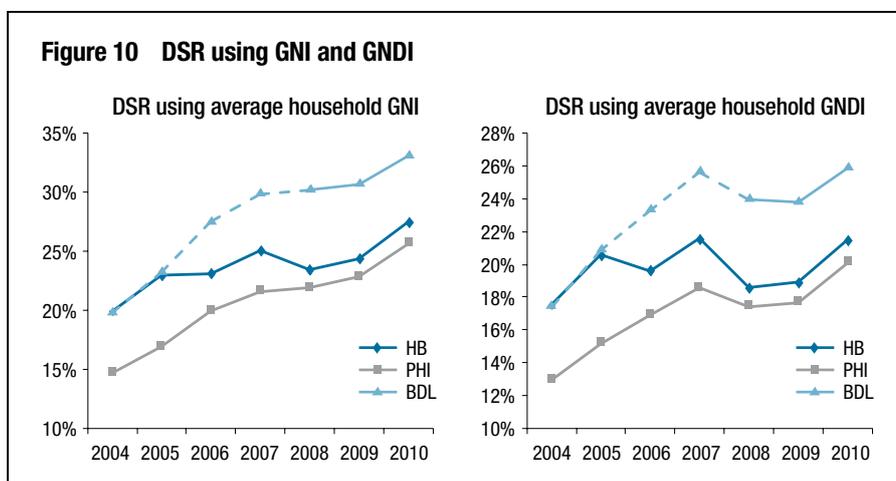


Figure 10 DSR using GNI and GNDI



HAI has deteriorated between 2004 and 2007 for all of the three mortgage schemes. These results are more reflective of the general mood in the country than those calculated with the average household GNI and GNDI.

5.2 Down payment

Affordability is related to the number of years needed to save the down payment, also known as the “deposit gap” (Hancock, 1993). The “deposit gap” is calculated using the household income and the propensity to save. In the national economic accounts, the marginal propensity to save is the ratio of the private gross saving to the private gross disposable income. This is also known as the savings rate of the private sector. The latest figure on the private sector savings rate dates back to 2005. Since then, the Lebanon National Accounts do not contain any breakdown of the GNDI between private

and public sector. For that reason, the gross national savings rate from Lebanon National Accounts is used instead⁹.

Figure 9 shows the number of years required to save for the down payment on each of the mortgage schemes using for the average household GNI, GNDI, and LCH income. Based on the gross national saving rates, the number of years of saving looks reasonable at below 5 years when the GNI and GNDI data are used. However, for the households on the LCH income category, this number is circa 18 years for the HB and the BDL mortgage schemes, and around 8 years for the PHI. The PHI seems to provide a better option from that perspective since it's possible to purchase a house with a 10% rather than a 20% down payment. However, as stated previously, the PHI blocks an additional 10% of the loan value which usually forces households to switch to smaller apartments or apartments further away

from central locations. From that perspective, if the main objective of the mortgage schemes is to support housing affordability for the low and middle income household, the chart below shows an important discrepancy at this level.

5.3 Repayment affordability

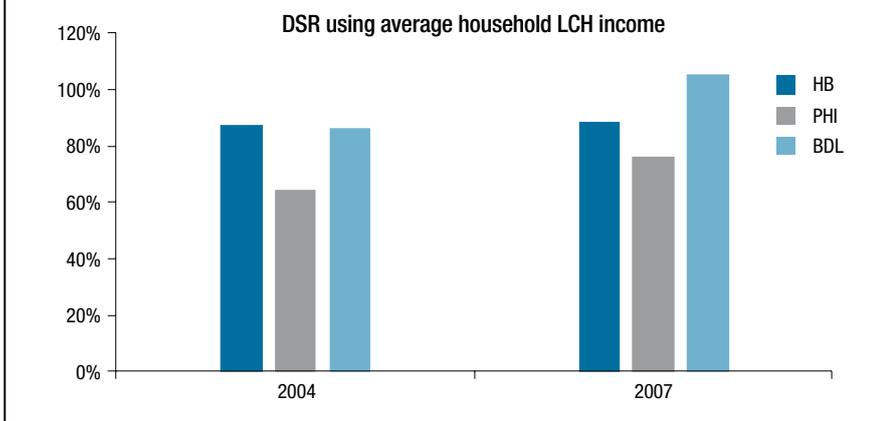
Repayment affordability is calculated using the debt service ratio [DSR] for each public scheme. The debt service ratio is measured as the monthly mortgage payment compared to the household monthly disposable income. More specifically, DSR measures the household's mortgage cost burden. A household is moderately burdened when its DSR exceeds 30%, and severely burdened when it is greater than 50%. Ideally, DSR must be kept below 30%.

Figure 10 shows the DSR of a 150 square meter apartment from 2004 to 2010 on each mortgage scheme for the GNI and GNDI income categories. The graph shows that the repayment burden has remarkably increased since 2004. The PHI mortgage scheme provides the best repayment affordability, and its DSR remains below 30% despite the sharp increase in house prices. In contrast, the other two mortgage schemes are already moderately burdened. The calculation for the PHI cost burden differs between the first and the second phase of the loan. In the first half of the loan period, the customer does not pay the loan interest, but must instead reimburse the principal entirely. In that sense, the customer of the PHI is not too concerned about interest rate fluctuations in the first half of the loan period.

The average household GNI shows a major turning point in terms of repayment affordability in 2008. Since then, a household with a mortgage on a 150 square meter apartment has become moderately burdened. In other words, since 2008, in order to maintain repayment affordability, households must make important adjustments in terms of apartment size and location. Based on the average household GNDI, the large inflow of remittances seems to have prevented a sharp deterioration of repayment affordability despite the large increase in house prices. This reflects the greater ability of Lebanese expatriates or their relatives receiving remittances to fulfil the mortgage payments compared to Lebanese residents. In that framework, the non-performing loans rate remained below 3% in the mortgage market because loans were mainly offered to the upper middle income class or the Lebanese expatriates.

⁹ Another possibility would have been to use the percentage of gross saving to gross national income less total consumption plus net transfers published by the World Bank. According to the World Bank the gross savings rate was around 11% in 2004-2007 and 12% in the period 2008-2012.

Figure 11 DSR using LCH income



Based on the LCH income, figure 11 shows that households on any of the mortgage schemes would be severely burdened in 2004 and 2007 and would even pay 100% of their annual income to afford the DSR of a 150 square meter apartment. From that perspective, a lower middle income household does not have the ability to afford any of the available mortgage schemes and this gap worsened during the period 2004-2010.

6. Conclusions and recommendations

This paper assesses the case of housing affordability in a country that is a large receiver of remittances. The case of Lebanon shows that a stringent regulatory framework, based on public-private cooperation, can contribute to more loans by making use of the large deposits held by commercial banks through exemptions from reserve requirements. However, when it comes to housing affordability, this regulatory framework could hardly compensate for the sharp rise in house prices during the period 2004-2010.

The results show that the number of mortgages has remarkably increased since the cooperation was put in place. The number and value of loans granted by the HB and PHI witnessed an unprecedented increase after 2004. But at the same time, the low number of mortgages granted before the cooperation might suggest the low demand for mortgages when prices were more affordable. From that perspective, since 2004, it is more likely that the demand for mortgages increased simultaneously with the deterioration

of housing affordability. One can't deny that the problem of affordability is also cultural. The idea of buying a house by taking a mortgage on a long repayment period still presents itself as a shock to Lebanese residents. In contrast, short-term borrowing is far more widespread.

The results reveal that purchase affordability has sharply deteriorated from 2004 to 2010 according to the GNI data which make each of the three mortgage schemes almost unaffordable. Although to a lesser extent, the purchase affordability for the GNDI has also deteriorated it has shown itself to be more immune to the increase in house prices. Moreover, the results suggest that the lower middle income category of households earn less than half of the qualifying income. As to repayment affordability, despite the large increase in house prices, the decrease in interest rates has maintained the debt service ratio below 30% for the GNI and GNDI data. However, the results based on the LCH income data show that a typical lower middle income household would be severely burdened. Repayment affordability of PHI customers is still remarkably affordable according to the GNI and GNDI data, but in contrast to its objective, not affordable for the lower middle income households.

Despite their overwhelming efforts in the mortgage markets, the current mortgage schemes enacted in collaboration with the private sector have failed to reach a very large fraction of Lebanese residents. This probably suggests that the purchase affordability of PHI mortgages should be redesigned by avoiding blocking 10% of the loan. This would definitely allow a large fraction of Lebanese residents to enter the mortgage

market. This doesn't mean that public authorities are advised to relax further the mortgage market or embrace the credit and liquidity risks associated with such a tendency. In contrast, public authorities are invited to come up with alternative solutions better tailored to lower middle income and low income households. One potential solution is the "rent-to-own" policy framework¹⁰ that is currently being debated.

In the end, there are several possible reasons for the increase in house prices in Lebanon. Some of those reasons are related to the basic economic fundamentals of demand and supply. However, based on the HAI calculated on the GNDI data, it seems that the large inflow of remittances, especially from 2007 to 2010, have transmitted the greater purchasing power of the Lebanese Diaspora compared to Lebanese residents to their homeland. For instance, whether these remittances were used to satisfy real housing demand or for speculation, they might have partially generated a substantial increase in the number of real estate transactions over a short period of time. This paper can finally reveal an interesting paradox: In countries of large remittances, the best way the lower middle income residents can afford a mortgage and live in the country is to leave and work abroad.

Future research should focus on the effect of remittances on the housing market in Lebanon in order to understand if they have been a curse or a cure to Lebanese residents. At the data level, compiling the price distribution of houses sold over the last decade as well as the income distribution can provide an enormous boost to research on housing affordability in Lebanon and result in better policy guidance.

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¹⁰ In April 2012, the Lebanese government approved a rent-to-own draft law under which a property is rented in exchange for yearly or monthly payments, giving the tenant the option to eventually

own the property. The law provides an opportunity for young people and low-income households to own a property.

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Celebrating 20 years of democracy within South Africa: a human settlements perspective

↳ By Pierre Venter¹

1. Context

By 1991, the apartheid government and a number of prominent business leaders were in earnest negotiations with the various anti-apartheid movements in order to try and reach a middle ground which would not only result in South Africa becoming a democratic state, but which would also safeguard the interests of the white minority and business alike. Housing backlogs for the poor were at crisis level, policy was fragmented, there were high levels of duplication and there was widespread misuse of public sector monies skewed in favour of the white minority population. These parties were therefore forced to negotiate a new housing policy based on a review of existing housing policy, in order to unravel the apartheid policy principles upon which the existing housing policy and home ownership were premised.

South Africa's post-apartheid human settlements policy was predominantly based on papers which emanated from a negotiation forum called the National Housing Forum. The 19 participants sat between 1992 and 1995, culminating in the post-apartheid Department of Housing publishing a White Paper styled *A new Housing Policy and Strategy for South Africa* in 1995, and the signing of a *National Housing Accord* in October 1994, in terms of which all parties undertook, *inter alia*, to collaborate and play their role for housing delivery to occur at scale.

The White Paper in its opening paragraph summarised the enormity of the challenge as follows:

Housing the nation is one of the greatest challenges facing the Government of National Unity. The extent of the challenge derives not only from the enormous size of the housing backlog and the

desperation and impatience of the homeless, but stems also from the extremely complicated bureaucratic, administrative, financial and institutional framework inherited from the previous government.

Section 26, Chapter 2, of the Bill of Rights within South Africa's Constitution stipulates that ... *everyone has the right to have access to adequate housing, and the State must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right.*

The vision statement of the Department of Housing (changed to the Department of Human Settlements in 2009) to give effect to the White Paper and Chapter 2 of the Bill of Rights is:

Housing is defined as a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities. This recognizes that the environment within which a house is situated is as important as the house itself in satisfying the needs and requirements of the occupants. Government strives for the establishment of viable, socially and economically integrated communities, situated in areas allowing convenient access to economic opportunities as well as health, educational and social opportunities, within which all South Africa's people will have access on a progressive basis to:

- *A permanent residential structure with secure tenure, ensuring privacy and providing adequate protection against the elements;*
- *Potable water, adequate sanitary facilities including waste disposal and domestic electricity supply.*

2. Demographics

In assessing the demographic shifts over the past 20 years, there is little doubt that there has been an overall improvement in living conditions. Noteworthy challenges, however, are clearly high unemployment levels, high levels of inequality and a young population. Economists estimate that for South Africa to absorb its labour force, annual economic growth levels of at least 5% are required. Average economic growth levels over the past few years have been well below this level (graph 1 below), with the result that labour indices are below real gross domestic product (GDP) (graph 2 below). This prompted the National Planning Commission (a function within the Office of the Presidency) to compile a national vision for South Africa up to 2030, styled the National Development Plan, where a strategic framework has been created with the goal of eliminating poverty, reducing inequality, building an inclusive economy and increasing the capability of the State and private sectors alike.

The provision of adequate shelter for all of its citizens is central to the social and political dialogue of most countries. From a human settlements perspective, there has been a remarkable increase in the level of basic services provided, as is highlighted in the above matrix, within both the urban and rural context. Whilst some 3.7 million welfare housing units have been built by the State over the past two decades, providing a home to almost a quarter of our population, this remarkable achievement has not matched demand due to population growth, urban migration, the reduction in the average size of families and a welfare dependency ratio of 53.8%, with the result that the official waiting list for a welfare home has more than doubled to some 2.3 million over the past two decades.

¹ The views expressed by the author are his own and they do not necessarily reflect those of his employer.

DEMOGRAPHIC SHIFTS IN SOUTH AFRICA (1994 – 2014)	1994	2014	Variance	
Population	42.8 million	52.9 million	23.6%	
South Africans living below the poverty line (> \$1 per day)	59.3%	41.4%	(43.2%)	
Average annual household income	R27 500 pa or \$2 500 pa	R103 204 pa or \$9 382 pa	275.3%	
Gini-coefficient	0.67	0.70 0.59**	(4.5%) 13.6%	
Number of households	9.95 million	15.56 million	56.4%	
Average household size	4.48	3.4	(31.8%)	
Households living in a formal dwelling	50%	77.6%	55.2%	
Formal dwellings ownership	58%	66.4%	14.5%	
Informal (on waiting list)	1.06 million (2.5% of pop.)	2.3 million (4, 3% of pop.)	117%	
Citizens receiving a social grant	7.9 million (introduced 2003)	15.8 million	100%	
Taxpayers	1.7 million	6.1 million	258.8%	
Middle class (income more than R25 000 (\$ 2 275) p.a.)	3.6 million	7.3 million	102.8%	
Access to basic services:				Urban 2014
- Portable water	60%	96%	24%	99.2%
- Electricity	50%	76.5%	53%	89%
- Sanitation	50%	83.4%	66.8%	81.7%
Unemployment	40%	25.5%	(56.9%)	
Total dependency ratios		53.9%		
Age of Population:				
- 0-14 years		28.3%		
- 15 – 24 years		20.2%		
- 25 – 54 years		38.2%		
- 55 – 64 years		7.1%		
- 65 years plus		6.3%		
- Median age		25.7 years		
Urban population	52%	64%	23.1%	
Life expectancy	60 years	61.2 years	2%	
Ethnic Groups				
- Black	76.7%	79.8%	4%	
- White	10.9	8.9%	(12.4%)	
- Asian	2.6%	2.5%	(4%)	
- Coloured	9.79%	8.8%	(11.3%)	
Workforce	8.9 million	15 million	68.5%	
- Skilled	20.7%	25%	20.8%	
- Semi-skilled	53.8%	46%	(14.5%)	
- Unskilled	25.5%	29%	12.1%	

** If welfare subsidies are included (housing, water, electricity, education, pension, disability, infants)

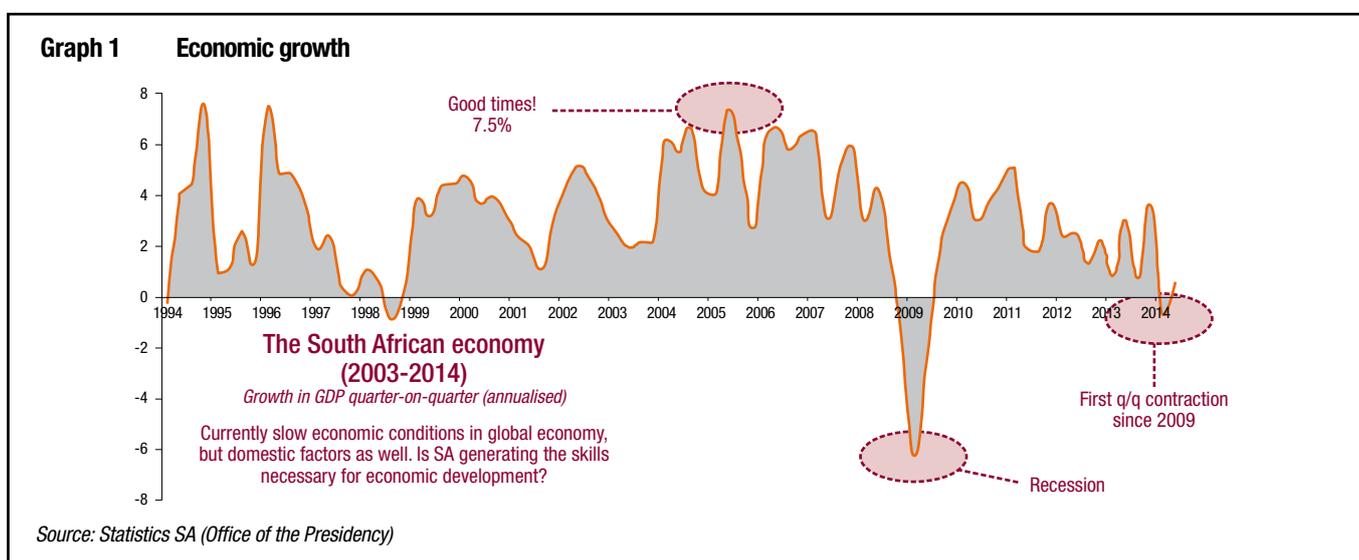
Sources: Department of Human Settlements, Statistics SA (Office of the Presidency)

There are approximately 13.8 million residential housing units in South Africa. What is pleasing to note is the development of the affordable housing market segment (housing product up to R500 000 [\$ 45 500]) which has not only grown in size, but has become commercially viable and sustainable, where commercial lenders compete for market share. Since the advent of the Financial Sector Charter [FSC] in 2004, whereby the financial sector created a voluntary transformational charter (legislated in 2012 as a Code), which strives for the sector to be relevant to the majority of our citizens, some R110 billion (\$10 billion) in affordable housing finance has been lent to lower middle income households, with more than 2.4 million households having improved their housing conditions through this initiative.

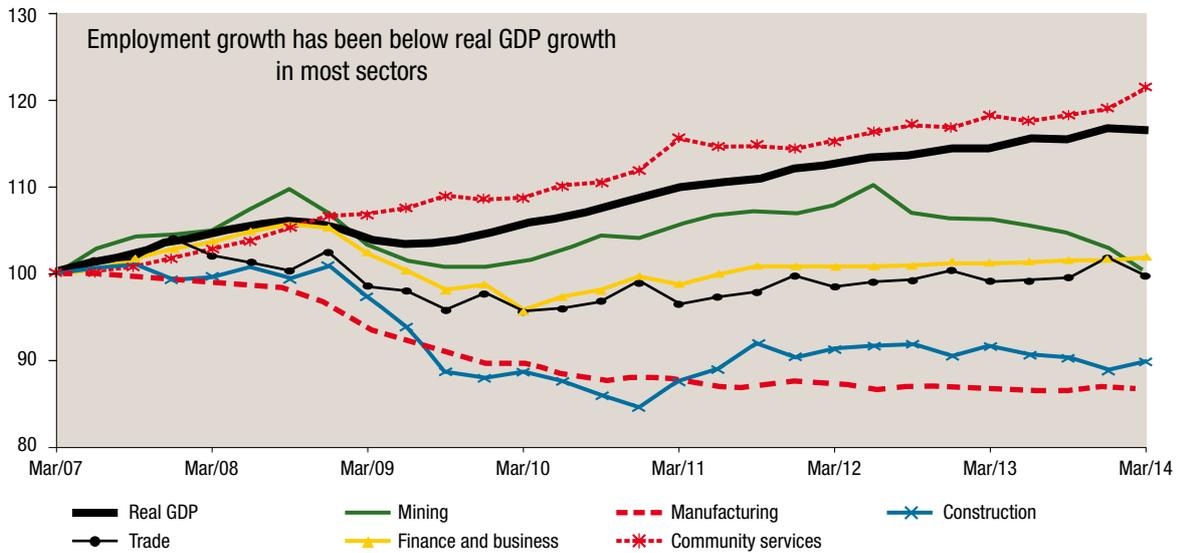
3. Welfare housing... the journey towards sustainable human settlements

3.1 1994 to 1997

Post 1994 was a period of consolidation, where the state merged numerous housing databases and built institutional capacity. It introduced a standardised rationed capital subsidy in 1994, striving to increase welfare housing supply by 1 million units over a 5 year period. Whilst municipal services in the form of running water, sewerage and electricity were evident, as were core housing units, little or no cognisance was taken of the needs for adequate roads, storm water drainage, consumer choice, the provision of social amenities, or efficient public transport to give communities access to economic opportunities. Moreover, welfare developments tended

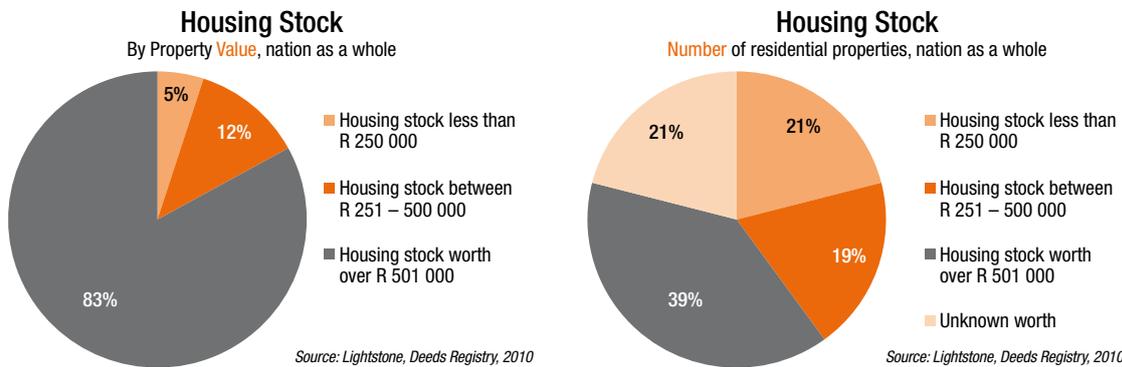


Graph 2 Index, Q1 2007 = 100; employment indices based on Quaterly Employment Statistics



Source: Statistics SA (Office of the Presidency)

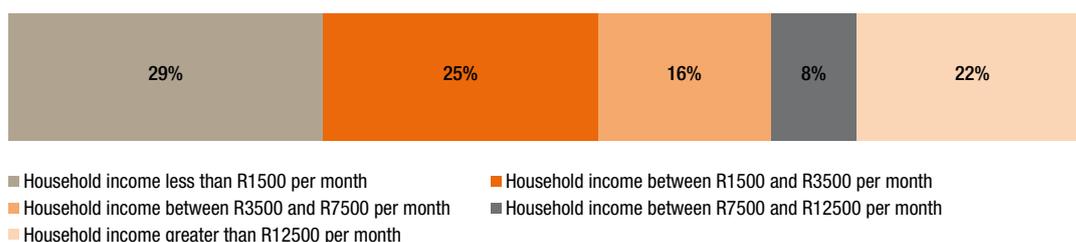
Graph 3 Market Segmentation (formal sector housing, includes ownership and rental stock)



- In 2010 properties below R500 000 (affordable housing) represented 42% of all stock and 17% of residential property value (R788 billion), total residential property value R 4.6 trillion
- 60% of all residential properties are located in 9 metropolitan cities and these constitute 67% of the total value of all residential properties in South Africa

Source: Centre for Affordable Housing Finance in Africa

Graph 4 The state of housing



Source: Statistics South Africa, General Household Survey, 2009

to be located on the periphery of cities as land was inexpensive in such locations. In the 1999 Department of Housing Annual Report, the Minister of Housing highlighted this shortcoming by the following statement – *We approach housing with a very real threat that in our chase for quantity, we fall short on the quality. It will be no solace at all that we created our new ghettos democratically.*



Example of a typical house during this period:

“Match” Box houses were built
SIZES OF HOUSES WERE 12 TO 17m²
NO STANDARDS EXISTED, RESULTING IN POOR QUALITY HOUSES

3.2 1997 to 2004

The State then introduced national minimum norms and standards which tried to ensure that the State's investment into welfare housing provided value for money. Under the new standards the maximum expenditure permissible on land and municipal services was capped at 50% of the overall cost of a unit, with an initial minimum top structure (unit) size of 20 m², subsequently increased to 30m² in 2002. This marked a significant departure from the 1995 Housing White Paper, which defined housing as a process whereby beneficiaries improved upon their own core or starter homes within their means over time. The location of housing developments, the provision of social amenities and public transport, however, remained unaddressed during this period.



Example of a typical welfare house during this period:

Size of houses increased to 30m²;
Regulations for welfare houses introduced in 2002;
Quality improved.

3.3 2004 to 2014

In 2004, South Africa adopted the United Nations Habitat Agenda which, *inter alia*, called for the need to create an enabling environment for sustainable development. This led the State to describe sustainability as *being the current condition of human settlements including the biophysical environment, the quality of the environment, the ability of the settlement to support human development and levels of access to services*².

By far the biggest shift towards creating a more comprehensive approach to housing delivery was evidenced in September 2004, when the Department of Housing introduced its Comprehensive Strategy for the delivery of Sustainable Human Settlements (commonly known as Breaking New Ground {BNG}).

BNG has six core strategic objectives, namely:

- *To accelerate housing delivery as a key strategy for poverty alleviation;*
- *To ensure property could be accessed by all as an asset for wealth creation and empowerment purposes;*
- *To leverage growth in the economy;*
- *To combat crime, promote social cohesion and improve the quality of life for the poor;*
- *To support the functioning of the entire residential property market to reduce duality within the sector by breaking down the barriers between the first economy residential property boom and the second economy slump;*
- *To utilise housing as the instrument for the development of sustainable human settlements, in support of spatial restructuring.*

For the first time, housing policy emphasised the need for the creation of well located, integrated developments as a pre-requisite for the approval of housing developments (whilst this was contained within the aforementioned Department of Housing White Paper, it had largely been ignored in the quest for housing delivery). Since then, numerous mixed income and mixed use developments, which included

the provision of social infrastructure (schools, clinics, public spaces and community halls), have been evidenced. Until 2013, BNG housing policy, however, omitted to address three critical pillars for sustainable development, namely economic, transport and environmental pillars. During 2013 three policy frameworks were introduced, namely the:

- Spatial Planning and Land Use Management Act, which strives, *inter alia*, to merge the first and second economies;
- Integrated Urban Development Framework;
- Energy efficiency regulations in respect of residential housing.

As a collective, these three policy frameworks will serve to address the aforementioned critical outstanding pillars for South Africa to achieve sustainable human settlements development.

Some examples of current human settlements:



4. Challenges

As with all interventions, there are always challenges which need to be overcome, as well as unintended consequences to be addressed, to ensure maximum benefits.

There is a need for greater coordination, collaboration and partnerships amongst housing delivery stakeholders if current supply and demand challenges are to be arrested:

¹ Guide Notes to the Sustainability Matrix (Department of Housing, Internal Working Paper).



From a supply perspective, South Africa's success over the past 20 years in improving housing conditions and providing basic services to almost a quarter of our population, has resulted in physical infrastructure reaching capacity levels in many cities. Additional bulk and connector services, as well as improved public transport, will need to be created for human settlements to expand. Further, institutional and resource capacity will also need to increase if delivery is to be accelerated to meet existing demand.

From a demand perspective within the welfare housing market segment, the provision of high quality completed housing units has created a culture of dependency and expectation, where the poor expect the State to continuously improve upon and provide for their housing needs. The current offering is not sustainable from both fiscal and critical mass delivery perspectives, with KPMG research estimating that for South Africa to address housing backlogs will require an additional R500 billion (\$45.5 billion) over five years. This is obviously not feasible, given other socio-economic imperatives. The existing welfare housing finance model will therefore need to be reviewed.

As regards affordable housing, South Africa is no different to the rest of the world where the increase in household debt, driven by consumer demand, has resulted in the over-indebtedness of households to the extent that many families are unable to afford even an entry level home. In South Africa the affordability supply gap in the property ladder is estimated to be approximately 600 000 units (30% of the workforce). Whilst the State has introduced a capital subsidy in order to reduce the quantum of individual mortgage

finance required, this is insufficient to close the affordability gap for the majority of families who fall into the "gap market."

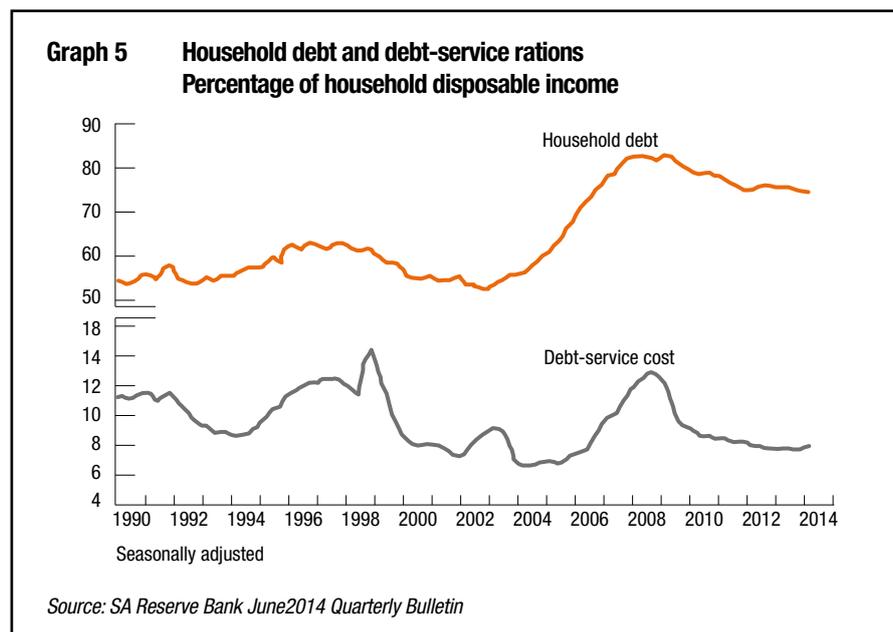
The South African Reserve Bank June 2014 Quarterly Bulletin highlights the financial plight of households (graph 5), whilst graph 6 highlights the extent of total credit in respect of the various types of credit granted, and graph 7 highlights the reduction in consumer spending as households reduce their consumption debt.

For affordable housing demand to continue to increase, affordability and the need for the continued growth of the middle income market are critical. As approximately 95% of residential mortgages are financed by commercial banks, with approximately 98% of such finance pro-

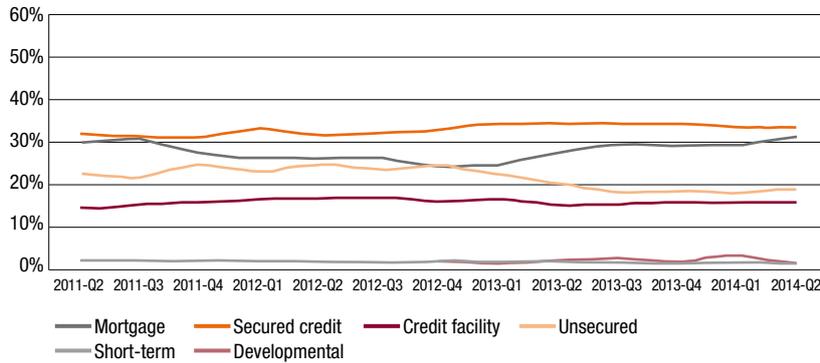
vided on a variable interest rate basis, there is a need for the State to act as a market maker for affordable long-term fixed interest rates (10 to 20 years), failing which households and in particular affordable housing households will continue to be exposed to the uncertainty of fluctuating interest rates and hence sustainable affordability vulnerability when interest rates increase (graph 8).

5. So, where to from here...

South Africa places much hope on its National Development Plan to lead the country onto a more sustainable path, in respect of both inclusive and environment friendly growth over the next two decades.

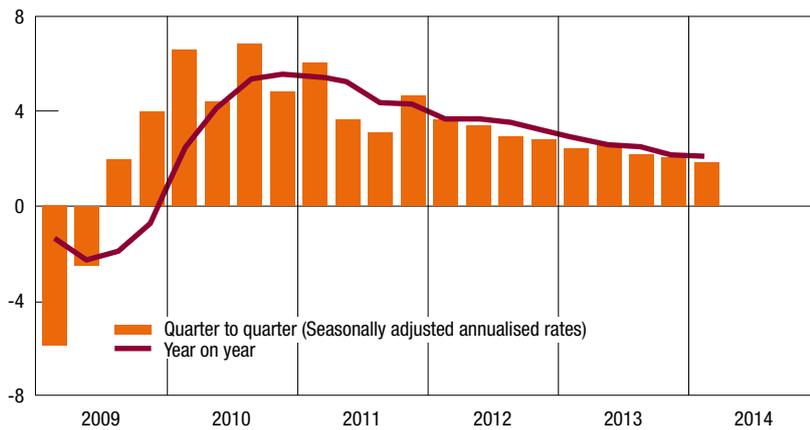


Graph 6 Credit granted - % Distribution



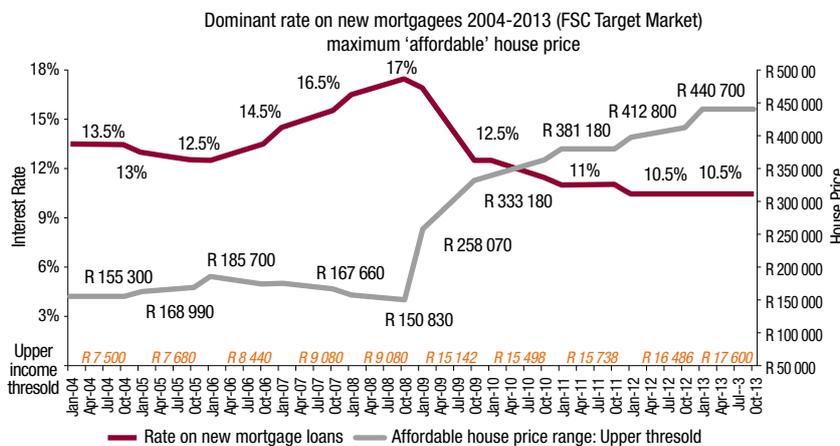
Source: SA Reserve Bank June 2014 Quarterly Bulletin

Graph 7 Real final consumption expenditure by households Percentage change



Source: SA Reserve Bank June 2014 Quarterly Bulletin

Graph 8 Affordability is a moving target, particularly in a variable rate environment



NOTE: The affordable house price range is determined using a 100%, 20 year mortgage at prime plus 2% and 25% of household income.

Source: The Banking Association South Africa

In 2014, the Department of Human Settlements initiated a major review of the existing strategic policy framework, which should culminate in a new White Paper being introduced during 2015. The Department has indicated that it is to embark on a policy development process that will address, *inter alia*, to:

- Develop a more coherent and inclusive approach to land by putting people first in its spatial investment decisions;
- Respond systematically across all geographic scales, to entrenched spatial patterns that exacerbate social inequality and economic inefficiency, taking into account urban development and rural spatial development frameworks;
- Review housing policies to better realize constitutional rights, as well as to strengthen the livelihood prospects of households;
- Radically revise the housing finance regime;
- Build capabilities for transforming human settlements;
- Engage in a proactive manner which acknowledges that our settlements are best built through a partnership between government, citizens, civil society and the private sector.

6. Conclusion

The envisaged 2015 White Paper will hopefully be released to the public in the latter half of the year. Outside of the predominant focus on reviewing the country's current spatial planning and land use, the author believes that it will also include a comprehensive review of existing policy frameworks, coupled with the introduction of new subsidy mechanisms that will promote alternative forms of tenure, the upgrade of informal settlements, rural development, incremental housing, inner city and former black township regeneration and the pursuit of innovative and environmentally friendly residential construction (green homes), making it a "must read" for housing practitioners.

As the President in Office, Nelson Mandela, aptly put it at the closing ceremony of the United Nations Habitat 1, African Ministers Conference in 1995:

... The world can be divided into those countries where the nation is comfortably housed, and those where housing is a part of a daily struggle for survival. Most countries in Africa, including South Africa, fall into the latter category. And this is a reflection of the challenges we face to ensure that our peoples do indeed enjoy a better life...

Fundamental questions on covered bond legal frameworks from a European perspective

↳ By Otmar Stöcker

Introduction

For more than 200 years, bonds secured by mortgages on real estate have been spread over Europe, later supplemented with other kinds of cover assets. For several decades the harmonization of covered bonds [CB] has been discussed, especially since the Green Paper on Long-Term Finance in Europe was published by the EC Commission.¹ Over the past 20 years, more and more conferences on CB issues have taken place. This article presents the questions and issues that these conferences usually deal with.

1. What are the most relevant risks you see that could hurt further development and the success of the CB markets?

(1) Further dilution of the asset class

The stability of the CB throughout the banking crisis as well as the ensuing privileged regulatory treatment of the asset class have fostered (and are likely to continue to foster) the development of alternative structures that build on the characteristics of the traditional CB but use a different structure (for instance a contractual structure) or are backed by different asset classes. This carries the risk that the perception of the quality of the overall product is hampered from both a regulatory and an investor's perspective with long-term negative implications

for the instrument. Therefore, a major criterion for the eligibility of cover assets shall be their enforceability as a security over longer maturities. Any asset should be suitable to serve as a long-term credit security and be appraisable.

(2) Regulatory challenges

CBs have received a privileged treatment within recent regulatory initiatives that mirrors their stability throughout the crisis. The regulatory efforts are far from over, although, a number of new initiatives, like the harmonization project are going to the core of CB concepts and the regulatory treatment of the instrument. For example regulators are currently working on the following initiatives directly affecting covered bonds:

- Bail-In regulation
- European banking supervision
- Harmonisation of covered bonds in Europe
- Reassessment of the privileged treatment of covered bonds
- Asset encumbrance
- Legally based covered bonds backed by assets other than mortgages, public finance and ships, the most discussed being loans to small and medium enterprises (SME).

Each initiative has the potential to put into question the role covered bonds have played

for financial institutions for many decades and more specifically throughout the recent crisis.

(3) Non-functioning rescue mechanism

The promise to safeguard investors in case of the insolvency of an issuing bank lies at the core of the CB brand. Therefore, it is extremely important that the mechanisms laid out by the respective CB laws would actually work in case of insolvency of a bank and would, more specifically, safeguard the interests of CB holders appropriately. A failure in one of the major markets would thus seriously undermine the trust in the safety of CBs. A major concern now is, whether the communication mechanism between ECB supervision (in charge of the bank) and national supervisors (in charge of the respective national covered bonds) would work, as their cooperation so far has not been defined at all - neither in relation to ongoing supervision of a going-concern bank, nor in a crisis scenario.

2. Is the covered bonds definition as referred to in Article 52(4) of the UCITS Directive (2009/65/EC) clear and complete?

No, the CB definition in Article 52 (4) UCITS is neither clear nor complete.

- There are no criteria that specify "special public supervision" compared to general banking supervision.

¹ EU-Commission, Green Paper Long Term Financing of the European Economy, Brussels, 25.3.2013. This was confirmed by Communication from the EU-Commission to the European Parliament and the Council of 27.3.2014 (COM (2014) 168 final).

- The priority on cover assets in the event of an issuer's default is just a very basic condition, without saying anything regarding the relation to the insolvency procedure over the issuer. Even unsophisticated CB approaches can fulfill this condition.
- There is not a single quality requirement and restriction regarding cover assets.

Overall, this "definition" is a very basic and out-of-date provision from older times, where the overall view was that nothing could ever go wrong with covered bonds.

3. How do banks investing in covered bonds ensure that the covered bonds (and the corresponding legal frameworks) are compliant with Article 52(4) UCITS Directive?

Investors (including banks, who invest in CBs) have to check case by case, whether covered bonds comply with Article 52 (4) of UCITS. Only where the national CB regulatory framework is fully compliant with this provision, can they rely on this, meaning that they have to check that only once for all further investments in CBs which are based on the same legislation – until the next amendments of this law.

It would be welcome, if the existing EU website on UCITS compliance could be updated regularly.

4. What are the key areas where national covered bonds legislations should be more harmonized?

With the aim to protect CBs from future harmful developments and to strengthen the solidity of the product while safeguarding the high level of security of CBs for investors, a prudent and tailor-made harmonization of a certain number of CB core principles could be discussed. Such an approach must materialize as minimum harmonization at an appropriate level where the historically rooted diversity of covered bond systems can be safeguarded. Appropriate areas could be

- Eligible asset classes,
- Special public supervision,
- Valuation of real estate, which is used for mortgage collateral purposes,
- Transparency on cover assets and
- Insolvency segregation of cover assets and bankruptcy remoteness of CBs.

5. Dual Recourse is 'indirectly' referred to in Article 52(4) of Directive 2009/65/EC. Given the existence of several different issuer models across EU jurisdictions, do you believe additional conditions should be established by law regarding this principle?

Yes. What "dual recourse" means should be clarified. For many years, it was understood as a "secondary" recourse to the insolvency estate of an issuer, if the cover pool should turn out not to be sufficient.

- But how can this be fulfilled by CB issuers, who are fully specialized, meaning that there is no difference between the cover pool and the balance sheet, if their mother banks do not legally guarantee the CBs?
- And how should this dual recourse be understood in other CB models, where the maturity of CBs is very long and therefore maybe longer than the insolvency procedure over the issuer?
- And how should it be understood, where the cover assets are somehow transferred to a SPV, which guarantees the CBs of the issuer? Here, dual recourse is sometimes qualified as a full recourse to the insolvency estate.

Therefore, this dual recourse minimum requirement should be interpreted as a "primary" recourse to the issuer, so that the investor does not have to worry about the cover assets as long as the issuer is fine.

If we understand the cover pool as a recourse issue, we could even count 3 recourses and call it "triple recourse":

- To the issuer as long as he is liquid
- To the cover pool, when issuer defaults
- To the general insolvency estate, if the cover pool turns out not to be sufficient.

The German Pfandbrief Act provides all three recourses. It is even regulated by statutory law that both the insolvency administrator and the cover pool administrator are allowed to take action to safeguard the third recourse of the covered bond holders against the insolvency estate (§ 30 VI 6 Pfandbrief Act).

6. Should there be a minimum regulatory over-collateralisation [OC] in national covered bonds legislations? If yes, what should the approximate percentage be and why?

This depends on the questions; what the aim of a CB is. What should be promised with a CB, i.e. the full and timely payment of even hard bullet CBs or just a generally better situation for the CB investor than for the unsecured creditors?

Next, the "necessary" OC depends on the quality of cover assets. The better their quality is and the more liquid they are, the less OC will be needed to fulfill the obligations out of the CBs.

Furthermore, important issues in this respect are valuation/LTV and the question of whether

the part beyond the eligible LTV by law belongs to the cover pool.

The German Pfandbrief Act regulates a 2 % minimum OC, which must be calculated on a net present value basis (incl. interest rate and currency stress tests) and be covered by liquid assets. From 2015 on, the German supervisory authority BaFin gets the power to require from individual issuers a higher minimum OC on a cover pool specific basis (cover add-on).

7. Are covered bond legal frameworks clear on the legal status covered bonds holders have in relation to voluntary OC above the regulatory minimum OC following insolvency of an issuer?

Most covered bond frameworks do not regulate this issue explicitly. It is assumed that any OC, which exists in the moment when the insolvency procedure is started, will be reserved for covered bonds only. The question is, whether this view is realistic, if this leads to an unfair treatment of unsecured creditors, which is often disputed regarding deposits – and here including the legal position of the institution guaranteeing deposits (asset encumbrance). Politically, it seems to be more stable, if the insolvency estate (and with it the unsecured creditors) get an explicit right to demand that a totally excessive part of the OC has to be transferred from the cover pool to the insolvency estate.

Therefore the German Pfandbrief Act regulates in § 30 (4) that cover assets, which "will obviously not be necessary" for the Pfandbrief (German Covered Bonds), will have to be given to the insolvency estate. Here, the burden of proof is on the side of the insolvency administrator.

A few countries have set OC limits, which could cause huge trouble for issuers, if they – e.g. because of changing rating methodologies – need more OC to keep their CB rating, but are not allowed to do this. The consequence would be a downgrading.

Often there are doubts as to whether the voluntary OC will still exist when the issuer defaults, because it is not regulated in covered bond frameworks. Mostly this is discussed regarding the part of OC, which rating agencies demand as a supplement to the statutory minimum OC. However, there is a fundamental misunderstanding: rating agencies do their own risk assessment. If they demand more OC than the law, this so-called "voluntary" OC – from the point of view of the rating agencies – is necessary cover, because they assess the quality of the cover assets to be lower than the legal

eligibility criteria qualify them to be. If in the end the rating agencies are right, this means that the assets, which were deemed to be supplementary and not necessary and therefore called voluntary OC, may turn out to be necessary cover – meaning in the end that there in reality never had been “over”-collateralization. As a consequence, this “over”-collateralization cannot be reduced. The only question is, who will discover this and when and what measures he then has to take to prevent a reduction of the “voluntary” OC.

8. How do the national covered bond legal frameworks regulate the valuation criteria for LTV calculation purposes of cover assets? Should some minimum criteria be specified in national legal frameworks for covered bonds?

There is no detailed overview on valuation provisions, which provide the basis for LTV calculation for cover mortgages.

Minimum criteria on cover asset valuation would make much sense. Valuation rules of cover assets should be risk-sensitive, because valuation must be conceived as an investor protection tool. Prudent and sustainable rules dampen market cycles and foster stability. A mortgage lending value-based approach is most suited to contribute to the high safety standard of covered bonds.

Independence and professional qualification of valuers (both internal and external) should be addressed. Monitoring and re-valuation issues are secured through the cross-reference of Art. 129 (3) to Art. 208 and 229 (1) CRR.

9. What are the essential features, in terms of ‘security on the property’, that mortgages included in cover pools should have?

Many criteria are essential in order to get sound security rights over real property, which all contribute to reliability, enforceability and long-term trust in that collateral:

- Clear and permanent legal title to the property; in case of leasehold or other rights which derive from the property, those rights must have a longer duration than the security right and may not be modified or relinquished without consent of the CB bank or sufficient payment to the CB bank with the payment secured on the property.
- Security right over real property with a clear title from a reliable land registry or, insofar as the land registry does not provide evidence and liability for the title, with a clear legal analysis

- No rights with priority in enforcement or insolvency which are not evident from the land register or legal analysis, which cannot be calculated because of an unclear amount (for example all prior and future income taxes) or which have a significant amount prior to the security right.
- Permanence and duration of the security right over real property for a period significantly longer than the planned duration of the loan and an adequate time to redeem the loan out of the proceeds of the property
- Security rights over real property and their enforcement must not be contingent or challengeable by the borrower, owner or other parties. (The danger of avoidance may not to be excluded by legal means but must then be excluded by credit assessment.)
- Clear option to enforce the mortgage and receive the proceeds including the remaining debt with interest amounts

Meanwhile, the Vdp initiated a think tank on “flexibility, security and efficiency of security rights over real property in Europe”, covering 36 countries, where these issues are dealt with regularly.

10. What is the best practice observed in national covered bonds legal frameworks on asset and liability management of cover assets and covered bonds relating to stress-testing of market risk (interest rate & currency risk), use of derivatives and liquidity risk (following issuers insolvency)?

Strong stress-tests regarding interest rate & currency risk should be an integral part of CB legal frameworks. This could either be a dynamic approach, where the stress is based on historical evidence or a so called static approach, where the stress requires interest rate shifts of 250 basis points and currency movements of 10 to 20 %.

As liquidity is key for a cover pool after an issuer’s insolvency, liquidity tests or buffers should be an integral part of covered bond legal frameworks, too. This could either be a mandatory, legally based soft bullet structure for covered bonds or a 180-day liquidity buffer.

Derivatives mitigate interest rate and currency risk for cover pools and are therefore to the benefit of CB investors. Hence, derivatives should be allowed in the cover pool. As cover pools are not designed to deliver collateral to a selected group of creditors in a physical way, cover pool derivatives should be exempted from both a clearing obligation and a bilateral physical exchange of collateral.

11. What is the best practice on the role of the banking supervisor observed in national covered bonds legal frameworks?

There is no area in CBs, which is as opaque as the role and practical behavior of supervision authorities in their role of safeguarding the “special public supervision”.

It is important to regulate the statutory requirements of a CB issuing license. Specifically, know-how and the qualifications of the staff of the issuer are fundamental preconditions for the quality of CBs. These should be checked by the supervision authority before allowing a bank to issue CBs.

Outsourcing of important tasks of a CB issuer in relation to quality checks of cover assets as well as ALM should not be allowed.

The supervisory authority itself should have specialised and well-trained staff in sufficient numbers to fulfil the CB issuer supervision. A specialised department would be preferable in order to make sure that all CB issuers are treated the same.

Random checks of the cover assets should be undertaken by the supervisory authority staff itself in order to safeguard this staff’s know-how.

In Germany, there is a specialized department in BaFin dealing with interpretation and development of Pfandbrief law, as well as with cover pool audits.

12. Should a national covered bond legal framework include specific legislation around the role of bank supervisors or should this be outside the scope of covered bond legislation?

The special public supervision is a key element of all EU regulation of CBs. Therefore the role of the supervision authority should be regulated in CB law directly. With that, it is easier for investors to check whether this element of EU law is fulfilled.

The supervisory authority should check the legal eligibility criteria as well as the market related ones (especially regarding valuation for LTV purposes and asset cover tests). Furthermore, the soundness of the cover register is an important issue, because this is decisive for the segregation of the cover assets from the insolvency estate in the event of an issuer’s insolvency.

13. What is the best practice concerning the servicing of loans once the issuer has

entered insolvency? Is there the need for any harmonized regulatory approach in this area?

The servicing of cover assets in this case depends on the fundamental legal structure of the CB model. There is no need to harmonize this in detail. Nevertheless, regarding creating a minimum quality standard, it would make sense to think about a separation of the administration of cover assets from that of the insolvency estate.

In Germany, according to § 30 Pfandbrief Act, cover assets would not be part of the insolvency estate (insolvency-free assets), would not be subject to insolvency law and would not be managed by the insolvency administrator, but by the cover pool administrator (Sachwalter).

14. What is the current best practice observed in the national covered bonds legal framework relating to disclosure to investors?

As only legally based disclosure requirements are enforceable, quarterly disclosure requirements should be a mandatory part of a CB legal framework. Loan-level-data are not necessary, not only because of the additional special public supervision of the covered bond business, which includes the oversight of cover assets and its “on-balance sheet character”, but also because all general banking rules apply to cover pool assets (minimum capital requirements etc...).

15. Does loan-by-loan data information on the cover pool provide additional information to stratification data? What is the current best practice in the cover bonds market?

Strict eligibility criteria enshrined in law offset the need for loan-by-loan data, thereby ensuring the high quality of covered bond investments. In addition, in most cases cover pools comprise thousands of loans, which reduce the additional value for investors tremendously. It is most likely, that investors wouldn't be able to do their own loan-level data analysis but would ask for third party opinions. Hence, one would end up at the rating agencies.

16. In case of an issuer's insolvency when the cover pool becomes 'static', does loan-by-loan information provide useful information to covered bond investors?

If a CB issuer became insolvent, the investor would have to decide, either to stick to its investment or to sell the covered bonds. While loan-level-data could help the investor

to evaluate the cover pool, this decision would be driven by other factors, for instance rating constraints. Moreover, the public supervision of the CB business, which includes the oversight of cover assets would still be in place.

17. Article 129(7) specifies the minimum criteria on disclosure and frequency of disclosure in order for the covered bond to qualify for preferential treatment. Are the criteria clear and complete or should they be further specified and harmonized across the EU?

As only legally based disclosure requirements are obligatory and enforceable, disclosure requirements should be a mandatory part of a CB legal framework. Apart from that, harmonization of definitions would be needed, before disclosure requirements could be harmonized further, for instance regarding valuation, LTV, etc.

18. How do banks investing in covered bonds ensure that the criteria under Art. 129 (7) CRR are met?

The best solution for investors is, if disclosure requirements according to Art 129 (7) are part of the national legal framework. In this case, investors know that the criteria are met without checking any individual issuer's website.

Another solution could be that the national supervisory authorities notify an EU website on CRR compliance, whether the criteria are met!

19. In general, do you agree that if a deposit-taking bank's covered bond issuance reaches a sizeable level, this will lead to a lower recovery rate on the unsecured debt after a bank's insolvency?

No, this is not an automatic effect and therefore asset encumbrance limits are not necessary in principal. It depends especially on the range of cover asset classes, the methodology of valuation as a basis for LTV calculation, the LTV limit itself, the methodology of cover calculation, the statutory minimum OC, the claim of the insolvency estate against an excessive OC, the regulations on how to manage liquidity risks in the cover pool after an issuer's default (fire sales allowed?) etc. Moreover, the quality of all on-balance assets plays an important role. Finally, a well-established access to CB funding reduces the issuer's probability of default.

20. Will the Banking Recovery and Resolution Directive have an impact on the national legal frameworks for covered bonds? If yes, which areas of the national frame-

works for covered bonds will be most affected?

Yes, the CB frameworks will be affected by the BRRD, but especially by the Single Resolution Mechanism [SRM] which gives a special twist to bank recovery and resolution in the Euro area.

Any recovery procedure could have and any resolution procedure will have an impact on CBs – therefore any kind of harmonization on these areas will have a fundamental impact on the CB legal frameworks. There will be competences at the European level, which very likely will have an overriding influence on the procedure, which is foreseen by national CB law on how to deal with crisis situations and especially on the legal effects of a default of the issuer. The decision making procedure as to when and how to wind down a CB issuer, will no longer be dominated by national authorities only, but by the new SRM body. It seems that so far nobody knows how this conflict of competences will be solved and what national regulations in detail will have to be adapted to the BRRD/SRM.

A lot of questions have already been discussed, for example:

- How to deal with (excessive) OC? Could this be used at least partially to support a recovery procedure?
- There is a special bail-in tool for CBs, if the cover pool turns out not to be sufficient. How will this be calculated? Who will do this calculation? Who will decide on the results of the calculation?
- Who will make the decision to start an official insolvency procedure over a CB issuer and who will file the application for this to court?
- Who will select the cover pool administrator, who is regulated in many Covered Bond frameworks, who will appoint him, who will supervise him – the competent body at national level or at European level?
- Who will make the decision regarding transfer of cover pool and CBs to another issuer? (In most CB frameworks, where this is regulated, a consent of the – so far national – supervisory authority is necessary.)

21. Please specify how competence and power sharing between the national authorities and the SSM and Resolution authority regarding covered bonds should be distributed.

As CBs are national products, national supervisory authorities have to remain in charge of CB oversight.

The supervision on CB issuers will be effected by SSM as well as by the future Resolution authority. There will be competences at European level, which will have an overriding influence on the procedure, which is foreseen by national CB law on how to do supervision on banks. This will cover CBS and cover assets as well. The so-called “special public supervision” will very likely remain with the national supervisory authority. But one could anticipate that reporting requirements for CBs and cover assets will increase dramatically as a consequence; possibly twofold as the ECB as well as the national authority will have information needs.

A lot of questions have already been discussed, for example:

- If national CB law requires a special CB license, will this be granted by the national supervision authority or the ECB?
- Is this special CB license regarded as being an independent (secondary) license or only a special add-on to the general banking license, which will be granted (and withdrawn) by ECB?
- Will national parliamentary law remain competent to regulate that the unity of CBs and cover pool (in Luxemburg and Germany called “Pfandbriefbank with limited business activities”) will keep the banking license including the CB license, if an insolvency procedure over the issuer is started and the banking license is therefore withdrawn?
- Will the national supervision authority remain competent to appoint and supervise cover pool monitors?
- If national law regulates cover pool inspections, will the national supervision authority remain competent to arrange this and draw consequences out of it?

It seems that so far nobody knows how this latent conflict of competences will be solved and what details of national regulations will have to be adapted to the SSM. Therefore, there is a fundamental need to clarify, how competences between national and European authorities will be distributed.

22. How much harmonization/differentiation should there be between countries? What is the likely impact in terms of a level playing field if there is no harmonization on this point across the EU?

See the answer to question 4.

The harmonization of CBs in Europe has been discussed for several decades and has gained momentum especially since the publication of the Green Paper on Long-Term Finance in Europe by the EC Commission in early 2013.

EU-harmonization of covered bond law can be achieved in many ways, among them:

- a) A common understanding of Art. 129 CRR (and Art. 54 IV UCITS directive). This is necessary in any case and could – at least partially – be achieved via interpretation by EBA Q & A procedure.
- b) Regulation of details necessary to achieve a common understanding. This could be accomplished by including more detail in CRR and UCITS.
- c) Minimum harmonization. This would mean setting minimum quality standards on cover assets, special public supervision etc. i.e. anything, that could be harmonized without forcing changes upon existing covered bond models and products.
- d) Fully targeted harmonization. Full scale harmonization would not allow or leave room for national laws apart from what would be EU level regulation. This would imply fundamental changes for most covered bond models and products and require changing many details on all outstanding issues. New cover pools would have to be created and then only new CBs could be issued based on the new law. Issuers would have to manage double amount of cover pools. Liquidity in the CB market would be seriously damaged and hampered for many years of transition.

It is clear that before any decision on the route to be taken a fundamental analysis of the pros and cons of each option should be undertaken, especially with a view to the economic costs and profits involved at EU-, national, and issuer-level. At each level the perspectives of investors, issuers, supervisors, and the national economy would have to be adequately reflected.

For a meaningful harmonization debate, first it is necessary to clarify, what aims a covered bond should fulfill. Should it

- Just be better than a senior unsecured bond?
- Safeguard full payment to covered bond investors in case of an issuer's default and/or insolvency procedure?
- Even safeguard timely payment in that situation?

The aim decides the measures to achieve it, i.e. the areas, which need to be harmonized. How shall the aim of limiting Asset Encumbrance be dealt with? Regarding the large exposure regulations, Basel Committee set up a minimum OC of 10 % in order to privilege CBs; should this be used for harmonization purposes as well? How to deal with liquidity buffers and what for? And how should soft bullet- and pass through-structures that shift liquidity risks to investors be regarded in this respect, positively or negatively?

To summarize, I doubt that the fragmentation of the CB markets will be removed by CB harmonization initiatives. Some investors think that they will have less work with more harmonization in analyzing CB law. But to a large extent, this seems to be wishful thinking. A full harmonization is not realistic, because this would not only mean harmonizing the CB legal framework including insolvency law and asset segregation issues, but the legal frameworks of cover collateral as well; even if this could be done one day, the markets of the cover assets will remain different – and therefore the quality of covered bonds, as well.

The level playing field should be seen on the regulatory side, especially risk weighting, where minimum requirements are necessary. The covered bond law itself should remain an issue for competition of law makers / legislators.

Summary

The success story of CBs during the financial crisis brought followers, initiated a lot of legislation and got the attention of supervision authorities and the EU-Commission.

The European Banking Authority [EBA] got the task of studying CB laws and markets. The “EBA Report on EU Covered Bond Frameworks and Capital Treatment” was published in June 2014 not only containing analysis, but best practice recommendations² as well, which nowadays are the core source of most CB conference discussions and will become the basis of future harmonization work.

With any kind of harmonization - whether minimum or full targeted one - CBs will not get guaranteed and automatic success, because such success is the result of long-term and sustainable work to improve legislation, to safeguard sound cover pools and to convince capital markets of their importance.

¹ Pp. 143 - 150

UK buy-to-let comes of age – investment returns compared

↪ By Rob Thomas

1. Introduction

This article explores the financial performance of buy-to-let – where ordinary people buy property to rent usually using a mortgage to finance the purchase - as an investment in the UK since the launch of the buy-to-let mortgage initiative in 1996 by the Association of Residential Letting Agents (ARLA) and leading mortgage lenders. The article compares investment returns for an average UK investor in buy-to-let – considering both mortgaged and un-mortgaged investors – with investors in equities, UK government bonds (gilts), commercial property and cash¹.

In the UK, buy-to-let is something of a household name today, so it is easy to forget that the concept that made the buy-to-let market possible in the UK was only introduced 18 years ago this year. In 1996 the Association of Residential Letting Agents (ARLA) and leading mortgage lenders launched the buy-to-let mortgage initiative. Prior to 1996, the mainstream mortgage lenders did not cater to landlords and the only source of funds available were from specialist commercial lenders or banks that would treat such a mortgage the same as a secured loan to any other small business. Typically, interest rates were much higher than on conventional residential mortgages and the maximum loan to value (LTV) ratio was usually 50%.

The buy-to-let initiative recognised the value of rented residential property as collateral for lenders, ushering in mortgage terms such as interest rates and maximum LTVs that were much closer to those available to owner-occupiers. This captured the popular imagination and encouraged a wave of ordinary investors to try their hands at becoming landlords for the first time.

But how have these early buy-to-let investors fared? While anecdotal evidence suggests that residential property has been a good investment there is a surprising absence of detailed information on actual returns relative to other asset classes. To overcome this informational void, this paper presents a quantitative analysis of average investment returns from UK buy-to-let between the end of 1996 and the end of 2013. It compares these returns with the average return from the other main UK asset classes; equities; gilts; cash and commercial property.

While the returns from buy-to-let recorded in this paper are excellent, a buy-to-let investment like any other investment carries risks. The impact of using a mortgage to finance the purchase of a rented property is also shown to have been positive over the period used in this paper. But such gearing also increases risk and can lead to the investor losing more than their original stake. Investors should be sure they understand all the risks involved.

2. Methodology

2.1. Constructing a UK buy-to-let total return index

To compare the returns of each of the main asset classes that we benchmarked buy-to-let against (cash, gilts, equities and commercial property), we have either taken recognised external benchmarks of total performance or have used estimates based on available information. Series like the FTSE all share index and Libor are widely used by fund managers and investors to compare returns. For buy-to-let we constructed a total return index. All indices are compiled without tax deductions.

To construct our buy-to-let total return index, for capital values we took the Nationwide house price index. For rents we took the level of rent determined by LSL Property Services rental data for December 2013 and extrapolated this all the way back to 1996 using the Office of National Statistics (ONS) private rent series used in the construction of the retail price index (RPI).

In constructing our buy-to-let total return index, where assumptions needed to be made we took a conservative approach. For landlords' management costs we assumed that the landlord will spend 25% of their rental income on operating costs (all outgoings except financing or mortgage costs). This is consistent with a landlord that uses the services of a managing agent i.e. a letting agent who finds tenants and manages the property. Clearly, a landlord who chooses to manage their own property should face comparatively lower costs and therefore achieve higher returns. Of course such costs will vary between landlords and properties depending on factors such as the age of the property and number of tenants but 25% is a fair average.

We also needed to make an assumption about the level of voids – periods when the property is not rented out – and about any rent arrears that are ultimately written off. There is limited time series data available on voids and write-offs but there are estimates of the general level. Taking the available information into account, we assumed that the average landlord faces around 22 days a year of void/unpaid rent – the overwhelming majority of which would be made up of voids.

We assumed that mortgaged landlords paid 1.75% above Bank of England bank rate on

¹ This article is based on a research report produced by the Wriglesworth Consultancy for Paragon Mortgages, which was released in April 2014.

loans taken out before the second quarter of 2008 and 4% above thereafter. Finally we needed to make assumptions about the costs of buying and, where applicable, furnishing the property. We assumed that these upfront costs average 3% of the purchase price.

As stated above, to construct a total return index we used the Nationwide house price index for capital values and the December 2013 estimate of rent levels from LSL Property Services. In doing so, we are implicitly assuming that the average rented property is equal in value to the average property in the Nationwide index.

Fortunately, we can check whether this is the case as LSL Property Services produce a figure for average gross rental yields, which was 5.3% at the end of 2013, implying that the average capital value of the rented property they tracked was £168,700, compared to the Nationwide average price of £174,400. This is consistent with the widely held view that the average rented property is somewhat cheaper than the overall market average. It suggests that our rental yields, and therefore the returns recorded in our total return index, were somewhat understated. This is consistent with our approach of using conservative estimates wherever possible.

2.2. Our approach to reinvestment of income in buy-to-let

One key element in the calculation of total returns where the treatment of buy-to-let should depart from the assumptions used for asset classes like cash, equities and gilts is the reinvestment of income. With cash the reinvestment of income is straightforward. Interest is simply credited to the cash account and thus rolls up. To calculate total returns for equities or gilts, income is reinvested back into the asset as it accrues. This is a reasonable approach as the fractional ownership of equities and bonds allows even small flows of income to be reinvested as they accrue.

The same cannot be said for buy-to-let. This reflects its lumpiness as an investment: a

buy-to-let investor faces a minimum initial investment determined by the size of the deposit and purchase/set up costs. Although in theory this barrier could be overcome by a group of investors working together as a syndicate and thereby making a smaller individual investment, this possibility is not considered in this paper.

The basis upon which we assumed that income was reinvested for a mortgaged buy-to-let investor is as follows: we assumed the investor started with a single property and only undertook an additional purchase when they accumulated sufficient cash flow from the first property to meet the cost of a deposit and purchase/set up costs on another property at the then market price.

The ungeared (cash) buy-to-let investor faces an even greater issue with lumpiness. For the buy-to-let investor who chooses to buy without recourse to a loan, we assumed that surplus cash was only reinvested in another property when he/she had saved the full purchase price including purchase/set up costs.

We assumed there was no return on surplus cash before it had been reinvested. In reality of course the investor is likely to park funds in an interest bearing account so returns would be somewhat higher but we have ignored this possibility so that the returns we estimate are purely those relating to the buy-to-let investment itself.

2.3. The conservative nature of our reinvestment assumption for buy-to-let

A rising property market of course makes it more difficult for the investor to accumulate the funds necessary to expand their portfolio. Indeed, in the case of the un-mortgaged (cash) investor buying at the end of 1996, our total return index shows that they will not have accumulated enough cash flow to purchase a second property by the end of 2013.

We believe that this methodology on reinvesting income is the most conservative approach one could sensibly use. In reality the buy-to-let investor is likely to have received interest on accumulated cash flow and had a range of options open to them which would allow higher frequency of reinvestment of income.

For example, the investor could have reinvested their income by buying a cheaper than average property. Some buy-to-let investors may be able to invest with other individuals, sharing the cost of purchasing a property. They may also be able to buy with a smaller deposit or they could re-mortgage existing buy-to-let properties to provide equity for additional purchases. Section 5 examines some alternative approaches to the reinvestment of income.

3. Investment returns compared

The investment returns shown in Table 1 show what £1,000 invested at the end of 1996 would have been worth by the end of 2013 in the five main asset classes in the UK. As is standard in such comparisons, the returns have been calculated gross of tax as different investors face different tax rates, and income was reinvested in the asset.

3.1. Superior returns on buy-to-let

The first key finding of this report is that rented residential property (or so-called buy-to-let) produced the highest return of any asset class. Even for the investor who used no gearing (i.e. bought property with cash) every £1,000 invested in an average buy-to-let property purchased in the final quarter of 1996 would have been worth £4,791 by the final quarter of 2013. This represents a compound average annual return of 9.7%.

Over this 17 year period, the landlord would have accumulated over £97,800 of net income (profit) from the property. However, this would have been insufficient to purchase another property outright so he/she would have ended the period with only the single property they bought back in 1996.

3.2. Enhancement of returns through use of borrowing

For investors who borrowed to purchase a buy-to-let property, the returns are significantly higher. Using identical underlying assumptions, the same property purchased with a 75% LTV buy-to-let mortgage (a fairly typical initial LTV) would, on average, over the same period have turned each £1,000 invested into £13,048, a return of just over 1,200% (a 16.3% compound rate of return).

Table 1. Cumulative total returns for the main UK asset classes (1996-2013)

Asset class	Value at end 2013 of £1,000 invested at end 1996	Compound annual returns	% of return from net income
Buy-to-let 75% LTV loan	13,048	16.3%	32.5%
Buy-to-let without loan	4,791	9.7%	45.4%
UK commercial property	3,654	7.9%	N/A
Equities (FTSE All Share index)	3,082	6.8%	61.9%
Gilts (Bloomberg/EFFAS index over 1 year maturity)	2,924	6.5%	58.6%
Cash (1 month Libor)	1,949	4.0%	100.0%

This investor would have accumulated enough surplus cash flow (net income) from their buy-to-let property to put down a 25% deposit and meet purchase/set up costs on a second property by 2011. By the end of 2013, their two properties would together be worth £348,900, providing total capital gains of £125,600 on an initial investment of £15,400. The investor's average LTV would be 47% and they would have an additional £14,300 in accumulated cash left over despite the purchase of a second property.

3.3. Returns on other asset classes

Turning to the performance of the other main UK asset classes, commercial property was the best performing asset class after buy-to-let. Every £1,000 invested at the end of 1996 would have been worth £3,654 by the end of 2013 based on our estimates. On the whole this has been a relatively benign period for commercial property supported by interest rates trending down, although the 2008/2009 financial crisis did hit the capital value of commercial property hard.

Equities, as measured by the FTSE all share index, showed the next highest returns. The average UK equity investor can expect to have seen each £1,000 invested at the end of 1996 grow into £3,082 by the end of last year. This period was a patchy one for equity markets with both the dot com bust and the financial crisis taking a toll on returns.

Unsurprisingly, given the relative low risk associated with UK government bonds (gilts), these provided lower average returns than equities. Each £1,000 an investor placed in gilts at the end of 1996 would have grown to £2,924 by the end of last year. Gilts outperformed only cash.

Cash produced the lowest returns out of the main asset classes, measured by one month sterling Libor. Even without tax, the cash investor would have failed to see their funds double over this 17 year period, with £1,000 growing to £1,949. Adjusting for inflation measured by the all items RPI index, the cash investor would have gained only 19% between 1996 and 2013. This result would seem to validate the widely held view that over the long term investors do poorly in cash.

3.4. Other investment criteria

This report is concerned exclusively with comparing investment returns. However, it is important to provide some context to the returns shown in Table 1 as returns are by no means the only factor that investors will take into account when considering where to place their money. Other key characteristics that need to be considered are whether an investment is active or

passive, the expected volatility and liquidity, the ability to diversify risk and the level of investment charges.

3.4.1. Buy-to-let is an active not passive investment

Buy-to-let is fundamentally different from asset classes such as equities, gilts or cash. Whilst these other investments are passive – once the investment is made you are relying on others to deliver the returns – buy-to-let is more akin to a business. Even when a landlord uses a managing agent to find tenants and manage their property, they will need to oversee the managing agent and they take on legal responsibilities related to important issues such as the safety of their tenants. For example, where the property has a gas supply, the production of an annual gas safety certificate is a legal requirement.

This sense in which buy-to-let is a business as well as an investment is what attracts many investors – they are making their own decisions rather than delegating them to others such as a management team whose financial interests may not be perfectly aligned with their own. Indeed, many landlords prefer to find tenants and manage their property themselves rather than employing an agent. This so called 'sweat equity' reduces costs and boosts returns.

Still, for investors who are not looking to devote much time it is important to remember that, unlike a share certificate which can be placed in a draw and left, buy-to-let can never be an entirely passive investment. As a result it will not appeal to all investors.

3.4.2. Volatility

You might expect the asset classes showing the highest level of price volatility to offer the highest returns as investors should need to be compensated for the risk associated with high volatility. However, over the period considered in this report this does not appear to be the case. UK equities, which consistently exhibit a high degree of price volatility, have provided comparatively lacklustre returns since 1996. By contrast residential property prices have shown low price volatility and yet provided the highest returns.

3.4.3. Liquidity

The flipside of UK equities' high volatility is high liquidity. An investor can typically sell equities without delay, although the price they receive could be significantly lower than on the previous day. Cash and gilts are also very liquid but with lower price volatility and, correspondingly, a lower expected return.

Residential property by comparison is illiquid – typically taking significantly longer to sell. This characteristic reinforces property's role as a longer-term investment. But for many investors looking for a long-term home for their funds, this illiquidity is not a significant concern and the low price volatility of property trumps its comparative illiquidity.

3.4.4. Diversification

It should be relatively easier for the investor to diversify in financial assets like equities than in buy-to-let because of the lumpiness of buy-to-let investments (the size of deposit required with even the cheapest buy-to-let properties). However, investment studies have shown that the returns on residential property have a low correlation with returns on financial assets, meaning that the property cycle is often not well synchronised with the movement in share or bond prices. This makes buy-to-let an attractive investment for wealthier individuals with a heavy existing exposure to equities or bonds, as it should diversify their risks.

3.4.5. Investment costs

The buy-to-let total return index we constructed builds in assumptions for the cost of buying property. We assume that the average investor spends 3% of the purchase price on purchase and set up costs, which are then immediately written off in our calculation. In contrast the indices that we show for equities and gilts do not allow for the cost of accessing the investment. While these costs can vary significantly, some investors do find that they can have a sizeable detrimental effect on returns particularly for investors seeking access to the equity market via managed funds.

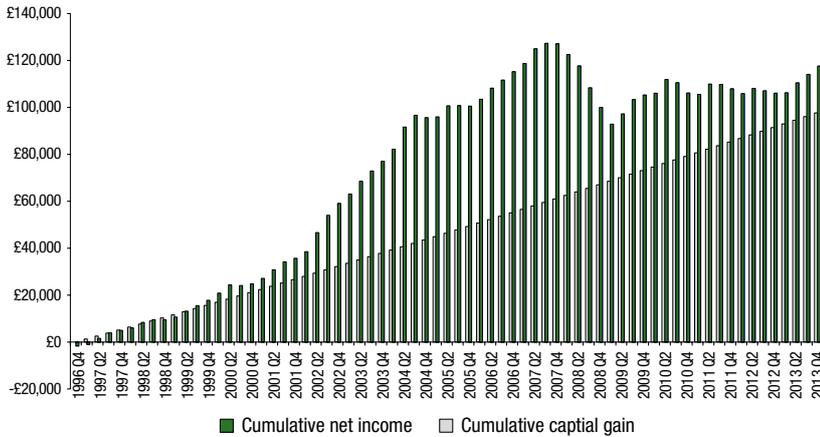
4. Breakdown of returns between income and capital gain

While much of the media coverage of buy-to-let has focused on capital gains the reality is that many investors are seeking a steady income from their portfolios and in particular, an investment that generates a decent income for them in retirement.

4.1. Un-mortgaged buy-to-let

Using our total return index we can break down returns between net income and capital gains with some interesting results. For the un-mortgaged buy-to-let investor, taking the 1996-2013 period as a whole, capital gain provided 55% of total returns and net income (i.e. the excess of rents over costs) produced 45%. Chart 1 shows the cumulative returns from income and capital

Chart 1 Cumulative returns from income and capital gains (un-mortgaged investor)



gains for this investor, illustrating how these income and capital gain elements of return evolved over the 17 year period.

As you would expect, capital gain is more volatile, reflecting periods when property prices are rising strongly such as the mid-2000s or falling such as in 2008. By comparison Chart 1 illustrates the more predictable nature of income as a source of return for the buy-to-let investor – reflected in the consistent increase in the lower bars. Another positive feature of this flow of income is that, as rents tend to rise over time, net income will also show a gradually rising profile.

Thus while net income was £5,100 in 1997, by 2013 it had risen to £6,300, equivalent to 11% of the original investment. Over the whole 17 year period the investor generated a net income of £97,800 on their initial investment of £56,800. For those looking for a retirement income this is a very attractive outcome.

Chart 2 Annual return on initial investment (un-mortgaged investor mortgaged buy-to-let)

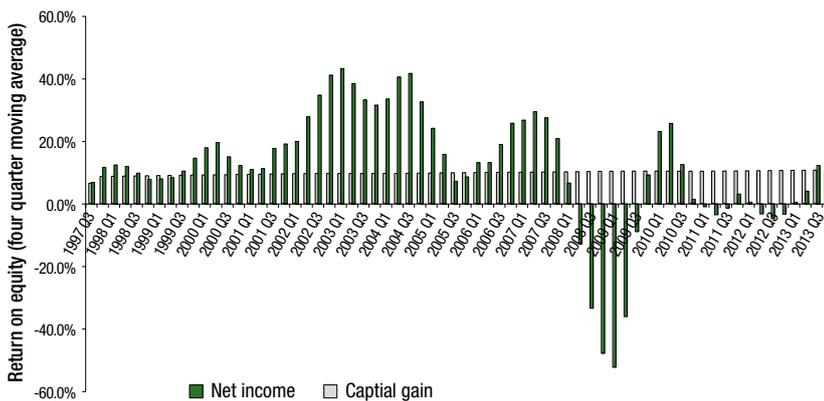
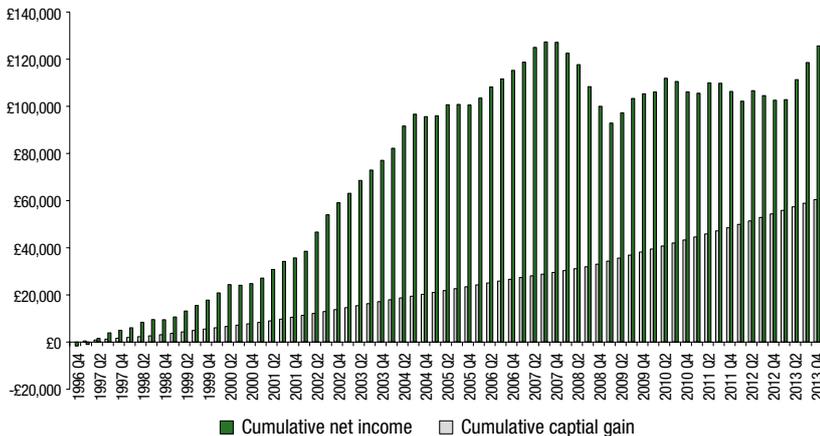


Chart 2 reinforces the importance of income as a stable source of return for the un-mortgaged buy-to-let investor. Rather than the cumulative returns shown in Chart 1 this shows annual returns (using a four quarter moving average) as a percentage of the initial investment. Clearly capital gains are much less predictable, although it is worth noting that using this four quarter moving average, capital values were lower in only 12 out of 69 quarters.

Moving from an un-mortgaged to a mortgaged buy-to-let investment alters the profile of returns. Chart 3 illustrates that the relative importance of capital gain increases. For the geared investor, 68% of the total return between 1996 and 2013 was made up of capital gain with 32% coming from income.

Chart 3 Cumulative returns from income and capital gains (mortgaged investor)



Note that the profile of the capital gains shown in Chart 3 is initially identical to that shown in Chart 1 above, as the same average property is purchased by both investors and the other assumptions are identical. Only once the mortgaged investor has accumulated sufficient net income to put down a deposit and meet purchase costs on a second property (which occurs in 2011), does the level of capital gain begin to diverge.

The lower income of the mortgaged investor reflects the additional cost of mortgage interest. But the key difference driving the higher returns for the mortgaged investor is that they have bought the same property for an outlay of little over a quarter of what the cash investor has invested. Returns on the initial investment are thus magnified.

This higher level of returns is illustrated in Chart 4, which shows annual (non-cumulative)

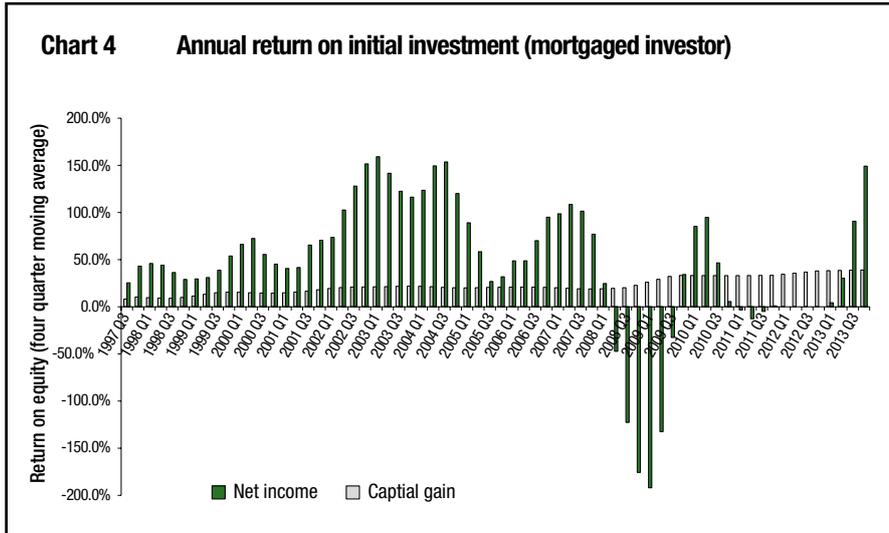


Table 2. Buy-to-let returns under alternative reinvestment assumptions

Alternative reinvestment methodology	Value at end 2013 of £1,000 invested at end 1996	Compound annual returns	% of return from net income
Remortgaging to 75% LTV	33,051	22.8%	16.3%
Starting with 4 properties (mortgaged)	17,069	18.2%	32.6%
Prioritising debt repayment	13,644	16.6%	39.8%
Starting with 4 properties (unmortgaged)	5,653	10.7%	47.9%

returns as a percentage of the initial equity invested in the property, again using a four quarter moving average. Comparing Chart 4 and Chart 2, it is unsurprising to see that the annual returns from capital gains are far larger relative to the initial investment for the mortgaged buy-to-let investor: it mainly reflects the additional gearing they achieve from using a mortgage. Nonetheless, the scale of capital gains relative to the equity invested for the mortgaged investor is impressive, being for example consistently over 100% during 2003 and 2004.

However, what is perhaps more interesting is the difference in net income. While total net income over the whole 1996-2013 period is higher for the cash investor (£97,800 versus £60,500 for the mortgaged investor), by 2013 the mortgaged investor was enjoying net income of £6,100, only slightly lower than that of the un-mortgaged investor (£6,300) despite the much smaller initial investment.

Expressing income as a percentage of the initial investment highlights the benefit of gearing. Although, as stated above, the un-mortgaged investor received a greater cumulative income over the whole period, expressing this as a percentage of the initial investment shows that

income came to 172% of the initial investment for the cash investor. But for the mortgaged investor it came to an amazing 392% of their original stake. Indeed, the net income of the mortgaged investor of £6,100 calculated for 2013 alone represents a 39% return on the initial equity invested in the property back in 1996.

Part of the reason the mortgaged investor does so much better is that by 2011 they had sufficient accumulated income to be able to fund the deposit and purchase/set up costs of a second averaged priced property. By contrast the £97,800 of net income accumulated by the cash investor was not sufficient for an outright purchase of a second property.

5. Buy-to-let returns under alternative reinvestment assumptions

In Section 2 we explained the methodology we have employed for the reinvestment of income in buy-to-let. We believe these are the most conservative realistic assumptions. In the case of the mortgaged investor we assumed that the investor started with a single property and did not reinvest their accumulated income until this

provided them with sufficient funds to meet the cost of the deposit and purchase/set up costs on another property.

In the case of the un-mortgaged investor we assume that they do not reinvest their income until they have saved enough accumulated income for another outright (un-mortgaged) property purchase including costs. For both the mortgaged and un-mortgaged investor we have assumed that no income was received on accumulated cash while it awaited reinvestment.

In this section we look at average returns on buy-to-let under three different reinvestment assumptions: firstly, where the investor starts with a larger number of properties and can therefore reinvest accumulated income sooner; second, where the investor prioritises the repayment of their mortgage and thirdly where the investor re-mortgages to release equity to accelerate the reinvestment process. Total returns from these scenarios are summarised in Table 2.

5.1. Alternative reinvestment assumption 1 - larger initial investment

As stated earlier, it is standard practice when calculating the total return on assets like shares or bonds to assume that income is reinvested back into the asset immediately. Applying such a methodology to buy-to-let would be unjustified however, because the lumpiness of property investments, even when mortgage finance is being used, means that investors cannot easily make small incremental investments in the way they may be able to do with shares and bonds.

However, we can provide a better like-for-like comparison with the approach to the reinvestment of income used for these other asset classes by considering an investor starting with more than one property. For many investors this is a more realistic approach, because it reflects their ability to plough more funds into buy-to-let, but the key point is it provides the more granular approach to income reinvestment that is the norm for other total return indices. We can calculate a total return index for both mortgaged and un-mortgaged larger-scale investors. We have taken the example of an investor starting with four average properties. We turn first to the ungeared landlord.

5.1.1. Un-mortgaged investor

As we saw in Section 3, the ungeared investor starting with a single property turned each £1,000 into just under £4,800. Applying the same assumptions, the investor who bought four properties at the end of 1996 would see each £1,000 grow to over £5,600 (see Table 2), achieving a compound return of 10.7% per annum.

Chart 5 Cumulative income and capital gains (larger-scale geared investor)

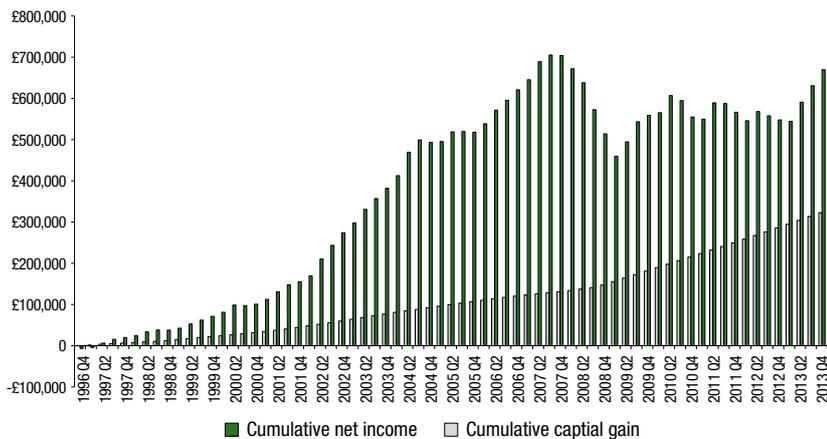
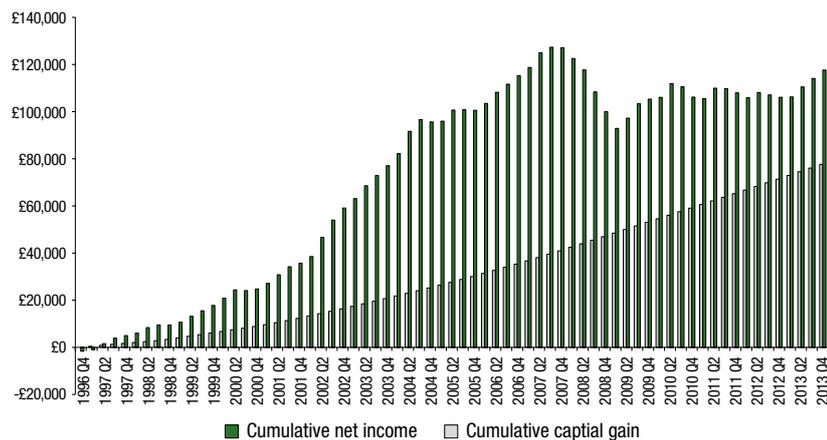


Chart 6 Cumulative income and capital gains (prioritised debt repayment)



Their cash flow would have enabled this investor to buy three additional properties, so from an initial investment of £227,300 they would have ended up with a property portfolio valued at £1,221,100 by the end of 2013. And during 2013 they would have received an income of just under £44,000, a substantial pension for an outlay of £227,300 just 17 years earlier. In total this investor would have made a little over £1,000,000. However, the percentage returns are still well below those for the mortgaged investor, even one starting with a single property.

5.1.2. Mortgaged investor

A 75% geared buy-to-let investment in a single property was the best performing investment shown in Section 3, returning over £13,000 for every £1,000 invested. Taking the same level

of gearing and applying it to the investor who started with four properties increases the return to just over £17,000, a compound annual return of 18.2%.

The main reason for the higher return for the larger-scale investor is that they had enough cash flow to start increasing their portfolio sooner and building it up to a greater extent. The investor starting with a single property ended up with two. The investor starting with four added another seven.

This greater growth in the size of the portfolio is the source of higher returns. Total capital gains amounted to £669,500 – 10.8 times the original investment of £61,800. By contrast the mortgaged investor starting with a single property achieved capital gains of 8.1 times the original

stake. But the returns from income were also higher – 5.2 times against 3.9.

The positive impact of gearing is also illustrated by comparing the larger-scale mortgaged investor to the buy-to-let cash investor shown in Section 3. The cash investor had turned £56,800 into £272,200. Taking a similar sum (£61,800) but using it to buy four properties by taking on 75% LTV loans on each would have turned it into £1,054,700. And although, as you would expect, a larger proportion of the returns were from capital gain, the geared investor would also have ended up with a far higher net income by 2013 of £37,400 against £6,300 for the un-mortgaged investor.

Chart 5 shows how these returns break down between income and capital gain for this geared investor. At 67%, the proportion accruing from capital gains was almost identical to the geared investor starting with a single property. However, what was markedly different was the scale of the increase in income. For example, between 1997 and 2013 the investor starting with a single property would see their net income rise from £1,600 to £6,100. The investor starting with four properties would have enjoyed a rise from £6,400 to £37,400.

5.2. Alternative reinvestment assumption 2 - prioritising debt repayment

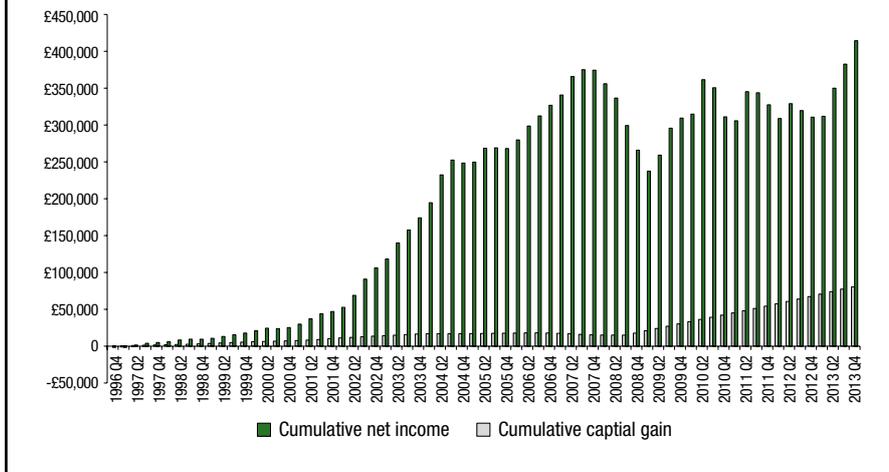
An alternative strategy to reinvesting income in additional properties is to use any surplus cash flow to reduce the outstanding mortgage balance. This might appeal to an investor who is approaching retirement and wants to maximise income and reduce risk.

Again, we can calculate a total return index using the same underlying assumptions. For an investor starting with a single property with a 75% LTV loan (identical to the starting point for the geared investment returns shown in Section 3), each £1,000 invested would have been worth over £13,600 by the end of 2013, giving a compound annual return of 16.6%.

This is actually slightly higher than the returns for the geared investor shown in Section 3. However, this reflects the fact that we have taken the conservative assumption that all monies held accrue no interest, so the investor saving for a deposit will lose out relative to someone who is using surplus cash to reduce their mortgage outgoings. If a modest rate of interest was paid to the investor saving for a deposit, this investor would have achieved a higher return than the investor reducing their debt.

The strategy of prioritising debt repayment resulted in the mortgage being paid off in full

Chart 7 Cumulative income and capital gains (re-mortgaging investor)



by the second quarter of 2008, after only 11 and a half years. Unsurprisingly, income is a larger component of total return (see Chart 6) than for the investor seeking to grow their portfolio, although not by as much as might be expected. Net income provides 39.8% of the total return for the investor paying off their mortgage against 32.5% for the mortgaged investor shown in Section 3. And by 2013 the investor will have an annual income of £6,300, only slightly higher than the £6,100 accruing to the investor who seeks to reinvest their income.

Where the debt-reducing investor loses out however is having not bought an additional property, they face lower capital gains going forward and ultimately probably lower income as well. As an illustration, in 2013 total capital gains amounted to £11,500 for the debt reducing investor against £23,000 for the 're-investor'.

5.3. Alternative reinvestment assumption 3 – re-gearing portfolio

One unique feature of buy-to-let compared with other assets is the extent to which the investor can borrow to invest. As we have shown above, this ability to borrow can significantly enhance returns. However, in all the analysis above we have assumed that once the investor has purchased a property they do not increase the debt secured on it regardless of subsequent increases in its market price.

Clearly investors who have accumulated large amounts of equity in their property portfolios will in practice be in a position to tap this equity to buy more properties. So we now turn to consider what returns could have been achieved by an investor who withdrew equity to accelerate the growth of their buy-to-let business.

We have used three simple rules to calculate a total return index for a buy-to-let investor who re-mortgages to fund additional property purchases. First, we assume the investor targets a maximum LTV of 75% for their portfolio. When the sum of sub-75% LTV equity and cash is sufficient to finance the purchase of another property with a 75% LTV mortgage (including paying for purchase/set up costs), the investor increases the debt on their existing portfolio back up to the 75% LTV level (we assume that a 1% fee is paid on new mortgage advances when they are taken out).

Second, if the average LTV on the portfolio goes above 75% because house prices subsequently fall, we assume that the investor will make no additional property purchases. And thirdly, even if the investor has the financial resources to purchase another property they will not do so if the prospective rental income on the next purchase is insufficient to cover all costs including mortgage interest in the quarter after purchase.

This third rule simulates the constraint that cash flow imposes on the investor's ability to borrow independently of, and in addition to, LTV. In our index it prevents the investor from purchasing any properties between Q1 2003 and Q1 2009, as net yields are too low during this period to match the cost of mortgage interest on a 75% LTV loan.

This re-mortgaging strategy produces higher returns than any of the other reinvestment strategies examined in this paper. Starting with an investment of £15,400 in a single property, this investor would end up with ten properties with a combined value of £1,744,400 and total returns of £510,600 (see Chart 12). This is an astonishing performance which would see

every £1,000 invested turned into £33,051, a compound annual rate of return of 22.8%. In 2013 alone the investor would have seen their portfolio increase in value by £103,700, 6.7 times the initial investment.

What this scenario helps to illustrate is how buy-to-let in the UK has not only provided very strong returns for average investors since 1996 but how it has enabled a cohort of ambitious investors to become seriously wealthy. The combination of strong house price growth and the ability to gear a portfolio has allowed a new class of millionaires to emerge in a way that has generally not taken place with investors in the other asset classes we have considered. Names like the Candy Brothers, who started as buy-to-let investors before moving into development, are high profile examples of this new class.

However, this re-mortgaging investor will face higher volatility of returns and higher risk. With higher relative debt levels they will be more vulnerable to a sharp rise in mortgage rates and if house prices fall their LTV can rise above their target maximum 75%. This occurred with our total return index in 2010-13, with the portfolio LTV peaking at 77.3% in Q1 2011 and not falling back below 75% until Q3 2013.

But it should be remembered that these returns are generated by following an entirely mechanistic reinvestment formula. In reality of course investors will have a range of options open to them that could allow them to optimise their investment performance and mitigate risk, and they can use their judgement to determine when to purchase properties. For example, they could seek out properties with higher than average net rental yields when mortgage rates are high, allowing the investor to expand their portfolio more quickly than in our example.

5.4. Reinvestment strategies compared

What these alternative reinvestment scenarios show is that buy-to-let investors have quite a range of options when it comes to their strategies for developing their businesses. Typically, the higher the level of gearing the higher the returns have been, although as explained above, the risks become greater too. This is illustrated in Chart 8 which compares the cumulative returns for each reinvestment scenario. It shows how re-mortgaging powered returns ahead as house prices rose in the mid-2000s and again in 2013. But it also shows the sharper reversal the re-mortgaging investor experienced in 2008 as house prices fell back.

The strategies that buy-to-let investors adopt are likely to be determined by their overall objective – do they want to become property magnates in which case they will probably want to re-mortgage

UK buy-to-let comes of age – investment returns compared

Chart 8 Buy-to-let reinvestment strategies – cumulative returns compared

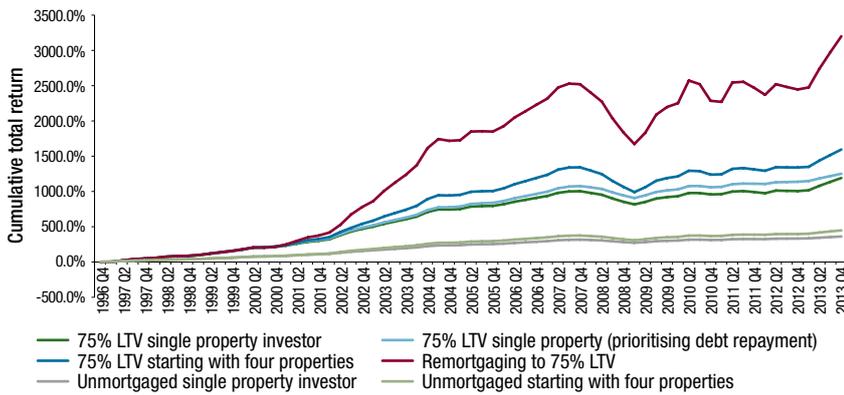


Chart 9 Annual net income – percentage of initial investment

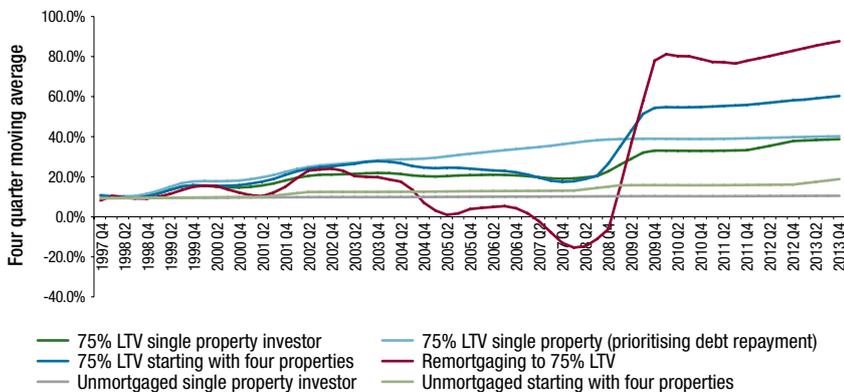


Chart 10 Loan-to-value (LTV) ratios for mortgaged buy-to-let total return indices

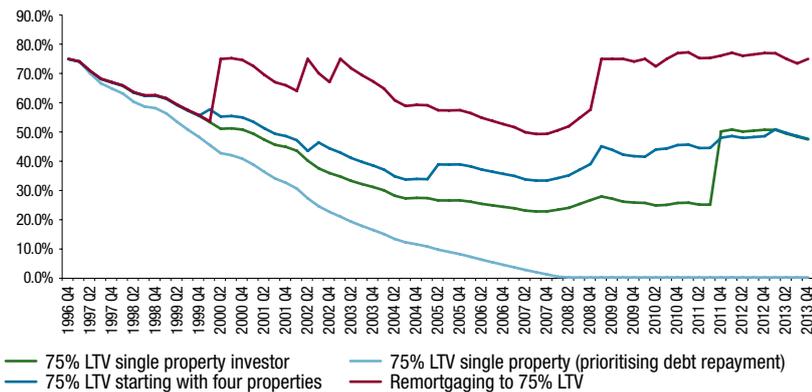


Table 3. 2013 net income under alternative reinvestment assumptions

	Initial investment in 1996	Net income in 2013	Net income in 2013 as % of initial investment
Remortgaging to 75% LTV	15,447	13,229	85.6%
Starting with 4 properties (mortgaged)	61,790	37,427	60.6%
Prioritising debt repayment	15,447	6,272	40.6%
Starting with 1 property (mortgaged)	15,447	6,051	39.2%
Starting with 4 properties (unmortgaged)	227,298	43,902	19.3%
Starting with 1 property (unmortgaged)	56,824	6,272	11.0%

to release equity for further purchases, or are they just looking for additional income in retirement?

For the majority of buy-to-let investors it is reasonable to suggest that, after focusing more on growth in the early years, they will want to shift toward a focus on income generation as they move towards old age. For these typical investors buy-to-let has compared very favourably with other investments and conventional pensions in generating an income in retirement.

Chart 9 shows the evolution of annual net income for the buy-to-let investor under different reinvestment scenarios, presenting net income as a percentage of the initial investment (using a four quarter moving average). This illustrates the benefit of gearing specifically in boosting income, particularly since the sharp fall in interest rates in late 2008/early 2009. For most of the 17 year period, the un-mortgaged investor scenarios had the lowest net income relative to their initial investment. The re-mortgaging investor has had the highest relative income since the fall in interest rates although income was slightly negative in the preceding period.

Table 3 shows the level of net income that the various buy-to-let reinvestment strategies we consider would have produced specifically in 2013. Again the re-mortgaging strategy would have produced the best results despite the higher gearing – each £1,000 of investment in 1996 would have produced £856 of net income in 2013.

But the investor starting with a single property reinvesting surplus cash flow still generated an impressive £392 of net income in 2013 for every £1,000 invested. And the investor prioritising debt repayment would have a corresponding net income of £406 per £1,000 invested. For investors looking to generate a retirement income with low risk these are impressive results.

Chart 10 shows the evolution of LTVs for the mortgaged reinvestment scenarios. The chart shows how much higher the LTV is for the re-mortgaging investor. For the investor who starts with a single property with a 75% LTV mortgage and expands their portfolio only from accumulated cash flow, by the end of 2013 the average LTV is just 47.3%. If they had started with four properties the LTV would have been very similar at the end of 2013.

By contrast the re-mortgaging investor would record an average LTV of up to 77.3% after house prices fell in 2008 and early 2009. This illustrates the higher risks faced by the re-mortgaging investor, the inevitable counterweight to the higher returns they achieved. However, it also leaves them well positioned to generate further high returns if the current recovery in house prices continues.

Real estate economics: changing social environments and the harmonization of tradition and innovation

↳ By Masato Koumura

1. Opening

In this article, I will explain how the Japanese Government leveraged the mortgage market as a driver for post-war reconstruction and then explain the changing focus of housing policy to address the changing environment, including reduction of emissions of carbon dioxide and enhancement of resilience to natural disasters. I will touch on the approach by which Japan harmonized traditional technology to innovate in those policy-oriented areas. I will also explain the demographic trend in advanced economies and the interaction of monetary policy with the macro-economy. Then, I will conclude.

2. Post-war reconstruction

In 1950, the Government Housing Loan Corporation [GHLC], was established to reconstruct the national housing stock which was devastated by World War II. One out of three houses constructed after the War was financed by mortgages originated by GHLC, until the Government of Japan decided to wind down GHLC in 2007 to be replaced by JHF which I represent. JHF does not originate mortgages but purchases 35 year fixed rate mortgages originated by private lenders and packaged by them in mortgage backed securities [MBS]. [Figure 1].

There is no doubt that these residential investments contributed to the post-war recovery of the Japanese economy along with other fixed asset investments. However, what is unique for GHLC and JHF is that we supported the enhancement of the quality of houses using financial intermediation, not only the quantitative supply of houses.

Real estate markets in Japan, including housing markets, are making progress day by day. There are two main drivers for such progress; one is the advancement of technology

Figure 1: The Government Housing Loan Corporation [GHLC] and Japan Housing Finance Agency [JHF]

	GHLC	JHF
Established	1950	2007
Ownership	100% Owned by the Government of Japan	
Mission	<ul style="list-style-type: none"> ▪ Provide liquidity to mortgage markets to low and medium income household ▪ Enhance quality of housing 	
Main Products	Fixed Rate Mortgages	
Main Business	Origination in primary mortgage market (Compete with private sector)	Secondary market operation (Support private sector)
Main Funding Source	Borrowing from the Government (MOF FILP)	Mortgage Backed Securities (MBS)
Subsidy	Yes	No (in principle)

to enhance building structures to make them more earthquake-resilient, and the other is the advancement of technology to enhance building structures to make them more energy-efficient.

Earthquake resilience is developing towards a seismically isolated structure and structures to control seismic movement. Promotion of energy efficiency involves developing housing structures with energy-generating facilities and energy-storing facilities. These cutting edge technologies are spreading from commercial properties to residential units.

3. Enhancement of earthquake resilience

First, I will touch on the development of technology for earthquake resilience.

During the one hundred year period from 1914 to 2014, Japan has suffered from many natural disasters including many severe earthquakes. These include the Great Kanto Earthquake in 1923, the Great Hanshin-Awaji Earthquake in 1995 and the Great East Japan Earthquake on March 11, 2011. We appreciate much assistance

Figure 2: Houryuji-Temple



for the victims extended by international communities, including, but not limited to, the United States of America.

Geographically, Japan can never be immune to earthquakes. However, it may be surprising to know that the oldest wooden structure which exists in the world today is located in Japan. It is Houryuji-Temple [Figure 2]. It was destroyed by a fire in the 7th century and was reconstructed in the late 7th century. It is 1,300 years old.

The five layered pagoda, which is the symbolic structure underlying the Houryuji-Temple, is as

Figure 3: Tokyo Sky Tree



Source: Obayashi Corporation

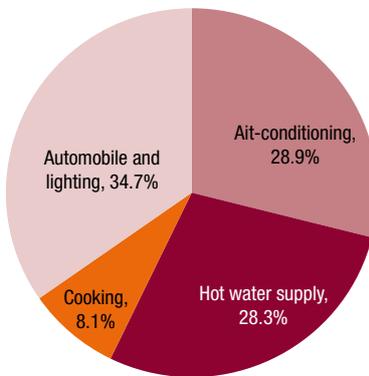
high as 32 meters, or approximately 100 feet. This pagoda has what we call “Shimbashira”, or the Center Column, which is isolated from other structures of the pagoda and serves as a weight to control the seismic movement. There are many five layered pagodas which have a similar mechanism in Japan and none of them has ever fallen as a result of earthquakes, the fact of which demonstrates the effectiveness of this structure. And this structure is employed by the Tokyo Sky Tree, which is the tallest tower in the world as of today. Tokyo Sky Tree is 634 metres tall, (more than 2,000 feet) and is used for broadcasting and telecommunications in the Tokyo metropolitan area [Figure 3].

4. Green Mortgages

The next trend is the advancement of technology to make the building structure more energy-efficient.

In the 20th century, supply of houses in term of quantity mattered more than quality to some extent. It is needless to say that houses had to

Figure 5: Type of energy consumption by household sector in Japan (2011)



Source: Ministry of Economy, Trade and Industries, Japan

meet a certain quality standard and enhancement of housing quality was an important agenda item, but in many advanced economies, the quantitative need for houses is already satisfied. Under such circumstances, improvement of energy-efficiency has become a priority issue on the political agenda, as everyone knows.

The term “Green Mortgage” has become quite popular in our industry in this century. JHF extends F35S, 35 year fixed rate mortgages on special concessional terms, to support the enhancement of the energy-efficiency of houses in Japan [Figure 4].

Japan is one of the most advanced countries in terms of unit energy consumption compared

to GDP, but in order to further develop a more energy-efficient society, housing can be a key contributor [Figure 5].

Japan is pleased and honored to host the 2020 Olympic and Paralympic Games. We have set a policy target for the year 2020 to set standards for housing with no energy consumption, to make building with no energy consumption to be realized, and to improve the ratio of earthquake resilient houses from 79% to 95%. Destruction of houses by natural disaster not only constitutes a loss of social infrastructure but also a loss of precious lives of people. Improvement of earthquake resilience of houses remains an important policy agenda in Japan. The current administration has released a “Building National Resilience” package, and we expect that the construction of houses and buildings with strong earthquake resilience will become one of the drivers for economic development in Japan.

5. Monetary policy and macro-economy

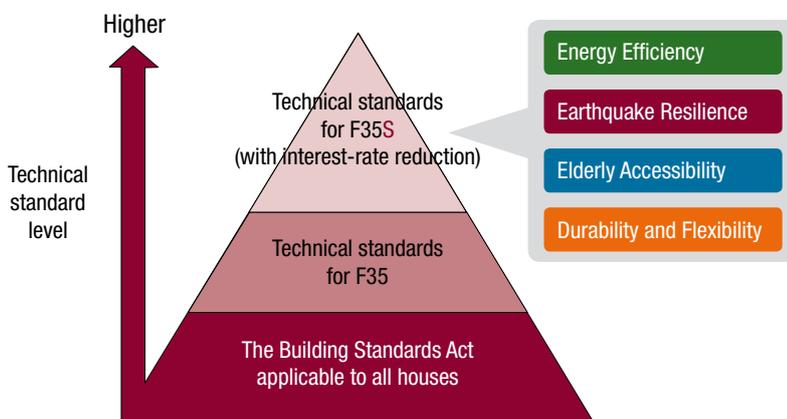
Thanks to the extraordinary monetary accommodation introduced by the Bank of Japan last year, people are becoming more optimistic for the future of the real estate market in Japan [Figure 6]. Before that, many people were pessimistic about the housing market and believed that housing prices in Japan would not recover because the population is decreasing and the housing stock is larger than the number of households.

6. Aging society

One of the challenges in many advanced economies is how to address an aging society. Japan is again the most advanced country in terms of being an aging society and our experience of addressing this issue would provide a good model for other countries [Figure 7]. Elderly people have less physical competency in general and some elderly people are migrating from owner-occupied houses to rental houses with daily care services to supplement their own activities. The Government of Japan is supporting the construction of rental houses with such facilities and services by using policy incentives.

In some regions, including countries in Africa, an aging society has not become a policy issue yet, but many countries in Asia will face a similar problem as Japan sooner or later. As society ages, more people will become consumers than savers of capital and this change will have an impact on the macroeconomic flow of funds. Of

Figure 4: F35S



Source: JHF

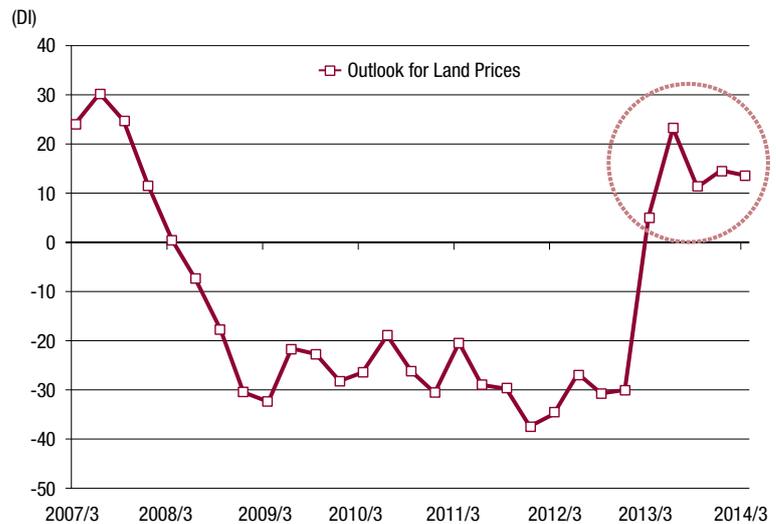
course, funding for mortgage lending will not be immune to such a shift. Reverse mortgages, which convert the assets of elderly people to cash flow, are attracting more attention in Japan, but we do not have such a large market for reverse mortgages as the United States.

With regards to the method of funding for the real estate market, securitization and REITs play an important role. The United States is well known for 30 year fixed rate, pre-payable mortgages, but Japan also has a significant market for 35 year fixed rate, pre-payable mortgages. Our mortgage market is 2 trillion US dollars equivalent in term of outstanding balances, which is far smaller than the US which has 10 trillion US dollar, but Japan is the second largest. In this market, fixed rate mortgages are available because we have a very active MBS market. JHF is responsible for 80% of MBS issuance in Japan. We are honored to share our expertise with Asian and other emerging economies to develop the secondary mortgage market. JHF is not as big as Fannie Mae in the US, but we are proud to be supporting an important policy function with adequate demarcation from the private sector. Our MBS market is not as big as the US because we have a shorter history, but we have a large potential to grow. We also have a large REIT market in Japan as well.

7. Conclusion

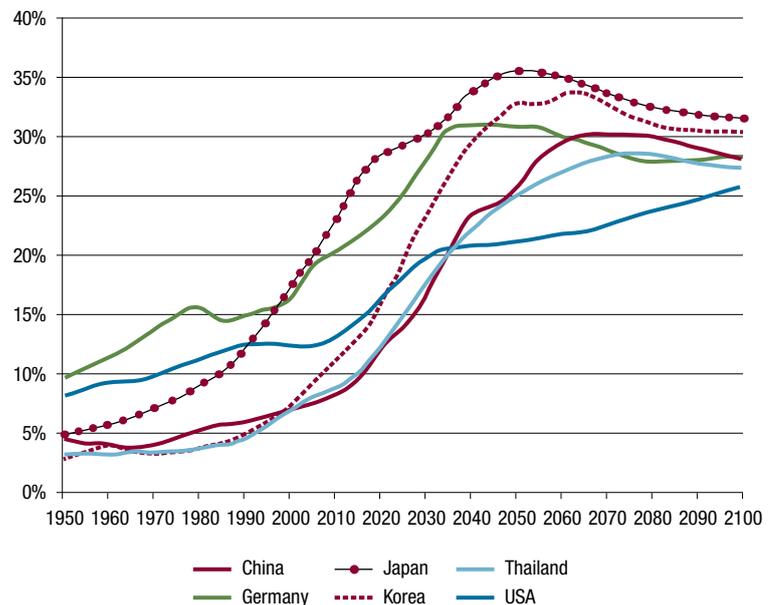
The development of the housing finance system over the past 100 years has been a major driver of economic development in many countries and contributed to the stabilization of society. Based on such an understanding, sharing information among industry experts would benefit people all around the world who are seeking to maximize social welfare.

Figure 6: BOJ Opinion Survey on the General Public's Views and Behavior



Source: Bank of Japan

Figure 7: Share of elderly population (aged 65+)



Source: United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2010 Revision (June 2011)

The International Union for Housing Finance 1914-2014: a 100-year perspective

↳ By Alex J. Pollock¹

1. A period of transition

Reflecting on the century since the first International Union for Housing Finance (IUHF) meeting in 1914, we are of course struck by how much things change and keep changing. In this context, we should consider the definition of “a period of transition,” from the economist, Jacob Viner. It is this: “A period of transition is a period between two periods of transition.”

From this definition, we can confidently state that we are in a period of transition, and that in the future we will also be in a period of transition. The 100 years of the IUHF has seen vast transitions. Let's look at a few of them.

2. World population

Population of the World

1914: 1.8 billion
 2014: 7.1 billion
 2014 = 4 x 1914

Source: U.S. Census Bureau, Maddison Project

The population of the world has grown from about 1.8 billion people in 1914, to an estimated 7.1 billion now, thus multiplied about 4 times. That's a lot more houses! And a lot more mortgages!

3. World gross product

GDP of the World, 2013\$ (PPP)

1914: \$5 trillion
 2014: \$87 trillion
 2014 = 17.5 x 1914

Source: IMF, Maddison Project

More mortgages are possible, fortunately, with a *much* bigger world economy. This huge change occurred as modernized, market economies, new knowledge and inventions, and institutionalized banking, central banking and mortgage lending spread over the world. Measured in constant 2013 dollars, with currency translated at estimated purchasing power parity, the gross economic production of the world is 17.5 times as big now as it was in 1914.

4. World per capita GDP

Per Capita GDP of the World, 2013\$ (PPP)

1914: \$2,800
 2014: \$12,300
 2014 = 4.5 x 1914

Source: IMF, U.S. Census Bureau, Maddison Project

How much is that per person? Again in constant 2013 dollars, world per capita GDP increased from an estimated \$2,800 in 1914 to \$12,300 now, so it multiplied about 4.5 times. This amazing increase in material well-being for average people represents an average compound growth rate of about 1½% per year. That may sound small, but 1½% per year continued over 100 years makes a great change indeed.

5. Europe in 1914



As the founders of the IUHF met in London in August, 1914, here was the contemporary map of Europe. It is notable for empires: the Austro-Hungarian Empire, the German Empire, the Russian Empire, the Ottoman Empire, and not shown on the map but most important, the British Empire.

It was logical to meet in London, the financial capital of the world. The principal international currency was the pound sterling and the Bank of England was the premier central bank. All the currencies of advanced countries really had a single underlying currency since they shared the international gold standard.

¹ This paper is based on a speech by the author to the IUHF Centenary Conference in Munich in September 2014.

All of this disappeared in the coming Great War.

6. Europe in 2014

The map of Europe is lot different as we meet in Munich today. There are almost twice as many states as a century ago, 46 rather than 26. Although many of these countries have a common currency, the Euro, all of the currencies now are fiat currencies, subject to the money printing theories of the respective central banks. All of these central banks have become formally committed to perpetual inflation. A world of perpetual inflation, which periodically gets away into bubbles, is an inescapable issue for housing finance.

7. Who was there in 1914?

Countries Attending the Opening Conference in London, August 1914

	Delegates
United Kingdom	19
United States	18
South Africa	2
	<hr/>
	39

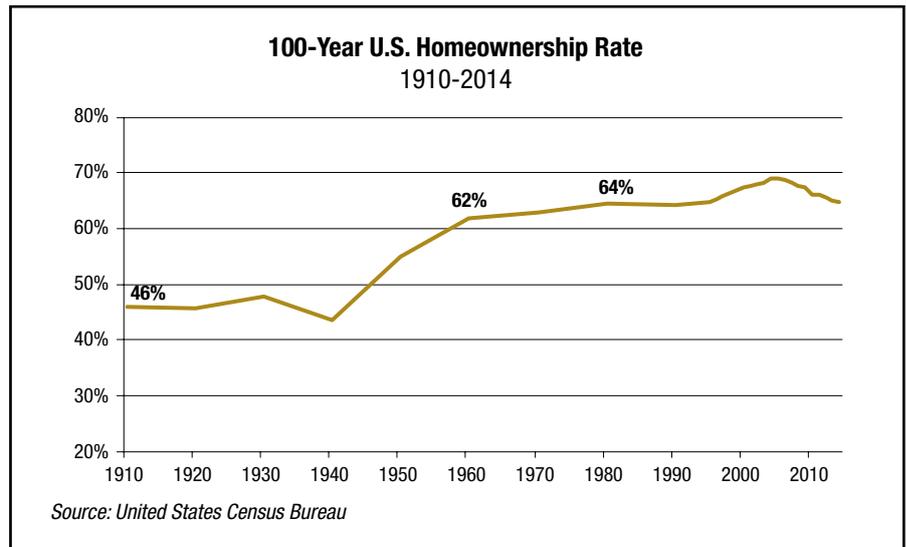
In contrast to the 40 countries meeting here in Munich, at the original 1914 meeting there were only three countries represented: the United Kingdom, the United States, and South Africa. Traveling by ship, of course, the two South African delegates had an especially long trip in order to participate! All the British delegates were from building societies and all the Americans from savings and loan associations.

8. Two key ideas

From the Constitution Adopted for the International Congress, 1914

- “To disseminate knowledge concerning the best methods of conducting our financial organizations”
- “To encourage thrift and stimulate the building and owning of homes by people throughout the world”

I would like to stress two of the ideas they discussed in 1914. The first was that they intended



to share knowledge concerning the best methods of housing finance. This continues as the key IUHF goal today.

Second, that it was central to encourage thrift and savings. The IUHF founders thought that thrift and mortgages naturally went together. They considered themselves a “movement,” not just a business, “with the message of savings.”

At their Congress two decades later, in Salzburg in 1935, they issued a “World Manifesto” with this goal: “To every *thrifty* family its own home.” Note the qualification: to deserve your own home, you had to be thrifty.

In the London Congress in 1965, which featured attendance by a Royal Princess and the British Prime Minister, they stressed the “twin causes of thrift and home ownership.”

This linking of thrift to mortgages and home ownership, as well as the sense of being a “movement” encouraging savings, is now entirely lost in U.S. housing finance, to our misfortune.

9. What’s in a name?

What’s in a Name?

- International Union of Building Societies and Savings Associations
- International Union of Housing Finance Institutions
- International Union for Housing Finance

The original name of the IUHF, reflecting its original members, was the International Union of Building Societies and Savings Associations, with the unfortunate acronym, “IUBSSA.” It reflected the old idea of what used to be called the “special circuit” of housing finance, which intended to create a channel of savings and mortgages separated from the rest of banking and capital markets. This idea is now entirely gone.

IUBSSA then became “IUHFI” – the International Union of Housing Finance Institutions. This was a broader idea, but still contained the qualification of “Institutions.”

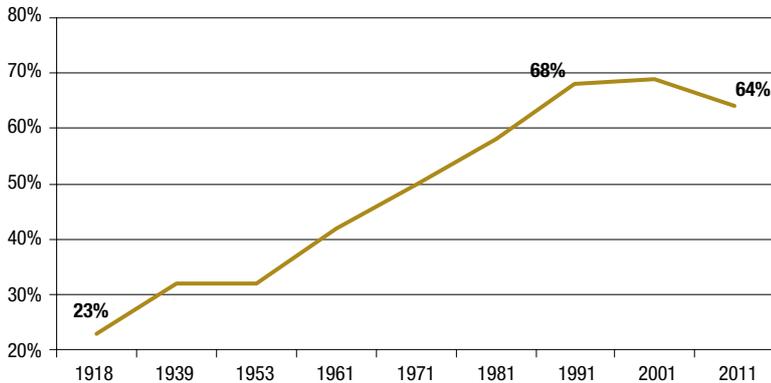
In the 1990s, I had the honor to chair the committee which proposed shortening the name further to the “International Union for Housing Finance,” to give us the broadest idea – today’s “IUHF.”

10. 100 Years of home ownership

At the time of the IUHF founding, the U.S. home ownership rate was about 46%. Its dramatic increase came after 1945, in the post-World War II housing boom, when it rose from about 50% to 62% in 1960. It reached 64% in 1980. Home ownership was artificially increased in the housing bubble of a decade ago, as the U.S. government and subprime lenders both pushed “innovative mortgage lending” – that is, risky loans. It has now fallen back to its level of 1980, 34 years ago (1980: 64.4%, 2014: 64.7%).

English home ownership of a century ago was much lower than in the U.S., estimated at 23% in 1918. Its dramatic increase came from the 1950s to the 1980s, up to 68% in 1990. With the bust of the 2000s, it has subsequently fallen

England Long-Term Homeownership Rate
1918-2011



Source: United Kingdom National Statistics

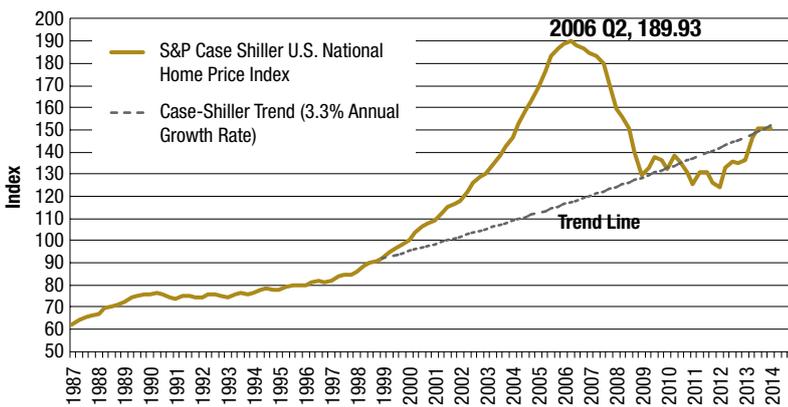
to 64%, interestingly just about the same as in the U.S., although the two countries have a completely different housing finance structure.

11. The curse of bubbles

In the IUHF World Congress in Vancouver in September, 2006, our opening session was devoted to whether we were in a housing bubble. Obviously we were, in multiple countries, but it all seems clearer in retrospect than it did at the time.

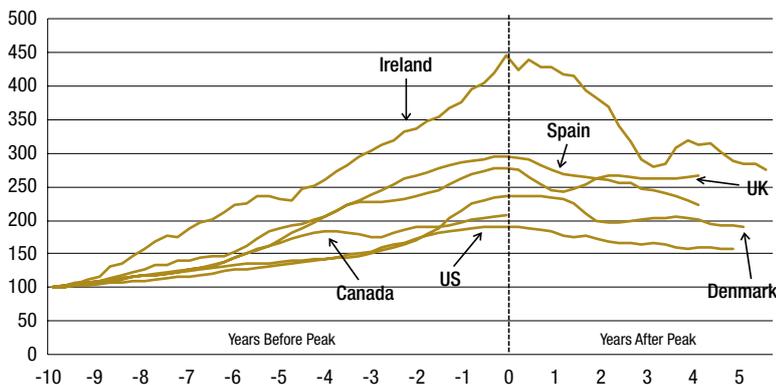
The graph shows the great and disastrous U.S. housing bubble of 1999-2006, followed by the crisis and collapse. The dotted line is the house price trend, and the chart displays the characteristic “regression to the mean” of house prices. Having inflated far beyond their underlying value, then fallen farther and faster than it was imagined they could, then gone sideways for a few years, then recovered starting in 2012, American house prices are now just about back on their long-term trend line.

The U.S. Housing Bubble: Case-Shiller National Home Price Index Values
1987-2014



Here is an international comparison of several housing bubbles: the graph defines the peak in house prices as year zero, and shows years before and after the peak. It displays the house price bubbles of Ireland, Spain, the U.K., Denmark, the U.S., and what appears to be the building, though not yet deflating, house price bubble in Canada. The economist Nouriel Roubini, who made good (that is, very pessimistic) forecasts of the depth of the 2007-2009 crisis, has recently opined that property values are overheated in Australia, Belgium, Canada, France, New Zealand, Norway, Sweden, the U.K., China, Hong Kong, Singapore, and Turkey.

International Comparative Housing Bubbles



Source: Bloomberg

That highly leveraged real estate is dangerous is a very old lesson indeed. Housing bubbles are an essential problem of mortgage finance, especially in a world of extreme central bank manipulation of interest rates.

Of course, bubbles are not limited to housing, although the high leverage of housing makes it especially vulnerable. Here is a comparison of the U.S. tech stock or “NASDAQ” bubble of the late 1990s, shown in comparison with the U.S. housing bubble, again with the peak in prices set as year zero. The per cent rise and fall in NASDAQ stock prices was much greater, but the housing bubble was much more destructive, because of the much greater debt and much higher leverage involved.

12. U.S. housing finance eras

Considering 100 years of U.S. housing finance, we can identify the following eras. First, the Age of Savings and Loan Institutions, from 1914 to 1980. This includes the Golden Age of Savings and Loans, from 1945 to 1980, as they enjoyed the great post-war housing boom. In the late 1970s, there were over 400 savings and loans which were IUHF members. Then came the savings and loan industry collapse of the 1980s, and we entered the Age of Fannie Mae and Freddie Mac, which became prominent IUHF members. Their age ran for a generation, from 1980 to the collapse of Fannie and Freddie in 2008. There followed the post-bubble doldrums. Now not a single savings and loan institution, and neither Fannie nor Freddie, is an IUHF member. U.S. housing finance is in a time of the big Question Mark, definitely a period of transition, with great uncertainty about what will come next.

13. Prices

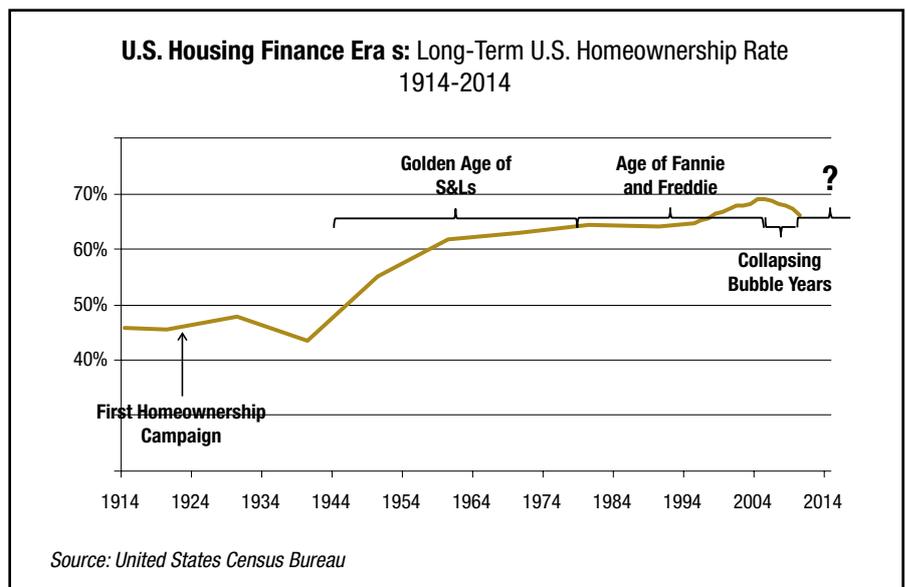
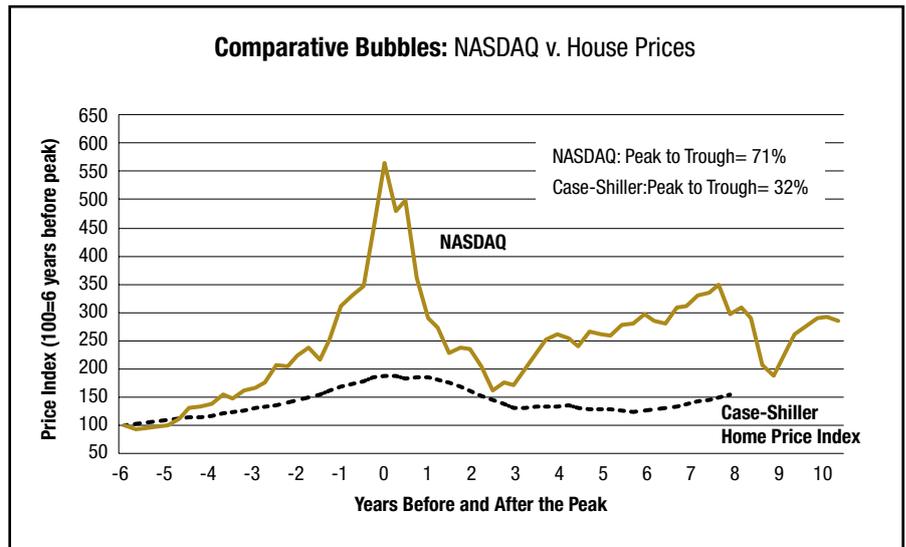
Countercyclical Ideas

What is the collateral for a mortgage loan?
How much can a price change?

Considering bubbles and eras of change leads to an essential question for housing finance: What is the collateral for a mortgage loan? Most people answer, “the house,” but this is not correct. It is the *price* of the house.

The next essential question is: How much can a price change? The answer is: A lot more than you think! This is why risk has been well defined as “the price you thought you would never have to pay.” When things get bad, they are likely to be far worse than you thought was possible.

This is why housing finance should build in credit standards, especially down payments and loan-to-value ratios, which are countercyclical to house price behavior. Lenders should become not more optimistic, but more pessimistic, as prices rise above their trend. How to do this well is a fundamental challenge for housing finance everywhere.



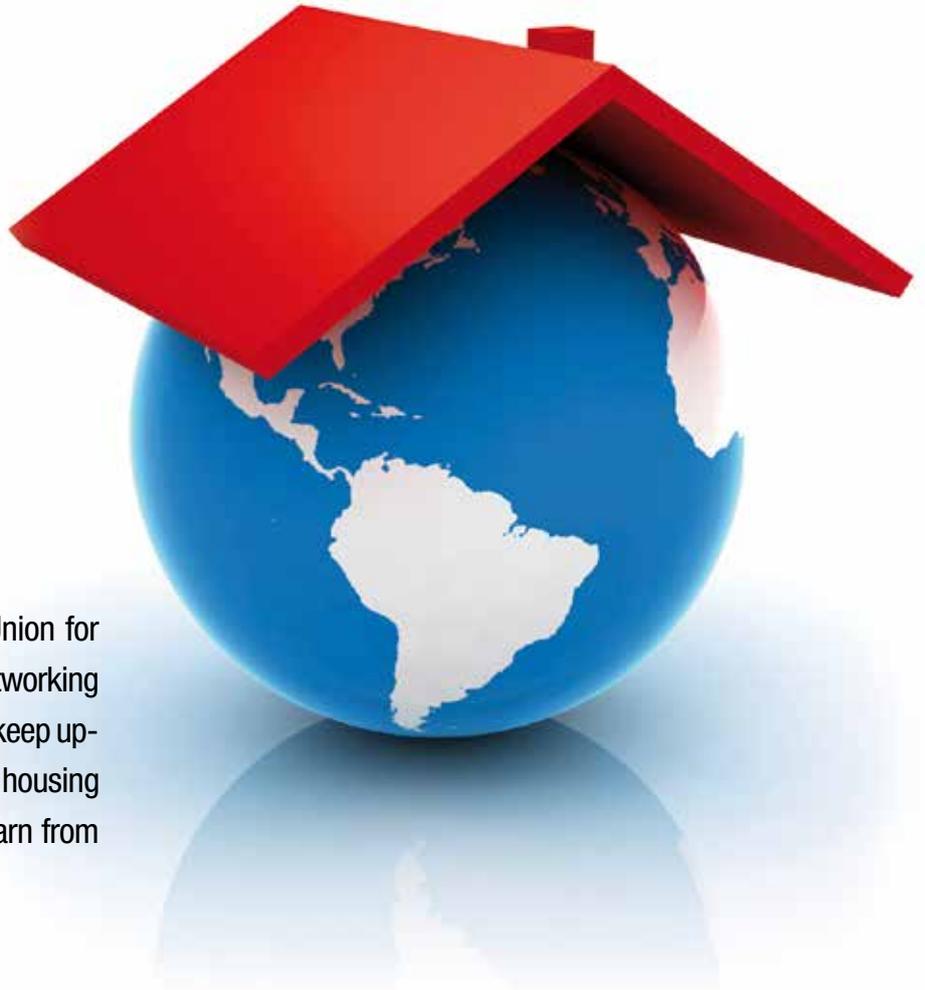
14. The IUHF mission

The IUHF has a great mission. It is to develop and share knowledge and information about housing finance in many different economic and political contexts. This allows us to compare our own narrow assumptions drawn from our own narrow experience to a broader international perspective. In this way, we can mutually learn on a world-wide basis from multiple experiences, problems, innovations, experiments, institutional designs, disasters, and successes. May this mutual learning continue.

Happy 100th Birthday, IUHF!



INTERNATIONAL UNION FOR HOUSING FINANCE



Established in 1914, the International Union for Housing Finance (IUHF) is a worldwide networking organisation that enables its members to keep up-to-date with the latest developments in housing finance from around the world and to learn from each other's experiences.

How does the Union do this? **By communicating!**

The Union does this in five different ways

- The Union runs a website - www.housingfinance.org. Please pay a visit!
- The Union publishes a quarterly journal, *Housing Finance International* (HFI)
- The Union organises a World Congress every two years
- The Union actively participates in events related to key housing finance issues around the world
- The Union facilitates the exchange of information and networking opportunities between its members

→ For more information, please see www.housingfinance.org
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