

HOUSING FINANCE INTERNATIONAL

The Quarterly Journal of the International Union for Housing Finance



- Brazil's housing finance system: the potential to address past accumulated needs and future demand
- Iceland: developments in the housing and mortgage markets
- → Housing and demographics: experiences in Japan
- Guaranteeing investment in affordable rental housing
- → Islamic housing finance

International Union for Housing Finance

Housing Finance International

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Editor's introductionWinter 2015

→ By Andrew Heywood

It has been said half-seriously that the UK invented affordability problems. The rise in house prices has outstripped rises in earnings every year from the early 1970's until the banking crisis. In England the ratio of annual median earnings to median house prices deteriorated from 3.54 in 1997 to 6.72 in 2013. In Inner London that ratio was 10.41 and in the prestigious London borough of Kensington and Chelsea median prices were an eye watering 32.39 times median earnings¹.

The key issue in the UK is the failure to develop enough new housing to meet demand. It has been calculated that around 220,000 new homes should be built each year in England simply to keep up with demographic changes. This takes no account of a range of other pressures on the housing stock including the need to replace homes in poor condition, or in the wrong place relative to demand. Yet even by this inadequate measure England is falling behind. In 2014-15 only 124,000 new homes were completed, while the average for the last five years was a mere 114,000. It is sobering to remember that 45 years ago in 1969-70 307,000 homes were completed. France, a country with a similar population has been building over twice as many new homes as the UK each year.

In the UK, failure to supply enough new homes has been a bi-product of government policy for over thirty years. From 1950 to 1980 housing promoted by government and built by local authorities averaged over 50% of all completed homes each year. This kept up the level of overall housing supply and ensured that housing was affordable across all tenures as there was enough public housing to facilitate the offer of an affordable home to a high proportion of households. Since those days, the proportion of homes supplied each year by the affordable sector has shrunk to under 20% on average. It is arguable that the large post-war public building programmes in the UK and elsewhere in Europe facilitated rising homeownership levels by promoting affordability and that the more recent falls, or stagnation, in homeownership in some countries is partly due to the decline in those programmes.

The problems of the UK are of course specific to that country. Nevertheless, anyone looking at house prices in Paris or Rome will be aware that affordability is a problem across Western Europe

to varying degrees, particularly in certain high demand locations. The phenomenon of those on lower and less secure incomes being relegated to less desirable areas, where job opportunities may be scarce and earnings relatively low, can be observed in many markets but overall, incomes remain relatively secure and by international standards comparatively high. Housing finance systems are comparatively well-developed also: mortgage debt as a percentage of GDP was 49.6% across the EU as a whole in 2014 and 75% in the UK².

Moving towards Eastern Europe and towards many of the poorer countries of the world affordability issues manifest themselves differently. Housing finance systems are often less well developed. The mortgage debt to GDP ratio in both Romania and India is around 7% and the ability to access mortgage finance is hampered in many countries by lack of secure title to property, and low, insecure incomes. There is significant reliance on micro-finance and other less formal sources of funding, often at relatively high interest rates. The state-sponsored "affordable" housing sectors, in decline but still significant factors in the West, are frequently non-existent or totally inadequate.

Habitat for Humanity suggests that affordability is a growing problem both in Europe and elsewhere. While experience of Western Europe is a reminder that a developed housing finance system is not in itself a sufficient condition to secure affordability of decent housing, it is a necessary condition, as wider international experience suggests. This re-enforces the case for supporting the International Union for Housing Finance [IUHF] as a body dedicated to promoting access to housing finance across the globe. As we look forward towards 2016 the need for such a unique organisation has perhaps never been greater.

Affordability and access to housing finance are two key issues tackled by Claudia Magalhães Eloy, in the first article in this issue of HFI; *Brazil's housing finance system: the potential to address past accumulated needs and future demand.* This magisterial article covers the development of the housing finance system over the period from the 1960's to the present, taking in periods of high inflation and a change of currency along the way.

The article tackles both funding issues as well as demand-related matters.

Iceland features rarely in HFI and we are therefore particularly pleased to welcome Sveinn Agnarsson back to these pages with a fascinating article: *Iceland: developments in the housing and mortgage markets.* Iceland's housing and mortgage market underwent severe trauma during and after the banking crisis of 2007-09. Agnarsson shows how the use of index linked mortgages and mortgages denominated in foreign currencies caused widespread hardship and forced the government to undertake a series of remedial initiatives. Although the situation is now much improved it is interesting to note that Iceland still makes significant use of index-linked mortgages.

In his article, *Housing and demographics: experiences in Japan*, Masahiro Kobayashi, who is well-known to readers of HFI, offers a detailed analysis of the complex relationship between demographics and housing markets during the post-war period. He focusses on Japan's ageing population and provides some instructive contrasts between the US and Japan, including an examination of the housing bubbles that occurred in both countries during the past decade.

It appears that cash-strapped governments frequently see offering guarantees to procure private finance for housing at keener rates as a policy strategy without a downside. In a timely article, Julie Lawson and colleagues offer a comparative analysis of the use of guarantees in a number of different countries including (among others) Holland, France, Switzerland and the US.

The growth in the use of Islamic housing finance has been 50% faster than the overall growth of the banking sector according to Muhammad Raza. In his article *Islamic housing finance*, he illustrates this proposition with reference to Pakistan, outlining the different approaches used to finance housing related activity and demonstrating how these approaches work in practice. Mr Raza shows that in Pakistan the share of Islamic housing finance in fresh acquisitions by banks has risen from 47% in 2012 to 63% in 2014.

Finally, it is time to offer all our readers best wishes for the Christmas season and for the New Year.

Contributors' biographies

Sveinn Agnarsson is Associate Professor at the School of Business, University of Iceland. He was senior researcher and later director of the Institute of Economic Studies at the University during 1997-2013. Agnarsson holds a PhD in economics from the University of Gothenburg, as well as undergraduate degrees in economics and history from the University of Iceland.

Mike Berry (B.Ec. Hons. University of Sydney, M. Ec. University of New England, B.A. University of New England, Grad. Dip. Urb. Reg. St. University of Birmingham, PhD University of Melbourne, D.Soc.Sc. RMIT University) is Emeritus Professor and one of Australia's leading housing and urban economists publishing extensively on housing policy issues and outcomes and providing strategic insight to the impact of financial market developments for vulnerable households.

Masahiro Kobayashi is the Director General at Japan Housing Finance Agency. He graduated from University of Tokyo in 1988 with bachelor of law and joined Government Housing Loan Corporation. He worked with Overseas Economic Cooperation Fund, Japan Bank for International Cooperation and seconded to Fannie Mae. He Serves as Advisory Board Member for Asia Pacific Union for Housing Finance. He can be contacted at Kobayashi.Orh@jhf.go.jp.

Claudia Magalhães Eloy is a consultant on housing finance and subsidy policy in Brazil, who currently works for FIPE [Fundação Instituto de Pesquisas Econômicas] and has worked for the World Bank [TA] and for the Brazilian Ministry of Cities and Companhia de Desenvolvimento Urbano e Habitacional of São Paulo [CDHU]. Claudia has also participated in the development of the National Housing Plan, in the analysis of

the Housing finance System. She holds a PHD in Urban Planning at the University of São Paulo [USP], a Master in City Planning at the University of Pennsylvania, a Master in Public Administration at Bahia's Federal University [UFBA] and a BA in Architecture and Urban Planning [UFBA], with an specialization in Real Estate Finance at the Brazilian Economists Order [OEB]. She also attended Wharton's International Housing Finance Program.

Julie Lawson (B. App. Sci., Urban Planning, RMIT University, Post Grad. Dip. Public Policy, University of Melbourne, PhD Geography, University of Amsterdam) is Honorary Associate Professor and an international housing researcher specialising in social housing systems in Europe and North America. She has played a ground-breaking role in research concerning social housing finance and regulation, with eye opening international field work on innovative developments in housing policy and critical assessments of their outcomes.

Hal Pawson (BSc Geography, Hons., University of Southampton, MS. Public Policy, University of Bristol, FCIH) is Professor of Housing Research and Policy at City Futures Research Centre, UNSW. Hal has played a key role in researching the finance, decision making and institutional arrangements of Australian and UK affordable rental housing.

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.

Muhammad Raza is Senior Executive Vice President and Group Head – Consumer Banking & Marketing at Meezan Bank Ltd, the first and largest Islamic bank in Pakistan. He possesses 25 years of banking experience and has been associated with the Islamic banking industry for the last 12 years.

Zaigham M. Rizvi is currently serving as Secretary General of the Asia-Pacific Union of Housing Finance and is an expert consultant on housing and housing finance to international agencies including the World Bank/IFC. He is a career development finance banker with extensive experience in the field of housing and housing finance spread over more than 25 countries in Africa, the Middle-East, South-Asia, East-Asia and the Pacific. He has a passion for low-cost affordable housing for economically weaker sections of society, with a regional focus on Asia-Pacific and MENA. Email: zaigham2r@yahoo.com

Kecia Rust is the Executive Director of the 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.

Mark Weinrich holds graduate degrees in political science and economics from the University of Freiburg, Germany. He is the General Secretary of the International Union for Housing Finance and the manager for international public affairs at the Association of Private German Bausparkassen.

Declaration of the members of the African Union for Housing [AUHF] following the Annual General Meeting held in Duhan

Annual General Meeting held in Duban, South Africa on 28th October 2015¹

By Kecia Rust

We, the members of the African Union for Housing Finance, having met with colleagues from the public and private sectors from nineteen countries in Africa over the past three days, and having held our 31st annual general meeting in Durban, South Africa, on 28 October 2015, express our commitment to making housing finance markets work in Africa.

We note:

Africa's housing finance sector has been going through considerable growth and change over the last decade, responding to the broader economic growth opportunities and rapid urbanisation. Over the past decade, developers have been gearing up to build housing, and housing finance systems are reconfiguring themselves accordingly. There is evidence of housing delivery and, increasingly, the reality of affordability is being addressed with innovative products that pinpoint the particular needs of the market. Housing finance and mortgage markets are also slowly developing, and as economic frameworks improve, some investors are actively targeting the residential property sector.

However, this activity is insufficient given the population growth and urbanisation pressures that are clearly evident in our cities. The rise and persistence of informal settlements and inadequate housing is a visual and lived expression of the failure of our finance and construction sectors, our policy and planning frameworks, and our land use management systems to engage with the reality of demand. We need to increase the scale of delivery, while decreasing the costs, so that more and better housing can be delivered on a sustainable basis.

Access to decent, secure, affordable housing is a crucial part of the African Agenda for 2063, and is our responsibility in terms of Goal 11 of the Sustainable Development Goals. These intentions, reiterated in the Draft African Common Position on Habitat III, frame our expectations and commitments.

We understand:

Housing must be paid for, by someone. And so, housing finance is a critical link in the housing delivery value chain. Whether through subsidies, savings, credit, or investment, the cost of housing must be covered by an investor — whether that is the state, the household, a developer or a financial institution — who trusts that benefit will be derived from the investment. Whether the benefit is financial or social, or a combination of the two, efficient and effective housing finance systems make it possible for investors to realise a benefit that encourages them to keep engaging. If we are to have housing markets that work, we need housing finance markets to work.

Housing affordability is a fundamental challenge that cannot be overlooked. With the majority of housing demand across Africa being expressed by first time home seekers without equity, and with low incomes, only a fraction of households can afford the housing currently being delivered by the private sector. Investment in innovative, low cost technologies and technical support to the housing sector can enable a new standard of affordability to meet the needs of our majority. Further, incremental construction approaches can spread the costs of housing over a series of more manageable steps. We need to acknowledge the housing affordability reality with more

realistic land use planning frameworks and delivery bylaws, and with innovative financial products that understand and respond directly to the capacities of the market.

The mortgage instrument is a useful tool for making housing more affordable, and for enhancing the financial intermediation capacity of our economies – but it will not serve the housing needs of the majority. This means that we need to work on all fronts: addressing the macro-economic and monetary policy issues that enable mortgage markets to develop, while elevating the role that non-mortgage, housing microfinance initiatives can and do play.

Housing backlog figures are frightening and there is a desperate need for the scale delivery of housing solutions, whether for ownership or for rent, that are affordable to the breadth of the population. Keynote speaker to the AUHF Conference, Dr Issa Faye, of the African Development Bank outlined the challenges: in Nigeria alone, the backlog is estimated at 17 million units. South Africa estimates a 2.1 million housing unit deficit and has 1.5 million households living in slums. In Kenya, an estimated housing backlog of 2 million units is growing annually by 200 000 units; and in Morocco, the 800 000 unit backlog is growing annually by another 178 000 units. These figures are replicated across the continent. Delivery of new housing is not even keeping pace with growth, not to mention addressing the backlogs. This is putting increasing pressure on our cities. Delivery capacity is fundamentally influenced by policy and regulatory systems, access to construction finance

how to enhance the flow of finance to address the very real opportunities and challenges created by a very visible and rapidly growing demand for housing. Conference presentations are available on the AUHF website: http://www.auhf.co.za/conference/making-housing-finance-markets-work-in-africa/ For more information contact Kecia Rust at kecia@housingfinanceafrica.org

¹ The African Union for Housing Finance held its 31st Conference and Annual General Meeting in Durban, South Africa, from 26-28 October 2015. Hosted by the Banking Association South Africa, an AUHF member, the meeting attracted 95 delegates from 65 organisations in the public and private sectors across 19 countries. The conference theme – "Making Housing Finance Markets Work in Africa" – focused on the key issues faced by housing practitioners across the continent –

and equity, efficient payment regimes, and, of course, effective demand for housing.

Policy is fundamental to efficient housing finance systems. From macro-economic, tax and monetary policy through to land use frameworks, building codes, labour law, and so on, government sets the rules and enables the pathways that the private sector can follow to deliver good and effective housing solutions that are affordable to the population.

Private investors, lenders, and development finance institutions are powerful players with the ability to influence development trajectories and the realm of the possible. While policy must create and nurture an enabling environment, the investment sector must also actively seek niches in which they can engage, and grow these to continuously expand access to lower income earners. We also understand that we need to engage with the reality of informality and develop mechanisms to accommodate this in our approaches. This will take long term, committed investment, and a vision that appreciates the potential of the market of the future, notwithstanding the challenges faced today.

Partnerships: The housing finance challenge is not just a challenge of financial engineering, but is also tied fundamentally to the housing delivery value chain. The complexity of the housing process makes partnerships a necessity. These need to be well structured, however, with each player taking a role appropriate to its own capacity. The role of government is to set an appropriate and enabling legal and regulatory framework, and to lead in the provision of serviced land for housing. Government can also provide legislative innovation and budgetary support for specific development objectives in the housing sector, such as VAT relief on newly constructed units sold to target market households. Full subsidisation is not required, however, as financial institutions have the capacity and appetite to provide development capital, risk mitigation products and end user finance. Development Finance Institutions can provide additional capital, technical assistance and targeted risk sharing mechanisms. With the legal and financial framework in hand, developers can then drive the initiative with their development expertise, also taking part of the risk. Lastly, households themselves, have a variety of capacities to contribute towards the realisation of their housing needs - whether financially or with their labour. Public private partnership arrangements are risk-sharing arrangements in which parties bring together their resources and use these collectively to realise the objectives of the project and effectively manage its risks.

We urge governments to address the following critical challenges:

- 1. Transparent land management systems: the investment of capital in housing markets depends on legal frameworks that confirm and support ownership or tenancy rights, and allow property to be used as collateral for access to credit. Sound planning frameworks that promote the growth of sustainable human settlements are a critical part of the enabling environment on which investment depends. Governments across Africa should streamline and prioritise their land legal frameworks, establishing and improving appropriate and sustainable titling systems, ensuring security of tenure, and clarifying and upholding rights of occupation and use, all in favour of effective housing markets.
- 2. Investment in infrastructure and serviced land for housing: a key constraint facing housing developers in the delivery of housing at scale is access to serviced land for housing. Government can facilitate increased construction by making land available through its regulatory and other levers, and investing in bulk infrastructure to support this. As cities develop, the establishment of effective rating and collections systems can also build municipal capacity to further meet the need on an ongoing basis, while also establishing critical contracts for local citizenship.
- 3. Attention to the housing impact of macroeconomic and monetary policy: the growth of the housing sector in Africa demands greater financial innovation that increases the capital available, whether for lenders, developers, or households themselves. Our capital markets are shallow and secondary markets are ineffective. A critical issue for attention by policy makers is the creation of an environment conducive to long term funding and increased investment. The role of the central bank and monetary policy is fundamental in this regard. Key areas for policy attention include interest rates, inflation, tax policy, currency risk, capital requirements and other macro-economic issues that impact on housing.
- 4. Accommodation of non-mortgage, housing microfinance as a viable and central component of a national housing finance framework: housing financing systems that accommodate the financial capacities of the majority are critically needed and cannot be overlooked in favour of unrealistic expectations of wide-scale mortgage finance. There are very positive examples of inclusive hous-

- ing finance systems across the continent, but these are not yet operating at the scale required. Governments can assist in promoting non-mortgage housing finance systems through the active and regulatory promotion of developmental credit, effective and appropriate credit regulatory systems, and the establishment of land use management systems that provide for and facilitate incremental housing delivery approaches.
- 5. Consistent national housing policy and regulatory framework. The long term nature of housing investments makes the current situation of policy uncertainty critically important. Unpredictable regulatory changes, complex legal frameworks and volatile local currencies all limited investment timeframes and challenge exit strategies, encouraging investors to look elsewhere, or upmarket. where the capacity to absorb costs is greater. Government policy can have a significant impact on investor interest and market participation, simply by being reliable and timely. At the same time, good policy can improve the reach of good investment - extending the benefits of investor interest to a wider array of people, and critically, down market.

We commit ourselves:

We, the members of the AUHF, confirm our commitment to the development of sustainable housing finance markets that address the broad spectrum of needs in the countries and regions throughout Africa. As individual housing sector practitioners, and collectively as members of the African Union for Housing Finance, we are committed to:

- The development of appropriate housing and housing finance products that are affordable to our populations, that respond appropriately to the reality of informality, and that contribute effectively towards adequate housing for all, across our nations.
- The mobilisation of capital resources, long term and in local currencies, debt and equity, with the appropriate risk underpins and supportive frameworks to encourage the participation of a diverse range of investors across the range of housing solutions, and to enable developers to grow their capacity to operate at scale.
- The realisation of scale delivery that meets the growing demands for housing with realistic, affordable products, including the delivery of affordable, well-managed rental housing at scale.

Regional round up: news from around the globe

- The establishment, and consolidation, of sustainable and robust institutions throughout the housing supply chain, and the provision of capacity support, technical assistance and professional development.
- The collection, analysis and dissemination of evidence-based information on effective housing finance practice and the performance of the housing market. In this, we are committed to sharing best practice and building track records that can be monitored on an ongoing basis, setting benchmarks for our peers and one another, in support of more effective housing markets across the continent.
- Increased dialogue and engagement between the public and private sectors, at a local, national, regional, continental and international level.
- Working in collaboration with each other, and other stakeholders, whether in the public or private sectors, to promote the realisation of sustainable human settlements across Africa.

The AUHF is keen to engage with respective governments on both micro and macro economic issues, including interest rates, tax and monetary policy, and housing and land policy as it influences the growth and performance of housing markets. The AUHF and its members

look forward to working with governments and other stakeholders, in respective countries and across the continent, in promoting the investment capacity of Africa's housing sector and meeting the housing needs of its residents.

28 October 2015

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News update from the Asia-Pacific Region:

By Zaigham M. Rizvi

Bangladesh

The housing sector of Bangladesh, which was once an illuminating sector in the national economy, is now on the slide due to various issues. It is a matter of concern that almost 3.5 million people are working in this sector. Around 269 linked industries have developed dependent on this sector, and thus its revival is essential to economic growth, apart from its social significance.

Realtors are struggling with expensive bank loans. People are also losing their interest in buying and/or constructing new houses on this account. They are not able to find a loan with a low interest rate to buy a flat or land. Despair is growing among them because of increased flat and land registration fees as well.

The housing sector of Bangladesh has undergone a revolutionary change during the last three decades. The situations of Dhaka, Chittagong and Sylhet are becoming a major concern from a housing shortage aspect. According to the Consumer Association of Bangladesh [CAB], 70% of people in Dhaka city use 65% or more of their monthly income for house rent. House rents have risen by 40%-45%, compared to 15%-20% ten years back. Unplanned urbanization is growing rapidly because of the shortage of land, legal complications, poor planning and lack of appropriate support. The facilities for the city dwellers are also being squeezed.

In this crisis period, the housing sector is facing another constraint. Financing from banks and financial institutions in the housing sector of Bangladesh has fallen drastically in recent times. According to the central bank statistics, the total amount of outstanding loans from the banks lending to the housing sector stood at BTk. 369.0 million (Bangladeshi Takka-BTk), as of June 2015. The amount was BTk. 366.0 million for the previous year. A huge amount of the credit to the housing sector has been classified as high risk due to a slowdown in this sector for

last couple of years. To get over this problem, most of the banks have squeezed new lending to the housing sector.

REHAB [Real Estate Housing Association of Bangladesh] reports that almost 12,185 flats are still unsold. The current valuation of these flats is BTk 88,110 million. Total investment of this project is 215,000 million BTk. Realtors along with 3.5 million working people in the sector are anxiously waiting for government intervention. The Association has demanded that the Government create a fund of BTk. 20,000 million in the form of a mortgage refinance scheme.

In Bangladesh the commercial banks are providing housing loans with a 12%-19.5% interest rate, which is very high and needs to decrease to single digit levels. In the past, the registration fee was BTk 250 per square meter which is now BTk 2000 per square meter. This needs to be reduced to the previous level. Moreover the Government increased the Source Tax to 13%, whereas in India it is 6% and 1%-4% in Malaysia, Singapore and Sri Lanka.

As a government-owned specialized institution in this sector, the Bangladesh House Building Finance Corporation [BHBFC] is providing housing loans at low interest rates. The BHBFC provides a loan with simple interest at 10%-12%. While the demand for the BHBFC loan is high, the organization is suffering from a long term liquidity crisis. The Government has promised to provide a fund of BTk.5,000 million, but this liquidity support has yet to reach BHBFC. The Islamic Development Bank [IDB] has in principle agreed to provide BHBFC a fund of 100 million USD (8,000 million BTk) for financing to the rural housing segment.

In spite of this long term liquidity crisis, the BHBFC disbursed BTk. 2,710 million during the year 2014-2015 as against BTk. 3,890 million disbursed during the year 2013-2014. The amount was BTk 4,330 million in 2012-2013.

Thailand

Contributed by the Government Housing Bank of Thailand

Low-cost GH Bank loans attract hordes of home buyers

The Bangkok Post reported that potential mortgage borrowers recently lined up for the Government-supported Bt10 billion baht lowinterest rate loans offered by the Government Housing Bank. On the first day, more than 2,000 borrowers applied for the new loans for borrowers with incomes not exceeding Bt 30,000 per month (\$US 857). The new program is designed to help buyers purchase homes priced at Bt 3 million (\$US 85,714) or less. This campaign began on October 19, 2015 and has been very successful. According to the Bank, more than 6,900 customers submitted loan applications for loans of a total value of Bt 8.500 million (as of Bt October 26. 2015). Customers can continue submitting loan applications even if applied-for amounts exceed (Bt10,000 million). The Bank is considering offering additional loans under this program.

To facilitate more qualified borrowers, the Bank raised the debt serving cap to 40-50% of income from the normal 33%. Normally, only those earning at least Bt 54,000 per month (\$US 1,542) are eligible for the Bt 3 million (\$US85,714) housing loans.

Mortgage interest rates on these loans will be 3.5% for the first year, 4.25% for the second year and the minimum retail rate [MRR] minus 0.7 percentage points throughout the term of the loan for general borrowers and MRR minus one percentage point for employees of companies that have been offered special conditions by GH Bank. The Bank's current MRR is 6.75%.

The Government also cut transfer and mortgage fees to 0.01% for six months for homes priced at no more than Bt3 million. First -time homebuyers purchasing homes for Bt 3 million

Regional round up: news from around the globe

or less by the end of next year will be able to deduct 20% of the home's value from taxable income over a five-year period.

Transfer fee reductions to 0.01 per cent will boost housing sales

The Thai government reduction of transfer and mortgage fees to 0.01% for a period of six months to a year and GH Bank's relaxed housing loan criteria for low-income earners form the backbone of new economic stimulus measures that will boost the housing industry.

The specific business tax – a levy on property developers when they sell to homebuyers and on property owners who resell their property within five years, would, however, be unchanged at 3.3%, said the Bangkok Post.

The Thai government has cut housing transfer and mortgage fees as well as the specific business tax twice before – in 1997 after the country fell into financial meltdown and again in 2001.

The 2001 package cut both transfer and mortgage fees to 0.01% and the specific business tax was 0.1% of appraisal value.

Developers open to government low-cost housing plan

Property developers are interested in developing low-cost residential projects following the Finance Ministry's policy of offering long-term land leases to help developers sell homes at Bt 600,000 per unit (\$US17,142).

GH Bank announces two and a half year 2015 operating results

Angkana Pilun-Owad Chaimanat, GH Bank's President announced the Bank's two and a half year 2015 operating results (April 2013 – September 2015) during which she served as the Bank's President. During this period, the Bank issued new loans of Bt 350,116 million (\$ 10 billion). Accumulated net profits were Bt 21,679 million (\$619 million). The Bank's total loans outstanding increased by Bt 124,426 million while total assets increased Bt 134,683 million.

Total deposits increased Bt 128,880 million. Non-performing loans [NPL] decreased to 5.43% of total loans (Bt 10,186 million).

She also announced third-quarter 2015 operating results (as of September 30, 2015).

During this period, the Bank issued new loans of Bt 108,401 million (\$ 3,097 million), increasing by 4.84% (Bt 5,002 million) over the same period last year.

At the end of Q3 2015, the Bank's total loans outstanding increased by 5.48% to Bt 837,795 million (\$ 23,937 million) while total assets increased 7.59% to Bt 887,640 million (\$ 2,361 million).

The Bank's BIS ratio (16.06%) exceeded Bank of Thailand's Minimal Capital Requirements (8.50%).

(Contributed by Government Housing Bank of Thailand)

India

Contributed by HDFC Limited - India

Initiatives in Housing and Housing Finance in India

The urban housing shortage in India is immense, estimated at over 18 million housing units. Despite a rise in the number of mortgage finance players, the market is still highly underpenetrated. The mortgage to GDP ratio is $\sim 9\%$, significantly lower than many Asian peers. Amongst emerging markets, India's attractiveness lies in its large, consuming middle-class. Disposable incomes are rising with better job prospects. Improved affordability is driving aspirations. Foremost amongst the desires of India's rising middle-class is being a homeowner.

In the recent period, there have been various initiatives to encourage affordable housing. These include:

- 1. Affordable Housing for All by 2020: Under this programme, the Government has committed to build 20 million houses for the urban poor within the next 7 years. This programme includes a credit-linked subsidy, wherein low income customers can avail an interest rate subvention of 6.5% over the term of the loan. This scheme will help reduce the effective rate of interest payable on a home loan. The National Housing Bank is a nodal agency to channel these subsidies and ensure that loans are given to the intended beneficiaries.
- 2. Private sector developers are being incentivized to undertake slum redevelopment programmes. While the land will come from the state governments, the developer will provide *in-situ* formal housing units to the slum dwellers and use the balance of land for commercial purposes. Further, to increase the affordable housing stock, public-private partnerships are being encouraged through incentives such as grants per housing unit, permitting a higher floor space index and stamp duty exemptions.

- 3. India's urbanization rate is expected to rise from 31% to 40% by 2030. Given the immense challenges that rapid urbanization poses, the Government has laid a strong emphasis on developing 100 smart cities. This is expected to be done through a combination of retrofitting and redevelopment of existing cities and development of Greenfield Cities. The process of identifying specific locations for smart cities and preparing smart city plans is underway. There has been significant global interest in participating in various components of smart cities, which bodes well for India's future.
- 4. As regards housing finance, continued fiscal incentives on both, the interest and principal component have encouraged more people to avail themselves of home loans. The regulators have recently reduced risk weights on individual mortgages which now range between 35 to 75%, based on the loan amount and loan to value ratios. This will help release capital for mortgage finance players. Further, mortgage finance players have been allowed to access international funding through external commercial borrowings for financing low cost affordable housing and through Rupee denominated overseas bonds, popularly known as Masala Bonds. This will help lenders diversify their borrower base.

Reducing land costs remains one of the key challenges in the provision of affordable housing in India. Building approval processes need to be streamlined to reduce time and cost overruns. While there are several challenges in the housing sector, the Government has clearly recognized the benefits of encouraging a property owning democracy.

Pakistan

Contributed by the State Bank of Pakistan

Housing Finance in Pakistan as on September 30, 2015

According to the figures released by the State bank of Pakistan [SBP], the central bank of the country, the overall housing finance portfolio stood at Rs. 58.02 billion as of September 30, 2015. The House Building Finance Corporation [HBFC], a specialized housing finance institution operating in the public sector, remained the largest shareholder, in terms of gross outstanding, with the share of 24%. However, based on category, Islamic Banks remained the largest players with a 33% share of gross outstanding loans. Fresh disbursement for the quarter accounted for Rs. 4.7 billion with 1022 borrowers. The HBFC accounted for 53.62% of new borrowers and contributed

17.37% of the new disbursements equivalent to Rs. 831 million. Islamic banks disbursed Rs. 2.76 billion, and thus demonstrate the great potential of sharia-compliant housing finance. Furthermore, a major chunk of the total outstanding remained directed towards the "Outright Purchase" category as 62.56% of the gross outstanding was used to finance this category of housing loans. It was followed by "Construction" and "Renovation" products with 25.89 and 11.55% respectively. It seems people prefer outright purchase rather than construction of their house.

During the quarter ending September 30, 2015, Islamic banks and Private Banks remained active in extending housing finance. This impressive rise in disbursements is a reflection of efforts to create an enabling environment for housing finance in Pakistan. This will be instrumental in increasing economic growth through positive changes in 40 industries allied to housing sector.

Sharia-Compliant House financing

Sixty one percent of fresh house loan disbursements in Pakistan during the year ended June 2015 were made by Islamic banks or through the Islamic windows of conventional banks. Fiscal Year 2015 was the first year since financial year 2008 when the gross outstanding amount of housing loans actually grew.

The recently released Quarterly House Finance Review by the SBP shows that it was essentially the second half of the fiscal year 2015, specifically the last quarter that saw the growth in disbursements.

Central bank role for promotion and development of housing finance

While chairing the first meeting of the Steering Committee of the Mortgage Refinance Company [MRC], the newly established long term liquidity facility institution, the Deputy Governor of SBP, Mr. Saeed Ahmed said that apart from other limiting legal and operational obstacles, non-availability of long term liquidity does not allow requisite growth in housing finance in Pakistan. The meeting was also attended by other members of the Committee including executives of MRC's equity holder banks/DFIs, representatives from the Ministry of Finance, Ministry of Housing & Works, and an industry specialist from IFC. The committee aims to steer the process of incorporation of MRC expeditiously in a planned manner.

Commercial Banks seem reluctant to lend for house financing

Commercial banks have been reluctant to boost housing finance operations since the

2008 sub-prime crisis. The central bank commented that banks have not pursued housing finance products due to lack of implementation of foreclosure laws, title issues and availability of risk free investment avenues.

Another reason hindering the growth of housing finance in Pakistan is reluctance of banks to lend outside a few big cities. Moreover, the lack of an effective institutional framework and secondary mortgage market and long term funding arrangements are still the major constraints on the growth of housing and housing finance.

6th population and housing census to begin from March 28, 2016

The process of the 6th nationwide census of population and houses will begin from March 28, 2016. The last census was held in 1998. Thus the demographic data base used in estimating population, household size, housing stock etc. currently being used is based on projections, and does not truly reflect the reality on the ground. It is hoped that after the new census more reliable date will be available to planners in housing and urban development.

Malaysia

Contributed by: Chung Chee Leong, President/ Chief Executive Officer, Cagamas Berhad

Malaysia's 2016 Budget continues efforts to provide affordable housing

The Malaysian 2016 budget as announced on 23 October 2015 highlighted the Malaysian Government's commitment and effort to continue providing affordable housing to meet the increasing housing needs amongst the low to middle income households. The Government has allocated RM2.96 billion in 2016 to meet its housing mandate, in particular for affordable housing and the key budget initiatives related to the property sector include:

- 20% stamp duty exemption on Shariah-Compliant financing instruments to finance the purchase of houses
- RM200 million allocation for a First House Deposit Financing Scheme under the Ministry of Urban Wellbeing, Housing and Local Government to assist eligible first time home buyers of affordable houses to pay deposits
- RM1.6 billion allocated to build 175,000 houses under 1Malaysia Housing Programme [PR1MA] to be sold at 20% below market

price. A total of 10,000 units is expected to be completed in 2016

- RM200 million allocated to build 10,000 units of People Friendly Homes under the National Housing Company Limited [SPNB] with a subsidy of RM20,000 to each house
- RM863 million allocated to build 22,300 units of apartments and 9,800 units of terrace houses under the Public Housing Programme
- RM40 million allocated to revive abandoned low and medium cost private housing projects.

By 2020, Malaysia's population is expected to reach 32.5 million and there will be huge demand for housing, especially affordable housing. Apart from the on-going effort to provide affordable housing, the Government has also implemented several cooling measures to control the high growth in house prices such as the abolition of the developers' interest bearing scheme [DIBS] and a revision of the real property gains tax [RPGT].

In addition, the Central Bank of Malaysia has implemented more stringent restrictions for home loans such as a maximum limit on financing tenure and adoption of a prudent debt service ratio [DSR]. The effects of the measures have already been seen in the current market. These measures will amplify the effects of the earlier cooling measures to further subdue the high growth of house prices experienced by the market in recent years. Evidently, the data from the National Property Information Centre's [NAPIC] First Half Property Market Report 2015 indicate that the growth of the Malaysian House Price Index has slowed down year-on-year from 8.4% in 1H2014 to 5.9% in 1H2015.

Mongolia

New developments are taking place in the housing finance sector of Ulaanbaatar, the capital of Mongolia. The country is pursuing an Affordable Housing Program, and we hope to learn more from D. Gantugs, the CEO of the Mongolia Mortgage Corporation [MIK] on the progress of the Mongolia Affordable Housing Program in the next issue of HFI. Given the rapid increase of the Program size and the impact on the Construction Development Sector MIK is working to expand its capitalization base.

The temptations of housing finance bubbles

By Alex J. Pollock

Running up the leverage is the snake in the housing finance Garden of Eden. It is a constant set of alluring temptations to enjoy the fruit of increased risk in the medium term, while setting ourselves up for the inevitable fall.

Let us view this famous painting by Lucas Cranach:



The woman is Fannie Mae. The man is Freddie Mac. The snake is whispering, "If you just run up the leverage of the whole housing finance system, you will become powerful and rich." Fannie and Freddie are about to eat the apple of risk, which will indeed make them very powerful and very rich for a while, after which they will be shamed, humiliated and punished.

Bubbles in housing finance have occurred in many countries and times. They always end painfully, yet they keep happening. As the prophet said (slightly amended), "There is nothing new under the financial sun. The cycle that hath been, it is that which shall be." Why is this?

Consider this quotation: "The banking failures for the current year have been numerous, greatly aggravated by the collapse of unwise speculation in real estate." What year was that? It could have been 2008, to be sure, but it is actually from 1891, as the then-U.S. Comptroller of the Currency looked sadly at the wreck of many of the banks of his day.

Some people say the problem is that housing lenders who go broke need to be personally punished, to get their incentives right. Economists are big, not without reason, on worrying about economic incentives. But a bigger problem is that it is so hard to know the future. Housing lenders don't create housing finance collapses on purpose, but by mistake.

The city of Barcelona in the 14th century decided to manage the incentives of bankers by decreeing that those who defaulted on their deposits would be subject to capital punishment. And as one financial history tells us, "In 1360, Francesch Castello, a failed banker, was beheaded in front of his bank." But this did not stop banks from failing.

One of the most important reasons that housing finance bubbles are so hard to control is that they make nearly everyone happy while they last. Who is making money from a housing finance bubble? Almost everybody. This is why the experience of a bubble is so insidious.

For example, take the most recent American experience. For a long time, the seven years of 2000-2006, the housing finance bubble generated profits and wealth. A lot of the profits and wealth turned out to be illusory in the end, but at the time some of it was real and all of it seemed real. As house prices rose, borrowers made more money if they bought more expensive houses with the maximum amount of leverage. Property flippers bought and sold condominiums for quick

and repetitive profits, even if no one was living in them. Housing lenders had big volumes and profits. Their officers and employees got big bonuses. Numerous officers of Fannie Mae and Freddie Mac made more than \$1 million a year each. Real estate brokers had high volumes and big commissions. Equity investors saw the value of their housing-related stocks go up. Fixed income investors all over the world enjoyed the returns from subprime mortgage-backed securities, which seemed low risk, and from Fannie Mae and Freddie Mac securities which seemed to be, and actually were, guaranteed by the U.S. government.

Most importantly, the 75 million households that were home owners saw the market price of their houses keep rising. This felt like, and was discussed by economists as, increased wealth. Of course, this was politically popular. The new equity in their houses at then-market prices allowed many consumers to borrow on second mortgages and home equity loans, so they could spend money they had not had to earn by working. Then-Federal Reserve Chairman Alan Greenspan smiled approvingly on this housing "wealth effect," which was offsetting the recessionary effects of the collapse of the previous bubble in technology stocks, which had collapsed in 2000.

Home builders profited by a boom in new building. Local governments got higher real estate transaction taxes and greater property taxes, which reflected the increased tax valuations of their citizens' houses. They could increase their spending with the new tax receipts. The investment banks which pooled mortgages, packaged them into ever more complex mortgage-backed securities, and sold and traded them, made a lot of money and paid big bonuses to the members of their mortgage operations, including the former physicists and mathematicians who built the models of how the securities were

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supposed to work. Bond rating agencies were paid to rate the expanding volumes of mortgage-backed securities and were highly profitable. Bank regulators happily noted that bank capital ratios were good, and that zero banks failed in the U.S. in the years 2005 and 2006 — the very top of the bubble. In the next six years, 468 U.S. banks would fail.

The politicians are not to be forgotten. The politicians trumpeted and took credit for the increasing home ownership rate, which the housing finance bubble temporarily carried to 69%, before it fell back to its historical level of 64%. The politicians pushed for easier credit and more leverage for riskier borrowers, which they praised as "increasing access" to borrowing. (The snake had most certainly been whispering to the politicians, too.)

The bubble was highly profitable for everybody involved – as long as the house prices kept going up. As long as house prices rise, the more everybody borrows, the more money everybody makes. This general happiness creates a vast temptation to keep the leverage increasing at all levels.

This brings us to two essential questions.

The first is: What is the collateral for a mortgage loan? Most people answer, "That's easy – the house." But that is not the correct answer.

The correct answer is: Not the house, but the *price* of the house. The only way a housing lender can recover from the property is by selling it at some price.

The second key question is: How much can a price change?

To this question the answer is: A lot more than you think. It can go up a lot more than you expected, and it can then go down a lot more than you thought possible. It can go down a lot more than your worst case planning scenario dared to contemplate.

So the temptations of housing finance bubbles generate mistaken beliefs about how much prices can go down. American housing experts knew that house prices could fall on a regional basis, but most were convinced that house prices would not fall on a national average basis. Of course, now we know they were wrong, and that national average house prices fell by 30%. And they fell for six years.

By then, Fannie Mae and Freddie Mac had been banished from their pleasant housing finance Garden of Eden. Here they are, being sent into government conservatorship, as depicted by Michelangelo:



In conservatorship they remain to this day, more than seven years after their failure. Having played a key role in running up the leverage of the whole system, they had suffered a fall they never thought possible.

Europe: a shifting regulatory landscape

Sy Mark Weinrich

The European Commission recently made several proposals which will have an impact on the major funding instruments for mortgages if they become effective. The European Commission proposes to introduce a European Deposit Insurance Scheme, to harmonize the covered bond markets as well as to establish common rules on securitization. While the proposal for a euro-area wide insurance scheme for bank deposits is considered a further step to a fullyfledged Banking Union, the proposals regarding covered bonds and securitization form part of the European Commission's Capital Markets Union action plan whose aim is to create deeper and more integrated capital markets across the European Union.

At the end of November, the European Commission proposed a European Deposit Insurance Scheme [EDIS] which will be mandatory for the Member States of the Eurozone. but open to other EU Member States who want to join the Banking Union. The Commission envisions a step-by-step process that develops over nearly a decade, in three stages. In a first stage, the system would provide re-insurance for existing national savings deposit quarantee schemes in the cases of a liquidity shortfall or excess loss. At the end of three years, bank deposits would be co-insured partly by national deposit guarantee schemes and partly by EDIS, with the EDIS contribution increasing over time from 20% to 80%. In the third and final stage, starting in 2024, all bank deposits in the Eurozone would be insured only by EDIS - subject to the limitation that only national deposit guarantee systems that comply with the Deposit Guarantee Scheme Directive will qualify for EDIS.

EDIS would be funded by contributions from banks. Banks' contributions would be riskweighted, so that riskier banks pay higher contributions than safer banks. EDIS would be administered by the Single Resolution Board, the central decision-making body within the European Banking Union.

The European Commission believes that EDIS will reinforce financial stability and "further reduce the link between banks and their sovereigns. However, doubts remain. In some Eurozone countries, vast quantities of (most likely) unrepayable debt continue to clutter the balance sheets of banks. Moreover, 15 out of 28 EU Member States do not even have a national deposit guarantee scheme yet, despite a 2014 EU Directive requiring all Member States to set one up. A joint system might increase the risk of contagion and be prone to "moral hazard" as banks in fragile economies would in effect be able to take risks with deposit insurance money ultimately paid in by savers in economically sound countries.

In September, the European Commission published a consultation document that considered a wide range of possible measures to harmonize the covered bond market. The regulation of covered bonds is a matter of Member State national laws although the prudential treatment of covered bonds is provided for in a variety of EU legislative acts such as the Units for Collective Investment in Transferable Securities Directive, the Capital Requirement Regulation and the Bank Recovery and Resolution Directive. There are differences between the legal frameworks and supervisory practices of various EU Member States for covered bonds as highlighted by the EBA in its July 2014 report. The ambitious initiative towards a more integrated EU-wide covered bond framework appears to be motivated by a perceived fragmentation between covered bond markets in the European Union. The document presents two options:

 voluntary convergence of Member States' covered bond laws in accordance with non-legislative coordination measures

- such as targeted recommendations from the Commission; or
- direct EU product legislation on covered bonds, which could seek to harmonize existing national laws (ranging from binding minimum standards to high market standards) or provide an alternative framework (a so-called "29th regime").

A dedicated EU covered bond legislative framework could include the following high level elements:

- I. Covered bond definition and protection of the term;
- II. Covered bond issuers (models and licensing requirements) and system of public supervision;
- III. Dual recourse and insolvency/resolution regime;
- IV. The cover pool;
- V. Transparency requirements.

The consultation document places considerable emphasis on liquidity buffers, coverage, over-collaterisation requirements and hedging arrangements as well as on transparency and disclosure practices and requirements. These areas of potential harmonization could lead to more consistent and possibly higher creditworthiness of covered bonds. Although a European legal framework certainly offers a chance to make the covered bond product even better across national borders, a divergence in collateral, issuer, and country risk could still happen in the future, and could once again lead to yield divergence that is justifiable on the grounds of credit fundamentals.

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Also in September, the European Commission published its proposal for a new regulation laying down common rules on securitization and creating a European framework for simple, transparent and standardized [STS] securitization (the Securitization Regulation). In summary, the Securitization Regulation harmonizes (and in some cases amends) the existing EU risk retention, due diligence and disclosure requirements for all securitizations into a single set of requirements, creates common foundation criteria for identifying STS securitizations, and makes amendments to existing risk retention and transparency rules.

The Securitization Regulation is backed up by a draft regulation proposing to amend the Capital Requirements Regulation to give effect to the Basel III Revisions to the Securitization Framework and provide favorable capital treatment to STS securitizations.

Although STS securitizations intend to make sure that investor's interests are appropriately safeguarded, the Securitization Regulation falls short of this aim. The information requirements for sellers are overly lenient and give huge leeway for banks to provide their own, minimalist interpretations and it does not provide end investors with a full see through of the complete securitization chain including origination and the underlying assets nor does it empower end investors to demand those data from banks.

The European Parliament as well as the European Banking Authority have shown

concern by the importance that securitization has for the European Commission's Capital Markets Union action plan. Many members of the Parliament are uneasy about treating residential mortgage backed securities (which stood at the cradle of the global financial crisis) as low risk assets by the European regulator.

All of the proposals have been submitted to the European Parliament and Council which will now discuss the proposals. Each of the Parliament and Council are likely to propose amendments to the Commission drafts followed by further discussions in order to agree a final text. It is unlikely given the size and importance of the proposals that a final version can be agreed and enacted before the third quarter of 2016.

→ By Claudia Magalhães Eloy

1. Introduction

In Brazil a vast number of families are not able to access housing finance, especially at market rates, thus making the traditional Housing Finance System [SFH], with its subsidized rates, still decisive in expanding affordability, as this paper aims to demonstrate.

The SFH dates back to 19641, when the military government structured the National Housing Finance System [SFH] - a specialized system, established within the financing system and amidst capital market reforms, together with the institution of monetary restatement. The SFH encompassed the creation of the National Housing Bank [BNH] and two sources of funding: the Brazilian Savings and Loans System [SBPE – Sistema Brasileiro de Poupança e Empréstimo]2, generally known as "Poupança"; and the FGTS [Fundo de Garantia por Tempo de Serviço]3, a provident fund that collects compulsory savings from workers4 and provides housing credit for anyone that qualifies for the loan. Since then, FGTS and SBPE have comprised an earmarked circuit of housing credit, each with specific regulation.

The high inflation rates during late 70s and 80s – over 200% per year between 1983 and 1985 – made the indexed installments escalate fast, becoming unaffordable for most families. The solution adopted was the mismatch of indexation rates in order to keep installments payable, in line with the low rise in salaries (kept low due to a wage squeeze policy), while the outstanding loan debt balance remained indexed by inflation rates,

turning amortization negative. The difference accrued was then transferred to FCVS [Fundo de Compensação das Variações Salariais], rapidly increasing its liabilities unsustainably. Meanwhile the growth of unemployment reduced the collection of deposits under FGTS as well as voluntary savings and boosted default, undermining the System's equilibrium.

In 1986, SFH underwent a restructuring process⁵ that extinguished BNH, transferring FGTS management and the execution of housing programs to CAIXA, a state owned bank; and the regulatory functions relating to SBPE to the Central Bank and the National Monetary Council [CMN]. Small savings and loans associations [Sociedades de Crédito Imobiliário, SCI, and Associações de Poupança e Empréstimo, APEs] were bought by bigger commercial banks, while public housing companies [Cohabs] lost their financing capacity and many were extinguished or severely impaired. During the following decade, housing policy was dismantled and credit through SFH became scarce. Many developers started offering financing schemes to their clients in order to compensate for the absence of SFH credit, but conditions were far more restrictive.

In 1994, as a new currency, the Real, was instituted, a set of macroeconomic policies — fiscal policy with deficit and public debt controls; monetary policy, based on inflation targets; and, floating exchange rates — brought about stability allowing the country to finally leave behind its historical pattern of very high inflation and interest rates. Since then, improvements in the regulatory

framework⁶, coupled with declining interest rates and a significant increase in demand, expanded by the favorable macroeconomic environment – growth of formal employment and household income – as well as added housing subsides, have enabled the revamp of SFH. Especially after 2005, the evolution of the Brazilian housing market was such that for a while, it evoked suspicions of a housing bubble in the country's real estate industry⁷.

Notwithstanding the impressive revival of SFH that took total housing credit from 1.3% in Dec/2004 to 2.1% in Dec/2008 and to 8.2% of GDP in Dec/2013, the debate around its role remains unsettled. Many argue that it is an outdated system that ought to be substituted for more contemporary financing mechanisms, connected to capital markets. Yet, real estate securities - introduced by regulation in 1997, under the establishment of the Real Estate Financing System [Sistema de Financiamento Imobiliário, SFI] - have not been performing as expected, particularly the Certificados de Recebíveis Imobiliários [CRI], the country's version of Mortgage Backed Securities. Real Estate Bonds (Letras de Crédito Imobiliário, LCIs), on the other hand, have shown a steep growth, but so far have mainly generated commercial, nonresidential real estate credit, with modest impact on housing credit supply.

The current adverse macroeconomic scenario has put SFH under a lot of pressure. The savings system (SBPE) has faced a net outflow of funds (difference between deposits and withdraw-

¹ Before 1964, in the 30s, provident institutes [IAPIs e IAPs] started providing long term housing loans to their affiliates. Yet, after 3 decades, results were small – 142 thousand units – restrict to some professional categories and concentrated in the Southeast region of the country, as well as the capital, Brasilia. Back then there was also the "Fundação Casa Popular" (Affordable Housing Foundation), established in 1946, which by 1964 had financed only approximately 17 thousand units on plots of land donated by state or municipal governments (Bonduki, 1999).

² Poupança (savings accounts) already existed in the country, but the institution of indexation gave it new breath, coupled with a strong marketing campaign to make it a popular investment.

³ FGTS was created in 1966 with a dual objective: to compensate for the extinguishment of workers decennial stability as well as to gather funding for the new SFH.

⁴ Some categories of workers (public employees and autonomous, for example) are excluded from this system as compulsory collectors/account holders. Domestic employees have recently been included.

⁵ Decreto-Lei nº 2.291/1986

⁶ One of the most important was the introduction of trust deeds as a substitute for conventional mortgages, allowing for a much simpler and expedited foreclosure procedure, conducted by a public notary thus greatly speeding up and lowering the cost of foreclosures and reducing net present loss rates.

⁷ Magalhães Eloy and Cagnin, 2014.

als) for 10 months in a row, since Jan/2015, thus giving new strength to the argument that it is not an adequate funding source for long-term housing finance, despite the fact that it still holds roughly BRL 500billion in stock. As market interest rates escalate, FGTS has been the focus of recent congressional debate about raising the interest rates paid on its deposits (fixed at 3%+TR annually), which may, in turn, have a significant impact on its lending rates.

This paper intends to approach the discussion regarding SFH, by focusing on its potential to offer credit at relatively low interest rates and its crucial importance for expanding housing credit downmarket in Brazil. This article is composed of three sections, besides this introduction and closing remarks. The first one briefly overviews the system's capacity to collect funds at below market rates and discusses present tendencies. The second section shows estimates of accumulated housing needs and predicted demand, while discussing the economic profile of families in the housing backlog. The third section provides estimates of income commitment to housing credit installments and exhibits the results of housing finance simulations at different interest rates, confronted with the distribution of payment capacity of Brazilian families, based on PNAD's8 data.

2. The potential of the Brazilian housing finance system to collect deposits

The Housing Finance System has been collecting both voluntary and compulsory deposits at rates regulated below market levels for over five decades. The analyses presented in the next two figures, show the rates paid to the deposits in comparison with market rates. They also exhibit the stock of each fund in relation to the country's GDP throughout the years. In both cases, quite a stable pattern is found, despite the variation of the gap between interest rates.

The analysis on SBPE dates back to the Real Plan (1994), setting the year of 1995 as its starting point. Before that, high inflation rates, a series of unsuccessful economic plans and, particularly, the government's confiscation of *Poupança's* deposits made its ratio to GDP very unstable. From 1995 on, the total stock of SBPE has varied from 6.2% to 9.5% of GDP, with an average ratio of 7.6%, as Figure 1 shows.

It is important to observe that, during the 1995-2014 period, the basic interest rate (Selic) varied from 8.9% to 38.8%, with an average of 17.6%, while SBPE kept remunerating its deposits at a much lower rate, an average of 10.5% (6%+TR)9. Therefore, even though *Poupança* has not been a very profitable investment, offering lower returns than other market investments, it has shown a remarkable capacity for collecting deposits with a sound correlation to GDP. Its returns are tax exempt and it is assured by the guarantee fund [Fundo Garantidor de Crédito, FGC], but so are real estate securities and bonds, which offer market rate returns. The *Poupanca* phenomenon can be mainly explained by the fact that it is a very simple, friendly investment, a first banking access to lower income families, as well as by cultural reasons: it is very popular even amongst richer investors in Brazil.

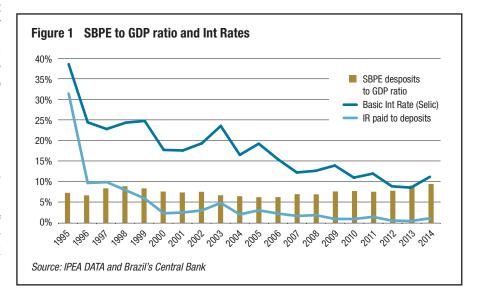
Since 1991, the establishment of the Reference Rate [Taxa Referencial, TR] as SFH's "indexation" rate has strengthened the fact that SFH operates apart from the market. The TR is not a price/inflation index, but a rate established by the Central Bank based upon the average monthly remuneration of bank deposit certificates and receipts [CDBs and RDBs].¹¹⁰ Its formula includes a reducing factor that softens the variations of the basic interest rate [Selic], thus providing quite stable interest rates for long-term housing loans, as Figure 1 demonstrates. This factor also enhances the affordability of SFH funding in comparison with adjustable market rates.

FGTS funding – composed of the stock of deposits (5.4% of GDP) plus other liabilities¹¹ – exhibits an average ratio to GDP of 7.8% between 2001 and 2014¹², quite similar to SBPE's. Here the difference between interest rates paid to deposits and the basic interest rate [Selic] is even larger, but as mentioned, FGTS' deposits are mandatory.

Together SBPE and FGTS' stock of funds correspond, on average, to 15,4% of GDP and thus the SFH allows for a larger housing credit to GDP ratio than the country has reached so far. On the other hand it also sets the limit for the housing credit to GDP ratio if Brazil were to have only this System. In order to expand this ratio above 15% and reach levels comparable to other developing countries, other sources of funding indeed become necessary. The question that remains is whether other sources should complement or substitute the SFH.

In 1997 the Real Estate Financing System [Sistema de Financiamento Imobiliário] was enacted, including the regulation of Certificados de Recebíveis Imobiliários [CRIs], a local version of MBS. Since then, other instruments have been created and regulated to enable capital market funding, such as real estate mortgage bonds, Letras de Crédito Imobiliário [LCIs] and Certificados de Crédito Imobiliário [CCIs]. Currently, the Guaranteed Real Estate Bonds [Letras Imobiliárias Garantidas, LIGs] are being regulated similarly to covered bonds.

Throughout the years, SFI has had a very slow growth, increasing more recently with the LCIs,



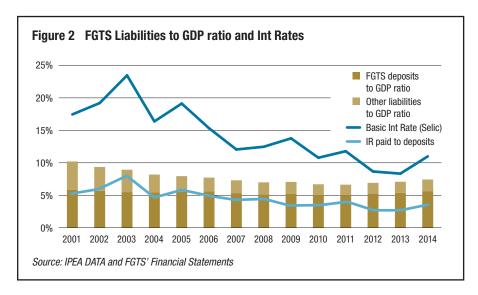
⁸ Household sample research conducted yearly by IBGE. Available at www.ibge.gov.br.

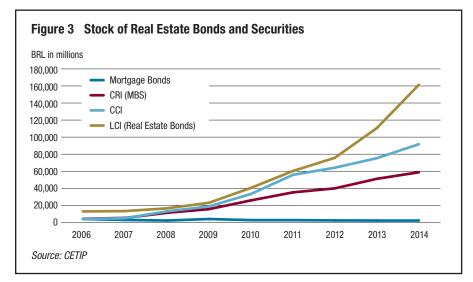
 $^{^9}$ Provisional Measure #567, May, 2012, established that whenever Selic was equal to or less than 8.5% per year, SBPE savings deposits received yields equivalent to 70% of Selic, instead of the usual fixed 6% (in any case, always added by the TR). If Selic is over 8.5%, deposits earn 6% +TR per year (TR + 0,5% monthly).

¹⁰ Issued by the 20 largest financial institutions: commercial, investment and multiple banks, in terms of volumes of certificates and receipts issued.

¹¹ Mainly inactive accounts and net equity.

¹² Period when financial demonstrations are available.





as the next Figure shows. After 17 years, the stock of CRIs reached BRL 55.7 billion in Dec2014, equivalent only to around 11% of SBPE's deposit stock. Also, the growth of CRIs has been supported by SFH funds: FGTS was the second major investor in 2014, responsible for the acquisition of 23.4% of CRIs issued that year¹³; in May, 2015, 12% of the savings (SBPE) stock held by private banks were invested in CRIs¹⁴; the issuance of corporate rental CRIs have had a significant decrease since 2011, when SBPE's regulation prohibited banks to count those to fulfill housing finance require-

ment obligations¹⁵. A shallow secondary market plus the structure of government borrowing through short term treasury bonds indexed at high and floating rates seem to be the basic reasons that keep securitization from taking off. Totaling BRL 338 billion as of July/2015, most of SFI's increase is related to commercial and corporate real estate financing, with no significant impact on housing credit supply.

Therefore, housing finance in Brazil still relies, almost exclusively, on the earmarked circuits of SFH – SBPE¹⁶ and FGTS – that reached,

at the end of 2014, BRL522.3 billion and BRL 410.4 billion, respectively, totaling BRL 932.7 billion, almost reaching one trillion reals in deposits.

The revamping of this system in the last decade, in terms of housing finance output, has been the result of a mix of decisive factors: macroeconomic stability, necessary improvements to the regulatory framework, low inflation and falling market interest rates, employment and real income growth¹⁷. After 2009, extra subsidies and the government's decision to push housing credit through FGTS and SBPE, mandating a leadership role for its state owned bank [CAIXA], fostered some bank competition and produced better credit conditions — higher LTVs and loan terms, smaller spreads.

Yet, despite all the celebrated growth, there is still, room for larger housing credit portfolios under SFH, suggesting that so far, size of funding is not yet a restriction for credit growth. The following figures show the evolution of housing finance as a proportion of total funds at SBPE and FGTS. As of Dec/2014, 43.5% of FGTS's total assets were allocated to housing credit and 52.2% of SBPE total deposit stock [in April, 2015, it reached 56.7%].

Historically FGTS has been investing more in treasury and market bonds than in housing credit. This managerial focus on financial investments has produced a net equity of BRL 77.6 billion (Dec/2014), not shared amongst its account holders. Housing credit as a % of total assets started growing after the federal government created the Minha Casa Minha Vida Program [PMCMV, "My House, My Life"] in 2009. This ambitious housing program has relied on FGTS to provide subsidized financing to families with monthly incomes up to BRL 5,000.00 for the acquisition of over 700.000 units between 2009 and 2014.

SBPE, on the other hand, shows two different trends since 2005: a steady and significant growth of housing credit portfolios by public banks {CAIXA and Banco do Brasil} that have reached 75% of total savings stock; and, among

¹³ Anuário UQBAR, 2015.

¹⁴ Banks that collect savings deposits have been using this strategy in order to comply with SBPE regulation that mandates that a certain % of the stock of deposits be put into housing credit, but has allowed them to fulfill this obligation partly with the purchase of MBS. Recent regulation has excluded the use of any type of MBS, imposing that from now on only RMBS may be considered for this purpose.

¹⁵ For an analysis on how SFH's funds have been fostering CRIs and other SFI instruments, refer to Magalhães Eloy, 2013.

¹⁶ Under current rules, established by the National Monetary Council (Resolution no. 3.932/2010), 65% of SBPE's deposit stock should be directed to real estate financing, of which 80% (52% of total) should be destined to fund housing finance operations under SFH criteria (maximum

interest rate of 12% and maximum housing value at BRL750,000.00) while the remaining 20% (13% of total) can be used in real estate transactions at market rates. The remainder of the balance must be allocated as follows: 20% in compulsory deposits to the Central Bank, 10% invested in treasury bonds and 5% freely used by banks. Deregulation has allowed banks to invest less than 26% on housing loans subject to SFH criteria, by complying with the 52% mandatory for housing finance partly with the purchase of real estate securities.

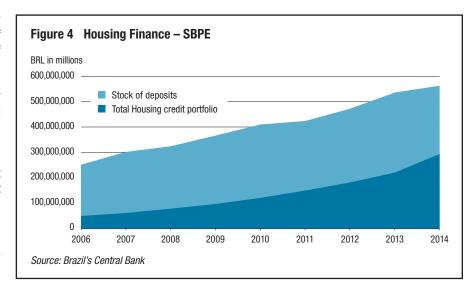
Another contributing factor comprehended new regulatory measures that would he gradually phase out the use of FCVS [Fundo de Compensação das Variações Salariais] credit by banks to comply with housing credit earmarking rules under SFH, a means previously used to avoid expanding their housing credit portfolios. To better understand this process, please refer to Magalhães Eloy,2013 or Cintra, 2007.

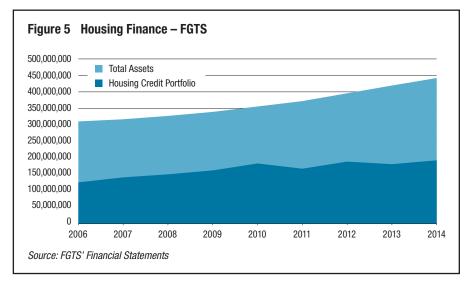
private banks, an initial growth followed by a small decline and a recent stabilization of their housing credit portfolio around 38% of total deposits.

Due to the economic recession – negative GDP (-2.1%18), inflation at 9.9% per year19, the basic interest rate at 14,25% (Selic²⁰) and unemployment growth (8.6%)²¹ – Poupança has suffered continuous net outflows (difference between deposits and withdrawals) throughout the first 10 months of 2015, totaling BRL 54 billion (a net loss of BRL23.4 billion by the end of Oct/2015). Yet, although the return on deposits is negative relative to inflation (as well as to other investment options that pay market rate returns) SBPE still keeps roughly BRL 500 billion in deposits. The accumulated losses once again revived arguments that SBPE should be deregulated in relation to its housing finance obligations, but never disputed the fact that interest rates paid to depositors are kept far below market rates, allowing banks to collect cheap funding.

As public banks, notably CAIXA, become much leveraged, with 75% of total deposits into housing finance, they have imposed more restrictive conditions – higher interest rates²² and lower LTVs. Their movement was immediately followed by private banks, even though they have kept their housing credit portfolios around 38% of total savings collected. Consequently, FGTS has been under pressure to provide more financing for account holders with higher incomes, as compensation for SBPE's shrinking.

Throughout the last 45 years, although FGTS has been paying only 3%+TR to account holders, regardless of inflation and Selic's movements, interest rates paid by borrowers have been relatively high, starting at 8,16%+TR, thus limiting the benefits created by the collection of deposits at such low rates. Studies conducted for the national housing plan called attention to the high spreads charged by FGTS' operator [CAIXA] and when PMCMV was enacted, in 2009, spreads went down but just 1 percentage point. Thanks to that decrease coupled with extra indirect subsidies – that have been provided since 2004 but were enlarged by PMCMV in 2009 - borrowers now pay interest rates between 5%+TR and 8.16%+TR, progressively according to the fam-





ily's monthly incomes. Also, FGTS had been better targeted to lower income families: non depositors could only obtain financing from its funds if the family's monthly income does not exceed BRL 5,400,00.

The new PMCMV phase, just announced, has raised FGTS's interest rates for families with incomes of BRL 2,350 or higher and has allowed financing to families with incomes up to BRL 6,500.00²³. Also, a new draft law proposes that returns paid to FGTS deposits be raised to SBPE's level – from 3% + TR to 6% + TR. The latest version of it, under scrutiny by the legislative body, establishes gradual increases

until 2019, when FGTS would be remunerated in equal terms to *Poupança*.

3. Housing needs and projected demand

According to Brazil's most recent census of 2010, the total population is 190.7 million, 85% located in urban areas²⁴. The 2013 National Household Sample Research [PNAD]²⁵ estimates there are over 64 million families in Brazil, 83% of which had monthly incomes up to BRL 5,400.00 (the previous cap to access FGTS financing)²⁶. Another 2% declared that they had no income at the time of the interview and another.

 $^{^{18}}$ In the 1st semester of 2015, compared to the same period in the previous year (IBGE).

¹⁹ IPCA – 12 month inflation rate in Nov/2015.

²⁰ Nov/2015 (Central Bank).

²¹ May-July/2015 (IBGE).

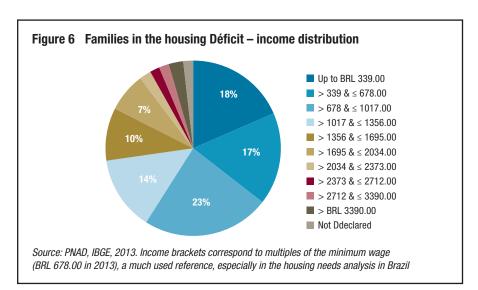
²² Justified by the fact that the mix of funding with LCIs have raised costs.

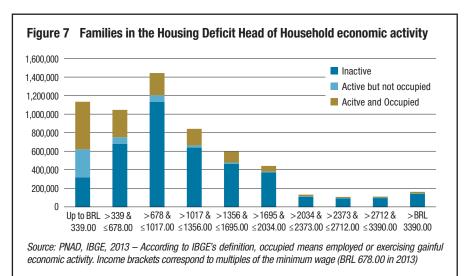
²³ Incomes from BRL 2.350 to BRL 2,700.00 will pay 6%+TR, from BRL 2,700.00 to BRL 3,600.00, 7%+TR, and incomes higher than 3,600.00 will now pay 8%+TR. Changes announced on September 10th, 2015.

²⁴ IBGE

²⁵ Pesquisa Nacional por Amostra de Domicílios, performed yearly by IBGE.

²⁶ As mentioned, recently altered to BRL 6,500.00.





In 2009, the official assessment of housing needs²⁷ indicated a deficit of 5.6 million units²⁸, highly concentrated among the lower income brackets of the population living in metropolitan regions of the country. By 2012, the deficit had grown, in absolute numbers, to 5.8 million units²⁹, although it has declined relative to the increased housing stock. The latest PNAD [2013] provides estimates³⁰ for the socio economic profile of the families included in the housing deficit: 58% have

incomes at or below BRL 1,017.00 [1.5 Minimum Wages]³¹. That means a considerable portion of families in need of housing show very limited capacity to afford any housing expenditures. Moreover, 9% of families declared that they had no income, at the time of the research interview³², a much larger proportion of the 2% found in the entire population. Also, the head of the household level of economic activity and occupation is quite low for families with the lower incomes.

confirming the assumption that those families could not qualify for long term credit.

Further updated research shows that amongst low income families participating in the Minha Casa Minha Vida Program, Faixa I33 – incomes up to BRL 1,600.0034 - the impact of housing expenditures is quite large for the lower income groups, even though installments are subsidized to correspond to only 5% of gross monthly income. In the first 4 income deciles, housing expenditures - installment, condominium taxes, water and electricity - represent 37, 31, 24 and 27% of family's monthly incomes35. Thus, despite highly subsidized installments, the income committed to housing turns out to be high due to the limited incomes, coupled by the fact that condominium type of developments at peripheral locations have been quite common in the PMCMV and the addition of condominium taxes has increased the burden of total housing expenditures.

The challenge of promoting access to housing encompasses not only the accumulated needs, but also the new demand generated each year. Studies developed in 2007, included in the National Housing Plan [PLANHAB]36, estimated the need for 18.3 million units between 2012 and 2023. This new demand would be highly concentrated in the metropolitan regions of the country, although significant growth in some small towns, due to the dynamics of economic growth patterns, was also predicted. Yet, the income distribution of those who make up future demand is hard to forecast. While until 2013 favorable macroeconomic conditions had translated into real income growth and upward mobility in the income pyramid³⁷, reducing the gap between rich and poor, the economic recession currently faced by the country suggests this trend may be threatened by inflation and unemployment during the next couple of years.

Together, the accumulated needs and new demand comprise a considerable challenge for the country. The relevant question is: how many of those families will be able to qualify for housing loans to become home owners?

²⁷ The definition of deficit consists of the sum of replacement and increment and therefore expresses the need to expand the housing stock. It includes precarious units and inappropriate residential places, families sharing a home unwillingly, high rent costs (over 30% of household income limited to 3 MWs) and high density rental units. Fundacão João Pinheiro [FJP], 2008.

²⁸ See Magalhães Eloy and Paiva, 2011.

²⁹ Fundação João Pinheiro, 2014.

³⁰ Schor, Magalhães Eloy e Rosalino, not yet published. Calculations based on PNAD 2013 data and following the official methodology proposed by Fundação João Pinheiro [FJP]. Their definition of deficit consists of the sum of replacement and increment and therefore expresses the need to expand the housing stock. It includes precarious units and inappropriate residential places, families sharing a home unwillingly, high rent costs (over 30% of household income limited to 3 MWs) and high density rental units. FJP, Déficit Habitacional no Brasil 2008, at http://www.fjp.gov.br/index.php/servicos/81-servicos-cei/70-deficit-habitacional-no-brasil.

 $^{^{\}rm 31}$ The minimum wage in 2013 was BRL 678.00.

³² PNAD's reference month is September, 2013.

³³ PMCMV Faixa I, different from the scheme based on FGTS, does not involve credit. It comprehends social housing production, entirely subsidized by federal government budget, given to families with incomes up to BRL1,600.00, selected by the municipalities. Housing price limits vary according to regions but the beneficiaries are required to pay installments that correspond to 5% of gross family income – varying from BRL 25.00 up to BRL 80.00 – for 10 years. No interest rate applied. No balance at the end of term.

³⁴ The new phase of PMCMV, announced on Sept 10th, 2015, raises payment percentages on that scheme up to 20% of monthly income, according to new income brackets defined. Income cap to participate has also been raised from BRL 1,600.00 to 1,800.00.

³⁵ IPEA, 2015

³⁶ Brazil's Ministry of Cities, 2009. Based upon Cedeplar/UFMG. Projeção da demanda demográfica habitacional, o déficit habitacional e assentamentos subnormais. 2007. This study projected population in each state of the country, using data related to mortality, migration.

³⁷ See NERI, 2012.

The next section will present simulations that indicate that the answer to the above question depends greatly on the availability of credit at low interest rates.

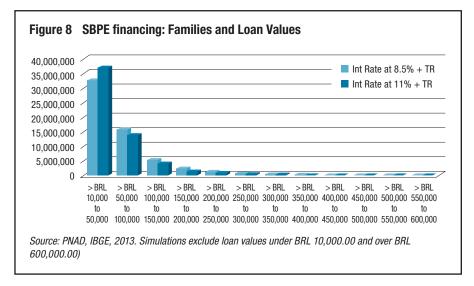
4. Access to housing finance

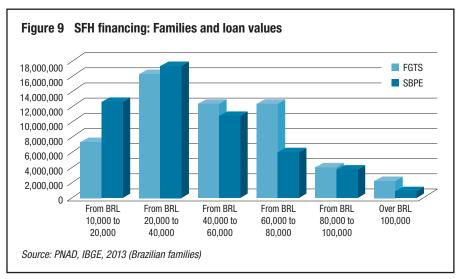
In order to verify the ability of Brazilian families to access housing finance, the installment to income ratios need to be estimated. The 30% rule of thumb, largely used for housing finance estimates, is replaced here according to some empirical evidence. The first evidence comes from a study conducted by CAIXA (responsible for around 70% of the market share of housing finance in the country), on its own loans: average income commitments at FGTS are 15% and a little higher for SBPE, at 17%. Also, the families' budget sample research (POF 2008/2009), conducted by IBGE, shows that income commitments vary between 10 and 22%, for incomes ranging up to BRL 5,400.00 (FGTS financing limit). Although POF data does not inform where the declared installment is located in the length of the mortgage term³⁸, it also indicates that the 30% rule is quite high in relation to the Brazilian mortgage market.

Moreover, a recent resolution (CMN N° 4.271/2013) mandates housing finance agents to adopt more restrictive criteria rules for assessing the repayment capacity of the borrower and for mitigating credit risk.³⁹

While SFH rules establish a cap of 12% for interest rates on earmarked housing finance, they had been as low as 7.5% in 2013 in SBPE. However, as already briefly mentioned, this downward trend, led by CAIXA since late 2008, has recently been reversed, accompanying the upward trend of SELIC. In both instances, other banks (commercial ones that collect *Poupanca* deposits) followed. As a result, SBPE/SFH rates now start around 9.5%+TR40 and SBPE market rates at 11%+TR. It must be noted that SBPE's regulation allows banks to comply with requirements partly by offering real estate credit at "market rates" funded by Poupança's low cost deposits. SFI's funds, on the other hand tend to provide credit at higher rates referenced in the market.

The effect of this upward trend on affordability was measured by simulating financing with families' income data from PNAD/IBGE (2013), and the results show that as interest rates rise,





fewer families are able to afford financing and those that still qualify loose leverage, obtaining lower loan amounts. Median loan values drop from BRL 46.3 thousand, when interest rate is at 8.5%, to BRL 43.0 thousand and BRL 39.0 thousand, at 9.5% and 11% rates, respectively. At the third quartile, loan sizes drop from BRL 80,6 thousand to BRL 67.3 thousand when interest rates increase from 8.5% to 11%. This loss of leverage is demonstrated in the next figure. Also, around 540 thousand families are excluded when interest rates move from 8.5%+TR to 11%+TR.41

Those simulations used the Constant Amortization System [SAC], installment to income ratios stressed at 25%. Joan terms of

30 years, interest rates as stated⁴². Credit insurance premiums [MIP and DFI] were not included.

The affordability impact of the difference between FGTS and SBPE financing interest rates suggests that interest rates around 5 and 6% provide much greater access – including almost around 3 million families. The next figure demonstrates the lower incomes' sensitivity to higher rates⁴³.

The comparative analysis between FGTS and SBPE shows the probable impacts of the rise in FGTS credit interest rates. Moreover, it also indicates that the two funds should be regulated in a more complementary manner, especially considering families with incomes around 5,000.00.

³⁸ The majority of mortgages in Brazil are contracted under the Constant Amortization System – installments decrease along the loan term. See Magalhães Eloy and Paiva 2011.

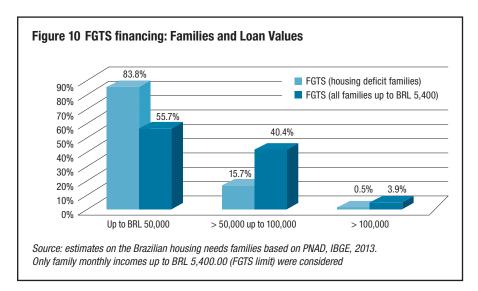
³⁹ It determines that the monthly flow of borrower's income and expenses be verified, in order to assess the actual borrowing capacity of the mortagee, instead of using an arbitrated percentage (commonly 30% or less) to determine monthly commitment.

⁴⁰ There are 15 banks, 2 public and 13 private that collect Poupança. Only 5 are relevant in the SFH earmarked housing finance circuit.

⁴¹ Considering that financing values under BRL 10,000.00 would not qualify.

⁴² It also includes the administration monthly tax of BRL 25.00, charged by banks, additional to the spread.

⁴³ The parameters used: the French amortization system (Price), installment to income ratios at 15% for FGTS and 17% for SBPE (CAIXA's figures), loan terms of 30 years and interest rates as stated. In the case of SBPE, the administration monthly tax of BRL 25.00 was added. Credit insurance premiums [MIP and DFI] were not included. Income range was limited to that of FGTS, in order to allow for comparisons. As stated before, SBPE's regulation does not impose income caps.



Finally, within FGTS credit conditions, a comparison is established between the entire group of Brazilian families and families considered as lacking housing. It demonstrates, as previously inferred, that the housing needs group has a much smaller capacity to qualify for housing finance, indicating the limits of housing finance in the Brazilian income structure and calling for alternative and innovative ways to promote housing access, other than ownership. The median financing value among families in the housing needs group is only BRL 27.6 thousand (as compared to BRL 44.4 thousand for the entire population of families). At the third quartile, the financing value drops from BRL 66.3 thousand to BRL 41.5 thousand.

5. Final remarks

Much has been said about the factors behind mature housing finance systems and generally arguments focus on funding mechanisms and the regulatory framework. The Brazilian mortgage market is still timid in comparison even to many smaller developing economies. Yet, the country has advanced a lot in the expansion and diversity of funding mechanisms and made significant improvements in its regulatory framework in the last decades. New market funding mechanisms bonds and securities – have been regulated, greatly expanding funding sources that total over BRL 300 billion. The improvements made to the regulatory framework have been quite remarkable, as many previous studies have discussed. Thus, what has been limiting a further expansion of the housing finance systems in Brazil? What has prevented the country from reaching a ratio of housing credit to GDP closer to other developing countries such as Chile (20%) and Malaysia (31%)⁴⁴?

The answer to those questions is certainly related to the country's income distribution. The limited capacity of a considerable portion of Brazilian families to afford housing expenditures, combined with restrictive financing conditions, particularly high interest rates⁴⁵, compromises housing credit expansion despite funding availability and better regulation. In this scenario, the below market rates granted under SFH become crucial to expand housing finance downmarket.

The combination of income growth (and inequality reduction) with more accessible credit conditions – lower interest rates, longer terms and larger LTVs 46 – coupled with extra subsidies have promoted the boom of housing credit and production since 2005. As Magalhães Eloy and Cagnin (2014) have argued, while there has been a major expansion of housing finance through SFH in the last decade, so far no evidence can be found of increasing complexity of credit and debt relations⁴⁷, indicating that there is no threat to the sustainability of the finance system as seen in the subprime crisis or as already experienced in the country in the 80's. On the contrary, SFH regulation does not leave room for the design of unconventional contracts and innovations that enhance borrowers' leverage. The provision of housing finance in Brazil remains guite conservative.

If there are no reasons to fear a credit bubble, there is however, much to be done regarding housing affordability in Brazil, especially considering current trends. Between 2005 and 2013, the increased credit supply and affordability, coupled with generous government subsidies and ambitious housing production goals without proper planning⁴⁸ or adequate linkages to land and urban policies, allowed for the steep rise in home prices, progressively reducing overall affordability. It is not surprising, therefore, that despite SFH's revamp and the huge subsidies spent, housing backlogs have not been reduced in absolute terms.

As prices begin to settle at lower levels, the reversal of credit tendencies once again hampers affordability, signaling the exclusion of families from housing credit and the ownership dream. Nonetheless, the recent announcement made, regarding the next phase of PMCMV, shows that the Brazilian government still believes that ownership is the only way to promote housing access, despite all evidence that indicates the scarce financial means of a significant number of families to cope with housing expenditures.

Until Brazil can lower and stabilize, in the medium run, market interest rates and achieve a better income distribution, it will need to rely on SFH's traditional deposit funding sources to promote down market access to housing finance. Yet the country should make a more optimal use of its subsidized system than it has been doing so far, in terms of both population targeting and aligning financing rates to the opportunity cost created by SFH's funding, as Magalhães Eloy (2013) has analysed. Recent trends, both in SBPE and FGTS, suggest, however, the opposite.

The results of credit simulations presented here indicate that there is a crucial affordability issue that deserves better attention from policies and regulators. At the same time, limitations and risks inherent in SFH must be recognized and mitigated, together with the phasing out assistance to families that can afford market rates and could access financing through SFI.

⁴⁴ Warnock and Warnock, 2012.

⁴⁵ As well as low LTV ratios (around 65%) and the prevailing use of the Constant Amortization System [SAC], since the Price system has been the subject of litigations in the country. On this subject, see Magalhães Eloy and Paiva (2011).

⁴⁶ The National Monetary Council Resolution # 4271 of 2013, set the LTV limit at 80% within SFH, expandable to a maximum of 90% solely under a constant amortization system (SAC). BCB, 2014.

⁴⁷ Magalhães Eloy and Cagnin, 2014.

⁴⁸ The National Housing Plan [Planhab] was abandoned. It must be noted that alongside with Planhab, in 2008, state and local governments were stimulated to develop local plans that were basically also abandoned when PMCMV was created with its imposed centralized logic. The previous plan to transfer funds from the national [FNHIS] to local housing funds was also made null.

The emphasis of this paper was on the crucial importance of below market rates to promote housing affordability in Brazil, even though it recognizes that affordable credit alone will not do the trick. A more comprehensive approach must be undertaken. The analysis of families in housing needs shows that the "credit to ownership" model is largely irrelevant to a significant proportion of those families. There is a need for alternative strategies to promote their access to decent housing.

The need to provide housing access to over 20 million families (backlog and new demand) in the next decade poses, indeed, a huge challenge for Brazil while the adequate functioning of its financing systems remains decisive.

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Iceland: developments in the housing and mortgage markets

By Sveinn Agnarsson

1. Introduction

Like many other countries, Iceland experienced a significant boom in the housing market in the first years of the 21st century. After the crisis of 2008, the market crashed, but has since recuperated. In this article we discuss the developments leading up to the Great Recession, and the various relief measures undertaken by Icelandic authorities and their impact, as well as recent trends in the Icelandic market.

2. Pre-crisis boom

Iceland is a sparsely populated island in the north Atlantic, considerably larger than Ireland. The country has only 330,000 inhabitants, two thirds of which live in greater Reykjavik. Outside the capital, most of the towns and villages are quite small and the real estate market consequently rather thin. In what follows we therefore concentrate on the property market in the capital.

As in most other parts of the world, the Great Recession had a paralysing effect on the Icelandic property market. The crisis – or The Crunch as it known in Iceland – broke out in October 2008, when the country's three largest commercial banks failed, bringing down the rest

of the financial system, and plunging the real economy into a deep recession. After growing on average by 7.0% in real terms during the period 2004-2007, the economy contracted by 4.7% and 3.6% in 2009 and 2010, before turning the corner in 2011. The post-crisis growth has averaged 2.2%, mostly due to enormous increases in tourism. In 2010, private consumption was 16% lower than in 2007 in real terms, but has since rebounded. The drop in investment, not least construction, was both larger and more long-lasting, with investment declining by two thirds between 2006 and 2010. Most of the drastic drop can be traced to investments in heavy industry and associated electricity generating facilities in the east of Iceland which reached their high point in 2006.

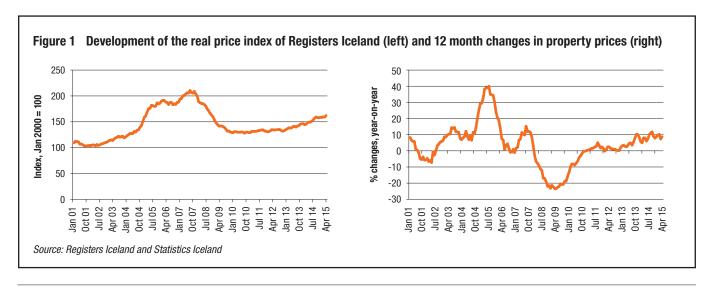
The clearest manifestation of the pre-crisis boom was observed in the markets for various assets, not least property. The real price index of Registers Iceland, which measures the price developments of all residential property in the capital area, rose by 95% between January of 2001 and October 2007, before falling by 39% during the period October 2007 – April 2010. Since then real market prices have risen by 26%.

Following years of a relatively stable and strong exchange rate, the free-floating Icelandic krona

depreciated heavily against other currencies in the 12 month period before and immediately following the crunch. By November 2008, it had fallen by almost two thirds against the Japanese yen, more than half against the US dollar and Swiss franc and slightly less against the euro. As the price of imports rose, the consumer price index (CPI) started to move upwards. Inflation rose from 5.0% in 2007 to 12.4% in 2008 and 12.0% in 2009.

3. Indexation

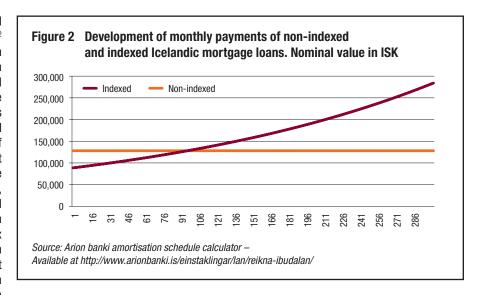
The depreciation of the krona and rising price level had disastrous consequences for homeowners as nearly all mortgages were either indexed to the CPI or linked to foreign currencies. Indexation had become widespread in the second half of the 20th century, with the country struggling to cope with a high and volatile price level. At first, some form of indexation was mostly applied to wages, but since 1955 the procedure has been practiced for certain long-term obligations.1 However, in 1979, after a decade of unusually high and variable inflation, a new system of indexation was introduced which provided a general policy for loans and savings. The main aims were to put an end to transfers of wealth from lenders to borrowers that the previous years of negative real interest rates had



¹ Jónsson, B. B. (1998). Verðtrygging lánsfjármagns og vaxtastefna á Íslandi [Indexation of capital and interest policy in Iceland]. Reykjavik: Central Bank of Iceland.

brought about, and diminish the excess demand for loans that had characterised recent years.2 According to the current rules on indexation set by the Icelandic Central Bank, indexation is only allowed on deposits that are bound for three years or longer and on loans for five years or longer.3 In Iceland, indexed mortgages were initially tied to a specially constructed loan index, which at first was composed of the cost-of-living index and the building cost index, but was later also linked to the wage index. Since April 1995, all indexed obligations, including home mortgages, can only be linked to the consumer price index.4 The indexation component is calculated from the CPI index using the Janus rule which applies past inflation and a future estimate of inflation to arrive at a 12 month weighted average.5 This is done in order to mitigate the effect of large short-term variations in prices as measured by the CPI. Conversely, the method prevents the borrower from benefiting from short periods of deflation. Indexed mortgage loans have a lifetime of either 25 or 40 years and are structured as annuities, with equal monthly payments. The repayment schedule for the loans results in a varying period of negative amortisation, the length of which depends both on the duration of the loans and the rate of inflation.⁶ The structure of the loans is such that the indexation component results in principal growth from the day the loan is issued. However, during periods of low inflation, below 3% for a 25 year loan and below 1.5% for a 40 year loan, borrower repayments can overcome the negative amortisation during the first part of the loan.7 As the indexed mortgage loans in Iceland are annuities, the real value of monthly repayments at each point in time are the same over the remaining lifetime of the loan. The real burden of the loan is therefore spread evenly out over the duration of the loan. By contrast, the nominal value of monthly repayments of nominal fixed-rate mortgages, which are structured as annuities, remains the same throughout the lifetime of the loan. In this case, the real repayment burden is much heavier in the beginning but through time inflation will reduce the real value of later monthly repayments.

This is demonstrated in Figure 2 which compares the repayment schedules of typical 40 year indexed and non-indexed mortgage loans in Iceland. The repayment schedule for the non-indexed loan is here completely horizontal, as



it has been assumed that the nominal interest of 7.25% is fixed throughout the duration of the loan. This is a slightly unrealistic assumption as banks are presently only offering fixed rates for 3-5 years. The repayment schedule for the indexed loan is based on the assumption of a 3.0% annual inflation and a fixed 4.3% real interest rate. The upward sloping curve represents the nominal value of monthly payments of the indexed loans. This curve has a positive slope, but it should be remembered that the real value is the same for each monthly repayment. The figure clearly reveals that at first, monthly repayments of the non-indexed loan are much higher than of the indexed loans. The difference is around ISK 80,000 (€ 540), or 32%. Over time, this difference grows smaller and after almost 13 years the monthly nominal repayments of the loans are equal. Thereafter, the repayments of the indexed loan grow larger. In nominal terms the last repayments of the indexed loans are ISK 314,000 (€ 2100) higher than of the nonindexed loans, a difference of 123%.

Households that have taken on a nominal mortgage may therefore struggle at first, but will find the loan burden lighter with the passage of time. The initial monthly repayments may, however, be so large that they will effectively prohibit low income households from entering the market. The availability of indexed loans with lighter initial repayments may therefore be essential for first-time house buyers, and households with limited funds. There can, however, be little doubt that the relatively easy access to indexed mortgage loans in Iceland has led individuals and households to take on too much debt.

Indexed loans are, by construction, sensitive to inflation and can quickly balloon if the price level starts to rise, as was the case in Iceland following the crisis. This is revealed in Figure 3 which compares the amortisation schedules of indexed ISK 40 million (€ 267,000) mortgages with annual inflation of 1.5%, 2.5% - the inflation rate target of the Central Bank - and 5%. While a 5% inflation rate may seem high in terms of international comparison, it should be noted that during 2008-2014 inflation averaged 6.4% and during the years 2000-2014 5.5%. Although inflation may have subsided to 2% in 2014, it would take a brave man to bet against prices rising on average by more than that during the lifetime of a 40 year mortgage, the most common length of a mortgage loan in Iceland. The amortisation schedules reveal that in all cases, even with inflation as low as 1.5%, the nominal value of the loans increases before starting to decline. In the case of 1.5% inflation, the mortgage only falls below the original nominal value of ISK 40 million late in year 16, in the case of 2.5% inflation this only occurs in the middle of year 28, and in the case of 5.0% inflation in the middle of year 37. The nominal value of the loan with 5.0% inflation peaks in year 25 at nearly ISK 79 million, almost double the original value of the mortgage.

² Ólafur Jóhannesson (1979). The presentation of the bill on inflation-indexation of savings and loans, 19th March 1979, Althingi, web page, http://www.althingi.is/altext/gomulraeda.php4? rnr=2602<hing=100&dalkur=3287

³ Central Bank of Iceland (2001). Rules on Price Indexation of Savings and Loans. Available at: http://www.sedlabanki.is/uploads/files/13.%20Price%20Indexation%20of%20 Savings%20and%20Loans.pdf.

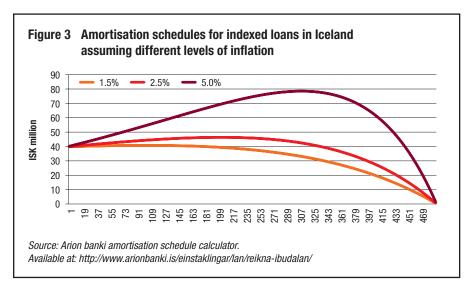
⁴ Act nr. 12/1995. Lög um vísitölu neysluverðs. Available at: http://www.althingi.is/lagas/142/1995012.html.

Mallett, J. (2013). An examination of the effect on the Icelandic banking system of verötryggö lán (indexed-linked loans). Icelandic Institute for Intelligent Machines, Tech Report IIMTR-2013-01-001. Available at: https://www.researchgate.net/publication/235633200_ An_Examination_of_the_effect_on_the_Icelandic_Banking_System_ of_Vertrygg_Ln_%28Indexed-Linked_Loans%29.

⁶ Mallett (2013).

⁷ Mallett (2013).

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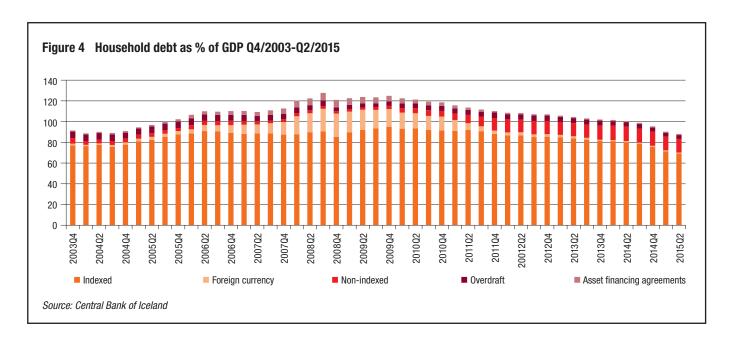
4. Debt and distress

The shock that hit households following the crisis in the autumn of 2008 was in essence twofold. On the one hand, the rise of the nominal value of outstanding mortgages and fall in house prices led to declining or even negative equity, while on the other hand the higher costs of servicing mortgages squeezed households with reduced earnings and earning potential.

Icelandic households were deep in debt even before the pre-crisis boom took hold of the nation. As illustrated in Figure 5, total household debt amounted to 91.5% of GDP in late 2003, but began to increase almost immediately after the commercial banks entered the mortgage market in 2004. Up until then, the state-owned Housing Financing Fund [HFF] had almost monopolised the market, with the country's many pension funds playing second fiddle. HFF had been formed in 1999 with the merger of the State Housing Board, the State Building Fund and the Workers' Building Fund.8 All mortgages offered by HFF and the pension funds were indexed 25 or 40 year loans, and the banks' entrance did at first not change the market in any fundamental way as indexed loans remained the norm. The banks did, however, offer more favourable real interest rates in the beginning which the HFF was forced to match, and also up to 100% mortgage rates which the HFF was unable to fully match, although it did go as high as 90%. But

in 2006 the banks introduced an innovation, currency-linked mortgages carrying considerably lower nominal interest rates than had hitherto been available. The loans were either denominated in low-interest currencies such as the Japanese yen or Swiss franc or denominated in Icelandic kronas but linked to foreign currencies, a difference which was to turn out to be crucial in the future. Icelandic homeowners embraced this novelty in emphatic fashion. By the end of 2007, foreign currency mortgages had increased from 2.0% of all household debt in the fourth quarter of 2003, to 10.7%, Two years later that proportion had increased even further to 18.5%. Total household debt then amounted to almost 125% of GDP, the highest private debt level of any country in Europe and the US.

The increases in nominal debt brought about by the depreciation of the Icelandic krona and increased inflation, coupled with the fall in real estate prices, led to a sharp decline in the equity levels of homeowners. This development is traced out in Figure 5 which shows equity as a share of the value of real estate for homeowners as a whole, as well as for the two lowest income deciles. Property values correspond to the annual assessments conducted by Registers Iceland for taxation purposes and represent the market value as of November of the previous year. Prior to the boom, the equity level amounted on average to a little over 60%, while lowest income earners were holding negative equity up until 2003. The equity position of all households peaked at 67% in 2005, but



⁸ Agnarsson S. and Jóhannesson S. (2011). The Icelandic housing market: Recovering after turbulent times. Housing Finance International, 26(2), 41-

fell by 18.5 percentage points over the next five years. The wealth situation of low income earners deteriorated even more. The position of those in the lowest decile reversed from positive equity of 10.1% in 2005 to -25.5% in 2010, while those in the second lowest decile witnessed their situation deteriorate from having positive equity of 16.2% in 2006 to a negative equity of 6.9% in 2010.

With the crisis spreading from Wall Street to Main Street, unemployment more than doubled from 3.0% in 2008 to 7.2% and 7.6% in 2009 and 2010, and private consumption fell in real terms by almost 16% between 2007 and 2010 This inevitably led to arrears becoming more widespread and households in general having more difficulties in making end meet, not least servicing housing costs. Arrears on mortgage or rent payments increased from 5.5% in 2008 to 7.1% the following year and 10% in 2010, with households consisting of single adults with a child or children most severely affected. More families also found housing costs a heavy burden. Thus whereas, only 9.6% of all households had been of this opinion in 2007, the share had risen to 19.2% in 2011. By then, a third of all single adults with a child or children had difficulties meeting housing costs.

5. Measures and court decisions

Immediately following the outbreak of the crisis in October 2008, the Government initiated a moratorium on foreclosures, while financial institutions where asked to freeze instalments and interest payments on foreign-exchange linked mortgages. While these were not actual debt restructuring measures, they provided households the opportunity to reassess their financial position. More concrete steps were taken in November, when parliament passed an act that allowed for payment smoothing of indexed mortgages.9 Although the loans - and thus the outstanding balance - continued to be linked to the CPI, the actual payments were linked to a special mortgage payment adjustment index computed by Statistics Iceland. The new index was based on the monthly wage index, but weighted by the level of employment as calculated by the Directorate of Labour. As wages were at this time rising slower than the general price level, this translated into a lower cost of servicing mortgages. The difference between the actual and implicit monthly payments were posted to a special account and paid at the end of the loan period. The duration of the loan could thus be increased up to a

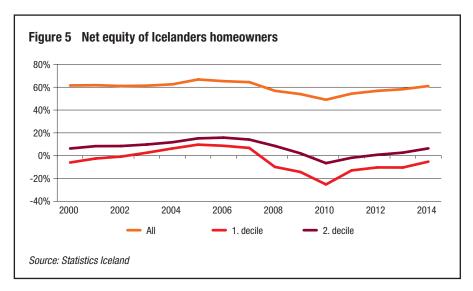


Table 1 Percentage of households in arrears with mortgage or rent payments and percentage of households that regarded housing cost a heavy burden

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | |
|---------------------------------------|------|------|------|------|------|------|--|
| Arrears on mortgage or rent payments | | | | | | | |
| All households | 5.7 | 5.8 | 5.5 | 7.1 | 10 | 10.1 | |
| Households without children | 3.8 | 4.9 | 5.0 | 5.5 | 7.1 | 8.3 | |
| Households with children | 8.2 | 7.0 | 6.2 | 9.5 | 14.0 | 12.9 | |
| Single adult with a child or children | 15.6 | 12.1 | 10.1 | 18.1 | 22.0 | 17.6 | |
| | | | | | | | |
| Housing cost is a heavy burden | | | | | | | |
| All households | 9.9 | 9.6 | 11.8 | 15.0 | 16.4 | 19.2 | |
| Households without children | 9.8 | 8.5 | 11.2 | 13.0 | 12.8 | 17.0 | |
| Households with children | 10.0 | 11.0 | 12.8 | 17.8 | 21.4 | 22.6 | |
| Single adult with a child or children | 19.5 | 19.2 | 27.2 | 30.5 | 33.8 | 31.4 | |

Source: Statistics Iceland

maximum of three years. In March 2009, similar arrangements were made for foreign-exchange linked mortgages.

HFF also increased the number of debt restructuring measures available to households and the fund was given permission to rent out property that it had acquired through foreclosures and forced auctions.10 Payouts from third pillar (private) pensions were also made possible and later expanded, and government mortgage interest subsidies increased. In cases where the above measures were inadequate, temporary mitigation (up to five years) of residential mortgage payments could be granted.11 In October 2009, new laws were passed on measures for individuals, households and corporations due to the banking and currency collapse that provided a framework for decentralised debt restructuring.12

Although households had freely embraced the new foreign currency nominated mortgages the banks began to offer in the years immediately preceding the crisis, the happiness turned sour when the value of the Icelandic krona began to tumble and the nominal value of the loans increased dramatically. Doubts began to emerge whether these loans were indeed legal, as Icelandic laws clearly stated that indexed loans could only be linked to the consumer price index compiled by Statistics Iceland. In June 2010, the Supreme Court found that it was illegal to index payments denominated in Icelandic krona to changes in currency exchange rate.13 Although the ruling concerned motor vehicle leasing payments, subsequent rulings applied the same principles to other kind of household loans, including mortgages. However, loans that had been granted in foreign currency were deemed to be legal. In subsequent cases,

⁹ Act no. 133/2008. Available at: http://www.althingi.is/altext/stjt/2008.133.html.

¹⁰ Act no. 138/2008. Available at: http://www.althingi.is/altext/stjt/2008.138.html.

¹¹ Act no. 50/2009. Available at: http://www.althingi.is/lagas/144b/2009050.html.

¹² Act no. 107/2009. Available at: http://www.althingi.is/lagas/nuna/2009107.html.

¹³ Supreme Court ruling 153/2010. Available at: http://haestirettur.is/domar?nr=6714&leit=t.

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the Supreme Court ruled that interest on these loans should be calculated in accordance with general interest on ISK-denominated banks loans that are published on the website of the Central Bank of Iceland. In effect this meant that the principal of the loan was set at the original value of the loan in Icelandic krona and monthly instalments and interest payments then calculated backwards and compared to those that had already taken place. As most of the loans had been issued before the Icelandic krona started to depreciate in 2007, the debt position of households improved significantly.

Later in the summer of 2010, the Government created the office of the Debtor's Ombudsman to oversee and provide advisory and mediation services related to debt mitigation procedures. ¹⁴ A new act on debt mitigation for individuals also came into effect that was intended to enable individuals in severe financial difficulties to restructure their finances and establish a balance between their debts and payment capacity so that debtors could realistically fulfil their obligations for the foreseeable future. ¹⁵

In the autumn of 2010, the Government initiated a special inquiry into the payment and debt problems of households, focusing on the use of the measures offered so far and their effectiveness. By then it was clear that the Supreme Court rulings would significantly change the situation for households holding loans that had been declared illegal, but that households holding either foreign currency loans that had been ruled legal or indexed mortgages linked to CPI would continue to face difficult times. Following this inquiry, the government introduced new measures intended to aid households facing negative equity.16 In particular, debtors were offered the option of reducing their mortgage to 110% of the value of the property, based on assessed tax value or market value, whichever was higher. However, the reduction of mortgages could not exceed ISK 4 million (€ 26,700) for individuals and ISK 7 million (€ 46,700) for couples or single parents. However, in exceptional cases the ceilings could be raised to up to ISK 15 million (€ 100,000) for individuals and ISK 30 million (€ 200,000) for couples or single parents. The voluntary debt mitigation framework already in existence was also expanded. The temporary increase in tax rebate on interest which had been in force in 2009 and 2010 was also extended, and a new a special interest rebate introduced for the years 2011 and 2012.

While the Icelandic Act on Interest and Price Indexation clearly authorises linking mortgages to CPI, doubts had emerged whether indexed loans were compatible with Directive 87/102/ EEC on consumer credit and Directive 93/13/ EEC on unfair terms in consumer contracts. In 2014, the EFTA Court delivered two advisory opinions in cases pending before Icelandic courts. In the first case, it had been argued that the indexation provision of a mortgage loan had not been individually negotiated, that the contract terms were unfair and that the indexation mechanism had not been fully explained in the bond and that the individual in question had therefore not been able to fully grasp the financial risk and consequences of high inflation. In its advisory opinion, the court stated that Directive 93/13/EEC does not generally prohibit indexation of mortgage loans and that European Economic Area [EEA] States¹⁷ could allow financial institutions to offer consumers mortgage loans indexed to a pre-determined index, such as the Icelandic CPI.¹⁸ The court also explained that it was for referring courts to assess whether the term at issue was unfair, had been negotiated individually and whether a contract term relating to the indexation scheme of the loan had ben explicitly and comprehensively described to the consumer. In the second case, the EFTA Court was requested to advise whether the practice of basing the calculation of total borrowing costs and annual cost percentages on 0% inflation, and not on the known rate of inflation on the date when the loan was taken was compatible with Directive 87/102/EEC. In its ruling, the court concluded this practice was not compatible with the directive, but then stated: "Provided that the level of protection established by the Consumer Credit Directive, as interpreted by the Court, is not compromised, it is for the national court to assess, having regard to all the circumstances of the case, the legal consequences of and the remedies for such incorrect information. ... In that assessment, the national court should take into account whether the consumer in question is an average consumer, who is reasonably well-informed, observant and circumspect."19 Based on these EFTA Court decisions, the Supreme Court has since ruled legal the Icelandic practice of linking

mortgage loans to the CPI, and that the term of issues are not unfair.²⁰ In its latest ruling, the Supreme Court found that although there may have been a discrepancy between Directive 87/102/EEC and the Icelandic practice of basing the payment schedules of mortgages on a 0% rate of inflation, this did not constitute enough grounds for the practice to be ruled illegal.²¹ The two Supreme Court rulings have made it clear that there are no grounds for ruling CPI-indexed mortgages illegal, as the practice of indexation is so widespread and well known, and all information regarding calculation of indexed mortgages and the premises on which these are based readily accessible.

Following elections in May 2013, a centreright coalition government was formed by the Progressive Party and the Independent Party. In its platform, the Government stated that it would "address the debt problem of Icelandic households, which has resulted from the unforeseeable increase in the principal of inflation-indexed loans as a result of the financial system collapse. The basic criterion is to achieve a correction to the results of the inflation spike of 2007-2010; to this end both a direct write-down of the loan principal and fiscal actions can be applied."22 The action plan for the Correction (Leiðréttingin), as the household debt relief program was called, was presented in November that same year and mainly consisted of two measures.23 The first was an across-the-board write-down of the loan principal of CPI-indexed mortgages equivalent to the indexation increase exceeding 4.8% which occurred during the period from December 2007 to August 2010. This corresponded to a 13% adjustment to the CPI used for indexation. The maximum amount of write-down per household amounted to ISK 4 million (€ 26,700), but it was estimated that up to 90% of households would not be subject to this cap. However, previous remedies reducing the loan principal from which households had benefitted would be deducted from the amount of the correction. The second part of the Correction allowed households to use private pension payments (third pillar pensions) to pay down their housing mortgages. Income tax payments would be waived on the wage earners' contributions of up to 4% together with the associated 2% contribution of employers. The maximum annual payment amounted to ISK 0.5 million (€ 3,300). This measure would

¹⁴ Act no. 100/2010. Available at: http://www.althingi.is/lagas/nuna/2010100.html.

¹⁵ Act no. 101/2010. Available at: http://www.ums.is/media/annad/Acton-on-debt-mitigation-for-individuals.odf.

Memorandum of understanding on measures to address household debt problems. Available at: http://eng.forsaetisraduneyti.is/news-and-articles/nr/4500.

¹⁷ EEA includes EU-states as well as Iceland, Lichtenstein and Norway,

¹⁸ EFTA Court Case E-25/13. Available at: http://www.eftacourt.int/uploads/tx_nvcases/25_13_Judgment_EN.pdf.

¹⁹ EFTA Court Case E-27/13. Available at: http://www.eftacourt.int/fileadmin/user_upload/ Files/Cases/2013/27_13/27_13_Judgment_EN.pdf.

²⁰ Supreme Court ruling no 160/2015. Available at: http://haestirettur.is/domar?nr=10438.

²¹ Supreme Court ruling no. 243/2015. Available at: http://haestirettur.is/domar?nr=10820&leit=t.

Platform of the Coalition Government formed by the Progressive Party and the Independence Party May 23rd 2013. Available at: http://www.government.is/government/coalition-platform/http:/.

²³ Government Action Plan for Household Debt Relief 30th November 2013. Available at: http://eng.forsaetisraduneyti.is/news-and-articles/nr/7808.

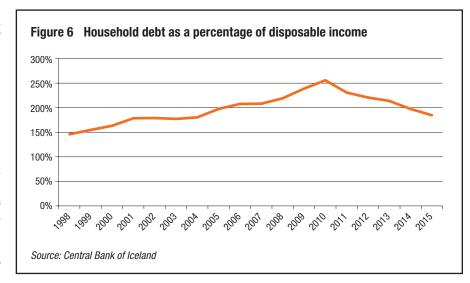
be available for three years. Total costs associated with the Correction were estimated at ISK 150 billion (€ 1 billion). The cost of writing down loans was put at ISK 80 billion (€ 533,000) and was financed by a special bank tax, while the treasury would shoulder the costs of foregone revenue on pension fund payments.

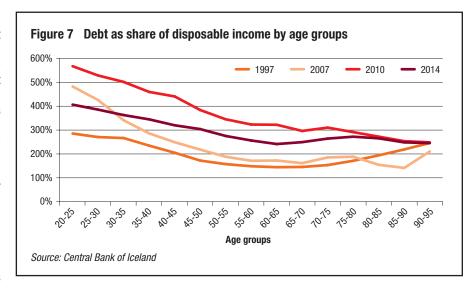
6. Effects on households

The measures undertaken and court rulings have reduced indexed mortgage principal and improved households' debt position. The rulings that mortgages linked to foreign currencies were illegal, has probably reduced outstanding mortgages by ISK 150 billion (€ 1 billion), while direct write-downs - the 110% option total ISK 36 billion (€ 240 million).24 Additional measures have probably improved the situation of households by another ISK 30 billion (€ 200 million). In June 2015, household debt amounted to 88% of GDP, after having fallen by 12 percentage points year-on-year, three points more than it would have fallen without the measures.²⁵ The rise in house prices coupled with the decline in the value of mortgages has increased the net equity of homeowners. By the end of 2014, households' net equity amounted to 61% (see Figure 5 above), but outstanding mortgages of households at the bottom of the income scale still exceeded the value of their property by a margin of 5%.

Household debt as a share of disposable income has decreased even more. As shown in Figure 6, it peaked at 256% in 2010, but had by the second quarter of 2015 declined to 184%. However, this ratio would be much higher or 300%, if households without mortgage debt were excluded.

In Figure 7 we analyse the debt situation in more detail for various age groups and in different years. The blue line at the bottom shows debt as a share of disposable income in 1997, the green line the debt situation in 2007, the light blue line at the top in 2010 and the red line the situation in 2014. In all cases we focus only on individuals with mortgage debt. The figure clearly reveals how much more debt young people took on in the years immediately preceding the crisis, and the dramatic rise of their debt ratio following the crisis, as well as how swiftly that ratio has fallen again. Thus, for individuals aged 20-25, the debt to disposable income ratio rose from 286% in 1997, to 483% in 2007 and 568% in 2010, but was down to 407% in 2014.





The improving health of households is well reflected in the performance of loans granted to households by Iceland's three largest commercial banks and HFF. As shown in Figure 8, in mid-2010 38% of all household loans were performing with the need for restructuring, 43% were performing after restructuring but 19% were non-performing. Non-performing loans are here defined as loans in default for over 90 day, frozen or deemed unlikely to be paid. The cross-default method is used, which implies that if one loan by a customer is non-performing, then all of that customer's loans are considered non-performing.²⁶ The situation eased considerably in 2012 and 2013, but decline in non-performing loans has since lost pace. The number of individuals on the default register. those declared bankrupt, and those subject to unsuccessful distraining measures has also fallen.

At the peak, in July 2013, there were close to 28,300 individuals on the default list but in August 2015 they numbered 25,800. The year-to-year decline was 1,200 or 5%.

Following the crisis, the Icelandic Central Bank began gathering detailed data on individuals and households from various authorities and financial intermediaries. This data was then used for a uniquely thorough analysis of the effects of the crisis on homeowners, as well as the effectiveness of some of the relief measures. In their study, Ólafsson and Vignisdóttir (2012)²⁷ conclude that "forbearance efforts provided temporary relief to a number of households in the immediate aftermath of the banking collapse, and debt rescheduling in the form of payment smoothing lifted almost 3,000 households from distress in

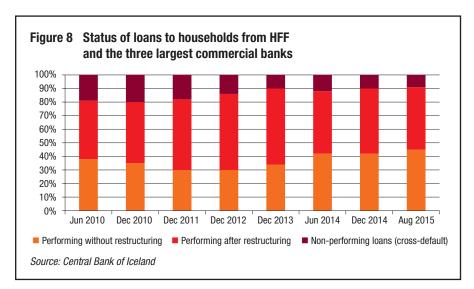
²⁴ Skýrsla Fjármála- og efnahagsráðherra um lækkun höfuðstóls verðtryggðra húsnæðislána (Lögð fyrir Alþingi á 144. löggjafarþingi 2014–2015). [Report of the Minister of Finance and Economic affairs on write-downs of the principal of CPI-indexed mortgages (Presented to parliament in 2014-15)]. Available at: www.althingi.is/altext/pdf/144/s/1486.pdf.

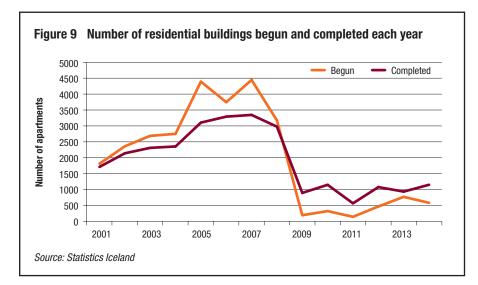
²⁵ Central Bank of Iceland (2015). Financial Stability 2015-2. Available at: http://www.cb.is/library/Skraarsafn---EN/Financial-Stability-Report/2015-2/FS_2015-2_eng.pdf.

²⁶ Central Bank of Iceland (2015).

²⁷ Ólafsson and Vignisdóttir (2012). Households' position in the financial crisis in Iceland. Central Bank of Iceland Working Papers no 59. Available at: http://www.cb.is/library/Skraarsafn---EN/Working-Papers/Working%20Paper%2059.pdf.

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the autumn of 2009." The authors acknowledge the positive effects court decisions on foreigndenominated loans had on households, but are more critical of the 110% option introduced in late 2010 and the special interest rebate open to households in 2011 and 2012. They point out that the 110% option was aimed primarily at solving the debt overhang and not easing the financial distress, and that many of those that received write-offs could service their debt without them. In addition, "the option raises questions regarding moral hazard, as it grants the largest write-offs to the households that took the greatest risk by borrowing with high loan-to-value ratios and without regard to whether they had any problems in servicing their debt." The authors are also critical of the third-pillar pension fund pay-outs, as they believe the majority of those were not received by households in financial distress. Similar objections have been raised to the Correction that came into effect in 2014, as it appears to have mostly benefitted people at the high end of the income scale.

7. Recent trends

Since the spring of 2011, real property prices have risen almost continuously, with a slight drop in May 2012 the only exception to the rule. During the 12 month period ending in September, real prices rose on average by 9% year-on-year. The price for apartments has risen much faster than the price for detached or semi-detached houses, reflecting the fact that smaller property has been in greater demand.

This development can be traced to several factors. During the years 2001-2008, work was

on average begun on 3170 residential buildings (apartments and houses) per year, while 2655 buildings were completed. During the crisis, the residential construction industry came almost to a standstill, with work commencing on only 190, 320 and 140 buildings in 2009, 2010 and 2011, although a slightly higher number of dwellings was completed. This lack of development has resulted in excess demand which has driven up prices.

In the last few years, Iceland has become exceedingly popular among tourists. The number of foreign visitors has increased by 20-30% annually, with the total number growing from 460,000 in 2010 to 1 million in 2014. Although new hotels have been built and other buildings converted into hotels and hostels, a substantial number of tourists have chosen to rent private accommodation. In October 2015, there were for instance around 3,500 dwellings registered on Airbnb, an increase of 120% over the previous 12 months.

Immediately following the crisis, Iceland introduced capital controls that have severely limited the number of opportunities for Icelandic investors. As almost no investment in foreign assets is permitted, investors have turned instead to the domestic asset market, not least the property market. Building societies have been quite active in the housing market, and it has been estimated that they currently hold a 5-8% share of purchases of property in the capital area, mostly in central locations. The property is usually rented out.

In order to encourage expatriates to liquidate foreign assets and transfer the proceeds to Iceland, the Central Bank of Iceland has allowed individuals to buy Icelandic krona at more favourable rates, often 20% lower than the official rate. There are many anecdotes of Icelanders returning home that have used part of their proceeds to buy property in Iceland at these "subsidised" prices. While the number of cases may be limited, these transactions do affect market prices and expectations.

The relief measures undertaken have of course had a positive effect on both the ability of individuals to take on a higher mortgage and service a higher level of debt. Real wages and income have also risen during the years of recovery, leading to an upward pressure on property prices.

In recent years indexation of financial commitments has come under heavy criticism and

²⁸ Central Bank of Iceland (2011). The Investment Programme. A step in capital account liberalisation. Available at: http://www.cb.is/publications/news/2011/11/19/The-Investment-Programme.-A-step-in-capital-account-liberalisation-/.

Iceland: developments in the housing and mortgage markets

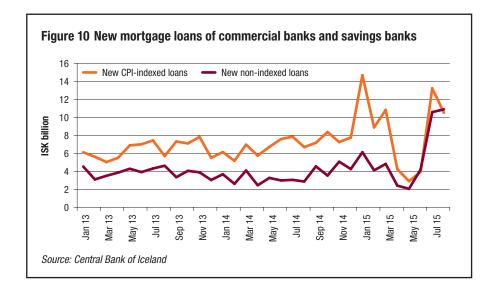
following the publication of a new report on ways to abolish indexation, ²⁹ the government introduced in May 2014 new measures aimed at curbing CPI-indexed mortgage loans. The maximum loan period will be shortened from 40 to 25 years and the minimum period extended from 5 to 10 years. Restrictions will be based on the mortgage level of indexed loans, and various incentives introduced to encourage households to take on non-indexed loans. The measures are intended to take effect in 2016. The report notes that complete abolition of CPI-index loans would require a more thorough preparation as decisions taken in haste might jeopardize

financial stability and negatively affect both lenders and borrowers. Despite this, CPI-indexed loans continue to be most common form of mortgage loans. In 2014, new CPI-indexed mortgage loans of commercial banks and savings banks to households amounted to ISK 83 billion ($\[mathbb{E}\]$ 553 million) while non-indexed loans totalled ISK 42 billion ($\[mathbb{E}\]$ 280 million). The gap had though narrowed in 2015.

8. Conclusion

During the run-up to the crisis in 2008, housing prices in Iceland increased in real terms by 95%,

only to fall by 39% during the crisis. Since then the market has recuperated, and in September 2015, real prices were 26% higher than at the trough in April 2010. As the crisis engulfed the economy, the Icelandic authorities introduced a host of measures aimed at reducing the debt overhang and making it easier for households to service their debts. In addition, court rulings on the illegality of most foreign exchange denominated mortgage loans significantly reduced housing costs for many homeowners. However, many of the measures were primarily aimed at reducing the debt level instead of helping households in financial distress.



²⁹ Prime Ministry of Iceland (2014). Afnám verðtryggingar af nýjum neytendalánum [Abolishment of indexation on new consumer loans]. Available at: https://www.forsaetisraduneyti.is/media/Skyrslur/skyrsla-afnam-verdtryggingar.pdf.

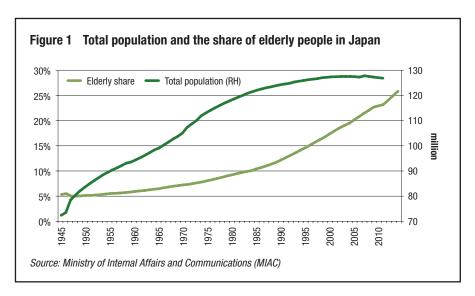
Housing and demographics: experiences in Japan

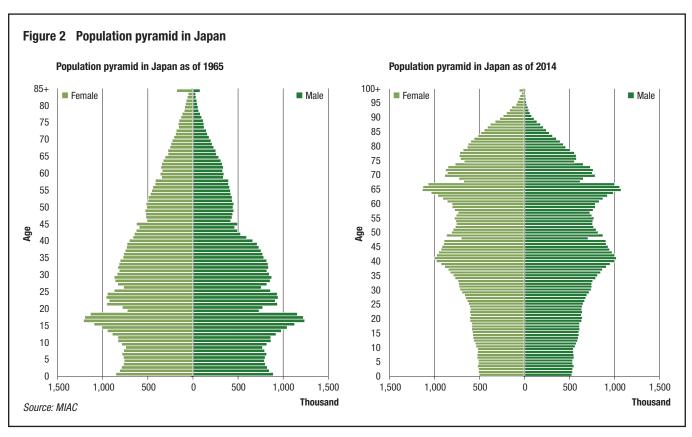
By Masahiro Kobayashi¹

1. Introduction

Japan has undergone a significant change of demographics in the past several decades. In 1945 when World War II ended, the Japanese population was 72 million. It increased to 128 million by 2010 and then started to decline. In the meantime, there has been a significant increase in the elderly population; in 1945 the proportion of those aged above 65 years old was 5.1% of the total population, which had increased to 26.0% by 2013 [Figure 1]. The figure is one of the highest in the world, and in this regard, Japan is the front-runner as an aging society.

The shape of the population pyramid used to be a triangle in Japan until the middle of 20th century,





¹ The views and opinions are author's own and do not represent those of JHF or the Government of Japan. This article has been prepared for the sole purpose of providing information only and not as an offer, sale or inducement to buy or sell bonds.

but the shape has changed dramatically since then and as of 2014, those aged at 65 year old represent the largest age group [Figure 2]. The population numbers of those aged between 64 and 67 are more than 2 million each, and the only age group which has more than 2 million of population as of 2014 other than them is those aged at 40 years old. The former age group comprises post-war baby boomers, and the latter composes junior baby boomers.

The two large age cohorts made for a unique configuration of the working age population in Japan. The United Nations defines "working age population" as those in the 15 to 64 age group. The inverse dependency ratio, which is the ratio of the working age population divided by the rest of the age groups (younger than 15 and older than 64), has two peaks in Japan [Figure 3].

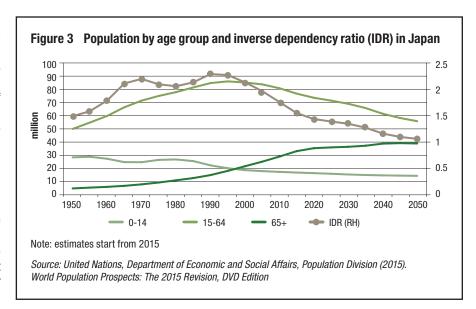
Post-war baby boomers have had significant impact on the dynamism of Japanese society. They migrated from rural agricultural regions to urban commercial and industrial regions in the 1960's and such migration caused severe housing problem in such metropolitan areas as Tokyo and Osaka. The second peak of the inverse dependency ratio was observed in the late 1980's and early 1990's. This coincided with the bubble economy in Japan. Baby boomers were still working while baby boomer juniors entered into working age. As the baby boomers started to retire, however, Japan is expected to experience a continuous decline of inverse dependency ratio for decades to come.

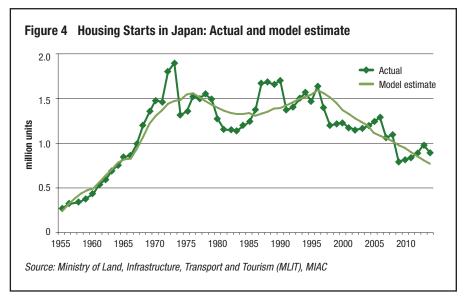
Will such a demographic trend negatively affect housing markets in Japan?

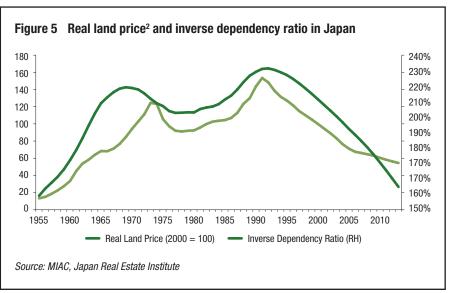
2. Observations

Housing starts in Japan have had a strong correlation with core working age populations [Figure 4]. Regression analysis using actual housing starts as explained variables and number of population of age groups for 20's, 30's and 40's year old as explanatory variables shows coefficient of determination (R2) of 0.836 for the observation period of 1955 to 2014, with t value of each explanatory variables ranging from 5.37 to 10.37, meaning that they have statistical significance.

Not only housing starts, but property prices also had a strong correlation with demographics in Japan [Figure 5]. The two peaks of the inverse dependency ratio, or the period of population bonus, coincided with the peaks of real land

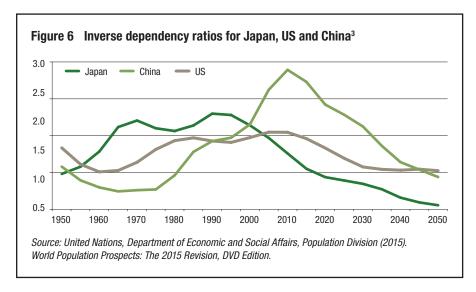






² The real land price is the national average discounted by CPI (All items, less imputed rent) and extrapolated before 1969.

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prices. During these population bonus periods, there was a plentiful supply of houses as was illustrated in Figure 4, but despite of such supply, the real land price climbed in those days, suggesting that demand was stronger than supply.

Although Japan is the forerunner of an aging society, it is a challenge for many other countries, not only for advanced economies but also for emerging economies including China [Figure 6]. China introduced the so-called "one child policy" around 1980, and this has distorted the demo-

graphic composition of China. However, the inverse dependency ratio is expected to decline in the US as well, although the total number of the population as well as the working age population is expected to grow in the US.

What is interesting is that the US had two peaks of the inverse dependency ratio just as was the case with Japan for the same reason. The second peak, in the early 2000's, was the period of the US housing bubble which led to the subprime crisis. If the demographic factor is the only fac-

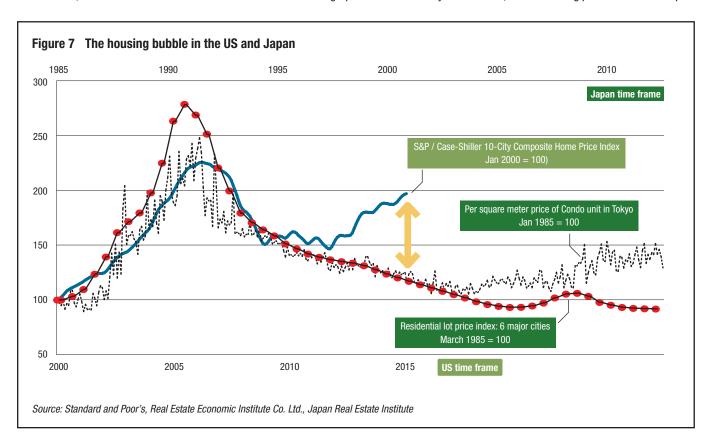
tor affecting the housing market, we can see only gloomy pictures for many countries for decades to come.

3. Difference between US and Japan

After the collapse of the property bubble, Japan faced a persistent decline in property prices while the US seems to have averted this [Figure 7].

Figure 7 illustrates the trajectory of property prices for Japan starting from 1985 and the US starting from 2000. The residential lot price in 6 major metropolitan areas in Japan is illustrated with a black line with red circle marker and the per square meter price of condominium units in Tokyo metropolitan area is illustrated with a black dotted line for Japan, both indexed to 100 as of year 1985. The blue fat line stands for the US housing price as measured by S&P Case/Shiller Home Price Index for 10 major cities indexed to 100 as of year 2000.

The property prices in both countries doubled in 5 to 6 years and then the property bubble collapsed. The trajectory of the creation and collapse of the bubbles seems almost identical for the initial 10 years or so. However, since 2012, the US housing price has started to pick



³ Estimates start from 2015. The figures after 2015 are UN estimates with medium fertility

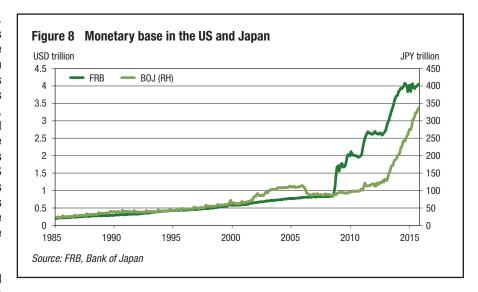
up and apparently deviated from Japanese case. S&P Case/Shiller Home Price Index employs "repeat sales method" and it may reflect the status of property market more accurately than other statistics, but according to other statistics including new home sales prices by the Census Bureau of the US Department of Commerce, and existing home sales prices by the National Association of Realtors, home prices have already recovered to the level of the pre-crisis peak. In any case, the home price in the US did not follow the same path as Japan. In this regard, the argument that relates housing prices with the inverse dependency ratio may not be plausible. US case suggests that Japan is the outlier rather than main stream.

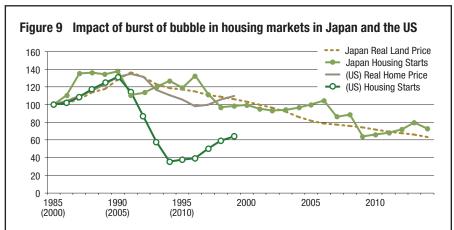
What made the US different to Japan would be the difference of monetary policy after the collapse of the property bubble, among others. Aggressive monetary accommodation by the Federal Reserve prevented the US economy falling into "lost decades".

In Japan, the Bank of Japan, the central bank, was praised by the media to depress the property price even after the property price started to decline in the early 1990's. There was strong support from the public to punish speculative real estate transactions. In retrospect, it was wrong from the perspective of the macro economy. In the middle of the 1990's, the Bank of Japan started to lower its official discount rate, but did not implement a large scale asset purchase program as the Federal Reserve did immediately after the outbreak of the global financial crisis [Figure 9]. The Japanese economy suffered from 15 years of deflation from 1998 until Bank of Japan introduced an extraordinary monetary accommodation named "Quantitative and Qualitative Monetary Easing (QQE)" from April 2013.

The population accounts for only a fraction of change in the economy if measured by the contribution to the composition of GDP change, but people were very pessimistic in Japan. This pessimism was reinforced by the persistent deflation and many people believed that deflation was caused by the declining population, and that property prices would continue to decline along with deflation because the Japanese population would continue to decline for decades to come. The QQE is a social experiment to change the minds or expectations of people.

Another factor that favorably affected to the US home price recovery would be the drastic decline





Source: MLIT, MIAC, Japan Real Estate Institute, US Department of Commerce, US Department of Labor, Standard and Poor's

of supply of houses [Figure 9]. Comparing the number of housing starts in the US starting from 2000 to Japan starting from 1985 again, the housing starts in Japan remained significantly higher than the US after the collapse of the bubble due to some extent to policy measures to stimulate the economy in Japan. This is the adjustment to the supply side, not the demand side.

The effort to sustain the housing markets by this policy initiative adversely affected the market in terms of property prices at least, and this lesson has some implication for China these days.

4. Aging society and household finances

So far, QQE by Bank of Japan has been working well. After 30 years⁴, property prices (housing

and stock) have regressed to fundamentals (GDP) [Figure 10]. In the long run, the bubble would burst and after the collapse of the bubble, property price would recover so long as the fundamentals of the economy are sound. In this regard, the property bubble per se may not be as important as many people would believe, at least over the longest term.

However, 30 year is long enough to see the change of generations. A different generation, having different experiences, may change their behavior over such a long time horizon.

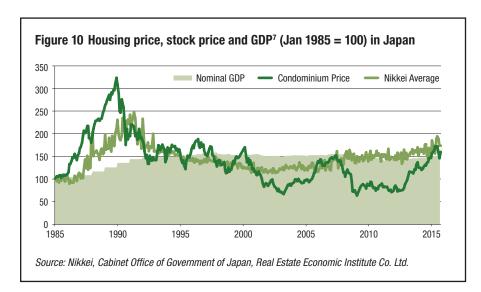
During the asset disinflation period, the value of land held by the household sector declined by 476 trillion yen from 1994 to 2013⁵. In the meanwhile, household sector hoarded almost equivalent amount of financial assets⁶ (499 tril-

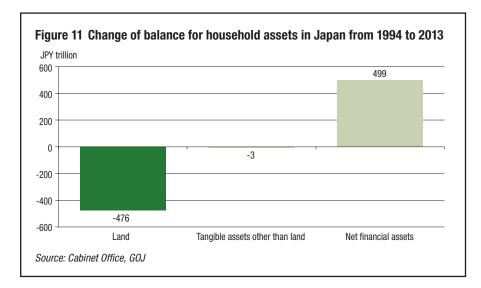
⁴ The Japanese economy faced significant fluctuation since the Plaza Accord of 1985.

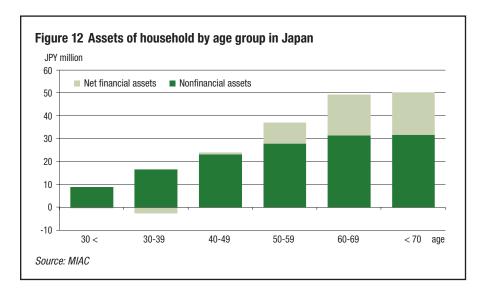
⁵ Current series of SNA (National Accounts of Japan) starts from 1994 and ends in 2013 as of November 2015.

⁶ Considering that the level of stock prices is almost the same for 1994 and 2013, the change of financial assets is largely attributable to the increase of cash and deposits.

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lion yen) and restrained personal consumption [Figure 11]. Household sector which faced decline of property price may have tried to rebalance their asset position by increasing financial assets, may it be intentionally or incidentally.

Another reason to explain the increase of financial assets held by the household sector also relates to demographics. An elderly population has more net financial assets as well as nonfinancial assets (mainly owned houses) [Figure 12]. Payment of lump sum retirement benefits is one of the major causes.

However, the elderly population, although it may be rich in assets, usually has poorer cash flow than working age population. In short, they are asset rich but cash poor. In this regard, there are possibilities for a reverse mortgage market to develop in Japan, but challenges remain. One prerequisite is the stabilization of property prices. If the price of property continues to decline, the premium to recover the cost after the disposition of the property at the time of the death of the borrower of a reverse mortgage would be too expensive to attract many customers. Another is the stabilization of future interest rates.

In this regard, it is to be noted that as the population ages, the macroeconomic savings rate for the household sector continued to decline and turned into negative in 2013.

So far, the long term interest rate is anchored thanks to the QQE by the Bank of Japan. The inflation rate is picking up, but remains below 2% objective [Figure 13]. Will such a low interest rate environment last even after more elderly people retire? We have to closely monitor the development of capital markets after the normalization of extraordinary monetary accommodation by Bank of Japan.

5. Impact on homeownership

As of October 2013, there are 60.63 million housing units in Japan, of which, 8.20 million are vacant⁸. Among the remaining 52.43 million houses which are occupied, 61.7% are owner-occupied. This 61.7% is referred to as the homeownership level in Japan. As of today, homeownership is not a major policy priority in Japan. The major policy priority is how to address the 8.20 million vacant houses, accounting for 13.5% of the total housing stock.

^{7 &}quot;Condominium Price" represents per square meter price of condominium units in the Tokyo Metropolitan Region. The current series of "Nominal GDP" starts from 1994 and figure here is the seasonally adjusted annual rate on a quarterly base. Figures before 1993 are the author's

estimates of annual value by chaining the previous series at 1994. The "Nikkei Average" is the value at the end of the month except for May 2015.

 $^{^{\}mbox{\scriptsize 8}}$ Includes both owner and rental property as well as second houses.

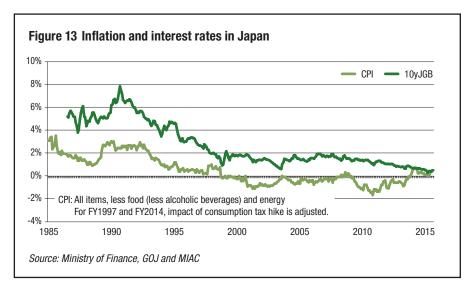
The vacancy rate is higher in regions with declining population [Figure 14]. The total population of Japan started to decline from 2010, but the degree of demographic change differs depending on the region. There are 47 prefectures in Japan and from the 2008 census to the 2013 census, the national population decreased by 394,000, but in Tokyo, the population increased by 462,000. Okinawa ranked second in terms of population growth due to a high birth rate (the increase of Tokyo is due to social migration because the birth rate in Tokyo is the lowest among 47 prefectures).

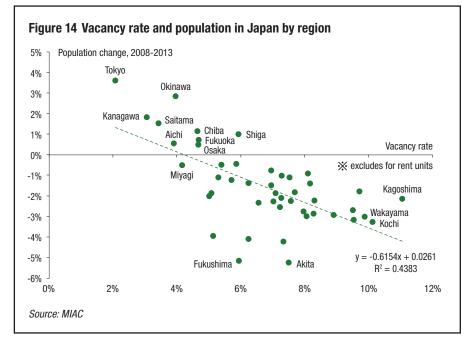
A certain level of vacancy rate may be necessary to secure mobility of people. However, more than half of the vacant units are vacant for more than 5 years, and the vacancy rate of 13.5% is thought to be too high by many people in Japan. Some people say that there is no need to construct new houses anymore because there are 8.20 million vacant houses and we should utilize those vacant housing units before constructing new houses.

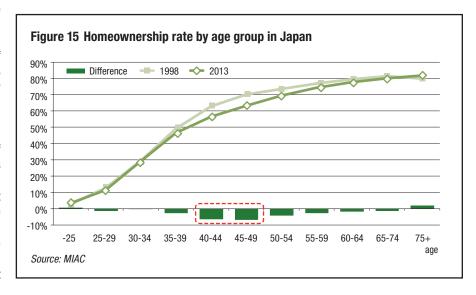
However, high vacancy rates are observed in regions which are far from Tokyo, and those who need houses, especially the young, may face more difficulty finding employment opportunities in those regions than in Tokyo. How to revitalize the regional economy to attract more young households is a policy priority which encompasses various elements including the housing issue, among others.

Homeownership of 61.7% is not very high, but not very low among advanced economies. If we compare the homeownership rate by different age groups in Japan, it is higher amongst the elderly cohort than the young cohort. One of the reasons for Japan being able to maintain the rate of homeownership above 60% is the aging society; the proportion of elderly people, who have a higher homeownership rate amongst the total population is increasing. The aging society, however, does not cause an automatic rise of homeownership. The homeownership rate has declined amongst many age groups, especially among those in their 40's [Figure 15].

Another aspect to be noted about housing markets in terms of demographics is the number of construction workers. The number of employees in the construction industry has been declining faster than the total population, and insufficient construction workers can be a constraint on the industry for some time [Figure 16]. A declining population had been thought to be the cause of deflation because there is less demand in Japan, but now people are recognizing that







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a declining population has an impact on the supply side as well.

6. Conclusion

Housing comprises places where people live. As the population decreases, it may be natural for people to assume that there would be less demand for housing. There was such a strong belief in Japan after the collapse of the property bubble in the early 1990's and such a belief reinforced persistent deflation as a self-fulfilling prophecy, not only for the price of goods and services in general but also for property prices.

What was unique in Japan was that there were two periods of population bonus created by baby boomers and baby boomer juniors, which coincided with the housing boom. It is projected that the ratio of the working age population to the rest will continue to decline in Japan due to the low birth rate and growth of elderly populations. If the relationship between demographics and housing is taken granted, we would see a very gloomy outlook for the Japanese housing market.

However, the US, which has a similar demographic trend, has deviated from the trajectory of the property bubble and its aftermath. The US housing market recovered strongly due to the extraordinary monetary accommodation implemented by the Federal Reserve and averted persistent deflation as Japan experienced for as long as 15 years. The Federal Reserve learned a lot from the experience in Japan in the late 1990's and took effective policy measures. This is a good example of how we can learn from the experience of foreign countries.

Once caught in deflation, it is very difficult to get out of it⁹ and therefore, it is very important to take measures to prevent the economy falling into deflation, especially for Europe where the demographic trend is closer to Japan than the US.

People in Japan may have focused too much on the demand side of the demographic impact on housing, but we have to pay attention to the supply side as well. Furthermore, demographics would impact on various aspect of the economy, not only on housing, and we have to distinguish what elements are more directly affecting housing than others, including job opportunities. In this

regard, the topic of "housing and demographics" is still at an early stage of statistical analysis and we have to verify the hypothesis with incoming data which are becoming available as the society ages.

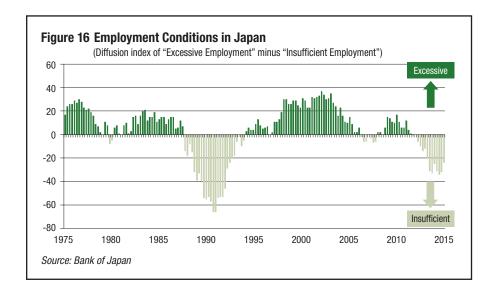
We are pleased and honored to share information on what is happening in Japan along with available statistics as they evolve and to exchange views with international housing finance experts to better serve the people on this planet.

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⁹ See Bullard [2010].

→ By Julie Lawson, Mike Berry, Hal Pawson

1. Introduction

As austerity continues to bite, many governments are puzzling over how to meet long term investment needs for social infrastructure in order to support more sustainable and inclusive national development. When direct public funds decline or are withdrawn from national and regional housing programs, providers of social housing must compete alongside other potential opportunities for private funds to make up the difference. Market conditions may not be in their favour, especially when the scale of demand is fragmented and small, making attracting investment time consuming, costly and short term. This has obvious implications for the number of dwellings able to be built and their eventual cost for households.

Recently guarantees and special purpose intermediaries have become much more important tools for pooling borrowing demands and attracting more favourable investment conditions for social landlords. This article is based on a study by the Australian Housing and Urban Research Institute (Lawson, 2013) which reviews the use of guarantees in financing social housing.

2. Definition and logic

Guarantees influence the credit allocation of lenders by giving comfort to investors. This comfort comes in the form of a third party (such as a government agency) legal promise of performance to a beneficiary (investor). Performance is typically defined as the payment of an agreed interest (coupon rate) or principle within a particular time frame. In the event that the borrower fails to perform as agreed, the guarantee may be called on to make these payments. Bonds have various characteristics and their promise to repay, their obligations, can be linked to various revenue streams, such as indexed rents or asset appreciation and eventual sale.

To provide comfort to investors, these payments can be guaranteed by a third party, with a strong credit rating and wider revenue base,

such as a government's broad tax base. In this way a government guarantee can reduce the perceived risk by bond investors and thereby moderate their required yield. Loans with a government guarantee demand lower interest rates than traditional mortgages. Ideally an efficiently run bond issuing financial intermediary passes on the full benefit (less the cost of issuance), in the form of lower cost finance to housing associations enabling more affordable dwellings to be delivered. Such social housing guarantees and specialist financial intermediaries have been established in the UK (to expire in 2016), Netherlands, Switzerland, Ireland, France and the US.

Regardless of the rational and international experience of guarantees, there pervades a view amongst many government Treasury officials that market interventions such as guarantees and use of financial intermediaries unfairly privilege certain providers, leading to market inefficiencies. Further, they argue that likely calls on the guarantee would negatively affect public accounts and place at risk a government's cherished credit rating.

However, recent AHURI research on the use of guarantees in social housing involving seven different guarantees (Lawson, 2014) finds that guarantee schemes have been designed to avoid default and thus their use has little or no impact on neither government accounts nor their credit ratings. Instead, government guarantees tend to provide welcome comfort to investors under adverse market conditions and have facilitated much needed lower cost longer term investment in social housing in these countries, in the absence of deep public subsidies.

3. Increasing reliance on guarantees

During and immediately after the Global Financial Crisis and Sovereign Debt Crisis, declining government revenues further eroded governments' willingness and capacity to borrow, increasing their reliance on private investment in order to deliver social and economic infrastructure. The lack of public funds accelerated efforts to

promote Public Private Partnerships, drawing in the private and third sector as both investors and delivery partners. From 2008 to 2012, the Organisation for Economic Co-operation and Development [OECD] reported increasing reliance on the use of government guarantees to improve the long term borrowing conditions of these third parties. The EU has recently focused on the use of these instruments in their Green Paper on Long Term Investment:

Public intervention can be achieved, either directly or indirectly, by offering or contributing to a range of financing products, including sharing and/or guaranteeing risks, and bringing together financial intermediaries in appropriate networks (EC, 2013:7).

International agencies have increased efforts to improve the public policy craftsmanship when designing specialist intermediaries and guarantees. The World Bank published Government guarantees: allocating and valuing risk in privately financed infrastructure project (Irwin, 2007) and the EU's PPP Expert Centre, hosted by the European Investment Bank [EIB], is dedicated to improving the use and design of state guarantees. From this centre Broom (2011) contends that reduced reliance on direct public funds in an era of budget austerity makes it imperative that governments build market confidence amongst new investor segments that are traditionally less familiar with public infrastructure investments.

4. A contested tool

In general terms, guarantees are used by many governments to reduce reliance on public funds, build market confidence amongst new investor segments and accelerate investment in required social and economic infrastructure such as social housing. They aim to bolster the credibility of new initiatives and can be used to establish new pathways to investment. Ultimately, they aim to attract suitable long term investors and reduce the cost of finance. In recent years, governments have used guarantees to ensure market stability in an era of crisis and change, such as during the GFC.

The arguments against the use of guarantees include the moral hazard of supporting risky but desired public investments. There is also the difficulty of isolating and measuring the effect of a guarantee on loan interest and terms. Further, there is a danger of oversupplying investment to a particular market. The creation of unfair competition with other forms of investment has led to the refinement of some schemes. Some opponents argue that guarantees can also lead to inefficient practices, as recipients receive lower cost credit without 'market discipline'.

The European PPP Expertise Centre [EPEC], hosted by the European Investment Bank [EIB] and EU member states, aims to demonstrate where government guarantees might be required and to assist the public sector in their design. They categorise the motivations for guarantees into financial and public policy drivers.

Public policy drivers include:

- reducing reliance on direct public funds in an era of budget austerity,
- building market confidence amongst new investor segments less familiar with public infrastructure investments,
- accelerating investment in particular areas, such as public infrastructure, and;
- bolstering program credibility to achieve policy initiatives and attract lower cost funds.

Financial drivers include:

- the improvement of credit quality to attract (new) investors and improve market competition,
- reduce the cost of capital,
- achieve higher leverage ratios and pertinently, and;
- promote market stability in an era of volatility (EPEC, 2011).

Growing use in the housing sector

Following the GFC, there have been many recent examples of governments guaranteeing exports, savings deposits, infrastructure partnerships and mortgage backed securities. In the housing sector, guarantees are often used to address market failure, to expand access to home ownership to households otherwise neglected by the market and promote investment in social rental housing.

A small number of housing researchers and market commentators such as Elsinga et al, (2009), Buckley et al, (2003, 2006) and Mersmann and Schiffer (2005) have examined the rationale for

| Table 1 | Government Guarantees - | - Ar | auments | For | and Again | ıst |
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| For | Against |
|--|---|
| Broadens access to credit to important but disadvantaged segments of market. | Unnecessary as they have minimal effect on the cost of finance. |
| Stabilises markets, act counter-cyclically by promoting mortgage bond liquidity; ameliorates negative effects of credit downturns. | Over-investment in under-demanded assets, leading to over-supply and posing of excessive risks to guarantee provider. |
| Protects investors from loss when lending criteria relaxed to encompass borrowers lacking asset backing | Shifts risks inappropriately, promoting profit reducing and inefficient practices amongst borrowers. |
| Reduces cost and improves terms of loans for qualifying borrowers | Undermines market discipline and misallocates credit, incentivising market actors to take on excessive risk (moral hazard). |
| Properly designed and managed guarantees protect taxpayers from "bailout" | May spill over to compete with ('crowd out') 'more productive' investments |

Source: Lawson (2013)

government guarantees in housing credit markets. Arguing from the perspective of market failure, guarantees are used to channel lower cost credit towards undersupplied segments of the housing market. Such markets ration access to credit, based on the limited information investors have at hand concerning the risk and return profile of different investment opportunities. Such rationing can lead to under-investment in certain market segments such as low cost rental housing, thereby impeding the achievement of desired welfare goals: affordable and available housing. Government guarantees are thus used to shift investment strategies to address market failure and promote better housing outcomes.

Elsinga et al (2009) have reviewed the use of guarantees in home ownership across Europe and note that many aim to address this information asymmetry and broaden access to housing finance. A six-country review of home ownership guarantees by Mersmann and Schiffer (2005) argues that long term government guarantees have proved to be an effective and efficient way of increasing the accessibility and affordability of housing markets, progressively influencing social welfare, much more so than commercial insurance. A review of Asian financial intermediaries makes a similar claim (Chan et al, 2006).

Mersmann and Schiffer (2005:25) also note that in some countries, guarantee schemes are the main instrument of housing policy, replacing interest subsidies and government loans. Like Elsinga et al, (2009:69) they argue that a government mortgage guarantee schemes place considerably less pressure on public budgets than other forms of direct or explicit means of financial support.

In addition to home ownership, government and sector-based guarantees are a growing area of

policy interest and international innovation in the social rental sector. This is demonstrated by emerging and expanding schemes in Scotland, the UK and Ireland, and growing interest in the established Dutch and Swiss schemes. There are also innovative proposals for the development of special purpose infrastructure bonds, guarantees and sustainable housing funds at the European Union level, involving the European Investment Bank. The UK and Austria have capitalised on this source of low cost funding, by establishing new government backed intermediaries to channel EIB funds through to their registered social landlords and limited profit housing association sector.

So far, the AHURI study provides the most detailed and extensive contemporary review of established and emerging practice in Europe and the US concerning the use of guarantees to support investment in social and affordable rental housing and puts forward a number of key principles when crafting guarantees for this sector (Lawson, 2013). It stresses that care should be taken in the design of any guarantee scheme to ensure that it addresses well defined objectives to achieve tangible, well targeted supply outcomes and minimise negative impacts on public accounts.

6. Implications for government accounts

Indeed, governments and their Treasury officials need to know how a guarantee would impact on their own reserves, borrowing capacity and credit rating. There are of course guidelines and standards on how guarantees should be accounted for, such as international public finance accounting standards IPSAS 19, Eurostat and national accounting policies. However, these are open to interpretation and re-interpretation as systems of government support and regulation change.

A summary of Eurostat's advice for general and more specific forms of guarantee is provided in the Table below:

Fees for guarantees are to be spread over the life of the scheme and recorded in the accounts as service fees.

Thus, in Europe, as per IPSAS 19 and under ESA 95 governments are required to report in full on their national accounts assets for which that government bears most of the risks, being more than 50% of the capital costs. Where government guarantees are considered as contingent liabilities, they are only reported in national accounts in many countries when they are called on or where it is likely that a debt will be called on. For only under these circumstances, does a contingent liability count as government debt and appear in the national accounts (EPEC, 2011:25-26).

According to the European PPP Expert Centre [EPEC], the actual practice of reporting of contingent liabilities is not pervasive and the recognition and disclosure of risk is only noted in a few national budgets. This is because most governments have created self-financing arms-length companies, albeit publicly owned, whose assets and liabilities are professionally accounted for. Only when an actual or repeated capital transfer occurs from government, is the government required to include details its own national accounts.

For proponents of guarantees, justification for their use is often framed in terms of cost savings to government, as the provision of direct funds decline. However, the devil is in the detail and the eventual cost for government relating to the guarantee depends to a great extent on the structure and conditions of the guarantee and of course the actual rate of default in any. The implementation of the structure is also very important, as risk is reduced by enforcing borrowing limits, demanding interest cover ratios and requiring and enforcing sound business management practices.

Obviously, for this reason alone, the government continues to play a key role in sustaining social landlords, often contributing land, start-up development finance and rental assistance, as in most social housing systems. It is notable that this very issue is under scrutiny in the UK, where significant policy risk threatens investment due to changes in regulation, rent setting and revenue assistance. Of course, credit rating agencies keep a close eye on policy risk. In October 2015 UK housing associations were redefined by the Office for National Statistics as public bodies due to their risk exposure to the UK government. This change is expected to have fundamental implications for

| Accounting standards | for various types of | f government guarantees ESA 95 |
|----------------------|----------------------|--------------------------------|
| | | |

| Gu | arantee assumptions | Accounting standard | | | |
|----|--|---|--|--|--|
| Ge | neral case | Guaranteed debt is recorded as borrowings solely of the corporation, | | | |
| | | For the government, guarantees are recorded as a contingent liability; | | | |
| | | Guaranteed debt is not recorded in core accounts until the guarantee is activated; | | | |
| | | Information on the existence of the guarantee should be public; | | | |
| | | If called and government takes over debt, it is recorded as a capital transfer. It may enter into further transactions to repay the debt to creditors. | | | |
| | | A partial call, or cash call, must be recorded as a capital transfer expenditure for the amount of the cash call. | | | |
| | | Where repeated calls (>3) government assumes outstanding debt and records the financial transaction to repay that debt. | | | |
| | vernment repays debt of rporation which issues | Debt is issued by a corporation but assumed by government, thus payments are recorded in public accounts as a capital transfer (4.2.1/6) | | | |
| | dged government is or Il repay debt | Probability of repaying the debt is high and regular (3 year +) provision is made in government accounts for this purpose, outstanding debt is assumed by government, despite no legal obligation, and debt assumption is recorded as above. | | | |
| | ll involves financing sets on a third party | Assets may be transferred to the government and recorded in the public balance sheet and government assumes the payment of debt to the creditor, which may be outstanding on the asset, influencing government lending and borrowing capacity. This asset and payment is recorded in the public accounts. | | | |

Source: Authors interpretation of Eurostat, 2013 p.317-320 in Lawson, 2013

future investment strategies, but only time will tell how these will unfold.

7. Growing investment in social housing

As mentioned above, government guarantees are increasingly used by well-established social and affordable housing finance systems in Europe and

the US to attract and stabilise longer term, lower cost investment in supply and renovation. This following table summarises 7 such schemes in the Netherlands, Switzerland, France, Ireland, the UK, Scotland and the US. A more detailed report examines their differing objectives, structure, market impact and cost to government drawing on financial and ratings reports, performance reviews and stakeholder interviews in these countries (Lawson, 2013).

| | Intermediary | Targeted | Financial impact | Default rate |
|--|--|---|--|--|
| Dutch Guarantee Fund Social Housing backed by the sector, a fund and central and local Dutch govern- ments (1983) | Yes Independent foundation | Yes New and renovated nominated rental housing, low to middle income, registered and monitored providers | 100-150 BP below going market rates for similar mortgages | 0% |
| Swiss Bond Issuing Cooperative for Limited Profit Housing backed by the Swiss Federal Government (1991) | Yes Cooperative owned by sector | Yes New and renovated cost rent based housing, low to middle income, compliant with Charter and government standards monitored providers | Competes to bring down commercial costs. Very small margin above low government borrow- ing costs | 0% since 2003 |
| UK Affordable and Private Rented Housing Guarantee Schemes, backed by UK Govern- ment (New 2013, expires 2016) | Yes THFC non-profit corporation, licensed guarantor | Yes Newly completed below market rental or ownership housing, low to middle income, registered and moni- tored providers | Provides 30 year loans at small margin above government borrowing costs | 0% based on lengthy THFC experience, guarantee intro- duced 2013 |
| French Mutual Fund for Guarantees of Social Housing, backed by the French Government (2001) | Yes Publicly owned and administered | Yes New and renovated nominated rental housing, low to middle income, registered and monitored providers | Market only exists with guarantee | 0% since 2008, has been higher 0.04% |

| | Intermediary | Targeted | Financial impact | Default rate |
|--|---|--|--|--|
| Irish Housing Finance Agency backed by the Irish Government (1982 LAHs/2012 VHBs) | Yes Publicly owned company | Yes New and renovated income related rental and ownership housing, low to middle income, registered and monitored providers | Very limited market without guarantee | 0% for Local Authority Housing, new for Voluntary Housing Boards |
| Scottish Government's National Housing Trust backed by the Scottish Government (2010) | Yes Publicly owned trust | Yes Newly completed near market rental housing, low to mid- dle income, managed by registered and monitored providers | NA | 0% new |
| US Risk Sharing Scheme between Housing Finance Authorities and HUD backed by Federal Housing Administra- tion (1992 pilot/2001 permanent) | Yes Various publicly owned corporations | Yes Rental or ownership housing, low to middle income, registered and monitored providers | NA | NA |

Source: Lawson 2013

Most guarantees were established in response to weak or non-existent investor interest in affordable housing, at a time when governments were reducing their own investment role. Of the European social housing guarantees reviewed, all have had a minimal impact on government accounts, as the debt is accumulated on the accounts of housing providers themselves and not their governments. In this way, governments have been able to play a very positive role creating and growing investor markets, reducing the cost of private finance and in many cases lengthening loan terms. Few of the government or sector guarantees have been called upon since inception and the default rate was zero for all funds since the GFC.

One reason that guarantees have been so effective is that certificates are restricted to those investments designed to deliver required returns. In particular, investment in registered non-profit landlords providing rental accommodation with secure, assisted or indexed rental streams. Such providers undergo regular and rigorous financial audits, examining not only their business performance and future plans but also the quality and stability of their financial management. This effort requires a specialist financial intermediary to certify provider capacity to cover interest on borrowings. Through such an intermediary, approved investment demands can be pooled to achieve efficiencies in issuance costs, and eventually lower cost funds can be allocated to participating housing providers.

In Europe and the US, social housing guarantees have been structured and capitalised in ways that have important implications for how

governments, providers and investors share the risks. The bonds they back may be based on fixed or indexed revenue streams, projected value improvements or profits from defined sales.

Bond coupon payments are typically secured by the obligation of the borrower to repay a loan secured by a legal agreement. Secondly, coupon payment is secured by an accumulated solidarity fund generated from a premium on the loan interest. Lastly the guarantee is backed by government treasuries. It is this element of the guarantee which has the greatest influence on the risk assessment and hence required yield of the bond.

Of the seven mechanisms reviewed, the Swiss Bond Issuing Cooperative [BIC] and The Housing Finance Corporation [THFC] established in the UK clearly demonstrate international best practice in terms of the importance of their market forming role, ability to make use of a government guarantee and positive impact on the financing conditions for affordable housing providers.

The Swiss bond issuing co-operative is a joint venture of the non-profit sector and the Federal Housing Office, established in 1991. It pools the financial demands of its members and meets these demands by issuing 5-15 year fixed bonds covered by a federal joint guarantee. This process allows smaller builders access to long term low cost finance from pension funds for affordable rental housing at typically 1-1.5 % below comparable market rates. Beyond the guarantee, the Federal government contributes to a revolving fund, which provides low-cost loans and is administered by two umbrella organizations of housing co-operatives.

The UK's Housing Finance Corporation was established under the stewardship of the National Housing Federation in 1987 to pool the borrowing demands of smaller housing associations and raise long term (20-35 year) debt finance from pension and annuity funds at very competitive rates (1-2% above Gilts). Until recently, the UK system has been strongly underpinned by subordinated grants and rent assistance paid direct to the landlord as well as appropriate sector regulation and secured financing. However, as mentioned above, the system currently faces considerable policy risk. The reclassification of UK Housing associations by the ODNS, due to the strong intervention of the government in their business and its regulation, can lead to the entire debt raised by the third sector being returned to the public sector's balance sheet.

In both mechanisms, pension funds are the primary investors in affordable rental housing.

8. Insights from international experience

From the detailed international review (Lawson, 2013) a number of important insights for policy makers can inform the design of appropriate investment enhancements:

8.1. Agreed principles, facility agreement, predictable pipeline

From the outset, agreed principles for investment eligible for government guarantee need to be defined by government and agreed by umbrella organisations to ensure appropriate targeting of implicit public subsidies and provide a clear signal of commitment to investors and borrowers for specific housing supply outcomes.

Once these principles are agreed there should follow clear government mandates for guaranteed obligations. Agreement on the limit should be based on defined supply targets and the current and potential borrowing demands and the capacity of the social housing sector. Such a ceiling and review process would ensure greater market certainty and investor commitment.

8.2. Lowering risk of investment and avoiding any potential call on the guarantee

It is vital to reduce the likelihood of the guarantee ever being called. First and foremost, the borrowers must be well managed, reporting appropriately and independently monitored. Accounts should be able to demonstrate

whether their businesses are stable and critical conditions supportive.

Secondly, it is important to inform investors of the nature of the guarantee and the 'back stop' role played by the government. This component of the guarantee is the main factor influencing the rating of the bonds.

8.3. Informing investors and Marketing the bonds

Investment in well-regulated affordable rental housing with a clearly defined and supported revenue stream differs markedly from investment in more risky infrastructure projects. The lower risk of rental housing, backed by loans with a government guarantee, needs to be reflected in lower anticipated yields by investors. Pro-active, government supported efforts need to inform relevant investors of the nature of risk and related guarantee enhancements. This would require an active marketing strategy or repeated 'road shows' amongst relevant stakeholders.

8.4. Expert financial intermediary

Investors are unlikely to have specialist technical and legal capacity to service the social housing sector, and hence the establishment of an independent financial intermediary is required. This intermediary should have the capacity to assess risks and ensure the requirements to be eligible for guarantee. Various models are possible, including co-operative buying groups as in Switzerland, non-profit intermediaries as in the UK and the Netherlands, and publicly owned corporations as in Ireland and France.

8.5. Pooling demands and regularity of bond issues

The size of the organisations is not definitive for their financial management efficiency and effectiveness, but the size of the bond issue is important to investors. Scale efficiencies can be achieved by pooling multiple smaller borrowing demands with cost of issuance shared between participating borrowers and added as a premium on the loans.

Pooling mechanisms can work effectively but regularity of issue is also important. Investors require issues to be regular and predictable, thereby developing a liquid market for the bonds. This requirement could dovetail with a long term housing program with annual supply targets.

In Switzerland since 1991, quarterly pooled bond issues in 5000 lots have varied from CHF

23 million to CHF123 million, attracting strong and sustained interest from large and small investors.

8.6. Structure of the guarantee and accounting requirements

In the event of any default, loss sharing arrangements need to be clear and agreed in advance. As with the WSW, the guarantee can be conceived as a series of layers or lines of defence against any default and consequently any call on the government.

Firstly, organisations must be accountable to a body that has real power to intervene and enforce compliance, where an organisation is failing to comply or needs assistance or re-organisation to comply. High calibre and professional expertise in the financial management of not for profit organisations is very important, both inside these organisations and those regulating them. This requires adherence to clear and appropriate commercial benchmarks for solvency ratios, interest rate cover and equity to be eligible for any guarantee.

Further, equity or equity-like components of guaranteed schemes are also important and include indefinite public loans or other (tenant, landlord, government provided) equity. Properties which are guaranteed need to be well located, maintained in good condition and be highly rentable. The guarantee may be tied to a mortgage on an unencumbered property. Comfort to investors can be given via a legal agreement, where the bond coupon payments are be ranked higher than other financial obligations, and hence these bond investors can claim first call on any repayment.

As in the Netherlands and Switzerland, a guarantee fee can also be used to build up a reserve fund proportional to the obligations guaranteed. It can also be conceived as the government guarantees second line of defence against being called upon. In Switzerland the fee is sufficient to cover interest payments for a minimum of one year and is, of course, in addition to any issuance fee.

Alternatively, governments can act as an insurer, by pricing the risk and charging fees; thereby accumulating a fund. Otherwise they must account for this risk in their budgets, as a contingent liability and set aside an acceptable proportion of the guarantee obligations. If they intend to regularly support organisations to meet their repayment obligations, the government is in effect taking responsibility for them and they should be accounted as such in the government budgets.

9. Conclusion: Well managed guarantee has little or no implications for government budgets

Overall, a sustainable and sound business model is first and foremost the strongest line of defence protecting any government guarantee, growing supply capacity amongst providers and easing access to lower cost larger volumes of investment. For this reason, threats to sustainability, via deregulation, equity removal or changes in revenue regimes should be minimised in order to maintain an ongoing pipeline of investment in new supply.

As demonstrated by all the schemes reviewed in this study, a zero default rate has been sustained, with no call made to date on the government accounts. This is largely due to the supportive role of government in bolstering the equity position of housing providers and their revenue stream (co-financing, regular indexing of rents, demand support for low income tenants) and the financial management and monitoring regimes guiding housing sector organisations (auditing and enforcing compliance).

The research team have extended their international review with an investigation into the borrowing needs and capacity of the Australian social housing sector and devised an appropriate guarantee and intermediary (Lawson, Berry, Pawson and Hamilton, 2014) to channel investment towards this sector. This proposal is currently under consideration by the Department of Treasury of the Australian government.

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Islamic housing finance

By Muhammad Raza

1. Introduction

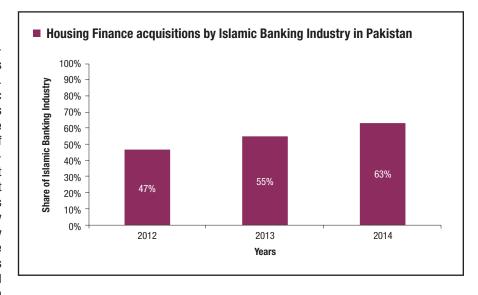
'Islamic housing finance' is mortgage financing under the Islamic banking system which is based on the principles given by Islamic law. In the Islamic financial system, Riba (Arabic for "usury") i.e. 'interest' is prohibited in all its forms and Muslims are not allowed to receive or pay interest on the borrowing or lending of money. It is a common belief that Islamic banking is just interest free banking; however, it actually goes much beyond interest - in that it is a complete financial system that provides the basis for a flourishing economy. Many principles of Islamic banking are commonly accepted all over the world and are very close to commonly accepted moral values, which is why Islamic banking is also termed as 'ethical banking'. A very interesting fact is that although it is termed Islamic banking, its practice is not restricted to Muslims only.

Islamic banking has received an overwhelming response from across the globe and is growing 50% faster than the overall banking sector. Globally, the size of the Islamic banking industry has grown to US\$ 1.8 Trillion with an annual growth rate of approx 15-20%. The size is forecasted to reach US\$ 5.0 Trillion by the year 2020. Today, more than 700 Islamic financial institutions are operating worldwide in over 85 countries.

2. The development of Islamic housing finance in Pakistan

In Pakistan, Islamic banking started in the year 2002 when Al Meezan Investment Bank acquired the Pakistan operations of the French Bank Societe Generale and at the same time, converted itself into a full fledged Islamic commercial bank. Currently five full fledged Islamic banks and 17 Islamic banking divisions of conventional banks are operating in the country with more than 1600 branches.

Amongst the total 25 commercial banks (including Islamic and conventional) and one specialized housing bank, HBFC – House



Building Finance Co. Ltd, it is very encouraging to note that Islamic housing finance has emerged as the most popular option for housing finance in the country. Recent statistics indicate that more than 60% of the housing finance acquisition in Pakistan is fulfilled through the Islamic banking Industry. The customer inclination towards Islamic housing finance is on the rise. In the year 2012, the share of Islamic housing finance in fresh acquisitions was 47% which ascended to 55% in 2013 and reached 63% in 2014.

3. Islamic modes of housing finance

The various modes of financing adopted for Islamic housing finance include Murabaha, Ijarah, Istisna'a and Diminishing Musharakah.

3.1. Murabaha means "Profitable sale" where the profit amount is known to the buyer. In this mode of financing, the proposed purchaser of property i.e. customer, requests the Bank to engage in a Murabaha transaction pursuant to which, the bank purchases the property from the seller on a cash, spot-payment basis at an amount equal to the "spot cash amount" and then immediately sells that property to the purchaser, on a deferred payment basis, at an amount equal to the sum of the spot cash

amount plus a profit. In the Pakistani market, this mode of financing is only illustrative and not practically used due to various impediments.

3.2. Ijarah means "To give something on rent". The lease (ljarah) financing structure is one of the most widely used Shari'ah-compliant structures in the world. It is conceptually very simple. In this mode, the customer selects the house and approaches a bank for financing. The bank, after approval of the financing facility for the specific house, purchases the house from the seller and obtains title of the house. Then the bank leases out the house to the customer on a monthly rent. The customer promises to buy the house and the bank promises to sell the house. The customer keeps paying monthly rent to the bank and when all rental payments over the term are made, the customer pays to buy out the lease. Upon lease buyout the customer takes title of the house.

3.3. Istisna'a is an order to manufacture or construct. It may be used for providing housing finance for construction purposes. Istisna'a is a type of forward sale contract in which the bank undertakes to construct the house on the basis of Istisna'a and sell it to the customer. It is not necessary that the bank constructs the house by itself, the bank can hire the services of a contractor (other than the customer). In this

Islamic housing finance

mode of financing, the bank must calculate the cost of construction and fix the price with the client that allows the bank to make a reasonable profit over its cost i.e. financing. The payment of installments by the client may start from the day when the contract of Istisna' is signed by the parties. In order to secure the payment of installments, the bank may mortgage the land or any other property of the customer as a security.

3.4. Diminishing Musharakah is a partnership between the bank and the customer whereby the bank and client participate in joint ownership of the property. The customer who intends to buy, build or renovate the house, approaches the bank requesting them to participate with him/her in purchasing of the selected property. The bank and customer jointly purchase property from a third party (seller). The arrangement is through a form of the Musharakah where the Bank's share in the property is divided into units and the customer undertakes to purchase the units over the agreed period of time (usually 20 to 25 years).

This Diminishing Musharakah arrangement is a flexible proposition for housing finance that provides competitive product features available in the market. This model of housing finance is the most popular and widely used by Islamic Banks in Pakistan.

Process flow of the Diminishing Musharakah [DM] transaction:

Diminishing Musharakah is based on the concept of Shirkat-ul-Milk (Joint ownership in property). It involves taking a share in the ownership of a specific asset and then gradually transferring complete ownership to the other partner (the customer). This concept is based on declining ownership of the bank.

DM Process flow for house purchase transaction:

- a. The customer approaches the Bank with the request for house financing.
- b. The bank enters into a Musharakah (Joint Ownership) agreement with the customer and both the parties provide their investments to be utilized for the purposes of purchasing a property from the seller of the asset.
- c. The Bank's share is divided into ownership units and the property is given to the customer on rent via monthly payment agreement (ljarah agreement).
- d. The customer promises to purchase bank's share (units) over the term of the transaction. This promise from the customer is made in writing through an Undertaking to Purchase. (Muslim jurists have allowed unilateral promises to be enforceable based on the principle that "the promise can be made enforceable at the time of need". The unilateral promise that is given in a particular structure is independent of the underlying transaction).
- e. Every month the customer pays rent for the use of the bank's share in the property.
- f. The customer also purchases the Bank's Musharakah units every month, thus reducing the bank's share in the property every month and increasing his own share.
- g. The rental amount is adjusted according to the bank's share (units) remaining in the property.
- h. Eventually, the customer becomes the owner of the property and bank's ownership finishes.

For construction or renovation of a house:

 The customer approaches the bank with the request for house financing for construction or renovation of a house on the land owned by him/her.

Joint Ownership

Bank Gradual Transfer of Ownership Customer

There are three major components of Diminishing Musharakah;

- Joint ownership by the Bank and customer
- Customer as a lessee uses the share of the bank
- Periodic purchase of Bank's share by the customer
- b. The bank enters into an Asset Purchase Agreement with the customer whereby the bank purchases a certain share in land from the customer in tranches. The purchase of the bank's share in property is also recorded through a Unit Purchase Receipt issued by the bank to the customer.

- c. Alongside Asset Purchase Agreement, Bank also enters into a Musharakah (Joint Ownership) agreement with the customer and the sharing ratio of both the parties is mentioned in musharakah agreement.
- d. The bank keeps purchasing from the customer, a certain share in land from time to time as per the agreed plan and the customer utilizes the sales proceeds (financing amount) received from the bank for the purpose of construction or renovation of the house.
- e. The bank's share is divided into ownership units and is given to the customer as rent via a monthly payment agreement (Ijarah agreement).
- The Customer promises to purchase the bank's share (units) over the term of the transaction. This promise from the customer is made in writing through an Undertaking to Purchase. For construction/renovation cases where the bank initially purchases a share from the customer for extending the financing facility, the buyback of the property share by the customer starts after a certain time period (usually 12 months). The grace period of 12 months allowed for unit purchase is due to shariah requirement of avoiding Bai Innah or buy back. According to Islamic jurists, to avoid the non-permissible situation of "Bai Inah" in a sale and leaseback transaction, which is subsequently followed by a repurchase transaction between the same two parties it is required that a reasonable period of time must have elapsed between the first sale and leaseback transaction of the asset and the second transaction involving the purchase of the asset by the previous owner.
- Every month the customer pays rent for the use of the bank's share in the property.
- k. After the grace period of 12 months, the customer starts purchasing the bank's Musharakah units every month.
- I. The rental amount is adjusted according to the bank's share (units) remaining in the property.
- m. Eventually the customer becomes the owner of the property and bank's ownership finishes.

Illustration

To understand the DM schedule using an illustration, assume that the house costs Rs.1.0 million and the bank financing is Rs.0.6 million, the Bank Investment Ratio (BIR) 60% implies that the customer has invested an up-front or down payment of 40% of the total cost. In order to calculate the number of units, total numbers of months are considered as the total number units since the redemption is done on a monthly basis. Unit price is calculated by dividing the financing amount by number of units. Refer the illustration given below;

| Easy Home – Home Buyer | | | | | | |
|------------------------|-----------|-----|-------------------|--------|--|--|
| House Cost Price | 1,000,000 | | | | | |
| Customer Share | 400,000 | 40% | Total Units | 60 | | |
| Bank Share | 600,000 | 60% | Units Sale Price | 10,000 | | |
| Profit Rate | 13% | | Monthly Rent/Unit | 108.33 | | |
| Tenure in Years | 5 | | | | | |

| Months | Rent | Unit Price | Monthly Payment | Balance Unit Price | Balance Units |
|--------|---------|------------|-----------------|--------------------|---------------|
| 0 | | | | 600,000 | 60 |
| 1 | 6,500 | 10,000 | 16,500 | 590,000 | 59 |
| 2 | 6,392 | 10,000 | 16,392 | 580,000 | 58 |
| 3 | 6,283 | 10,000 | 16,283 | 570,000 | 57 |
| 4 | 6,175 | 10,000 | 16,175 | 560,000 | 56 |
| 5 | 6,067 | 10,000 | 16,067 | 550,000 | 55 |
| | | | | | |
| 56 | 542 | 10,000 | 10,542 | 40,000 | 4 |
| 57 | 433 | 10,000 | 10,433 | 30,000 | 3 |
| 58 | 325 | 10,000 | 10,325 | 20,000 | 2 |
| 59 | 217 | 10,000 | 10,217 | 10,000 | 1 |
| 60 | 108 | 10,000 | 10,108 | 0 | _ |
| | 198,250 | 600,000 | 798,250 | | |

To comply with the rulings of Islamic financing, certain conditions as mentioned below are required to be followed for Diminishing Musharakah transactions.

- The prime condition is that the agreement for joint purchase, leasing and selling different units of the share of the financier should not be tied-up together in one single contract. However, the joint purchase and the contract of lease may be joined in one document whereby the financier agrees to lease his share, after joint purchase, to the client. This is allowed because ljarah can be affected for a future date.
- At the same time the client may sign a onesided promise to purchase different units of the share of the financier periodically and the financier may undertake that when the client purchases a unit of his share, the rent on the remaining units will be reduced accordingly.
- At the time of the purchase of each unit, sale must be affected by an exchange of offer and acceptance at that particular date.
- It will be preferable that the purchase of different units by the client is affected on the basis of the market value of the house as prevalent on the date of purchase of that unit, but it is also permissible that a particular price is agreed in the promise of purchase signed by the client.

Attractive attributes of DM transaction:

The Nature of the contract is for co-ownership.
 The transaction is not based on lending and

borrowing of money but on the joint ownership of an asset.

- Real Musharakah [Partnership] with an asset-based transaction which results in true economic activity.
- In Islamic housing finance, the bank takes a risk on property up to the extent of its ownership share.
- In the case where the Musharakah property is destroyed, the rental payment is stopped, as due to non-availability of the asset, rent cannot be charged.
- With the purchase of the Musharakah share consistently, the rental amount is gradually reduced every month.
- There is no restriction on purchase of additional Musharakah shares. The customer can increase his ownership share in the property through purchase of Musharakah shares periodically.
- No compulsory penalty on early termination. The bank's profit on early purchase of Musharakah shares is subject to the appreciation of the Musharakah property value.
- In the case of late payment of a monthly installment, no penalty is taken from the customer as interest. However to discourage late payment, the customer undertakes to pay an amount towards charity which the bank utilizes for charitable purposes and does not consider as Income. As charity does not become part of Bank's income, maximum efforts are offered to ensure that the customer makes timely payments.

- The charity structure is helpful for customers in real financial difficulties and punitive for willful defaulters.
- Life Takaful (Islamic Insurance) is kept optional and not made compulsory for customers. In the case of death of the customer (i.e. one partner of the musharakah), the Islamic bank may enter into a fresh Musharakah agreement with the legal heir of the deceased customer. For property takaful, being a musharakah partner, the expense of property takaful contribution (Insurance premium) up to the bank's share in property is on the bank's part; hence there is no cost to the customer.

4. Conclusion

Islamic Housing Finance is a true Musharakah transaction in its essence. The way it is structured is a win-win situation for both the partners (the bank and the customer in this case). It is more user-friendly than the conventional interest-based mortgage financing and the way it is growing in Pakistan suggests that in the next couple of years almost 90% of all mortgage financing will be based on Diminishing Musharakah.



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 upto-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 or contact us at:

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