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- Housing finance in Ukraine: a long way to go
- Perceptions of land registration in a state-subsidised housing project in South Africa
- Counting the homeless 'down under'
- The case of a secondary mortgage corporation in Malaysia: Cagamas Berhad
- Stock market fluctuations, housing wealth and consumption behaviour in Turkey

Event to mark the 100th Anniversary of the IUHF – September 11-12 2014 – Munich
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International Union for Housing Finance

Housing Finance International

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For further details, please contact Anja Gruhn
(gruhn@housingfinance.org)

International Union for Housing Finance
Rue Jacques de Lalaing 28, B 1040-Brussels - Belgium
Tel: +32 2 231 03 71
Fax: +32 2 230 82 45
www.housingfinance.org
Secretary General: Hartwig Hamm

Editor's introduction
Continuity and change

↳ **By Andrew Heywood**

The century from 1914 to 2014 has been one of changes in the geo-political and economic landscape that would be almost unimaginable to a senior politician or banker attempting to foresee future events from the perspective of 1914. The past one hundred years has witnessed the rise and fall of communism, the invention of the atom bomb and the onset of global warming, to name but three developments that have shaped the lives of most of us.

In Europe, the First World War was declared with a fanfare of patriotic enthusiasm in August 1914. By its end, it was being justified as "the war to end all wars" in the words of US President Woodrow Wilson; a wildly miss-placed prediction that should make us all very cautious, particularly in the fragile international environment of 2014.

The financial world and within that, the world of housing finance, has changed dramatically also and in ways that few would have predicted. In 1914 Barclays Bank Ltd had been formed by merger only 18 years previously with total deposits of £26 million. Few in 1914 would have predicted the global reach of Barclays and other institutions a century later.

Yet some were at least thinking internationally in 1914 when the IUHF was founded in London. A century later we are still here even after two World Wars, massive environmental challenges, the development of the global economy and the transformation of the financial sector across the world. Of course, the IUHF has changed as the world has changed, yet certain values have persisted within the organisation and still have relevance. They include recognition of the importance of global contact, exchanging knowledge and providing information in the promotion of housing finance and the provision of housing itself.

Housing Finance International cannot claim to be a hundred years old. Nevertheless, the values of global contact, exchange of knowledge and provision of information are central to our role as the journal of the IUHF. It would be nice to predict that we will still be doing this in 2114. However, in the light of the past one hundred years perhaps we should settle for acknowledging present relevance and a promising future as far as we can reasonably see into it.

Ukraine has been in the news for much of the current year in the context of its internal problems and disputes with Russia. Clearly this is not an easy time to be undertaking research on housing finance in Ukraine and we are therefore particularly grateful to Aleksandra Burdyak and Valery Novikov for their comprehensive and thoughtful review, *Housing finance in Ukraine: a long way to go*. Against a backdrop of difficult economic conditions since transition, Burdyak and Novikov offer a national and regional assessment of prices and affordability in relation to both rental housing and home ownership over the post-transition period. They also provide a very useful overview of government intervention in those markets since transition.

Land registration is an ongoing problem for a number of African countries and has been presented as a live issue in articles in previous issues of this journal. Usually, the matter is presented in terms of the need to achieve a more coherent and robust registration system in order to reap the benefits of wider access to housing finance, higher levels of secure home ownership and faster economic growth. In their article *Perceptions of land registration in a state-subsidised housing project in South Africa*, Michael Barry and Lani Roux turn the problem on its head; looking at how land registration actually works for those on lower incomes who wish to undertake housing transactions. Using interviews with those involved, they also examine whether there is a case for developing alternative ways to transact property which bypass registration and conventional conveyancing.

So often in analysis involving the use of statistics, the numbers (and often the conclusions to be drawn from them) are a function of the definitions that determine exactly what is collected as data. Homelessness, always a difficult policy area for governments, is no exception. In his article *Counting the homeless "down under"* Chris Chamberlain, who has researched this subject in Australia for many years, compares two definitions and explores their implications for the Australian policy agenda. He contrasts the long standing "cultural definition" of homelessness that has been used to collect data until very recently with a new and wider definition introduced by the Australian Bureau of Statistics. In the process he raises some thought-provoking questions that will be of real interest whether you work in the field of homelessness or not.

Following the well-publicised difficulties of Fannie Mae and Freddie Mac, the promotion of a secondary mortgage market at a national institutional level continues to be viewed with suspicion in many quarters. It is therefore pleasing to present an article setting out the success story attached to Cagamas (or the National Mortgage Corporation) of Malaysia. Chung Chee Leong traces the development of Cagamas since its launch in the 1980's, through the financial storms that have affected the Asia-Pacific region, to the present. Mr Leong is the CEO of Cagamas and is able to provide an insightful insider view of this well-respected institution.

Finally, we are pleased to include the second and final part of the article by Çiğdem Akın; *stock market fluctuations, housing wealth and consumption behaviour in Turkey*. Ms Akın brings her analysis of the relationship between wealth, housing wealth and consumption to a conclusion following on from the first part of her article, which was included in the Summer 2014 issue of HFI.

Contributors' biographies

Çiğdem Akın is a public management economist at the Asian Development Bank. Previously, she worked as an assistant professor of economics at the Johns Hopkins University SAIS. She obtained her Ph.D. in economics from George Washington University and M.A. in international development from the International University of Japan as a Monbusho scholar. Email: cakin@adb.org

Dr Michael Barry holds the Chair in Land Tenure and Cadastral Systems in the Geomatics Engineering Department at the University of Calgary, where he has been working since 2002. He has studied the effectiveness of land registration and cadastral boundary systems in South Africa for twenty years. Email: mbarry@ucalgary.ca

Aleksandra Burdyak is a senior researcher at the Institute for Social Analysis and Forecasting of the Russian Presidential Academy of National Economy and Public Administration. She is an expert on mortgage lending, housing policy and welfare, a leading researcher in social assistance and housing affordability programs; one of the authors of Russian Federation NHDR (2009). Email: aleksandra.burdyak@gmail.com

Chris Chamberlain was Director, Centre for Applied Social Research, RMIT University, Melbourne, 2005-2013, where he is now Emeritus Professor. Chris is the joint author/editor of Youth Homelessness (1998); Counting the Homeless 2001 (2003); Counting the Homeless 2006 (2008); and Homelessness in Australia (2014). Email: chris.chamberlain@rmit.edu.au

Chung Chee Leong has been the President/Chief Executive Officer and an Executive Director of Cagamas Berhad, Malaysia's national mortgage corporation, since 1 April 2012. Mr. Chung is also a member of the Small Debt Resolution Committee; established by Bank Negara Malaysia to support the resolution of non-performing loans of Small and Medium Enterprises, and a member of the Advisory Board of the Asia Pacific Union for Housing Finance (APUHF). He has 29 years of experience in central banking focusing mainly on financial system stability and the financial sector. Email: chung@cagamas.com.my

Valery M. Novikov is Doctor of Economics, Professor and head of department of the Ptoukha Institute for Demography and Social Studies of the NAS of Ukraine. He was scientific consultant for the President of Ukraine (1994-2000) and an expert of the UNDP in Ukraine (2001-2004). Research interests: social infrastructure and social policy. Email: valery.economy@mail.ru

Alex J. Pollock is a resident fellow at the American Enterprise Institute in Washington DC. He was President and CEO of the Federal Home Loan Bank of Chicago 1991-2004 and is a Past-President of the IUHF. Email: APollock@AEI.org

Zaigham 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

Dr Lani Roux is an independent researcher. She holds a PhD from the University of Calgary and a MSc from the University of Cape Town. Her doctoral dissertation developed theory to explain land registration use in a state-subsidised housing estate in South Africa. Email: lanimroux@gmail.com

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

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

Celebrating one hundred years: the IUHF past, present and future

By Dale Bottom, Don Holton, Alex Pollock, Adrian Coles, Cas Coovadia, Hartwig Hamm and Andreas Zehnder

One hundred years is a long time, particularly given the social, political and economic changes and upheavals that the world has experienced since 1914. The IUHF pre-dates the foundation of both of the quintessentially international organisations, the Red Cross and Red Crescent Societies (founded in 1919) and the United Nations (1945). That the IUHF has flourished and survived as an international association in such a fast moving environment is a testament to the foresight and commitment of its members and officers. There are few more important necessities to human kind than the provision of shelter. We live in a world of rapid population expansion, a continuing trend towards urbanisation, changes in family patterns, and high levels of poverty, all of which create significant practical challenges. The IUHF creates an important and necessary forum for sharing experiences, ideas, and expertise to facilitate solutions towards the UN Habitat goal of "adequate shelter for all".

The contributions below, arranged chronologically, give an interesting and thought provoking insight into the past, present and future of the IUHF. Thanks go to all the contributors to this article but especially to Dale Bottom who provides an invaluable historical perspective on the Union.

Dale Bottom (Secretary General 1989-1995)

The International Union's beginning was a series of housing finance conferences, including a so-called World Congress in Chicago, Illinois IL, in 1893; so-called since the only attendees were from the United States. A Second conference was scheduled for London, England in 1914. While the conference was disrupted by the international geopolitical tensions of the time, nevertheless it was this congress that marked the formal creation of the International Union. Very little activity of a truly international nature took place until a congress was held in Philadelphia, Pennsylvania, in 1931, in conjunction with the United States League of Building Societies and Savings Associations convention to celebrate the 100th anniversary of the building (savings) and loan business in the United States. Further congresses were held in 1933, 1935, and 1938. At the 1938 congress, held in Zurich, Switzerland, the International Union became a formal entity, rather than an ad hoc organization arranging occasional congresses.

Following the 1938 congress, International contacts lapsed due to the "Great Depression" in the United States and its impact on housing and savings markets, followed by the commencement of World War II. After the war, there was pent-up demand for single family housing and societal changes to more urban and suburban living. Building societies, savings and loan associations and other housing finance institutions flourished to meet this need.

In 1956 a new constitution was established and the International Union was once again resurrected as the value of international collaboration on housing finance issues came again to the forefront. As before, it was believed the International Union should provide the forum for the management of these institutions to gather to examine problems and opportunities of mutual interest. International Congresses were held on a regular basis around the world, along with other meetings and conferences with large attendances from many nations.

The establishment of the International Union would not have been possible without the insight and leadership of many individuals. Although the International Union was an independent organization, it depended on the administrative and management support of the Building Societies Association of the United Kingdom and the United States League of Savings Associations. Throughout most of its modern history, the administrative headquarters of the International Union was housed alternatively with The United States League or the Building Society Association of the United Kingdom. Usually the chief executive officer of one of those organizations, or one of their senior executives served as Secretary General of the Union. The first executive staff director of the U S League, Morton Bodfish, hired in 1931, was a keen advocate of the International Union and a major contributor to its early success. Norman Strunk, who followed Bodfish as the executive officer of the U S League was also a major contributor to its development along with Norman Griggs, the chief executive officer of the Building Societies Association of the U K. Clearly they could not have made such contributions without the support and intellectual contributions of leading individuals around the world who are far too numerous to name in this brief report. However, I would like to mention my own personal remembrance of three Presidents who through their strong personalities and personal commitment created enormous goodwill for the International Union. They were E. H. "Ted" Tytherleigh of Australia, Sir Hubert "Pip" Newton of the United Kingdom and Willie-Dieter Osterbrauck of Germany. Each of these gentlemen traveled widely and generated significant interest and support for the Union during their terms of office in the 1960s, 1970 and 1980s.

After retiring as the executive officer of the U S League in 1979, Norman Strunk was named the Secretary General of the International Union. He worked pro bono full time and had not only his considerable executive skill to devote to the job; he had significant world-wide contacts and the full resources of the U S League to complement his efforts. During his tenure the International Union increased its portfolio of publications, added considerably to its membership, assisted in the creation of other national and regional housing finance organizations, and built up a substantial financial reserve, to ensure a more self-sustaining entity.

Demutualization of Building Societies in the United Kingdom and Savings Associations in the United States and other nations, or the conversion to public capital stock ownership structure impacted the landscape of housing finance institutions. This new ownership scheme provided an easier route to consolidation or mergers resulting in a significant reduction in the number of savings associations and building societies. This consolidation among housing finance institutions substantially reduced participation in the International Union. However, the growing interdependence of national economies and the concomitant evolution of specialized financial institutions reinforce a need for collaboration provided by the International Union that has never been greater. It is a credit to those institutions and their leaders who continue to support the International Union.

Congratulations to all the organizations and their leaders who have provided this commemorative and significant conference celebrating the One-Hundredth Anniversary of the International Union for Housing Finance. It is a signal event.

It was my pleasure to serve the International Union during a time of its transition. May your good works continue for another 100 years and I wish you well in your future endeavors to fulfill your important mission.

Donald R. Holton (Secretary General 1995-2001)

In 1995, the IUHF expanded its mission beyond learning and exchange, focusing as well on the desired result of its work: "To improve the effectiveness of housing finance leaders and the organizations they serve and thereby increase the availability of housing finance."

The IUHF journal, *Housing Finance International*, edited by Dr. Michel Lea, explored issues and innovations from many countries: affordable housing, globalization, securitization, housing savings programs, mortgage enhancements and policy. An affiliation with the Wharton School, University of Pennsylvania, enabled IUHF members to attend intensive two-week training in housing finance. In 1996, the Banking Council of South Africa organized the IUHF International School in Pretoria, S.A., which benefited many from emerging economies.

IUHF presidents, 1995-2001, were Chris Sharp (Northern Rock, UK), Luiz Pinto Lima (Unibanco, Brazil) and Alex Pollock (Federal Home Loan Bank of Chicago, USA). Over these years, Mr. Pollock's bank generously hosted the offices of the secretariat.

Members organized dynamic World Congresses. Adrian Coles, Director-General of the Building Societies Association (UK) headed the well-attended 1995 congress in London. In 1997, Mrs. Krongcin Kanitasut, senior executive, Government Housing Bank, Thailand, served as congress secretary for the four-day meeting held in Bangkok and Phuket. Thailand's prime minister opened sessions. In 1999, Luiz Henrique Rocha headed Uniapravi's hosting of the congress in Rio de Janeiro, an event opened by the Vice President of Brazil, Marco Maciel. The 2001 congress was cancelled after the 9-11 terror attacks.

Alex J. Pollock (President 1999-2001)

In 1991, in the wake of the American housing finance crisis of the 1980s, I walked into my new office in the Federal Home Loan Bank of Chicago to take up my new job as its chief executive. My predecessor had done me two large favors: getting himself forced out, and leaving a book in the otherwise empty bookcase. The book was *National Housing Finance Systems*, a discussion of "the range of systems of housing finance" around the world, by Mark Boleat, published by an organization I had never heard of: the "International Union for Building Societies and Savings Associations" (now the IUHF). Inquiring where this IUBSSA might be found, I discovered it was a few floors up in the same building in downtown Chicago. Thus began my long, professionally highly valuable, and personally very enjoyable, association with the IUHF. This included having the IUHF Secretariat housed in our bank for several years, before it moved to London and then Brussels, and my work moved to Washington, DC.

The IUHF's purpose is to provide knowledge, information and understanding about housing finance systems in varying economic, financial, and political contexts, and to compare each of our own narrow institutional assumptions to a broader international perspective, so that we may mutually learn from multiple experiences, experiments, problems, disasters, successes, and innovations. The IUHF has greatly helped me in this way–I owe it all to finding that book.

Adrian Coles (Secretary General 2001-2009)

I became Secretary General of the International Union in 2001. It was an honour to be invited to serve in that capacity, and a pleasure to be an office holder for the next eight years. The IUHF offered then, and still offers, knowledge, understanding, and analysis of housing finance from a variety of angles: as an academic subject worthy of study in its own right; as a comparative analysis of different housing finance systems from which those otherwise bound by narrow understandings of their domestic arrangements can learn; and as a tool to help managers of mortgage lenders learn about specific topics – arrears, say, or underwriting – from the worldwide expertise available through the IUHF.

Even more important have been the networking opportunities. I was lucky enough to be supported and guided by excellent and supportive Executive Committees and Presidents. Many have become life-long colleagues and friends.

My period in office was marked by a massive expansion in many mortgage markets, followed by an equally massive contraction. The huge changes in markets, regulation and the prospects for owner-occupation arising as a reaction to the events of the last decade mean that members of the Union will have plenty to talk about over the next 100 years!

Cas Coovadia (President 2009-2013)

I am honoured to contribute to the celebration of the centenary of the International Union for Housing Finance (IUHF). I was President of the IUHF from 2009 to 2013, before handing over to Andreas Zehnder, the current President. I presided over a period of turbulence and uncertainty because the IUHF had to consider its role and future in the aftermath of the financial crisis starting in the USA and spreading to parts of Europe. The Board of the IUHF went through serious deliberations and considered a number of options to rebuild the IUHF after numerous members were affected by the crisis.

The Board finally accepted an offer from the European Federation of Building Societies [EFBS] to take over the Secretariat of the IUHF from the European Mortgage Federation. The EFBS has acted as Secretariat for the last two years and has made good progress in maintaining membership and continuing with the operations of the IUHF.

The IUHF has a proud history in the area of facilitating housing finance globally. It is an in valuable network of relevant organisations that contribute to ongoing innovation and development in this critical area. I believe the IUHF has a critical role to play in promoting sustainable housing finance in developed and developing countries, such that housing finance contributes to sustainable human settlements.

Hartwig Hamm (Secretary General 2011-present)

Almost everywhere in the world housing finance is, a national - if not a local business. However, economic and political goals and activities are similar. Those who want to operate on a sound and successful basis would be well advised to benefit from the experience of others; from historical experiences as well as from the experiences of other countries. The last few years have clearly demonstrated how painful it can be not to learn from mistakes made in the past or elsewhere.

The International Union for Housing Finance provides a unique platform for the housing finance industry across the globe. Not only does it keep members abreast of current developments in housing finance with the journal "Housing Finance International", but the regular congresses and events of the IUHF provide all housing finance professionals an indispensable opportunity to build up personal ties with colleagues from different sectors of the industry and different regions of the world, colleagues with proven expertise and communication skills on whose reliable judgment one can depend.

It was therefore in the autumn of 2011 that I, with great pleasure and utter conviction, in my role as Secretary General together with the Secretariat of the European Federation of Building Societies, undertook all necessary actions to keep this platform going and breathe new life into it. I hope that the World Congress in Vienna in 2013 and the conference celebrating the one-hundredth anniversary of the International Union for Housing Finance are milestones that carry the IUHF forward to a prosperous future!

Andreas Zehnder (President 2013-present)

The International Union for Housing Finance has been an important part of my life since the beginning of my professional career. It has enabled me to form a number of friendships and acquaintanceships that have lasted until today. The international expertise that the IUHF brings together and offers through its Congresses, International Schools and the Journal "Housing Finance International", ensures its importance; the IUHF is a vital source of information for every expert in housing finance– including myself.

Reaching one's 100th birthday is far from an ordinary achievement. The position of the IUHF is similar to individuals who reach this exceptional age and retain their good health: They have experienced a lot, have been through many of the vicissitudes of life, and can draw on a wealth of experience. However, unlike individuals, who are subject to the ageing process, the IUHF as an institution has been in a constant state of renewal. The history of the IUHF is one of frequent change and adaptation. In 1914 it was established as the International Union of Building Societies and Savings Associations in turbulent times. World War I had broken out a few days before the inaugural conference in London, which in spite of the international situation, was attended by 39 delegates from three English-speaking countries: the UK, the USA and South Africa.

World events and the fluctuations of financial markets have always had an impact on the IUHF. It was therefore by no means inevitable that the institution would celebrate its 100th anniversary this year. The latest turbulent period is only just behind us. The crisis that erupted in the Anglo-American housing finance system and which swept across the world, creating the worst economic depression since the 1920's, has resulted in serious debates in the IUHF about its future role and direction.

The work of the IUHF is highly relevant in today's rapidly evolving financial world. The European Federation of Building Societies (of which I am the Managing Director) therefore expressed its commitment to the institution by offering to take over the secretariat of the IUHF from the European Mortgage Federation in 2011 in order to bring the IUHF back into safe waters. This has certainly been a success.

For 100 years the IUHF has been spreading insight into the various housing finance practices and instruments at a global level, so that narrow national horizons can be transcended and the best methods can prevail. In this way, the IUHF contributes to a better understanding of the interaction between housing markets and the general economy. Such an understanding supports the housing economy in following a stable path and avoiding bubbles. Stability was close to the hearts of the founding fathers of the Union. In the constitution adopted at the first international congress, they even postulated the possibility of legal restrictions on instruments and institutions if experience seemed to dictate the necessity for their imposition.

There were and always will be new tools, methods, institutions and regulations. The passage of time brings innovation with it and this can be very valuable. More people have access to credit than the founders of the IUHF would have dreamed possible and, at their best, housing finance systems have become more stable. However, we now also confront new challenges and new risks must be managed with appropriate tools.

It is the task of the IUHF to identify opportunities and challenges simultaneously. As in the past, the IUHF is still the right institution to undertake this task and perhaps the only one with the necessary focus and global reach. Its Presidents have come from all continents of the world, which not only brings a very broad perspective on the issues with it, but also a measure of objectivity and neutrality. There is no powerful organization dictating the IUHF agenda behind closed doors. As an institution we stand for open dialogue between equal partners and our reputation is built on the results of that dialogue.

The IUHF has gained a strong position over the past 100 years. We have all contributed to this success: from the founding fathers to the staff of housing finance institutions who have continuously renewed the ideals of the IUHF by turning them into concrete support for innovative and prudent best practice. The early members of the IUHF had to travel, often for weeks, in order to gather information; today this information is available at the click of a mouse. Nevertheless, joint meetings and face-to-face conversations are still irreplaceable. This truly is the only way to create international cooperation - and the future should involve even deeper and broader international co-operation. In fact, as the recent World crisis has demonstrated, even though housing financing systems follow national rules, laws and habits, they often have impacts that do not stop at national borders. The IUHF aims to promote international co-operation and to form the backbone of sound international housing finance, theory and practice. May the good work continue for another 100 years.

Housing finance news from Africa:
Housing finance depends on the entire housing value chain

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

Increasingly, policy makers, practitioners and academics are raising the issue of the housing value chain as fundamental to getting the housing finance sector to work in Africa. A recent paper by Oxford academics Paul Collier and Anthony Venables makes the point succinctly.[1] They write:

In many African countries, a market for private provision of formal sector mass housing is largely absent. This is not inevitable, but is the consequence of policy failure surrounding five key issues. The affordability of housing, with costs often inflated by inappropriate building regulations and inefficient construction sectors; lack of clarity in land titling and legal enforcement; lack of innovation in supply of housing finance; failure to supply supporting infrastructure and to capture development gains to finance this; and failure to plan cities in a manner conducive to employment creation. Since responsibility for these policies is divided between different parts of government, a coordinated push is needed to secure reform and activate this market.

The challenge, as Collier and Venables highlight, is bringing together stakeholders from sectors that are otherwise in separate silos: central bankers and finance ministers with housing and land ministers, bankers and micro lenders with community representatives, developers and building material suppliers, and so on. Critically, this must all happen at once: success in titling, for example, is unhelpful if the banking system hasn't the liquidity to support the growth of the mortgage market, and this won't happen if there are no houses to buy.

At a conference in Cape Town last month , a number of African housing finance practitioners gathered to discuss the state of housing financing on the continent. Throughout the many presentations, a key theme was that the success of housing finance depended critically on the success of the wider housing delivery value chain.[2] Delegates raised issues such as the land tenure framework, the cost of building materials, the capacity of the construction sector, liquidity issues, and the availability and cost of long-term capital. While each delegate could offer particular examples from their own context, the issues raised were on the whole, common to all.

Friedemann Roy, the Global Product Lead for Housing Finance at the IFC, suggested three key challenges in growing housing and housing finance markets in Africa.

First, he highlighted constraints in the enabling environment, specifically with regard to land regulation, infrastructure, property markets and housing policy. In Ghana, for example, overlapping statutory and customary land tenure systems undermined the use of land to as security in the housing lending process. He also noted that housing policies were only currently being developed in many countries, and many were still in draft form. The competencies relating to housing and housing finance were often scattered across several ministries and institutions.

The second issue related to constraints in the delivery of affordable housing at scale. The cheapest property available in the formal sector was barely below US$30 000, affordable only to a small minority of households. This, he said, was partly a consequence of the cost of construction and infrastructure. The high cost of construction was due to the absence of local building material industries and a consequent dependence on imported building materials. Transporting these materials over long distances, especially in land-locked countries, also exacerbated the costs. Further, municipal incapacity and limited budgets meant that developers had to undertake and finance infrastructure within the framework of their housing developments, costing the investment into the housing product price rather than amortizing infrastructure costs over long term municipal bonds as might otherwise be the case. Housing supply was also constrained by the absence of a vibrant construction sector. Most countries did not have adequate legislation to manage the construction process and few developers had the project management experience to undertake large scale projects. As a result, lenders had an aversion to the provision of construction finance, creating a chicken-and-egg situation where finance to facilitate the growth of the sector was unavailable, due to the incapacity

1 Collier, P and A Venables (2013) Housing and Urbanization in Africa: unleashing a formal market process. CSAE Working Paper WPS/2013-01.

2 Affordable Housing Africa. 18-20 August 2014. African Pride 15 on Orange Hotel, Cape Town, South Africa. www.marcusevans.com

of the sector, which was of course constrained by the lack of finance.

Access to, and the affordability of housing finance was the third constraint raised by Friedemann Roy. He said that housing finance was expensive for a number of reasons. First, short term deposits created a funding mismatch and the capital market structure in most countries did not allow for the issuance of covered mortgage bonds. Limited primary markets meant that securitisation was not yet an option. The providers of long-term funds were often social security funds. This was an area for development, but conservative regulation policies often meant that social security funds were reluctant to engage with the housing sector. As a result, in many jurisdictions, state-owned lenders dominated, undermining the emergence of private sector options and ultimately, contributing to rising finance costs.

Still, the conference presentations also highlighted interventions which were overcoming the challenges.

Charles Bonsu, GM of Mortgage and Consumer Banking at HFC Bank in Ghana, and Vice Chairman of the African Union for Housing Finance, described the application of indexed mortgages in the Ghanaian context. Ghana is the only African country with such a product. He argued that the indexed mortgage is appropriate for low to moderate income earners. HFC Bank had a dual index product: the interest rate was indexed to inflation, while the monthly instalment amount was linked to a wage index. The product responded to affordability constraints, lowering the monthly repayment at the beginning of the repayment period and allowing it to grow overtime, as wages grew. This meant that instalment to income was never greater than 35% of income. Where wages were growing faster than inflation, a twenty-year dual index mortgage could be fully paid off by year twelve, he said. In high inflationary environments, the dual index mortgage could still be paid off within twenty years – however he cautioned that in environments where inflation was higher than 40%, an indexed mortgage would not work. HFC Bank had limited the offering of this product to its affordable market loans, with a ceiling loan amount of US$30 000, and limited to borrowers with monthly incomes of US$ 850. To date, HFC Bank has used indexation to originate more than 10 000 home loans – of these, 80% were paid off before maturity date. The product has made housing affordable and available to more than sixty percent of the Ghanaian population.

In Nigeria, the establishment of the Nigerian Mortgage Refinance Company was seeking to overcome some of the liquidity challenges in that country's mortgage market. Facing a reported housing deficit of 17 million units, the NMRC was established to provide liquidity into the market, enabling the flow of mortgage finance against which developers could then build affordable housing at scale. Roland Igbinoba, the MD and CEO of the FHA Mortgage Bank of Nigeria, explained that this was part of the Central Bank's mortgage banking sector reform programme. The programme had three components – the reform of and support for primary mortgage banks in Nigeria, in which they were adequately capitalised and refocused to address the needs of the sector; the development of an institutional framework with standardised mortgage underwriting procedures, capacity building and professional development, and the promotion of mortgage insurance; and the development of a secondary mortgage market, through the establishment of the NMRC, and the reform of the Federal Mortgage Bank of Nigeria as a secondary market operator. In championing these interventions, however, the Central Bank of Nigeria also highlighted the need for additional interventions that were beyond its scope of influence. These included the development of an appropriate legal framework for the housing sector, the accelerated development of affordable houses. Roland Igbinoba explained that the Central Bank of Nigeria had developed

The need for stakeholders to work together in promoting effective housing markets, which include the all the links in the housing value chain is something taken for granted in many markets around the world. African housing markets are new, however, and face the additional challenge of limited affordability on the demand side, and limited capacity on the supply side. Effective coordination in bringing together the capacities that do exist is therefore critical. Cas Coovadia, MD of the Banking Association of South Africa and Treasurer of the African Union for Housing Finance concluded his presentation with three key questions. He noted that the most effective interventions across the continent generally involved some form of public-private partnership – so he asked, how do we facilitate productive relationships? Investor interest, he said, depended on established track records, clear and positive investment performance, and access to local markets – so how do we realise these conditions? And finally, he argued that the housing delivery and financing chain is only as strong as its weakest link – so how do African housing practitioners address these gaps?

The 100th anniversary of the IUHF offers practitioners the opportunity to reflect on lessons learned in the evolution of housing markets around the globe. These lessons will be particularly useful in the African context, where the AUHF celebrates its own anniversary, turning 30 this year. The pressures of urbanisation, and affordability, matched with the opportunities for scale and new markets, have created a unique and critical moment to which practitioners must respond. By working together, across silos, to support the growth and development of the entire housing value chain, they will see the realisation of effective housing markets across this continent.

Asia-Pacific Union for Housing Finance – News update

By Zaigham Mahmood Rizvi

Bangladesh

Bangladesh is a developing country and has limited resources. The Bangladesh Government is working for a planned policy of rural urbanization. The Government has taken on an ambitious project of setting up new model villages with limited urban facilities to prevent shrinkage of agriculture land. The Executive Committee of the National Economic Council [ECNEC] has approved the Tk 4.24 billion (UD$ 55 million) for the "Palli Janapad" project, through which four-story buildings will be constructed in each village to accommodate the families living there (for details please see http://www.thedailystar.net/frontpage, dated:20/08/2014).

Though Government is actively working in the housing sector, the private sector is playing the major role.

The requirement to add solar panels to high-rise buildings is creating initial difficulties for the development of this sector. According to Developers Association (REHAB) almost 22,572 Flats remain unsold. The current value of these Flats is 220 billion taka (US$ 2.8 billion). The REHAB proposed to the Government that they create a housing fund of 150 billion Taka (US$ 2 billion) to increase the purchasing capability of housing clients.

The Bangladesh House Building Finance Corporation [BHBFC] has managed to maintain steady growth. In the fiscal year 2013-2014, BHBFC has made a profit of 1.94 billion taka. A new strategy was established and new techniques were implemented by the current management to enhance the overall performance of BHBFC. The recovery rate of BHBFC (up to June 14) is about 86% and the Non-Performing Assets [NPAs] classified rate is about 6.50%.

India housing for all by the year 2022

Housing for the affordable segment has been a priority area for the Government of India. To mitigate housing needs, housing schemes have been in operation both by the Central and State Governments and also through budgetary allocation. The majority of the Central and State Schemes are intended to fulfill their social objective of providing housing to the economically weaker section/lower income groups [EWS/LIG] segments through subsidized or cross subsidized mechanisms while the private sector caters for the needs of middle and higher income segments on a commercial basis.

The newly elected Government in India has been mandated to provide "Housing for All by 2022". Towards achieving the same, the recent Union Budget announcements in July 2014 related to the housing sector are very encouraging. Some of the key announcements regarding the housing sector for 2014-15 are given below:

- The Allocation for the National Housing Bank increased to IRs 8000 crore[1] to support rural housing.
- A sum of IRs 4000 crore for NHB from the priority sector lending shortfall with a view to increasing the flow of cheaper credit for affordable housing to the urban poor/EWS/LIG segment has been provided.
- Extended additional tax incentives on home loans shall be provided to encourage people, especially the young, to own houses.
- A mission on low cost affordable housing anchored in the National Housing Bank is to be set up.
- Slum development is to be included in the list of Corporate Social Responsibility [CSR] activities to encourage the private sector to contribute more.
- Master planning of 3 new smart cities in the Chennai-Bengaluru Industrial Corridor region, viz., Ponneri in Tamil Nadu, Krishnapatnam in Andhra Pradesh and Tumkur in Karnataka to be completed. The development of industrial corridors with emphasis on Smart Cities linked to transport connectivity to spur growth in manufacturing and urbanization will be accelerated.
- A sum of IRs 7060 crore is provided in the current fiscal year for the project of developing "one hundred Smart Cities".
- Incentives for Real Estate Investment Trusts [REITS] are to be enhanced including complete pass through for the purpose of taxation and a modified REITS type structure for infrastructure projects to be known as Infrastructure Investment Trusts [INVITS]. These two instruments are prepared to attract long term finance from foreign and domestic sources including the non-resident Indians [NRIs].

These budget announcements related to the housing sector are very encouraging. With an allocation of IRs 8000 crore to support rural housing and IRs 4000 crore for affordable housing to the NHB result will be increased flow of cheaper credit for affordable housing to the rural and urban poor/EWS/LIG segments. Further, the setting up of a mission of Low Cost Affordable Housing which will be anchored in the National Housing Bank to incentivize the development of low cost affordable housing.

Housing Finance in Pakistan

The outstanding housing finance lending reported by banks and DFIs (including HBFCL) as of June 30, 2014 was Rs. 52.7 billion. It was

1 I US$+ IRS 60, and I Crore= 10 million

Rs. 52.2 billion as of June 30, 2013 showing a decline of Rs. 0.5 billion (0.95 %) over the year. At the end of last quarter, it was Rs. 52.6 billion. The number of outstanding borrowers also decreased from 79,478 to 74,894 over the year, showing a fall of 5.76 percent. Non-performing loans decreased from Rs. 17.6 billion (June 30, 2013) to Rs. 15.6 billion (June 30, 2014); an 11.36 % decrease over the year.

Fresh disbursements of Rs. 3.46 billion were made to 742 borrowers during April to June, 2014. HBFCL accounted for 51 percent of these new borrowers and contributed 16 percent of the new disbursements equivalent to Rs. 541 million.

With regard to the issuance of Prudential Regulations [PRs] for housing finance, until now the housing finance was reported and regulated under the PRs of consumer finance. However, due to the different nature of housing finance products in comparison to consumer products, the State Bank of Pakistan (SBP, the central bank) has issued a separate set of housing finance PRs. This initiative has been taken to create an enabling regulatory environment for the financial institutions through changes in general and relaxation in specific provisioning and reserve requirements.

With regard to the issuance of Guidelines for Financing to Housing Builders/Developers, SBP has issued its guidelines for financing to house builders/developers to encourage banks/DFIs to develop suitable products to facilitate finance to credit worthy real estate builders/developers.

These guidelines broadly cover the following areas:

- Eligibility Criteria for a Builder/ Developer
- Requirement for documents relating to the financial standing of a builder/ developer
- Requirement for documents relating to a property/project
- Assessment of builders/developers projects
- Requirement for the valuation of a project as per project value
- Legal opinion on project/ property document
- Collateral arrangements to finance builders'/ developers' projects
- Requirement of debt/equity ratio
- Working of Escrow Account
- Requirement for insurance/Takaful

Low Cost Housing Guarantee Scheme:

The Government of Pakistan announced, in its budget for FY 2014-15, a program to provide housing credit for low cost housing units to enable the poor to have their own houses. Banks and financial institutions will provide loans of up to Rs. 1 million[2] (US$ 10,000) under this scheme while the government will guarantee 40% of the portfolio amount. The scheme will cover all areas of Pakistan and 25,000 loans worth Rs.20 billion will be provided through this innovative method of supporting low and middle-income families.

The State Bank of Pakistan is devising a mechanism in close coordination with relevant stakeholders to implement the aforementioned scheme.

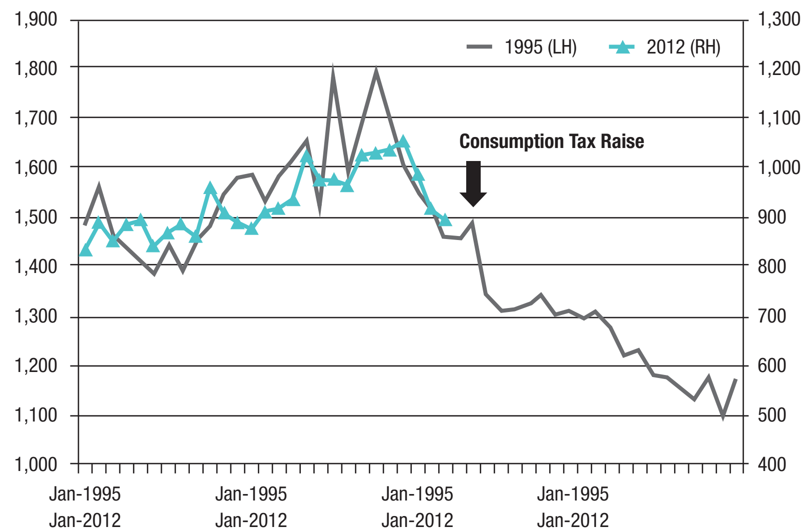
Establishment of Mortgage Refinance Company [MRC]

In the budget for FY 2014-15, the Government announced that a Mortgage Refinance Company is being established with a broad shareholding to be held by the Government of Pakistan, the Commercial Bank, and Development finance institutions, multilaterals and others for this purpose, in order to generate long-term liquidity for housing finance. Total paid up capital of the company would be Rs.6 billion. The company will provide refinance facilities through purchases of loans from the financial institutions engaged in loan origination and package them for sale to long-term investors. The Government of Pakistan will invest Rs.1.2 billion in the equity of the company. The Central Bank and Ministry of Finance are in close coordination to establish the MRC.

Japan[3]

The Consumption Tax rate was raised from 5% to 8% in Japan as of April 2014. It is 17 years since the rate was raised from 3% to 5% in April 1997. Housing is also subject to the Consumption Tax, although the land price, which comprises the major portion of the housing price, is exempted. If you purchase a house whose value of the structure is JPY 20 million (approximately USD 200,000), the tax burden will be increased by JPY 600,000 (approximately USD 6,000).

Figure 1 Seasonally Adjusted Annual Rate of Housing Starts in Japan (1,000 Units)



Source: Ministry of Land Infrastructure, Transport and Tourism

2 PRs 100+ I US$

3 By Masahiro Kobayashi, Director General for Global Market, Research and Survey Department, and Director General for International Affairs, Corporate Strategy Department, Japan Housing Finance Agency (JHF). (Note) The views and opinions expressed in this section of the article are the author's own and do not represent those of JHF or the Government of Japan.

The Government of Japan has introduced several counter measures to mitigate the negative impact on the housing market including tax incentives, but some prospective home buyers have already taken measures to protect themselves; purchasing houses before the consumption tax rate is raised. Toward the end of 2013, such a rush was observed in the data on housing starts, as was the case in 1997. The rush died down a couple of month before the implementation of the Consumption Tax hike because the house must be completed in principle to enjoy the lower tax rate and it takes a several months or a couple of years to complete the housing construction after it has started.

In the case of 1997, the housing starts continued to decline for more than a year after the Consumption Tax rate was raised from 3% to 5%. For the moment, the trajectory of the number of housing starts seems be similar in 2014. However, we do not anticipate such a drastic decline. In 1997, not only did the Consumption Tax rate rise negatively affect the housing market, but the macro-economic environment also exacerbated the situation. The Asian currency crisis which hit Thailand in July 1997 spread across the region and in Japan several financial institutions faced insolvency problems, which lead to a financial crisis and a credit crunch in Japan. This time, the financial system in Japan is resilient after undergoing substantial reforms in the last decades.

We may face some subdued construction activity for a couple of month, but Japan is finally getting out of deflation which has been prolonged for as long as 15 years. If the extraordinary monetary accommodation by the Bank of Japan succeeds in lifting the Japanese economy out of deflation, the minds of Japanese consumers will become more optimistic, their optimism further fueled by the honor of hosting the Tokyo Olympic and Paralympic Games in 2020, which requires substantial fixed assets formation including upgrading of urban infrastructure.

This time is different, we hope.

Thailand

Thai developers eye ASEAN market

A recent article in the Bangkok Post said that the Association of South East Asian Nations [ASEAN] markets offers a vast opportunity for Thai property developers after regional economic integration kicks late next year, but some experts warn risks lie ahead.

"Opportunities in the property sector in ASEAN are admittedly large but we suggest Thai developers start with small-scale projects to minimize risks before expanding..." said Sopon Pornchokchai, president of the Agency for Real Estate Affairs.

Sophon added that early this year, Bangkok had the largest number of residential projects among 10 ASEAN cities with about 1,500 such projects, followed by Jakarta (300), Manila (200), Ho Chi Minh City (150) and Phnom Penh (100).

Prior to 1997, Sophon said many Thai developers tried unsuccessfully to build housing overseas. Different lifestyles, culture and restrictive regulations and laws deterred them, he said.

Even though many Thai developers are looking to expand overseas, Prateep Tangmatitham, Chief Executive of Supalai Plc told the Bangkok Post that Thailand itself was not an easy place for foreign developers because of foreign property ownership issues.

"Official documents related to property and land are all in Thai, while local units of measurement such as wah, ngan and rai are still used, he said.

Brighter outlook for Thai home loan market

The Housing Finance Association's President recently told the Bangkok Post that the Thai home loan market will expand by 10 per cent per annum over the next three years despite recent political uncertainty. Kitti Patpongpibul's optimistic outlook comes amid Siam Commercial Bank's [SCB] forecast of a second half 2013 rebound of new mortgages issued.

Total new housing loans are estimated to expand by Bt 570 billion ($US19 billion) in 2014 compared to a previous forecast of Bt470 billion ($15.7 billion). In 2013, lenders extended new home mortgages of Bt530 billion ($US14.3 billion)

New housing loans of Bt270 billion ($US 9 billion), the SCB report said, were issued in the first six months of 2014 with a substantial portion in June, a sign that consumer confidence is returning.

Bank of Thailand Governor Prasarn Trairatvorakul also told The Bangkok Post that property loans should grow in line with the overall lending growth at 6-8% this year.

GH Bank announces first half 2014 operating results

Angkana Pilun-Owad Chaimanat, GH Bank's President announced the Bank realized first half 2014 operating profits of Bt4,672 million ($US 153 million).

During this period, the Bank issued new loans of Bt65,589 million (US 2.15 billion), increasing 13.75 per cent from the same period last year.

At the end of Q2 2014, the Bank's total loans outstanding increased 3.51 per cent to Bt762,317 million (US$21.5 billion) while total assets increased 6.3 per cent to Bt814,788 million ($US27.3 billion).

Angkana said that during the first half of 2014, the Bank achieved its new loan targets.

"Currently, the Economic Confidence Index is moving positively and we are confident the Bank will achieve its year-end new-loan target of Bt134,000 million ($US 4.46 billion)."

During Q2, the Bank offered numerous innovative new loan and deposit products that were designed to meet different customers' needs. They are also pro-actively improving their service quality and introduced new service channels in areas across the country.

GH Bank still Thailand's largest individual lender

Despite stiff competition, Thailand's Government Housing Bank [GH Bank] is still the largest home loan lender in the country.

Thailand's home loan mortgages outstanding reached Bt 2.55 trillion ($US 85 billion) at the end of December 31, 2013.

The top six ranked lenders were as follows:

1. **GH Bank**
   Bt 727 billion ($US 24.2 billion)
2. **Siam Commercial Bank**
   485 billion ($US16.1 billion)
3. **Krungthai Bank**
   270 billion ($US 9.0 billion)
4. **Government Savings Bank**
   247 billion ($US 8.2 billion)
5. **K-Bank**
   215 billion ($US 7.1 billion)
6. **Bangkok Bank**
   170 billion ($US 5.6 billion)

Europe

↳ By Mark Weinrich

Even before Basel III is fully implemented, Basel IV casts its shadow ahead. After completion of the Basel III standards, the Basel Committee has already developed a number of new recommendations plus consultation and discussion papers. Some of the ideas are already quite tangible, while others are still at the policy discussion stage.

On the one hand, it is therefore already possible to classify final standards or consultations in revision status on leverage ratios, large exposures, counterparty risk, securitization and trading book as "Basel 3.5". On the other hand, the discussion of basic trends in the regulatory approach is explored further. This could also lead to a qualitatively new approach in Basel IV. This further development is basically driven by the desire for a reduction in complexity and a better comparability of banks' internal risk modeling.

The Basel Committee has suggested in its revised framework that a minimum requirement of 3% for the leverage ratio should be tested during the parallel run period from 2013 to 2017. A bank's total exposure measure is the sum of on balance sheet non-derivative exposures, repurchase agreements and securities finance, derivatives and off-balance sheet items. The Basel Committee monitors banks' disclosed leverage ratio data on a semi-annual basis to assess whether the 3% ratio is appropriate on an ongoing basis. Depending on the results, the leverage ratio will be adjusted and made effective in 2018. So far, the leverage ratio does not belong to Pillar 1 which prescribes the minimum requirements, but it is part of the supervisor's additional regulatory tools under Pillar 2.

There is still hope in the finance industry that the leverage ratio will not become a mandatory backstop under Pillar 1. But it is not possible to dismiss the impact that the discussion about the leverage ratio has already had. Rating agencies give considerable attention to this indicator although the leverage ratio is not yet mandatory. However, an excessive reliance on the leverage ratio is undesirable. Credit institutions could be incentivized to accumulate riskier assets or to discontinue business with certain customer groups or instruments. Of particular interest for housing finance practitioners is that the funding costs for portfolios with low risk-weighted assets might increase considerably[1]. This could therefore have a distorting effect on mortgage lending or on holding government bonds and increase the credit costs or lead to a funding bottleneck in these areas.

From this perspective, the leverage ratio operates like a "floor" for the risk weight and countervails the current risk-weighted framework as it does not (and in fact cannot by definition) take into account the riskiness of the asset base. However, there is no question that for regulatory policy to create the right incentives, a strong link between internal risk practices and regulatory capital should be maintained. Furthermore, the underlying differences in accounting standards make comparability across jurisdictions not straightforward. This suggests that a leverage ratio should remain permanently positioned as an additional Pillar 2 instrument.

The Basel Committee is also looking closely at the use of supervisor-approved internal models by banks. The current system allows credit institutions to use their internal models to calculate regulatory capital requirements, and regulators are concerned that it gives credit institutions too much leeway to determine inputs, that it generates outputs that cannot be compared from institution to institution, that it is too complex, and that it may be based on flawed data sets.

In order to constrain the variation in risk-weighted assets and protect against the risks in internal models the Basel Committee proposes to tie model-derived capital requirements more closely to the standardised calculations. This could be applied by introducing fixed risk parameters and new floors on internal model outputs or by using benchmarks that do not impose a hard floor but would still provide a standardised measure that could be used to evaluate the output from model-based approaches.

The Basel Committee also admits that in pursuit of greater risk sensitivity, parts of the Basel capital adequacy framework have become very complex. Simplicity has, to date, not been recognised as an explicit objective by the Committee but it proposes to adopt it as an additional objective. This could help to counter the natural tendency towards more complexity within the regulatory framework. Furthermore, fundamentally different approaches to capital adequacy that address the complexity issue are discussed as well.

With its aims of making the regulatory framework simpler and tying model-derived capital requirements more closely to the standardized calculations, the Basel Committee acknowledges also the burden for smaller credit institutions imposed by an overly complex regulation. It could also help to restore confidence in internal models. However, simplicity and standardization should not come at the expense of representativeness and risk sensitivity. The assessment of risks is a core competency of credit institutions and it cannot be replaced by prudential rules or regulatory models. Advanced internal models support credit institutions to fully integrate processes of risk and capital management as well as increasing risk sensitivity and risk management. It is therefore alarming that the criticism of the internal models has already reduced the incentives to develop these models.

It is not only because of the possible changes to the regulatory framework that credit institutions will have to further develop their capital management. An even deeper understanding of the capital requirements of different business activities and their connection with the business and risk strategy is of key importance to secure further success and profitability. A solid IT architecture and efficient processes in risk and finance are therefore indispensible. They will also support the credit institutions in handling the increased disclosure requirements.

1 Calibrated to 8% minimum capital, every risk position with a risk weight lower than 37.5 would be rendered unattractive given a leverage ratio of 3%.

U.S. housing finance in 100-year perspective

By Alex J. Pollock

Housing finance in the United States over the last one hundred years can be divided into three eras:

- The age of savings and loan institutions, 1914-1980
- The age of Fannie Mae and Freddie Mac, 1980-2008
- The As-Yet Undefined Age, 2008-future.

The age of savings and loan institutions

At the organizing meeting of what became the International Union for Housing Finance in August, 1914, 18 of the 39 delegates meeting in London were from the American savings and loan "movement," as they then thought of themselves – a movement for thrift and "the message of saving," home ownership, self-help, self-discipline, and social improvement[1]– excellent and still highly relevant goals. At that time there were about 6,800 savings and loan associations in the U.S[1].

In the housing boom which went along with the general boom of the 1920s, the remarkable "Coolidge Prosperity," the number of U.S. savings and loans grew to over 12,000. These were severely winnowed by the vast bust of the 1930s, which included a devastating housing and mortgage finance collapse. The national trade association of the savings and loans movement was the United States League for Savings. At the International Congress of housing finance in Salzburg in 1935, the message of the then-head of the U.S. League was "the precarious plight of the savings and loan movement in the early 1930s."

In the midst of international economic disaster, this International Congress issued a "World Manifesto of the Building Societies Movement." The Manifesto included this objective: "To every thrifty family its own home." Note the key qualification: thrift–you deserve to own your own home if you are thrifty. This sound idea has been completely forgotten in U.S. political discourse.

The U.S. movement did survive the 1930s crisis, with about 7,500 savings and loans making it to 1940. They were helped by the establishment of a kind of central bank for housing finance, the Federal Home Loan Bank System, in 1932. The Federal Home Loan Banks today are a system with $865 billion in assets, which remain an international model for bond-issuing liquidity facilities to link home mortgages and fixed income securities markets.

With the shadows of another world war looming, 35 U.S. savings and loan delegates made it to the International Congress of housing finance in Zurich in 1938. That was the last time there would be such a meeting until 1957. By then the great housing boom of the post-war decades was in full swing.

This was the Golden Age of the savings and loans. They were the most important mortgage lenders in a time when U.S. home ownership rose dramatically, from about 50% in 1944 to 62% in 1960 to over 64% in 1980. That is the same level it is now, 34 years later. In these post-war decades, waving the banner of housing and home ownership, the savings and loans were politically potent. The U.S. League for Savings became a Washington lobbying power to be reckoned with, working for favorable legal and regulatory treatment for its members.

As the Golden Age neared its end, there were over 400 savings and loan member institutions of the International Union. They sent over 200 representatives in 1980 to what was by then the World Congress of housing finance in London.

But the game was over. The U.S. Federal Reserve Board had pushed interest rates into double digits to correct the calamitous effects of its own massive inflationary blunders of the 1970s. Since savings and loans were structured by law and regulation to lend long and borrow short, the result was that by 1980, the aggregate savings and loan industry–it had by then become an "industry," no longer a "movement"–was insolvent on a mark-to-market basis. In the decade of the 1980s, it collapsed, ending with a $150 billion government bailout and punitive legislation in 1989.

Of the 25 biggest U.S. savings and loan institutions in 1983, not a single one has survived to today as an independent company. Two-thirds, or 17 of them, failed or were acquired by an institution which failed, and the other third were acquired and became just a portion of some much bigger bank. The U.S. League for Savings

1 Information and quotations about the history of the International Union in the age of savings and loan institutions is drawn from *Nation to Nation–Nurturing Homeownership–A History of the International Union of Building Societies and Savings Associations*, 1914-1980, by Josephine Hedges Ewalt (1982).

no longer exists. Savings and loans institutions which did survive generally started calling themselves "banks." Not a shred of the ideas of "the message of saving, self-help and self-discipline" survives, to our national misfortune. There are today zero U.S. savings and loan members of the International Union.

The age of Fannie Mae and Freddie Mac

Into the 1980s housing finance vacuum created by the collapse of the savings and loans stepped two "government-sponsored enterprises"– "GSEs" in American parlance: Fannie Mae and Freddie Mac. By 1990 they had become the undoubted titans of U.S. housing finance.

They were "GSEs" because their corporate charters were Acts of the U.S. Congress, which gave them numerous special privileges and competitive advantages, the most important of which was a government guarantee of their debt obligations. This was only "implicit," it was often said, and that it really was a guarantee was sometimes denied by high ranking government personages, but such claims were nonsense. The guarantee was always and still is fully real.

The principal beneficiaries of the government connection were for a long time the private shareholders of Fannie and Freddie—the stock of both was then traded on the New York Stock Exchange. For years the translation of government-created economic rents flowed through to the shareholders. Of course, the managements of the GSEs also richly benefitted. As critical Texas Congressman J.J. Pickle said early on, "The risk is 99% public and the profit is 100% private." The stock prices of Fannie Mae and Freddie Mac rose dramatically.

Fannie and Freddie grew by the 2000s to over $5 trillion in combined assets. They are still that big. For a number of years and World Congresses, they were prominent members of the International Union, having displaced the savings and loans there as well. They were fond of saying that their method of financing home loans by turning them into mortgage-backed securities [MBS], which Fannie and Freddie guaranteed, while Fannie and Freddie were in turn guaranteed by the U.S. government, was "the envy of the world." This was highly dubious to be sure, but they proclaimed it nonetheless. Their arrogance was truly irritating.

After their vast pride came their humiliating fall. Under political pressure to finance more risky mortgage loans, they did. On top of that, by 2007, together they held $327 billion of subprime MBS to help meet their so-called "affordable housing goals." They were major inflators of the U.S. housing bubble. While the savings and loans failed from interest rate risk, Fannie and Freddie failed from credit risk—i.e. bad loans. By September, 2008, they were insolvent, and were taken over by the government which orchestrated a $189 billion taxpayer bailout. Fannie and Freddie became 79.9% government owned and 100% government controlled.

Fannie's all-time high stock price was $87 per share in December, 2000; Freddie's was $73 in December, 2004. The subsequent fall in stock prices was more dramatic than their rise: to lows of 19 cents a share in both cases, for stockholder losses of well over 99%. The prime beneficiaries of the government guarantee became all their bond and MBS-holding creditors, who were absolutely protected by transfers from the U.S. Treasury.

Neither Fannie nor Freddie is any longer a member of the International Union.

The as-yet undefined age

At present, Fannie and Freddie are still 79.9% government owned and 100% government controlled. Although they are wards of the state, they remain the dominating entities in American housing finance, with combined assets of $5.2 trillion, which represents more than half of all U.S. home mortgage loans. Most observers think they will not reemerge as the GSEs they used to be, but some optimistic investors have bid the price of their stock back up to about $3.80. That is 95% less than the highs of a decade ago.

A number of bills have been introduced in Congress to restructure Fannie and Freddie and U.S. housing finance in general. The ideas range from closing Fannie and Freddie and privatizing the housing finance sector, to making a huge government guarantee the center of housing finance, and varieties in between. Nobody is trying to re-introduce the age of savings and loans. None of the bills will pass in the current U.S. Congress, with Republican control of the House of Representatives and Democratic control of the Senate. Numerous political forecasters predict a Republican Senate majority will result from the November, 2014 elections. Then maybe in 2015 a bill would pass. Would it be signed by the still Democratic President?

In short, what era comes next in U.S. housing finance is still undefined and uncertain, even six years after the bailout of Fannie and Freddie, five years after the end of the U.S. financial crisis, two years after the housing recovery began, 25 years after the bailout of the savings and loans--and 100 years after the founding of the International Union for Housing Finance.

Housing finance in Ukraine: a long way to go

By Aleksandra Burdyak and Valery Novikov

1. Introduction

Besides current events attracting the world's attention to Ukraine, there are several reasons for economists' interest in the country. Ukraine is the second largest transition country having a land area of 603,700 sq. km, larger than Metropolitan France. Ukraine has a population of 45.3 million (2013 average) and a GDP comparable to Norway (Word Bank Indicators, 2014). The transition process in Ukraine was characterized by an extremely large initial shock and a fairly slow recovery. The country's real GDP declined by more than 60% in the 1990s and has not reached the pre-transition level since then, making the transition process highly attractive for post-soviet countries researches as an experimental model.

There is a big gap in knowledge on housing and housing finance in Ukraine, and the aim of this article is to shed some light on the subject. Recent changes in the overall economic situation in Ukraine have deeply affected housing finance. In Spring 2014 a 40% depreciation of the national currency[1] drastically reduced the chance for mortgage borrowers to make payments on dollar and euro mortgages which accounted for 2/3 of mortgage debt before the exchange rate jump. Although mortgages are not widespread in Ukraine, the repossession of property mortgaged to banks and the cost of housing expressed in dollars could devastate the sector. Given the bleak outlook, there is an urgent need to rethink the funding model and to identify new solutions.

At this point we should draw attention to the two-fold role of housing finance, as it is understood in transitional economies, contrary to that in developed ones (Stephens, 2005; 2014). In the 'western' sense the housing finance system functions to facilitate, or hinder, labour mobility by helping people to get a dwelling; either buying or renting it. In Ukraine support for vulnerable groups to obtain housing is mainly understood as a social security payment for rent and the cost of communal services such as heating, water supply etc. Such support is provided via means testing regardless of the type of tenancy – either homeowners or social housing renters can apply for it. Ukraine has a most generous well-functioning housing allowance system: all costs in excess of 15% of household income are reimbursed, and for households with children or pensioners the threshold is 10% (Ministry of Social Policy, 2014). There is also a privilege program for certain categories of people with disabilities, veterans, etc., who are provided communal services at a reduced price; this program is not targeted at the poor.

The disparity between having the highest average costs for supplying gas and the lowest residential gas and heating tariffs in Europe, at 40% of those in Poland and 40% of those of the Baltic countries, is leading to huge inefficiency in energy usage; 10 times more intensive than OECD average. This was underlined in 2013 World Bank research (World Bank, 2013). Estimating the direct budgetary and quasi-fiscal subsidies on gas and heating as 7% GDP in 2012, the research provides the conclusion that a gradual increase in energy tariffs coupled with better targeted social assistance is vital for Ukraine's budget and energy security. Detailed justification of a need for a tariff increase based on micro data was provided five years ago (Fankhauser et al., 2008). However, the tariff was not changed for the past 10 years until it was increased dramatically in Spring 2014. Although housing allowances will support the poorest households within the social norms of consumption, more expensive utilities for consumers promise that the coming winter will be a challenging one.

In describing the progress of housing affordability and the housing finance transformation since 1990 we will offer an overview of the prospects for future development.

There are two reasons for this unusual two-fold role of housing finance. First, the governance and management system is extremely inertial. In Soviet times housing was constructed and provided by government, the cost of rent was symbolic for households, therefore housing costs predominantly consisted of communal services payments. The housing sphere was run by the Ministry of Housing and Communal Services and the role of government in 'providing decent housing for reasonable cost' was understood as the provision of water, electricity, heating supply, including electrical networks and water and sewer pipes maintenance, together with direct assistance to poor households over payments. Since then the ownership structure in the housing utilities sector has changed, housing become mostly private. However, the Ukrainian Ministry for Regional Development, Construction, Housing and Communal Services is functioning (Ministry for Regional…, 2014) and affordable housing beside its 'western' meaning has been still widely understood in Ukraine as affordable cost of 'communal services' for the households. This socially sensitive area has always attracted attention before an election and the idea of affordable communal services always appears in political debates.

While mortgage credit problems and direct need for housing concerns only a small proportion of Ukrainians, the 2014 Spring increase of tariffs for housing and communal services has reduced the affordability of comfortable housing for all the population. A partial answer from government was additional funding for housing allowances, targeted at poor households with incomes under subsistence level. The program

1 Figure 1 Average living space area (LHS) and number of households in a waiting list for housing (RHS).

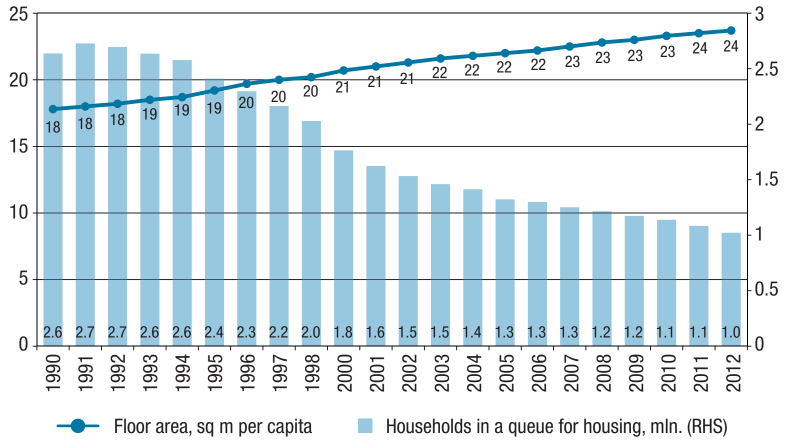
is expected to cover up to 4.5 million Ukrainian families, or 30% of the total population, while only 1.4 million households (almost 5 million people or 11% of the population) had benefited from the program before (UNIAN, 2014). The consequences of old water pipes and wiring, obsolete units now worn out, low energy efficiency of housing and poor management are still making affordable decent housing in Ukraine a basic need still to be satisfied as part of the progress of human development (Stiglits et al., 2009; Human development, 2012).

Housing provision is one of the crucial socio-economic characteristics of a country. All governments share the objective of achieving adequate and affordable housing for their citizens, including in Ukraine. The 'right to housing' in the United Nations Declaration of Human Rights expresses the general aim of housing policy. However, government does not necessarily take direct measures to achieve it.

It should be underlined that in Ukraine despite the huge increase of housing per capita stock for the post-soviet period from 17.8 sq.m to 23.7 sq.m per capita, the living conditions are still worse than those in European countries (Eurofound, 2012; Derzhstat, 2014). To a great extent the growth has been caused by a population decrease from 51.8 million persons in 1990 to 45.6 million in 2013. This component accounts for 42% of the housing per capita increase. Nevertheless, there is still a queue of about a 1 million households waiting for housing (Figure 1). Ukraine faces a problem of providing people with decent and affordable housing.

Looking back twenty to thirty years one can conclude that housing has been constantly on the agenda in Ukraine. In the Soviet Union housing was mainly constructed and provided free of charge by the state. However, in the mid 1990-s when the old system was broken and total economic downturn and lack of funding led to a sharp reduction in housing construction, the main idea of housing policy was to enable the market to work as in other former socialist countries. It is well known that privatisation in Eastern and Central Europe is associated with political regime changes (Lowe, Tsenkova, 2003; Tosics, Hegedüs, 2003; Buckley, Kalarical, 2005). On the one hand the process is interpreted as a political shock absorber and a tangible step to citizens. However, on the other hand ownership transfer to the population is driven by the high cost of maintenance and repair as an excessive burden on the new regime.

Figure 1 **Average living space area (LHS) and number of households in a waiting list for housing (RHS)**



Source: State Statistics Service (Derzhstat) data

Homeownership in Ukraine was free of charge and strongly encouraged by government and now Ukraine belongs to a group of countries with very high homeownership – 93.7% of the housing stock[2] was private in 2013. For the last five years the situation has not changed much, and the main flow of privatisation occurred in 1995-2005, when the privately owned share increased from 62% to 89%. It is worth noting, that privatization in Ukraine is a totally urban phenomenon, whilst in rural settlements housing was dominantly private before, and since 1995 the change has been small; from 92% to 98.4% now in rural areas. On the contrary the share of private housing in cities and towns increased from 44% to 91% for the period 1995-2013.

Settlement pattern is very important for analysis of the affordability of housing, since the housing market is extremely place specific. In big cities not only is the income higher, the work opportunities are greater and more attractive for labour migrants, but also real estate is more expensive. While 69% of the population of Ukraine is urban, 20% of all urban dwellers live in four big agglomerations – Kyiv (2.8 million population), Odesa (1.0 million), Kharkiv (1.5 million) and Dnipropetrovsk (1.0 million). Another 12% of the urban population of Ukraine lives in five smaller agglomerations with populations of 500,000 – 1 million; and the majority of urban dwellers live in cities and towns with a population less than 500,000 people. House prices in big cities are the benchmarks of the housing market changes over the transition period.

2. House prices: dynamics and prospects

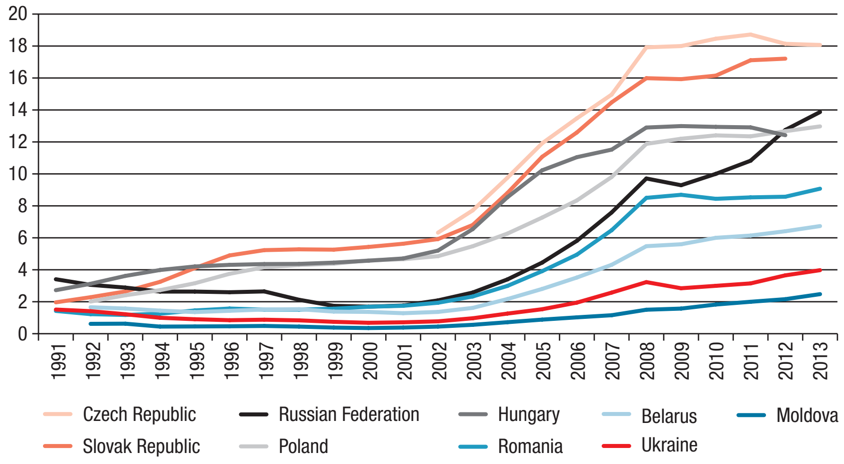
In the early 1990-s at the starting point of the housing market development in Ukraine, the commercial value of apartments was at a minimum historical level. In the capital city Kyiv with a 2.8 million population, the price of a studio apartment was about 8,000 US dollars; one-bedroom apartments cost 12-13,000 USD and two-bedroom 17-18,000 USD. In Odesa, a one million population city on the Black Sea in the south, studio apartments cost about 5,000 USD, one-bedroom apartments – 7-8,000 dollars, two-bedroom – 12,000 dollars. In Kharkiv, a 1.6 million population city in the eastern part of Ukraine, prices were even lower: 4,000 dollars for a studio, 6,000 dollars for a one-bedroom and 8-10,000 dollars for a two-bedroom apartment. In 1994 there was a significant increase in apartment prices in the cities of Ukraine, but after the mid-90s they grew very moderately and by 1998 housing prices had virtually stabilized.

Because of the crisis of 1998 and a sharp decline in the exchange rate of the hryvnia [UAH] against the dollar, when the dollar's value increased from 1.5 UAH to 5.5 UAH, the cost of

2 Per cent of total floor area of housing.

apartments in Kyiv, Odesa and Kharkiv almost simultaneously fell by half. During the period 1998 to 2001, there was a serious downturn and afterwards stagnation in the sales of real estate, including apartments. The unfortunate events of September 11, 2001 sharply intensified the housing market; the excessive demand led to an unprecedented increase in the cost of housing. It should be noted that after the collapse of the Soviet Union the banking sector had lost all credibility since all bank savings of the population were actually annulled. The population in the 1990s usually saved in foreign currency in cash, and after 11th of September there was a huge investment of accumulated savings in real estate or other safer assets.

Figure 2 Gross national income, converted to U.S. dollars using the World Bank Atlas method of Ukraine and neighboring countries in 1991-2013



Source: World Development Indicators

In Kyiv the studio price was 120-130,000 dollars, the one-bedroom price was about 150,000 dollars, and a two-bedroom apartment cost 200,000 USD. In Odesa the prices were 80,000, 100,000 and 130,000 dollars, respectively. In Kharkiv, a studio cost about 60,000 dollars, one-bedroom apartments 70-80,000 dollars, and a two-bedroom apartment – 100,000 dollars.

In the mid 2000-s prices had stabilized and until the financial crisis did not change much. In 2008 the dollar's value increased from 5 UAH to 7.7 UAH, and depreciation of the hryvnia against the dollar caused the decline of apartment prices in USD. We will describe in detail current housing prices and affordability of housing, including its regional disparities, further. Viewing the situation at the end of 2013, based on the situation in the property market in Ukraine, we could anticipate its stagnation. Analyzing the long-term forecast for housing prices in Ukraine until 2020, we could not see any clear trend going up or down. Under the influence of situational factors, the cost of apartments was anticipated most likely to remain unchanged, with minor variations. Prices in the second-hand housing market can decline in response to downward demand fluctuations, although, in the new-build housing market reduction is less feasible due to continuously rising prices for building materials and the growing cost of construction labour. The considerable changes of the last few months have made the future of housing finance dependent on the overall economic situation and on government adjusting housing policy to it.

3. Affordability of housing

With the huge housing deficit and with only a rudimentary social housing sector, the main obstacle to better housing in Ukraine is low household income. As could be seen from Derzhstat statistics, during the transition period the real wage in Ukraine grew from USD 50 (UAH 90) per month in 1996 to about USD 100 (UAH 525) in 2004 and USD 316 (UAH 2517) in 2011, and in earnings terms Ukraine is still far behind European countries. To illustrate relative income in alternative measurements for international comparison, let us refer to the Big Mac Index (Economist, 2014), based on the theory of purchasing-power parity. In July 2014 the under-valuation of the Big Mac in Ukraine is the highest among all countries[3]. The effect is partially caused by a 50% increase in the official hryvnia exchange rate over the last months; however, in the 2013 currency comparison there was still a 50% under-valuation of the Big Mac. Therefore, we can conclude that Ukraine permanently belongs to a group of countries with relatively low income.

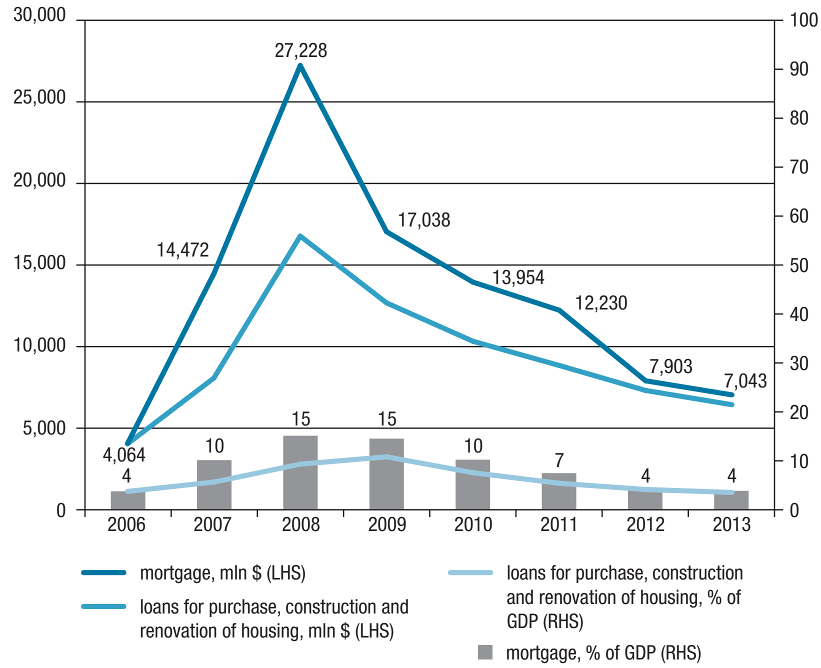
According to the World Bank classification, Ukraine is in the lower middle income group of countries (Sachs, 2014). In 2013 the per capita gross national income of Ukraine reached 3,960 USD – almost the threshold for the upper middle income group, which is 3,976 USD per capita. The dynamics of gross national income of Ukraine and neighboring countries (Figure 2) illustrate that they have diverged dramatically since 1991 and the country has performed really poorly. The income of 9% of the population is below the subsistence level (absolute poverty measure), 25% of citizens can be classified as relatively poor having equivalent income below 75% of the median level (relative poverty measure) (Social outcomes, 2012). Without sufficiently stable high earnings people cannot afford to buy a house or a flat even when housing finance programs give the support. Low household incomes coupled with high prices are the main obstacles to better housing in Ukraine.

Despite the fact that for 40% of households the floor area of their dwelling is below the 13.65 sq. m norm and in big cities the proportion of households reaches 48%, only 15% of households are not satisfied with their housing in cities and 20% in rural settlements (Derzhstat, 2014). Therefore, this supports the idea that in Ukraine the prevailing housing standard of the population is low – the same conclusion is reached by one of the authors for Russia (Burdyak, 2014). For the families, who cannot afford the purchase or construction of new housing and for whom the affordability of payments for rent and communal services becomes the first violin [plays the main role] in housing, mortgage finance remains a distant reality, even if market-based finance is available. Most of the poor households will get very little direct benefit from the development of housing finance; to meet their housing needs the idea of social housing should be revitalized, revised and implemented.

3 The Big Mac Index, The Economist, 28.07.2014 http://www.economist.com/content/big-mac-index

Ukraine has a number of government housing programs (The Ministry for Regional Development, 2014). 'Own House' has operated since 1997 and supports individual housing construction and connection to a piped gas supply in rural areas by preferential loans at 3% per year: it has 100,000 participants. In 2002, the 'State housing program for Youth' started, it also provides cheap housing loans, has covered 7,000 young families and has been extended until 2017 with expected participation from 17 thousand young families. Since 2012 government financing of affordable housing for those from the waiting list goes through two sources: the Affordable Housing Program 30/70, under which the state pays 30% of the cost of construction, and the citizen pays the remaining 70%; and mortgage loans at a reduced interest rate of 16% per year, of which the citizen makes payments at 3% interest rate and the state provides the remaining interest payments every year. Government housing programs do support housing construction, but they are not sufficient; they cannot help very poor families who are not able to afford to participate in any co-financing of new housing. Currently the financing of affordable housing programs in Ukraine has been suspended.

Figure 3 **Size of mortgage debt and housing loans in million $ and as % of GDP of Ukraine**



Source: Author's calculations based on State Statistics Service (Derzhstat) data

The problems created by the low official wage are to some extent weakened by shadow income and informal employment – the phenomenon is quite common for other transition economies (Gimpelson, Kapelyushnikov, 2014). While there are different views of the scale of the informal sector in Ukraine, some of them suggest that in the early 2000's it was up to 50% of GDP. The involvement in informal work is estimated at about 25% of the work force, including 10-15% of employed people who work only on informal jobs and others who are combining formal and informal work (Commander et al., 2013). When we take all the people involved in agricultural production, informal employment jumps to more than 60% of the work force in Ukraine. Other authors revealed the share of non-standard employment to be 27.5% in 2010 (Kupets, Vahitov, Babenko, 2012). People who have under-declared income from informal employment are directly supporting their relatives. Labour migrants working abroad receive three times more salary than their counterparts at home, and not only send money to their families in Ukraine, but also buy, or build, housing for themselves, or their children here. In most cases social support and protection come from family and through intergenerational support, not from institutions. In reality, in Ukraine the older generation of parents is supporting their children and grandchildren in difficult situations, especially in cases of unemployment or temporary or casual jobs. They help their children much more often than children can support and help their retired parents. This is because pensions are paid on time and in full, pensioners' monthly expenditures are usually much lower, and there is no need for additional housing, as there often is for young families. De-shadowing the economy and legalizing all earned income would make a contribution to the official level of income, to housing affordability and the availability of mortgages.

Mortgage finance has quite a long history in Ukraine. Ten years ago the State Mortgage Institution [SMI] was created (Concept, 2004), therefore banks were already providing mortgage loans. In the National Bank of Ukraine Statistics mortgage loans have been reported since 2006, at that point they counted for 25% of all consumer loans and mortgage debt was 3.8% compared to GDP (National Bank, 2014). To avoid ambiguity we should underline the difference between two notions presented in National Bank statistics. If ownership of the housing, including that under construction, or any other real estate ownership acts as loan collateral[4], the loan is called a 'mortgage' regardless of the purpose of lending. Conversely, in the statistics there is a reference to all loans for purchase, construction or renovation of housing without any reference to loan collateral, and strictly speaking mortgage loans are at the intersection of the two. In 2012 the definitions became very similar; nevertheless, for 2006-2013 we present both categories (Figure 3). Consumer debt on mortgages was at its maximum in 2008-2009, however it did not exceed 15% of GDP; housing loans had reached not more than 11% of GDP. Further, in regional analysis of mortgages, we refer to a 'housing loans' category following the Independent Association of the Banks of Ukraine practice (Independent Association, 2014).

The role of the SMI in overall provision of credit has been negligible, a maximum 1-2% of loans were refinanced by the SMI every year; a total of 8500 mortgages were SMI supported from 2005 till the end of 2012. However, the

4 In case of several collateral instances real estate ownership should be the maximal component.

Institution fulfilled well its role as a development institution after the 2008 financial crisis, rescuing construction projects with frozen funding and supporting banks. At that time the SMI supported mortgage rate was 7.5-8.5% points less than on other mortgages and the SMI refinancing rate was a landmark for the sector. In November 2012, Ukraine was advised by international financial institutions to equalize the cost of borrowing from SMI to that from the Ministry of Finance on its way to meeting the European standards. It was a huge drawback in housing finance development. The SMI refinancing rate jumped from 11% to 18% and all the advantages of the Agency were lost. Now the rate on SMI joint mortgages is only 0.5-0.8% less than for other mortgages with more restrictive requirements in relation to borrower income and the terms of the loan.

According to the SMI, a standard mortgage is only in UAH, maximal loan-to-value ratio is 75% and monthly payments should not exceed 50% of borrower income (State Mortgage, 2014). Among banks the lowest 20 year mortgage rate is 18.7% with loan-to-value ratio minimum 65%. For 80% loan-to-value ratio the mortgage rate is higher, 20.9% (Prostobank, 2014). For bank loans taken jointly with the SMI the rate is 16.5%, but even without the SMI there are some new-build blocks of houses offered with a 12-13% mortgage special offer. The weighted average mortgage rate in 2013 was 18.5% for loans in UAH and 13% for loans in hard currency. In March 2014, just before the depreciation, the rates decreased to 17.5% and 7.8% respectively. Overall, compared to other countries the scale of mortgage credit in Ukraine is quite small, 4% of GDP; a mortgage is incredibly expensive and should be made more available in terms of the rate. However, when mortgage finance does become available, land market regulations are so restrictive and housing construction is so slow in reacting that the finance simply feeds sharp house price increases rather than resulting in more housing (Shiller, 2005); this already happened in the mid 2000-s in Russia. Therefore, a mortgage rate decrease should be well balanced with sufficient construction of housing.

De-dollarization is a big challenge for the banking sector. It is worth noting that for a long time 80-85% of housing loans in Ukraine were in dollars or euros and only in 2013 did the share of foreign currency debt decrease to 70% of all debt on this kind of credit. A relatively large share of foreign exchange – denominated loans together with a lack of competition in many sectors, and the shortage of affordable and long-term finance has caused severe problems for the finance sector. Depreciation is putting an immediate strain on the banks' capital adequacy ratios through losses generated from the deteriorating quality of the loan portfolio. As these trends continue, there is a very high risk that a large number of banks will be identified as insolvent, shifting the burden to the Deposit Guarantee Fund [DGF], which may be required to make very large depositor payouts and resolve multiple banks quickly (Ukraine Snapshot, 2014). The system of housing finance not only needs to be supported now but also should be developed in future by decreasing rates on mortgages and by implementing other instruments of housing affordability in addition to the existing mortgage financing scheme.

For two years housing finance in Ukraine has experienced a time of turbulence. In 2013 alone, some new articles of the Budget Code and of the Tax Code, 56 laws and more than 40 government acts came into force that totally changed the real estate market (RBK, 2014). At the end 2012 the SMI refinancing rate jumped. Since January 2013 certificates of title, contracts of sale, mortgages, other encumbrances and other documents relating to the rights to housing and other real property, must be registered with the State Registration Service in the relevant registers of rights.

On September 2013 the National Bank set the maximum amount of cash payments at the level of 150,000 UAH per day for individuals. All cash transactions carried out in the housing market (usually in dollars) without actually fixing the amount paid (except the mortgage) have become illegal. According to the new rule when selling and buying an apartment, you need to open a bank account, transfer funds to pay for the procedure and lose some money by exchanging dollars into hryvnia and back.

In August 2013, Ukraine implemented a new procedure for the assessment of property for tax purposes and the calculation of other mandatory payments. It led to long queues for the procedure in spite of additional costs of assessment.

In January 2014, new rules of real estate taxation came into force. Previously, only one dwelling was considered for tax purposes, usually the largest; the apartment area should not exceed 120 sq. m and the area of a house was limited to 240 sq. m. Now the total living area of all dwellings belonging to the taxpayer, including different types (apartments, houses or apartments and houses) is taken into account. For owners of more than one dwelling the tax rate is 1% of the total area up to 740 sq. m and 2.7% above this threshold. At the same time the list of vulnerable groups subject to tax exemption has been expanded.

Since March 2014 there has been imposed a limit of 15,000 UAH[5] on cash withdrawals or purchase of foreign currency per person per day. Together with restrictions on cash payments and hard currency deposit withdrawals they are binding for sellers and buyers of housing.

In short, the housing market has been really unstable due to overall economic and political turbulence. Nevertheless, the regional disparities in housing affordability can be measured as a ratio of the average wage to the price of 40 sq. m of accommodation (studio) in December 2013 and in April 2014, as well as a ratio of the average wage minus the subsistence level of a working-age adult to the price of the same 40 sq. m of accommodation (studio) in December 2013 (Table, Annex 3). The rationale behind this is that the average working Ukrainian would have to save all her money for 6.6 years to buy a standard flat. If she saves a half of her earnings, or there are two working adults consuming one salary and saving another, the period will be twice as long, 13.2 years. Supposing that the cost of living for an adult person equals the minimum subsistence level and all the rest of the wage is saved for housing, then the period of saving will be 10.4 years. In April 2014 the period of saving all earnings for housing had become 1.7 longer compared to December 2013.

4. Regional disparities in housing affordability

Considerable regional diversity within Ukraine is striking for housing and for the overall economic position of this large country (Lehmann et al, 2012). However, all findings on housing have limitations due to data constraints, because there are no official statistics on the housing market in Ukraine. While we can estimate regional prices by looking at open-access adverts at Domik.ua, as the Independent Association of the Banks of Ukraine does (Domik, 2014; Independent, 2014),

5 It is 1,277 USD in July 2014.

6 The administrative unit in Ukraine is called 'oblast'. Usually the name of region is derived from the name of the central city except for Crimean Autonomous Republic, Zakarpattia and Volyn.

we should keep in mind that (a) they are seller-prices and do not necessarily coincide with the final price of a deal, and (b) the number of deals in a specific region sometimes is small, therefore jumps in prices are smoothed by the moving average technique. The volume of the housing market by regions continues to be a puzzle for researchers. The database of the World Bank 2010 (Kupets, 2012) has the same limitations, consisting of housing and rent prices only in main regional cities therefore representing regional housing with a high degree of conditionality. Taking into account the low level of urbanization in some regions together with concentration of economic activity and housing construction in regional centers we can conclude that so-called 'regional' prices in the Domik database are predominantly the regional center ones.

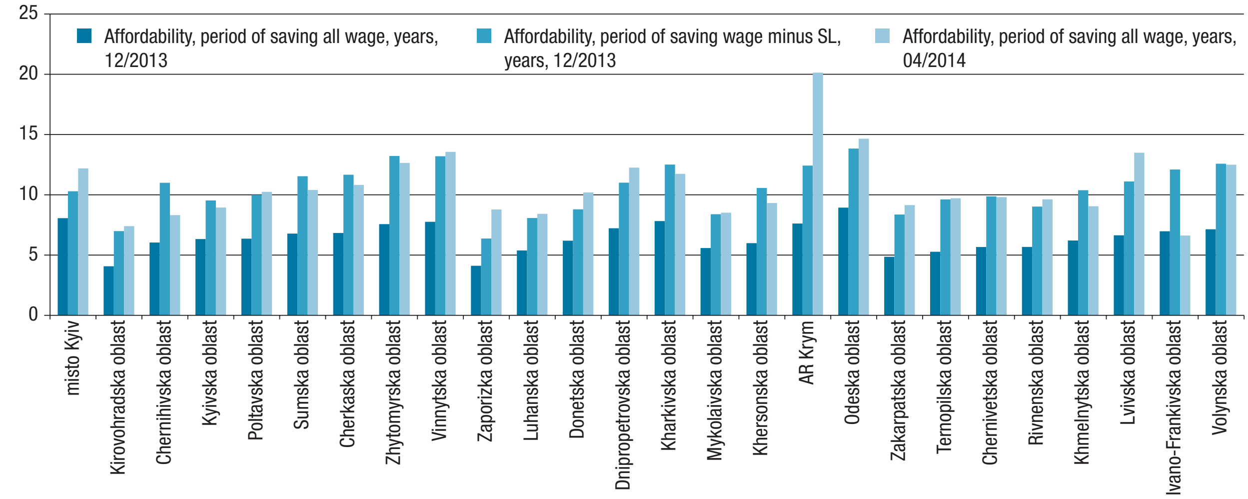
There are 27 administrative units in Ukraine and the division is consistent with the Nomenclature of Territorial Units for Statistics standard (NUTS-2) in the old and new EU member states. An officially adopted subdivision of Ukraine into macro regions does not exist. A useful grouping of regions is based on human and economic development regional statistics (Kupets, 2009). However, the 'geographical' one we keep to is the most widely used and simple. We describe affordability of housing and mortgage concentration by region in the context of their socio-economic characteristics (Table, Annex 3; Map, Annex 1). A detailed report on the main specialization of regions and geographic concentration of manufacturing industries can be found (Fankhauser et al., 2008; Kupets et al., 2012). We also refer to O. Kupets research on housing and rental prices as factors in relation to internal labour mobility (Kupets, 2012) with the main finding that in 2010 differences in housing prices were much more pronounced than persistent regional disparities in income and wages. Huge inequality in the affordability of housing still exists in 2013.

- Kyiv City is characterized by exceptionally high levels of economic and human development, high living standards and favorable employment opportunities, concentration of human capital, investment, production, overall prosperity and attractiveness to internal migrants from the rest of the country despite very high housing prices; $439 per month for a one bedroom apartment rent[7] in 2010. The housing in the second-hand market is among the least affordable compared to other regions – 8 years of saving all earnings. 36% of all mortgage debt is concentrated in Kyiv and Kyiv oblast.

- The Centre and North (consisting of Vinnytsia, Zhytomyr, Kyiv, Kirovohrad, Poltava, Sumy, Cherkasy and Chernihiv oblasts) with a predominantly Ukrainian-speaking population and with agriculture as a high proportion of total employment. Despite proximity to the capital city and great potential for economic development, this macro region lags behind in many aspects of the labour market and human development. Except for Vinnytsya (49.5%) and Sumy (67.3%) the urban population is 56-63% of the total. The average housing price is $106 per month rent for a one bedroom apartment (2010). This is the most homogeneous macro region in terms of affordability, 6-7/8 years of saving, with a low concentration of mortgage finance.

- The industrially developed and urbanized East with a predominantly Russian-speaking population (which consists of Dnipropetrovsk (83.5% urban population), Donetsk (90.5%), Zaporizhia (76.9%), Luhansk (86.7%) and Kharkiv (80%) oblasts) is the second richest macro region of Ukraine after Kyiv City with a rather good labour market performance. Despite relatively high wages and low unemployment rates it lags behind the other macro regions in terms of demographic development, social situation and environment quality. The average housing price here in 2010 was $158 per month rent for a one bedroom apartment. While in Zaporizska and Luhanska oblasts housing is quite affordable, in Dnipropetrovsk and Kharkiv it would take 7 years to save for a standard flat. The mortgage finance is concentrated in Kharkiv.

Figure 4 Affordability of housing as the period of saving total earnings needed to purchase 40 sq.m accommodation in December 2013 and April 2014



Source: Author's calculations based on State Statistics Service (Derzhstat) and Domik.ua data

7 Rental prices are cited from (Kupets, 2012)

- The South (which includes Crimean AR and Sevastopol, Mykolayiv, Odesa and Kherson oblasts) with a predominantly Russian-speaking population and a rather diversified economy. The overall human and labour market development in this macro region is more advanced than in the rest of the country (leaving aside Kyiv city) but it is highly volatile because of the significant dependence on the seasons, weather conditions, and the political situation (particularly in Crimean AR and Sevastopol). The urban population is 61-68% of the total. The average housing price is $169 per month rent for a one bedroom apartment (2010). Odessa not only has the most unaffordable housing compared to other regions, but also 14% of Ukraine mortgage finance is concentrated here. Odessa, Kyiv city and Kyiv oblast are the biggest centers of mortgage finance.
- The agrarian and predominantly rural West with a Ukrainian-speaking population (which includes the most rural Zakarpattia (37.2% urban population), Ivano-Frankivsk, Ternopil, and Chernivtsi (all 42-44%), Rivne (47.8%), Volyn (51.7%) Khmelnitskyi (54.6%) and Lviv (60.7%) oblasts) exhibits the worst performance measured by economic, labour market and human capital indicators but it performs fairly well in terms of the demographic, social, and environmental situation. Weak labour market development, poor living conditions and material well-being of the local population encourage considerable out-migration of population, both within the boundaries of Ukraine and outside them. The considerable inflow of money from labour migrants from abroad to their families keeps the average housing price quite high at $127 per month rent for a one bedroom apartment (2010). Lvivska and Zakarpatska oblasts have 2-3% of Ukrainian mortgage finance, while others are not so much involved. In Lvivska, Ivano-Frankivska and Volynska oblasts the affordability of housing is quite moderate, 6.6-7 years; in other western regions the period of saving is shorter.

In many respects, the basic conclusion on housing finance in Ukraine is striking but positive: there is a long way to go, but a journey of a thousand miles begins with a single step.

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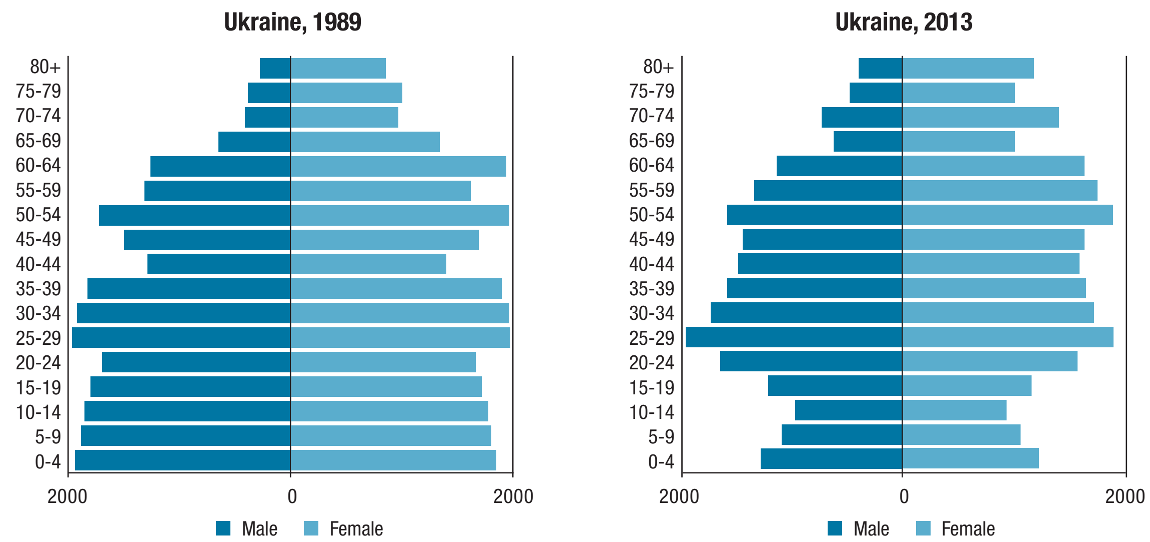
The National Bank of Ukraine, http://www.bank.gov.ua

The World Bank in Ukraine http://www.worldbank.org/en/country/ukraine

Annex 1 **The map of Ukraine**

Source: United Nations, March 2014. http://www.un.org/depts/Cartographic/map/profile/ukraine.pdf

Annex 2 **Demographic pyramid,** Gender and age structure of Ukraine population in 1989-2013, th. of persons



Source: Author's calculations based on State Statistics Service (Derzhstat) data

Annex 3 Table Mortgage debt, wage cost and affordability of housing and population by regions

	Macro region	Mortgage debt, % of total	Wage, UAH per month per person	Cost of 1 sq. m of housing, USD	Affordability, period of saving all wage, years	Affordability, period of saving wage minus SL, years	Wage, UAH per month per person	Cost of 1 sq. m of housing, USD	Affordability, period of saving all wage, years	Population, million	Population, % of total	Share of urban population in the region, %
		04/2014	12/2013	12/2013	12/2013	12/2013	04/2014	10/05/2014	04/2014	2013	2013	2013
Ukraina		100.0	3619		6.6	10.4			11.2	45.5	100.0	68.9
Avtonomna Respublika Krym	South	3.1	3148	900	7.6	12.4	3013	1570	20.1	2.0	4.3	62.7
Vinnytska oblast	North	1.6	2956	861	7.8	13.2	2650	930	13.6	1.6	3.6	50.3
Volynska oblast	West	1.2	2817	755	7.1	12.6	2526	817	12.5	1.0	2.3	52.1
Dnipropetrovska oblast	East	9.9	3544	961	7.2	11.0	3390	1075	12.3	3.3	7.3	83.6
Donetska oblast	East	4.7	4117	957	6.2	8.8	4036	1065	10.2	4.4	9.6	90.6
Zhytomyrska oblast	North	1.4	2848	809	7.6	13.2	2597	850	12.6	1.3	2.8	58.5
Zakarpatska oblast	West	1.8	2906	530	4.9	8.4	2607	617	9.1	1.3	2.8	37.2
Zaporizka oblast	East	2.6	3434	530	4.1	6.4	3416	776	8.8	1.8	3.9	77.1
Ivano-Frankivska oblast	West	1.2	2876	753	7.0	12.1	2766	474	6.6	1.4	3.0	43.4
Kyivska oblast	North	0.0	3624	861	6.3	9.5	3456	800	8.9	1.7	3.8	61.9
Kirovohradska oblast	North	0.6	2918	446	4.1	7.0	2643	506	7.4	1.0	2.2	62.5
Luhanska oblast	East	1.8	3657	739	5.4	8.1	3404	742	8.4	2.2	4.9	86.8
Lvivska oblast	West	2.8	3029	755	6.6	11.1	2816	983	13.5	2.5	5.6	60.9
Mykolaivska oblast	South	1.9	3641	763	5.6	8.4	3299	727	8.5	1.2	2.6	67.9
Odeska oblast	South	13.8	3440	1154	8.9	13.8	2972	1127	14.7	2.4	5.3	66.9
Poltavska oblast	North	1.4	3350	800	6.4	10.0	3082	817	10.2	1.5	3.2	61.5
Rivnenska oblast	West	1.1	3285	700	5.7	9.0	3048	759	9.6	1.2	2.5	47.8
Sumska oblast	North	0.9	2954	752	6.8	11.5	2698	726	10.4	1.1	2.5	68.0
Ternopilska oblast	West	0.8	2697	534	5.3	9.6	2371	596	9.7	1.1	2.4	44.2
Kharkivska oblast	East	5.4	3250	954	7.8	12.5	3071	933	11.7	2.7	6.0	80.4
Khersonska oblast	South	1.5	2811	632	6.0	10.6	2505	604	9.3	1.1	2.4	61.2
Khmelnytska oblast	West	1.4	3030	706	6.2	10.4	2847	667	9.1	1.3	2.9	55.7
Cherkaska oblast	North	0.9	2940	754	6.8	11.7	2682	751	10.8	1.3	2.8	56.5
Chernivetska oblast	West	0.7	2862	609	5.7	9.9	2435	618	9.8	0.9	2.0	42.6
Chernihivska oblast	North	0.7	2703	613	6.0	11.0	2654	571	8.3	1.1	2.4	63.7
misto Kyiv		36.7	5618	1700	8.1	10.3	5313	1676	12.2	2.9	6.3	100.0
misto Sevastopol	South		3911				3089	1206	15.1	0.4	0.8	93.8

Source: Author's calculations based on State Statistics Service (Derzhstat) and Domik.ua data

Perceptions of land registration in a state-subsidised housing project in South Africa

↳ By Michael Barry and Lani Roux[1]

1. Introduction

The article examines government housing beneficiaries' perceptions of the usefulness of land registration and whether people transacting in land actually register transactions, as opposed to off-register strategies, in Project97, a state-subsidised housing project, in the Drakenstein Valley, in the Western Cape province, South Africa. In addition, it briefly examines the suitability of introducing alternative methods of effecting transactions in low income housing projects such as Project97. Proposed alternatives include a form of private conveyancing where parties to a land sale perform the transaction at a police station and the police witness the process, a local registration system run by municipalities, and a licensing system similar to car registration. Project97 is a pseudonym for ethical reasons.

Since the African National Congress came into government in 1994, state-subsidised housing programmes are claimed to have facilitated the construction of more than 3 million houses for the poor (Financial and Fiscal Commission 2012). To qualify for a subsidised house, a household has to earn less than R3,500 per month. A number of studies report a significant number of these properties being sold off-register (informally) or inherited without the property being registered in the name of the heir (Boaden and Karam 2000, Marx 2007b, 2009, Barry et al 2007, Gordon 2008, Smit 2008, Vorster and Tolkien 2008, Payne et al. 2009, Roux 2013).

Landholders transacting off-register after first registration in developing world cities can be a vexing problem for land administrators and policy makers. Instead of registering transactions in a land registry, parties to a transaction use forms of private conveyancing and social processes (e.g. symbolic delivery in front of witnesses and/or a private contract) to effect transfer, often with the direct assistance or tacit approval of government agents and agencies (Doebele 1994, Marx 2009).

If off-register transactions become pervasive, they can freeze the formal land market as financial institutions will not issue a mortgage against a cloudy title (Barry 2006). It also makes it more difficult to provide and bill for municipal services.

In South Africa, dating back to 1840, the courts only recognise changes in real property rights if they are registered (Harris v Buissine's Trustee (1840) 2 Menz. 108). Consequently, an off-register purchaser is in a precarious position as sellers have been known to reclaim the house that they have sold off-register, in some cases arguing that the transaction was really a lease not a sale (Barry 1999, Roux and Barry 2010, Roux 2013).

Given these apparent problems with land registration in South Africa's state-subsidised housing, the following questions are pertinent:

- What strategies do landholders employ, or intend to employ, to secure their tenure and/or secure a land transaction?
- How important is a registered title / deed as a component of these strategies?
- How pervasive are off-register transactions?
- Does the phenomenon occur to a significant extent in all state-subsidised housing projects or in a few conspicuous cases?
- There have been proposals to regularise informal transaction methods or introduce alternative systems to effect land transactions.
- Does Project97 provide empirical support for these proposals?

This study examined how people transact from a micro-level, from the landholders' perspective. There are a number of studies that examine the phenomenon from a land market perspective, and the appropriateness of land registration and the design of alternative systems is not their primary focus. Tenure security, we submit, is more important than the operation of a land market in poverty alleviation programmes. The question of whether land registration or some cheaper alternative, which is more accessible to the poor, is better suited to recording land rights is not trivial. Land registration gives procedural effect to the real property law (Ziff 2006), and alternatives to registration should do the same.

Proposals for alternatives to registration in South Africa are not new. The first author was a member of a national working group to examine land registration and land surveying options in the "new" South Africa soon after the ANC came to power in 1994. Political considerations were one major factor in using private ownership, registered in a deeds registry, as the preferred tenure form in state-subsidised housing instead of phased strategies to ownership such as a lease that could be converted to ownership. Whites and so-called coloureds could own property under the apartheid system, while black Africans could not own property in most of South Africa.

1 This study has been conducted with the support of the John Holmlund Chair in Land Tenure and Cadastral Systems.

2. The land titling debate

Home ownership, property rights and land titling have been a dominant strategy in the international development agenda since World War II (Shipton 2009). Land titling has been at the core of development aid strategies under recent US administrations, and there is an extensive body of literature advocating private ownership and titling. The argument goes that private ownership, among other benefits; (1) provides the highest level of tenure security, (2) promotes economic activity through access to credit; (3) provides an incentive to invest in the home; (4) improved municipal revenue collection, and in turn improved land administration, and (5) efficient land markets (Payne 2008, Shipton 2009).

Internationally, empirical support for the above hypothesis has been modest and it is surprising that it has been promoted for so long and so ardently. Titling does bring about social and economic benefits under the right conditions, but it is not a panacea for economic development. If applied when some of the enabling conditions are absent, land titling can do damage (Mitchell 2005, Peters 2006, Payne 2008, Sjaastad and Cousins 2008). Any basic text on social systems theory will argue that strategies to address complex social challenges that are based on a single variable, such as land titles, are unlikely to work and can have serious unintended consequences.

In South African state-subsidised housing, there is evidence that social benefits may accrue from registration if the supportive conditions exist. In poor communities, registered titles may improve tenure security and perceptions of tenure security where people are at risk of eviction, and provide vulnerable segments of society, such as women and the elderly, with more secure tenure (Payne et al 2009, Roux 2013). It is evident that many poor people believe that documents, but not necessarily title deeds, are a critical component of strategies to defend their land interests (Barry 1999).

3. Land registration in South Africa

Registration procedures in South Africa are rigorous, a rigour designed to minimise the risk of fraud, sharp practice or erroneous title. Parties to a land transaction are compelled to use a lawyer to prepare the documents and effect registration. The Registrar checks the accuracy of the documents submitted for registration, the validity of title, whether the vendor is empowered to sell, and checks the documents and processes that prove the vendor's identity (*Deeds Registries Act 37 of 1937*). The contract of sale involving real rights in land has to be in writing (*Alienation of Land Act 68 of 1981 s.6*). An essential document for registration to proceed is a municipal clearance certificate, certifying that municipal fees, rates and charges have been paid up to date (*Municipal Systems Act, 32 of 2000, s.118*). For registration to flow smoothly, it is critical that a vendor has all their personal documents and documents relating to the property being sold in order, and that both buyer and seller are available to sign documents for the lawyer to proceed with registration.

3.1 Off-register transactions in South Africa

A number of commentators have argued that transaction costs in South Africa are too high for low income property owners (as they have to use a lawyer), the registration system is too complex, and that it is inaccessible to the poor. The argument goes that if transaction costs are lowered, the system will better serve the poor in housing markets (Mooya and Cloete 2007, Payne et al 2009). However, there were early indications that the situation is more complex than lowering costs and making the system more accessible and these are not the only reasons why people choose off-register transaction strategies. For example, in a project in Cape Town in the 1990's to transfer ownership of 21,211 rented houses to the tenants, 21% of the properties had to be referred to dispute resolution / re-adjudication committees before transfer could be effected. The leases had been checked and adjudicated two years prior to the expected date of transfer. Most of the affected leases had changed hands informally. Importantly, there were no costs for transferring the lease, and the records were kept in a local office which was easily accessible (Barry 1999).

Off-register transactions in South Africa have been widely reported, but gaining an incisive understanding of the phenomenon is difficult, because it is difficult to get parties to such a transaction to explain why they chose this strategy. Drawing on Barry (1999, 2006), Boaden and Karam (2000), Nell et al (2004), Marx and Rubin (2008), Marx (2007a, 2007b, 2009), Smit (2008), Gordon (2008), Vorster and Tolkien (2008), Roux and Barry (2010) and Payne et al (2009), Lemanski (2010), and Roux (2013) the following factors are advanced as reasons why people choose to transact off register in state-subsidised houses.

1. Lack of knowledge or understanding of the legal requirements when transacting in land (i.e. transactions in real rights should be registered) and the consequences of transacting off-register.
2. The registration system is inaccessible to the poor as transaction costs are too expensive.
3. The registration process is complex, slow and difficult to use; instead off-register transfers are expedient. (Aspects of this proposition are challengeable, as parties to a transaction have to consult a lawyer, who deals with the complexity and difficulties).
4. Restrictive clauses in title deeds that prohibit a beneficiary from selling their house for a period after first registration in state-subsidised housing projects. In some early projects, a five year restrictive period was set as a condition of title. In 2001 the restrictive period was set nationally at 8 years in terms of the *Housing Act 107 of 1997, s.10a and s.10b*. As they cannot sell the house legally during the restrictive period, people then sell it off-register.
5. The poor struggle to pay for municipal services, in spite of special concessions for the indigent. When they wish to sell, registration is delayed until arrangements have been made to settle the debt and the municipal clearance certificate is issued. Parties transact off-register as they cannot afford to wait for the bills to be paid and the certificate issued.
6. Distress sales, where circumstances change drastically and suddenly due to family problems, especially funerals where the owner has to be buried in a distant rural area, medical problems or loss of employment, and people have to sell to get money quickly.
7. People pledge their homes to entrepreneurs such as local money lenders and taxi drivers to assist with funerals where the deceased has to be buried in a rural area perhaps more than 1000 km away. If they cannot pay off the loan in the stipulated period the money lender or taxi operator takes possession of the home.
8. A significant number of beneficiaries have not received their title deeds. The slow process of providing registered titles to first time home owners means that the original beneficiary may move away before the house is registered, and they may sell the right to the house off-register.
9. Beneficiaries' circumstances change before registration is effected. Couples may divorce or separate, or a beneficiary may die intestate. In the case of divorce or separation, the one who moves out may sell the property informally and disappear with the proceeds.

The buyer may not qualify for a state-subsidised house, and the state will then have to try to evict the buyer and allocate the house to someone else on the housing list.

10. Based on certain cultural norms, houses belong to the family and not an individual, and should never be sold. If this is the case then there is no need to register the house in the names of the heirs upon the death of the beneficiary, and so it becomes a dead man's title.
11. Beneficiaries sell immediately after getting their house to get the once off payment, at times to retire to a rural area or live with their children.
12. Adjudication and registration errors, where land and houses were mistakenly allocated to the wrong person or a house was allocated to the person(s) who expected to receive it, but registered in someone else's name.
13. Land grabbing, at times with the assistance of corrupt officials. Registered tenants have been evicted by gangsters or street committees or chased out during taxi wars. The groups that evict them then allocate their houses to other people.
14. Beneficiaries swop sites or the first beneficiaries on site move into a different house if there are defects in the one they are given, or mistakes in the records result in beneficiaries occupying the houses on the parcels allocated to them but they have a deed registered against another parcel.

The above may well explain why off-register transactions occur. However, the empirical basis for some of them appears to be limited. Our studies indicate that many of them are based on opinions of officials, and some of these officials base their opinions on hearsay rather than direct experience. A question is, do informal transactions pervade all South African state-subsidised housing projects to the extent that the law should be changed to accommodate this practice? How much more risk to parties to a transaction and other people who have interests in the land in question (e.g. a common law partner) should be allowed if alternative systems are implemented? How important is a registered title to landholders in these schemes, and why do people choose to transact off-register?

3.2 Alternative transaction strategies

There are proposals to regularise off-register transactions, which tend to occur through written or oral contracts witnessed by street committees or a contract effected by a sworn affidavit at a police station. There are also proposals to implement alternative systems of recording land transactions. Proposals for alternatives have been on the table since the post-apartheid land reform and housing programmes started. The first author proposed a system run by land professionals in Barry (1995), which is similar in some ways to the privately run title insurance system in the United States. McNab (2011) proposed a licensing system, similar to a car licensing system, which was submitted at the public hearings on Deeds Registries & Sectional Titles Amendment Bill in July 2013. Urban Landmark (2011) suggested a system of registration run by municipalities or provinces (Parliamentary Monitoring Group, 2013).

Regularising the existing off-register transactions may have to occur at some stage, and there is enabling legislation to do this (e.g. *Land Titles Adjustment Act 111 of 1993*), but it is a long and an expensive process and one attempt at this was aborted. Given that there are backlogs in registering first time owners, fixing the "off-register" situation will take significantly more resources. In addition, it appears that a number of people have purchased by affidavit before registration occurred and they do not qualify for state-subsidised housing as they earn more than the subsidy threshold. Therefore they cannot be given title to the house.

There are risks associated with local registration systems and private conveyancing systems, which many proposers of alternative transaction systems overlook. Unless there are the necessary skills and capacity to run such a system and perhaps an insurance programme to address errors or fraud, such a system may create a bigger problem than the one it is attempting to resolve and may have particularly negative consequences for vulnerable people and purchasers. While there is much research on land titling and land registration, there is little empirical work on the effectiveness of alternatives to registration.

Lessons from the English private conveyancing system are instructive. As far back as 1818, Preston noted that a critical part of the process in the English private conveyancing system was that the lawyer had to check the authenticity of the deeds and any other relevant facts. Of major importance is a check whether the vendor is empowered to transfer the property and is not attempting to transfer a greater set of rights than those than he or she lawfully possesses. Upon transfer, all the deeds, perhaps dating back to first registration of the property, and the documents that create encumbrances over the property (e.g. a right of way), which constitute the chain of title, would then be handed over to the purchaser to keep until the next transaction occurs (Preston 1818). The risks to the purchaser are erroneous or fraudulent omissions, such as a mortgage on the property or a divorce settlement, or a vendor might include a document that indicates that they have more power over the property than they actually possess (di Castri 1987).

4. The Project97 study

Project97 started as a greenfield development in which the local municipality facilitated the construction of 760 houses, which were handed over to beneficiaries in 1999. The majority of these beneficiaries were so-called coloureds as most had been on a housing waiting list dating back to 1976 (Drakenstein Newspaper 19 September 1996; Interviews 700, 706, 743). The Western Cape was declared a coloured labour preference area in 1955 under the apartheid system, which meant that black African settlement, was phased out and influx control stepped up (Bishop 1983). Influx control was abolished in 1986, and people streamed into the area from two former homelands in what is now the Eastern Cape Province. One hundred houses in Project97 were set aside for residents drawn from a nearby informal settlement, who were primarily in-migrants from these former homelands (Drakenstein Newspaper 19 March 1998). Registration was completed by the end of 1999 (Transfer records 1999 - 2014; Interviews 700, 701, 702). Unlike many other state-subsidised housing projects, beneficiaries were free to sell the lots immediately after registration as there was no restrictive clause in the deeds prohibiting sales for five years or eight years.

The study is based on 37 open ended, door-to-door interviews and household group discussions with 42 people in Project97, eight interviews with landholders in an adjacent housing project, and 21 key informant interviews. Key informants included officials, local politicians, community leaders, community workers, policemen, lawyers and real estate agents. Interviews in Project97 explored life histories, how participants and other people in Project97 had acquired their houses, and examined their life histories and livelihood strategies. They were asked if they were aware of land transactions in their neighbourhood, to describe how other people in Project97 performed land transactions, and if they were aware of land related problems in the neighbourhood or the broader Drakenstein region. To explore tenure securing strategies, they were asked what they would do if an outsider challenged their ownership.

Interpretive qualitative analysis was applied to the interviews. This was checked against secondary data which included transactions recorded in the land registry, municipal valuation records and other municipal documents, and newspaper archives extending back to 1954.

4.1 Project97 transactions

Between 1999, when registration started, and July 2014, a total of 122 properties, 16% of the 760 properties, have been turned over and registered, as sales or inheritances. There were a total of 157 residential property transactions registered in the Deeds Office. Of these, four appear to be reallocations (zero value transfers) after the house had been re-registered because the municipality discovered that owners did not qualify for the subsidy, the registration was cancelled and the house allocated to another beneficiary (Friedman 2002). Three properties have been transferred thrice, and 28 properties transferred twice. Between 1999 and 2003, eleven properties sold for below the original subsidy price of R14, 460; which in turn is significantly below the actual overall costs of constructing the streets, municipal services and the house. Eight more properties were transferred for no consideration. Seven of these were inheritances, and one appears to be a divorce settlement.

Today there are pressures to sell in Project97 as the houses are a bargain for people who earn more than the state-subsidy threshold of R3, 500 per month but cannot afford a house in the open market. Two real estate agents do door-to-door prospecting and advertise in local newspapers and in stores in Project97, as they have long lists of interested buyers (Interviews 747, 748). However, the low turnover shown in the registry records and interview data suggests most original beneficiaries are reluctant to sell.

One hypothesis explaining a major proportion of off-register sales is lack of knowledge of the procedures to be followed (Vorster and Tolkien 2008). We found minimal evidence to support this. Beneficiaries were aware that they should consult a lawyer if they wished to sell or buy. This may be due to the fact that in this project the lawyer who handled the original registration held information sessions on the rights and responsibilities associated with home ownership when beneficiaries signed their sales contracts. He also claimed to have encouraged beneficiaries to prepare a will (Interview 743). In other housing projects, the municipality has handled housing consumer education. In addition, the majority of the beneficiaries have lived in the Western Cape all their lives, and, in contrast to people who migrated to the city from the former homelands, engaging a lawyer in dealing with legal matters is the norm, and registering transactions at the deeds office is the only system for recording and transferring land rights with which they are familiar.

Unlike state-subsidised projects in some other parts of the Western Cape at that time, governance of the housing list was good and the operations management systems supporting the delivery process were stable. Most of the beneficiaries had been on a municipal waiting list for at least ten years before they received their house. As one land professional observed, the municipality's housing management systems are efficient (Interview 743). Registration and allocation errors, where a beneficiary was allocated a house and occupied it, but their title deed was registered against another lot, which apparently occurred in other projects, did not occur in Project97 (Interview 706).

4.2 Trusting agents and agencies

If they do not trust them, people may choose to avoid using official agents and agencies involved in registering land and supporting land tenure security when effecting land transactions. Relevant agents and agencies include specific officials and the local municipality in general, local politicians, banks, real estate agents, lawyers, community workers, money lenders, community based power structures such as civic organisations and street committees, ratepayer associations, other service providers, and criminal elements.

The municipality is the land administration organisation with which residents interact on a regular basis. In the field, participants were asked what they would do if someone challenged their ownership. The municipality and lawyers were the organisations that people stated they would approach for assistance and advice, and with one exception, landholders trusted them.

As noted above, parties to a land transaction are compelled to use a lawyer to effect registration. Residents in Project97 are well aware of this. In addition, a number of residents had used lawyers for matters unrelated to property and some referred to "their lawyer" (Interviews 715, 718, 726, 731, 732). Translating one interview: "When we bought … we went to the lawyer because of the many scams. People sell to multiple buyers and you can lose your money. People come to the door and demand proof that you own the house …. If you go into an oral agreement to buy the house by paying instalments to the owner, you are at risk of the owner selling to someone else if you don't keep up the payments and then you can be evicted." (Interview 715). Reinforcing this view, an owner who had bought a house in Project97 submitted that if you sell off-register, the seller might reclaim the house. He would always check with his lawyer as you might lose your money: "I won't buy a house off-register, not even from my brother" (Interview 731).

Along with municipal valuation notices that are posted to homeowners each year, estate agents play a role in informing residents about the market value of their houses and the documents and procedures involved in a sale. Consequently, residents are aware of the factors that determine the value of their house, and what is a reasonable price should they choose to sell.

In contrast to other state-subsidised projects in the Western Cape, civil society groups such as the South African National Civics Association [SANCO] and street committees are not active in Project97. In a number of other settlements in the Western Cape, they have played an active role in adjudicating who should be allocated a house, and in day to day administration in the settlement (Barry 1999, Barry et al 2007).

4.3 Original beneficiaries strategies to defend their tenure

Receiving the house under secure tenure is a major positive for many of the original state-subsidised housing programme beneficiaries interviewed. A number indicated that they would never sell the house, but rather leave it to their children as it is so difficult to get a house.

Participants were asked what they would do if someone laid claim to their house, and who they would approach for assistance. One participant responded that she had experienced a similar issue, as people had invaded her house before she received it, and the municipality had had to evict them before she could move in. Twenty two of twenty three original beneficiaries (or their surviving spouse) who were asked this question indicated that they had a title and other municipal papers (e.g. municipal accounts, the original contract of sale papers) and this is the primary evidence that they would use to defend their ownership. The title "is like gold" is how one person put it.

In the event of a conflict over ownership, the majority would approach official institutions, such as a lawyer or the municipality, or both for advice and assistance. Three people indicated they would approach the police. One participant with minimal education indicated she would first contact family members who were better educated than her. None of the participants indicated that they would approach the neighbours, or community based institution such as street committees. This is very different to what has emerged in other housing projects we are studying and what is reported in the literature.

Our interviews, with two possible exceptions, indicated that people who bought a house, or people who inherited a house, had gone through the formal procedure from the outset. Buyers had either obtained the house by responding to estate agents' adverts, or heard about it through their social network of family and friends. They had acquired their knowledge about the transaction process through having previously bought and sold a house, advice from their social and family networks, respected community members (e.g. in one case the church stored documents for an heir), municipal officials, employers, lawyers, estate agents, local politicians and political party offices. They then used a lawyer to negotiate a strategy to settle any municipal debt, and effect transfer. In some cases the municipal debt was settled immediately as part of the transfer. One buyer described how they paid off the seller's debt in instalments, confirming that the municipality's policy (the municipality permits low income home owners to use an instalment plan to pay off municipal debt) had been applied in Project97. Some buyers had regular income and obtained a mortgage. Employers assisted others; in one case the employer bought the house as a form of pension for the employee. Others drew on family resources or used money they had inherited. Allowing for the possibility of errors in a commercial vendor's deeds office data, and discrepancies in the sale price stated in interviews and the price in the records possibly being distorted by outstanding municipal debt, the interview data predominantly matched registry data and the municipal valuation records (Interviews 715, 729, 731, 740, 745, 750, 753, 754, 755, and 756). Building on earlier discussion, buyers used a lawyer and decided to register as protection against the type of fraud that they had observed, heard about or read about. As with the original beneficiaries, for buyers the title deed would be their primary evidence in the event that someone challenged their ownership (Interviews 715, 729, 731, 745, 750, 753, 756).

Three people indicated that they had inherited from a family member through a will and three others indicated that they will inherit once the deceased estate is wound up (Interviews 717, 742, 744, 756, 749). The value of having both spouses` names on the title was evident in one case where a couple had separated and the wife had moved out. An official advised the woman to move back into the house until the divorce was finalised. However, her husband died before the divorce was concluded, and she remained in the house (Interviews 717). She believed that her husband's family might have claimed the house and sold it had she not done so.

4.4 Off register transactions

Key informants and Project97 interviewees indicated that off-register transactions do occur, and that it is general knowledge that owners sell houses off-register and then reclaim the houses by using the title deed to claim that the original transaction was not a sale (Interviews 721, 727, 731, 735, 755). However, we could not validate any of these claims in the field, and the evidence of off-register transactions occurring in Project97 is sketchy.

A taxi owner has supposedly built up a portfolio of four rental properties in Project97 (Interviews 706, 738, 716). We could not find one person who owns four properties in Project97 in the deeds registry data. If the story is true these may be off-register transactions, or registration may be in process. One story emerged of a drug dealer getting an oral agreement to take over a house in Project97. However, people are too scared to talk about criminal activities (Interview 707), and the story could not be validated.

To find off-register transactions, we asked participants if they knew about sales or inheritances in Project97 and how they occurred, and if they knew of any problems associated with land transactions in Project97, or if people they knew had had problems. Six houses were pointed out that were purportedly off-register transactions. Of the six, in one we could not access the occupants after a number of visits. Two others were rented, and we could not establish from the tenants how to access the owners, and in another the occupants refused an interview. In two interviews, the participants claimed to be original beneficiaries, but their description of the process of obtaining the house as a beneficiary was flawed. One possible explanation is these properties were acquired off-register (Interviews 716, 739). Thus there is speculative evidence of a small number of off-register transactions. One possible deduction from the two "false" narratives is that the people involved in these transactions are aware of official practice, but they might have chosen an off-register alternative. If they were ignorant of the official process it is unlikely that they would concoct stories about being beneficiaries.

5. Discussion of results

Unlike figures claimed in other state-subsidised housing projects in South Africa, off-register transactions are not pervasive in Project97, and none could be confirmed. In general, landholders believe that deeds are important and that agents and agencies such as the municipality and a lawyer are important and they trust them. For original beneficiaries, their houses are a major positive in their lives and the title deed a major element of them feeling secure in their homes. Many indicated that they would never sell, which is unsurprising given how difficult it is to get a house or alternative accommodation.

There was little evidence of lack of knowledge of what should be done when transacting in land. Three factors may explain this. Firstly, the lawyer who did the original registration held information sessions with the beneficiaries, and so people associated the lawyer with their title deeds. Secondly, there are no street committees in Project97. Evidence from the literature and our ongoing research indicates that some street committees actively encourage off-register transactions. Thirdly, people were aware of what might go wrong in off-register transactions i.e. the title holder may attempt to reclaim the property. It is not clear where participants obtained the information about problems with off-register transactions. It may have been from the media (residents favour a tabloid newspaper that has reported on reclaim cases), or stories from neighbouring settlements. Based on our ongoing studies, it takes one problem case to generate general awareness in a community of what can go wrong with off-register transactions.

6. Conclusions

In Project97, the proposal for regularising an alternative system of private conveyancing is not supported by concrete evidence of off-register transactions, or by landholders expressing a desire for an alternative to using a lawyer. People interact with the official structures when dealing with property matters, without going through intermediaries such as a street committee, and people are aware of the risks of off-register transactions. If forms of private conveyancing system or alternative records systems are introduced, one question is what type of disruption they may cause in projects such as Project97 where the registration system is providing the desired tenure security, and what type of disruption might eventuate in the property ownership system in general?

No compelling evidence of off-register transactions emerged in Project97, although there are suggestions of them. Landholders were well aware of how off-register transactions occur and the risks of using them. None of the interviewees suggested that off-register transactions are preferable to land registration. Given a problem with their ownership, they would approach the municipality or a lawyer, and the title deed is seen as a very important document. The registration system is effective in this housing project, but what needs to be examined further is if this is an anomaly or if problem cases are predominant in state-subsidised housing projects.

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Counting the homeless 'down under'

↳ By Chris Chamberlain[1]

1. Introduction

Homelessness is an important issue in Australia and governments of all political persuasions have been concerned to reduce the size of the homeless population. In 2008, a newly elected Labor Government published a White Paper on homelessness known as The Road Home. The Australian Government, in conjunction with the eight state and territory governments, set two headline goals to guide the country's long term response to homelessness. These were to halve homeless by 2020 and to provide supported accommodation to all rough sleepers who needed it. The Australian Government subsequently announced initiatives worth $7.8 billion over five years to reduce homelessness, including the construction of 20,000 new public housing properties.

The Road Home (FaHCSIA 2008, p.3) noted that the most widely accepted definition of homelessness in Australia is the cultural definition which distinguishes between primary, secondary and tertiary homelessness. This definition is explained in the next section of the paper. The White Paper quoted figures from *Counting the Homeless* 2006, published by the Australian Bureau of Statistics [ABS], which used the cultural definition to enumerate the homeless population at the 2006 Census (Chamberlain and MacKenzie 2008). The Australian Government used this information when it allocated funding to the states and territories under the National Affordable Housing Agreement in 2009 (Auditor-General 2013).

However, in September 2012, the ABS endorsed a new statistical definition of homelessness. This definition is broader than the cultural definition because it includes people living in conventional houses and flats as homeless if their housing is inadequate. The definition is explained below. This essay refers to people in these circumstances as the housed-homeless population.

The ABS subsequently released figures for the 2011 Census, and revised figures for the 2006 Census, using its new definition. These showed that homelessness had gone up from 89,700 in 2006 to 105,200 in 2011, an increase of 17% (ABS 2012b). The ABS did not criticise the Australian Government but the sub-text was clear. Since 2008, the Australian Government had been directing substantial additional resources towards reducing homelessness, but the problem was actually getting worse.

This essay evaluates the new statistical definition of homelessness proposed by the ABS. I show that the ABS definition is broader than the cultural definition, but the ABS definition is difficult operationalize using Census data and there is a serious problem with undercounting.

2. Cultural definition

The cultural definition of homelessness was developed by MacKenzie and Chamberlain in the early 1990s when they were working at an agency for homeless youth in inner Melbourne (Chamberlain and MacKenzie 1992). Many of the ideas informing the cultural definition came from reading 3,000 case histories of the young people who had used the service and from two years of fieldwork undertaken by the authors.

The fundamental contention underpinning the cultural definition is that 'homelessness' is a relative concept that acquires meaning in relation to the housing conventions of a particular culture. In a society where the vast majority of the population lives in mud huts, the community standard or cultural norm will be that mud huts constitute adequate accommodation (Watson 1986, p.10). Thus, the task of defining homelessness must start by identifying the minimum accommodation that people are expected to have in order to live according to the conventions and expectations of a particular culture.

In Australia, the vast majority of the population lives in suburban houses or self-contained apartments, and 70% of all households either own, or are purchasing their home. There is a widespread view that home ownership is the most desirable form of tenure and this is the 'dream' to which most Australians aspire (Kemeny 1983, p.1; Badcock and Beer 2000, p.96). Thus, the minimum community standard for an individual or couple is a small rental flat with a bedroom, living room, kitchen and bathroom and an element of security of tenure, because this is the minimum that most people achieve in the private rental market. While the minimum community standard is not specified in any formal regulations, it is embodied in current housing practices.

2 This article draws on arguments in Chris Chamberlain (2014) Homelessness: Re-shaping the policy agenda? Australian Housing and Urban Research Institute (AHURI) Final Report no. 221 (available at www.ahuri.edu.au).

Of course, the concept of 'housed' and 'homeless' constitute a continuum of circumstances, and it is important to recognise that there are a number of groups on the margins. There are also a number of institutional settings where people do not have the level of accommodation identified in the cultural standard, but in cultural terms they would not be considered part of the homeless population. They include, amongst others, people in seminaries, elderly people in nursing homes, students in university halls of residence and prisoners.

The cultural definition leads to the identification of three groups in the homeless population. The model is shown in Table 1.

Primary homelessness refers to people living on the streets, sleeping in parks, squatting in derelict buildings or using cars or railway carriages for temporary shelter. It is operationalized using the census category 'improvised homes, tents and sleepers out'.

Table 1 Cultural definition of homelessness

Minimum community standard: equivalent to a small rented flat with a bedroom, living room, kitchen & bathroom

Culturally recognised exceptions: where it is inappropriate to apply the minimum standard, e.g. seminaries, gaols, student halls of residence	**Marginally housed:** people in housing situations close to the minimum standard
	Tertiary homelessness: people living in single rooms in private boarding houses without their own bathroom, kitchen or security of tenure
	Secondary homelessness: people moving between various forms of temporary shelter including friends, emergency accommodation, youth refuges and hostels
	Primary homelessness: people without conventional accommodation (living on the streets, in deserted buildings, improvised dwellings, under bridges, in parks, etc.)

Source: Chamberlain and MacKenzie 2008, p.3.

Secondary homelessness refers to people living in various forms of emergency accommodation (refuges, hostels etc.) and people staying temporarily with other households because they have no accommodation of their own. In the original paper (Chamberlain and Mackenzie 1992), people staying temporarily in rooming houses were classified in the secondary population, but in the Australian Census they cannot be disaggregated from people living in boarding houses on a long-term basis (Chamberlain and MacKenzie 2008). Nowadays, all boarding house residents are treated as part of the tertiary population (FaHCSIA 2008, p.3).

In Australia, the terms 'rooming house' and 'boarding house' are used interchangeably and this accommodation does not provide tenants with meals. Boarding house tenants are homeless because their accommodation does not have the characteristics identified in the minimum community standard. They have only one room for eating and sleeping, and do not have private kitchen and bathroom facilities. The facilities they use are shared with other tenants and their accommodation is not self-contained. Often, they have no right of tenure as provided by a lease.

The cultural definition of homelessness is a 'statistical definition' because the number of persons in each of the categories can be quantified. Thus, the cultural definition appealed to people in the ABS. At the 1996 Census, the ABS decided to target Australia's homeless population with a special enumeration strategy using the cultural definition of homelessness (Northwood 1997, p.6).

I undertook the 1996 Census analysis, working closely with ABS staff. A methodology was developed to estimate the number of homeless people, and the findings were published by the ABS as an occasional paper (Chamberlain 1999). The same basic approach was used to analyse the 2001 and 2006 Census data and the findings were published by the ABS as part of the Australian Census Analytic Program (ACAP) (Chamberlain & Mackenzie 2003; 2008). The publication of homelessness estimates, based on census data, dramatically raised the profile of the cultural definition in Australia, because there were now numbers attached to the various categories of homelessness.

3. ABS statistical definition

In September 2012, the ABS released a publication entitled: *Information paper - A statistical definition of homelessness* (ABS 2012a). Surprisingly, the paper noted that: 'Up until 2008, the ABS had neither developed its own definition of homelessness nor adopted any other definition' (ABS 2012a, p.9). It claimed that the ABS subsequently had 'identified the need to develop a robust, defensible and evidence informed definition of homelessness for statistical purposes' (ABS 2012a, p.10).

The fundamental question that the new ABS definition addressed was: 'what is it to have a home?' The ABS approach was concerned to identify:

> … the core elements of 'home' in Anglo American and European interpretations of the meaning of home as identified in research evidence (Mallett 2004). These elements may include: a sense of security, stability, privacy, safety and the ability to control living space. Homelessness is therefore a lack of one or more of the elements that represent 'home' (ABS 2012a, p.7).

The ABS view endorsed the assumption made in the 1980s that definitions of homelessness should take into account people's perceptions (see, e.g. Hoombs and Snyder 1983; National Youth Coalition for Housing 1985; Watson 1986). Thus people living in conventional houses and flats were deemed to be homeless if they believe that their dwelling failed to provide them with privacy, safety and security. In essence, one can be both housed and homeless at the same time.

The ABS statistical definition was constructed from a conceptual framework with three core elements. These relate to:

- adequacy of the dwelling;
- security of tenure in the dwelling; and
- control of, and access to space for social relations (ABS 2012a, p.7).

Control of, and access to space for social relations covers privacy, safety, security and a range of other characteristics that make a dwelling into a 'home'.

Under the new definition, a person is considered to be homeless if their current living arrangement is:

- in a dwelling that is inadequate; or
- has no tenure, or if their initial tenure is short and not extendable; or
- does not allow them to have control of, and access to space for social relations (ABS 2012a. p.7).

It is important to note that the ABS classifies people living in conventional houses and flats as homeless if their dwelling lacks any one of these three elements (ABS 2012a, p.7). In this paper, people who meet this criterion will be referred to as the *housed-homeless population*.

The *adequacy of the building* refers to whether the structure of the dwelling renders it fit for human habitation and includes whether the building is being used for the purposes for which it is zoned. The dwelling must therefore provide proper kitchen and bathroom facilities and should not be an improvised structure. Similarly, the house or apartment should satisfy the relevant building codes and not have any improvement or control orders on it.

The second element in the ABS conceptual framework is the *security of the dwelling*. This covers a person's legal right to occupy their accommodation with stability and security of tenure. This can be achieved by owning the property, with or without a mortgage, or renting the accommodation with a formal lease. In some cases tenants may have rights that can be enforced through common law. This includes familial security of tenure such as the circumstances of children living with their parents.

The third element in the ABS conceptual framework is access to *space for social relations*. This relates to the extent to which a household (or individuals within that household) has control over and access to social and physical space such that they can pursue 'normal' social relations in a safe and secure setting. In this context, the living space must be sufficient to enable individuals in the household to have privacy when sleeping, undertake recreational and leisure activities, and for the household to have exclusive access to a kitchen and bathroom as required. The dwelling must provide a safe and secure environment where people feel supported and affirmed.

In order to implement this criterion one therefore requires:

- Evidence about each person's relationships with significant others in their household.
- Information about how much personal space people have and whether they consider it to be adequate.
- Evidence about the extent to which people feel safe, secure and supported in their accommodation.

The Australian Census currently does not collect this level of evidence.

4. Operational categories

The ABS (2012b) reports that six groups in the homeless population can be identified using Census data, and these groups are shown in Table 2. The first five ABS operational categories are similar to the categories used in the cultural definition (Table 2). The ABS category 'improvised dwellings, tents and sleepers out' is similar to 'primary homelessness'. People in supported accommodation or staying temporarily with other households are included in the secondary homeless population, and people in boarding houses or other temporary lodgings are included in the tertiary population.

However, the ABS operational definition is broader than the cultural definition because it includes in the homeless population people living in severely crowded houses or flats. These dwellings are assessed by the ABS against the Canadian National Occupancy Standard (CNOS) as requiring four or more additional bedrooms to adequately accommodate each person in the household.

The CNOS assess the number of bedrooms required by a household using the following rules:

- There should be no more than two persons per bedroom.
- Children less than five years of age of different sexes may reasonably share a bedroom.
- Children less than 18 years of age and of the same sex may reasonably share a bedroom.
- Single household members aged 18 years and over should have a separate bedroom, as should parents or couples.
- A lone person household may reasonably occupy a bed sitter (cited in ABS 2012b, p.92).

Occupants of severely crowded dwellings are considered to be homeless because they lack access to space for social relations and cannot maintain privacy and safety in their accommodation:

When people are subject to severe, sustained, overcrowding, all persons in the dwelling experience the absence of access to personal space, regardless of personal tenures. For example, while some people in a dwelling may own it, and many others also occupy the dwelling as their usual residence, the access to personal space of all is compromised … all people living in the severely overcrowded dwelling(s) do not have control, or access to space for social relations (ABS 2012a, p.15).

According to the ABS, therefore, each person in a 'severely overcrowded' dwelling is homeless, regardless of their own view of their housing situation or housing tenure. The definition as applied in practice included people in dwellings that were owned outright or being purchased (20% of all severely crowded dwellings) (see: ABS 2012b, p.53). These dwellings had 7550 residents. According to the ABS, the defining characteristic for homelessness here is overcrowding: that being, the number of occupants relative to the number of bedrooms.

If a dwelling required three (rather than four) additional bedrooms, then the ABS classified everyone in that dwelling as housed. The ABS

Table 2 Comparison of ABS operational categories and cultural definition

	ABS operational categories	Cultural definition
1	Improvised dwellings, tents or sleepers out	**1** Primary homelessness
2	Supported accommodation for the homeless	**2** Secondary homelessness
3	Staying temporarily with other households	**3** Secondary homelessness
4	Boarding houses	**4** Tertiary homelessness
5	Other temporary lodgings*	
6	Severely crowded dwellings	

* Included in tertiary population but not a separate analytical category

(2012a) paper cited no empirical studies to substantiate its assumption that all people in dwellings requiring three extra bedrooms feel safe and secure, whereas all people in households requiring four extra bedrooms do not. In fact, it seems unlikely that one could substantiate this point empirically. Whether people feel safe and secure in a dwelling is mediated by the character of the relationships between members of the household, not just the number of bedrooms that the property has. Some people in overcrowded dwellings probably feel safe and secure and others probably do not.

The implication of the broader ABS operational definition of homelessness is that the homeless population is larger than previously thought. In order to understand this, it is useful to compare the number of people recorded as homeless by the 2006 and 2011 Censuses, using the ABS statistical definition and the cultural definition.

As already pointed out, the first five operational categories in the ABS statistical definition are similar to the operational categories used in the cultural definition. Table 3 shows that, using the cultural definition, the number of homeless people increased from 58 199 in 2006 to 63 847 in 2011. This was an increase of 9.7%. However, using the ABS statistical definition, the number of people who were homeless increased from 89 728 to 105 237, an increase of 17.3%. The percentage increase using the ABS definition of homelessness was almost double because the housed homeless were the largest group in the population (41 390 in 2011), and their numbers increased by 31.3% between 2006 and 2011.

Table 3 Number of homeless people, cultural and ABS definitions, 2006 and 2011

	2006	2011	Increase
	N	N	%
Improvised dwellings	7,247	6,813	-6.0
Supported accommodation	17,329	21,258	+22.7
Temporarily with other households	17,663	17,369	-1.7
Boarding houses	15,460	17,721	+14.6
Other temporary lodgings	500	686	+37.2
Cultural definition (total)	***58,199***	***63,847***	***+9.7***
Overcrowded dwellings	31,531	41,390	+31.3
ABS definition (total)	***89,728***	***105,237***	***+17.3***

Source: ABS 2012b, pp.16-17.

5. People experiencing 'housed-homelessness'

As stated earlier, the ABS approach classifies people living in conventional houses and flats as homeless if their dwelling lacks any one of the following:

- The house or flat is inadequate.
- They have no security of tenure.
- They do not have space for social relations.

Adequacy of the dwelling covers whether the house or flat is being used in accordance with building and zoning regulations, complies with health and safety codes, and has an adequate kitchen and bathroom (ABS 2012a, p. 12). However, the Australian Census does not gather information on the quality of kitchen and bathroom facilities, or whether buildings are being used for the purposes for which they have been zoned, or whether dwellings have improvements or control orders on them. Homeless people living in substandard houses and flats were not included in the homeless estimates in Table 3.

According to the ABS, *security of tenure* can be achieved by owning or purchasing a property, or by renting accommodation with a lease (ABS 2012a, p.12). Thus, another group in the homeless population are tenants living in private dwellings who do not have a lease. The 2011 Census did not ask whether tenants in private dwellings had a lease, and people in this segment of the population were not included in the estimates in Table 3.

The third element in the ABS conceptual framework is access to space for social relations. This covers whether a household has control over and access to private space in order to pursue 'normal' social relations (ABS 2012a, p. 13). Most importantly, the dwelling must provide a safe environment where people reasonably feel supported and affirmed. It is possible to mount the argument that there were many people who should have been classified as housed-homeless when this criterion was applied but were not identified in the enumeration. Two examples illustrate this point:

First, women living in suburban houses will not feel safe and secure if they have violent partners (they are 'housed' rather than 'homed', see ABS 2012a, p. 31 for a discussion of this issue). Women in this situation were clearly part of the housed-homeless population according to the criteria specified in the ABS definition, but they were not included in 2011 Census estimates (Table 3).

Second, teenagers who are physically or sexually assaulted by family or other household members will not feel safe and supported at home. It is common for it to take months or years before physical or sexual assault comes to the notice of the authorities. Young men and women who are victims of physical or sexual assault are homeless according to the ABS conceptual framework, but again they could not be identified in the 2011 Census (Table 3).

People in the groups described above were part of the housed-homeless population according to the criteria specified in the ABS conceptual framework, but were not included in ABS homelessness estimates. The only people included in the housed-homeless population were those living in overcrowded dwellings and, as previously discussed, the criteria for their inclusion – or exclusion – was controversial.

It has been noted that women and children experiencing domestic or family violence are homeless according to the ABS conceptual framework. Why, then, were they not included in the ABS homeless estimates? The ABS notes:

> "A person experiencing violence who remains in their unsafe house with the perpetrator, could be considered to lack control of and access to social relations. However, assessing these situations in a measurement context is very difficult, and the ABS definition currently

> excludes such situations from its definition of homelessness..." (ABS 2012a, p. 15).

The ABS is correct to point out that it is very difficult to enumerate people experiencing domestic or family violence, but someone in this situation is clearly homeless according to the criteria spelled out in the ABS conceptual framework. There is another word for this problem. It is called undercounting.

As has been shown, the housed-homeless population comprises a wide range of people. However, only those in overcrowded dwellings were counted in the 2011 Census. Young people living in family households where there was physical and sexual assault were not counted, nor were women and children experiencing domestic violence. In addition, people living in conventional houses with inadequate facilities were not included, nor were people renting flats without security of tenure.

The ABS could legitimately argue that it is not possible to count any of these groups using Census data. But this is precisely the point. The ABS set out to develop a definition of homelessness that could be used for statistical purposes, but their definition is difficult to implement using existing Census data.

6. Conclusion

The cultural definition identifies four groups in the homeless population:

- People in improvised dwellings and sleepers out (primary homelessness).
- Persons in supported accommodation for the homeless (secondary homelessness).
- Individuals staying temporarily with other households (secondary homelessness).
- Boarding house residents (tertiary homelessness).

As we have seen, these categories were grounded in evidence because they were derived from reading 3,000 case histories and two years of fieldwork at an agency in inner Melbourne. The categories in the cultural definition were widely accepted by policy-makers in the late 1990s and have become embedded in the Australian discourse on homelessness since that time.

Most importantly, the cultural definition draws attention to the fact that when homeless people first lose their accommodation, they usually stay temporarily with friends or relatives before seeking emergency accommodation. After that they may go to a boarding house or to a caravan park, or move around between various temporary options. As a last resort, some people sleep rough. Once these points are explained, most people find the rationale behind the four operational categories of the cultural definition easy to understand.

The ABS definition is more difficult to explain to the broader community because this definition contends that some homeless people live in houses and flats. The idea of 'housed-homelessness' is counter-intuitive to people in the general community for good reason. People living in houses may be at risk of homelessness, but they are not 'homeless' while they remain housed – a fundamental point of disagreement between the two definitions.

According to the ABS, the housed-homeless make up the largest group in the homeless population, up from 31 531 in 2006 to 41 390 in 2011 (see Table 3). However, these figures potentially understate the extent of housed-homelessness if the criteria specified in the ABS conceptual framework are applied consistently. Not identified in the census, for example, are:

- Women and children experiencing domestic or family violence.
- Children and young people in families where there is physical or sexual violence.
- People living in houses that have inadequate facilities.
- People renting accommodation without security of tenure.

The ABS Personal Safety Survey 2012 estimated that there were 61 000 women whose current partner had been violent on more than one occasion and that this violence had occurred 'most of the time' or 'some of the time' (ABS 2012c, Table 22). If their children were included in the homeless count, then the number of people in this category would probably exceed 100 000. If, for arguments sake, a further 100 000 people should have been included in the other three categories, then it would mean that there were probably about 300,000 homeless people in Australia, but most of them could not be identified using Census data.

The undercounting of the housed-homeless means that it is not possible to specify the overall number of people using the ABS statistical definition. Nor is it possible to specify the age and gender characteristics of the population, because people who were not identified may not have the same characteristics as those who were counted. The geographical distribution of the population is also thrown in to doubt. It was pointed out earlier that the Australian Government uses this information to allocate funding to the states and territories under the National Affordable Housing Agreement (NAHA) (Auditor-General 2013). This is a significant disadvantage of the new approach.

The ABS (2012a, 2012b) states repeatedly that it has developed a statistical definition of homelessness. But a statistical definition is one where the number of persons in the relevant categories can be quantified. This is an important criterion if a definition of homelessness is to be used for policy and planning purposes. The ABS definition is broader than the cultural definition. It is also difficult to implement using census data and there is a serious problem with undercounting.

The next chapter of this Australian story has yet to be written. The ABS has adopted a definition of homelessness that implies a rewriting of the policy agenda and a redistribution of funding between the states and territories (Chamberlain 2014, pp. 15-21). Nonetheless, some people are puzzled by the claim that large numbers of the homeless live in houses. Others are wondering why some of the housed-homeless are counted and others are not; and some politicians may question whether further expenditure on homelessness is justified when there is no agreement on definition. More than a decade ago, Professor Suzanne Fitzpatrick pointed out that when one extends the concept of homelessness to include everyone living in inadequate accommodation, then it 'becomes entirely useless' (Fitzpatrick 1998, p. 198). The ABS should have heeded this warning.

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The case of a secondary mortgage corporation in Malaysia: Cagamas Berhad

↳ By Chung Chee Leong

1. Introduction

Since its establishment in 1986, the National Mortgage Corporation, better known as Cagamas has been a global model of how emerging countries can establish successful secondary mortgage liquidity facilities. This paper examines the need for a secondary mortgage market institution and how to address the growing maturity mismatch in the banking system.

All banks suffer from a structural maturity mismatch due to their reliance on short-term deposits (mostly under one year) or wholesale inter-bank funds to finance long-term projects, bonds and mortgages. This maturity mismatch problem is exacerbated in most emerging markets, where demographic factors such as an increasing young population and greater urbanization have made mortgage lending a profitable business for banks and carried relatively low risks.

As the population ages and real estate prices increase, the credit risk, liquidity risk and maturity mismatch borne by banks also increase. Hence, in many advanced and some emerging markets, the authorities have actively developed the secondary mortgage market to securitize mortgages as a way to develop robust housing finance systems and address structural weakness. By packaging mortgages into various types of mortgage-related securities, these are sold to long-term funds and asset managers, so that the maturity mismatch is reduced and the portfolio diversified.

2. Secondary mortgage market

The secondary mortgage market has three functions. The first is to reduce the maturity mismatch in the banking system. The second is to assist asset securitization and deepen the capital market. The third is to help extend the mortgage maturity and introduce new mortgage innovations so that house-buyers can afford to buy with longer maturity (higher affordability) and also introduce new products, such as fixed rate mortgages.

Secondary mortgage markets have been successfully established in different countries, taking various forms to suit indigenous needs. Interest in secondary mortgage mechanisms is continuing to grow as governments in emerging economies are beginning to recognize the potential for getting private investors to fund the primary mortgage market through the securitization of mortgage assets.

Historically, there are two types of mortgage securitization models in the advanced markets.

The first is the Fannie Mae and Freddie Mac model in the United States, where the two are government sponsored enterprises [GSEs] that provided the bulk of housing finance in the country by packaging long-term mortgages into collateralized debt obligations for resale into the market without recourse to the initial borrower or the origination bank. Their dominant role in the mortgage market, supported to an extent by an implicit government guarantee on their operations, was further reinforced by an amendment to their charter in 1992 that encouraged them to facilitate the financing of housing for low and moderate income borrowers. Under pressure to retain market share in the face of growing competition from competing mortgage lenders, there was a decline in lending standards and both Fannie Mae and Freddie Mac collapsed in the face of the subprime mortgage crisis in the United States in 2008. Both institutions required government guarantee and rescue in order to keep the mortgage market going.

The second type of asset securitization is the Pfandbrief or "covered bond model" that is widely adopted in Europe. From its early beginnings, the Pfandbrief in Germany has evolved into a triple-A rated bond system that collateralizes long term assets such as property mortgages or public sector loans. Essentially, Pfandbrief are covered bonds that are backed by cash flows from mortgages or public sector loans with one important enhancement, namely, the bondholders have recourse to a pool of assets that "covers" the bond if the originator (usually a financial institution) becomes insolvent. Unlike asset-backed securities created by securitization (which moves the ownership of the mortgage to the buyer and are therefore taken off the balance sheet of the selling bank), covered bonds keep the underlying assets on the issuer's balance sheet. While not treated as true securitization, covered bonds have become the largest source of housing finance throughout most of Europe. As at the end of 2011, total outstanding mortgage-backed covered bonds issued in 19 EU countries amounted to €1,822 billion, more than fourfold larger than the level of €410 billion at the end of 2000. The soundness of covered bonds and their lower cost features have led to global interest in this as a model of mortgage finance.

There are three conditions for the success of a secondary mortgage market:

1. The process of securitization should be highly transparent, with details of each mortgage security fully disclosed and registered, with the mortgage corporation doing due diligence on the quality of mortgages purchased.
2. The banks or originators that sell these mortgages retain "skin in the game", with a commitment to replace impaired mortgages.
3. The rules and regulations on asset securitization and trading of such assets are drafted to international standards, including accounting standards. This should be done at the outset, as mortgage securities, like the US mortgage market and the Pfandbrief market eventually became global markets.

However, certain fundamentals must be in place for mortgage securitization to be efficient, the foremost amongst others being:

A stable macroeconomic environment to foster quality mortgage assets in the primary market and robust growth in demand for housing;

A legal framework which allows transfers or assignments of receivables without cumbersome procedures concerning prior consent of the borrower. Equally important are bankruptcy laws which safeguard investors holding mortgage-backed securities;

A regulatory regime which builds liquidity in the primary and secondary markets and serves to minimize transaction costs and taxes in the bond market through standards in documentation, information dissemination and clearing/settlement.

3. The establishment of secondary mortgage market in Malaysia: Cagamas Berhad

Malaysia has enjoyed several decades of growth and prosperity since the 1980s and has successfully withstood the negative impact of a series of economic crises that began with the collapse in commodity prices (1983-1984), the Asian financial crisis (1997-1998) and then the international financial crisis of 2007-2009. In an environment of political, economic and financial stability, Malaysia has made great strides in promoting home ownership for its citizens. The Government has played a strategic role in directing the private-sector housing industry to build adequate and affordable homes for the rapidly expanding middle class, leaving the public sector to concentrate on providing low-cost housing as an integral component of the Government's social infrastructure programme.

On the financial front, Central Bank of Malaysia [BNM] recognised that the prerequisites of a successful home ownership programme are housing finance availability and accessibility. In consultation with the Government in the mid-1980s, BNM considered the need for a secondary mortgage market to be part of the financial infrastructure.

Cagamas Berhad [Cagamas] was duly incorporated in December 1986 as Malaysia's National Mortgage Corporation to develop the secondary mortgage market. It commenced operations in October 1987 at a time when financial institutions were experiencing tight liquidity and house-buyers were facing escalating mortgage rates. With the establishment of Cagamas, financial institutions were encouraged to securitize their housing loans to release liquidity from their long-term assets and thus modify the maturity profile of their balance sheets. At the same time, the issuance of Cagamas debt securities was envisioned as paving the way for the development of private debt securities to add greater depth and breadth to the capital market.

4. Cagamas' four phases of development

Cagamas effectively went through four distinct phases of development over 28 years.

The initial years from 1987–1991 were not without difficulty. The newness of its operations and its limited product line, buying at a fixed rate for five years with recourse were the main reasons for the slow progress in the operations of Cagamas. Purchases for periods of three and seven years were made available in 1989–1990. At the end of December 1991, outstanding loans with Cagamas amounted to only RM3.1 billion (USD$1.0 billion)[1].

From 1992–1997, which can be regarded as the take-off and growth phase, the operations of Cagamas picked up through active marketing and the introduction of new products. During this period, the range of products with recourse was extended to include Islamic home financing and industrial property loans. In addition, products were enhanced with floating and convertible-rate features. At the end of December 1997, outstanding loans with Cagamas grew to RM22 billion (USD$6.9 billion) or 31% of total market loans of the banking system.

The diversification phase from 1998–2003 was when Cagamas introduced hire-purchase and leasing debt and Islamic hire-purchase products. At the end of December 2003, Cagamas had outstanding loans of RM27.3 billion (USD$8.6 billion), with hire-purchase and leasing debts accounting for 43.4% of its portfolio, compared to 56.6% for housing loans. In 1999, Cagamas also introduced the Purchase Without Recourse [PWOR] scheme to the financial institutions. However, there was no urgency for banking institutions to securitize their housing loans then as there was excess liquidity in the banking system and banks were highly capitalized with risk-weighted capital adequacy ratios averaging 12.5 % in 1999. Furthermore, housing loans were deemed to be high-quality assets with low default rates and negligible foreclosure losses.

The period 2004–2013 can be referred to as the securitization phase during which Cagamas first embarked on purchasing housing loans without recourse and at the same time, contributed to the development of the asset-backed securities [ABS] market in Malaysia. Without losing its focus on supporting home ownership in the country, Cagamas went on to offer mortgage guarantee products and to participate in the Government's 'My First Home Scheme' or 'Skim Rumah Pertamaku' [SRP]. The major developments during this period included the following:

In 2006 and 2007, there were renewed efforts on the part of Cagamas to enhance the PWOR scheme, particularly in terms of product pricing, to make it attractive for banking institutions. When the subprime mortgage crisis in the United States derailed global financial markets in 2008, Cagamas continued to support the domestic ABS market by purchasing housing loans on an outright basis from financial institutions, and with a view to warehousing these loans for future securitization.

In 2007, Cagamas HKMC Berhad [CHKMC] was established as a joint venture company of Cagamas Holdings Berhad[2] and the Hong Kong Mortgage Corporation [HKMC] to provide mortgage guarantees to housing loan/finance originators. The Mortgage Guarantee Programme [MGP] offers a "first loss" protection on banking institutions' mortgage portfolio, which serves to reduce the credit risk of their housing loans/financing portfolios. Effective from December 2012, Cagamas Holdings Berhad had acquired the entire 50% HKMC equity stake in the joint venture, making CHKMC a fully-owned subsidiary of Cagamas and renamed as Cagamas MGP Berhad.

In 2011, Cagamas SRP Berhad was formed as another subsidiary to support the Government's Skim Rumah Pertamaku [SRP], which is aimed at helping young working adults (not exceeding the age of 35 years) to own their first homes

1 Ringgit Malaysia [RM] translated at RM3.18 as at 20 Aug 2014

2 Cagamas Holdings Berhad comprises of Cagamas Berhad as the main operating entity; Cagamas MBS Berhad, Cagamas SME Berhad, BNM Sukuk Berhad, Cagamas SRP Berhad and Cagamas MGP Berhad.

falling within the price range of RM100,000 to RM400,000. Under the scheme, eligible first-time house buyers are offered 100% financing by the financial institutions with a repayment period of up to 35 years. Cagamas SRP undertakes to guarantee the financial institutions for the portion of financing above the 90% level.

As from January 2013, certain specific eligibility criteria of the SRP were changed or abolished. Of significance was the raising of the gross monthly income limit for eligible buyers from RM3,000 previously to RM5,000.

5. The Cagamas model

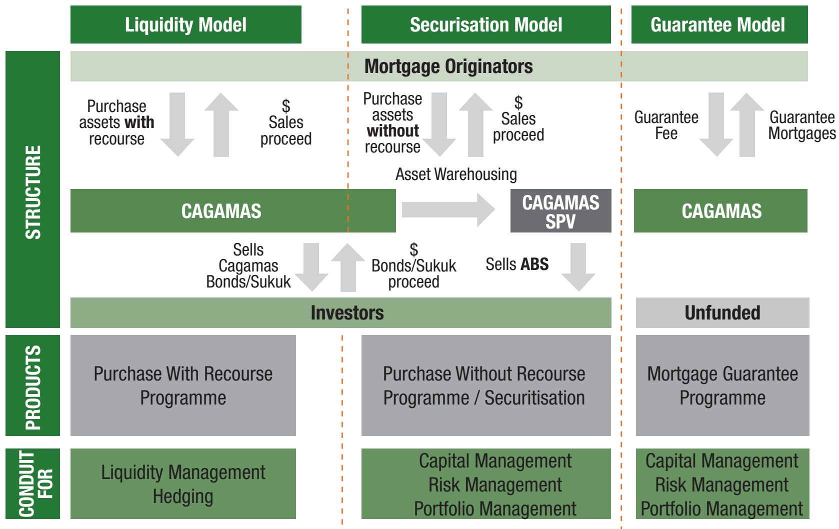
Cagamas has contributed to the building of a sustainable housing finance system in Malaysia by continuously applying innovations to its business model to meet the liquidity and capital needs of financial institutions. Cagamas is now a full-fledged mortgage corporation that encompasses a liquidity model, a securitization model and a guarantee model to promote home ownership. (See Figure 1).

Under the liquidity model, the PWOR scheme addresses the maturity mismatch problem by effectively freeing liquidity so that financial institutions may grant more housing loans at affordable costs. It also provides financial institutions with a channel to hedge their interest rate risk and to reduce negative carry via asset swapping. In times of tight liquidity, financial institutions can easily sell their housing loans to Cagamas within a short turnaround time of at least seven business days.

Under the securitization model, in addition to funding, the PWOR scheme enables housing loan originators to transfer credit and interest/profit rate risk in their entirety to provide full capital relief and to improve return on assets [ROAs] and returns on risk-weighted capital. The PWOR scheme has a much faster turnaround time of three weeks compared to the two to three months required for other types of ABS issuance, and it offers flexible transaction sizes.

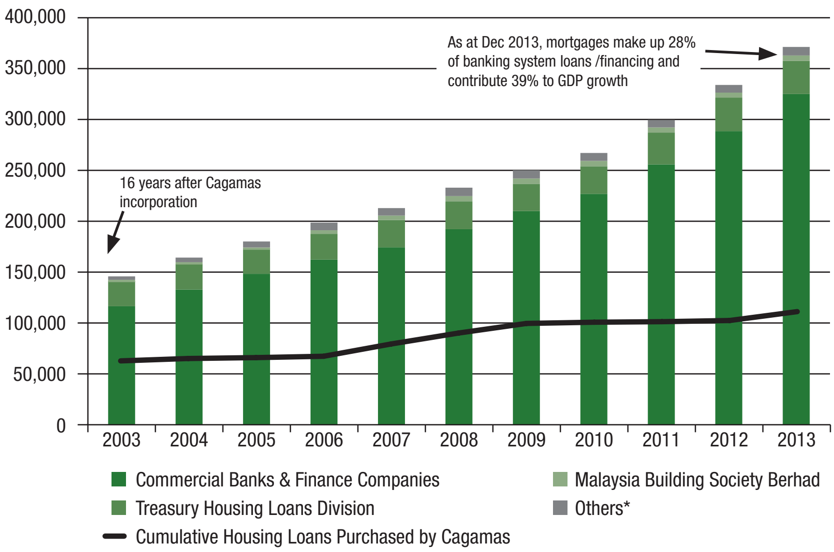
Under the guarantee model, the MGP helps housing loan originators transfer some of their credit risk, free up capital for more financing and manage their portfolio concentration risk. By reducing credit risk on their housing loan/financing portfolios, banking institutions can improve their capital adequacy ratios. The MGP has the flexibility to adjust its structure to suit the specific requirements of the mortgage financier, such as adapting the mortgage guarantee for the Skim Rumah Pertamaku.

Figure 1 The three business models of Cagamas



Source: Cagamas

Figure 2 Malaysia: Supply of housing loans, RM million



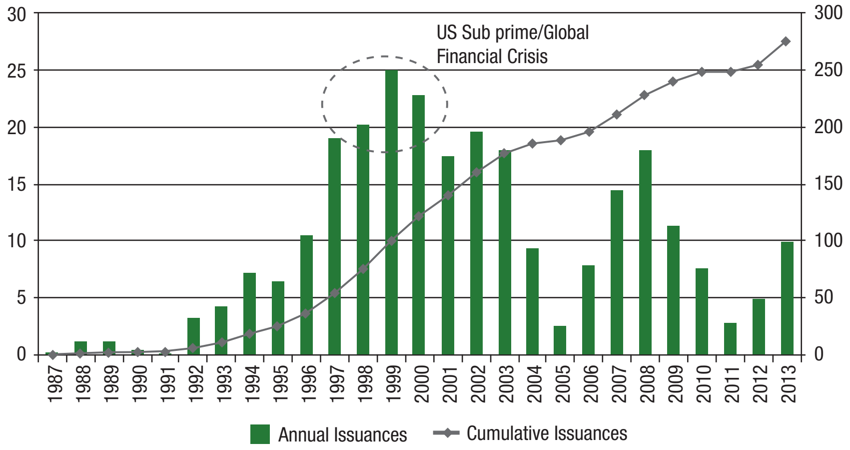
Source: Cagamas and Central Bank of Malaysia Annual Reports – various years

The World Bank has acknowledged the success of Cagamas in providing liquidity to financial institutions to fund home ownership at reasonable cost. From an initial purchase of conventional mortgages of RM110 million (US$34.6 million) in 1987, Cagamas had, by the end of 2013, cumulatively refinanced mortgages in the secondary market equivalent to RM111 billion (US$34.9 billion) or 1.8 million homes. The size of the Malaysian mortgage market has grown exponentially from RM22 billion (US$6.9 billion, then constituting a small proportion of banking system loans) in 1989 to RM371 billion (US$116.7 billion or 28% of banking system loans) as at the end of 2013 (see Figure 2). In relation to the economy, the ratio of outstanding mortgages to GDP as at end-2013 was 39%, among the highest in East Asia (Singapore 44%, China 20%, and Thailand 17%).

Cagamas has also been an active and regular issuer of private debt securities [PDS], contributing to the rapid development of the corporate bond market in Malaysia. Today, Cagamas has established itself as the largest and leading issuer of PDS in Malaysia. Since inception, Cagamas has introduced a wide range of new and award winning capital market instruments. As at the end of December 2013, the Cagamas Group has issued a cumulative total of RM275.5 billion (USD86.6 billion) of PDS (including the issuances of RM10.2 billion (USD3.2 billion) in Residential Mortgage Backed Securities [RMBS] by Cagamas MBS Berhad, a sister company of Cagamas). Cagamas' outstanding issuances of RM24.7 billion (USD7.8 billion) make up 8% of Malaysia's current outstanding PDS, which amounts to RM314.8 billion (USD99 billion); and in which Malaysia is already among the top 5 issuers of corporate bonds in the Asia-ex Japan region. Cagamas is accorded the top domestic credit rating of AAA and P1 by Malaysia's RAM Rating Services Berhad. Similarly, it is also rated AAA/AAAID and MARC-1/MARC-1ID by Malaysian Rating Corporation Berhad, denoting its strong credit quality.

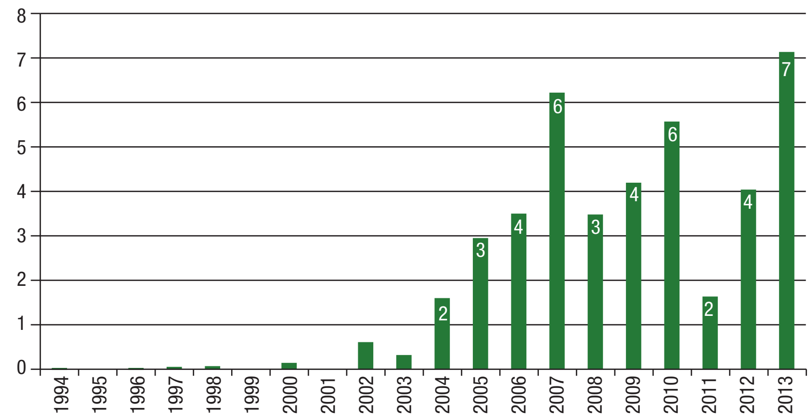
Due to the good track record and high credit standing of Cagamas, all long and short-term debt securities issued by the company have consistently been rated AAA by two Malaysian rating agencies (RAM and MARC). Cagamas is also well regarded internationally and has been assigned local and foreign currency long-term issuer ratings of A3 by Moody's Investors Service Inc. that are in line with Malaysian sovereign ratings.

Figure 3 Cagamas: Provider of liquidity to housing market, RM Billion



Source: Cagamas

Figure 4 Cagamas Sukuk issuances, RM Billion



Source: Cagamas

6. Cagamas as a liquidity provider to the housing market

Cagamas' role as a liquidity provider took on significance in times of financial crisis and tight liquidity (see Figure 3). Cagamas has injected stability into the financial system by standing ready to purchase mortgages from financial institutions that are seeking alternative sources of funding or who might otherwise turn to the central bank as a lender of last resort.

Since 2004/2005, Cagamas has evolved into a major issuer of Islamic bonds (Sukuk) (see Figure 4). It began by securitizing a significant portion of the Government's staff Islamic home financing. The issuance of RM2.05 billion (USD$0.6 billion) nominal value Islamic Residential Mortgage-backed Sukuk Musyarakah [IRMBS] in 2005 was the first of its kind in the world and attracted RM13.5 billion (USD$4.2 billion) in book size, primarily from domestic institutions and some foreign investors from Hong Kong and Singapore. Cagamas' Sukuk currently make up 18% of domestic AAA-rated Sukuk of a fast growing segment of the PDS market and dominate 88% of the domestic AAA-rated Islamic ABS market. The promotion of the issuance of Sukuk is also in tandem with Malaysia's aspirations to be a leading international Islamic financial centre.

Beyond the provision of liquidity, Cagamas has also evolved to become a provider of risk and capital management solutions. This includes Cagamas' promotion of products such as mortgage guarantee and its involvement in the synthetic securitisation in the Small and Medium Enterprise [SME] sector. Cagamas has also become a credible partner of the Government in a home ownership initiative to address the issue of affordability among young adults wishing to own their first home (My First Home scheme).

In the financial year ended 31 December 2013, Cagamas recorded a profit after tax of RM318.6 million (US$100.2 million). Its shareholders funds amounted to RM2.5 billion (US$0.8 billion) and its Risk Weighted Capital Ratio [RWCR] stood at a healthy 24.3%. In comparison, the average RWCR of the banking sector in the corresponding period stood at approximately 15%.

7. Lessons learnt from Cagamas

The Cagamas model offers important lessons for other developing countries that are considering the establishment of a secondary mortgage market. These include the following:

Ownership of Cagamas was split with the BNM owning 20% and the other 80% by the banking system. The BNM nominates the chairman of the board of governors, but the rest of the board are representatives of the banks.

From the beginning, Cagamas was supported by a well-developed system for land purchases and regulation, clear rights of property ownership and transferability, well-developed financial infrastructure and a liberalized financial system, and a proactive urban and housing policy.

In the early stages, government support and involvement in the secondary mortgage corporation, including share ownership was necessary to alleviate the default risk concerns of investors. Government and BNM privileges helped to reduce the cost of funds for Cagamas, such as:

- Exemption of the company from stamp duties for its housing loan transactions
- Exemption from the requirement to issue any prospectus in respect of its issuance of debt securities;
- Exemption from having to obtain the prior approval of the Securities Commission to issue bonds;
- Exemption of the proceeds of sales of housing loans obtained by financial institutions from statutory reserve and liquidity requirements;
- Classification of Cagamas bonds as Tier 1 liquid assets for purpose of compliance with statutory liquidity requirements.

Adoption of the PWR scheme helped to overcome moral hazard in the early stage of development of a secondary mortgage market. It gave Cagamas time to build its credibility as a safe and regular issuer of debt securities before it introduced the PWOR product.

Within the secondary mortgage framework, Cagamas has had the flexibility and innovativeness to develop new asset classes in Sukuk and SMES for institutional investors such as insurance companies and pensions, while not losing sight of its social role in promoting home ownership in the country.

8. Conclusion

Malaysia was the first country in the region, and is probably one of the earliest among the developing economies, to establish a secondary mortgage market. Cagamas has come a long way in fulfilling its initial mandate to help promote the spread of homeownership among Malaysians and played a pivotal role in the development of Malaysia's private debt securities market. Over the years, with its innovative products, Cagamas has contributed to granting loans at longer tenures and making housing loans accessible at reasonable cost within the financial sector, which is crucial to the overall success of the Government's housing policy as well as private sector initiatives. It has also provided highly-rated multi-tenure bond and Sukuk for the investor base, and has played a significant role in developing the Islamic capital market. As a pioneer in Islamic financial product innovation in the secondary mortgage space, it serves as an excellent model for nations with similar requirements.

Stock market fluctuations, housing wealth and consumption behaviour in Turkey

By Çiğdem Akın[1]

This is the second part of a two-part article and continues from Section 5 – the Introduction has been re-printed to facilitate continuity. The first part was published in the Summer 2014 issue of Housing Finance International.

Introduction

There is an increasing acknowledgement that fluctuations in asset markets and wealth can influence private consumption behaviour. Over the last decade, as a result of the broadening of equity ownership in the OECD economies, booming stock and real estate markets have been credited for the excessive growth in consumer demand, while weaknesses in consumer activity have been, to a certain extent, ascribed to the slump in the stock markets. The importance of residential property in determining consumer demand has been strengthened as a consequence of financial deregulation in mortgage markets and the growing importance of consumer financing through mortgage equity withdrawal.

The combination of these developments as well as the recent volatility in worldwide equity prices and housing markets following the subprime mortgage crisis in the United States have naturally stimulated interest in the potential impact of major movements of asset prices and wealth on the real economy. Despite ample empirical evidence on the role of the banking sector and credit expansion fueling consumption booms, studies investigating the effects of fluctuations in wealth on consumption behaviour are relatively scarce and essentially focus on the OECD economies. Although the emerging markets have shown substantial financial sector development over the last two decades, there are only a limited number of empirical studies assessing the wealth effects in the context of the emerging markets.

This paper is the first attempt in the literature to investigate the comparative role of the stock market, housing, and financial wealth in determining behaviour in relation to the consumption of durables and non-durables for the Turkish economy based on the permanent-income and the life-cycle hypotheses. The analysis is accomplished by estimating a vector error correction [VEC] model using quarterly time series data for the period 1987-2006. Unlike previous studies on consumption behaviour in Turkey that employed Engle-Granger single equation estimation with annual data, the model developed in this paper uses a longer sample and higher frequency data, and captures the long-run and short-run inter-relationships across variables in system estimation.

Another major contribution of this paper is that the effects of housing wealth are estimated using an originally constructed quarterly housing wealth series based on primary data on occupancy permits, dwelling stock numbers from the building census and residential floor area prices. Furthermore stock market wealth is calculated using stock market capitalization, while the total of time and savings deposits and foreign currency deposits in the banking system are used as a proxy for the financial wealth. The separate models developed for the consumption of durables and non-durables identify the distinct wealth effects of these asset categories. Consistent with the life-cycle and permanent-income hypotheses, net private disposable income, credit to the private sector and consumer price index-based real exchange rate fluctuations are also controlled as a proxy for income, liquidity constraint and import demand as well as depreciation of non-indexed assets respectively.

The main findings of the paper show that in the long-run, an increase in housing wealth raises the consumption of non-durables, but has no effect on the consumption of durables. On the other hand, consumption of durables is significantly affected by stock market wealth in contrast to the lack of effect on consumption of non-durables. Short-run coefficients indicate positive wealth effects from changes in stock market capitalization and financial savings on consumption of non-durables and durables. However increases in housing wealth lower the consumption of non-durables in the short-run.

The findings of this paper have important policy implications in the context of the 2007 mortgage market legislation in Turkey. This study primarily shows the strength of the housing wealth effects during the period 1987-2006

1 The author is a public management economist at the Asian Development Bank. The views expressed in this paper are those of the author and do not necessarily reflect the views and policies of the Asian Development Bank or its Board of Governors or the governments they represent.

when mortgage markets were underdeveloped in Turkey. The new law improves the regulatory and legal infrastructure of the primary and secondary mortgage markets and enhances the competition in mortgage loan origination. The law also introduces new housing finance instruments such as adjustable rate mortgages and mortgage-backed securities.

With the availability of long-term housing finance and reduction in the cost of credit for both lenders and borrowers, the new mortgage system is expected to increase the demand for formal housing construction and homeownership in the future. In addition, monetary policy changes and cyclical developments in the economy are likely to have a larger impact on mortgage interest rates, the availability of housing loans, and house prices. The increased use of homes as collateral can strengthen the positive effect of rising housing wealth on consumption over time. Given the existing strength of the wealth effect found even before the establishment of the modern mortgage system, Turkish policymakers need to monitor developments in the real estate market even more closely in the future and take measures to prevent deterioration in lending standards that may fuel house price bubbles and inflationary pressures coming from excess consumption.

The remainder of the paper is organized as follows. Section II gives a review of the theoretical literature. Section III examines previous empirical findings on wealth effects in the OECD and emerging market economies, and reviews the findings about the consumption behaviour in Turkey. Section IV looks at the description of the variables. Section V discusses the results from the vector error correction model. Section VI concludes with policy implications.

5. Empirical results

The estimation of the wealth effects on consumption is based on the following reduced-form Vector Error Correction [VEC] model:

$$\Delta y_t = \alpha\beta' y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + Bx_t + \varepsilon_t$$

where y_t is a $(nx1)$vector of non-stationary variables in levels that are integrated of order one I(1), Bx_t are deterministic variables such as constant term, linear trend, centered seasonal

Table 3 Vector error correction model for consumption of non-durables

Restrictions on Coefficients			LR Test of Restrictions		[Prob.]
Ho: β INCOME = β ISEMCAP = 0 *α INCOME = α HOUSING = α CREDIT = α RER = 0*			χ^2 (6) = 6.350357		[0.3851]
Cointegrating Equation:					
NON-DURABLES	HOUSING	SAVINGS	CREDIT	RER	TREND
1	-0.27216***	0.59423***	-0.12750***	0.15953***	-0.011928***
	(0.07201)	(0.07227)	(0.02533)	(0.04714)	(0.00110)
	[-3.7796]	[8.2222]	[-5.0334]	[3.3842]	[-10.8220]

ΔNON-DURABLES	Coefficient	Std.Error	t-value
CointEq. (-1)	-0.386698 ***	0.04155	-9.3100
ΔINCOME (-2)	-0.066311 *	0.03513	-1.8900
ΔHOUSING (-1)	-0.120868 ***	0.04402	-2.7500
ΔHOUSING (-3)	-0.122293 **	0.05229	-2.3400
ΔSAVINGS (-1)	0.189090 ***	0.05269	3.5900
ΔSAVINGS (-3)	0.191512 ***	0.05569	3.4400
ΔISEMCAP (-1)	0.046577 ***	0.01104	4.2200
ΔISEMCAP (-2)	0.019116 *	0.01093	1.7500
ΔCREDIT (-3)	-0.098773 **	0.03936	-2.5100
ΔRER (-1)	0.075490 *	0.04415	1.7100
ΔRER (-3)	0.080482 *	0.04757	1.6900
Constant	2.668580 ***	0.28690	9.3000
CSeasonal_1	0.105438 ***	0.01444	7.3000
CSeasonal_2	0.282540 ***	0.02022	14.000
DUM1994Q1	-0.094723 ***	0.03030	-3.1300
DUM1998Q3	-0.042696 *	0.02531	-1.6900
DUM2001Q1	0.038780	0.02440	1.5900

ΔSAVINGS	Coefficient	Std.Error	t-value
CointEq. (-1)	-0.809232 ***	0.13630	-5.9400
ΔINCOME (-1)	0.193280 **	0.08105	2.3800
ΔSAVINGS (-2)	0.468825 ***	0.11850	3.9600
ΔISEMCAP (-2)	0.076805 ***	0.02318	3.3100
ΔCREDIT (-2)	-0.310672 ***	0.07335	-4.2400
ΔRER (-1)	0.247207 ***	0.08864	2.7900
ΔRER (-2)	0.292600 ***	0.08266	3.5400
ΔRER (-3)	0.156484 *	0.08009	1.9500
Constant	5.594840 ***	0.94090	5.9500
CSeasonal	-0.120375 ***	0.02865	-4.2000
CSeasonal_1	-0.129679 ***	0.04326	-3.0000
CSeasonal_2	-0.157242 ***	0.03650	-4.3100
DUM1993Q2	-0.111325 **	0.04524	-2.4600
DUM1994Q1	0.126671 ***	0.04614	2.7500
DUM1994Q2	-0.068119 ***	0.04521	-1.5100
DUM1998Q3	0.148360 ***	0.04604	3.2200
DUM2001Q1	0.228537 ***	0.04663	4.9000
DUM2001Q2	0,110400 **	0,05202	2,1200

2 The detailed explanation of the VEC methodology is provided in Appendix 2.

dummies, etc. and ε_t is a vector of white noise disturbance terms. If there are linear combinations of these I(1) variables that are stationary I(0), this stationary linear combination is called the co-integrating equation, which can be interpreted as the long-run equilibrium relationship, where the single co-integrating vector is β and the speed of adjustment parameters are given by α.[2]

5.1 Modeling the wealth effects on consumption of non-durables in Turkey

The first empirical model displayed in Table 3 looks at the wealth effects on consumption of non-durables and finds the following co-integrating relationship.[3]

The residual diagnostics and vector misspecification tests in Table 4 and Figure 7 indicate that the model successfully explains the data generating process and satisfies the parameter constancy conditions.

Non-durables = $0.27216 \times$ Housing - $0.59423 \times$ savings + $0.1275 \times$ Credit - $0.15953 \times$ Rer + $0.011928 \times$ Trend

The co-integrating vector above shows that a one percent increase in housing wealth raises consumption of non-durables b 0.27%, which is consistent with the co-movement of the two series in Figure 5B. Similar to the findings of Binay and Salman (2008), there is a significant wealth effect from housing because home ownership is spread more evenly over the population and the housing wealth is held by consumers in all income classes in Turkey. According to Table 2, home ownership rate has reached 60% of urban households in 2000.[4] Examination of households' income and consumption expenditure surveys during the period 1987-2005 in Table 5 shows that income generated from real estate property ownership is significant in Turkey. Actual rent income ranged between 3-5% of the household disposable income. The reported imputed rent of homeowners reached 6.6% of disposable income in 1994 survey.

Fluctuations in stock market capitalization however do not have any significant wealth effect on the consumption of non-durables perhaps because equity ownership is limited and concentrated in the high income groups.[5]

The lack of a statistically significant relationship between consumption of non-durables and disposable income is consistent with the permanent-income hypothesis and the findings of the previous literature that the relationship between disposable income and consumption has weakened in the last 15 years due to the availability of bank credit as well as earnings coming from accumulation of financial wealth (See Ceritoğlu, 2003).

There is a significant and positive long-run co-integrating relationship between bank credit and consumption of non-durables. A one percent increase in the availability of bank credit to private sector increases the consumption of non-durables by 0.13%. This indicates that elimination of financial constraints on households stimulates consumption in the economy.

Table 3 Vector error correction model for consumption of non-durables

ΔISEMCAP	Coefficient	Std.Error	t-value
CointEq. (-1)	-1.662430 ***	0.61640	-2.7000
ΔNON-DURABLES (-1)	2.762280 ***	0.67430	4.1000
ΔNON-DURABLES (-3)	1.327910 **	0.51450	2.5800
ΔINCOME (-2)	0.783121 **	0.33230	2.3600
ΔHOUSING (-1)	-1.382700 ***	0.47510	-2.9100
ΔHOUSING (-2)	-1.162420 **	0.47540	-2.4500
ΔSAVINGS (-2)	1.259110 **	0.48660	2.5900
ΔSAVINGS (-3)	2.383330 ***	0.61180	3.9000
ΔISEMCAP (-3)	0.272307 **	0.10190	2.6700
ΔCREDIT (-3)	-0.748670 *	0.37840	-1.9800
ΔRER (-2)	1.094930 **	0.41590	2.6300
ΔRER (-3)	1.004020 **	0.40450	2.4800
Constant	11.43540 **	4.25300	2.6900
CSeasonal	0.585840 ***	0.16470	3.5600
CSeasonal_2	0.582820 ***	0.18180	3.2100
DUM1993Q2	0.684386 ***	0.22560	3.0300
DUM1998Q3	-0.432906 **	0.20940	-2.0700
DUM2001Q2	0.466525 **	0.22060	2.1100

LR Test of Overidentifying Restrictions: $\chi 2$ (46) = 30.141 [0.9658]

*Notes: Standard errors are in ( ) and t-statistics in [ ]. ***, **, * denote 1%, 5% and 10% significance levels. PCGive Autometrics is used to determine the significant variables retained in the system.*

Table 4 Residual diagnostics and mis-specification tests for consumption of non-durables

Vector Portmanteau Statistics (12)	95.5282	
Vector AR 1-5 Test	F(45,125) = 1.1516	[0.2685]
Vector Normality Test for Residuals	$\chi 2$ (6) = 7.9093	[0.2448]
Vector Heteroscedasticity Test	F(324.3) = 0.0291	[1.0000]

3 The VEC model is obtained after incorporating the coefficient restrictions on the co-integrating vector and the adjustment coefficients, and excluding all of the weakly exogenous equations except for Δ*non-durables*, Δ*savings* and Δ*isemcap*.

4 A recent study by Van Rijckeghem and Üçer (2009) finds supporting evidence for the housing wealth effects based on the household budget survey data in 2005. Homeowners reduced their saving rate and increased their consumption more than tenants in recent years because of the large increase in real estate prices and hence wealth in Turkey. Their results also indicate a reduction in savings for old age households, among which the rate of homeownership is high. Tenants in Turkey consumed less than homeowners, and became relatively worse off as a result of the boom in house prices and rents.

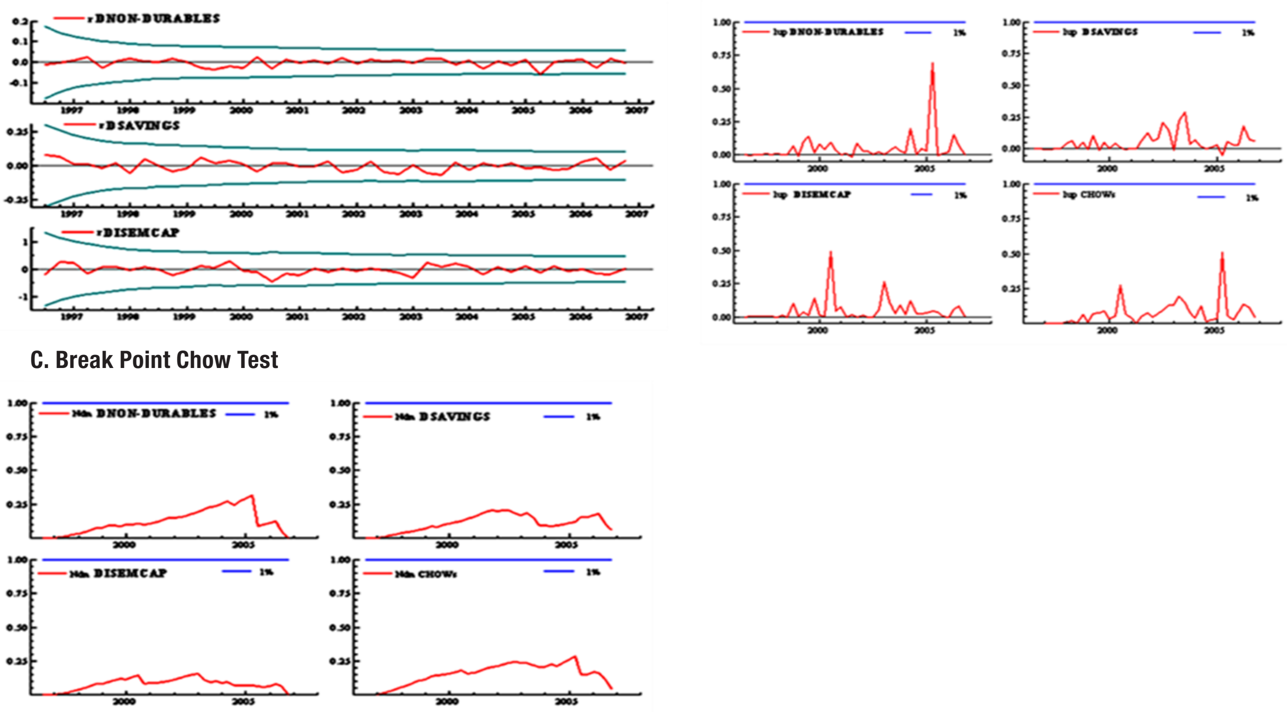
5 Figure 4 shows that investing in common stocks has been an unattractive option for domestic residents in comparison to the Turkish Lira and foreign currency deposits and government debt instruments due to high volatility in returns. According to Table 1, roughly 12% of the total portfolio of the Istanbul Stock Exchange is held by domestic institutional investors and 21% by domestic individual investors. More than 80% of domestic individual investors are small investors holding portfolios of less than 10,000 New Turkish Lira. The share of their portfolios constitutes only 6% of the total investment by domestic individuals.

Figure 7 Misspecification and stability tests for consumption of non-durables

A. Recursive Graphs for One-Step Ahead Residuals within 2+/- Standard Errors

B. One-Step Chow Test

C. Break Point Chow Test



The coefficient estimates show that a one percent increase in savings reduces consumption by 0.59% in the long-run. Consistent with the findings of Özcan et al. (2003), the accumulated financial wealth finances the consumption of non-durables.

Real depreciation of the Turkish Lira significantly affects consumption of non-durables. One percent real exchange rate depreciation increases consumption of non-durables by 0.16%. Gylfason (1981) shows that inflation drives down the real value of assets and encourages consumption at the expense of savings. The negative interest rates on savings deposits due to chronically high and variable inflation during 1990s and depreciation of the Turkish Lira denominated assets encourage consumption rather than savings. Similarly Juster and Wachtel (1972) indicate that depreciation of the domestic currency creates a negative wealth perception reducing the demand for cash holdings and stimulating the consumption of necessities.

The α adjustment coefficient on the error correction term of Δ*non-durables* equation in

Table 5 Distribution of household disposable income (in %)

	1987	1994	2002	2003	2004	2005
Total Income	100.00	100.00	100.00	100.00	100.00	100.00
Wages, Salaries and Daily Wage	24.10	28.30	38.75	41.78	42.16	42.52
Entrepreneur Income	51.50	42.40	34.45	32.02	31.81	28.81
Agriculture	22.80	16.70	13.16	9.84	9.38	
Manufacturing		4.40	3.33	3.96	3.93	
Construction		1.70	1.30	1.32	1.22	
Commerce		14.40	9.76	10.46	10.19	
Services		5.20	6.90	6.44	7.08	
Property Income	13.60	19.30	9.25	6.22	4.85	5.63
Real Estate Income	11.80	11.60	4.11	3.59	2.65	2.92
Imputed Rent *		6.60				
Actual Rent		5.00	4.11	3.59	2.65	2.92
Income from Financial Assets	1.80	7.70	5.14	2.63	2.20	2.71
Transfer Income	10.80	10.00	17.54	19.98	21.19	23.05
From the Government		6.90	14.27	17.45	18.33	
From Abroad		1.40	0.89	0.60	0.85	
From Other Sources		1.70	2.38	1.93	2.01	

*Source: TÜİK Household Income and Consumption Expenditures Surveys. See Akın (2009b) for a detailed explanation. *Imputed rent income is available only for 1994.*

Table 3 is -0.3867, indicating that deviations from the long-run consumption equilibrium is adjusted partially by the short-term changes as the theory suggests. The short-run coefficients of the model show that quarterly change in the consumption of non-durables is positively affected by lagged quarterly changes in financial wealth and lagged changes in the stock market wealth.

The changes in disposable income surprisingly have a negative effect on the changes in consumption of non-durables. One possible explanation is that consumption booms in Turkey often coincide with the widening of the current account deficit, which enters negatively into the equation for net private disposable income (See Başçı et al., 2007). Furthermore, economic crises during the 1990s have substantially reduced the disposable income of households. Particularly after 2002, fiscal discipline imposed by the disinflation program reduced the disposable income, while consumption surged with the availability of credit.

The results indicate that changes in housing wealth reduce consumption of non-durables growth in the short-run. This result supports the argument that when the cost of acquiring housing assets and the implicit cost of residential services increase, prospective home buyers need to save more and reduce consumption. (See Catte et al., 2004)

The increase in per capita bank credit also has a negative effect on consumption of non-durables in the short-run indicating that increase in debt reduces the consumption of necessities. However the exchange rate appreciation raises the growth of consumption of non-durables in the short-run consistent with the perceived increase in the purchasing power.

When the Δsavings equation is examined, change in financial wealth is positively influenced by changes in disposable income, stock market capitalization, and real exchange rate appreciation. However, changes in bank credit in previous periods reduce the savings growth.

Finally, changes in stock market capitalization, Δ*isemcap*, are significantly affected by lagged growth in consumption of non-durables. The asset prices co-vary with consumption growth consistent with consumption based capital asset pricing model, CAPM (See Cheung and Ng, 1998). The one-way causality however shows that wealth effect and leading indicator roles of the stock market are not observed for Turkey, similar to the findings of Liu and Shu (2004b).

The results show that changes in income and savings increase stock market capitalization growth in the short-run. Real exchange rate appreciation has a strong positive effect on stock market capitalization growth, which might reflect the effect of foreign capital investment in the stock market and other domestic assets. On the other hand, increases in housing wealth and bank credit reduce stock market capitalization growth in the short-run.

Table 6 Vector error correction model for consumption of durables

Restrictions on Coefficients	LR Test of Restrictions	[Prob.]
Ho: β HOUSING = 0 *β INCOME + β CREDIT = -β SAVINGS* *α INCOME= α HOUSING= α ISEMCAP = α CREDIT = α RER = 0*	χ^2 (7) = 7.881646	[0.3432]

Cointegrating Equation:

DURABLES	INCOME	SAVINGS	ISEMCAP	CREDIT	RER	TREND
1	-0.16961**	0.62459***	-0.053356***	-0.45499***	-0.50814***	-0.0078592***
	(0.07215)	(0.08718)	(0.016041)	(0.03454)	(0.06604)	(0.001743)
	[-2.35076]	[7.1647]	[-3.3262]	[-13.1713]	[7.6950]	[4.5095]

ΔDURABLES	Coefficient	Std.Error	t-value
CointEq. (-1)	-1.030390 ***	0.11270	-9.1400
ΔINCOME (-1)	-0.470737 ***	0.16940	-2.7800
ΔINCOME (-2)	-0.646132 ***	0.12970	-4.9800
ΔSAVINGS (-1)	0.558900 **	0.22770	2.4500
ΔSAVINGS (-2)	0.315833	0.19730	1.6000
ΔISEMCAP (-1)	0.127224 ***	0.04023	3.1600
ΔISEMCAP (-2)	0.096918 **	0.04264	2.2700
ΔCREDIT (-1)	0.774851 ***	0.16500	4.7000
ΔCREDIT (-2)	-0.491498 ***	0.15050	-3.2700
Constant	1.093470 ***	0.11810	9.2600
CSeasonal	-0.264153 ***	0.05193	-5.0900
CSeasonal_1	-0.200308 **	0.09855	-2.0300
CSeasonal_2	-0.251229 ***	0.06707	-3.7500
DUM1993Q1	0.201546 **	0.08994	2.2400
DUM1994Q2	-0.744689 ***	0.09760	-7.6300
DUM2001Q1	-0.270351 ***	0.09151	-2.9500
DUM2001Q2	-0.296225 ***	0.10500	-2.8200

ΔSAVINGS	Coefficient	Std.Error	t-value
CointEq. (-1)	-0.266743 ***	0.05203	-5.1300
ΔINCOME (-1)	0.080312 ***	0.02895	2.7700
ΔINCOME (-2)	-0.162698 ***	0.02625	-6.2000
ΔSAVINGS (-2)	0.157686 *	0.0862	1.8300
ΔISEMCAP (-1)	-0.067648 ***	0.01997	-3.3900
ΔCREDIT (-1)	0.324787 ***	0.07373	4.4100
Constant	0.292205 ***	0.05514	5.3000
DUM1994Q1	0.204718 ***	0.04432	4.6200
DUM2001Q1	0.166231 ***	0.04513	3.6800
DUM2001Q2	-0.104028 **	0.04742	-2.1900

LR Test of Overidentifying Restrictions: $\chi2$ (25) = 22.829 [0.5875]

*Notes: Standard errors are in ( ) and t-statistics in [ ]. ***, **, * denote 1 %, 5 % and 10 % significance levels.*
PCGive Autometrics is used to determine the significant variables retained in the system.
The residual diagnostics and vector misspecification tests in Table 7 and Figure 8 indicate that the model is robust.

5.2 Modeling the wealth effects on consumption of durables in Turkey

The second empirical model displayed in Table 6 estimates the wealth effects on consumption of durables.[6]

$Durables = 0.1696 \times Income - 0.6246 \times Savings + 0.05336 \times Isemcap + 0.45499 \times Credit + 0.50814 \times Rer + 0.009859 \times Trend$

The long-run co-integrating vector above indicates that in contrast to consumption of non-durables, housing wealth has no statistically significant relationship with consumption of durables. On the other hand, a one percent increase in per capita stock market capitalization raises the consumption of durables by 0.05%. Despite the fact that equity ownership is very small in Turkey, the movements in stock market capitalization, which is a reflection of capital flows into the economy, function as a leading indicator of the boom-bust periods, and reflect the consumer confidence about the future economic conditions. Consistent with Figure 6D, stock market fluctuations are associated with consumption of durables, which are highly sensitive to cyclical conditions and income uncertainty in Turkey.

Coefficients of the co-integrating equation show that a one percent increase in disposable income raises real per capita consumption of durables by 0.17% in the long-run in contrast to the consumption of non-durables. The results are consistent with the findings of Duygan (2005) that consumption of durable goods in Turkey is strongly determined by uncertainty about real income and employment expectations.

There is a significant and positive long-run co-integrating relationship between bank credit and consumption of durables. A one percent increase in the availability of bank credit to the private sector increases the consumption of durables by 0.45%, which is more than three times the elasticity of consumption of non-durables. Therefore elimination of financial constraint through availability of bank credit stimulates the consumption of durables in the long-run. Figure 6E consistently shows that consumption of durables increases with the availability of credit.

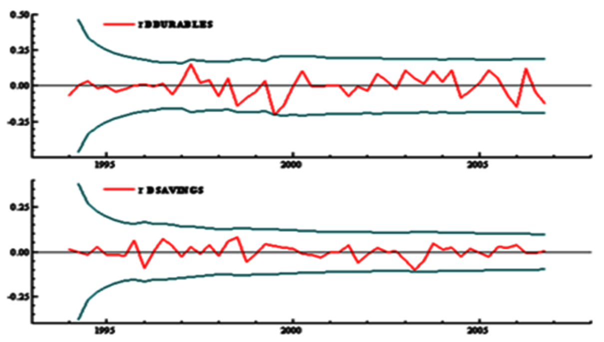
Even though coefficient estimates of the co-integrating vector indicate an absence of a distinct long-run relationship between consumption of durables and housing wealth, the coefficient capturing the elasticity with respect to bank credit

Table 7 Residual diagnostics and misspecification tests for consumption of durables

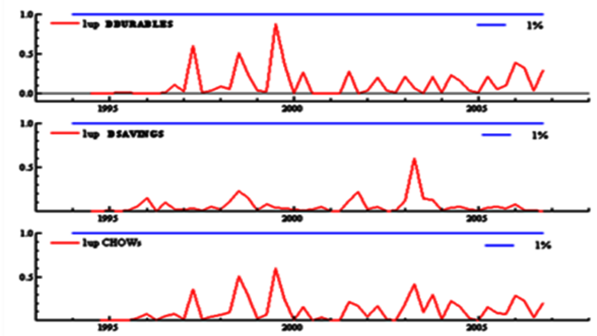
Vector Portmanteau Statistics (12)	41.0953	
Vector AR 1-5 Test	F(20,106) = 0.8060	[0.7014]
Vector Normality Test for Residuals	χ^2 (4) = 2.4899	[0.6464]
Vector Heteroscedasticity Test	F(120,63) = 0.4130	[1.0000]

Figure 8 Misspecification and stability tests for consumption of durables

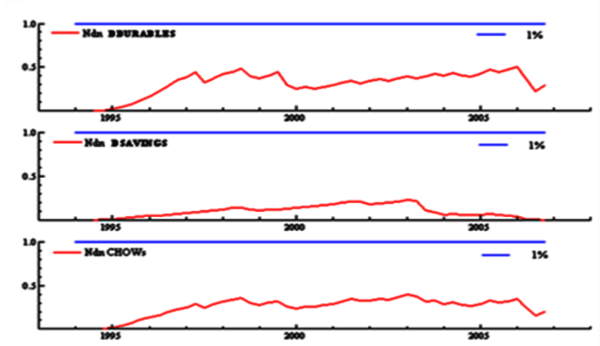
A. Recursive Graphs for One-Step Ahead Residuals within 2+/- Standard Errors



B. One-Step Chow Test



C. Break Point Chow Test



6 The final parsimonious VEC model is obtained by incorporating the coefficient restrictions on the co-integrating vector and the adjustment coefficients, and by excluding all of the weakly exogenous equations except for Δ*durables* and Δ*savings*.

may actually incorporate the collateral channel, through which housing wealth affects household spending on consumption. The estimated housing wealth series based on urban dwellings with occupancy permits allows the collateral channel to be effective because the housing asset is legally recognized in formal financial transactions and can be transferred to subsequent generations via a bequest.[7] As discussed in previous sections in detail, the use of homes as collateral amplifies the impact of cyclical fluctuations of house prices on consumer spending as increases in house prices raise the value of the collateral and loosen the borrowing constraints on households.

In addition, the results show that a one percent increase in savings reduces consumption by 0.62% in the long-run. The strong effect may indicate that people are trading durable goods for savings. The sum of the elasticities of consumption of durables with respect to disposable income and bank credit is equal to the elasticity with respect to the savings, consistent with the restrictions imposed on the co-integrating vector.

In contrast to consumption of non-durables, a one percent real exchange rate appreciation increases the consumption of durables by 0.51%. Consistent with Figure 6F, real appreciation of the Turkish Lira significantly affects consumption of durables in the long-run due to the fact that many of the durables such as household appliances, electronics or vehicles are either directly purchased from abroad or require a significant amount of imported components in the production process. This finding is consistent with the observation that the appreciation of the real exchange rate coincides with the widening of the current account in Turkey.

Another explanation could be that strengthening of the domestic currency creates a wealth perception as a result of the decline in uncertainty associated with the depreciation of Lira denominated assets or inflation, which stimulates the consumption of durables as argued by De Gregorio et al. (1998). The concurrent fall in nominal interest rates after the disinflation program in 2003 provides consumers with more liquidity and results in a wealth effect, which induces consumers to bring forward their purchases of durable goods in Turkey. The exchange rate appreciation together with credit availability triggers consumption of durables.

The α adjustment coefficient for the error correction term of Δ*durables* equation in Table 6 is -1.0304 indicating that deviations from the long-run equilibrium of consumption of durables is completely adjusted. The short-run coefficients in Table 6 show that changes in the consumption of durables is positively affected by lagged changes in savings and the stock market wealth.

In contrast to the non-durables, increases in per capita bank credit in a previous period leads to a net increase in the consumption of durables in the short-run. Together with the positive long-term effects, it can be clearly seen that the availability of bank credit plays a significant role in the financing of the consumption of durables in Turkey.[8] Changes in disposable income in the previous period also have a negative effect on the changes in the consumption of durables similar to the previous model for consumption of non-durables.

When the Δ*savings* equation is examined, changes in savings are influenced positively by changes in income and bank credit, but negatively by changes in stock market capitalization.

6. Conclusion

This research is the first attempt in the literature to explicitly investigate the comparative role of stock market, housing and financial wealth in determining the consumption of durables and non-durables in Turkey. A vector error correction model is estimated for the two consumption series using quarterly time series data for the period 1987-2006.

The other contribution of the paper is that housing wealth series are originally constructed using primary sources for urban dwellings with occupancy permits. Unlike the previous literature using total number of households in the population, this methodology avoids the potential problems associated with identifying the extent of undocumented and unauthorized housing stock in Turkey and captures the collateral channel, through which home owners can borrow from the financial institutions using their legally documented homes as collateral.

The main findings show that in the long-run, an increase in housing wealth raises the consumption of non-durables, but has no effect on the consumption of durables. This result is consistent with the fact that home ownership is spread evenly over the population in Turkey.

These findings have important policy implications in the context of the recent mortgage market legislation enacted in February, 2007. The Mortgage Law No. 5582 has prepared a modern institutional framework for the mortgage market in Turkey, which has suffered from the consequences of the underdeveloped institutional housing finance over the last decades.

According to the IMF (2007), the new law improves the regulatory and legal infrastructure in capital markets, tax and banking laws related to the operations of the primary and secondary mortgage markets, foreclosure and bankruptcy procedures, consumer protection, and real estate appraisal standards. Competition is increased by allowing non-bank lenders to originate mortgage loans. The law also introduces the Mortgage Finance Corporations, as a secondary market facility, which can provide funding to the primary lender, and authorizes and specifies the conditions governing the covered bonds and mortgage-backed securities that can be issued by banks or the mortgage finance corporations. These securities can be purchased by pension funds, insurance companies and other banks to improve access to long term sources of funds for mortgage lending and their issuance would deepen the financial markets in Turkey.

With the availability of long-term housing finance options and reduction in the cost of credit for both lenders and borrowers, an increase in demand for housing construction is expected. Because of the collateral requirements that houses need to be purchased under the record of the financial institutions, and stricter enforcement of housing construction standards, the new mortgage system is expected to alleviate informality in the construction sector and mitigate squatter settlements and the development of unqualified housing in urban areas. This in return implies that the collateral channel can be used more effectively in Turkey over time by large segments of the society, strengthening the housing wealth effects.

In addition, the introduction of the new housing finance instruments such as adjustable rate

7 According to the Turkish banking regulations, individuals and firms are required to document their incomes as well as prove ownership of assets such as house, car or land to be used as collateral in order to have access to credit.

8 Çimenoğlu and Yentürk (2005) previously showed, using an econometric model, that the rise of credit volume and credit card utilization has a significant impact on the consumption of durable goods in Turkey. This observation is also consistent with the fact that there has been an increase in the nationwide acceptability of credit card usage in major retail stores in the last decade and in the availability of consumer loans for automobiles since 2002.

mortgages and enhanced liquidity in the market through mortgage-backed securities imply that availability of housing loans, construction activity and house prices may respond more strongly to monetary policy changes and cyclical developments in the economy.[9] The increased use of homes as collateral can amplify the positive effect of rising house prices on consumption via increased household borrowing over time.

Given the strength of the existing housing wealth effect found in this study, the Turkish policymakers need to monitor the developments in the real estate market even more closely in the future and take appropriate measures to prevent deterioration in lending standards due to intense competition among financial institutions as well as house price bubbles and inflationary pressures coming from excess consumption in the economy.

Currently, the Turkish regulatory and supervisory infrastructure for real estate and property development is highly fragmented among many central and local government authorities. Several researchers like Coşkun (2011) have identified significant deficiencies in the land and cadastral information systems, availability of reliable and standardized quality and price data for commercial and residential properties, and licensed professionals for conducting independent real estate appraisals for market and public based transactions. These factors significantly decrease the legality, transparency, and efficiency of transactions as well as the expected rate of return in the Turkish real estate market. Furthermore negative externalities arising from informational asymmetries and irregular practices in marketing and brokerage activities could potentially spill over into the credit and securitization markets by amplifying the risks in mortgage market-related financial transactions and products. Therefore in order to protect the public interest and prevent systemic risks in financial markets, there is an urgent case for the establishment of a nationwide real estate regulation and supervision agency, which would be designed to unify and coordinate the legal and institutional framework for real estate and property development as well as set the standards for the functioning of mortgage credit systems.

Another important finding of this paper is that stock market wealth has a quantitatively small, but significant effect on the consumption of durables in the Turkish economy. In contrast, consumption of non-durables is not affected by stock market wealth. This result is consistent with the fact that equity ownership is limited and concentrated in high income households in Turkey. The stock market capitalization is predominantly driven by foreign investment and functions as a leading indicator of the business cycles, and a transmission mechanism for international financial conditions. Therefore, stock market wealth is indirectly associated with consumption of durables, which is sensitive to cyclical conditions and expectations.

This paper finds a strong impact from the elimination of liquidity constraints on consumption of both durables and non-durables. The elasticity of consumption of durables with respect to bank credit is more than three times the elasticity of consumption of non-durables. Although there is no distinct long-run relationship between consumption of durables and housing wealth, the high elasticity with respect to bank credit may incorporate the additional collateral channel. Increases in house prices loosen borrowing constraints by raising the collateral value and amplify the impact of cyclical fluctuations of house prices on spending on durables.

The increasing role of credit cards and consumer loans to finance the consumption of durables makes the lending booms a serious concern for the soundness of the banking system in Turkey. With the appreciation of the currency, consumer spending leads to higher demand for imports and widening of the current account deficit. Turkish policymakers should be vigilant about excessive bank lending, financed by borrowing from international capital markets, and implement stringent prudential regulations to prevent defaults on consumer loans.[10]

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9 Existing studies have already shown the importance of these macroeconomic variables in the Turkish housing market even before the establishment of the new mortgage system. For example, Sarı et al. (2007) find that shocks to interest rates, output and prices had significant effects on changes in housing investment during the 1994-2001 period. Similarly, Hepşen and Kalfa (2009) find that shocks to interest rate and volume of mortgage loans had noticeable impacts on changes in the housing investment during the period 2002-2007. Özsan and Karakaş (2005) attribute a significant portion of the housing price increases since 2003 to decreasing interest rates and more readily available housing loans. Finally, Çobandağ (2010) finds that reduction in nominal interest rates increased the total amount of housing loans issued during the period 1998-2009.

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Appendix 1: Data sources and explanations

Non-Durables	Logarithm of total private final consumption expenditure minus the consumption of durables deflated by CPI and divided by population. 1987:Q1-2006:Q4 (Quarterly, Current Prices, New TL) Source: Turkish State Statistics Office.
Durables	Logarithm of consumption of durables deflated by CPI and divided by population. 1987:Q1-2006:Q4 (Quarterly, Current Prices, New TL) Source: Turkish State Statistics Office.
Private final consumption expenditure (C) Private gross fixed capital formation (I) Exports of goods and services (X) Imports of goods and services (M)	1987:Q1-2006:Q4 (Quarterly, Current Prices, New TL) Source: Turkish State Statistics Office.
Government fiscal balance (Govt. revenue-Govt. expenditure)	1987:Q1-2006:Q4 (Quarterly, Current prices, New TL) Source: GDS, C186GB
Net factor incomes from rest of the world	1987:Q1-2006:Q4 (Quarterly, Current prices, New TL) Source: OECD Quarterly Accounts and Turkish State Statistics Office.
Consumption of fixed capital (Depreciation)	1987:Q1-2006:Q4 (Quarterly, Current Prices, New TL) Source: OECD Quarterly Accounts and Turkish State Statistics Office.
Income	Net Private Disposable Income (NPrDI) series are constructed using: NPrDI = C + I – Government Savings + Net Exports + Net Factor Incomes Received from the Rest of the World–Depreciation NPrDI series are deflated by CPI and divided by population. Logarithm of the per capita net private disposable income gives the *income* series used in the econometric estimation.
Housing	Logarithm of Per Capita Real Housing Wealth. See Akın (2009b) for a detailed explanation of the methodology. Data used in the construction of the housing wealth series are as follows:
Completed or partially completed new buildings and new additions according to occupancy permits	Number of Buildings and Dwelling Units, Floor Area (m2), Value (TL) 1965-2005 (Annual) and 1993:Q1-2007:Q2 (Quarterly) Source: Turkish State Statistics Office and State Planning Organization
Total number of dwellings in 2000	2000 Building Census Source: Turkish State Statistics Office and Undersecretariat of Housing
Production of dwellings (m2)	1986:Q4-2006:Q4 (Quarterly) Source: OECD Main Economic Indicators, 186.PRCNDW01.ML
Savings	Logarithm of time, savings and foreign currency deposits deflated by CPI and divided by population. 1986:Q4-2006:Q4 (Quarterly, Current Prices, New TL) Source: International Financial Statistics, 18625.ZF
Isemcap	Logarithm of the Istanbul Stock Exchange market capitalization deflated by CPI and divided by population. 1986:Q4-2006:Q4 (Quarterly, Current Prices, New TL) Monthly total market values of companies traded on Istanbul Stock Exchange are averaged for each quarter. Source: IMKB Annual Factbook 2006
Credit	Logarithm of domestic deposit banks credit to private sector deflated by CPI and divided by population. 1986:Q4-2006:Q4 (Quarterly, Current Prices, New TL) Source: The Central Bank of Republic of Turkey, TP.KM.C11.1
Rer	1987:Q1-2006:Q4 (Quarterly) (Base Year 2000=100) Logarithm of CPI Based Real effective Exchange Rates Index Source: OECD Main Economic Indicators, 186.CCRETT01.IXOB
Consumer price index (CPI)	1987:Q1-2006:Q4 (Quarterly) (Base Year 2000=100) Source: OECD Main Economic Indicators, 186.CPALTT01.IXOB
Population	1987:Q1-2006:Q4 (Quarterly) Source: OECD Analytical Database, 186.POP

Appendix 2: Vector error correction [VEC] methodology

The estimation of the wealth effects on consumption is based on the VEC methodology.

Consider a basic VAR model of order p, which has the following form:

$$y_t = A_1 y_{t-1} + A_2 y_{t-2} + \dots + A_p y_{t-p} + Bx_t + \varepsilon_t \quad (5.1)$$

where $y_t = (y_{1t}, y_{2t}, \dots, y_{nt})$ is a $(nx1)$ vector of non-stationary variables in levels that are integrated of order one I(1), A_i are (nxn) coefficient matrices of the endogenous variables to be estimated, Bx_t are deterministic variables such as constant term, linear trend, centered seasonal dummies and impulse dummies or non-stochastic regressors and $\varepsilon_t = (\varepsilon_{1t}, \dots, \varepsilon_{nt})$ is a vector of white noise disturbance terms.

If there are linear combinations of these I(1) variables that are stationary I(0), this stationary linear combination is called the co-integrating equation, which can be interpreted as the long-run equilibrium relationship. In this case, the above equation can be transformed into the following VEC form:

$$\Delta y_t = \Phi y_{t-1} + \Gamma_1 \Delta y_{t-1} + \dots + \Gamma_{p-1} \Delta y_{t-p+1} + Bx_t + \varepsilon_t \quad (5.2)$$

where $\Phi = \sum_{i=1}^{p} A_i - I$, $\Gamma_i = -\sum_{j=i+1}^{p} A_j$ and $\varepsilon_t \sim (0, \Sigma_\varepsilon)$ is a vector of white noise innovations.

Φy_{t-1} contains the error correction term with co-integrating relations among I(1) variables and must be stationary by definition. Γ_j's (j = 1,…, p-1) are the short-run parameters.

According to the Johansen methodology, the rank of the matrix Φ gives the number of linearly independent co-integrating vectors that exist in the equilibrium system. If the coefficient matrix Φ has reduced rank $r < n$, then the co-integrating rank, r is the number of co-integrating relations. There exists r x n matrix of $\Phi = \alpha\beta'$ where β and α contain the co-integrating vector parameters and adjustment coefficients respectively. If rank (Φ) = 1, there is a single co-integrating vector. α is the matrix of speed of adjustment parameters, with which each co-integrating vector enters the n equations of the VEC model. Each speed of adjustment coefficient measures the degree to which the variable responds to the deviation from the long-run equilibrium relationship.

To estimate the matrices of α and β consistently, it is necessary to impose identifying restrictions. For rank (Φ) = 1, this restriction amounts to normalizing the coefficient on one variable to be 1. In the case of a single cointegrating vector, if $\alpha_i = s_i \Phi_{1j}$ and $\beta_i = \Phi_{1j}/\Phi_{11}$, for i=1,…, n each equation can be written as:

$$\Delta y_t = \alpha\beta' y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + Bx_t + \varepsilon_t \quad (5.3)$$

where the single co-integrating vector is $\beta = (1, \beta_2, \beta_3, \dots, \beta_n)$ and the speed of adjustment parameters are given by $\alpha = (\alpha_1, \alpha_2, \dots, \alpha_n)$. If α_i is zero, the variable is weakly exogenous and does not need to be modeled within the system.

As the first step in VEC analysis, all endogenous variables must be tested to determine their order of integration. The augmented Dickey-Fuller test results show that all of the variables are integrated of order one, I(1).[11] The VEC models as well as the co-integrating relationships among variables are quite sensitive to the chosen lag length of the endogenous variables while constructing the VAR model using the undifferenced data. The lag selections for each model are obtained using multivariate generalizations of log-likelihood, Akaike information, Schwarz and Hannan-Quinn criteria. Johansen (1988) multivariate co-integration tests indicate one co-integrating relationship in each model.

In the first model, using endogenous variables of *non-durables, income, housing, savings, isemcap, credit*, and *rer*, the co-integration test is based on the VAR system in levels, which has 4 lags of each endogenous variable. The adjusted sample has 76 observations during the period 1988:Q1-2006:Q4. In the second model, using endogenous variables of *durables, income, housing, savings, isemcap, credit, and rer*, the co-integration test is based on the VAR system in levels, which has 3 lags of each endogenous variable. The adjusted sample has 77 observations during the period 1987:Q4-2006:Q4. Dummy variables for 1994:Q1 and 1994:Q2; 1998:Q3, and 2001:Q1 and 2001:Q2 are introduced as unrestricted variables to account for the crisis episodes and dummy variables for 1993:Q1 and 1993:Q2 control the fluctuation in the housing wealth.

Intercept and centered seasonal dummy variables control for the deterministic seasonality patterns particularly in *non-durables* and *income* series. A time trend is restricted to the co-integrating space.[12]

The final parsimonious VEC models are obtained after incorporating the coefficient restrictions on the co-integrating vector and the adjustment coefficients, and excluding all of the weakly exogenous equations. The variables that are significant at or below 10% significance level are retained in the parsimonious VEC models. The residual diagnostics and vector mis-specification tests are conducted to verify that the models are robust.

11 The general specification of the augmented Dickey Fuller test is used for testing the null hypothesis of a unit root under the presence of intercept, trend and centered seasonal dummies. The sample period is 1987:Q1-2006:Q4. The t-statistics are compared to the MacKinnon critical values. Hylleberg et al. (1990) unit root tests are also conducted for all seasonal frequencies. They are available from the author upon request.

12 The results are available from the author upon request.