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- The determinants of office rents in Accra, Ghana
- Financing home ownership: Some sectoral perspectives
- A low cost housing project at IDH colony in Telangana State, India
- Housing affordability in the New Europe
- Population growth, urbanization and slums: Challenges for developing low-income affordable housing
- Income equality and home ownership in United States urban areas

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Editor's introduction
Brexit: what next for housing?

↳ By Andrew Heywood

Since Christmas the EU referendum debate has become louder and distinctly less friendly. In February, David Cameron returned from negotiations in Brussels with a deal that was claimed to establish a new relationship between the UK and the EU but which has been greeted with much scepticism.

Boris Johnson, the Conservative Mayor of London was probably the highest profile politician to declare himself in favour of leaving the EU since the Cameron deal, but a number of senior politicians have now declared themselves as supporters of the "out" campaign. Opinion polls have consistently shown voters to be almost equally divided between leaving and staying in the EU with two out of three recent polls showing a small majority in favour of Brexit.

The pound has weakened against the dollar and the euro, reflecting that international markets do not discount the possibility of Brexit and do not like the prospect. As one might expect, there is no consensus in the UK on the broad economic impact of leaving the EU over the medium and longer term. However, many commentators have suggested that a weaker pound and more volatile economy would be likely.

To try and predict the impact of Brexit on the UK housing markets is a distinctly risky venture. Nevertheless, even though housing is not by and large a UK export industry it is difficult to argue that Brexit would have no impact. London house prices are a case in point. Overseas investors have seen London as a safe haven and sound investment in an unstable world; average prices rose by 14% for the year to January 2016. If Brexit led to the UK being perceived as less sound in terms of rising house prices and a stable economy, investors could decide that other cities such as Paris (which already has substantial inward residential investment) were more attractive. A partial exit of overseas buyers could put downward pressure on house prices, which would exacerbate any cyclical downturn. For London homeowners, this raises the prospect of negative equity and inability to move. Developers could curtail future development plans. For those struggling to buy a home, lower house prices might seem like good news, particularly if the London market was no longer indirectly putting upward pressure on prices in the surrounding regions. However, other impacts could wipe out such perceived benefits.

Higher interest rates caused by a weaker pound could cause mortgage rates to rise. This could in turn make housing less affordable, push up mortgage arrears and possessions, and damp down demand. This could cause developers to be more cautious, thus exacerbating the chronic under-supply of new homes in the UK. At a time when the Government's policies are directed towards promoting growth in homeownership at the expense of market and sub-market renting, homeownership levels could continue to fall.

Higher interest rates and a weaker pound could re-enforce the pressure on government to further reduce public spending. Will future governments feel as able to support housing markets and promote homeownership? Currently government support for the UK housing market ranges from provision of mortgage guarantees and equity loans to supply-side grant for affordable housing. Welfare benefits in the form of housing benefit and universal credit underpin the viability of social renting.

Of course, the above impacts may not materialise. However, the UK referendum experience is already illustrating a fundamental economic truth regardless of the outcome of the vote; uncertainty about the future can itself be a destabilising factor.

The first article in this issue of HFI is Housing affordability in the New Europe. In this study, based on a review published by Habitat for Humanity, Wolfgang Amann examines nine countries in Central, Eastern and South Eastern Europe, including Russia and Ukraine. Mr Amann, examines incomes, housing costs and affordability of housing across tenures against the backdrop of the transition from communism, conflict, migration and other challenges.

While HFI focusses mainly on residential property, many readers will find the article by Noah Kofi Karley, The determinants of office rents in Accra, Ghana to be of genuine interest and of indirect relevance for the determination of rents in the residential rented sector. Accra has some of the highest premium office rents in the world. The author traces the key determinants of demand and supply of office space which in turn determine rental levels. The article provides a fascinating insight into the range of factors at work, from location to government policies.

This issue contains two articles on India, in Financing homeownership: some sectoral perspectives, RV Verma, former Chairman and Managing Director of the National Housing Bank of India, examines the financial issues surrounding the expansion of homeownership in India. He concludes that there is tremendous potential for the mortgage industry to expand from its current position, where mortgage debt as a percentage of GDP is around 9%. Our second article from India is by Francis Eddu. He points to population projections suggesting that by 2050 the Indian population will increase by 900 million. This highlights the need for additional housing, particularly for those without access to mortgage finance. He then focusses on an innovative low-cost housing project in Telangana state in South-Central India, which aims to provide housing for low income households.

Zaigham Mahmood Rizvi is a regular and respected contributor to this journal. For this issue he has contributed an insightful article Population growth, urbanization and slums: challenges for developing low-Income affordable housing. Drawing on data from around the globe, Mr Rizvi, examines the plight of those who have difficulty accessing suitable affordable housing. With the world population expected to reach almost 11 billion by 2050 and with urbanisation (much of it un-planned) proceeding apace, the need to develop affordable housing in adequate numbers has never been greater. Mr Rizvi articulates many of the issues facing policy makers and planners and suggests solutions.

Our final article draws on research using US Census Bureau American Community Survey data to analyse the relationship between income inequality and the level of homeownership in US urban areas. Interestingly, Daniel Singer and his fellow authors conclude that there is an inverse relationship between inequality of incomes and the level of homeownership, and that programmes to increase homeownership should seek to address the inequality issue.

Contributors' biographies

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Alex J. Pollock is a distinguished senior fellow at the R Street Institute in Washington DC, USA. He was president and CEO of the Federal Home Loan Bank of Chicago 1991-2004, and president of the IUHF 1999-2001.

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

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

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Raj V. Verma has over 25 years' experience in the mortgage finance and housing sector and served as the Chairman and MD at the apex statutory body National Housing Bank, India. He has held several leadership positions and chaired various boards, such as the Central Registry/CERSAI (promoted by the Govt. of India), the India Mortgage Guarantee Corporation, the APUHF (Asia Pacific Union for Housing Finance) and the PFRDA (Statutory Regulatory authority for Pension Sector).

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

Towards Habitat III: Developing a common position on housing in Africa

↳ **By Kecia Rust**

The housing and urbanisation challenges facing African countries received special attention at a three-day regional meeting held in February 2016, in Abuja, Nigeria. This was a preparatory meeting for the United Nations Habitat III conference to be held in October in Ecuador. The regional gathering developed the Abuja Declaration, and the Draft Common African Position on Habitat III.

The Abuja Declaration[1] sets out "Africa's Priorities for the New Urban Agenda". It is guided by the African Agenda 2063[2], and focuses on urbanisation as a driver of inclusive, socio-economic transformation. The declaration makes a number of recommendations which, beyond the focus on the broader goals of the New Urban Agenda[3], are specifically supportive of improved housing finance frameworks in Africa. Six recommendations are put forward. Of these, the first is the most directly relevant: "Harness the potential of urbanisation to accelerate structural transformation for inclusive and sustainable growth." This includes the allocation of adequate financial resources, and the promotion of land titling and registration to enable housing finance. Land value capture and resource generation through land based revenue sources are also suggested. The sixth recommendation suggests that efforts to advance a global partnership should mobilise financial resources from both state and non-state actors, and the inclusion of the private sector in multi-stakeholder engagement efforts is explicitly recommended. Further recommendations engage with transport-oriented development and connectivity, and the potential to be found in urban agglomeration and regional integration. The recommendations recognize the reality of informality – in economies and transaction systems – and urge systems and processes to engage with these directly. Of course, environmental sustainability and measures to address climate change through managed urbanisation processes are also raised.

The Draft Africa Common Position is virtually identical to the Abuja Declaration – the key issue is that it must be ratified by the African Union at its summit in Kigali, Rwanda, in July 2016. Where the Abuja Declaration has seven recommendations, the Draft Africa Common Position has eight – the additional one being an emphasis on linking settlements, within which the recommendation for "active partnerships with the private sector as actors of land development, for the greater public good in human settlements" is found.

While both of these documents acknowledge a role for the private sector, they are tentative, and it is in this area that they are least clear in their intentions. This is perhaps to be expected: the UN is a government-rooted organisation which depends on agreements among state actors. It has no explicit mechanism for engaging with the private sector. This is perhaps the greatest weakness of the material going into the Habitat Agenda from a housing finance perspective – certainly in the African context where the numbers are so great and far beyond the capacity of state financing, the private sector is a critical stakeholder and participant. Indeed, this challenge is noted in passing by the Draft Africa Common Position:

REITERATE the continuing relevance of the twin goals of the Habitat Agenda namely adequate shelter for all and sustainable human settlements in an urbanizing world, and reiterate that all its aspirations have not been fully met, ***mainly due to the challenges encountered in implementing the Habitat Agenda including limited access to housing finance****, land and basic services as well as the continued expansion of slums and informal settlements. [emphasis added].*

In part towards this issue, an online dialogue on financing urban development was held from 22 February – 6 March 2016, in advance of the Habitat III Thematic Meeting in Mexico City on 9-11 March. Even that, however, was vague about the role of the private sector. The key questions asked of online participants made no reference to private sector financing, focusing rather on the role of local authorities in delivering public services and the challenges they face in financing this commitment.

There have been efforts to engage the private sector. Representatives of the African Union – Housing and Urban Development Coordinating Unit participated in the AUHF's conference in Durban in October 2015, and presented both the Draft African Common Position and proposals for an African low income housing finance facility. At that meeting, delegates raised concerns with the disconnect between government expectations for delivery and both global and national economic realities that frame the capacity of the private sector to engage. The Durban Declaration reached at that meeting (and published in the last issue of HFI) urges governments to address the challenges of land management systems, investment in infrastructure and serviced land for housing; to give attention to the housing impact of macro-economic and monetary policy; and to accommodate non-mortgage, housing microfinance as a viable and central component of a national housing finance framework. The Durban Declaration goes to to motivate for consistent national housing policy and regulatory frameworks so that the private sector can frame its engagement with the certainty required. In this, regional and international frameworks also need to be consistent and focused on the diverse

[1] Read the Abuja Declaration on http://www.afriquelocale.org/images/ABUJA-DECLARATION-FINAL_26.2.2016.pdf

[2] The Africa Agenda 2063 was agreed at the 50th Anniversary of the African Union in 2013 to set out a plan for the next 50 years. See http://agenda2063.au.int/

[3] The New Urban Agenda will be the outcome document agreed upon at the Habitat III conference in Ecuador, in October 2016. To be signed by all governments – national, through to municipal – as well as participating regional bodies, it will guide the efforts around urbanization for the next 20 years, shaping the approach of policy and legislation and guiding public sector investment. Meetings are being held all over the world in preparation, as the content of the agenda is drafted. It will replace the Habitat Agenda, framed in the Istanbul Declaration on Human Settlements, which was the outcome of the 1996 Habitat II conference. See https://www.habitat3.org/the-new-urban-agenda

capacity, intentions and constraints felt by the various players, public and private, in housing value chains across the world.

The commitments of AUHF members set out in the Durban Declaration[4] are not insubstantial, and would go a long way in supporting governments in their efforts to realise their commitments in the New Urban Agenda, if the challenges raised in the declaration were also addressed. The AUHF will continue to input into the Habitat III preparatory process in the hopes that a productive collaboration between the public and private sectors can be realised.

Commitments by the members of the African Union for Housing Finance at their AGM in Durban, South Africa, 28 October 2016

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

- *The development of appropriate housing and housing finance products that are affordable to our populations, that respond appropriately to the reality of informality, and that contribute effectively towards adequate housing for all, across our nations.*
- *The mobilisation of capital resources, long term and in local currencies, debt and equity, with the appropriate risk underpins and supportive frameworks to encourage the participation of a diverse range of investors across the range of housing solutions, and to enable developers to grow their capacity to operate at scale.*
- *The realisation of scale delivery that meets the growing demands for housing with realistic, affordable products, including the delivery of affordable, well-managed rental housing at scale.*
- *The establishment, and consolidation, of sustainable and robust institutions throughout the housing supply chain, and the provision of capacity support, technical assistance and professional development.*
- *The collection, analysis and dissemination of evidence-based information on effective housing finance practice and the performance of the housing market. In this, we are committed to sharing best practice and building track records that can be monitored on an ongoing basis, setting benchmarks for our peers and one another, in support of more effective housing markets across the continent.*
- *Increased dialogue and engagement between the public and private sectors, at a local, national, regional, continental and international level.*
- *Working in collaboration with each other, and other stakeholders, whether in the public or private sectors, to promote the realisation of sustainable human settlements across Africa.*

The AUHF is keen to engage with respective governments on both micro and macro-economic issues, including interest rates, tax and monetary policy, and housing and land policy as it influences the growth and performance of housing markets. The AUHF and its members look forward to working with governments and other stakeholders, in respective countries and across the continent, in promoting the investment capacity of Africa's housing sector and meeting the housing needs of its residents.

[4] A copy of the AUHF's Durban Declaration can be found here: http://www.auhf.co.za/wordpress/assets/Durban-Declaration-AUHF-28-October-2015.pdf

Europe: House price development

↳ **By Mark Weinrich**

The Eurozone housing market turned the corner in 2015 after years in the doldrums and prices are now likely to rise further. The bursting of debt-fueled property bubbles in countries such as Spain and Ireland played a big role in the Eurozone's financial crisis, and although there was a brief recovery in 2010 and 2011, house prices fell again in 2012 and 2013. Across the Eurozone as a whole, house prices rose by 2.3% and by 3.1% in the European Union as a whole in the third quarter of 2015 compared with the same quarter of the previous year.[1]

However, Pan-European figures for house prices and their development have to be considered with caution, as real estate markets in Europe are inherently local. Even within individual states there are big differences driven by local demand and supply conditions. It is no surprise that prices are very different between the Member States. The highest annual increases in house prices in the third quarter of 2015 were recorded in Sweden (+13.7%), Austria (+9.3%), Ireland (+8.9%) and Denmark (+7.2%). Falls were observed in Latvia (-7.6%), Croatia (-3.0%), Italy (-2.3%) and France (-1.2%). The picture in Spain also improved. The price of an average home rose by 4.5% compared to the year before – the fastest increase since the start of Spain's economic crisis almost eight years ago.

It is of interest that the two most crisis-hit nations, Ireland and Spain, are now experiencing steady house price growth. In particular, property prices in Ireland grew at a blistering pace after bottoming out in 2013 – prices increased by 33% from the first quarter in 2013 to the third quarter in 2015. Sweden, Norway and the United Kingdom even show clear symptoms of housing bubbles. Even though none is a member of the Eurozone and Norway is not even a member of the European Union, they are all manifesting a number of the Eurozone's problems, not least falling inflation. At the same time, households in all three countries carry huge debt burdens. Germany and Austria also show signs of regional buoyancy, which could allow house prices to exceed their longer-term fundamental value.

The strong price rises have raised the concerns about the possibility of a spiral of higher property prices and credit leading to another misalignment of property prices and eventual correction, causing large losses to the banking sector. Consequently, Eurozone member states including Ireland, the Netherlands and Estonia have already imposed or adjusted loan-to-value caps for local borrowers, in an effort to prevent consumers from overstretching themselves. Other countries, such as Belgium, have increased the amount of capital banks must hold against certain types of loans in a bid to dissuade them from risky lending.

The European Central Bank [ECB] acknowledges that the ultra-low interest rates that it has introduced in a bid to inject life into the European economy risk overinflating house prices. However, this finding has not led the ECB to alter its monetary policies as it has found that, overall, there are few signs that the pickup in prices is currently leading to "either widespread house price imbalances or rapid housing loan growth".

Given the favourable financing conditions, improving economic prospects and a massive refugee influx, it is not surprising that the residential construction sector across Europe expects to grow at 13% until 2018.[2] Strong growth is expected in Denmark, Germany, the United Kingdom, Hungary, Ireland, Netherlands, Sweden and Spain. In contrast, Belgium, Finland, France and Switzerland expect a moderate decline, Italy and Portugal even a strong decline.

This short overview should have given a good insight into the current diverse developments in European housing markets. It has also shed light on the differences in projected growth patterns for the next three years as the basic conditions and risks in the different markets vary considerably. Although housing and also housing finance markets in Europe remain local in nature – in particular in terms of the range of prices they exhibit – it does not stop them having common cycles deriving from similar or the same causal factors (such as low interest rates).

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[1] All data on house prices are from Eurostat: http://ec.europa.eu/eurostat/statistics-explained/images/8/8b/House_Price_Index_-_Quarterly_and_annual_growth_rates-2015Q3.PNG.

[2] Euroconstruct, 80th EUROCONSTRUCT Summary Report – European Construction: Market Trends until 2018, Budapest 2015.

Update on U.S. Property Prices in the Fed's Brave New World

By Alex J. Pollock

Readers of my last update in *Housing Finance International* may recall this principle: The collateral for a home mortgage loan is not the house, but the price of the house. Likewise, the collateral for a commercial real estate loan is not the property, but the price of the property.

A key question always accompanies this principle: How much can asset prices change? The answer is always: More than you think. Prices can go up more than you expected, and they can go down a lot more than you thought possible; a lot more than your "worst case scenario" projected. The more prices have gone up in the boom, and the more leverage has been induced by their rise, the more likely are their subsequent fall and the bust.

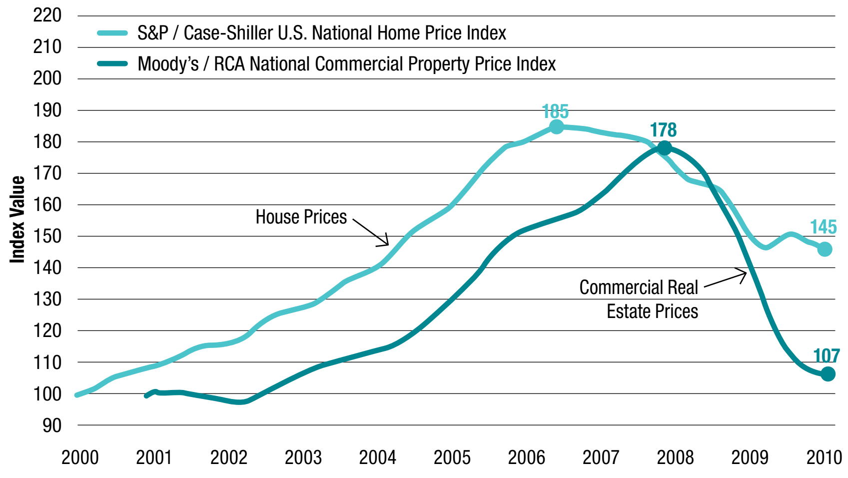
From this, we can see how dangerous a game the Federal Reserve and other major central banks have played by promoting asset price inflation through their monetary manipulations of the last several years. Unavoidably, among the asset prices affected are those of residential and commercial real estate.

The Fed has tried asset price inflation before. In the wake of the collapse of the tech stock bubble in 2000, under then-Chairman Alan Greenspan, the Fed set out to promote a housing boom in order to create a "wealth effect" that would offset the recessionary effects of the previous bubble's excesses. I call this the Greenspan Gamble. As we know, the boom got away into a new and far more damaging bubble. It was in fact a simultaneous double bubble in housing and in commercial properties. This is made apparent in Graph 1, showing the decade from 2000-2010. These events stripped Greenspan of his former masterful aura and of his former media title, "The Maestro".

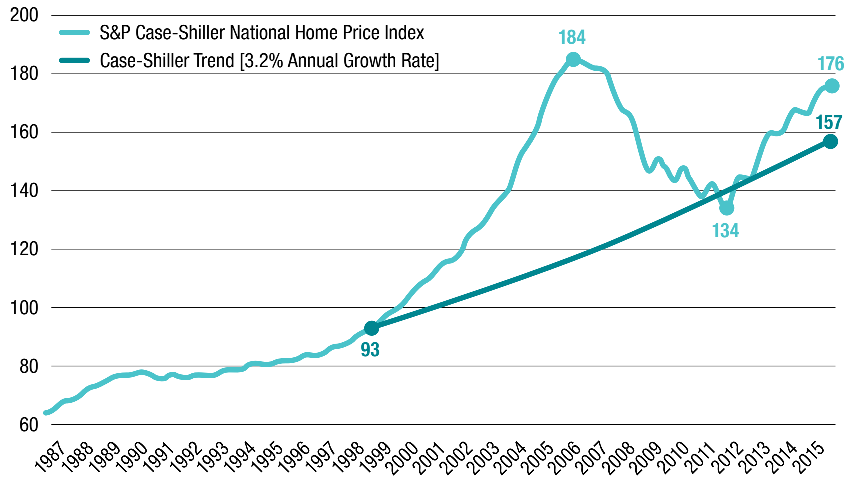
The economically sluggish aftermath of the twin bubbles brought us, under Greenspan's successor, Ben Bernanke, the Bernanke Gamble. The Fed once again set about promoting asset price inflation and "wealth effects" to offset the financial and economic drag of the previous excesses. The brave new world of the Bernanke Gamble includes exceptionally low interest rates, years of negative real short-term interest rates, and the effective expropriation of savers, while making the Fed into the biggest investor in mortgage assets in the world. Of course this has inflated real estate prices.

Graph 2 shows U.S national average house prices from 1987 to 2015 and their trend line. The bubble's extreme departure from the trend is obvious. It is essential to observe that the six years of price deflation, from the peak in 2006 to 2012, while a 27% aggregate fall, brought

Graph 1 The Real Estate Double Bubble
Residential and Commercial Property Price Indices 2000-2010



Graph 2 The U.S. Housing Bubble and Recovery
Case-Shiller National Price Index 1987-2015



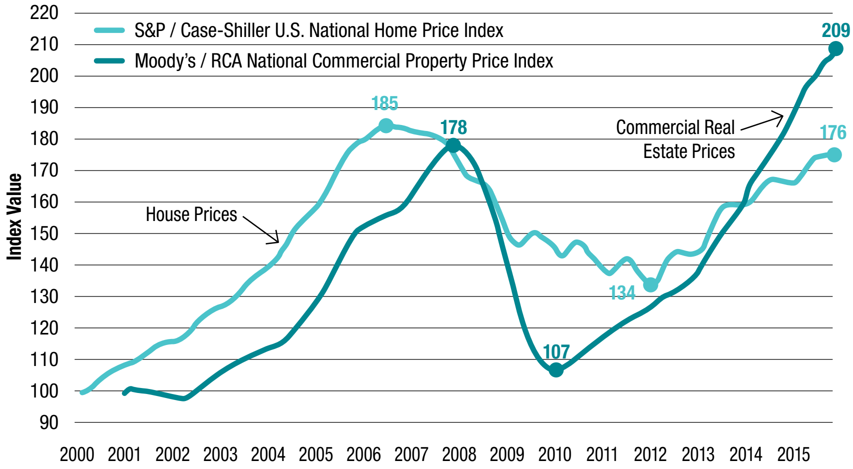
house prices only back to their trend line – there was very little downside overshoot. Since 2012, prices have risen by 31% in less than four years, and are now 12% over their trend line. This rate of increase is unsustainable. On top of that, the U.S. government is once again, as it did the last time around, pushing mortgage loans with small down payments and greater credit risk. Some politicians have apparently learned nothing and forgotten everything.

The price behavior of commercial real estate has been even more extreme. As shown in Graph 3, while commercial real estate prices peaked in 2008 at a level similar to that of housing in 2006, their fall was much steeper, dropping 40%, or about half again as much as house prices. The difference presumably reflects the large government efforts to prop up the prices of houses.

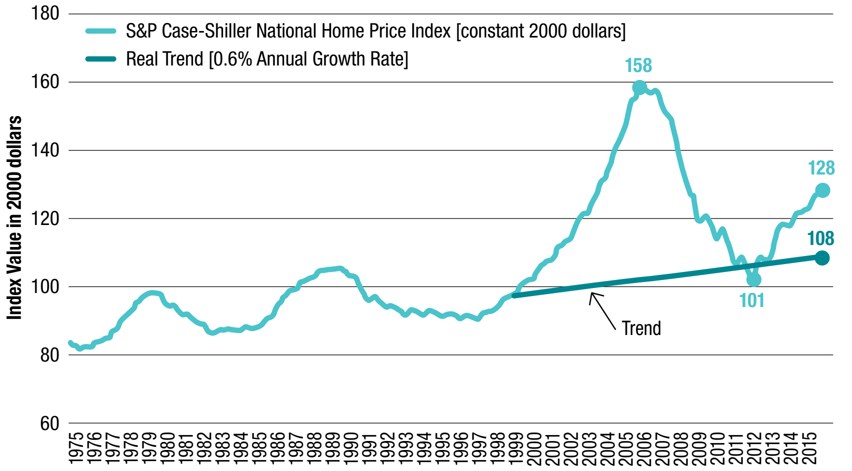
From the 2010 bottom in commercial real estate prices, they have now almost doubled, and the current index is 17% above the prices at the peak of the bubble. Cranes are busy, and this so far makes the Fed happy, since it means strong construction spending. But what comes next?

Asset prices need to be understood on an inflation-adjusted basis. Over long periods of time, the inflation-adjusted increase in U.S. house prices is very modest – only about 0.6% per year, on average. This means home ownership is a good long-term hedge against the central bank's endemic inflation, but on average, not a great investment. Graph 4 shows real house price movements over 40 years, from 1975 to 2015, stated in constant 2000 dollars, and the modestly increasing long-term trend line. As of the end of 2015, average house prices are 19% above the inflation-adjusted trend – not yet a bubble, but distinctly a renewed boom.

Graph 3 The Real Estate Double Bubble and Recovery
Residential and Commercial Property Price Indices 2000-2015



Graph 4 Long-Term U.S. House Price Index
Inflation Adjusted to 2000 dollars 1975-2015



Rapid increases in house and commercial real estate prices is what in the past has induced extrapolations of further price increases, looser credit standards, increasing leverage, and overconfidence among lenders and borrowers. We can only hope that this time they remember that it is the price, not the property, which is being leveraged.

Will the Bernanke Gamble end in similar fashion to the Greenspan Gamble? Will the historical average of a financial crisis about every ten years continue? We will find out.

Financing of housing in Latin America

↳ By Ronald A. Sánchez Castro

This article offers a brief overview of developments in housing finance in some of the countries of Latin America and the Caribbean.

In Argentina, the Program Argentine Credit [PROCREAR] from its inception in 2012 to November 2015, has invested a total of $87.225 million. PROCREAR has financed 200,468 homes throughout the country, of which 171,143 are individually built properties (of which 121,289 have been completed) and 29,325 are in 79 urban developments in different Argentine cities.

In Brazil, according to information from the Brazilian Association of Savings and Real Estate Credit [ABECIP], the value of new housing finance loans fell by 33% in 2015. The amount financed in 2015 amounted to R$ 75.6 billion reals, compared with R$ 112.9 billion reals in 2014. In terms of units, 341,500 properties were funded in 2015, 36.6% less than in 2014. On the other hand, the real estate portfolio balance of the Caixa Economica Federal grew 17.2% between January and September 2015, compared to the same period in 2014, reaching R$ 375.7 billion, with a market share of 67.5% of real estate credit in Brazil. According to the Ministry of Planning with the Federal program Minha Casa, Minha Vida [MCMV] from inception in 2009 to 2015 it has contracted to build more than 4 million units with an investment of R$ 287.8 billion. About 3 million units have been completed and 2.5 million have been handed over.

In Chile, according to the Superintendence of Banks and Financial Institutions, bank loans for housing credit were UF 1,421 million in 2015, surpassing the figure for 2014 (UF 1,285 million). Housing loans represented 23.4% of GDP in 2015, higher than the 21.5% for 2014; also mortgage default was 2.8% in 2015, less than 3% registered in 2014. On the other hand, according to the Ministry of Housing and Urbanism [MINVU] at the end of 2015 they had under construction 108,770 houses using a state subsidy across the whole of Chile. In addition, 228,822 middle income families who paid their loans on time were benefiting from a subsidy and 153,274 from the new unemployment insurance, associated with their mortgage loans. It has also completed the reconstruction of 87.7 % out of a total of 281,074 homes damaged by earthquakes.

In Colombia, according to data from the National Department of Statistics [DANE] during the third quarter of 2015, the capital value balance of the housing mortgage portfolio was $44.922 billion Colombian pesos, (12% more than the same period in 2014), of which $32.343 billion Colombian pesos was destined for the financing of non-social housing [Not VIS] and $12.580 billion of Colombian pesos for the financing of social housing [VIS]. According to the Colombian Chamber of Construction, in 2015, 174,000 homes were sold in the 17 major regions of the country, this figure is 3% higher than in 2014. The Government completed one of its major programs “Housing 100% subsidized” in which an investment of more than 4.4 billion pesos was allocated, and 100,000 houses were delivered free. In addition, government investment funded the program “My house already” which amounted to 11.4 billion pesos in 2015, with 130.000 quotas implemented throughout the country.

In Costa Rica, the Mortgage Bank of Housing (BANHVI) has financed financial institutions to a total of ¢28.710 million. This sum included finance for credit unions, Mutual Savings and Loan Associations, investment funds and private banks, which in turn used those resources to offer individual housing loans to their customers. In this context, BANHVI approved long-term loans to Coopealianza (¢3.600 million), Coopemep (¢3.000 million), Copeande No.1 (¢6.450 million), Coopeservidores (¢2.000 million), Cathay Bank (¢2.500 million), Carthage Mutual Savings and Loan (¢1.800 million) and Coocique (¢2.500 million). On the other hand, 10,354 housing bonds to low-income families were granted, with an investment value of ¢78.661 million and financial approval was given to 35 housing projects. These are BANHVI’s main achievements during the year.

In Ecuador in 2015, the Bank of the Ecuadorian Institute of Social Security [BIESS] issued US$ 1,055 million in mortgage loans, which have benefited more than 22,000 Ecuadorian families, who have managed to fulfill their dream of home ownership. Also, BIESS has delivered a total of US$ 5.388 million since it began operations in October 2010. This is equivalent to 130,000 credits. The Ministry of Urban Development and Housing (Housing Ministry) for the month of November 2015 invested US$ 36,153,161.70 corresponding to 6,183 housing bonds in their various forms, to assist the low income sectors.

In El Salvador, during 2015 the Social Housing Fund [FSV] has benefited 12,477 Salvadorans with mortgage arrears by applying a range of different financial solutions to help them avoid losing their homes. They were able to recover arrears totaling US$ 31.13 million during 2015. The reduction in the default rate was one of the main achievements of FSV during 2015, as the index fell from 13.31% in June 2009 to 4.11% in December 2015.

In Guatemala, figures from the Superintendence of Banks [SIB] for the year to September 2015, show that banks granted fewer loans for housing. The number of loans fell by 8.81%, from 34,337 for the year to September 2014 to 31,313 for the year to September 2015. However, the monetary value of housing credit grew by 2.79%.

In Honduras in 2015, the Honduran Chamber of Construction Industry [Chico] report that only 3,500 new homes were built across the country. At the end of 2015 housing construction had fallen by 43%. On the other hand, it [Chico] estimated the housing deficit in Honduras at around 700,000 homes.

In Mexico, the Secretariat of Agrarian, Territorial and Urban Development [SEDATU] announced that during 2015 1,820 million Mexican pesos in subsidy were invested in 60,574 new houses, extensions and improvements via the Housing Designs and Rural Housing programs. The Institute of National Housing Fund for Workers [INFONAVIT] saw what was considered to be a historic outflow of 173,737 million pesos, a figure that rose in the last weeks of 2015, achieving 672,000 loans. The level non-performing loans was estimated at 5.62% in line with reports for recent years. During the month of December 2015, the 66 partners that make up the Association of Real Estate Developers [ADI] announced that they had made a historic investment of 277 billion Mexican pesos, which will enable the construction of 279 modern real estate projects, including 117 housing developments and 61 shopping centers.

In Nicaragua, according to the Central Bank of Nicaragua (BCN), private construction in the country showed a growth of 20.4% in the third quarter of 2015, compared to the same period in 2014. The total area of social housing stood at 66.454 square meters and reached a 17.5% share in the national total and comprised 28.8% of total residential area. According to the Chamber of Builders (Cadur), in 2015 developers managed to offer around 4,500 houses for sale. In 2016, sale estimates are currently about 6,000 homes, most of it social interest housing.

In Panama, the credit balance of the construction sector at the end of 2015 stood at $5,172.2 million, with the result that the credit in the National Banking System grew $722.4 million or 16.2% compared to the balance at December 2014. The public Esperanza program tendered by the Ministry of Housing and Land Management, delivered 32,500 homes during the year in the poorest sectors of the country.

In Paraguay, approved credits destined for the purchase, construction or renovation of housing, totaled 73.2 million dollars for the year to November, 2015. According to the Financial Agency of Development [AFD], this represented a 31% increase over the previous year.

In Peru, in July 2015, the cabinet approved the legislative decree rental - sale (Leasing Act) designed to benefit the middle class, by offering the possibility to access homeownership. According to the Peruvian Association of Banks ([SBANC] the banking system granted 30,358 mortgage loans, which means that the trend is upwards and lending exceeded S/.37 billion at the end of 2015. This represented an increase of 7.35% compared to 2014. Meanwhile, according to the Peruvian Chamber of Construction [CAPECO] during 2015 in Lima and Callao a total of 11,118 homes and apartments were sold, which represented a decline of 34% in comparison to the sales in 2014, which amounted to 16.930. According to the Fund Mivivienda, on December 31, 2015, the accounting balance of the credit portfolio Mivienda amounted to S/.5,878 million, having increased by 11.4 % compared to the close of 2014. Their market share of the mortgage market rose from 26% in 2014 to 28% in 2015. The rate of default increased slightly from 1.43% in 2014 to 1.78% in 2015.

In the Dominican Republic, the Superintendence of Banks reported that in October 2015 financial institutions allocated RD$ 137,391.8 million for mortgage loans; 16.7% of total lending. The Savings and Loan Associations [AAYP] granted 30.9% of registered mortgages by value, but 40.3% in terms of the number of loans. Financial institutions and AAYP together accounted for 99.3% of the existing mortgage loan portfolio in the financial system. According to the Dominican Association of Builders and Promoters of Housing [ACOPROVI], from December, 2014 to October, 2015 the price of construction materials increased by 13.79 %.

In Uruguay, the Department of Housing Territorial Classification and Environment [MVOTMA] granted loans for the construction of 11,.744 houses to families of 363 cooperatives across the national territory between 2010 and 2015.

In Venezuela in December, 2015 the Government delivered 900,000 homes out of a target of a million homes, set out in the state program Great Mission Housing Venezuela [GMVV] at its launch 55 months ago. In 2016 it aims to build 508,789 2016 homes, which will contribute to a planned 3-million-unit target to be achieved by 2019.

Housing affordability in the New Europe

↳ By Wolfgang Amann

1. Introduction

In late 2015, the author contributed a "Housing Review on 15 countries in Europe and Central Asia" within a Habitat for Humanity Housing Review presented at the Third Europe Housing Forum in Berlin in November 2015.

This paper presents the main findings with a focus on housing affordability in the European part of the review area. This comprises nine countries where Habitat for Humanity is present ["HfH 9"]: Hungary, Poland and Slovakia, representing Central Eastern Europe [CEE], Bosnia-Herzegovina, Bulgaria, Macedonia and Romania, which cover South Eastern Europe [SEE], and finally the two CIS countries (Commonwealth of Independent States) Russia and Ukraine. This paper excludes the additional 6 countries of the Caucasus and Central Asia. Data used for this paper are the most recent ones available, in most cases from 2014, if not quoted differently.

2. Living conditions in new Europe

2.1. Incomes

In all former socialist countries transition caused a heavy decrease in economic output and real wages.[1] The recovery in wages and hence of domestic demand developed only slowly during the 2000s. Today, even in the most developed CEE countries, average wages struggle to reach even half of the EU average.

Statistics on wages and incomes are less standardized than other numbers. EU SILC data (Statistics on Incomes and Living Conditions) provides for EU member and candidate states data on equivalent monthly income per capita, which is far below average wages, depending on labour force participation of household members and household size. The average monthly income in the EU28 was €1,315 (2014), but only €400 on average for the 5 EU countries covered in this paper. This is less than one-third of the EU average. Slovakia, at €570, reaches roughly half of the EU average, Poland and Hungary, with €380 and €445, reach one-third. Similar incomes are documented for Russia. Equivalent monthly incomes in Bulgaria, Romania and Ukraine are between €280 and €160, a fifth to an eighth of the EU average. Of course the income situation of households looks different if one is considering differences in purchasing power in the respective countries.

2.2. Income equality

Equality in society is statistically documented with the inequality of incomes ratio (highest to lowest quintile) and the Gini Coefficient. Both indicators together provide a clear picture on the different regions covered in this paper. In mature Western economies, both indicators provide consistent results. In less mature economies with less reliable data, the indicators in some cases show quite divergent results.

Before transition, most countries of Eastern Europe and the CIS had less inequality of incomes than the OECD average. High levels of social expenditure and low wage differentials meant that the distribution of incomes within those countries was significantly more egalitarian than in most market economies. Economic transition has resulted in a rise in inequality right across the region. However, the size of the increase has varied considerably.[2]

Today, the EU 28 has an inequality of incomes ratio of 5.2 (Gini Coefficient 31). But some of the highly developed countries have ratios below 4, including some Scandinavian countries and the Netherlands, but also Slovenia, Czech Republic and Slovakia (Gini below 26 each). Poland and Hungary have higher inequality of income ratios but are still below the EU average (Gini for both below 31). SEE countries have much more unequal societies compared with the EU average. The numbers are extreme for Macedonia, with an inequality of incomes ratio of 12 and a Gini Coefficient of 43. Also Romania and Bulgaria have quite high levels, with inequality of incomes ratios of 7 and Ginis of around 35. For CIS countries, the two indicators only partly coincide. Both indicators show a very good level for Ukraine, with an inequality of incomes ratio of only 3.3 and a Gini of 25. This resembles Scandinavian countries. A much higher level of inequality is found in Russia (Gini of 40).

2.3. Poverty

Statistical data on poverty are widely inconsistent, since the phenomenon of poverty is a question not only of monetary indigence, but also of access to social life and infrastructure. The proportion of people below the poverty line – an indicator based on consumption (or income) levels – is often used, but other indicators are needed to capture other dimensions of poverty. Eurostat, meanwhile, provides reliable data from EU SILC that combines data on incomes, the relative income level in a country, and a set of criteria of social exclusion. But this source is available only for EU member and candidate countries.

In the EU, an average of 24.5% of the population is threatened by poverty. According to Eurostat, threat of poverty is defined basically as being below 60% of median income. As a consequence, this level is generally lower in more equal societies and higher in countries with high income disparities. Cross-country comparisons do not seem entirely reliable, but time-series of individual countries are useful.

For the CEE countries represented in this paper, this results in an average number close to the EU mean. In Hungary, 30% of households are under threat of poverty. In Poland, the current level is 26% of the population, which is on par with the EU average. An impressive success story can be observed in Slovakia, where the rate was at 30% a decade ago but is now below 20%. Poverty is a much more serious issue in the SEE region. In Macedonia, 31% of the population is threatened with poverty, while in Romania, it is 40%, and in Bulgaria, 48%. Slight gains in the fight against poverty can be observed in Bulgaria and Romania.

Most countries have additionally defined national poverty lines, but they hardly qualify for comparative analysis. We make an exception

[1] UNECE 2004: 167.

[2] UNECE 2004: 165.

for a few of the CIS countries, as they perform a regular Household Living Condition Survey, following a similar methodological basis as EU SILC. In Russia, the fight against poverty was very successful, where in 2000 almost 30% of the population were identified, but in 2013 poverty threatened only 11%.

A converse data concept is a fixed level of individual incomes, neither considering different purchasing power nor price inflation, e.g., people living on less than US$2 per day, which is one definition used by the World Bank. This concept describes extreme poverty quite well, as under conditions of extremely low incomes, all other aspects of vulnerability become less relevant. Extreme poverty was not an evident problem in the region before transition. It seems to be one of the most humiliating failures of the political process of transition that in several countries this became different. In some CIS countries, extreme poverty was and still is present in everyday life. In most Western European countries, virtually no one lives on less than US$2 per day. The same is the case for most CEE countries. Only Slovakia has 0.5% and Hungary 0.2% of the population at this income level. The situation is much worse in the SEE region, with 1.6% of the population in Romania and even 3.9% in Bulgaria classified as extremely poor (2011/12). An even higher share of 5.9% was documented for Macedonia, but no data after 2009 are available. In Russia and Ukraine (before the current crisis) extreme poverty was not prevalent anymore.

The total share of extreme poverty in the HfH 9 countries covered by this paper seems like a small percentage, but taking into account that roughly 2.2 million people are concerned, the severity of the situation becomes evident. Data from the past decade give reason for optimism, however, as most countries are successful in fighting poverty. Poverty is closely linked to unaffordability of housing.

2.4. Energy poverty

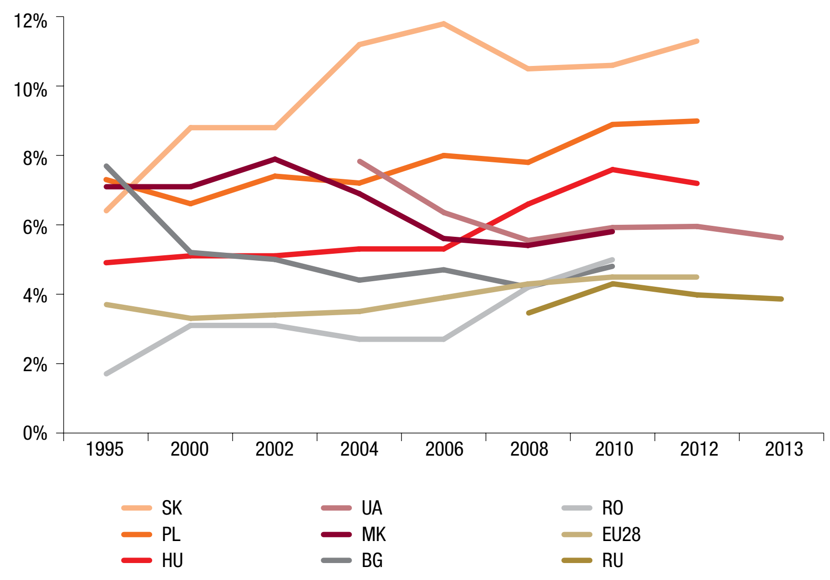
Energy poverty is defined as "a situation where a household is unable to access a socially- and materially-necessitated level of energy services in the home".[3] The United Nations Development Programme [UNDP] defines this situation as when a household spends more than 10% of its income on energy.[4] At an EU level, energy poverty went on the official agenda only in 2009, with the Directives 2009/72/EC and 2009/73/EC "concerning common rules for the internal market in electricity and natural gas supply", followed by the "European Economic and Social Committee opinion on energy liberalization" of 2010.[5]

After liberalization of energy markets in most countries, energy prices have in many cases reached Western levels, but household incomes remain far below those of the West. The SEE countries suffer from a "pervasive nature" of energy poverty.[6] This is mainly connected to the lack of adequate domestic energy services and the limited extent of networked energy infrastructures (gas). This means that energy poverty is on the rise in SEE countries not only because of economic issues, but also because of technical shortcomings. Together with steadily rising electricity prices, this situation means that the only possibility for some parts of the population is to switch to cheaper forms of heating energy, usually firewood.

For many potential candidate countries in the Western Balkans and the CIS region, the EU initiated an Energy Community Treaty in the early 2000s. This supranational initiative is responsible for the biggest part of legislation on energy efficiency and other issues related to EU energy policy in the region, and also considers social issues.[7]

The usual indicator for the level of energy poverty is the ratio of household energy costs compared to the disposable income of a country's households (Figure 1). Since the liberalization of energy markets in former socialist countries, the increase in energy prices has not been accompanied by a similar rise in income. In Poland, for example, energy costs per household have been rising steadily since 1995 (currently at 9% of household incomes on average). At the same time, levels of poverty have fallen considerably. This suggests that energy affordability is a huge issue among the population and that the reduction of (absolute and relative) poverty is in many countries hardly relieving the pressure of the rising energy costs.[8] By far, the highest energy cost ratio can be seen in Slovakia, where it has risen from slightly above 6% in 1995 to currently close to 12%. This has to do with harsh tariff reforms. Energy markets in the CIS region are still heavily subsidized. This is one of the reasons why levels of energy cost ratio in some countries is still below the EU 28 average.

Figure 1 Household Energy Cost Ratio



Re.: Data for EU and candidate countries derive from National Accounts; for CIS countries from a Households Living Condition Survey.

Source: Eurostat, National Statistical Offices, IIBW

[3] Bouzarovski 2011: 1.

[4] See UNDP 2014: 22.

[5] Bouzarovski et al. 2012: 3.

[6] Bouzarovsky 2011: 5.

[7] UNECE 2012; Bouzarovski et al. 2012: 4.

[8] Cf. Bouzarovski 2011: 4.

3. Migration, Refugees, IDPs

Migration has different dimensions. Many former socialist countries suffered from massive out-migration during transition, as people were seeking income opportunities that they could not find in their home country. As the transition countries saw more economic development, emigration decreased and, in several CEE countries, reversed. A second dimension is migration from rural to urban areas as a global trend. A third dimension is migration caused by war and violence, extreme poverty, or natural or man-made disasters (called "refugees" if people migrate across borders, and "internally displaced person," or IDP, if they remain within the borders of their home country). Such migrants are particularly vulnerable to human rights violations, and the enjoyment of housing is among the most endangered rights. Although several international instruments oblige states and other agents to ensure the right to adequate housing, these migrants are frequently the victims of discrimination in that respect.[9]

Before the escalation of the conflict in Ukraine and the civil war in Syria, up to 2.2 million people were displaced at the end of 2013 in Europe, the Caucasus and Central Asia because of conflict, human rights violations or generalised violence.[10] They made up nearly 10% of the global internally displaced population. The majority had been displaced by conflicts in the 1990s during the breakup of the Soviet Union and Yugoslavia. But in 2014/15, a new major conflict broke out in the region, namely the civil war in eastern Ukraine.

Internal displacement has affected virtually all countries in the Western Balkans and in the CIS region.[11] The Balkan Wars of the 1990s created 3 million IDPs, and several hundred thousand remain displaced throughout the region. In Ukraine, by mid-2015 some 1.4 million IDPs and more than 700,000 refugees in neighbouring countries were registered.[12]

Adding to that, a steadily rising number of refugees in-migrate to the region from the ongoing civil wars in the southern Mediterranean and the Middle East, particularly Syria. SEE countries are especially affected by very high numbers of refugees passing through and insecurity about the ability of Western European countries to host them.

The conflict in Ukraine provides some specifics on migration from man-made disasters. Only a portion of migrants fled because of direct threats of violence. More people left the conflict zone for other reasons. As an example, the Government's decision to stop social transfer payments in the conflict zone forced many pensioners to register in neighbouring districts to continue to receive their pension, without really migrating. Other people left for other parts of Ukraine, as they saw no economic prospects in their former home, putting many of them in an economic situation similar to "normal" migrants. Those groups have insignificant need for shelter and aid. Very problematic, by contrast, is the group of IDPs who lived in vulnerable circumstances even before the conflict, e.g., single parents, people with disabilities, people with poor education, and those directly affected by violence.[13]

4. Housing costs

4.1. Housing cost inflation

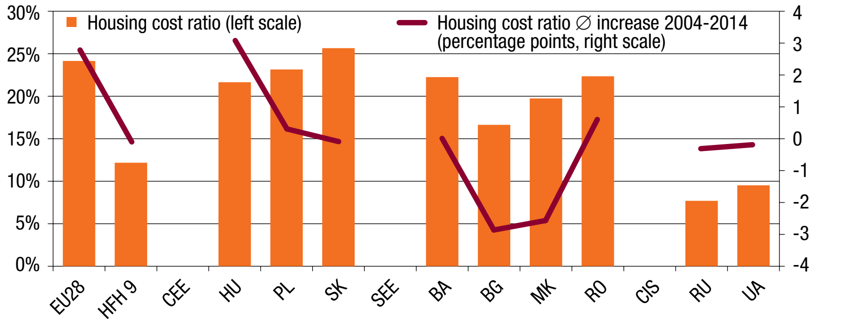
Price inflation [CPI] in the EU 28 was 2.1% per annum on average from 2004 to 2014, whereas housing costs (CPI housing) increased by 3.6% and energy by 5.3% per year (despite decreasing energy costs in 2014/15). This makes a difference. In the HfH 9 countries, price inflation was generally higher compared to the EU average, but house price inflation exceeded even general inflation. For the three CEE countries, the yearly average price inflation from 2004 to 2014 was 2.4% (Slovakia, Poland) to 4.2% (Hungary), but housing costs increased by 4% (Slovakia, Poland) to 5.4% (Hungary). Hence, housing costs increased on average over the past years by around 1.5 percentage points more than prices in general. In Romania, the divergence was even greater, with 5.4% general inflation and 8.9% housing cost inflation. Bulgaria is an exception, as house prices increased by 4.1%, slightly lower than general prices. For Russia, house price inflation exceeded general inflation until the mid-2000s. Since then, the two indicators have approached one another.

4.2. Housing cost ratio

To assess the proportion of household expenditure on housing-related expenditure, two main indicators are available. On average within the EU, 24.1% of private consumption within National Accounts is spent on housing (2013). In 2004 it was only 21.3%. Private consumption within National Accounts is a synthetic "top-down" indicator. A different concept is applied by EU-SILC, which provides data on housing expenditures based on a large household survey. This is a "bottom-up" approach from the household point of view. Under this concept, the housing costs of European households (including energy costs) amounted in 2013 to 22.2% percent of disposable household income. The two numbers seem similar, but both sources show some severe inconsistencies. As always, statistical data have to be treated and interpreted with care.

The housing cost ratio (national accounts) in the countries covered in this paper differ a lot (Figure 2). It is close to the EU average in the

Figure 2 Housing cost ratio (share of private consumption in National Accounts)



Re.: For CEE/SEE countries data from National Accounts, for CIS countries Household Living Condition Survey. Data are mostly from 2012/13, but in a few cases are earlier. Sums are weighted with housing stock..

Source: Eurostat, National Statistical Offices, IIBW

[9] U.N. Special Rapporteur 2010: para. 9

[10] IDMC 2013.

[11] World Bank database (2013).

[12] UNHCR, 6/2015; IDMC 2015.

[13] Amann 2015.

three CEE countries and only slightly below in the four SEE countries. Contrary to the general trend, the ratio has decreased in Bulgaria and Macedonia over the past ten years by 3 percentage points. Depressing house price inflation was a specific focus of the Bulgarian Government in recent years. Data from EU SILC give a different picture. According to this source, households have to spend a particularly high share of disposable income on housing in Bulgaria (28%) and Hungary (24%), whereas the share is similar to the EU average in Romania (22%), but below in Slovakia (21%) and Poland (18%). Following this data source, housing costs increased since 2005 (when EU-SILC was introduced) significantly in Poland (plus 5 percentage points), whereas they decreased in Hungary, Bulgaria and Slovakia (minus 4-5 percentage points). Differences between the two data sources are explained in part by different ownership rates (consideration of imputed rents in national accounts, but not in EU SILC) and different treatment of mortgage payments.

In the CIS region, housing costs are by far lower, with less than 8 percent in Russia and below 10 percent in Ukraine (based on national Household Living Condition Surveys). In both countries the ratio remained stable over the past decade.

4.3. Housing cost overburden rate

EU-SILC also provides data on excessive housing costs. These are defined as spending more than 40% of the disposable household income on rents, mortgages, maintenance and household energy. This seems to be a good indicator of poverty housing. On average for the EU, 1 out of 10 households belongs to this category (2013). This proportion has been basically stable since 2005.

In the countries covered by this paper, the situation differs quite a lot. In Bulgaria and Slovakia, the excessive housing cost rate is below the EU average. In Romania and Hungary, the rate is close to the EU average, while it is extremely high in Poland. Since the introduction of the database, the rate has decreased slightly in Slovakia, was stable in Bulgaria and Romania, has increased in Hungary and has skyrocketed in Poland.

The low housing cost ratios in many transition countries and particularly in CIS countries have the following causes:

- Generally, poorer countries have lower housing cost ratios than more developed countries, because a much higher share of private consumption goes to meet basic needs, in particular food.
- The intention of mass housing privatization to keep housing costs for much of the population on a low and stable level succeeded.
- The ineffectiveness of housing maintenance schemes with hardly any household expenditures on housing management, maintenance and repair has contributed to lasting low housing costs. But it must be clear that this is at the cost of the residents' welfare and future investment requirements.
- The development of utility costs (household energy, maintenance services) is in many CIS countries significantly depressed by state control of tariffs, even if utility providers are in many cases privatised.[14]
- The old stock of owner-occupied housing, whether owner-occupied from the beginning or privatized, was basically financed without mortgages, and hence has no financing costs at present.
- The mostly high house-price-to-income ratios for new condominium dwellings seem to have minor influence on the statistics because of the still low quantity of this part of the housing stock.
- The low housing mobility in most transition countries – in several cases below 2% per year, compared with more than 10%, for example, in the USA – is a major break for housing cost development. On the other hand, the low mobility is basically caused by the unaffordability of alternative accommodation. Low housing mobility and, hence, labour mobility are assumed to be one main barrier for the economic development of those countries.

5. Housing vulnerability

5.1. Housing situation of refugees and IDPs

Wars and violence cause plenty of negative effects in terms of housing:

- A huge volume of housing and infrastructure is destroyed. Since 1991, approximately 1 million housing units all over Europe have been destroyed or badly damaged because of war.[15] In the ongoing conflict in Ukraine, thousands of houses and infrastructure buildings have been destroyed.
- War causes an exodus of people seeking safety.
- War affects construction and the institutional setting of a country. As seen in many examples, housing construction lags behind in warring countries even years after the conflicts. The same is true for housing maintenance and repair of the remaining housing stock.
- Impoverishment of big parts of the population renders even well-functioning housing markets unable to meet the need for housing.
- Violence in rural areas contributes to rapid urbanization and increases pressure on urban housing stocks, often expressed through the growth of informal settlements on the urban fringes.
- Displacement caused by violence impedes complicated property rights questions regarding housing.

The perspective of EU accession has motivated some European countries to develop sustainable solutions for IDPs in order to comply with EU human rights standards. In 2012, the Western Balkan countries Bosnia and Herzegovina, Croatia, Montenegro and Serbia, in cooperation with OSCE, UNHCR and the EU Commission, initiated a Regional Housing Programme to provide housing solutions for 74,000 individuals, with estimated investment costs of almost €600 million within a five-year period.

For the situation in Ukraine, a more detailed picture can be drawn. The United Nations High Commissioner for Refugees [UNHCR]has conducted a survey on the housing situation of IDPs (6/2015; n=3,000), with the following main results[16]:

Around 60% of IDPs live in rented apartments or houses, four out of five without a formal contract.

Costs for rented apartments are mostly quite moderate, with 70% of IDPs paying rents of below €80 per month. This is far below the market rent in bigger cities. It can be explained that many IDPs have rented summer houses or apartments in rural areas or accept shared apartments. There are also cities in northern Ukraine with very low market prices. In some

[14] UNECE 2013, 22, 23.

[15] HfH 2005: 37.

[16] Amann 2015.

cities in northern Donetsk Oblast, rental apartments are available for the costs of utilities. The substantial increase of rental demand due to the IDP inflow has increased the market level of (informal) rental housing in most Ukrainian cities.

Around 20% of IDPs are hosted by friends or family members.

Only 10% are accommodated in collective centers. Those facilities are particularly affected by overcrowding (40%). Collective centres are mainly temporary shelters for IDPs, who will usually find other housing solutions after some time. Only some of the most vulnerable people depend on collective centres on a permanent basis. Many of them have been vulnerable and dependent on such institutions even before migration.

The remaining IDPs are accommodated in other ways, such as in purchased apartments or hotels.

The vast majority of IDPs (80%) used to live in owner-occupied apartments before migration. Unfortunately, the housing markets in the conflict zone have basically collapsed. It is still possible to sell apartments, but at prices that are a fraction of what they were before the conflict. Hence, being the owner of an apartment in the city of origin doesn't help very much in purchasing an apartment in the new hometown.

It may seem reasonable to allocate such IDPs in rural areas, where costs of living are lower. But because of the lack of employment opportunities and medical infrastructure, along with limited mobility, most IDPs are reluctant to pursue such options. Experience from other countries shows that low-income and vulnerable households are particularly dependent on housing solutions in an urban environment.

5.2. Roma housing

"Roma" refers to a heterogeneous, stratified, geographically and linguistically diversified ethnic minority in many countries. The biggest shares of Roma population within the scope of the HfH 9 countries live in Romania (7 to 9%), Bulgaria and Slovakia. But the demographic and housing situation of the Roma population is also a challenge in Bosnia-Herzegovina, Hungary and Macedonia. Those and other European countries committed to the "Decade of Roma Inclusion 2005-2015" with housing as one of its priority areas (romadecade.org). Within this initiative, housing-related projects were realized in most mentioned countries.[17]

The World Bank has called the Roma situation "the biggest challenge to poverty alleviation in Central and Eastern Europe." The poverty of the Roma is closely related to housing, as Roma people often live in informal or illegal settlements on the outskirts of population centres. Housing quality in these settlements is usually substandard; services are few; and access to electricity, gas, water, sanitation and sewerage is limited. The Roma face a series of specific obstacles, including lack of information, restrictions and discriminatory criteria, which impede their access to social housing. The issue is widely unsolved in the region.

5.3. Housing for elderly people

All countries worldwide are facing a rapidly aging society. In 2014, the worldwide proportion of people older than 60 was 15%. It will be 21% by 2030 and almost double that by 2050. Many Western countries already have proportions of close to 30%. Some of the countries documented in this paper also have a particularly aged population, particularly Bulgaria and Hungary. In contrast with Western countries, this is not primarily because of growing life expectancy, but because of strong emigration amongst the younger population strata in past years.

In some ECA countries, such as Russia, life expectancy has dramatically decreased during transition. The change of mainstream ideology has strongly affected those socialised in the communist era. People who were in their 40s or older when socialist regimes collapsed had severe difficulties in integrating into the new labour market conditions. A huge portion of the population was excluded from the official workforce and have ceased their attempts to return. Transition of labour markets and welfare regimes were particularly discriminatory for those who are elderly today. They face low, insecure and often informal incomes and pensions with a much lower purchasing power compared with those before transition. Whereas the 50 and older generation in many Western countries is one of the wealthiest strata in society, the opposite is true in all transition countries. This generation is definitely the loser from transition.

Hardship for this group was relieved by several pragmatic measures. The most important was housing privatization, which particularly benefited this group. Even so, being poor, most of them have severe difficulties in maintaining their property. Inflation in the cost of utility services, particularly energy, is also a heavy burden for many elderly people.

In many countries, elderly people still have access to low-cost medical care and other privileges, such as reduced tariffs for utilities or public transport free of charge. Family bonds and support from the younger generation have become increasingly important. Many elder families have retired to old cottages far from the cities and make their living as self-sufficient farmers with a very low standard of accommodation. Elderly people living alone are particularly likely to experience poverty.

Whereas the elder population stratum is an important clientele in real estate markets in Western countries, this is different in most transition countries. There is hardly any supply of homes for the elderly. New construction of homes for the elderly is at a very low level. Hence, "aging in place" seems to be the prevalent strategy to serve the elderly. This requires retrofitting existing structural features and providing community support systems.[18] Social services targeting elderly people, such as "meals on wheels" or mobile medical care, are also poorly developed.

6. Housing stock, housing provision

6.1. Floor space per capita

Housing provision in in the HfH 9 region varies considerably. Housing conditions are more favourable in those countries that joined the European Union in 2004 (Hungary, Poland and Slovakia) while Romania, Bulgaria and non-EU countries face significantly worse situations.

The contrast between the EU aggregate average and "New Europe" is even more striking in consideration of useful floor space per capita, being 38 square meters for the EU 28, but only about 25 square meters in the average of the HfH 9 countries (Figure 3), ranging from only 15 square meters (Macedonia) to 33 (Bulgaria, Hungary).[19]

6.2. Housing privatization

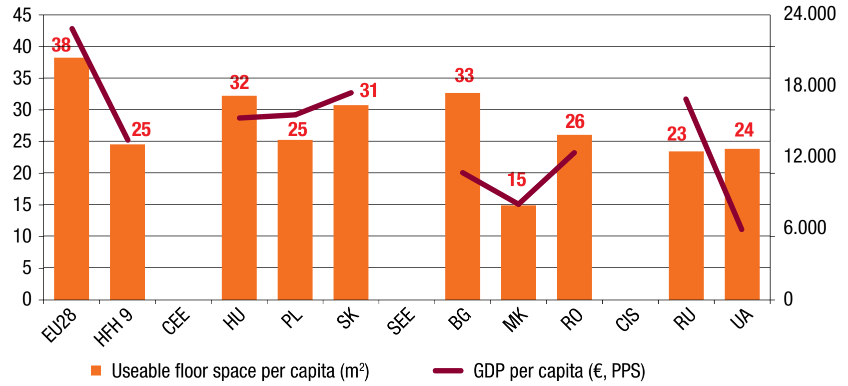
In shifting from a command to a market economy, many countries across the region have conducted a radical privatization of the housing

[17] Berescu et al. 2012; ERRC 2010; Molnár, et al. 2012.

[18] Hamilton 2013.

[19] Hamilton 2013.

Figure 3 Average usable floor space (m²), average GDP per capita



Re.: Data are mostly from 2013/14 but in a few cases are earlier.
Statistical data on usable floor space are rather inconsistent because of different measurement methods. Therefore, an attempt was made to convert all data to the measurement method used in Western Europe, including all space within an apartment into the usable floor space (not only living rooms). Sums are weighted by population.

Source: National Statistical Offices, Eurostat, Euroconstruct, EECFA, IIBW

stock since 1990. By contrast to housing privatization in many Western European countries, only one model was applied: selling off social rental apartments at very low prices to sitting tenants. Other models, such as right-to-buy policies to sitting tenants (as in the United Kingdom), property transfers from public to not-for-profit actors (as in the Netherlands and the United Kingdom), and sale of public housing stock to commercial investment companies (as in Germany), were not considered. The impact of housing privatization on the population has varied from country to country.[20]

The starting place for privatizing the housing stock was different for every country. In some countries, a private housing market had existed legally or clandestinely for many years before 1990. Although state ownership was extreme in some countries such as Russia, other countries, such as Bulgaria, Hungary and Slovenia, experienced levels of homeownership above those of Western Europe. In Czechoslovakia and Poland, cooperative housing was very important before 1990, and it continues to be important today.[21] In most CEE countries, the public rental sector has decreased from previous levels of 20% to 50% or more of the housing stock to current levels of well below 10%. Hence, at least 40 million apartments in the HfH 9 region were transferred from the public sector to the private sector.[22]

Sale prices of privatization almost never came close to "replacement value," a price that allows the public to build a new housing unit and hence keep the total social housing stock stable. Since privatization was never intended to be used for financing new social housing construction, this argument was hardly ever applied. By contrast, in many cases there was a consensus that sitting tenants had a legitimate claim for property rights on their apartment. Housing was in former times financed by contributions from the workers (in CIS countries to the state, in the former Yugoslavia as a fixed royalty from salaries to "Solidarity Funds"). As the former system of social transfers ceased to function, privatization to sitting tenants seemed to be the fairest solution to the biggest number of beneficiaries. In most cases, sale prices were below 20% of replacement value, but in many countries the sales were at nil value or only nominal. Giveaway privatisation took place in Slovakia, Macedonia and most CIS countries.

Mass housing privatization is often assessed critically or negatively.[23] The following main negative aspects are detected:

- Rash implementation negated old systems before the new mechanisms were established, particularly condominium legislation and regulations on housing maintenance and management.[24]
- Privatization diminished affordable rental housing. What was good for the sitting tenants up to that time became a big disadvantage for following generations. If today young households, migrants to the cities, and the poor are confronted with a very difficult housing situation, it is the result of that transitional policy.
- Privatization generated plenty of "poor owners," who are hardly in a position to take over the responsibility linked to their property. Not only can poor owners hardly benefit from the asset of owning an apartment (e.g., as security for business activities), but also they are mainly responsible for the poor effectiveness of condominium management. Being barely able to contribute financially to maintenance and repair of common parts of the buildings, they aggravate decision-making processes within owners' associations and cause improvement measures to fail. Orderly housing maintenance works only with a low share of freeloaders. If there are too many in one building, both decision-making and funding will fail.
- Finally, mass privatization and the rapid increase of ownership rates contributed to the very low housing and labour mobility in all transition countries, which led to negative effects on overall economic development.

With these issues unresolved, deteriorating privatized housing will in the medium term become a heavy public liability. If private owners resist taking over responsibility for repairs, this responsibility will fall back on the public. Leaving unwilling owners in collapsing structures is no political option. The public wanted to get rid of the responsibility for housing provision of the poor. This proved to be an illusion. Housing for those in need will always be a public service obligation.

It seems reasonable to also value some positive aspects of privatization. In many individual cases, the underlying core idea of privatization to give households an asset succeeded. Ownership of the inhabited apartment was, in many cases, a starting point for economic well-being. Housing privatization was probably the best visible symbol of the system change to a market economy. It was, therefore, politically highly rational. With the applied inadequate model of housing privatization, implementation was possible in the short term. Any complex model, anticipating problems as seen today, would have been much more difficult to implement with a lot of political risks. Housing privatization was quite popular. People enjoyed the opportunity to become the legal owners of

[20] UN Special Rapporteur 2009: para. 37, 39. Hegedüs et al. 2012: 41.

[21] Struyk 2000: 3.

[22] IIBW estimate.

[23] e.g., UNECE 2003, Balchin 1997: 243; HfH 2005: 29; Dübel et al. 2006; Tsenkova 2009; Amann 2009; Amann, Hegedüs, Lux & Springler 2012.

[24] UNDP 1997: 67.

their apartments, as it promised tenure security and a degree of economic security. Rapid implementation is therefore understandable.

Ownership made it easier for many poor households to survive the ensuing economic hardship. Even today, low-cost housing in owner-occupied apartments is a core element of something that could be called a "social contract" in countries such as Ukraine or Russia. Those who lost from transition by being dropped from the labour market or losing promised claims for future benefits by massive inflation and change of insurance schemes were thus provided with the basics for a decent living. Very low housing costs in combination with multiple privileges (free public transport and medical services) allow even elderly people with very low pensions not only to survive, but to live a life in some dignity.

6.3. Tenure structure

Mass privatization and a lack of new rental housing construction led to a sharp decrease of rental housing in all transition countries in the 1990s. Today, a majority of transition countries may be classified as Super Homeownership States[25] with ownership rates above 90%. Whereas in the EU 28, the average homeownership rate is 70%, it is 89% in the average of the HfH 9 countries documented in this paper. Generally speaking, there seems to be a correlation between the state of economic development of countries and lower ownership rates, with, e.g., Switzerland or Germany having ownership rates of below 50%.

Formal rental housing has a decreasing significance in all transition countries, despite all the emphasis on re-establishing affordable rental housing. Only Russia, Poland and Bulgaria have social rental housing sectors above the EU 28 average (i.e., more than 11% of the total housing stock). Market rental sectors differ even more from EU standards. Whereas 19% of the total housing stock in the EU is rented out on market conditions, that figure is less than 2% in most SEE and CIS countries and only slightly higher in the CEE region.

However, these statistics hide important differences in rental tenures. For example, cooperative housing has to be classified somewhere between rental and owner-occupied housing. In some countries, tenants of cooperative housing have tenancy rights close to ownership, but in other countries such dwellings are clearly rentals. In some countries, such as Poland, both types exist side by side.

On the other hand, an informal rental market has emerged in all transition countries. Privatized owner-occupied apartments are rented out, mainly serving demand at the lower end of the market. This tenure is mostly unregulated, with hardly any tenant protection or fiscal treatment. Despite its considerable size, this tenure sector is statistically elusive, with no real data available. It can be estimated that 20 to 30% of tenants in metropolitan areas live in rented apartments, depending on the economic strength of the cities and, linked to this, real estate prices. It becomes evident that the development of regular private rental markets is to become one of the main challenges of housing policy in the region.

6.4. Affordable rental housing

Before transition, the significance and institutional setting of social rental housing was quite diverse. The public rental sector occupied more than 50% of the housing stock in the Soviet Union, about 28% in CEE countries, and only 19% in SEE countries such as Albania, Croatia and Bulgaria. It was primarily state-owned in CIS countries, but enterprise-owned in the former Yugoslavia. There, social ownership titles could be inherited and swapped for private ownership. Consequently, a social rental sector as such did not exist in the former Yugoslavia. The homeownership sector in Bulgaria or the cooperatives in Czechoslovakia functioned quite similarly.[26]

But in the socialist housing system, the definition of social housing was quite uncertain, as the state housing policy followed a "unitary" structure, to use the term coined by J. Kemeny,[27] which meant that state-subsidized housing (both in the public and in the owner-occupied sector) was open for a wide range of different incomes and professional groups.[28]

Currently, the share of social rental housing is 11% in the EU (2014). In the HfH 9 region, the percentage of social rental housing is varied, comprising less than 5% of the housing stock in Slovakia, Romania and Ukraine, but above the EU average in Russia, Poland and Bulgaria. The costs of social rental housing in the region are extremely low and often not even cover maintenance costs. This locks any new investments in social housing.

There is a clear link between rising house prices – and the resulting affordability problems – and the demand for public and affordable housing. The constant decrease of public housing has resulted in long waiting lists, keeping a large number of people in inadequate housing conditions or affecting their expenditure in other areas, such as food, clothing and health.[29] Having a sufficient supply of affordable housing affects different areas of development. It is important not only to provide shelter, but also for the formation of a cohesive, inclusive society and for a country's economic development.

7. Housing construction, markets, housing finance

7.1. Housing construction

For most transition countries, the first decade after transition could be characterized as a deep housing crisis. Housing completions dropped in some countries (for example, Russia) by more than 40%, in most CEE countries by 70 to 80%, and in less-developed SEE and CIS countries by up to 90%. Since the early 2000s, housing construction has developed impressively in most CEE countries (except Hungary). In terms of completed dwellings per 1,000 inhabitants, some CEE (Poland, Slovakia) and CIS countries (Russia) have meanwhile exceeded the European average, but others are still far below (Figure 4).

For several countries (SEE region and some CIS countries), official data on housing construction are inadequate. In some of those countries, informal construction still has not been stopped[30]. "Completion" of a dwelling means something different than it does in Western countries. To leave a building shell unfinished until new liquidity comes along seems quite normal.[31]

The Global Financial Crisis has hit the construction industry in several Western countries hard, with decreases of up to 90% in Ireland and Spain. Overall, in the Euroconstruct countries (i.e. 17 EU countries + Switzerland + Norway), the rate was cut in half, from 5.6 completed dwellings per 1,000 inhabitants in 2007 to only 2.8 in 2013, with stagnation

[25] Stephens, 2005.

[26] Amann & Lawson 2012; Council of Europe 2002: 12-13; Charles Kendall / Eurasylum 2009: 7.

[27] Kemeny et al. 2005.

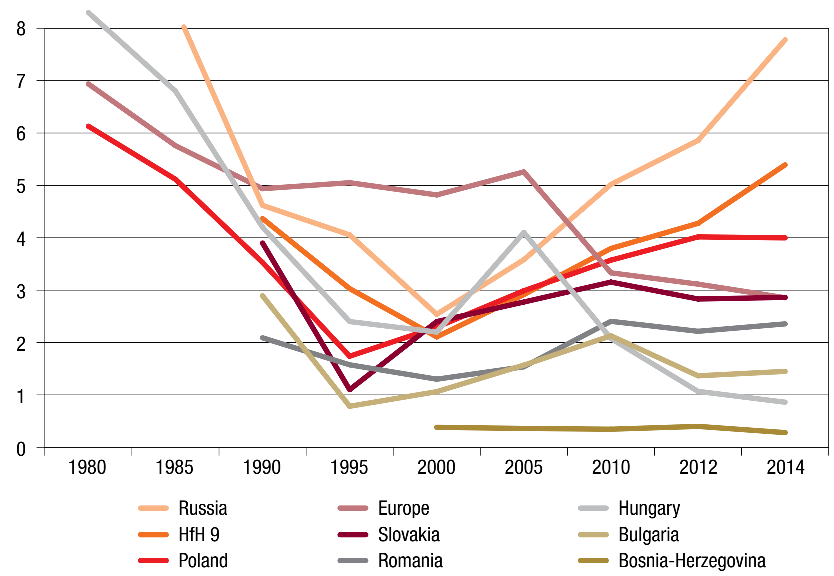
[28] Amann, Hegedüs, Lux & Springler 2012.

[29] UN Special Rapporteur 2009: para. 34.

[30] Tsenkova, 2009.

[31] Gevorgyan & Hirche 2006: 20..

Figure 4 Housing completions per 1,000 inhabitants in the HFH 9 countries



Re.: Europe = "Euroconstruct" countries = 17 EU countries + Switzerland + Norway

Sources: National Statistical Offices, Euroconstruct, EECFA, IIBW

at this low level (but with housing refurbishment growing in significance). Even though most ECA countries were also heavily affected by the crisis, the construction output in the residential sector performed quite differently:

- Some countries, such as Hungary and Bulgaria, had developed quite well before the crisis but have since suffered from steep decreases in production, with current signs of recovery in both countries.
- In the majority of countries, where housing construction had developed to a moderate level before the crisis, the output fell in the years after, but has recovered again at a basically stable level. This group includes higher-performing countries such as Poland and Slovakia, along with countries with moderate housing output, such as Romania and Ukraine (until 2013).
- Some economies focus on housing construction as a key measure for economic recovery and hence have increased housing output strongly. Among the HFH 9 countries, this is particularly true of Russia, with a construction rate (completed dwellings per 1,000 inhabitants) that has tripled since the early 2000s and exceeds the European average by 170% in 2014 (Figure 4).

7.2. Social housing construction

Housing policy in the region has focussed quite clearly on construction of owner-occupied market housing. Nevertheless, social housing construction has begun to recover in several countries. Even though social housing in most countries does not have the significance it has in some Western European countries, it seems to be reviving.

In Slovakia, the share of social housing in new construction is as high as 15%, but in other CEE countries it is much lower, with 4% in Poland and even less in Hungary (2011). In many CIS countries, public housing is stable at a high level of some 10% of total new construction, e.g., in Russia (2013).

But data on social housing construction are quite inconsistent. There is no clear definition of social housing, neither regarding the target groups (only vulnerable households or including moderate-income groups) nor tenure. In many cases, public authorities targeting social issues are reluctant to produce social rental housing but prefer to provide low-cost owner-occupied housing.

There are various models in place for low-cost owner-occupied housing. The Council of Europe Development Bank (CEB, Paris) specialises in such programmes, e.g., in the Western Balkans. Many countries and municipalities have introduced financing schemes for specific target groups, such as young families or key workers.

For many CIS countries, a paradox applies: Today, public housing is still privatized at below-market prices, while substantial public funds are invested in new public housing construction. Nevertheless, the existing programs for new public housing construction are in all cases too small to substantially increase the share of affordable rental housing over time.[32]

In many countries in the region, commercial housing developers increasingly target low-income households. They minimize construction costs not only by standardized planning and cheap construction products, but also increasingly by offering limited and very limited floor space. In some places, this market segment is called "social housing."

Social housing construction in the HfH 9 region relies mostly on municipal housing and housing organised by state housing agencies or funds. Such financing institutions play an important role in the social housing construction of many transition countries.

8. Housing markets

8.1. Owner-occupied apartments

Between the early 2000s and the Global Financial Crisis in 2008, the favourable macroeconomic conditions fuelled demand for housing in all countries of the region. With effective mortgage legislation, moderate interest rates and the willingness of banks to accept high loan-to-value ratios, many people could afford to own property. Growing demand not only stimulated production capacities, but also inflated the price of housing.[33]

Market prices in metropolitan regions of all HfH 9 countries skyrocketed, in most cases reaching a peak in early 2008. Prices for new condominium dwellings rose in cities like Bratislava, Kiev, Warsaw or Moscow to levels above Western European capital cities, despite much lower incomes of domestic customers and often lower standards of fixtures

[32] Amann & Mundt 2011: 95.

[33] Roy, 2008: 152; Amann 2009: 25.

and fittings. In some capital cities, the prices of used apartments even exceeded those of newly built ones, mainly because of the better location and appreciated construction quality of old buildings.

After the hype, prices dropped in most markets (e.g., in Warsaw and Budapest) by one-quarter, but by around 40% in Sofia and by more than half in Kiev. Moscow experienced a temporary, slight decrease of prices.[34] Meanwhile, housing markets have stabilized, but in most countries of the region they remain below the pre-2008 level. Only in a few countries do prices exceed the pre-crisis level.

8.2. Rental housing markets

Rental markets are not transparent in the transition countries. Hardly any reliable statistics are available, particularly for the large informal rental sector. But rent levels obviously follow market conditions. Upscale market apartments with rents on the level of Western European capital cities are available in many prosperous cities in the region. But only in major cities of some CEE countries and Russia are the mainstream markets at this rent level. In most urban areas, there is a substantial supply of much cheaper informal rental apartments, often in privatized private dwellings. For many less-developed cities, the mainstream rental market is on a level of €1.50 per square meter per month or below.[35] This makes it very difficult to implement formal rental housing schemes with sustainable refinancing schemes.

9. Housing finance

9.1. Development of mortgage financing

In most countries of the region, retail financing products first appeared in the early 2000s. They were responsible for a boom in new construction of housing in all metropolitan areas of the region. In the years before the Global Financial Crisis, financing conditions became more and more favourable in most countries, not only in terms of decreasing interest rates, but also in respect of ever-growing loan-to-value ratios, which in some cases exceeded 100% of the market value of the premises.

Housing affordability improved despite the fact that house prices increased more quickly than household income. Decreasing interest rates after 2000 made mortgages affordable for the upper 40 percent of households, thus relaxing the pressure on social housing. Then again, it was the availability of attractive financing products that mainly heated up house price inflation.[36]

The banking industry competed intensively for market share, particularly in the new markets, knowing that the market leader would have a privileged position in long-term business performance. As such, plenty of insufficiently secured loans were accepted, sometimes with excessive loan-to-value-ratios. With the economic downturn, this practice resulted in big volumes of bad debts and a fundamental change of business conduct.

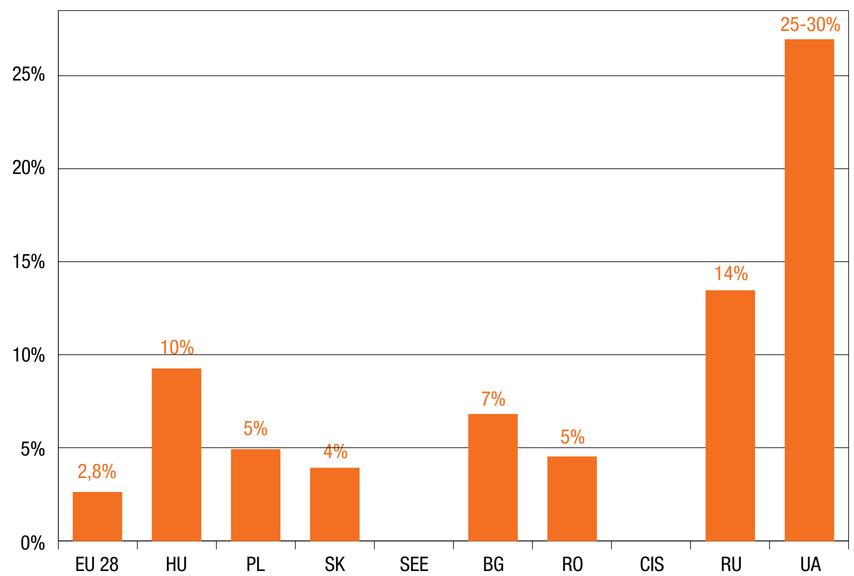
The crisis produced a gridlock in housing finance in the entire region. For some time, almost all projects were stopped because of insecure financing. Since then, housing finance has recovered, but conditions for mortgage financing have changed fundamentally. Banks require more owner equity and higher down payments than before. They also require more securities, such as pledges, and charge higher interest rates. A less enthusiastic economic outlook combined with more restrictive lending conditions led to a cooling off of mortgage financing, with some countries even decreasing ratios of outstanding mortgage loans to GDP.

As documented in Figure 5, the situation has since revived. Representative interest rates are again on an attractive level in many countries covered in this paper. In most CEE countries, housing financing was cheaper in 2015 than in 2007 (Hypostat). Interest rates in the CIS region are in contrast to this situation. In Ukraine, most private banks have stopped mortgage financing because of extremely high interest rates. With interest rates on such a level, it is impossible to finance anything but owner-occupied housing at short-term maturities.

9.2. Foreign currency financing

Foreign currency (mostly Euro and Swiss franc denominated) loans were popular throughout the region, particularly in Hungary, Poland, Romania and Ukraine.[37] In many cases, they caused serious hardship for borrowers in the wake of the Global Financial Crisis, leading to devaluation of local currencies, a downturn in property values, and insecurity of employment. In some cases, such as in Hungary, national governments forced banks to convert foreign currency loans at fixed rates into local currency, which caused substantial losses to the finance

Figure 5 Representative mortgage rates



Re.: Interest rate of a representative mortgage loan in local currency. Most recent years, mostly 2014/15.

Source: Hypostat/EMF, EECFA, IIBW.

[34] Different sources, IIBW/HfH 2013.

[35] IIBW 2010.

[36] Hegedüs et al. 2012: 22; Amann 2009: 26.

[37] Hegedüs et al. 2012: 22; Amann 2009: 24.

industry and shook the public's confidence in political reliability. Today, foreign currency loans are prohibited in most countries of the region.

9.3. Social housing finance

In Soviet times, state housing investments were financed through budgetary resources and through the state banking system, which operated under the control of central planning. The banks issued loans at the price and in magnitude set by the central planning agencies. In former Yugoslavia, social housing finance was organised with a fixed royalty of about 0.5% from salaries to "Solidarity Funds," which were usually organised by the same companies where people worked. After 1990, socialist housing finance systems collapsed. Solidarity Funds closed down with mass housing privatization. The fiscal pressure on the state budgets forced the governments in CIS countries to cut housing subsidies drastically. In most transition countries, public housing investments were practically stopped. In parallel, subsidies to bank-financed schemes (such as cooperative or subsidized owner-occupied housing) had been cut severely or withdrawn totally.[38]

After the turn of the century, several HfH 9 countries continued to develop social housing. Some countries, mostly in the CIS region, continued to finance such construction from state or municipal budgets. In a few countries, such as Russia, this developed into very significant amounts. In other countries, public-private-partnership [PPP] approaches were tapped, e.g., the Low Cost Social Housing [TBS] programme in Poland, combining financing through a state bank with loans from international financing institutions and contributions of future tenants. The establishment of housing funds or housing agencies proved to be the most durable approach in a number of countries in the region. Many countries introduced subsidy tools to promote mortgage financing of housing purchases for middle-income groups.

10. Conclusions

This paper focuses on "New Europe", representing countries from Central Eastern Europe, South eastern Europe and the CIS region, which are rarely enough in the spotlight of comparative housing research. We come to the following conclusions.

Housing affordability has a different characteristic in the CEE/SEE/CIS region, compared to Western Europe. Household incomes are significantly below the EU average. But the same applies to housing costs. Housing cost ratios are similar to Western Europe in CEE countries, slightly below in the SEE region, and far below in CIS countries. In most cases they keep stable, in few countries they have even decreased. How could those countries succeed in this?

Housing affordability in "New Europe" is achieved both by policy action and by idleness. In many of those countries household energy costs are kept low, both by tariff systems and by subsidies to utility providers. Maintenance costs are kept low by reluctant implementation of sustainable maintenance and refurbishment schemes. Past mass privatization allows a big part of the population, particularly the elder generation, to live at very low costs.

But all of those measures have a serious downside. Cheap energy is a major barrier to energy efficiency and lower emissions from the building sector. Insufficient maintenance schemes threaten sustainability and the intrinsic value of the housing stock. Mass privatisation has created a large number of poor owners, who cannot really take over responsibility for their property. It has resulted in housing stocks with insufficient management and maintenance schemes with quite a gloomy outlook for long term technical stability. Such settlements are much more obstructive to urban regeneration than rental housing estates. The resulting low household mobility is a barrier to economic development.

Political decisions to leave things as they are or to take action are driven by political rationality (or opportunism) in an environment with usually quite a short political lifespan. But in many cases it is also honest anxiety about the needs and problems of those big parts of population which didn't benefit from transition. Affordable housing is an indispensable shock absorber for those who have close to nothing. Low housing costs are an important part of keeping purchasing power in balance.

It seems that today New Europe performs quite well in terms of housing affordability. But huge challenges are imminent, both in respect of sustainability of the existing housing stock, a climate neutral building sector, the vibrant and seminal development of cities, a better balance of tenancy choice and finally tackling economic opportunities from developing housing sectors.

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[38] Amann, Hegedüs, Lux & Springler 2012.

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The determinants of office rents in Accra, Ghana

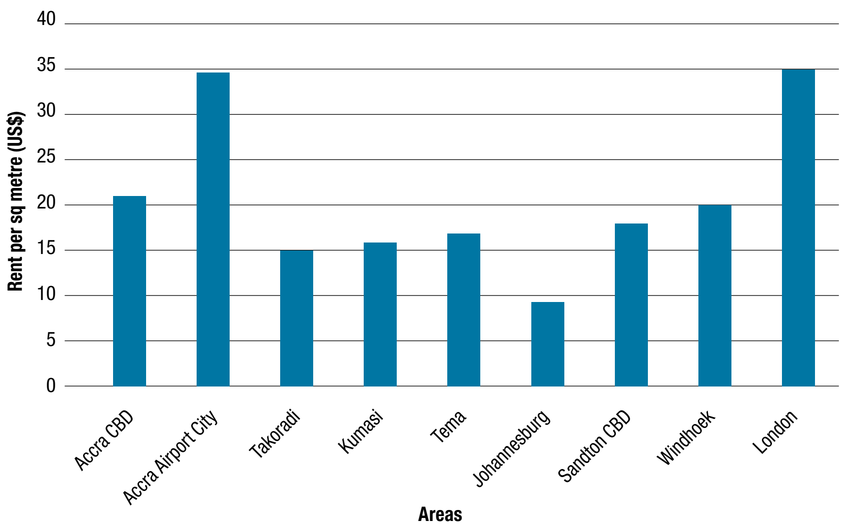
By Noah Kofi Karley

1. Introduction

In Ghana, real estate is one of the largest components of wealth. Housing in particular is a major motivation for household saving and significantly influences household consumption (Karley 2008). The ratio of commercial real estate is also growing gradually within this sector. Many of the office buildings available before the 1980's economic restructuring were state owned. However, these buildings were not able to meet users' demand and in many cases fell short of users' requirements. The increased demand for office space led to sharp increases in rents. In the short term, residential buildings were converted into other uses including offices, retailing and even for industrial purposes. Yet, this did not slow down rising rents, and in some cases the premises posed health and safety hazards for users.

Recognising the long term need for more purpose-built office spaces, both state agencies and the private sector were encouraged to participate in this market by the enabling environment stimulated by the structural reforms. The state entered the market through its agencies such as the Social Security and National Insurance Trust [SSNIT] as investors, mainly in the office sector. The private sector participants were predominantly investors and/or developers in office and other sectors of the property market. Although there has since been a significant level of activities in the market, one would have expected a moderate level of office rents. Yet, rents in Accra are among the highest when compared to other cities in the region and other parts of the world as illustrated in Figure 1.

Figure 1 Indicative monthly rentals for office in 2013*



** Rentals are gross and reflect prime space of 80 to 100 m²*

Source: BROLL (2013)

2. Study approach and methodology

To establish trends and determinants of rental values in Accra, a good set of data and information are needed to draw a clearer picture. However, due to paucity of data required, a modest approach is used in this paper. The paper employed two methods as outlined here. First, an update of academic literature was carried out. This consisted of a comprehensive and systematic literature review, focusing on the office rent determinants as well as existing information on historical development and pattern of office development in Accra. A review and analysis of official statistical information about the numbers, location, type of investors and users, was undertaken. Secondly, data and information collected through interviews and discussions with stakeholders also formed a key part of the research. The discussions with targeted official representatives in the industry included BROLL (an office management company) and users, e.g. insurance companies etc. to discuss broader issues of office demand, supply and impact on rents.

Before assessing the determinants of office rents in Accra one needs to know what office rent determinants exist in general, and how they manifest in the market.

3. Review of office rent determinants

Determinants of office rent is well researched and documented by several studies with different emphasis (for example Clapp and Giacotto 1992; Dunse and Jones, 1998; Dunse and Jones, 2002; Long, 2012; Baker, 2012). In more recent studies, Long (2012) emphasised the impact of lease terms on commercial rental values and Baker (2012) highlighted the impact of several different factors. According to Baker (2012), different factors prevail in different situations. It is understandable why these studies have identified variable determinants of office rents. If these factors prevail at the same time, a perfect market scenario will occur. Effectively, this will create a major impact of high performance in the affected office market. This is a hypothetical case, which does not happen anywhere in the office market. Indeed, there is no such a perfect market in micro or macroeconomic context.

In general, both micro and macroeconomic factors affect value of office rents. The common factors identified from the literature include location, highest and best use, cyclical demand, marketing time, market driven value, site improvements, lease value, financing, vehicle impact, demographics, competition, taxation issues, zoning, creative sales/leasing methods, multipliers and "rules of thumbs", income (appraisal) approach to value, market (appraisal) approach to value, cost (appraisal) approach to value and net lease value. Jowsey (2011) explains why different attributes must be taken into account in rent determination. Whilst influences on the capital and income structure within a sector, region, city or office grade can be analysed, the individual property's characteristics such as size, age, quality etc. must be assessed. Thus the questions that need to be answered include: Is there demand for this location? How much supply is currently in the area? What is the age of this building? Does it meet current environmental standards? And so on. In a nutshell, variations in the outcome of studies of office rent are caused by attributes of different geographical locations as well as characteristics in relation to the nature of economies; building attributes; varying contractual arrangements; and even government policies. These parameters are now used in reviewing determinants of office rents.

3.1. Economic factors

In simple microeconomic terms, the determination of office rent rates is about demand and supply. On one hand demand relates to wants and is only limited by peoples' ability and willingness, whilst supply is limited by the resources and technology available (Sloman 2006). On the other hand, rental values are the market price (per annum) of occupying property. Thus, as market price is determined by interaction of demand and supply, so is rental value. Office space as commercial property is a factor of production. Fraser (1993) observed that demand for office space as a factor of production is derived demand. Office buildings are usually occupied by professional, banking, financing, and other administrative and management users. These users require space to help in the provision of services required by other economic entities. So the demand for additional space depends on the demand for goods and services produced when combined with other factors of production. Also a shift in the stage of market and/or industry development could have impact on associated space requirements and rental values. For instance, an economy moving into or dominated by service activities or an industry potentially moving into the growth phase of its business life cycle, would lead to an increase in demand for office space and possibly an increase in rents.

In assessing the impact of economic fundamentals on office demand, Barras (1994) asserted that real GDP is the most appropriate and widely used demand side measurement at an aggregate level. That real GDP gives a broad indicator of office activity, both for manufacturing and service sectors of the economy. The fact is, demand for goods and services are sensitive to changes in disposable income, which is affected by macroeconomic variables such as real wages, interest rates etc. So the level of occupation demand for office is influenced by general economic conditions.

Henneberry and Gardiner (1991) examined determinants of real office rent within standard geographical regions in the UK for the period 1977-84. They found regional GDP to be the most significant of all the demand-side measures included in the analysis. The other variables identified in the study were service sector employment and average income. Similar results were obtained in a study by Giussani and Tsolacos (1993). These views are supported by recent studies in the UK (UBS 2012), which discovered that demand for space in office, retail and logistics sectors slowed down considerably due to the weakening of the UK economy. Capital Economics (2015) highlighted the impact of economic variables such as real consumer spending, employment rate and GDP on the rental values in office sectors. Thus, offices serve all aspects of the economy and so the demand and rents tend to be in line with the economy performance (Fraser, 1993).

Wheaton et al (1997) suggested that the driving factor of office space demand is employment in selected sectors of an economy. This study tracked employment growth in the finance, insurance, business and professional services. With an increase in employment, there is a need for additional office space to accommodate them. This leads to a greater demand for office space and in turn results in higher rental values. This claim is supported by GVA Grimley's Economic and Property Review (2012), which asserts that when employment growth increases it is particularly good news for the property market, especially the office sector.

Given the level of demand, a suitable level of supply is required to bring the market into equilibrium. Supply in the office market is measured by the level of current stock and new property coming onto the market. Supply depends on the resources available in respect of land, labour and capital. Vacancy being a function of both demand and supply is the amount of empty space that is available for let. Clapp, J. and C. Giacotto (1992) found out that vacancy levels are among the most important drivers of rental rate formation.

In times of high demand (and low availability of supply), vacancy rates should naturally be low leading to a rise in the rental rate. The reverse scenario has the opposite effect in that a high vacancy rate allows a lessee to exert downward pressure on the rental agreement. Also, understanding of the property cycle and the amount of supply scheduled to come onto the market helps in rent determination. For example, if the economy shifts into a boom phase where demand is strong, then the pressure to provide more supply into the market is strong. However, the inelasticity of supply immediately will put upward pressure on the rent rate. An area of land should naturally appreciate in value if it is released or regenerated to provide supply onto the market (Clapp, J. and C. Giacotto (1992). This is particularly true where demand is already high with low supply in the market. However, Wheaton et al (1997) have shown that the timing of the release in the property cycle will impact on the scale of the valuation especially if there is low demand with already sufficient supply in the market.

Compared to industry, the planning and construction period for offices is the longest (McCann, 2003). Offices have longest supply lag as the development pipeline may contain projects that could add significantly to future supply. In the short term, owing to supply lag, office development is unable to react to changing market demand. As supply is ill-equipped to satisfy the immediate demand it can result in rising rent. In the investment market property is an asset amongst competing assets, and the proportion of a portfolio held in property will be influenced by the values and potential of rival assets, inflation, and the need for portfolio 'balance'. The amount of investment demand and supply activities in the office sector of the property market could impact on the rental rate (Keogh 1994).

Finally, the cost and availability of owner-occupied premises will tend to affect the demand for rented spaces. So firms contemplating buying as an alternative to leasing will take account of the relative cost, particularly the cost and availability of finance (for purchase), expectations for future rental growth, and tax relief on rent and interest payments.

3.2. Location factors

Location for every business is an important decision. A business searches for a property that best serves their needs. The ability to service employees and customers in an efficient manner means that businesses will develop in certain locations to take advantage of certain factors. The classical economists (Ricardian) explanation of land rent assumed land is homogeneous, and the market in equilibrium does not change with supply conditions in the long run (Evans et al. 2004).

Contrary to Ricardian belief decisions of office location are affected by certain location attributes such as transportation and interactions costs, quality of the environment and agglomeration economies (Goddard, 1975; Evans, 1985; Ball et al., 1998). Moreover, as postulated in Von Thunen's model, rent values fluctuate with distance from a main commercial centre, which means the office location could be determined by a "trade off" between transportation cost and distance to the Central Business District [CBD]. Alonso in 1964 also emphasised a negative rent gradient with distance from the urban centre. But Jones and Dunse and Jones (2002) have shown that rents could increase away from the CBD on approach to major highways and motorways. This is a factor of accessibility and relates more to location of industrial warehouses.

In assessing location-specific price determinants, Bollinger et al (1998) find that nearness to concentrations of office workers exerts a positive impact on office rent levels in the Atlanta area. Agglomeration could be enhanced by spatial concentration and composition of population in certain areas. So industries requiring certain skilled labour may agglomerate their businesses into an area which forms an enclave. This shows that agglomeration of industry in a purpose built or business efficient area could result in high demand and so will rent increase. For example, over the past three decades there was a major shift of single professional households and R&D workers towards the South East of England. This created an increase in demand for, high-tech office units as well as smaller units of 1/2-bedroom housing in this region. Adjacent effects (externalities and spill over effects) to the geographic location of office property relative to public transportation infrastructure and hub have also been observed (Clapp 2003). Finally, some studies have included the latitude and longitude coordinates as well as heights of buildings in hedonic modeling of office rent. This approach was applied for instance by Clapp (2004). The number of storeys of a building and the availability of panoramic views and the potential landmark status of very tall buildings tend to impact positively on rental rates.

3.3. Building attributes

There is no substitute for land and property in general. For example, an office is not a substitute for a shop; offices without air-conditioning are not regarded as an adequate substitute for air-conditioned premises by most firms in the financial services sector. The capacity to substitute one property for another is confined by the need to match individual characteristics to individual tenant requirements, for example, in terms of size, design and layout, age and technology and amenities. Besides location, office occupiers are sensitive to certain building attributes that they may be willing to pay higher rent for. So property that meets, among others, these requirements would be in high demand and could lead to higher rental values.

It is expected that tenants pay a high premium for the convenience of accessing amenities in the building, which are perceived as good. Building age could be used as proxy for quality. Slade (2000) and Dunse et al (2002) observed that constructed or renovated building had positive impact on rental rates. Ho et al (2005) also reported that functionality, services, and overall amenities are important in assessing office building quality.

Space size is also critical to some tenants. Assessing determinants of rent in the Atlanta office market, Bollinger et al (1998) have shown that large tenants are often willing to pay a rent premium for sizeable units of contiguous office space that enable their internal operations to run more smoothly than a situation with several scattered locations.

Technological factors play important role in the nature of business activity and demand for space. For example, the introduction of micro-computers into most office-based activities in the UK since the 1980s had an effect on office floorspace demand (Fraser, 1993). This led to an increase in demand for offices able to accommodate suspended ceilings and raised flooring, behind which cabling and services are housed. Offices without such facilities have become functionally obsolete.

3.4. Contractual and policy factors

Lease terms associated with commercial property space are important to the tenant. Hendershott, et al (1999) highlighted a number of key characteristics of the office rental contract in the UK, which include long term, an upwardly only rent escalation clause and other onerous tenant responsibilities. Businesses would always seek tenancy agreements that suit their business needs but during periods of economic uncertainty, costly clauses perceived as onerous are likely to discourage potential tenants and as such this could have negative impact on rent rates.

Government policies may have impact on office rents via a number of routes. Starting with urban land planning and use policies, policies that restrict release of land, such as green belt etc. may affect supply of land development. If the government has no proposal to allow new offices to be constructed through the availability of licences for land development, then this will lead to a decrease in supply. If this remains in place, for example, in an expanding economy, it will lead to a rise in office rents. However, a release of further supply through capital expenditure for refurbishment of current dwellings to compete with new supply could lead to moderation in rents. Red tape associated with planning permission and development permits could also affect the time of delivery of required office space. Consequently, the associated costs are passed on to the end user in the form of higher rents/prices, densities, and smaller lot sizes.

The effect of tax relief policy on office rent cannot be overemphasised. When industries are provided incentives, rebates or subsidies for the production of goods or services, it affects the profitability of the business. For that reason, firms may consider tax relief on rent and interest payment when deciding on building space usage – that is, they may consider whether to be an owner occupier or a tenant. This affects the desire or not for office space supply to increase. At the same time, the requirement for more or less office space as part of a firm's portfolio and/or balance sheet affects office space supply. Thus, the way the regulatory and tax regimes for an industry are applied may affect how rents are set.

4. Growth trend and impact on demand for office space in Ghana

Ghana is a developing country with an estimated population of 25 million in 2013, up from a population of 6 million in the 1960s. There is an increasing trend towards an urban population as depicted in Figure 2(a), which presents the Urban Population as percentage of total population.

Figure 2a Urban Population as Percentage of total population, 1960 to 2011

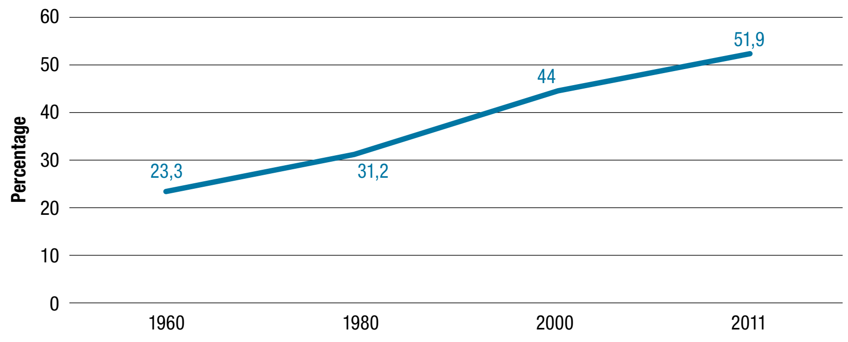
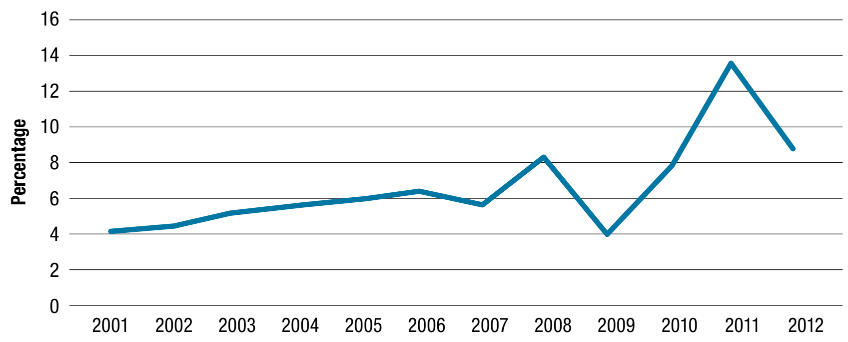


Figure 2b Ghana Real GDP Growth, 2001-2012



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The country is well known for its commodities: gold and cocoa production. In addition, oil has recently been discovered by drilling off the shores of the country in the Atlantic Ocean, which begun during 2010. The country is perceived as relatively stable politically and socially compared to others in the sub-Sahara Africa region [SSA]. Ghana's economy has improved dramatically; well-endowed with natural resources, a competitive business environment and sustained reductions in poverty levels and with a rising trend in per capita income which reached over US$1600 in 2011. Ghana is now recognised as the world's 16th fastest growing economy on the IMF's World Economic Outlook (2013). Some are even going as far as to describing Ghana as the 'Switzerland of Africa'. Figure 2(b) shows the real GDP growth data for the past decade. Macroeconomic developments since 2001 suggests significant gains have been made in the economy, with economic growth currently at 8.8% and inflation coming down to single digits at 9.8%.

Economic growth in Ghana was above 10% in 2014, though this is far from the almost 14% achieved in 2010. This is well above the predicted growth rates of most economies in the region. The peaceful general elections in December 2012 also highlighted the country's potential and prompted further economic growth. So much so in fact, that many advanced-nation businesses are currently looking to Ghana for investment opportunities, the Canadian Business Delegation being the most recent.

It is important to highlight the impact of the modernisation process that accompanied Ghana's structural adjustment programmes [SAP] three decades ago. These reforms brought about financial assistance from the IMF, World Bank and other international finance corporations. The reforms caused an upturn in industrial output, investment and service sector growth. From a predominantly agricultural based economy after independence in 1957, Ghana's tertiary sector has now achieved significant growth (World Bank 2013). For example, accounting for only a third of GDP in 2000, the service/tertiary sector now accounts for over 50% of GDP as portrayed in Figure 3. During the years immediately after 2000, agriculture had the largest percentage share of GDP. However, by 2012, the service sector contribution to GDP had exceeded 50% and is set to continue growing. Analysis of the working age population by industry reveals a generally increasing trend in employment opportunities in the service sector, which tends to require office spaces. Over two thirds of increases are noted to be in the greater Accra region GSS 2013).

It is interesting to note that Accra's ranking in terms of number of service firms in sub- Sahara Africa appears to be rather respectable with a continuing rise in the number of Foreign Direct Investment [FDI] firms in the service sector. In the midst of volatile political and economic environments in neighbouring countries, Ghana continues to stand out as a stable country and probably the preferred choice for service generating companies.

In view of these factors Ghana (and in particular its major cities such as Accra, the seat of government, Kumasi, Tema and Takoradi) has become an attractive location in the region for international organisations and businesses. Among the cities, the capital, Accra is highly sought after, because of being centrally placed in relation to other major cities mentioned above and having relatively better infrastructure. These facts, among others discussed later, have led to further increases in economic activities and the use of purpose built office spaces. Yet, the cost of doing business in Accra is very high. According to the Mercer Index, Accra ranks 86th (2011) compared to 214 other cities over the world in terms of the cost of living.

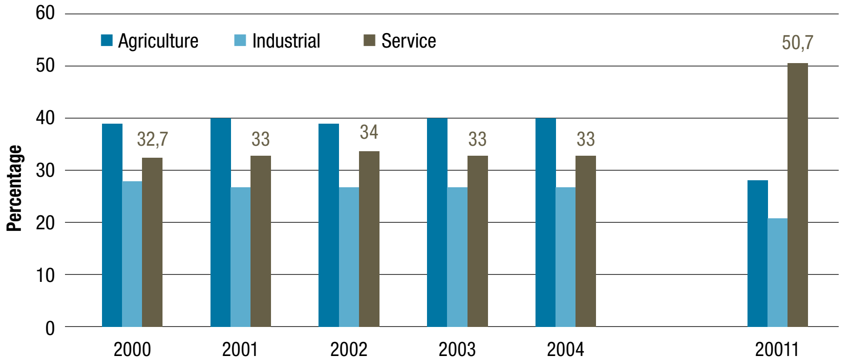
5. The nature of demand and supply of office space in Accra

5.1. Factors contributing to demand for office space

Demand for office space in Accra appears to be strongly affected by activities of the service sector especially finance, business and services employment. The service sector covers a range of tertiary economic activities which are categorised in Ghana under the following main activities: finance; insurance, real estate and business services; restaurants and hotels; transport storage and communication; wholesale and retail trade; government services; and community, social and personal services and producers of private non-profit services.

Considering the finance sector for example, there were less than 20 banks (mainly pubic owned) in Ghana during the 1980s. However,

Figure 3 Ghana GDP Composition by sector 2000-2004, and 20011



Global Finance Ghana Country report (February 2013)

with the development of the banking sector, there was a need for the appropriate office spaces. After the structural adjustment programme private banks entered the sector and the number of banks increased to the extent that by 2004 there were 115 banking institutions and by 2013 there were nearly 200 private banks in Ghana. All these banks have their head offices located in Accra. In addition, numerous branch offices are located in Accra and other major cities. All of these banks now use sophisticated IT facilities requiring the appropriate state of the art office spaces fitted with suitable equipment.

Furthermore, the number of non-bank financial institutions requiring office spaces has increased since the mid-1990s. Non-bank financial institutions were established in Ghana to provide services to sectors of the economy believed to have been denied access to credit by the commercial banks. This sector was given a significant boost in 1995, when the Ghana government received support from International Development Association [IDA] credit in the sum of US$25millions that was used to develop various programmes to enhance the capacity of the non-bank financial sector. In particular, the following sets of institutions were developed;

- The capital market institutions (Ghana Stock Exchange, Securities Exchange Commission, and the Non-Bank Financial Institution [NBFI] Department);
- Associated financial infrastructure (Home Finance Company, Domestic Payment System, and Institute of Chartered Accounts of Ghana); and
- The contractual savings industry (National Insurance Commission, State Insurance Company, Social Security and National Insurance Trust).

Although the financial system in Ghana is dominated by the banking sector (50% of GDP), there has been proliferation of other non-bank financial institutions such as insurance businesses. Compared to other African markets, the insurance industry in Ghana is relatively small. For instance, insurance premium as a percentage of GDP in 2001 was less than 1%. As of December 2004 the sector contribution to the entire financial sector was 1.3, rising to just under 8% in 2013 (Lamptey 2014). The industry is made up of insurers, insurance brokers, actuarial firms, and agents. But the number of insurance companies has more than quadrupled from only 3 private insurance companies in the 1990s to 17 insurance companies, 30 insurance brokers and 2 re-insurers by 2004. There were over 30 insurance companies as of December 2013. In view of the growing numbers, additional office spaces are required.

Another impact on office demand is the privatisation in the Telecommunication industry. This led to a significant growth in the need and demand for high tech office spaces. For example, before the mid-1990s, parastatal enterprises were the only providers of television and radio broadcasting, and telephone services. However, significant competition was introduced from the mid-1990s onwards. Compared to a single government owned and controlled TV broadcasting house, the Ghana Broadcasting Corporation [GBC], there are now more than 5 private television broadcasting service providers. In addition, companies providing television services via a satellite dish have entered the industry. Over 100 private radio FM radio stations have now spread across the greater Accra region alone. In the 1990's there were only government-owned radio stations. Furthermore, post, telephone and mobile phone service providers have entered the industry after the hitherto government owned and controlled P&T Communication was privatised.

Service provider companies are major users of high technology office space. Therefore, these developments have introduced competition as well as increased the need and demand for suitable office space in the capital. They have, no doubt caused a stir in and boosted demand in the Accra office market.

5.2. Supply of office space in Accra

Accra's office market can be separated into several grades; mainly Premium Grade, Grade A, Grade B, Grade C and Grade D. These office spaces are predominantly located in the Central Business District [CBD]. The city is experiencing very low vacancy rates for office space located in the CBD with particular high demand for premium grade and grade A office space. The average vacancy rates of Accra's office market are 5.8%.

Before the 1980s, an area called the Ministries and further south of the Ministries along the Accra High Street was collectively perceived as the Central Business District in Accra. This was where the High Court was located and the central bank, and major banks had their headquarters and major branches here. It was also a key location for international businesses and organisations. This area being the main CBD of Accra was clogged with traffic congestion. Retail markets located in the vicinity aggravated the concomitant traffic congestion that characterised the area. The Accra Metropolitan Assembly [AMA] realising the impact of traffic congestion in Accra and especially in the CBD, initially focused efforts in redeveloping the main retail sector called Makola market in a bid to easing traffic congestion and to provide an appropriate shopping area. In the process few office spaces were added to the office stock.

Office sector expansion became a reality when the Social Security and National Insurance Trust [SSNIT] ventured into real estate investment during the early 1990s. In particular, they entered the office sector and by 2000 they owned several office buildings most of which were skyscrapers located in the Ridge Ambassadorial Enclave of Accra, adjacent to the Ministries area. By 2004, the lettable area of SSNIT office spaces was roughly 30,740 square metres in their property portfolio (Karley 2008). Table 1(a) shows the number of office spaces brought to the Ridge Ambassadorial area and the rents charged are shown on Table 1(b).

Table 1a Rental evidence at Ridge Ambassadorial area

PROPERTY	FLOOR AREA (SQM)	RENT PSM PER MONTH($) / (GHC)	MAJOR TENANT(S)	PROPERTY GRADE
Ridge Tower	14,355.33	18	MTN, Fidelity	B
Heritage Tower	9,340.55	18	UBA, Volta River Authority (VRA), Ghana Revenue Authority (GRA)	B
Premier Tower	10,262.78	18	Zenith Bank, SG SSB GC NET, Affiliated Computer Services	B
Trust Tower	4,122.25	13	—	B
Round House	1,094.96	13	—	B
Okofo House	721.46	13	—	B
Total House	—	12	—	C
Movenpick	—	45	—	A
World Trade Centre (WTC)	—	39	—	A
Accra Financial Centre (AFC) (under construction – completion 2014)	13,700– Office, 1,800 - Retail (9 storeys plus basement parking)	40	—	A

BROLL (2013)

Table 1b Rental escalation in the Ridge Ambassadorial area

PROPERTY	2006	2007	2008	2009	2010	2011
Ridge	13.45	13.45	13.45	14.35	16.15	16.15
Heritage	13.45	13.45	13.45	14.35	16.15	16.15
Premier	13.45	13.45	13.45	14.35	16.15	16.15
Trust	10.764	10.764	10.76	11.66	11.66	13.00
NIA	—	—	—	11.66	11.66	11.66
Round House	5.38	5.38	5.38	5.38	5.38	5.38
Okofo	5.38	5.38	5.38	7.64	7.64	7.64

BROLL (2013)

Table 2a Prime office spaces in the Airport City area

PROPERTY	FLOOR AREA (SQM)	RENT PSM PER MONTH($) / (GHC)	MAJOR TENANT(S)	PROPERTY GRADE
Opeibea House	2,124.00	15	Stanchart/Ghana Life/IFC	C
Aviation House	2,104.00	18	GCAA	B
Gulf House	3,233.00	21	GCB/ADB/Intercity Hotels	B
Millennium Heights	3,500.00	15	JICA	B
UNA House	2,944.00	25	Barclays/PWC	A
Silver Star Tower	7,111.00	26	Delta Air/ Ecobank / Stanbic Bank/Lakeside Estates	A
Manet Towers (Twin Towers)	—	26	UT Bank and Vodafone Ghana Limited	A
Cocoshie Building	3,000	19	Kosmos Energy / Procredit	B
One Airport Square	16,000	50	—	A
Icon House	15,000 – offices, 2,500 – retail Total – 17,500	40	Stanbic Bank Ghana Limited	A

BROLL (2013)

The introduction of these prime office spaces attracted businesses quickly to the area and the rate of take up of office spaces increased. According to BROLL (2007), the property management company responsible for SSNIT commercial properties, most of these offices achieved 100% occupancy rate on inception. The overall occupancy was 88% in 2004 rising above 93% in 2005. Thereafter, the occupancy rate for all SSNIT offices has increased to nearly 100% throughout the years to date.

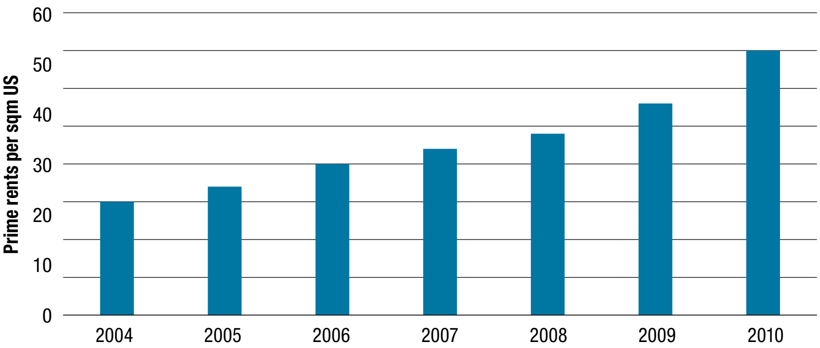
As the Ridge area became an attractive location so did private companies' interest in the area. Private companies entered into office development for either their own use and/or for investment purposes. Notably, redevelopment of properties along the Independence Avenue resulted in a complete facelift of both sides of the highway and many international organisations, and businesses relocating to occupy office spaces in the area. Banks, insurance companies and other financial institutions currently have both head offices and branches in this location. The Ridge area has also become a hot spot for the leisure industry, to the extent that some of the best hotels in Accra (e.g. MOVENPICK and NOVOTEL) are located in this area. It is interesting to note that compared to the CBD of the Ministries and Accra High Street areas, the Ridge Ambassadorial enclave, experienced a lower rate of traffic congestion.

Another addition to existing office space came with the reconstruction of the Accra –Airport highway, completion of various overhead bridges on the main highway, completion of the Tettey Quarshie interchange linking the Tema motorway to Accra. A new spatial structure of offices emerged. The Ministry of Foreign Affairs commissioned a Chinese construction company to develop a new office building in the vicinity. This was completed in 2012 to allow the permanent seat of the ministry to be moved there. Other developments such as Opebia House, Gulf House and the Airport City project (shown in Table 2a) completed in stages, brought additional prime office spaces to this area of the city. Hence, there seemed to be a shift or creation of another CBD in the Accra Airport City area, thereby attracting demand to the area and hence a further increase in rents as shown in Figure 4.

6. Discussion of Accra rental vales

Whilst many issues affecting rent can be looked at on the micro-economic level of the office market and property industry, the macro-economic factors of the country, region and global impacts, must be taken into account

Figure 4 Prime office rents in the Airport City area



BROLL (2013)

as they can influence the current and future expectations for rental values across the office sector in Accra.

If the economy is doing well and in a boom, rental values generally are higher than if the economy is in a recession or in a downturn. With Ghana and for that matter Accra's economy expected to continue to do well as stated earlier, and vacancy rates at low levels, rental values are expected to continue their steady ascent.

Ghana's economic growth figures were assessed earlier. To establish the current impact and the future expectations, we need to establish the following:

Will there be a further period of strong economic growth? Has the economy reached a peak? Are the economies in the region in a period of decline in output? How will global issues affect office rents? Certainly issues like inflation, interest rates, currency rates, unemployment, demographics, monetary and fiscal policies are also crucial.

Supply and demand are some of the main factors determining rental values. Supply directly relates to vacant office spaces at any one given time and the demand is determined by the take up rate of new and existing office spaces. We have seen that the supply cycle of office spaces in Accra is currently at or near the bottom of the cycle with very low or negligible vacancy rates and new office buildings only slated to be completed towards 2016 and 2017. New supply coming into the market is situated in the Airport area, a relatively new area in the city. Furthermore, the take up rate for new office spaces has experienced high levels of pre-leases and only a low percentage not being taken up yet. As supply continues to be limited, the rental values of office spaces in Accra will remain relatively high and likely continue to go up. The demand for office spaces also remain strong going into 2016/17. New buildings both in Accra's 'traditional' CBD as well as in the Airport area, a relatively new business district, have both seen strong demand for office spaces with spaces being taken up even before the new office buildings are completed. This strong demand is a determinant of rental values in the city and in this case will likely drive rental prices of office spaces up in the city.

We have seen a growing service sector in Accra dominated by finance, insurance and telecommunications. As there is an increase in employment, there is a need for additional office space to accommodate them. It is interesting to note that during the 1980s, although office employment (white colour jobs) grew considerably, the absorption of office space in Accra did not experience the same level of growth. This is due to the type of jobs being generated currently, requiring high tech and sophisticated office spaces.

The forecast for immediate growth in the Accra Airport areas is high because of their reliance on the banking and oil sector with the news that "investment banks are growing and with oil drilling already in the country. The overall forecast for the Accra office market is on the whole very positive. For instance, it is anticipated that the current prime rents of US$30 per square foot [psf] in the Accra market will increase to USD35 by the end of 2015 and will reach 40 psf in 2017 and a significant increase in rental value is also expected for the Airport city project.

There is an 'Accra effect' at work here. The city is an attractive destination for businesses seeking office space. It attracts businesses from all over the world. The market is of special interest because of its international character: According to Lamptey (2014), over 95% of new office space in prime locations are occupied by non-Ghana firms, Furthermore, BROLL (2013) asserts that a number of overseas companies taking up flagship units have driven up rents on prime streets.

Accra is a prime example of an agglomeration economy, which is embodied by pooling of skilled labour, a greater supply of supply inputs and services, and information flows between firms (Ball et al. 1998). We explained earlier that Accra is attracting other sectors into its commercial property market such as the Technology, Media and Telecommunication [TMT] Sector. Lamptey (2014) supports the theory of agglomeration theory by confirming that businesses from the TMT sector by identifying that "there are clear business advantages for technology and telecommunication companies to choose Accra including talent pool and access to a truly global marketplace in Africa."

It is the case that "the office space required in Accra specification" (BROLL 2013) because the demand coming from the overseas businesses and the TMT sector will seek a supply of Grade A property. As the level of demand in Accra continues to rise with limited new supply scheduled for 2016/17, this will continue to push up rental values until the supply of quality property increases. The nature of property means that in the short run, supply cannot be easily adjusted in response to increased demand. It is possible to look for alternative property in other areas, but as demonstrated above the types of businesses that operate in the Accra market do so to benefit from the specific advantages of its location. In reality the evidence suggests that rental values in Accra will continue to increase until the market is adjusted to equilibrium with the onset of further supply of quality buildings. Fraser (1993) summarises "if demand increases the rental value will increase due to the inelastic supply curve in the short run. This will induce an increase in supply but only after a time lag." The cause of this time lag is in the main part down to the time it takes to build office accommodation, particularly the tall and high specification buildings.

7. Conclusions

A number of issues determine the price paid per square foot for office space. All the three main sub-sectors of the market, namely the occupier, investment and development sectors affect the market in various ways. These 3 areas are important when looking at the rental values.

As observed earlier, in fact, a premium is paid for central sites in the Accra office market. These attributes would be carefully considered by each potential occupier and applied to the rent they might want to pay for an office space.

While the main factors that determine rental values in Accra have been explained theoretically by imbalances between market fundamentals – demand and supply for space, there are other unexplained factors contributing to higher office rents. First, premium office is difficult to come by due to the oligopolistic tendencies among suppliers. This is due to the fact that it has a market that has high barriers to entry and as Clapp (2004) suggests 'However, due to rising values over the past 20 years the market seems to be generally restricted to major funds such as SSNIT, big international property companies or high wealth individuals'. Secondly, there seems to be a significant amount of speculation regarding value of land and anticipation of the amount of business likely to be brought into the city and country in the long run. So landowners are demanding more than current land values and/or reluctant to release land, hoping to cash in in the future. It is expected that foreign investors' interest in the office market in Accra will remain strong going into the future and so demand for office space will continue to grow. To ensure that increasing rents do not affect the local economy, more needs to be done with regards to curbing speculation and to encourage release of land for office development to ensure that rent escalation is controlled.

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Financing homeownership: Some sectoral perspectives

↳ By R. V. Verma

Policy makers constantly face the challenge involved in expanding homeownership in the country, and in developing a stable, dependable and sustainable financing mechanism for attaining this goal. This is a challenge particularly affecting the growth of housing in emerging economies. Addressing issues related to expansion and stability of the mortgage industry requires building an extensive data base and intensive research capabilities for better understanding of the trends in the property market and their underlying implications for choice and decision-making at the individual's and the entity level. These could involve pricing, investments, buying and selling decisions and their timings, depending on the market conditions and availability of credit at reasonable rates. Expectations about price movements and interest rates or house prices coupled with market sentiments are important determinants of individual's decision-making for buying a property as an end-user or an investor, or postponing the decision. Knowing the imperfect nature of the property market, and its likely implications for the economy as a whole, regulators are often concerned about irrational market sentiments and exuberant market behaviour based on distorted and asymmetric information and data. The regulators intervene based on their perception of the market. There could be chances of excessive intervention in the absence of data and trends on the property markets and their analyses.

"Housing is a basic human need" is a much clichéd statement. Housing also represents the largest component of any individual's life-time earnings and accumulated wealth. Over the last two decades in India, there has been a paradigm change in this sector from government-provided housing to self/market-provided housing. This also reflects a radical shift in approach and understanding from housing as a social activity to housing as a commercial and financially viable activity; from housing as a consumption activity to housing as a productive/investment activity. The evolution of the housing finance industry over the past 20 years has been largely demand-driven. This has been reinforced by easy availability of credit to individuals. The expansion in retail mortgage provision has been in the range of 18-19%, compounded annual growth. The quality of loan assets has been consistently good in sharp contrast to the rising non-performing assets in the banking industry, overall. With growing demand for housing and housing loans by the individuals, there have also been marked improvement in lending practices across the entire industry comprising banks and specialised housing finance institutions. The size of the market has created natural scope for competition resulting from a hunger and opportunity for a larger market share, and greater market penetration, both geographically as well as across different income segments. Competition has led to better terms for the borrowers/buyers in terms of both speed and quality viz. processing time, personalised services, interest rates, downpayment and security requirements, repayment period and other flexibilities that any borrower will commonly desire. Easy access to credit has brought about a marked transformation in the mortgage eco system, not only on the credit side but also for the suppliers of housing viz. builders and construction agencies.

We have come a long way from the times when housing was not favoured by the banking industry and individuals and households were left to fend for themselves and organise their housing through their life-time savings and pension fund/gratuity and informal borrowings from friends and relatives etc. Essentially, acquisition of a house used to be the last project in one's life, mostly close to the retirement time. In contrast, acquiring a house early in life is perhaps the most important aspiration of a young earner today. It's his first project in life. This metamorphic change has happened due to easy credit availability for housing. Times have changed and lenders are vying with each other to expand their presence across the country and to achieve a larger market share. With easy access to credit, a house has now become the first asset in life that any individual wants to acquire. Purchase of second or third houses are also a common phenomenon, reflecting the aspirational levels of people in different market and income segments.

Expansion in credit, fuelled by growing demand, has implications for volatility in pricing, overheating of the market and stability of the sector and with all these, impact on the broader economy. While this evolution has happened over a period of time, the regulators viz. RBI and the National Housing Bank (NHB in case of Housing Finance Companies- HFCs) have intervened selectively, but effectively with timely signals to the market through appropriate and well-considered regulatory and prudential measures, viz. loan to value ratio, risk weights, provisioning, security and collaterals etc. Thus, while we have to deal with expansion in housing through enabling promotional policies to improve home ownership in the country, the challenge lies in ensuring that the intended expansion of the market is sound and sustainable, without collateral damage. The building of market infrastructure to support the mortgage eco system is critical in this regard as it helps in bringing about greater stability through increased transparency, information availability, instruments for risk mitigation, price-tracking by institutions, research and analysis, access to borrowers' credit history, easy and simplified foreclosure laws, mortgage guarantee etc. The market infrastructure relates to both demand and supply side in the larger interest of all stakeholders ranging from policy makers, regulators, lenders and builders to individual buyers/borrowers. Building the right infrastructure is important and involves the perspective and interest of all stakeholders, leading to a common objective of "growth with stability".

Often for the regulators, a growing mismatch between the demand and supply of housing or housing credit is a matter of concern. For the market to operate efficiently and at optimal level, the supply responses have to be smooth, matching up to demand. Due to situations of supply constraints and capacity constraints, the market gets increasingly prone to distortions in the form of price-rigging, artificial shortages, a growing stock of unsold inventory, holding on to prices etc. The Indian mortgage industry is exposed to such distortions which not only affect the "real" economy (supply side) but also can have serious implications for the lending industry. A constant vigil over such developments is important for timely intervention to prevent such trends from turning into a full-blown crisis. While the lending side of the mortgage industry is well-regulated and has developed along the reform path in tandem with the financial sector and capital market reform, the more critical supply side suffers from a number of regulatory and information asymmetries/gaps which have thrown up concerns and fears of overheating / melting of the market time and again. Reforms on the supply side of the equation are critical for efficient functioning of the mortgage industry overall in the best interest of all concerned. Such gaps and deficiencies on the supply side result in opacity of the market which in turn is exploited by certain segments (the investor community) who further feed distortions. Market opacity causes information asymmetry which is exploited and arbitraged by these segments, with a view to gaming the market. There is need for appropriate regulatory interventions on the supply side in order to ensure timely correction of the market to prevent further distortions. Supply rigidities increase the scope for distortions and exploitation, in turn adversely affecting market sentiment, not only amongst buyers and the lender community but also for potential investors in the sector including foreign investors through the Foreign Direct Investments [FDI]/ Foreign Institutional Investment [FII] route. These factors clearly inhibit the growth of the industry and erode the credibility and creditworthiness of the real estate sector, if not checked in time.

All of the above notwithstanding, it may be useful to research and investigate the causes of supply rigidities in such markets, including the phenomenon of either lagged response of the supply side to the increasing demand for housing and increased supply of housing loans, or over-supply of housing without the prices falling. The timeline for delivery of housing from the date of the announcement of the project is a long arduous journey of land acquisition, obtaining approvals (myriad approvals), infrastructure development on the acquired land (approvals for each item of infrastructure viz. water, sanitation/sewerage, electricity, schools, markets etc.), the time taken for construction and the processes involved in getting approvals at different stages including at the completion stage are all factors militating against "ease of doing business". The longer the time gap, the greater is the uncertainty and risk embedded therein. These include the credit risk for the lenders both for the project as well as in respect of the individuals buying in to those projects, the project completion risk, price escalation risk, and resultant market risk (inadequate demand at higher price points).

There is clearly a need to reform the supply side of the housing market which can lead to substantial improvement in market sentiments, with flexibilities in supply, early delivery of projects and swifter market adjustments to changing demand and striking optimum equilibrium levels. The whole supply side intervention is the cornerstone in developing a sustainable market-based approach for housing. In the Indian context, with the federal structure, the real estate component of the mortgage industry is in the domain of the respective state governments who decide on the pattern of land-use, housing and infrastructure, approvals etc. There is full-fledged machinery and infrastructure in place for performing these roles across the States. Although the priorities of the state governments and the efficiencies of the institutions may vary widely, there is a definite need for reforms in the sector to achieve better and fuller utilization of capacity across the entire value chain. This will generate greater confidence among the investors and the lending industry and will result in a more unified and integrated sector across the country rather than a fragmented industry and negative externalities associated therewith.

The housing and the real estate sector across the globe is replete with boom and bust stories and is often infamously considered responsible for triggering instability and crises in the financial market. Due to the pro-cyclicality risk inherent in the real estate industry, unchecked credit growth and housing bubbles can be detrimental to financial stability and the real economy. However, a well-functioning and well-regulated mortgage industry can adjust to the shocks and overcome the pro-cyclicality risk in good measure through proactive intervention. This again underscores the need for constant research and analysis of market trends and price behaviours in the property market underlying the need for a stable and credible property index at the local, regional and the national levels. The growth in the mortgage financing and investments in the housing sector, with its potential multiplier effect, together with transmission effects of monetary and credit policy through these channels, can lead to overheating of the market and house prices which may in turn lead to systemic risk in the absence of prompt corrective action. The credit boom and construction boom often reinforce each other leading to over-leveraging of the financial sector. All these features of the mortgage industry and its huge potential to impact the larger economy in both positive and negative ways, highlights the need for ongoing research and analysis of the trends and data thrown up by the sector. The sector, particularly in relation to the developing economies is highly under-researched and data on the supply side particularly are not easily forthcoming. Considering that the outstanding mortgage debt in India, for illustration is about 9% of GDP, there is scope for massive expansion which in turn will call for a systematic and conscious effort to develop a data base for the projects, including categories of housing units, costs and prices, input wise costs, trends in prices, investor/end-user occupied housing, ownership/rental housing, borrowers' and lenders' profiles, valuation of properties plus the correlation between credit supply, housing supply, demand and prices etc. All these will rightly constitute the subject matter for a specialised research institution feeding their results into the industry which can take advantage of these research outputs in charting their way forward.

The Indian mortgage industry is on the cusp of a big growth on the back of the growing interest from the financial sector lending community in a competitive environment. The property indices and researches around it, still a greenfield space, will add immense value to the mortgage industry in India, helping in its growth and expansion accompanied with stability, adding to the robustness of the market and to the quality of the decision making and policy formulation across all stakeholders.

Low-cost housing project at IDH colony in Telangana State, India

By Francis Eddu

Today the development of affordable housing is the urgent requirement for urban India. Due to the absence of low-income housing in Indian cities, slums and unorganized real estate are visible across the landscape. The slum dwellers are unable to avail civic services because of lack of legal residence documents. Quite often, affordable and low-cost housing are found to have similar meaning but in fact they differ vastly from each other. In general, low-cost housing implies the Economically Weaker Section [EWS] category that provides minimum housing facilities, whereas affordable housing is focused on the Lower Income Group [LIG] and Middle Income Group [MIG] that includes peripheral services such as schools, hospitals and community facilities.

It has been projected that by 2050, the population of urban India will increase by 900 million people. The increase, which is largely due to rural-urban migration, will strain the already constrained urban infrastructure in the cities. Due to rapid urbanization, there is a concern among India's urban planners as how to tackle the looming housing shortage which affects EWS (economically weaker sections) and LIG (lower income groups), estimated at 18.78 million households in 2012 (KPMG, 2012).

A non-linear trend is found between income and affordability among different income groups. For lower-income groups the expenses on food, non-food items and house rent take up the bulk of their earnings, whereas as we go towards the higher-income groups, the increase in costs does not have an impact in the same way. Disposable surplus income, a key resource in buying a new house is insignificant among low-income groups.

In spite of a large network among financial institutions, banks and finance cooperative societies, low-income groups are without access to housing finance. The loan market for the 3-10 lakh[1] annual income groups is around INR[2] 1,100,000 crore[3] (USD 220 billion). However, a substantial number of the loans disbursed by Housing Finance Companies [HFCs] are to mid- and high-income segments. This is largely because people who fall in 3-10 lakh INR bracket are viewed as a high risk segment (Jones Lang Lassalle, n. d.).

Eighty percent of the low-income and economically weaker groups do not have access to institutional finance due to absence of clear title deeds and regular, formal employment. On the contrary, there is a rapid growth of housing finance institutions in India, around 57 today from an insignificant number in the 1990s (Martin, 2014).

Telanga State

Telangana State is the 29th southern India state which was created in the summer of 2014. The Telangana RashtraSamithi [TRS] party which swept to power promised to construct 2BHK (2 bedrooms, a hall, a kitchen) houses for deserving individuals in all villages in the state. The TRS during elections promised to provide two bedroom houses to each poor family. To this end, there is an initiative to build 60,000 to 100,000 (1 lakh) housing units in the first stage (Janyala, 2015).

TRS is a regional Indian political party formed to create Telangana State from erstwhile Andhra Pradesh. It was formed in 2001 with the sole objective of creating a separate state with Hyderabad as state capital. It succeeded in getting statehood to Telangana in the summer of 2014. It won all the local and general elections and TRS is keen to expedite all-round development of the state, including the housing sector.

The Government is determined to provide the poor with two bedrooms, a hall, and kitchen (2BHK), with two toilets flats and houses in a phased manner. To this end, the following guidelines were formulated:

Eligibility Criteria for Selection of Beneficiaries:

1. The beneficiary family should be a Below Poverty Level[4] [BPL] family having a valid Food Security Card with a number in her/her spouse's name his name (in case of widow/widower/physically challenged.).
2. The house will be sanctioned in the name of housewife of the family.
3. Homeless families and families living presently in huts, katcha houses or in rented houses. (Mee kosam, 2015, para. 4)

All the housing units will be constructed on government land. The existing slums will be acquired if necessary. Each flat at IDH Colony has a 560 sq. plinth area in G to G+ pattern, that is, ground

Table 1 Changes in prices of residential properties (2009 and 2014)

	INCOME LEVEL	SIZE OF DWELLING UNIT	AFFORDABILITY
Economically Weaker Section (EWS)	<INR 1.5 lacs p.a.	Up to 300 sq. ft.	EMI to Monthly Income • 30 to 40 percent
Low Income Group (LIG)	INR 1.5-3 lacs p.a.	300-600 sq. ft.	House Price to Annual Income Ratio • Less than 5.1
Middle Income Group (MIG)	INR 3 to 10 lacs p.a.	600-1200 sq. ft.	—

Source: KPMG Analysis

[1] Lakh is equal to 100,000 Indian Rupee.

[2] USD 1 is equal to approximately Indian Rupee (INR) 67

[3] 1 Crore=USD 167,00.

[4] Government of India poverty threshold and economic benchmark

Figure 1 Telangana State is located in South-Central India

Figure 2 Newly constructed residential towers at the IDH Colony, New Bhoiguda, Hyderabad, commissioned in November 2015.

Source: Deccan Chronicle

floor (G) and G+ additional floors in urban colonies. In rural areas independent houses will be constructed. However, these housing units will be only for people living below the poverty line [BPL] – a criterion determined by the government (Government of Telangana, 2015).

The new government is keen on constructing spacious 2BHK units - in cities apartment/flats and independent houses in rural areas. Often poor people are found to live in shanty, box-like rooms without adequate shelter but the goal of this government is to provide the poor a decent accommodation to live in dignity. The government has an ambitious target of constructing of 400 houses in 119 Assembly constituencies.

The IDH Colony is the first successful housing project that was completed in November 2015. The state officials were pleased with the maiden outcome of the IDH Colony and averred that in future similar projects will be replicated throughout the country. INR 7.90 lakh was incurred to construct each flat and an additional INR 1.99 lakh for infrastructure (The initial estimate differed) (Express News Service, 2015).

The ruling TRS Government included housing for the poor as a priority in its election manifesto. Soon after the party came to power in the summer of 2014, it laid the foundations for the IDH Colony redevelopment. Within 15 months the housing units were ready for occupation.

A recent household survey in the state brought to the fore that there are 2 lakh homeless families in the city of Hyderabad and the scheme aims to provide shelter to them. The paucity of government land made the planners focus on tower blocks of flats to build units in a limited space. Further, these housing complexes will make it easier for the Government to provide services and maintenance at a single location.

One of the noteworthy features of this program was the ability of the leaders to convince the residents who were already living in the IDH Colony to part with their land for a year. The IDH Colony had a number of shanty and dilapidated houses and most of the residents were poor, working on daily wages and living in self-build houses on plots measuring 75-200 sq. yards. The residents were skeptical about the government housing program but the local leaders convinced them to make alternative housing arrangements for a year, i.e., to allow the government to dismantle their homes while they rented accommodation elsewhere. The rent was borne by the beneficiaries. In the end, the beneficiaries' faith in the Government paid off and they got excellent flats for no cost.

All the flats are registered in the women's' names as per the Government policy. To ensure the scheme is not misused by the residents either re-selling or renting, the Government officials monitor and examine the flats regularly. The feedback received by the officials was overwhelmingly positive, as many residents did not like to rent for fear of tenants spoiling their flats and they were more interested in staying in new, spacious flats (Reddy, 2016).

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Population growth, urbanization and slums: challenges for developing low-income affordable housing

↳ By Zaigham M. Rizvi

1. Housing and the challenge of population growth-global scenario

Housing is a numbers game, the more people there are, the more need there is for housing. As seen on the World Population Clock[1], the number of people living on the planet is rising every second while the usable land resource, more so the habitable land, called in housing terminology "serviced land" remains a limited resource. It is critical that sufficient serviced land be developed with the necessary infrastructure. Availability of "serviced land" for development of housing and new settlements is a key issue.

The World population, which is currently around 7.38 billion as of Dec 2015 is expected to reach close to 11 billion by 2050. It is estimated to reach 9 billion by 2030, with the current net addition of more than 80 million per year using the current growth rate of 1.13%/p.a. Furthermore, by the year 2030, nearly two-thirds of the world population will be urban, and nearly half of that urban population will comprise the urban poor living in a poor habitat, non-decent housing and urban slums. While low income affordable housing is a universal challenge and will remain a challenge to political leaderships and the urban planners, urban congestion is making it even worse in the regions of Asia and Africa. Urban growth rates are highest in the developing world, absorbing an average of 5 million new urban residents per month, and thus account for the largest portion of urban population growth on the globe.

The factors contributing to urban migration are: greater economic growth, rising income levels, employment opportunities, migrant workers, occupational shift from agriculture to manufacturing & services, changing attitudes towards consumption and life styles, changing family culture and shrinking household size. However, poverty and unemployment, and thus the economic compulsion appears to be the main driving force towards urbanization. Almost half of the world population lives on less than $ 2.50 a day, and four out of five live at below $10 a day. In addition, other compelling factors for urbanization are the lack of, or deficient, health services, education facilities and utilities in terms of water, electricity etc.

The absence of any control and management of this massive urbanization, and failure of urban planners to account for this influx of population into cities and major metropolitan areas is resulting in mushrooming of slums in the cities.

2. Challenges faced by Asia and the Muslim world

Including China, the Asian population reaches close to 4 billion, thus making every second person on the globe an Asian. The current population estimate for China is 1.4 billion, with India next at 1.29 billion. India with a higher population growth rate is likely to pass China in terms of population by 2030 and will become the number one country in terms of population. The population growth rate in Asian countries is more than the world average growth rate of 1.13% p.a. In countries like India, Pakistan, Afghanistan it is close to twice the global average. As said earlier, housing is a numbers game, the more people, the greater is the need for housing. Thus Asia, already facing a massive backlog, will be facing a much bigger challenge of shortage of supply and a growing backlog in housing. While generic population growth is the main contributing factor to growing housing need, the other factors like urbanization, depletion of existing stock, declining household size further contribute to housing need. The irony is that in most of the underdeveloped and developing world, the annual housing supply is much short of incremental demand due to population growth only. The deficit of supply relative to demand keeps adding to the already existing massive housing backlog. India is currently facing an urban housing backlog of 18 million housing units, and Pakistan has an urban housing backlog of 3-4 million units. Nearly all of this housing backlog is in economically weaker segments [EWS] of the society. Each country in the region has its own geo-socio-economic parameters, which contribute to the problem and hinder any solution.

The housing shortage has made housing a popular political slogan in Asia, and some of these slogans are:

- "Housing for all"
- "Slum Free Cities"
- "Maang Raha hai har Insaan-Roti, Kapra, aur Makan" (Every human demands food, clothing and shelter) etc.

With all these slogans and political promises, it is sad to note that in a few countries the delivery against these aspirations is limited, but in most countries it is non-existent.

The Muslim world is no exception either, when analyzed from the aspect of the housing backlog. This is critical from the perspective of this paper, since Muslims would generally prefer to avail themselves of housing finance, if the products are Sharia-Compliant. This is significant from the aspect of housing and housing finance. It is less a matter of faith, but more a matter of financial inclusion. Unless these markets are served with Sharia-Compliant housing finance products, Sharia-Compliant

[1] World Population Clock, www.wordometer.info.

long term liquidity instruments and standardized documentation, housing finance will not achieve further penetration.

The member countries of the Organization of Islamic Countries/Islamic Development Bank [OIC/IDB] are already confronted with the challenge of a massive housing backlog. The incremental yearly housing demand and supply gap adds to the already existing housing backlog. Out of 193 member countries of the United Nations [UN], 57 Muslim countries are members of the OIC/IDB -meaning one out of four countries on the globe is a Muslim country. The population of OIC countries is 1.6 billion, and adding the Muslim population in other countries like India, overall, the Muslim population of the globe is 2 billion plus, thus every fourth person on the planet is Muslim. The total urban population of IDB Member Countries was 731 million in 2010, representing nearly half the total population of IDB member countries.

Within the regions the Muslim population as a proportion of the total population is: Africa-53.0%, Asia-32.2%, Europe-7.6 %, N. America-1.8%. 2

A study conducted in 2012 by IDB on the subject of housing reveals that the housing requirement of the Muslim world is 8.2 million new units per year[2]. This is based on an overall household size taken as 5-5.5 and a population growth rate of 2.8%. To meet this yearly incremental demand, these countries would need US$ 15.5 billion/year of investment in the housing sector.

The breakdown of the backlog is as follows:

MENA 3.2 million

Asia 2.7 million, and

Africa/others 2.3 million.

The housing issue came to the surface in the Middle East during the recent civil uprising, even amongst some economic elites of the Muslim world. Like other regions, most of the housing backlog and shortage of supply is in the low-income segment of their populations.

Most of the countries in the OIC world are facing a major challenge of already existing housing shortage, e.g., Pakistan 9-10 million, Egypt 1.5 million, Iraq 1.0 million, Morocco 0.6 million, Saudi Arabia 0.4 million. Although there is a significant oversupply in upscale or luxury housing, the low income segments/ communities remain neglected. Urbanization and population growth is further adding to the annual housing needs in major metropolitan areas in these countries.

The Mortgage Debt [MD] to GDP ratio is low in the Muslim world as compared to the rest of the globe. In the Muslim world, it is highest in Malaysia (32%), and lowest in Pakistan and Egypt (below 1%). This reflects a low penetration of housing finance in these countries, since institutionalized housing finance is in it's infancy in most of the OIC member countries.

The current market share of Sharia-Compliant housing finance in Muslin countries is around 20% only. The urge is very strong among the low-income segments of the population. As we move higher, the mortgage cost also becomes a factor while taking housing finance. That means, while addressing housing finance needs of low-income segments in OIC countries, they need to be served with Sharia-Compliant housing finance products.

3. Rapid urbanization needs the due attention of urban planners

Global urbanization was 51% in 2010, and by 2030 it is likely to reach 61%. Major metropolitan areas in developing countries will be absorbing 95% of the overall urban population growth in the country. Without incorporating this urban population growth as an integral part of urban planning, this population influx into cities will largely result in slums, illegal habitats, and non-decent housing.

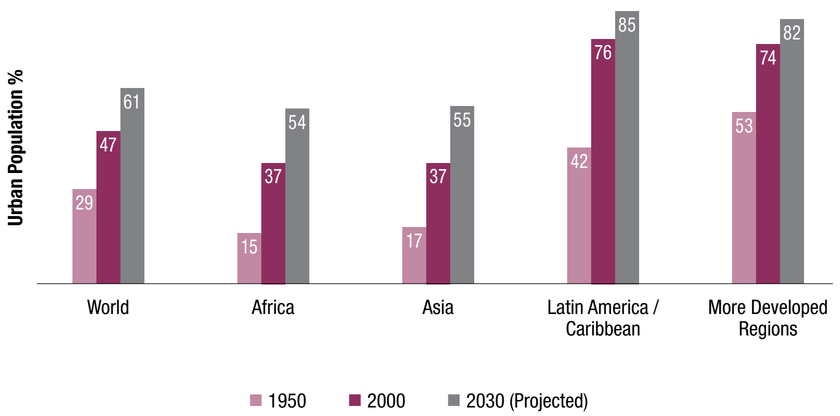
With this influx of population into cities due to migration from smaller towns and rural areas, urban planners need to take into consideration the following factors into planning:

- Changing size of persons per household (a cultural phenomenon driven by socio-economic factors).
- In the absence of proper urban planning, the cities are growing in circles around inner circles, rather than developing new cities and satellite towns outside major metropolitans.
- Low-Income Segment prefers to live close to the place of work.
- Redefining city limits with progressive Master Plans (urban/rural rezoning)
- Land prices force poor into suburbs/illegal habitat having no civic amenities, transport, utilities, while slums in inner circles of cities provide all these amenities-leading to slums growth.
- Failure or absence of an integrated housing and urban development function.

4. Urban slums

Massive urbanization into major metropolitan areas, in the absence of any urban planning to address this issue, is resulting in the development of more slums. Today more than one billion people around the globe live in slums; that means one out of seven persons on the planet. Figure 1 shows the trends in urbanization by region, and Figure 2 gives proportion of people living in urban slums.

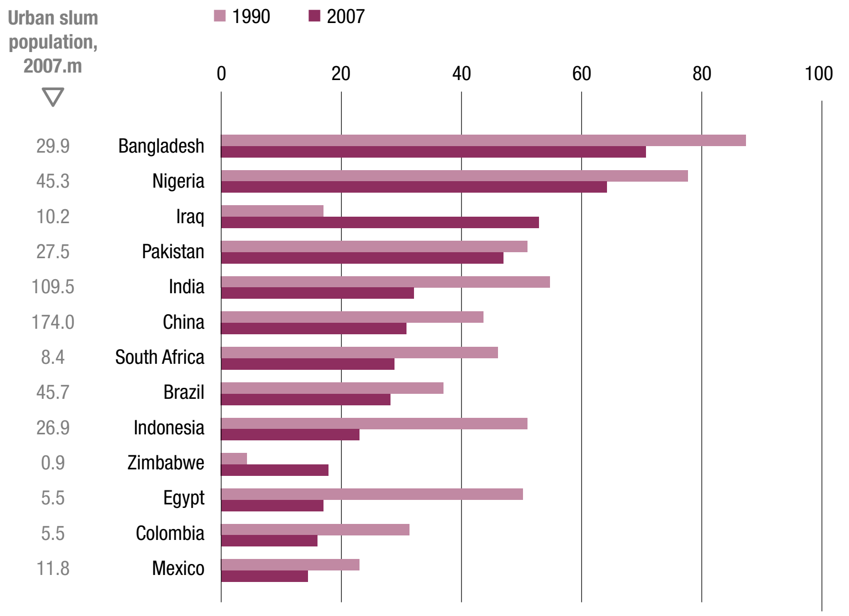
Figure 1 Trends in Urbanization by Region, 2003



Source: United Nations, World Urbanization Prospects

[2] IRTI-IDB occasional paper, 2012, OIC and IDB membership is the same.

Figure 2 Urban population living in slums, %



Source: UN-HABITAT

The three largest slums on the globe are:

- DHARAVI, MUMBAI-INDIA
  – The Mumbai slum ***Dharavi*** in India is one of the biggest in the world.
- ORANGI TOWN, KARACHI-PAKISTAN
  – Orangi Town is a town in the northwestern part of Karachi, Sindh, Pakistan, spreading over 22 square miles. It has a population of approximately 2.5 million although government records report 720,000 inhabitants (1998 census). It could be the largest slum in Asia, possibly surpassing Mumbai's Dharavi in terms of population.
- KIBERA, NAIROBI-AFRICA
  – Kibera houses almost 1 Million people. Kibera is the largest slum in Nairobi, and the second largest urban slum in Africa.

To address the issue of slums, the Urban Planners need to work on:

- Slums improvement and up-gradation programs.
- Slums resettlement programs.
- Incremental housing business model, both on the supply-side and demand-side.
- Plan and develop new settlements in suburbs equipped with physical, social and economic infrastructure.
- Linking the urban periphery with urban centers of commerce and business with suitable modes of communications.
- New satellite towns equipped with physical, social infrastructure, transport etc.
- On-going coordination and wisdom-sharing between urban planners, housing and urban development ministries, developers, fiscal and regulatory authorities and academia.
- Alternative options to act against slums prevalence, expansion, and inefficient use of land in the slums. Resettlement and rehabilitation projects to be designed with necessary government support for implementation.
- Regulations on densification: inner city expansion in circles around circles results in further densification.
- Business Models for private-public partnership.
- Compile and process data on urban-rural migration and take measures to regulate/control urbanization (Model of China).

Urban Planners would need to make interventions like:

- The numbers case: large numbers of dwellers offer benefits of economies of scale.
- The financial case: by providing security of tenure and access to services including financial services, the poor become keen to invest in their dwellings.
- The management case: urban planners need to recognize slums as part of the urban management challenge.
- The urban development case: Slums to be an integral part of the urban development strategy of planners
- The governance case: engage households and community leaders in slums improvement, rehabilitation or resettlement programs.
- The socio-economic case: integrate initiatives for development of social and economic infrastructure in slums.

5. Affordability

The affordability of affordable housing needs to be understood and defined:

Housing units being supplied by the market are considered 'affordable' since they cater for a "market segment" that can afford it. Market Housing meets the needs of the middle and high income segments, and does not address the real issue of affordability. In the market housing segment, the supply matches demand and at times may exceed it as well. The one-billion-dollar house in Mumbai-India is affordable, since Mr. Mukesh Ambani, the business tycoon could afford it. That calls for the need to define affordability by the target market.

Affordability is an issue for the low-income segment and Bottom-of-Pyramid [BoP], where the housing backlog and incremental demand is massive and supply is insignificant i.e., the social housing segment. While developers/suppliers need to bring down the housing cost, to be affordable by this market segment, the state has to play its role in addressing the fiscal and regulatory issues, and financial sector has to develop housing finance products which could suit the capacity of the borrowers from social housing segment. The fact remains that market forces/developers do not come forward with low-income housing supply due to viability constraints. Thus the affordability issue genuinely arises in segments having an acute affordability mismatch between income, housing cost and mortgage affordability. If the system will not offer them formal housing solutions, they will go outside the system and develop slums. In short, affordability criteria should be applied to and empower the shelter-less who cannot afford housing through the formal channels.

A home is defined as affordable, when 35-40% of the disposable income matches the equated mortgage installments [EMIs] and when loan to value (LTV) ratios are typically 70:30 or 80:20, and housing loans are of terms of 20-30 years.

In terms of the cost of an affordable home, the cost of a housing unit should be equal to

50-70 times of monthly income and EMI should be determined for a long term.

The above market norms are used for low and lower-middle income segments of the population [LIH] and do not necessarily apply in case of housing microfinance (for Bottom of the Pyramid –BoP), where an entirely different business model would be used.

Some of the country specific affordability definitions are;

- Affordability of finance:
  - India, Pakistan, Malaysia: EMI- 30 % of gross monthly income.
  - Thailand: EMI- 25 % of gross monthly income.
  - Philippines: Monthly amortization/rental at PHP 265 in first decile, PHP 388 in second and PHP 496 in third decile
  - Hong-Kong: HK uses median rent to income ratio as affordability yardstick
- Cost affordability:
  - India: supply- Area 300-600 Sq. ft., cost 4 times gross annual income.
  - In certain countries this ratio may be 5-6 times
  - Korea: housing affordability index - ratio of mean price of house to mean income of working class

6. Challenges of low income housing

The following is the set of issues and possible answers for addressing the challenges of low-income affordable housing supply and demand. These are specific for Asian region but most of them, with slight modification to meet local conditions, will also be applicable to the countries in Africa and Middle-East.

6.1. Supply Side

ISSUE: Supply of serviced land at affordable price: Availability of well-connected and well served land, affordable for low-income segments, remains a main concern in major metropolitan cities of Asia. ***ANSWER:*** Convert "Raw land" to "Serviced land" with Government's support in terms of physical, social and economic infrastructure provided by the state, to be a part of its affordable housing program.

ISSUE: Rising Construction Costs: According to developers across major cities in India, the construction cost in the recent past has increased by 15-20% per year. LIH is a 'low-margin' business making it less attractive especially in case of delays. ***ANSWER:*** Fiscal support in terms of waiver of Sales Tax, Import Duties and other levies on construction materials, the construction industry and developers.

ISSUE: Lengthy and complex approval process: This impacts construction timelines, project IRR and pricing. The approval fees/costs further add to the unit price. ***ANSWER:*** Simplify approval procedures, on-line status, monitoring, waiver or concession on approval fees, elimination of any duplication in taxation etc.

ISSUE: Developer /Construction finance from financial institutions and capital markets is not easily available to developers/construction industry, primarily due to absence of developer finance regulations in most of the countries. The Developers fund their projects through short term in-house funding or through customer finance by way of advances and accelerated payments. ***ANSWER:*** The Central Bank and Securities Commission to play a proactive role in facilitating market based supply of long term funding for the developers under a developer finance regulatory regime.

ISSUE: Absence of or insufficient fiscal support to LIH projects. ANSWER: Business models of indirect Cross-Subsidies and direct Smart Subsidies to LIH/EWS housing development schemes will provide fiscal support to them.

ISSUE: Absence of or insufficient building regulatory support to LIH/BoP Segments. ANSWER: Regulatory incentives in terms of Floor Area Ratios [FARs], Floor Space Index [FSI], and wherever permissible relaxation in Building Codes etc. This needs to be done without compromising on building quality.

ISSUE: Lack of external infrastructure. ANSWER: The Government needs to ensure that un-serviced Land for LIH projects is transformed to serviced land by way of external infrastructure in terms of roads, transport, communication etc., as well as provision of health and education. It will be further advisable to promote land banks, as the case may be.

ISSUE: Transport. In development of new habitats in the urban periphery, transport remains one compelling factor for the poor. ***ANSWER:*** At the initial stage of an LIH Project, basic public transport in such locations be provided at an early stage, while decent transport services should be a part of medium to long term urban planning.

ISSUE: Non-availability of Low-Cost Construction Technologies makes construction costs high and unaffordable to the target clientele. ***ANSWER:*** The Developers to be assisted and supported to import and indigenize low-cost construction technologies.

ISSUE: Lack of Low-Cost Construction Materials [CMIs]: Non-availability of low-cost construction materials makes construction cost high, and this unaffordable tom the target clientele. ***ANSWER:*** The Government to promote local development of low-cost construction materials, and regulate standardization of CMIs for use in LIH Projects.

ISSUE: Small size housing development schemes deprive the housing of the benefits of economies of scale. ***ANSWER:*** Manufacturing scale production. The development projects and the developers are of small size, and thus deprived of the benefits of economies of scale, and use of proven low-cost construction technologies. Low-cost construction technologies should aim at manufacturing scale production of housing.

6.2. Demand side

ISSUE: Mismatch of monthly mortgage vs income affordability. At lower income levels, propensity to save is low and sustainability is fragile. ***ANSWER:*** Housing finance products designed to suit repayment capacity of low-income clients, and may incorporate gradual rise in repayment installments, as the income will rise over the years.

ISSUE: Income assessment of informal income source, or issue of family vs individual income, undocumented income and so on. ***ANSWER:*** Use informal approaches to income assessment, and clubbing of family income to determine affordability.

ISSUE: Income sustainability for the long term remains an issue, while longer terms are needed to make mortgages affordable. ***ANSWER:*** flexible repayment plans, with flexibility of terms.

ISSUE: Seasonality of income is a critical factor, more so for workers engaged in agriculture or in industries related to agriculture like sugar manufacturing. If the regular housing finance products fail to address this issue the client will be deprived of any mortgage finance. ***ANSWER:*** Flexible repayment plans, with flexibility of loan repayment intervals.

ISSUE: Rate preferences. The poor prefer fixed rate mortgages [FRMs] while lenders prefer Adjustable Rate Mortgages (ARMs). ***ANSWER:*** Product designed to provide FRMs for fixed terms (say 5-7 years), and adjusted for rate with defined intervals during overall loan term of 25-30 years.

ISSUE: Long term liquidity/funding challenges. In the absence of market based instruments like bonds/securitization, housing finance institutions generally face long term liquidity shortages. This forces those to go for maturity mismatch or short term lending. ***ANSWER:*** Availability of long term liquidity institutions as well as instruments. A vibrant market for long term funding instruments like bonds and securitization is also a pre-requisite.

ISSUE: Title verification, lien registration costs/fees, lengthy and complex foreclosure process. ANSWER: Computerization of land records like Land Record Management Information System [LRMIS], a World Bank funded project in Pakistan, and efficient and effective foreclosure laws.

ISSUE: Cost efficient loan delivery and servicing. ANSWER: time driven systems and procedures, and use of physical and virtual branch network.

ISSUE: Awareness about mortgage finance providers/primary lenders, procedures and programs and applicable fiscal/regulatory provisions. Customers from the low-income segment generally lack awareness on housing finance, affordability, payment terms, bankable titles, and available fiscal/regulatory support. ***ANSWER:*** Awareness programs by lenders covering mortgage finance in the communities with the potential clients. Focus group discussions within the community may be of further help.

ISSUE: Specialized Housing Finance Institutions [SHFCs] are needed to finance the low-income Segment. In most of the countries in Asia-Pacific, either SHFIs are not functional, or their performance is abysmal, since generally they are in public sector. ***ANSWER:*** Develop SPHFIs and also learn from best practice in the region i.e., Government Housing Bank of Thailand (in the public sector) and Housing Development and Finance Corporation of India (in the private sector).

ISSUE: Commercial banks [CBs] prefer middle and high income market, while low-income segments make up a larger proportion of the population and truly deserve financial inclusion and economic empowerment. ***ANSWER:*** Low-income housing finance by CBs be placed under "priority lending" regulations of the central banks.

ISSUE: Housing microfinance institutions for Bottom-of-Pyramid [BoP]. Although Bottom-of-Pyramid makes a sizeable segment of the society, especially in urban areas, yet they are not served by housing microfinance instructions and products. ***ANSWER:*** Design specialized housing microfinance products, bankable land titles, alternate security options as well as non-conventional income assessment techniques. Microfinance institutions need the support of the central banks for long term liquidity so as to lend for medium and long term terms.

ISSUE: Financial inclusion: low-income segments and the population in smaller cities and towns are generally left out of any housing finance program by financial institutions. ***ANSWER:*** Ensure outreach and financial inclusion to low-income segments, through innovative channels like physical branches, virtual branches, service agents, mobile services etc.

ISSUE: Delay in home delivery by the developers leads to simultaneous payment of rent and EMI, which makes repayments unaffordable and may lead to default at the early stage. ***ANSWER:*** Address the issues of delays and build- in solutions in developer finance guidelines of the central banks.

ISSUE: Affordability and income mismatch. For low-income segments, the Government needs to play its role for economic empowerment of the poor. The least governments could do is give fiscal support to low-cost housing developers, and not to tax construction material used in development of low-cost housing ***ANSWER:*** Provide interest rate subsidy to low-income customers. Waive or subsidize levies like VAT, stamp duty and registration fees for low-income customers. In low-income housing, Governments cannot help the poor and tax the poor at the same time so there should be no taxation of low-income housing development.

7. Conclusion

Housing is a numbers game, the more people, the greater is the need for housing. The world population is growing faster in numbers, if not in rate of growth, and by 2050 it is expected to exceed the 10 billion mark. Urbanization is simply adding to the phenomenon of natural population growth in cities. At the same time serviced land as a primary ingredient of housing supply is not available to enable new habitats to be developed in an organized and civilized manner. Population growth rates are higher than the global average rate of 1.13% p.a. in the countries of Asia, Africa and to some extent in the Middle East. On the other hand, year-on-year incremental housing supply is falling much short of demand, simply adding to the already existing massive urban housing backlog. In most of the countries in those regions, there is hardly any program for rural housing supply and finance. Population growth, coupled with the impact of urbanization, is leading to mushrooming of slums in major metropolitan areas. The political leadership in the majority of these countries, while being cognizant of housing as a major social issue, has failed to offer a planned, viable and sustainable answer. It is critical for urban planners, with the support of the political leadership to ensure the supply of serviced land for the development of new and decent habitats, equipped with much needed social and physical infrastructure. The paper gives an overview of some of these issues with possible answers. It is imperative that the political leadership comes forward in a determined and planned manner, and pass on this mission to urban planners, academia, local government and fiscal and regulatory authorities. They need to implement short, medium and long term initiatives. There is an urgent need to increase the supply of low-income affordable housing, and to empower the low-income segment, with appropriate financial measures. These measures need to be implemented with the active involvement of all stakeholders and from the supply-side as well as the demand-side. Equally important is the need for intra-regional and inter-regional knowledge sharing so that best practice from within the region and around the globe could benefit planners, developers and financiers. For the sharing of knowledge and best practices, forums like the International Union for Housing Finance [IUHF], the Asia-Pacific Union for Housing Finance [APUHF] and the African Union for Housing Finance [AUHF] etc. could play a significant role.

Home ownership and income inequality in United States urban areas

↳ By Lijing Du, Michaël DeWally, YingYing Shao, Daniel Singer

1. Introduction

The incidence of home ownership in a market may be thought of as a function of income levels in that market, the desirability (amenity value) of the housing stock, and the cost of that housing. Insofar as the distribution of that income has an influence on home ownership, causation is thought to run from income inequality to patterns of home ownership (Beck, Demirguc-Kunt and Levine, 2007). However, a model of the relationship between income and home ownership may be obscured by endogeneity between the independent variables and the possibility of uncontrolled confounding elements (Alexandre, 2015). While inequality in urban areas is multi-dimensional whose causes are generally shifting from race to economic, demographic and social factors (Chakravorty, 1996), this study will focus strictly on the income dimensions of inequality. Following Scarpa (2015), this paper examines the implications of causation running from income inequality to home ownership. While the estimators generated by an OLS equation for home ownership where home ownership is a function of income inequality (among other factors) and therefore may be biased, they are not necessarily inconsistent (Greene, 2012). Variations in housing market characteristics can provide a useful framework for analyzing the factors influencing home ownership (Huang, 2014).

This study uses data provided by the Bureau of the Census, American Community Survey for 2013 (ACS, 2015). The American Community Survey samples about 3.5 million households every year to supplement the Census Bureau's decennial census program. The Survey covers a wide range of self-reported social, economic and housing data. While the one-year tabulation for 2013 covers 817 separate counties, this study utilizes the data from the 437 urban counties for which the relevant data is available in the 2013 survey.

The housing characteristics found in this survey confirm earlier research that local housing markets are characterized more by their homogeneity than their heterogeneity (Rickman and Guettabi, 2015). That is, differences between local housing markets generally exceed the differences within those housing markets. Spatial patterns of home ownership may yield insight into long-run housing tenure decisions (Lebo and Weber, 2015; Carruthers and Mulligan, 2013). The attributes of the relationships from this cross-sectional data are suggestive of long run characteristic relationships among the different variables. Thus, questions having to do with the short-run impact of the financial crisis of 2008 or other transitory events on income and home ownership patterns are addressed only indirectly through this study.

The overall rate for home ownership in the United States at the end of 2014 was 64% (Bureau of the Census, 2014). The average home ownership rate in the ACS counties used in this study was 62.5% with a standard deviation of 9.6%. The lowest percentage of home ownership was in Bronx County, N.Y. (18.5%) and the highest was Hunterdon County, New Jersey (85.4%).

On a policy level, the goal of home ownership may be seen as an important social marker. Home ownership may be seen as generating an array of social and individual benefits (McCabe, 2013; Mok and Lee, 2013). Current government policy to encourage home ownership relies on a market-based approach using government sponsored entities (GSEs: Freddie Mac, Fannie Mae, and the Federal Home Loan Banks) to provide incentives for financial institutions to increase the availability of mortgage funds for prospective homeowners. While this approach has worked well for upper and middle income households, its success with lower middle-income and poor households has been limited. Past attempts to increase home ownership by reducing credit standards have been disappointing (Barakovaa, et. al., 2014; McDonald and Stokes, 2013). Government policies focused on easing credit terms have often been counterproductive and led to increased alienation and disenfranchisement among lower income households (Smith, 2014; Clark, 2013; Bostic and Lee, 2008).

The results of this study suggest the need for a more comprehensive and nuanced approach to increasing home ownership among lower income households. Aside from social factors that increase the desirability of home ownership and economic factors that increase the ability to acquire a home and sustain its ownership, attention must be paid to the setting in which housing tenure decisions are made. In particular, we find that a more unequal distribution of income retards home ownership by weakening the traditional nexus of obtaining home ownership through the process of stepping up from rental housing to owner-occupied housing, where that process involves a progression from less expensive housing to more expensive housing. A diversified economic base which generates a more equal distribution of income in a given housing market appears to have a positive effect on promoting home ownership.

2. Literature review

The relationship between income and home ownership may be understood within the context of affordability (Stone, 2006). The decision for home ownership represents a balance between housing and non-housing expenditures that maximizes the utility of the individual or household. While the economic dimensions of home ownership are significant, the decision for home ownership is not a simple matter of identifying and discounting the net cash flows associated with ownership (Smith, 2014; Coulson and Li, 2013).

2.1. Amenity factors

Home ownership may generate utility for the individual or household from pride of ownership per se, a sense of permanence of place associated with ownership, the physical attractiveness of the dwelling, environmental advantages, closeness to nearby friends and relatives, ease of access to employment opportunities, and the desirability of nearby schools, recreation centers, parks, etc. (Linblad and Quercia, 2015; Morgenroth, 2014; Kemeny and Storper, 2012). These different factors may be seen as contributing towards the amenity value of a home.

Table 1 following shows the extent to which wide variations exist among urban counties in the amenity factors shown to be important in the home ownership decision. For example, while nearly half of the households in the average county are headed by a married couple, two-thirds of the counties actually experience a marriage rate for households between 41.7% and 55.9% and 5% of the households actually have a marriage rate of less than 34.6% or more than 62.8%. The remaining amenity values in Table 1 exhibit similar variance. This degree of variance is suggestive of the complex interplay of amenity factors in the ownership decision across urban counties.

The interplay among the various amenity factors between counties is specified in Table 2. The Value/Rent variable (the ratio between the average value of owned homes and rental units may be interpreted to measure the relative amenity value of owned housing in a county. The difference between the average value of owned housing and the value of rental housing is thought to represent the premium homeowners are willing to pay for that amenity value (Smith,2014). The high correlation between the value/rent ratio and the percent of married households suggests the important role the incidence of marriage in plays in the amenity value of a particular locale.

Research in sociology suggests marriage and concerns about schooling for children are important factors in the decision for home ownership (Sekkat and Szafarz, 2011). A higher rate of family formation (especially by marriage) may be expected to increase the demand for owner-occupied housing (Eriksen, 2010; Smits and Mulder, 2008). Families with children often consider the quality of their children's education to be an important amenity associated with home ownership (Read, and Tsvetkova, 2012). Todd and Teske (2015) found public school choice to be an important factor in locational decisions. The presence of school age children in the household may similarly be expected to increase the demand for home ownership as household location is such an important factor in accessing the educational system for younger children. It is generally felt that the quality of the education system available is higher where schools are supported by neighborhoods characterized by owner-occupied housing (Beracha and Johnson, 2012). Despite disagreements as to the magnitude of the impact of home ownership on the welfare of children, research overwhelming argues for a large positive educational benefit for homeownership (Barker and Miller, 2009).

Residential stability also plays a role in the home ownership decision. More stable neighborhoods may be seen as more desirable places to live and a better place to form social relationships and raise children (Read, and Tsvetkova, 2012). Chen, (2013) found both a positive ownership effect and a negative residential stability effect for adolescent educational success. Li (2014) found that ethnic homogeneity had a positive impact on housing prices because non-market social interactions influence people's preference and behavior. Stability in the neighborhood has been found to generate positive utility for homeowners (Yamamura, 2011). Yorukoglu (2002) found an exodus to suburbia as contributing towards urban inequality. Stable neighborhoods tend to encourage stability in social relationship which can be seen as producing positive utility (Patillo, 1998).

A fundamental assumption of this analysis is that there is a difference between the economic value and the amenity value of homeownership. The market price of a home expresses its value as an economic asset, but also includes the home's non-monetary amenity value to the homeowner. While the amenity value of owning a home cannot be measured directly, Krainer, and Wei (2004) and Smith (2014) have found that the ratio of home value to rent (Value/Rent) in a local real estate market serves as a good proxy for the relationship between the economic and amenity value of homeownership.

The number of individuals residing in a single household has important sociological and housing implications (Tscharaktschiew and Hirte, 2010). Bradbury (2014) has noted that house size has been increasing in the U.S. and is concerned about the sustainability of this trend. Changes in household size and composition have been found to impact optimal consumption decisions, including housing decisions (Bick and Choi, 2013). While it is possible in a given household more wage

Table 1 ACS Amenity Characteristics

COUNTY AMENITY FACTOR	HOUSEHOLD AVERAGE AMENITY FACTOR	HOUSEHOLD COUNTY STANDARD DEVIATION
% Married	48.8%	7.1%
% C School	33.0%	5.4%
% Not Moved	84.6%	4.6%
Value/Rent	62.700	9.510
H Size	2.610	0.231

% Married: % of population married
% C School: % of population with children older than 3 in school
% Not Moved: % of population residing in same residence 1 year previously
Value/Rent: the ratio of median owner-occupied housing value to average gross rent

Data from 437 ACS Counties, 2013

Table 2 Amenity Value Correlations

	% MARRIED	% C SCHOOL	% NOT MOVED	VALUE/RENT	H SIZE
% Married	1	-0.006	.386**	.531**	.412**
% C School		1	-.402%%	-0.81	.444**
% Not Moved			1	.319**	.416**
Value/Rent				1	-.129**
H Size					1

% Married: % of population married
% C School: % of population with children older than 3 in school
% Not Moved: % of population residing in same residence 1 year previously
H Size: number of persons in household

Data from 437 ACS Counties, 2013 *** P = .01, * P = .05* earners mean a larger pool of resources with which to gain home ownership, household size may also be an impediment to home ownership. If additional household members are unable to contribute to the earnings pool (e.g., children, the elderly, disabled individuals), such individuals may represent a claim on household resources that reduce the amount available to spend on housing.

Table 3 presents the relationships among the different amenity factors when home ownership is held constant across the counties. In Table 2, where variance in home ownership is not taken into consideration, no significant relationship is noted between children in school and marriage, whereas in Table 3, holding home ownership constant, a significant positive relationship is found between the incidence of married household and children in school. This finding present evidence that it is not the relationship between children in school and marriage that is important alone, but that home ownership is a catalyst in the positive relationship between marriage And children in school. Hence the sociological importance of home ownership. The partial correlations presented in Table 3 show a positive relationship between a married household and a household with children in school given home ownership. This shows the importance of home ownership in both dimensions of these utility-creating household circumstances. Similarly, the relationship between Value/Rent and the % Not Moved when home ownership is controlled for is no longer significant, suggesting the importance of home ownership in creating stable neighborhoods.

2.2. Cost and income factors

The data in Table 4 present the ACS data for cost and income factors in the surveyed counties.

Table 3 Amenity Value Partial Correlations (Controlling for Home ownership)

	% MARRIED	% C SCHOOL	% NOT MOVED	VALUE/RENT	H SIZE
% Married	1	.328**	-.029	0.131**	.563**
% C School		1	-.299**	.153**	.478**
% Not Moved			1	-.023	.149**
Value/Rent				1	-.197**
H Size					1

% Married: % of population married
% C School: % of population with children older than 3 in school
% Not Moved: % of population residing in same residence 1 year previously
Value/Rent: the ratio of median owner-occupied housing value to average gross rent
H Size: number of persons in household

Data from 437 ACS Counties, 2013 *** P = .01, * P = .05*

Table 4 ACS Cost and Income Characteristics

	AVERAGE	STANDARD DEVIATION
SMOC W	$ 1,450	$ 423
SMOC W/Med Y	0.027	0.005
$54,910	$ 54,910	$ 13,649
Mean Y	$ 72,714	$ 17,893
Y < 10k	0.072	0.028
Y > 200k	0.045	0.035
Gini	0.452	0.035

SMOC W: Selected Monthly Operating Costs with a Mortgage
SMOC W/Med Y: SMOC W/Median Household Income
Med Y: Median Household Income
Y< 10k: % Households < $10,000 Income
Y>200k: % of Household > $200,000 income
Gini: Gini Coefficient

Data from 437 ACS Counties, 2013

The ACS develops a measure of the cost of housing as Selected Monthly Operating Costs [SMOC] for owner-occupied housing with a mortgage (Schwartz and Wilson, 2014). Considerable variation is found in the costs of ownership from county to county as one standard deviation in this distribution amounts to 29% of the mean. Home ownership costs may vary from factors such as the simple fact that a house in Arizona requires less heating fuel than a house in Minnesota. In addition to variations in utility costs, maintenance costs, property taxes and various ownership fees vary considerably from locale to locale. SMOC data uses self-reported monthly expenditures on a first mortgage, a second mortgage, any home equity loans, homeowners' insurance, condo or Homeowners Ownership Association fees where applicable, taxes and utility expense.

A common approach to the decision for home ownership is to weigh the affordability of that decision. Factors to be considered in determining affordability include the price of housing, household income, utility costs, maintenance costs, insurance costs, taxes, and daily expenses (Carlyle, 2015). Some researchers use a gross measure of housing affordability by examining the ratio of housing price to income (Lin, et. al., 2014). Others distinguish between the short-run perspective of acquisition and the longer-run perspective of housing consumption. In this study, we follow Haffner and Heylen (2011) and use a ratio of continuing housing cost relative to income (SMOC W/Med Y) to measure affordability.

As indicated in Table 4, the fact that the mean exceeds the median of the income distribution suggests a highly skewed income distribution across ACS counties. Specifically, the difference between the average mean and the average median income across all counties is $17,804 with two-sample t-test of 16.54. That is, the difference between the mean and median income is both economically and statistically significant. The fact that the degree of skewness of the income distribution varies from county to county affects the interpretation of the degree of income inequality as measured by the Gini Coefficient. By definition, the Gini ratio is the ratio of the difference between the actual cumulative distribution of income (the Lorenz curve) and the cumulative distribution of income if all income were equally distributed. A Gini ratio of zero expresses perfect equality and a Gini ratio of one represents the maximum possible inequality.

As income increases or decreases in a particular area the effect on the distribution of income

Table 5 Cost and Income Correlations

	SMOC W	SMOC W/MED Y	MED Y	MEAN Y	Y < 10K	Y > 200K	GINI
SMOC W	1	.486**	.783**	.847**	-.414**	.837**	.246**
SMOC W/ Med Y		1	-.115*	0.021	.381**	.127**	.532**
Med Y			1	.952**	-.737**	.864**	-.204**
Mean Y				1	-.621**	.960**	0.072
Y < 10k					1	-.456**	.566**
Y > 200k						1	.246**
Gini							1

SMOC W: Selected Monthly Operating Costs with a Mortgage
SMOC W/Med Y: SMOC W/Median Household Income
Med Y: Median Household Income
Y< 10k: % Households < $10,000 Income
Y>200k: % of Household > $200,000 income
Gini: Gini Coefficient

*** P = .01, * P = .05*

Table 6 Cost and Income Partial Correlations (Controlling for Home ownership)

	SMOC W	SMOC W/MED Y	MED Y	MEAN Y	Y < 10K	Y > 200K	GINI
SMOC W	1	.560**	.874**	.887**	-.583**	.850**	.127**
SMOC W/ Med Y		1	.130**	0.191**	0.027	.224**	.246**
Med Y			1	.963**	-.710**	.898**	-0.021
Mean Y				1	-.645**	.967**	213**
Y < 10k					1	-.518**	.355**
Y > 200k						1	.339**
Gini							1

SMOC W: Selected Monthly Operating Costs with a Mortgage
SMOC W/Med Y: SMOC W/Median Household Income
Med Y: Median Household Income
Y< 10k: % Households < $10,000 Income
Y>200k: % of Household > $200,000 income
Gini: Gini Coefficient

*** P = .01, * P = .05*

the degree of income inequality may vary. The impact of a change in median income may be felt primarily at the lower end of the distribution or at the higher end of the distribution. Depending on where the impact of the change in income is felt, a given change in income can result in different changes in the Gini ratio.

This study finds great variation in in the response of the relative income levels of the poor, middle class and wealthy to a general increase in income. Thus, the same Gini ratio can reflect two entirely different distributions of income (Hagerbaumer, 1977). While a given change in median income may leave the Lorenz curve unaffected, a more likely occurrence is that the slope of the curve will change depending on whether the impact of the change in modality income levels is felt on the lower or upper end of the distribution (Krause, 2014). This means that variations in median income and the Gini Ratio will not be unambiguously correlated with each other. As a result, median income and the Gini Coefficient may have different and independent impacts on home ownership. Consequently, causation may be expected to flow from both median income and its distribution to the incidence of home ownership.

The correlations presented in Table 5 confirm the suspected relationship between the modality of the income distribution and the Gini Coefficient. While the overall impact of an increase in median income is to reduce income inequality, the correlation, though significant, is weak (-.204). Insofar as the incidence of the very poor (Y < 10k) increases, inequality will increase. Insofar as the incidence of the rich (Y> 200k), inequality will increase. Reducing the incidence of individuals at both ends of the income distribution will increase equality.

Table 5 shows a larger presence of the very poor is associated with lower housing costs (SMOC W). A larger presence of the rich is seen to be associated with higher housing costs (SMOC W). While median income is positively associated with housing costs (SMOC W), it is negatively associated with the relative cost of housing. This illustrates the positive effect of increases in income and the negative effect of relative income (that is, as housing becomes less affordable, home ownership decreases). This would suggest that the response of housing costs to income is inelastic because of the importance of amenity value in making the home ownership decision.

In Table 6, controlling for home ownership, the coefficient between SMOC W and median income remains positive, suggesting that among those who do not own homes, the response of housing costs to income is income elastic. In contrast, the coefficient between median income and costs relative to income turns from negative to positive. This suggests that those who do not own homes in a given market, are willing to spend disproportionately on home ownership. This possibility is reinforced by the fact that controlling for home ownership changes the relationship between median income and the Gini from significantly negative to a lack of significance. An implication of this change is that the distribution of income has a different effect on homeowners and non-homeowners.

3. Findings

As a consequence of the above relationships, their impact on home ownership may be summarized as follows:

Home Ownership = a + b_1 Amenity Value + b_2 Median Income + b_3 Cost + b_4 Income Inequality + e

Where:

Amenity Value = Value/Rent Ratio

Median Income = Median Household Income

Cost = Selected Monthly Operating Costs with a Mortgage

Income Inequality = Gini Ratio

Regressing these variables on home ownership yields:

Home Ownership =.773 +.263 Amenity Value + .531 Median Income - .468 Cost

(5.651) (6.732) (-6.310)

- .273 Income Inequality $R^2 = .552$ (1)

(-6.889)

t values in parentheses

The formulation for home ownership expressed in equation 1 explains more than half the variation in inter-county variation reflects the impact of amenity value, income, costs and income inequality examined above. The positive coefficients for amenity value and median income reflect the expected impact of those variables on home ownership as indicated in the above research. The negative coefficient for cost on home ownership is also as expected. The negative coefficient for income inequality (less inequality means higher home ownership) requires further consideration.

The correlation coefficient between median income and the Gini Coefficient in the survey counties is -.204 (significant at p = .01). The explanation for this is that while an increase in median income generally reduces the inequality of the income distribution, the impact of a change in median income can effect either the lower portion of the distribution or the upper portion of the distribution. Where the impact of an increase in median income is on reducing the incidence of lower incomes, the inequality of the distribution will be reduced. Where the impact of the increase in median income is to increase the incidence of higher income, inequality will be increased. The important insight provided by this equation is that any change in median income affecting home ownership will also have an effect on the distribution of that income which will also effect home ownership.

The reason for this may lie in the structure of housing values in a particular area. An area where the income distribution is more equal may be expected to have a diverse housing stock. Inexpensive homes for poorer households, more expensive housing for households with more income. Where the distribution of income is less equal the housing stock may be expected to be less diverse. Where the source of inequality reflects a concentration of high income households, the stock of inexpensive housing might be small, interrupting the normal progression of households from rental housing to low cost housing ownership. Where the source of inequality is from a preponderance of low income households, this may reflect the perception that the existing housing stock is so undesirable as to preclude a desire for home ownership (a slum effect). In either case, greater income inequality will have a debilitating effect on home ownership.

4. Conclusions

The above spatial analyses of home ownership patterns reveal the importance of the utility creating facets of home ownership in the decision to become a homeowner. This largely explains the past success of government policy by facilitating mortgage funds for middle and upper income households. This does not imply that future increases in home ownership rates can be accomplished by the same policies.

The findings above suggest that to increase home ownership (particularly among low income households) it is not sufficient to focus on policies designed to raise modal levels of income. It can be argued a free market approach to generally raising income levels is more advantageous to the already well-to-do than among the economically disadvantaged. An unintended consequence of such policies might be to create a less equal distribution of income, even though median income increases. It can be seen that in ACS surveyed counties a less equal distribution of income has a negative effect on the incidence of home ownership.

The findings above reveal that government strategies promoting home ownership in urban areas should consider which of those programs would have the effect of creating a more equal distribution of income, as well as considering programs which would increase income per se, or increase accessibility to mortgage funds. Such policies are likely to be most effective when directed towards those at the lower end of the income distribution. Thus an alternative to directly promoting home ownership by increasing the availability of mortgage funds or promoting programs designed to solely raise modal income, home ownership can be facilitated by focusing on the basics of increasing the earnings power of low income prospective home owners. Imbroscio (2013) argues the necessity of a shift from redistributive policies to equity building policies. What better way to build equity for low income households than home ownership?

This would allow currently economically disadvantaged individuals to better utilize the existing conventional mortgage facilities to realize home ownership. While this might be too slow an approach for contemporary politicians (Jacobs and Manzi, 2014), the above spatial analysis suggests that programs specifically targeting low income households in order to reduce inequality in the distribution of income could be a significant factor in increasing urban home ownership.

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