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The Quarterly Journal of the International Union for Housing Finance

- How might the coronavirus crisis affect the financial system and housing finance in the longer term?
- Decoding a new reality: what does Covid-19 mean for affordable housing finance in Europe?
- An exploration of black housing and wealth inequality in the suburbs: a call to action
- Covered Bonds, between innovation and tradition: building the Capital Markets Union and shaping a greener future
- Aligning public-private partnerships to deliver affordable rental stock: the Low-Income Housing Tax Credit [LIHTC] program in the United States
- The rise of impact investing stimulating investment in housing

International Union for Housing Finance

Housing Finance International

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A time for re-appraisal

The COVID-19 Pandemic necessitates re-appraisal of short-and long-term assumptions about housing and mortgage markets. The impact of the disease itself has been severe enough with the World Health Organisation estimating a total of 7.15 million confirmed cases and 408,000 deaths across the globe at the time writing (10 June 2020).

The measures taken to contain and/or reduce the incidence of the virus have had devastating short-term consequences which will in turn directly or indirectly have longer terms impacts. It is still too early to fully quantify estimates of even immediate effects, but the UK provides some graphic examples. UK GDP fell by 5.8% year on year in March 2020 – the month the UK lockdown was introduced. Residential property transactions were a staggering 53% down in April 2020 compared to April 2019[1]. House prices fell by 1.7% between April and May 2020 with further falls almost certain[2].

In terms of housing finance there is clearly a need for information and analysis of what is happening in the short term. This revolves around collation and analysis of immediate impacts of the pandemic and the response by governments from around the world as they try to contain the disease and alleviate the consequences for those whose incomes and living standards have been adversely affected by those same measures. In terms of housing finance, these measures revolve around requiring lenders to exercise forbearance, most commonly in the form of delaying mortgage and rent payments in various ways and in curtailing the ability of lenders to take enforcement action against borrowers in default. This issue of Housing Finance International [HFI] contains a series of well-informed topical regional articles all covering the financial and market impact of the pandemic and immediate response measures in countries as far apart as Singapore, France and Peru. These articles form an invaluable resource.

Important as the short-term implications of the crisis are, we cannot afford to delay the process of coming to understand the longer term economic and market impacts. Inevitably, no such analysis can be definitive; the longer-term impacts on the economies of the world, on government policies and on housing finance systems are still unfolding and crucial data is still emerging. Nevertheless, the task of understanding how our world may change and what we should prepare for has to begin, although any conclusions must be tentative and subject to update and subsequent revision. Again, HFI is making its contribution. In his article *How might the coronavirus crisis affect the financial system and housing finance in the longer term?* Rob Thomas asks some important questions about the likely future role of governments and central banks as well as lenders themselves and offers some tentative suggestions on key questions such as the likely direction of interest rates, inflation and money supply. This article will be revised later in the year to reflect the latest data, and analysis.

In a similar vein we are pleased to present a short article by Saskia van Balen of EFL, *Decoding a new reality: what does Covid-19 mean for affordable housing finance in Europe?* Van Balen examines how affordable housing providers are already adapting to a new situation and highlights some major issues such as future availability of capital funding and the need to contain costs in the future.

The pandemic is not the only event to necessitate widespread re-appraisal across the globe. The conflagration in the US caused by the death of George Floyd has re-ignited fierce debate in many countries about race, racism and the appropriate response. In this context we offer a highly topical article by Joseph Fraker, *An exploration of black housing and wealth inequality in the suburbs: a call to action*. Fraker acknowledges the importance of housing equity in personal wealth creation and goes on to analyse the relative values of homes owned by blacks and whites in US suburbs as well as, crucially, the rate of accumulation of equity through increases in house prices. His analysis is striking; not only are house prices significantly lower in black areas but African American owners do not benefit from the same rate of price increases. Indeed, many African Americans have seen the value of their homes fall in recent years. The article makes compelling if uncomfortable reading.

The article by Luca Bertalot of the EMF-ECBC, is entitled, *Covered Bonds, between innovation and tradition: building the Capital Markets Union and shaping a greener future*. The article sketches the history of covered bonds and then goes onto look at recent developments including "green" covered bonds and the role of covered bonds in the EU Energy Efficient Mortgages Initiative.

Our next article also focusses on the US, although this time it highlights a success story. The article, by Christopher Feather, describes the system of Low-Income Housing Tax Credits and their role in enabling over $190 billion in funding for affordable rental housing across the US. Feather examines how the system works and how it has performed over a period of more than thirty years. This article is well worth reading.

Affordable housing is also the theme in the article, *The rise of impact investing stimulating investment in housing* by Josie McVitty. The article focusses on the increasing level of interest in impact investing, which seeks social and environmental benefit as well as financial return. McVitty assesses the potential for this type of investment in the affordable housing field.

On a lighter note we are pleased to report that the World Bank has worked with the IUHF on its Call for Papers on affordable housing. This exercise has produced a crop of excellent articles on affordable housing initiatives that have been judged on their use of partnerships, their originality and their replicability in different markets. An international team of experts has assessed the contributions and we are pleased to announce that the winning article is:
Affordable housing finance for non-formal workers, by Widya Estiningrum, Achwal Farisi, and Yesi Septiani.

The runner-up is:
***Partnership and financial innovation: unlocking affordable housing markets across urban Africa and Asia*, by Dr Andrew Jones and Lisa Stead**

Both articles will be published in the Autumn 2020 issue of HFI: watch this space!

Andrew HEYWOOD
June 2020

[1] Office for National Statistics

[2] Nationwide HPI

Contributors' biographies

Luca Bertalot is Secretary General of the European Mortgage Federation – European Covered Bond Council. Previously, he was a financial analyst in Italy and Australia. He is a graduate in Economics and Financial Markets (University of Rome, Tor Vergata) and has also studied at the University of Mannheim and the Wharton School – University of Pennsylvania.

Claudia Magalhães Eloy is a consultant on housing finance and subsidy policy in Brazil, who currently works for FIPE [Fundação Instituto de Pesquisas Econômicas] and has worked for the World Bank [TA] and for the Brazilian Ministry of Cities and Companhia de Desenvolvimento Urbano e Habitacional of São Paulo [CDHU]. Claudia has also participated in the development of the National Housing Plan, in the analysis of the Housing Finance System. She holds a PHD in Urban Planning at the University of São Paulo [USP], a Master in City Planning at the University of Pennsylvania, a Master in Public Administration at Bahia's Federal University [UFBA] and a BA in Architecture and Urban Planning [UFBA], with a specialization in Real Estate Finance at the Brazilian Economists Order [OEB]. She also attended Wharton's International Housing Finance Program.

Christopher Feather is the Executive Director of Kalamu Consulting. He advises developed and emerging markets on ways to strengthen their housing finance sector. His previous work includes UN-Habitat, Ginnie Mae and the U.S. Department of Housing and Urban Development (HUD).
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Joseph Fraker graduated with a Master's degree in Urban and Regional Planning from Virginia Tech in 2019. As a student, he focused on home equity disparities in metropolitan areas in the United States. He currently works as an urban planner in Baltimore, Maryland. He can be reached at *jfraker@vt.edu*

Andrew Heywood is an independent consultant specialising in research and analysis of housing and mortgage markets, regulation and policy with both a UK and international focus. He is a visiting fellow of the Cambridge Centre for Housing and Planning Research [CCHPR] and a research fellow with the Smith Institute. He is also Editor of the journal Housing Finance International. Andrew writes for a number of publications on housing and lending issues and publishes reports commissioned by a wide range of clients.
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Christian König is the Managing Director of the European Federation of Building Societies in Brussels, Belgium and of the Association of Private Bausparkassen in Berlin, Germany. His scope of work includes the evaluation of legislative proposals in the field of banking, contract and consumer protection law, as well as housing policy of the European Union and of other German regulatory and legislative institutions. He holds a degree in German law, a French diploma degree in comparative law and a Masters in European Law.

Josie McVitty has 10 years' experience in the housing sector with a focus in investment, international development and strategy. She is currently based in London working with the private equity firm, Actis, and has previously had roles with International Housing Solutions, the World Bank and the Affordable Housing Institute.

Joost Nieuwenhuijzen is the Managing Director of the European Federation for Living [EFL]. He graduated as a Town planner and Master in Real Estate at the University of Amsterdam. After his master studies, Joost developed a professional career in the social housing sector. He has been the Managing Director of EFL since 2006 he is Managing Director of EFL, European Federation for Living. EFL is an international network in the housing industry, active in 14 countries, 70 members and covering 1,5 million homes in Europe.

Edward Pinto is an American Enterprise Institute [AEI] resident fellow and director of AEI's Housing Center. The Center monitors the US markets using a unique set of housing market indicators. Active in housing finance for 44 years, he was an executive vice president and chief credit officer for Fannie Mae until the late 1980s.

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.
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Rob Thomas is a leading UK expert in mortgage and housing research. He was an economist at the Bank of England, a financial analyst at UBS Warburg and he initiated the European mortgage finance agency project. He developed the blueprint for the NewBuy mortgage scheme and is now Director of Research at Instinctif Partners.

Saskia van Balen is a 27-year-old entrepreneur and legal expert living in Amsterdam. As a student, she worked for the European Federation for Living (EFL). After having obtained her Master's degree in tax law, she continued to work for EFL in various projects.

Asia-Pacific Region

↳ By Zaigham Mahmood Rizvi

Australia

New South Wales (NSW) social housing gets $60.5 million upgrade as Covid-19 Rescue Package

The NSW Government announced that $60.5 million of its $2.3 billion Covid-19 rescue package will be dedicated to revitalising public housing. The funds will be used for repairs, upgrades and maintenance works on social housing properties, half of which will be located in regional NSW. The NSW Land and Housing Corporation (LAHC) will spend $47 million of the $60.5 million on providing emergency accommodation in response to the coronavirus crisis. According to a statement from the NSW Government, the repair and maintenance works will include electrical, kitchen and bathroom maintenance to refurbish 142 units. The funds will also aim to ensure that housing can be delivered at a lower price than the typical rental costs of emergency accommodation.

Tenants on the public housing priority list will be placed into emergency housing, said NSW Minister for Water, Property and Housing Melinda Pavey.

"This $60.5 million stimulus program delivers important public housing upgrades and new supply, while generating vital employment and economic relief at this critical time," she said.

"This unprecedented crisis calls for different thinking and innovative approaches, to protect jobs and support the economy, our communities and vulnerable people and that is exactly what we're doing."

(Source: https://au.finance.yahoo.com/news/nsw-social-housing-020029321.html)

Fast-tracking development in NSW: genuine reform or rent-seeker give-away?

In response to the COVID-19 crisis, the NSW Government announced a Planning System Acceleration Program to "cut red tape and fast-track planning processes to keep people in jobs, boost the construction pipeline and keep our economy moving". (New South Wales is a state on the east coast of Australia. It borders Queensland to the north and Victoria).

The proposed reforms include the co-funding of community infrastructure in North-West Sydney and more ministerial decisions to fast-track development applications and rezoning.

The Government says the reforms will create more than 30,000 construction jobs in the next six months.

(Source : https://www.thefifthestate.com.au/urbanism/planning/fast-tracking-development-in-nsw-genuine-reform-or-rent-seeker-give-away/)

The Australian Government to consider rebuilding employment against the backdrop of the COVID-19 pandemic

The Think Tank's authors explain that this recession is indeed very different – no government has ever tried before to put the private sector into "hibernation" – and thus traditional ideas for government stimulus aren't best suited to "thawing".

"Usually when parts of the economy are contracting, because of private sector decisions, governments do what they can to stimulate economic activity," the paper says.

"In Australia today it is government decisions to shut down most of the tourism, retail and hospitalisation industries that are causing the economy to contract and, in turn, traditional government policy to 'stimulate' the economy is inherently less effective than ever before.

"As a result, the design of fiscal stimulus must be more creative than ever before."

(Source: https://thenewdaily.com.au/finance/finance-news/2020/04/21/coronavirus-employment-michael-pascoe/)

Bangladesh

The woes of the construction sector and its ancillary industries in the Pandemic

COVID-19 is anticipated to have a grave impact on the real estate sector, particularly its ancillary industries as well as the construction sector, and Bangladesh is no exception. In turn, it will have some dire consequences for the housing sector as a whole.

Except for a few government development projects, both the construction and the real estate sector is in a kind of purgatory state. The fate of millions of formal and informal workers in the steel, cement and the construction industry – not to mention hundreds of small and medium businesses and trades – are hanging in the balance. According to the President of Bangladesh Steel Mills Owners Association, the first two weeks of March alone saw steelmakers incur losses amounting to BTk35 crore (A Crore is 10 million) or over US$4 million. By the estimation of the Asian Development Bank (ADB), the construction sector could lose about $400 million over one year due to the coronavirus pandemic.

The steel industry of the country has seen amazing growth in the last decade. There are 40 active mills in the country capable of churning out nine million tons of steel every year – exceeding the national demand of eight million tons. This achievement was possible thanks to the introduction of several state-of-the-art manufacturing technologies and easier access to raw materials – most of which are generated from imports and the shipbreaking yards of Chittagong. However, the situation is completely different in COVID-19 situation.

Aside from a few rolling mills still operating in a limited capacity, all the melting plants were forced to shut down due to a shortage of raw materials. The last of the steel mills shut down on April 9, which were of the giant of the industry - the Bangladesh Steel Re-Rolling Mills Ltd., (BSRM). The only reason they were able to hold on to the thread for this long was because they had a stockpile of their own raw materials – something the small-to-mid-sized steel makers did not. So, one by one, the factory doors began to shut down after the nationwide general holiday was declared in March.

A significant portion of raw materials necessary for steel manufacturing are imported from abroad. 90% of those imports are from the US, Canada, Italy, UK and Australia. All of these places are in complete lockdown right now, with nothing getting in or out. As a result, supply has completely dried up.

(Source: https://www.dhakatribune.com/business/real-estate/2020/04/21/the-woes-of-the-construction-sector-and-its-ancillary-industries)

Fiji

Fijian Ministry to assist residents in informal settlements

The Minister of Industry, Trade, Tourism, Local Government, Housing and Community Development, Hon. Premila Kumar recently visited the Waidamudamu informal settlement, to inspect damage caused by Tropical Cyclone Harold.

The Minister said whilst tropical cyclone Harold directly impacted mainly Kadavu and the Lau group, a number of families in the Western and Central divisions were also affected by strong winds and flash flooding, particularly those living in informal settlements.

"Our most urgent priority now is to rebuild, within the Suva lock-down area, to enable families to live in their own homes and avoid the risk of spreading of COVID-19 in our informal settlements and Waidamudamu is our focus right now," said the Minister.

Hon. Minister Kumar added that a team from the Ministry had carried out an assessment of informal settlements in the Suva lock-down area and confirmed that seven (7) homes in Waidamudamu had suffered significant damage to their roofs from strong winds, and a further 59 houses also sustained damage that is now being repaired. With the exception of two families, most of the residents have returned to their homes.

"The Ministry conducted detailed assessments of the seven (7) homes and is making arrangements to assist these families withdraw funds from the Fiji National Provident Fund to buy necessary materials"

"The Ministry will also assist in the procurement of materials and will deploy a team of carpenters from the Ministry team and the Public Rental Board (PRB) maintenance team, to assist in the rebuilding efforts," Hon. Kumar said.

Waidamudamu informal settlement is being upgraded by the Government to improve the quality of life of 270 families who live in this area. The construction work is progressing well and after completion, the residents will be issued with 99-year leases.

(Source: https://reliefweb.int/report/fiji/ministry-assist-residents-informal-settlements-following-post-tc-harold-assessment)

Relief packages for Housing Authority and Public Rental Board (PRB) customers

The Public Rental Board (PRB) and Housing Authority (HA) of Fiji are offering relief packages for customers directly affected as a result of COVID-19. The Minister for Industry, Trade and Tourism Premila Kumar announced the decision. However, she cautioned customers that while the relief options would provide temporary relief, they were likely to increase the total amount owing on a loan. She said a relief package was also being offered to Public Rental Board (PRB) tenants, whose income had been directly affected by the current COVID-19 pandemic, allowing these tenants to apply for rental payment deferment for the next three months. Applications for both HA and PRB relief options can be submitted to the respective regional offices along with a supporting letter from the employer confirming their current employment status or a statutory declaration for those who are self-employed.

The Housing Authority of Fiji is currently providing loans to 2,772 customers, whilst PRB is currently providing 1625 rental flats for its tenants.

These relief packages for both the HA and PRB are for three months and will be reviewed monthly as the situation evolves.

(Source: https://www.fijitimes.com/covid-19-housing-relief/)

Fijian Government focusing on rebuilding Suva homes damaged in tropical cyclone and containing spread of COVID-19

The Fijian Government is focused on rebuilding homes damaged during Severe Tropical Cyclone Harold in the Suva lockdown area to minimise the risk of the spread of COVID-19, says Housing and Community Development Minister Premila Kumar.

"Our most urgent priority now is to rebuild within the Suva lockdown area to enable families to live in their own homes and avoid the risk of spreading of COVID-19 in our informal settlements and Waidamudamu is our focus right now," she said. Mrs Kumar said a team from the ministry had carried out an assessment of informal settlements in the Suva lockdown area and confirmed that seven homes in Waidamudamu had suffered significant damage to their roofs from strong winds and a further 59 houses also sustained damage that were now being repaired.

She also said 59 families affected could also approach the ministry if they required assistance and this would be assessed on a case-by-case basis.

Mrs Kumar said Waidamudamu was being upgraded by Government to improve the quality of life of the 270 families who lived there.

(Source: https://www.fijitimes.com/stc-harold-focus-on-rebuilding-damaged-suva-homes/)

Hong Kong SAR

Housing in super compact Hong Kong – will there be failure or success?

Hong Kong's compact urban structure is the world's most efficient and convenient urban system. Its nine new towns and the urban core comprise a decentralised but highly concentrated nodal development, with high rises of 40 stories and population densities of up to 130,000 persons per square kilometre. This enables the operation of an efficient, highly patronised and profitable public transport system that carries up 90% of travel trips. It also allows for the provision of a fuller range of community and retail services within walking distance of residential areas.

But like most compact cities, Hong Kong suffers from exorbitant housing and land prices due to the restrained supply of developable land. The price-to-income ratio is 20.8 for a median home. There are other compounding land supply factors affecting housing production. Around 78% of land is hilly terrain and the planning process is delayed by increasing politicisation of public affairs. This adds to controversies in planning matters and intensifies public participation in planning processes, increasing uncertainties in the supply of developable land.

The government's projections for future housing demand are predominantly based on local demographic changes and downplay external demand. As a global city with a low-tax economy and an open housing market, Hong Kong attracts global and regional buyers. Between 2011 and 2012, around 32% of buyers in the primary market were non-local or company buyers. Further fuelling demand in recent years is the global financialisation of housing – housing being increasingly treated as a financial investment product rather than a social good.

As all land is government-owned, the Government can and indeed does provide public housing on a large scale. Approximately 29 and 15% of the population live in subsidised rental and owner-occupier housing respectively. Unlike home-owning Singapore, preference is given to providing public rental housing to low-income families, a legacy of providing cheap labour to support manufacturing industries in the 60's and 70's.

(Source: https://www.eastasiaforum.org/2020/04/03/is-housing-doomed-to-fail-in-super-compact-hong-kong/)

In Hong Kong, housing loans exceed value of properties in first quarter

In Hong Kong, many homebuyers are on the verge of falling into negative equity, after the prices of flats in some housing estates declined by more than 10% from October last year. Negative equity occurs when a home loan exceeds the market value of the property involved. The last time the city recorded more than 1,000 such cases was in the second quarter of 2016, when it reported 1,307 instances of negative equity. The surge could also deepen a correction in home prices in the coming months. There were 128 cases of negative equity in the three months ended December 31, according to Hong Kong Monetary Authority data. This means instances of negative equity could have risen by 680% by the time the authority releases data for the first quarter of 2020 by the end of this month.

"The number of negative equity [homeowners] might rise above 1,000 in the first quarter this year," said Ivy Wong, managing director of Centaline Mortgage Broker.

The massive jump in cases comes after the Hong Kong government relaxed mortgage-lending rules in October 2019, allowing first-time homebuyers to secure loans worth up to 90% of a flat's value, for old homes worth up to HK$8 million (US$1.03 million), up from the HK$4 million previously allowed. The sales of such homes jumped 34% to 3,804 homes in November, from a month earlier, according to data from Midland Realty.

(Source: https://www.scmp.com/business/article/3080115/more-1000-hong-kong-homeowners-could-see-loans-exceed-value-properties)

India

As of February 2020, 3.2million homes completed under Prime Minister Awas Yojna (PMAY)

The Housing and Urban Affairs Ministry said on Monday that 3.21 million houses have been constructed and delivered so far under the Pradhan Mantri (Prime Minister) Awas Yojana-Urban (PMAY-U), out of the total sanctioned 10.3 million houses. In a written reply to the Lok Sabha, the Minister in-charge Hardeep Singh Puri said that around 6.05 million units were at various stages of construction.

"Based on the project proposals received so far from the States/Union Territories (UTs), a total 10.3 million houses have been sanctioned under the scheme; out of this, 6.05 million are at various stages of construction and 3.21 million are completed/delivered," the Minister said.

According to Mr Puri, States and UTs have been requested to get sanctioned by March 2020 the project proposals for all their remaining demand of houses so that construction of all houses may progressively be completed by 2022.

In December, a total of 670,239 houses were sanctioned by the Centre, Mr Puri said, adding that the assistance under the scheme from the Centre to the states and UTs has so far been Rs 63,676.50 crore (Rs.636,765 million).

(Source: https://www.ndtv.com/business/32-lakh-homes-completed-under-prime-minister-awas-yojna-2177942)

COVID-19 lockdown shows India may need social rental housing

The exodus of migrant workers – including children and the elderly – immediately after the announcement of the nationwide lockdown to curb the spread of the novel coronavirus disease (COVID-19), is a good reminder of the clamour for homes in India. The gathering of over 1,000 migrant workers in Mumbai and the hostility with which they were met, was one instance of the kind of distress migrants faced. India is currently suffering a reverse migration trend where several thousands of workers, facing a long-term loss of their livelihoods, are undertaking long journeys to return home to their villages and towns, in several cases undertaking journeys of hundreds of kilometres on foot. Many of these workers are not likely to return back to their workplaces, and thus will cause shortage of workers at construction sites. State governments – including those of Odisha and Delhi – requested landlords to waive or defer rents for poor tenants in the wake of the migrant crisis. This was done as state governments do not have adequate shelter for thousands of migrants. Delhi, for instance, is making efforts by using their infrastructural capacity – including temporary shelters in school – to house 18,478 people.

The situation brings to the surface an important housing typology, amiss from the national and state-level housing regime: Social Rental Housing (SRH), where rent is set at a level below market rates to make it affordable for the poor and lower-income segment.

State governments currently prioritise the construction of houses with a view to hand them over to beneficiaries. The Pradhan Mantri Awas Yojana – Urban (PMAY-U) is India's attempt to shorten the housing gap in the country. PMAY-U is implemented through various steps including in-situ slum redevelopment.

(Source: https://www.downtoearth.org.in/blog/governance/covid-19-lockdown-shows-why-india-needs-social-rental-housing-70555)

In India, the COVID-19 impact on housing finance

In India, one of the sectors most affected by the outbreak and the consequent lockdown is real estate and housing finance. The slowdown in real estate and housing finance began after the Infrastructure Leasing & Financial Services [IL&FS] crisis in September. The liquidity crunch in housing finance companies and non-banking financial companies (NBFCs) impacted construction activities. Things improved a notch after the government and the central bank intervened. Yet, housing finance did not pick up as expected due to low demand as the economy slowed post the FY20 Budget. There is a huge unsold housing inventory piled up over the past four years in nine major cities worth IRs 6 lakh crore, according to the online realty portal Prop Tiger.

The Government took a view of measures to revive the economy and the real estate sector by setting AIF (Alternate Investment Fund) of IRs 25,000 crore to provide last-mile funding to about 1,600 stalled projects at different stages, increasing income tax exemption on housing loans of IRs 2.5 lakh to IRs 3.50 lakh for affordable housing, and many other measures to boost supply and demand.

Whatever visible uptick the measures had brought about has been wiped out by the coronavirus pandemic. All sectors of the economy are badly hit with immediate high impact on domestic service sectors such as tourism, aviation, hospitality, auto/taxi, small business, retail, food and beverages, etc.

(Source: https://www.fortuneindia.com/opinion/the-covid-19-impact-on-housing-finance/104410)

Aavas Financiers gains on securing ADB loan to boost housing finance in India

Aavas Financiers Limited (formerly known as Au Housing Finance Limited), [AAVAS] is primarily engaged in the business of providing housing loans to customers belonging to the low and middle income segment in semi-urban and rural areas. These are creditworthy customers who may or may not have the income proof documents like IT return, salary slip and hence are financially excluded by other large housing finance companies and banks. AAVAS uses unique appraisal methodology to assess these customers individually. The financing solution needs to be appropriate and suitable for them

The Asian Development Bank (ADB) has signed an agreement to lend up to $60 million in

Indian rupee equivalent to Aavas Financiers (Aavas), to improve access to housing finance for lower-income borrowers in the country, particularly women. The loan is disbursed under ADB's project for supporting access to housing finance for women in lower-income groups and in lagging states. Aavas will use the funds to provide housing finance to women in low-income communities either as primary borrowers or co-borrowers.

India is experiencing a severe housing shortage estimated at 18.7 million units in urban areas and 43.7 million units in rural areas, mostly affecting low-income groups. They face several challenges in obtaining mortgages including a lack of documents to prove their incomes. Aavas is one of the largest housing finance companies in India's affordable housing segment. It has more than Rs 7000 crore in assets under management and 245 branches across 10 states as on 31 December 2019.

(Source: https://www.business-standard.com/article/news-cm/aavas-financiers-gains-on-securing-adb-loan-to-boost-housing-finance-in-india-120033001134_1.html)

Indonesia

Mortgage subsidies accessible to more citizens as Indonesia hit by pandemic

The Government has rolled out new housing loan subsidies and opened the door for more citizens to access this facility amid the COVID-19 pandemic, which is expected to disrupt businesses and hit people's purchasing power.

It launched Rp 1.5 trillion (US$89.7 million) in mortgage subsidies for 175,000 low-income families nationwide and increased the salary ceiling for eligible recipients to Rp 8 million for all types of housing from the previous Rp 4 million for landed houses and Rp 7 million for low-cost apartments. The new provision takes effect on April 1. The minimum wage varies across the country with a range of between Rp 1.7 million and Rp 4.3 million per month.

"We hope that housing subsidies will help low-income households to acquire decent and affordable housing, especially in the difficult times of the COVID-19 pandemic," Public Works and Housing Ministry, Director General Infrastructure Financing Eko "Heri" Djoeli Heripoerwanto said in a press statement. Heri explained that the stimulus would be in the form of interest rate subsidies for loan instalments (SSB) and down payment subsidies (SBUM). Out of the Rp 1.5 trillion, Rp 800 billion will be used for SSB and Rp 700 billion for SBUM.

The housing subsidies are part of a Rp 10.3 trillion stimulus package announced by the government in February to cushion the impacts of COVID-19 on household spending. The pneumonia-like disease has infected more than 1,700 people in the country with 170 fatalities and disrupted business activity as citizens are told to stay at home to limit the virus spread.

(Source: https://www.thejakartapost.com/news/2020/04/03/mortgage-subsidies-accessible-to-more-citizens-as-indonesia-hit-by-pandemic.html)

Japan

Japan's homelessness problem – a problem brought to light by corona virus

Japanese authorities are rushing to house thousands of homeless people following the closure of internet cafes in several major cities. The cafes have become a common destination for those without secure housing. A social stigma is attached to homelessness in the country with many accustomed to life-long employment. Those who find themselves unemployed often endure a daily routine of cramming themselves into the cafes' box-like spaces. There is usually an array of caffeinated drinks on offer in a dazzling corner of the facilities, which bear some resemblance to shelters and hostels, but most arrive merely to retreat to the dingy corridor where they will find a booth barely big enough to squeeze into alongside their entire belongings. They serve to provide some precious privacy and respite for up to 12 hours though, costing as little as 2,000 Yen (around £15).

It may be noted that, these internet cafes have served to obscure Japan's homelessness rate, with the Ministry of Health, Labour and Welfare reporting last year that the total was just 4,977 people.

(Source: https://www.independent.co.uk/news/world/asia/coronavirus-japan-tokyo-internet-cyber-cafe-refugees-shinzo-abe-a9470346.html and https://www.bbc.com/news/world-asia-52265917)

Malaysia

Malaysian central bank report: relative to income, Malaysian house prices remain seriously unaffordable

Malaysian central, Bank Negara Malaysia [BNM] said in the report published on April 3, that relative to income, Malaysian house prices remain seriously unaffordable due to a pronounced and prolonged mismatch between demand and supply of residential property. This was despite lower average transacted house prices in 2019, consistent with higher activity in the affordable housing segment, according to the Central Bank's Financial Stability Review for Second Half 2019.

Nevertheless, risks of a sharp correction in house prices will continue to be mitigated by firm demand for housing, particularly for properties priced below RM 500,000. For the first nine months of 2019, these properties accounted for 83% of total transactions.

Initiatives to support home ownership have led to improvements in housing market activity and lowered the stock of unsold properties. Still, the number of unsold housing units remains elevated with house prices remaining seriously unaffordable and demand for affordable housing units continuing to outstrip supply by a wide margin. (1 US Dollar= 4.35 Malaysian Ringgit on April 23)

(Source: https://www.theedgemarkets.com/article/bnm-annual-report-2019-relative-income-malaysian-house-prices-remain-seriously-unaffordable)

Maldives Islands

Construction of 3000 housing units for Male' residents

President Ibrahim Mohamed Solih announced that the government would commence the implementation of the housing project targeted for residents of Male' city next month. Speaking at a ceremony held to inaugurate the Male' City Street Scaping Project, President Solih said the most important need that has to be fulfilled for the residents of Male' is housing.

"During the presidential campaign, we pledged to build 4000 housing units especially for the residents of Male' city. Our studies today show this amount is not enough, and more housing units are needed. Therefore, we are amending our plans based on the studies, and we are making arrangements for other housing projects targeted for the residents of Male' city," said the President.

The Housing Ministry has said that the physical implementation of the project will kick off during May this year. The two-year project is estimated to cost US$ 133 million. During the 2018 presidential campaign, President Ibrahim Mohamed Solih had pledged to construct 4000 housing units for Male' residents. President Solih had announced that the foundations for two projects to construct 1700 and 1300 housing units targeted for Male' residents will be laid within the current month.

The 1700-unit housing project was inaugurated by Planning Minister Mohamed Aslam and Housing Minister Aminath Athifa, and the

Vice President of Chinese company, Sinohydro at a ceremony held at the reclaimed suburb on Tuesday.

(Source: https://avas.mv/en/78320 and https://avas.mv/en/79415)

New Zealand

All sectors of New Zealand housing market 'severely' unaffordable: survey

Every urban housing market in New Zealand is regarded as "severely" unaffordable, a major report has found, despite efforts by the government to address skyrocketing property prices. The Demographia international housing affordability survey studied more than 300 urban housing markets in eight countries and found housing in New Zealand was now more than seven times the median income, making it out of reach for most.

The country's housing crisis – which has seen the homeless population grow, and the waiting list for a state house reach a record high – has spread to the provinces, the Act Party's leader, David Seymour, said. "The effect of this is that even well-paid, professional Kiwis are unable to buy homes in the cities where they work," he said. "It costs too much and takes too long to build a house. New Zealand is one of the least densely populated countries in the world, but government has driven land prices up with the result that housing has become severely unaffordable." Seymour said councils around the country needed to urgently free up land to build more houses as the lack of affordable housing is "a serious threat to the middle-class". The Prime Minister, Jacinda Ardern, was voted into office in 2017 with a vow to "fix" the housing crisis, but the Government's flagship affordable housing scheme, Kiwibuild, drew the ire of voters after it built only 47 homes in six months. (ACT New Zealand, usually known as ACT, is a right-wing, classical liberal (or neo-liberal) political party in New Zealand)

(Source: https://www.theguardian.com/world/2020/jan/20/all-sectors-of-new-zealand-housing-market-severely-unaffordable-survey)

Building a house in New Zealand

Building your own home is still an achievable dream for many New Zealanders and has proven very tempting for many immigrants. Don't expect acres of identical red-brick homes though - developers typically sub-divide blocks of land into sections then sell these on to builders or private buyers. Subdivisions can range in size from 6-8 houses to hundreds of houses. The builder then spec-builds a home or sells on a land-and-house package; a private buyer can arrange with the builder of their choice to have a home built. Plans are subject to local council bylaws and covenants on larger subdivisions, but there is typically a huge range of building styles and materials used. Some single sections in existing residential areas do become available to build on, but this is often an expensive way to buy land as you will be competing with developers looking to build townhouses.

When building your own home, many large building companies have literally hundreds of plans you can choose from, and often have Model Homes you can visit. There is often a large degree of specification available even within the existing plans - you can literally ask that particular walls are moved along a few inches. Alternatively, you can have a home designed from scratch to your exact specifications.

(Source: https://www.justlanded.com/english/New-Zealand/Articles/Housing-Rentals/New-Zealand-Houses)

Community housing in New Zealand

Community housing is a form of public housing working alongside private housing in the open market. Typically, these are not-for-profit groups meeting housing need through a range of social and affordable rental and home ownership options. They provide an alternative to the public housing provided by Housing New Zealand and local authority housing.

The community housing sector in New Zealand is small compared to other countries and we know there are many New Zealanders who still need access to good housing. So, we have a plan to achieve this and a vision for all new Zealanders. Our Vision is all New Zealanders well-housed and a goal of 50,000 more homes provided by 2020.

The sector is growing and has new opportunities under the Government's social housing reform programme. You can see where New Zealand's community housing is provided on the housing map.

(Source: http://www.communityhousing.org.nz/what-is-community-housing)

Nepal

Five years on from the earthquake in Bhaktapur, Nepal, heritage-led recovery is uniting community

Since the Gorkha earthquake killed almost 9,000 people in April 2015, Nepal has been on a slow and arduous route to recovery. Nepal's vibrant cultural heritage of monuments, religious places, crafts, festivals and traditional practices has been key to this process. Heritage reconstruction in Nepal has been prioritised in the UNESCO World Heritage Site of Kathmandu Valley and received vast amounts of international assistance. But this reconstruction has also become the source of growing tensions between global institutions, national politics and local aspirations.

Bhaktapur city is home to one of seven monument zones of the valley. It has been undertaking a novel form of locally led recovery, focusing on built heritage to restore its tourist potential and – more importantly – rebuild community life and the resilience of residents. Bhaktapur is 13 km from Kathmandu with a population of 82,000. The city has a long history stretching back to the 12th century as a prominent seat of power for the Malla Dynasty. The central Durbar Square, an ensemble of palaces, temples and rest-houses, showcases centuries of history, architecture and craftsmanship. Declared a World Heritage Site in 1979, Bhaktapur is often referred to as a city of "living heritage", with over 130 heritage sites and an annual calender of festivals, processions and crafts. Bhaktapur suffered extensively in the earthquake, with over 300 deaths and 2,000 wounded. Over 30,000 houses and 116 monuments were significantly damaged.

For residents, heritage reconstruction is a prominent, tangible sign of post-earthquake recovery, offering a renewed sense of local pride. Sites being reconstructed are not simply monuments for tourists to visit, but essential places for public life: temples for worship and rest-houses for community gatherings.

(Source: https://theconversation.com/five-years-on-from-the-earthquake-in-bhaktapur-nepal-heritage-led-recovery-is-uniting-community-136255)

Rethinking housing construction after 5 years of earthquake disaster – Seismic agility and structural fragility

On April 25, 2015, the devastating Gorkha Earthquake destroyed around half a million residential houses and rendered another half a million ramshackle in 31 districts. After the Gorkha Earthquake, improved housing construction is widely practised in urban as well as rural Nepal, especially in the earthquake-affected areas. Meanwhile, the newer constructions are facing multifaceted challenges as Nepal is frequently affected by other natural hazards, such as fires, landslides and floods, among others. To this end, the room for improvement in the housing sector has grown bigger of late as public concern regarding occupants' safety has widened.

New studies on seismic and multi-hazard vulnerability of residential dwellings in Nepal by a research group reflect very high vulnerability of Nepali residential buildings. The grim future of enormous losses can be downscaled only if the existing highly vulnerable more than three and half million buildings are strengthened. Strengthening priorities are direly needed, but before that, reliable statistics would be needed for prioritisation of immediate to long-term countermeasures. The focus now should be the highly vulnerable stone masonry buildings after Gorkha towards the west of the country.

National Reconstruction Authority apart, there should be another authority to look after the strengthening and retrofitting measures. However, in many locations, new construction would be more economical than retrofitting. So, sectoral priorities and assessment of availability of construction materials are pivotal. The next batch of vulnerable construction would be the already constructed buildings before the endorsement of the new building code in Nepal. As the new code will be functional sometime soon, many existing buildings that were designed as per the existing regulations may be non-compliant. In this case, seismic improvement is also required for all such structures.

(Source: https://thehimalayantimes.com/opinion/seismic-agility-and-structural-fragility/)

Still recovering from the earthquake, Nepal Faces Covid-19

The pandemic crisis currently derailing lives across the globe may have a familiar feel for Nepalis. It was just five years ago that Nepal was reeling from a massive earthquake that killed and injured thousands and destroyed crucial infrastructure, followed by a blockade of the border to neighbouring India that cut off large parts of the population from essential goods and services. While the Covid-19 pandemic poses stark new challenges for Nepal, it is a reminder of the recent struggles of the Nepali people and their resilience in time of crisis.

Earthquake reconstruction was slow for the first two years, with many people lodged in temporary shelters or damaged houses as they waited for clarity on government assistance and financial aid. As the government's housing reconstruction program gained traction, however, progress began to accelerate. By late 2019, four years after the tremors, three-quarters of affected households said they were living in a fully repaired or rebuilt house or in a second house undamaged by the earthquake, and many more were in the process of rebuilding.

(Source: https://asiafoundation.org/2020/04/15/still-recovering-from-the-earthquake-nepal-faces-covid-19/)

Pakistan

Pakistan's Islamic Banking joins hands for affordable Naya Pakistan Housing Program

Naya Pakistan Housing and Development Authority [NAPHDA] and HBL's Islamic Banking have joined hands to provide Islamic Finance to affordable housing clients. NAPHDA Chairman Mr. Anwar Ali Hyder and HBL President and CEO Muhammad Aurangzeb signed a memorandum of understanding [MOU]. Under the MOU, HBL's Islamic Banking team will act as a facilitator for providing consultancy services to NAPHDA. These services would include, but would not be limited to providing recommendations as and when required to the NAPHDA on models and prevalent best international practice with respect to low income housing schemes that might be suitable for the project. HBL could also provide high level support and recommendations to make the project bankable. Pakistan faced a housing crisis with an overall housing backlog of more than 10-12 million housing units, and the present Government of Prime Minister Imran Khan has launched a massive housing program to address this under the slogan "Naya Pakistan Housing Program", and NAPHDA is to facilitate in execution of the program.

(Source: https://www.thenews.com.pk/print/647360-hbl-s-islamic-banking-joins-hands-for-affordable-naya-pakistan-housing)

Prime Minister Imran Khan's Naya Pakistan housing plan needs friendly banks

Prime Minister Imran Khan's government had started building 20,000 homes with Rs100 billion, in Islamabad Rawalpindi Quetta and Lahore as part of its ambitious plan for five million in five years. "The government never had the money for five million houses," said Prime Minister Imran Khan at the ceremony in Islamabad. "The private sector had to make them. But that journey has started." Six projects will be by the Federal Government Employees Housing Authority and one will be executed by the Pakistan Housing Authority (PHA).

As the PM so candidly put it, the government will never be able to build enough houses on its own. That is why housing finance is a crucial part of this plan. The Govt's Housing Policy had been prepared by Mr. Zaigham M. Rizvi, who heads the Prime Minister's Housing Task Force (PMHTF). The PMHTF is to facilitate the housing program on policy and support measures. Rizvi's interaction started with Imran Khan before he was elected as Prime Minister. Mr. Khan declared the inclusion of the Housing Agenda and its Policy in the manifesto of Pakistan Tehreek-e-Insaaf (PTI). Mr. Imran Khan visited the Association of Builders and Developers (ABAD) in Karachi to personally announce the Housing Policy. He declared at the event that in the execution of the housing agenda, while the Government will play the role of enabler and facilitator, the actual delivery of the housing agenda will be done by the private sector.

Zaigham Rizvi explains that we need to understand that while country's size in area remains the same, its population is growing fast-from 54 million in 1971, to 220 million by 2020., and is projected to touch around 375 million by turn of the century. The population density will increase from the current level of 250 to around 450 by turn of the century. "The more people we have the more we will need shelter," said Zaigham. Demand for land is always on the rise to produce food, clothing, shelter, which are basic social needs. Therefore, Pakistan needs to move from the present trend of horizontal hosing to high rise apartment buildings. Talking about the housing target of One Million units per year, Zaigham says, while on the face of it, it seems a very ambitious target, in fact it is just what the country needs in terms of annual housing production. The net population growth during 2019 was 4.2 million, and with an average household size of 6 persons, the country needs 0.7 million housing units to meet year on year incremental demand for housing. Adding to that is the existing backlog of 11-12 million housing units, which is to be addressed by a supply over and above the yearly incremental demand.

(Source: https://www.samaa.tv/news/2020/04/imran-khans-big-naya-pakistan-housing-plan-needs-friendly-banks/)

A private sector developer offers to contribute to Prime Minister's housing plan in a big way. More such interest is emerging

Lahore-based Blue World City CEO, Blue Group Companies Head, Saad Nazeer, donated Rs2 crore (about 125,000 USD) to the Corona Relief Fund, personally presenting a cheque to Prime Minister Imran Khan at a special event, organised under the auspices of the Governor of Punjab at the Governor House. He has offered his services to the government to help facilitate the successful completion of a large portion of the

Naya Pakistan Housing Project and has offered 5,000 ready-built houses, as well as developed land for 50,000 apartments. Similar initiatives are coming up from other private sector developers as well as from the platform of ABAD.

(Source: https://nation.com.pk/06-Apr-2020/blue-world-city-offers-5-000-houses-developed-land-for-50-000-apartments-for-naya-pakistan-housing-project)

Global consortium plans to pour billions into Pakistan for projects including housing projects

Pakistan is expected to have another financing window from the world consortium to invest up to €50 billion on a public-private partnership basis in different mega projects like Naya Pakistan Housing Scheme.

Global Investment Consortium [GIC] is a consortium of more than 200 members comprising hedge funds and investors pouring in capital on the basis of engineering, procurement and construction (EPC) and public-private partnership models in emerging markets for infrastructure development. It can raise around €30-50 billion in structured finance for development projects in Pakistan.

The consortium can finance not only major infrastructure projects but also social-sector schemes that are direly needed in these trying times, when most of the world is locked down due to the Covid-19 pandemic.

Talking to The Express Tribune, GIC Regional Associate Muhammad Irfan Ali said, "We have been pretty successful in convincing hedge funds to consider, in principle, raising enormous funds to channel into government projects in Pakistan."

He said the hedge funds they worked with, though duly regulated, were not typical ones as their associates worked on developing real sectors in emerging countries such as affordable housing, mining, hydroelectric power, pipelines, roads, railroads and so on. They also pump structured money into social development in areas of healthcare, education, ecology, tourism and access to information technology.

(Source: https://tribune.com.pk/story/2197330/1-global-consortium-plans-pour-billions-pakistan-business/)

Prime Minister's recent relief package for the construction industry – who will be benefited

Recently, the Prime Minister announced a historical incentive package for the construction industry with the twofold aim of providing employment to daily wage earners, and spurring economic activity through the construction sector. The package also includes additional incentives for builders and developers to build low-cost housing for the poor under the Naya Pakistan Housing Programme. The stakeholders of the housing and real sector (Real Estate Sector) have warmly welcomed the incentive package and are now gearing up to announce projects to benefit from the incentive package and make sizeable contribution to the Prime Minister's housing agenda.

Under the incentive package, the Government has also declared "Construction" as industry. The Government has also announced to set a Construction Industry Development Board (CIDB), which will have active involvement of all stakeholders of the construction sector.

(Source: https://www.dawn.com/news/1549370)

Republic of Korea

South Korea increases availability of apartments specially designed for senior citizens

The government plans to increase senior citizen welfare residence supplies by 1,000 to 2,000 units a year, with a target of 10,000 units by 2025. This year, residents are being recruited for a total of 6,682 units, including 150 at the Gwangyeong Chilseong complex in South Jeolla Province, 124 at the Yeongdeok Yeonghae complex in North Gyeongsang Province, and 120 at the Boryeong Myeongcheon complex in South Chungcheong Province.

The Ministry of Land, Infrastructure and Transport (MOLIT) explained, "The Yeongdeok Yeonghae complex has been designed to be a pleasant setting in terms of wind pathways, and with a range of amenities including public laundry rooms, we're anticipating that it will be strongly preferred by senior citizens."

In addition to the senior citizen welfare residences, the South Korean government is implementing senior citizen welfare policies based on a wide range of residential forms. To begin with, it plans to reflect the senior citizen welfare concept in its newly built public rental units and purchased rental units. As part of this, it will be working to ensure a supply of units for seniors by reflecting its "impediment-free design" in a portion of national rent and Happy Housing complex units (8% of all units in the Greater Seoul area, 5% outside of it).

(Source: http://english.hani.co.kr/arti/english_edition/e_national/935414.html)

Sri Lanka

Condominium Developers Association looks for support, relief to rise from COVID-19 hit

The Condominium Developers Association of Sri Lanka (CDASL) has written to President Gotabaya Rajapaksa seeking urgent government support and relief to the property development and construction industry in view of the impact from the global and local spread of the novel coronavirus (COVID-19).

CDASL maintains that the property development industry employs hundreds of thousands of people, both directly and indirectly, throughout Sri Lanka. This includes ordinary skilled and semi-skilled workers, professionals and technical personnel whilst supporting SMEs from building material providers, to manufacturers and installers of a range of finished goods and equipment.

"A slowdown in development activity will have immediate impacts on these firms (and their employees) which will only get resolved when development projects are able to move forward," CDASL Chairman Suresh Rajendra has informed President Rajapaksa.

In the COVID-19 situation, construction sites have been shut down and global supply chains for materials and equipment are severely impacted. Given these circumstances, delays in construction projects are unavoidable. Ensuring that concessions from the Board of Investment [BOI] are extended to accommodate such unavoidable delays would be critical for ensuring the viability of many of these projects. The President has also been requested to allow the importation of project-related materials.

(Source: http://www.ft.lk/front-page/Condominium-Developers-Association-looks-for-support-relief-to-rise-from-COVID-19-hit/44-699189)

Sri Lanka PM hands over redeveloped homes in Colombo

Sri Lankan Prime Minister Ranil Wickremesinghe on Thursday handed over well-built houses with all modern amenities to 626 families and fully developed commercial spaces to around 114 shop owners – built under the One Colombo Redevelopment Project.

The investment in the project - for redevelopment of century-old, high density dwelling units and shops – was around LKR 7,000 million. The unique project by Tata Housing of India has ensured re-housing of the existing community in a residential complex with improved infrastructure. (1 USD = 193.03 Sri Lankan Rupee on 24-04-2020)

(Source: https://realty.economictimes.indiatimes.com/news/residential/sri-lanka-pm-hands-over-redeveloped-homes-built-by-tata-housing/70491248)

Thailand

Homeless people in Thailand facing big problem in lock down due to COVID-19 pandemic

Government statistics suggest Thailand has approximately 2,700 homeless people, likely a significant undercount in a nation of around 69 million.

The lockdown and empty streets mean fewer opportunities for homeless people to earn money. In addition, they face stigmatization and accusations of negligently spreading the virus, as well as disobeying government orders. Though it has been over 15 weeks since Thailand recorded its first Covid-19 case, the government still has not effectively reached out to the homeless population for testing. Only rudimentary temperature checks using handheld thermometers are available to homeless people when they line up to receive food and other necessities. Government-run shelters are often overcrowded, without sufficient space required for physical distancing, and far from areas homeless people know and frequent, so they are reluctant to go. "Housing has become the front-line defense against the coronavirus," said Leilani Farha, the United Nations special rapporteur on the right to adequate housing.

(Source: https://www.hrw.org/news/2020/04/24/covid-19-curfew-arrests-thailands-homeless)

GH Bank introduces COVID 19 debt restructuring programs

The Government Housing Bank of Thailand (GH Bank) has announced a Covid 19 debt restructuring program, which includes late penalty and interest payment deferrals and abatements.

Chatchai Sirilai, GH Bank's President said that approximately 20,000 loan defaulters will benefit from the new debt restructuring program.

"Only low-income earners who intend to restructure loans are eligible for the program," Chatchai he said.

Under the program, the Bank will delay loan principle repayments and forgive penalty interest payments.

After the restructuring borrowers enter the program, certain payments will be deferred to the loan's later years. Unpaid principle payments will also be deferred contractually to the loan's later years so borrowers can avoid default.

Currently, GH Bank has non-performing loans (NPLs) approximating Bt 50 billion (4.05% of loans outstanding). In 2019 NPLs were 4.3%. Chatchai said the Bank's restructuring program adheres to the Bank's primary mission to help Thai people acquire their own homes while not focusing on maximizing profits.

It will also hope to alleviate NPL re-entry problems experienced by previous restructuring programs wherein both principle and interest payments were required to be paid in full along with 13% penalty interest rates.

The new scheme is subject to the Bank's Board and the Bank of Thailand consent.

To prevent moral hazard, GH Bank will establish clear-cut qualifications, including amounts borrowed and payment histories for those eligible to enter the restructuring program.

EEC housing market trends 2019 and 2020

GH Bank's Real Estate Information Center (REIC) collated and analyzed overall 2019 and 2020 housing market data for three "Eastern Economic Corridor" provinces; Chonburi, Rayong and Chacheongsao and forecasted overall 2020 trends.

Housing market demand and supply is expected to contract in 2020 (condominium demand shrinkage larger than low-rise).

Dr Vichai Viratkapan, Government Housing Bank Inspector and acting REIC Director said overall 2019 housing demand and supply in the three EEC provinces increased (includes land subdivision and building permits).

Average transferred home prices per unit increased from 2018. Sattahip district which was officially announced as the "eastern airport city" attracted the most investment.

Although in 2020, interest rates and oil prices are expected to continue declining and government stimulation policies are also expected to increase along with Bank of Thailand's de-emphasis on LTV limitations, the COVID 19 crisis and it's expected economic consequences will be negative real estate industry factors.

The economic downturn has already resulted in higher unemployment and decreasing farm incomes, all of which negatively affect home purchases.

REIC forecasts housing demand and supply decreases in 2020.

Land subdivision permits will decrease by 17.8%; construction permits will decrease 15.3%. However, condominium permits will decrease less than low-rise housing permits.

Housing right transfers are forecasted to decrease 11.9% (transfer values will decrease 21.5%).

Land subdivision permits

In 2019, subdivision permits were issued for 175 land subdivision projects (21,814 units) increasing 2.9% and 22.6% respectively.

Townhouse permits constituted 14,066 units (64.5%) followed by 3,978 single-family homes (18.2%); and 3,461 detached homes (15.9%) and 218 commercial buildings (1.0%).

Rayong issued the most permits (44.5%), primarily in the Pluankdang, Nikompattana and Muang districts. It was followed by Chonburi (44.4%) primarily in Sriracha, Muang and Panthong districts.

Chacheongsao followed with 11.1% of permits issued, primarily in Bangpakong, Muang and Plangyao districts.

EEC land subdivision permit trends are expected to decrease 17.8% in 2020 (expected total 17,938 units). The expected decreases are between 16,145 – 16,938 units (decreasing 9.5 to 26.0%).

Housing construction permits

In 2019, housing construction permits were issued for 41,949 units (increasing 35.0%). Low-rise housing permits increased 14.3% (29,845 units); condominiums housing permits increased 151.6% (11,649 units).

Chonburi province issued the most permits (26,527 units, 63.9 of total); including 17,803 low-rise units and 8,724 condominium units (primarily in Sriracha, Muang and Sattaheep districts).

Rayong followed with permits for 10,378 units (25.0% of total). Low-rise units represented 7,480 units; condominiums 2,898 units, primarily in Muang, Pluakdang and Glang districts.

Chacheongsao issued permits for 4,590 units (11.1% of total); 4,562 low-rise units and 28 condominium units, primarily in Chacheongsao, Plangyao and Panomsarakam districts.

REIC forecasts housing construction permits in the EEC provinces to trend between 31,649 – 37,275 units in 2020 (decreasing between 10.2 to 23.7%). 41,494 units were issued permits in 2019.

Condominium permits are expected to decrease 43.7% and low-rise permits 4.1%.

Housing rights transfers

In 2019 50,675 housing units were transferred (value Bt99,905 million). The number of units decreased slightly by 0.3% but unit values increased 5.9% (50,825 units, Bt94,377 million). Low-rise units represented 36,718 units (Bt69,316 million), condominiums 13,957 units (value Bt30,589 million).

Chonburi led with low-rise transfers of 21,888 units (Bt45,010 million) primarily in Sriracha, Banglamung and Muang districts. Rayong followed with 10,967 units (Bt17,381 million), primarily in Muang, Pluakdang and Banchang districts. Chacheangsao issued permits for 3,863 units (Bt6,924 million) primarily in Muang, Bangpakong and Banpo districts.

Chonburi transferred 12,705 condominium units (Bt29,096 million) primarily in Banglamung, Sriracha and Sattaheep districts. Rayong issued permits for 711 units (Bt963 million) primarily in Muang, Glang and Pluakdang districts; Chacheongsao 541 units (Bt530 million) primarily in Muang, Banpo and Bangpakong districts.

Housing project developers in 2019 transferred 28,817 units while individuals transferred 21,858 secondhand homes (57:43 ratio). The total new housing transfers ratio to second home transfers was 64:36.

Housing rights transfer trends in 2020 in the EEC provinces are expected to decrease 11.9% from 2019 (expected decrease 40,191 – 49,123 units). Expected values of these transfers will decrease between Bt70,599 – 86,288 million (decreasing 21.5%).

Vietnam

Vietnam social housing projects waiting for incentives

Demand in Vietnam for low-priced social houses and houses for long-term rent was high but incentive policies have not yet encouraged investors. There are currently dozens of low-priced social housing projects in Hanoi and Ho Chi Minh City that have not been given preferential loans from the government.

Le Thanh Commercial Construction Co Ltd Director Le Huu Nghia told the Tien Phong (Vanguard) newspaper that for years his company had invested into building more than 3,000 low-priced houses in Ho Chi Minh city's Binh Tan district. The company sold the houses at 12-13 million dong ($500-550) per square metre, he said. In addition, the company had completed a social housing project with 930 apartments for rent with tenures of 50 years, said the Director. However, he said, procedures for land use and soft loans had not yet been completed, so the company had to pay interest of 11 per cent per year. "In fact, policies for social housing development had been slowly implemented with overlapping regulations on taxes," said Nghia.

(Source: https://www.phnompenhpost.com/post-property/vietnam-social-housing-projects-waiting-incentives?__cf_chl_jschl_tk__=24aa8a38cc69a73cb8ae55f0dd73e8c7ca0d6593-1587817023-0-Af-dbRXzzb_y1QxsbW7t0YRDDcaB7DoStX1xWy5x1ZvEIZcUI6-SvEndTtwVhEosSWLD6F1GVDq514gGUDt1_59oL4Nmkw4J6kXPI4txfQJWU5GZriKv-7yYIT7wm2fv9mxqHd25IvVY522W5leamY3q45FZHtJDhaEHZ1mpATw6_84f49Oi7IWRv5EoswxR4kX8I-o4ocrMq58PSoQT2rI1Mt93aYLpJGbm27lUmFmyT-sVLGde7NSVI0AjwWs87vgJJj0DGCOTUiSXny6m2MqAK_oGOtlrHDLNfn6y1jvjCnltj9OXOc5GVOIX2baN-oppQO4mj7nVd5S-DECd0vQ0KJBtgcPZqrL252OeB6F4)

Experts believe that the real estate market is unlikely to fall into a crisis despite COVID-19 pandemic

It is expected that, the demand for housing will remain high in the face of limited supply. So, it is not expected to fall into any crisis. The COVID-19 pandemic is heavily weighing on a number of sectors, and property is no exception. The market saw a significant fall in transactions in the first quarter of this year. Despite fewer transactions, prices have not dropped off as expected. According to CBRE, average housing prices in the primary market rose by around four per cent during that time. The Viêt Nam Association of Realtors said market supply and successful transaction volume in the first quarter of this year were both at their lowest levels for the past four years, with no new developments launched. The association said buyers were seemingly waiting for drops in housing prices to make purchasing decisions. Buyers tended to think that the property market would fall into a crisis and prices would drop due to the impacts of the COVID-19 pandemic. However, experts said that a crisis was unlikely. The situation appears to be different from the real estate crises in 1997-98 and 2007-08 when housing prices fell to rock-bottom levels. The crises were fueled by easy credit for real estate which inflated housing prices, coupled with low-capacity developers in the market.

(CBRE Vietnam is part of CBRE Group, Inc. (NYSE:CBG). CBRE Group, Inc. (NYSE:CBRE), a Fortune 500 and S&P 500 company headquartered in Los Angeles, is the world's largest commercial real estate services and investment firm (based on 2019 revenue)

(Source: https://vietnamnews.vn/economy/715450/housing-prices-unlikely-to-drop-despite-pandemic-experts.html)

Vietnam real estate sales at four-year low

Vietnam's real estate market in the first quarter had the lowest transaction volume in the past four years due to the impact of the Covid-19 pandemic, said Vietnam Association of Real Estate Brokers (VARS).

VARS vice-president Nguyen Van Dinh told Vietnam-Plus that the reasons for that situation included a strong reduction in new supply last year, a long Tet (Lunar New Year) holiday and the novel coronavirus pandemic. "The number of transactions only accounted for about 10% of total offered property products in the first quarter, too low compared to the same period of last year," Dinh said.

However, the price of apartments and low-rise houses in the quarter did not decrease against the fourth quarter of last year. Now, there are no businesses announcing discounts for those products, he said.

Prices of affordable and mid-end apartments in urban areas are not expected to increase because of low demand during the pandemic and high inventory, said VARS. Meanwhile, price of high-end apartments may fall because capital pressure would force investors to reduce the price. In the first quarter, property enterprises nationwide offered a total of 53,200 units in housing projects, while the successful housing transactions reached more than 7,600 units, VARS said in a quarterly real estate market report. The absorption rate of this housing segment was 14.3%.

(Source: https://www.phnompenhpost.com/post-property/vn-real-estate-sales-four-year-low)

Overview of legal measures with implications for housing loans taken by some national governments in Europe in the light of the COVID-19 crisis

↳ By Christian König

The COVID-19 pandemic and the associated lockdowns are not only a human tragedy but have led also to unprecedented economic costs around the world. COVID-19 has also had a substantial effect on housing loan transactions within the European Union. Several member states and the European Union itself have within the last three months offered historic, unprecedentedly large packages to provide relief and help for consumers, the economy and for the banking sector in terms of a temporary reduction in regulation.

When COVID-19 hit Europe in February, national governments forced the economy to lock down on a step by step basis. Businesses were forced to close shops and restaurants. Traffic and borders within Europe were closed and travelling was restricted. Millions of people lost their jobs, plunging many citizens into difficulties paying their bills and their mortgage loans due to their reduced incomes.

In order to help consumers not to be evicted and the mortgage foreclosed, many European governments introduced relief measures for consumers to enable them to stay in their homes even if they are not able to make mortgage repayments.

Over the last three months the banking sector all around Europe has offered clients, with financial difficulties due to a COVID-19 related loss of income, payment breaks.

Certain member states of the EU even granted their consumers a right to postpone their mortgage payments and creditors were obliged to offer these consumers a payment break.

But here lies the problem: according to EU legislation[1] a temporarily postponed capital and/or interest payment of a loan because the borrower is experiencing or is likely to experience financial difficulty in repaying the loan would normally be categorised as "forbearance". This creates reporting, specific oversight and capital burdens for credit institutions.

In order to prevent these COVID-19 related measures falling within this definition, the European Banking Authority (EBA) issued Guidelines[2] on 2nd April 2020 to specify that payment breaks by creditors, which have been agreed due to COVID-19, will not fall under the definition of forbearance, if they have been agreed because of a general legislative and non-legislative moratorium.

In order to comply with a non-legislative moratorium, national banking associations all over the EU drafted and negotiated standards applying to these non-legislative moratoria with their relevant national banking supervisor, which the relevant credit institution could then adhere to, in order to be assisted by these new EBA Guidelines.

As a result, several divergent standards, nationally and EU-wide were drafted, registered and applied.

This article will give an overview of some of the national relief measures proposed and implemented by law by some European governments. This crisis showed clearly that Member States are currently pursuing different approaches to mitigate the considerable disruption to economic circulation caused by COVID-19.

Austria

On 6 April 2020 a statutory debt moratorium for consumers and micro-enterprises came into force in Austria. In terms of content, Austria largely follows the example of the German law. It covers credit agreements with consumers and micro-enterprises concluded before 15 March 2020. Micro-enterprises are defined as enterprises which employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed EUR 2 million. Any claims by the creditor in respect of repayment, interest or redemption due between 1 April 2020 and 30 June 2020 shall be deferred for a period of three months from the due date.

The deferral is subject to the condition that the borrower beneficiary suffers a loss of income due to the exceptional circumstances caused by the spread of the coronavirus, with the result that they cannot reasonably be expected to perform the service owed. It is unreasonable to expect the borrower to perform the service, if his or her reasonable livelihood or the reasonable livelihood of his or her dependents is at risk. Collaterals are also continuing to cover the extended duration of the loan contract without restrictions. Lenders are prohibited from giving notice to terminate the loan contract during the deferral period.

Belgium

Families who get into financial difficulties due to the COVID-19 will not have to repay their mortgage loan until September 2020 (i.e. no instalments for mortgage loans from now until

[1] Paragraph 1 of Article 47b of Regulation (EU) 575/2013 introduced by Regulation (EU) 2019/630 of the European Parliament and of the Council of 17 April 2019 amending Regulation (EU) No 575/2013 as regards minimum loss coverage for non-performing exposures and (ii) paragraphs 240 and 241 of Annex V of Commission Implementing Regulation (EU) No 280/2014.

[2] Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis, EBA/GL/2020/02

30 September). Customers will not be charged by the credit institutions for this deferment of payment.

In addition, the Belgian Government has drawn up a "guarantee scheme" with the financial sector: 50 billion euros will be made available to cover losses that may be incurred in respect of the repayment of future loans. All loans currently taken out by companies and self-employed persons (for a maximum of 12 months) are covered by this "guarantee scheme". Losses of up to 3% of the capital provided will be borne entirely by the financial sector. Losses between three and five percent are shared: half by the government and half by the financial sector. Even greater losses are borne 80% by the government and 20% by the financial sector. Previously, the federal government had already granted a moratorium on the payment of income tax, withholding tax, value added tax and social security contributions.

Croatia

The measures already in place include among other things: deferral of the payment of public and fiscal charges. The payment of public fees (including taxes, contributions, concession fees, etc.) due between 20 March and 20 June 2020 can be suspended free of interest. This measure could be extended for another three months. If taxes cannot be paid even after that suspension, there is the possibility of applying for interest-free instalments (maximum 24 months).

Czech Republic

The Czech Government has declared a state of emergency and has taken the following measures among others:

Any claims for support by those particularly affected are examined on a case-by-case basis. Banks usually offer their customers three-month payment deferrals in respect of loans.

The Government is considering a six-month moratorium on the repayment of loans and imposition of reduced interest rates for existing loans. However, no decision has yet been taken in this regard.

In addition, on 19 March 2020, the Government, under its COVID II guarantee program adopted on the same day, provided a further CZK 5 billion in guarantees for loans granted by commercial banks to entrepreneurs affected by the spread of the coronavirus. This form of support is to be extended to individual entrepreneurs and small and medium-sized businesses.

After an extraordinary monetary policy meeting the Czech National Bank announced that it had cut key interest rates by 75 basis points to 1.00 per cent.

France

After the French state granted loan guarantees of 300 billion euros, "we will offer additional loans to all companies," said Frederic Oudea, head of the French banking association. Each company can apply for a loan from its bank up to an amount equivalent to three months' income. Loans with an interest rate of 0.25% have been available since 25 March 2020.

In addition, small businesses can postpone the payment of rents and bills for water, gas and electricity. In France, the government is resorting to exceptional measures and announced financial support for employees who are currently unable to work due to the crisis. These employees receive 70% of their salary. The employer will be compensated by the state up to an amount of 6,927 EUR (gross). As a result, there are currently no new rules for the possible deferral of loans.

Germany

On 25 March 2020, the Bundestag passed a package of regulations using a fast-track procedure, which was finally approved without amendments in the Bundesrat on 27 March 2020:

A consumer who has lost income as a result of the COVID-19 and is unable to meet his performance obligations under loan agreements, rental contracts or contracts for services of general interest (e.g. electricity or telecommunications) in the months of April, May and June 2020 will be protected in various ways:

Claims by the lender under consumer loan agreements (whether they are consumer credit or mortgage credit) are legally deferred for a period of three months. For this deferral period, the borrower's default is set aside, so that no interest for default is incurred. Unless otherwise agreed, the due date for servicing the loan will be postponed by three months and the term of the loan agreement extended by this time. Termination rights of the lender due to non-payment or deterioration of the financial circumstances or securities of the borrower are legally set aside until the expiration of the delay of payment.

The right of landlords to terminate the lease on the basis of rent arrears in respect of residential or commercial leases is restricted for three months. In the case of continuous obligations of general interest like water, electricity, gas delivery or phone contracts, consumers and micro-enterprises are given the possibility of refusing performance for three months.

With regards to supervisory regulation, the competent authority has made it clear that an official deferral request, which is to be assumed in the case of such a regulation, is not to be regarded as a payment default.

The law authorises the Minister of Justice to extend this period of delay to the end of March 2021 at the latest, which has not happened yet.

Hungary

On 11 March 2020 a national emergency was declared for 15 days and on 30 March 2020 the Hungarian Parliament adopted an Enabling Act authorizing the Government to prolong the national emergency and take all measures to ward off the COVID-19 pandemic without the involvement of Parliament. So far, the following measures, among others, have been taken: For loans concluded by 17 March 2020, there is a moratorium on capital and interest payments until the end of 2020 for all households and businesses.

Sector-specific measures in the tourism, hospitality, entertainment, sport, culture and taxi sectors: employers will pay no contributions at all and employees will pay no more pension contributions until 30 June 2020, and the health insurance contribution to be paid by employees will be reduced to the statutory minimum. In these sectors, leases cannot be terminated, and rents cannot be increased.

Italy

The local banks in Alto Adige (South Tyrol) (Südtiroler Sparkasse, Volksbank and Raiffeisenkassen) had already decided on a delay in payment for families and companies within the framework of their joint working network and are now also supporting the initiative of the ABI (Italian Banking Association).

Under the ABI Agreement, banks aim to support micro, small and medium-sized enterprises (SMEs) that have run into difficulties as a result of the COVID-19 crisis. The new delay in payment agreements is already active throughout Italy. The agreement provides for the possibility of suspending or extending loans granted to companies "in bonis" (i.e. companies that properly service the loans) if the debtor has not failed to pay back the instalment and interest before the 31 January 2020. The suspension of payment of the capital share of the instalments can be requested for a period of up to one year. The suspension applies to medium-term credits (loans). The extension of the term of the loans can be up to 100% of the remaining term of the repayment. For short-term loans the maximum extension period is 270 days.

In the Alto Adige region, private individuals can already apply, without any particular formalities, to obtain a delay of payment up to 12 months for medium/long-term loans, and – alternatively or additionally – to extend the term of these loans by up to 24 months, so that they can also benefit from a reduced rate. These measures involve neither additional costs nor changes to interest rates. The only condition is that the borrower must have a properly serviced credit ("in bonis") at the time of the request. "On the other hand, this benefit is not available for financing borrowers whose term has already been extended in the last 24 months or for which a total or partial deferral of instalments has already been granted. In the case of financing operations where there are personal guarantees from third parties or guarantee consortia or guarantee funds, the agreement of the guarantors must be obtained".

Luxembourg

The Luxembourg Government helped small businesses with emergency indemnities ("Indemnités d'urgence") up to 5,000 euros that do not have to be paid back. A total of 50 million euros is available for this purpose. In addition, there is a subsidy for companies with a minimum annual turnover of 15,000 euros and nine employees, which had to close down on 18 March 2020 due to the Grand-Ducal Regulation, but which must be repaid: Here, the state pays 50% of the costs for rent and personnel, with wage costs capped at two and a half times the minimum wage. Companies will have to start repaying these loans in twelve months at the earliest.

The State of Luxembourg has also joined forces with six Luxembourg banks to offer credit security to companies. BIL, BCEE, BGL, ING, Caisse Raiffeisen and Banque de Luxembourg offer their customers a moratorium on current loans for a total of six months, both in terms of payment obligations and interest. The state acts as guarantor for new loans, with a total of 2.5 billion euros available in the event of corporate insolvency (period: from now until the end of the year). However, the banks themselves bear 15% of the risk.

Slovakia

Slovakia presented an action plan on 16 March 2020 which includes the following among other things:

Slovakia extends the deadline for filing tax returns. Both companies and individuals will receive an automatic extension of up to three months, said the Slovakian tax administration in a press release.

Banks will offer a sanction-free deferral of loan payments and improved access to low-interest loans on an individual basis.

Slovenia

The Slovenian Government classified the situation as an epidemic on 12 March 2020 and as a result took the following measures, among others:

Banks may grant suspension of payments to companies, cooperatives, self-employed persons and agricultural enterprises with their registered office or residence in Slovenia. The law provides for delay of payment for a period of 12 months. However, the bank and the borrower may also agree on a further deferral if it is more favorable to the borrower.

The deadlines for filing tax returns for the payment of income tax and corporate income tax have been extended until 31 May 2020. Deadlines for exercising the rights of the parties in court proceedings as well as all other deadlines in court proceedings do not apply, except for court proceedings that are considered urgent (e.g. criminal proceedings).

Spain

The amount of Spain's aid program in respect of the COVID-19 crisis represents around 20% of economic output. The biggest impact of the measures, at 100 billion euro, is in respect of state credit guarantees.

The Spanish Government has adopted a moratorium on the payment of mortgages. In doing so, it wants to help those who have no or significantly lower income due to the closure of large parts of the trade and services sector. In addition, it guarantees that no household with payment difficulties will be cut off from water, electricity or gas. The self-employed are also to be grated a deferral of mortgage payments.

Outlook

The crisis proved that national lawmakers and legislators were really swift and fast with their actions in order to relieve consumers and business. But from the European point of view it was surprisingly disappointing to see that the European Union did not play its role by coordinating these relief measures and that many of these national supportive measures were directed and are focused along national borders.

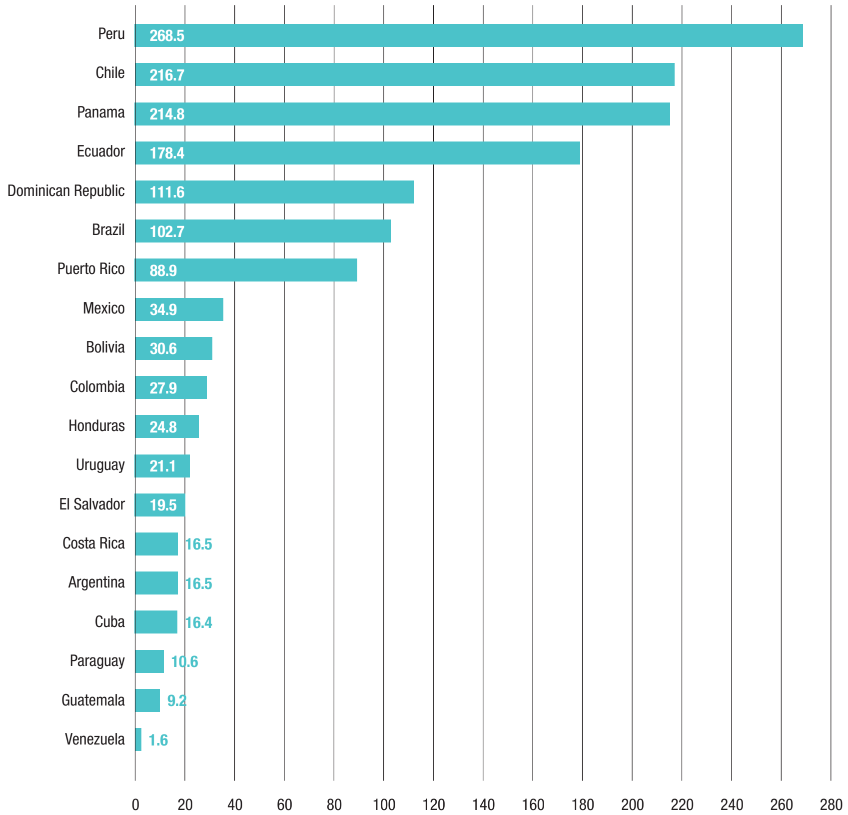
After the crisis, it will certainly require a great effort by the European Union to create a level playing field within the European Union again and level down certain distortions that confer competitive advantages, recently introduced by national lawmakers in order to boost their national economies.

Covid-19 and the housing finance systems in the Latin America and the Caribbean

By Claudia Magalhães Eloy

Coronavirus in Latin America and the Caribbean started in late February, early March and since then it has been spreading throughout the region contributing to a situation where the Americas, including the Northern part, have become the new epicentre of the coronavirus pandemic: more than 2.6 million cases and over 151 thousand deaths, according to the World Health Organization (WHO). The chart below shows updated figures, as of May 11th, of confirmed cases/100,000 inhabitants in LAC[1], with Peru heading the statistics. Yet, cross-country comparisons must take into account that differences in testing levels and accuracy in reporting may cause distortions.

FIGURE 1 Confirmed cases per 100,000 inhabitants



Source: https://www.as-coa.org/articles/chart-covid-19-testing-recovery-and-mortality-rates-latin-america

As is widely known, the quarantine necessary due to the health crisis causes wide-ranging socio-economic impacts and while there is still much uncertainty regarding the magnitude and duration of those impacts, it is understood that they will be severe and unevenly distributed among economic sectors, regions, countries and segments of the population. The IMF projects that LAC, alongside Europe, will be hit the hardest and suffer above-average declines: negative growth rates of 7% and 7.7% respectively. Unido's[2] estimates a drop of 12.4% – the world's largest – on aggregate working hours for the entire Americas'region for the 2nd quarter of 2020, while ECLAC/UN forecasts a contraction of 5.3% for the LAC region, with unemployment reaching roughly 11.5%, leaving 38 million unemployed and 30 million poor[3]. It must be noted that in the seven-year period leading up to the pandemic, the region was exhibiting low growth rates, at an average of less than 0.5 per cent.

In response, many counter-cycle policies and emergency social protection schemes have been set up quickly by governments throughout the region, in order to counter the harsh impacts on companies and the most vulnerable segments of the population. Measures include cash transfers, opening of special credit lines, cutting benchmark interest rates and reducing banks' reserve requirements to increase market liquidity, as part of contemporary "experimentation with quantitative easing"[4]. Emergency financing has been made available by the IMF for Bolivia, El Salvador, Haiti, Honduras, Panama and Paraguay.

The situation in the housing sector has precipitated an array of actions initiated by the government, financial and construction sectors as well as grassroots, social, philanthropic and community-based organizations. More specifically in the housing finance field and regulatory spectrum, forbearance measures include deferment of payments (mortgage break) and moratoria on foreclosure and eviction for mortgages as well as rental contracts.

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[1] According to AS/COA (Americas Society Council of the Americas), May 20th. https://www.as-coa.org/articles/where-coronavirus-latin-america.

[2] https://www.unido.org/stories/coronavirus-economic-impact as of May 26th, 2020.

[3] https://repositorio.cepal.org/bitstream/handle/11362/45477/4/S2000285_en.pdf.

[4] https://www.latinfinance.com/daily-briefs/2020/5/1/factbox-5120-latin-america-moves-to-mitigate-impact-of-covid-19.

The table below illustrates those measures for selected countries:

COUNTRY	HOUSING FINANCE		OTHER
	Mortgage Forbearance	Credit conditions	
Argentina[5]	Freeze of installment values (as of March) extended up to September/2020.		Suspension of mortgage foreclosures and evictions up to September/2020
Bahamas[6]	Instalment deferment of 3 months (Bahamas Mortgage Corporation (BMC)		
Brazil[7]	Instalment deferment initially for 2 or 3 months (varying by bank) without penalties. CAIXA recently extended automatically to 4 months.	Mortgage loans contracted in March were higher than Jan and Feb, but lower than last quarter of 2019, while rates remain between 6% and 8% (SFH) as SELIC, the benchmark rate, is at a historically low of 3%.	Proposed suspension of rental evictions up to October/2020 approved by Senate. Online notary real estate registering has grown 800%. Average sale prices of residential property are up (FipeZap and IBGE).
Bolivia[8]	Reprogramming of principal and interest payments without penalties		
Chile[9]	Instalment and insurance deferment for up to 3/6 months without penalties	Mortgage rates are up (2.7%) and credit is more restrictive. Creation of a conditional credit facility (FCIC) providing a special financial line to banks, with incentives for refinancing mortgages.	Unemployment insurance for subsidized housing and / or mortgage credit
Colombia[10]	Deferment period of up to 6 months without penalties within Fondo Nacional de Ahorro. Bancolombia has offered a 3-month mortgage break.	Refinance is available with no reporting to credit bureaus (*centrales de riesgo*). 633,000 families have renegotiated their mortgage and/or leasing contracts[11]	Suspension of evictions up to June 30th 2020 Freeze of the leasing rate up to June 30th, 2020
Costa Rica[8]	Extension of terms without penalty in public banks	Reduction of interest rates in public banks	
Guatemala[12]	Installment deferment for up to 2 months for those who are not more than one month past due		Creation of the Popular Housing Fund
Ecuador[13]		Mortgage refinance rehabilitated, up to 30-year terms and a grace period of 18 months	Reduction of contributions and credit demand in Banco Instituto Equatoriano de Seguridade Social (Biess)
El Salvador[8]	Payment deferment for 3 months without penalties		Postponement for 3 months and regulation of the rental price
Jamaica[14]	3-month loan moratorium for the unemployed available with immediate effect	National Housing Trust (NHT) interest rate reduction of 1% on all new loans	NHT's special one-off offer to contributors to reschedule delinquent loans that were not previously subject to foreclosure notices
Mexico[15]	Regulator CNBV has established a 4-month deferment on mortgage installments for clients in good standing. Some banks have allowed extension to six months	As of May 20tn, 281,000 clients had applied for deferment of payments on mortgage loans according to ABM	
Peru[16]		Mortgage rates reduced in accordance to BCR mandate.	Payment facilities without deterioration in credit rating
Trinidad and Tobago[17]	Payment deferrals for three months. 2-month deferment on HDC's Rent to Own (RTO) or License to Occupy (LTO) arrangements.		
Uruguay[8]	50% reduction of installment payments for April and May/2020.	Since March, new mortgage rates of 5.25%	

NOTE: It must be noted that the Brazilian workers indemnity Fund – FGTS – and the Mexican provident Fund – Infonavit – have deferred employers' 2nd quarter's monthly contributions until the 2nd semester of 2020. In many countries, reduction of services and utilities fees or payment moratoria are also seen.

[5] https://www.argentina.gob.ar/normativa/nacional/decreto-319-2020-335938/texto.

[6] The BMC stated: "Homeowners who can afford to continue making payments are encouraged to do so rather than see their mortgage balance increase or maturity date extended as a result of accrued interest. While we expect payments with accrued interest to resume in June 2020, the Corporation will be guided by the general economic and health and safety condition of the country as significant uncertainty remains." https://ewnews.com/bahamas-mortgage-corp-announces-three-month-loan-deferral-for-mortgagors.

[7] www.abecip.org.br and https://portal.febraban.org.br/

[8] MINURVI's report: Measures taken by LAC countries to counter the effects of COVID-19 in the Housing Sector. www.minvivienda.gov.co (information collected between April 20th and 22nd.

[9] https://www.meganoticias.cl/dato-util/296739-bancos-abiertos-medidas-coronavirus-covid-19-postergacion-creditos-hipotecarios.html
https://banco.santander.cl/informacion/comunicacion-importante/apoyo-clientes

[10] Information provided by the Colombian Ministry of Housing and Cities as well as https://id.presidencia.gov.co/Paginas/prensa/2020/Cerca-de-300-mil-familias-han-renegociado-creditos-hipotecarios-alivio-Gobierno-proteger-vivienda-colombianos-200409.aspx
http://www.minvivienda.gov.co/Decretos%20Vivienda/0579%20-%202020.pdf

[11] As of June 4th, 2020. Source: www.superfinanciera.gov.com

[12] https://www.jdsupra.com/legalnews/guatemala-financial-measures-during-72988/

[13] https://www.elcomercio.com/actualidad/biess-prorroga-creditos-hipotcarios-coronavirus.html

[14] https://home.kpmg/xx/en/home/insights/2020/04/jamaica-government-and-institution-measures-in-response-to-covid.html

[15] https://www.bnamericas.com/en/news/millions-of-mexicans-apply-for-deferment-of-credit-card-mortgage-payments

[16] https://gestion.pe/economia/coronavirus-peru-mvcs-anuncia-prorroga-de-creditos-del-fondo-mivivienda-ante-crisis-por-covid-19-nndc-noticia/
https://gestion.pe/tu-dinero/inmobiliarias/coronavirus-peru-como-impacta-el-covid-19-en-el-sector-inmobiliario-asei-banco-central-edifica-nndc-noticia/?ref=gesr

[17] https://home.kpmg/xx/en/home/insights/2020/04/trinidad-and-tobago-government-and-institution-measures-in-response-to-covid.html

Those are measures that intend to help families cope with the current financial impact and although certainly necessary, there is no guarantee that they will be enough. For many of those families that are already included as mortgagors in the housing finance systems, the ability to resume payment after the conceded deferment periods is certainly not assured. For those not yet on the mortgage ladder, qualifying may become more difficult, notably amongst moderate – and low-income earners, even if they retain their jobs. Lenders are expected to tighten credit to avoid taking greater risks, leaving the task of sustaining credit offers to public banks.

There is evidence in Brazil[18] (and one would expect a similar outcome in most, if not all LAC countries) that low-income families (homeowners or renters) will be hit the hardest by the recession following Covid-19. With little or no savings at all, as unemployment and informality grow, they will be likely to face greater difficulty accessing homeownership, even for homes within their financial reach. As a result, economic disparities in access to safe and affordable housing that existed long before the COVID-19 pandemic are expected to widen.

There is also uncertainty as to how home and rental prices will react as supply and demand now tend to shrink simultaneously. Amidst all the threat and uncertainty, governments across the region must react promptly with adequate and comprehensive reformulated housing policies.

In economic downturns investments in the housing sector can be boosted precisely as a countercyclical measure as seen in 2009: in Brazil the 1 million housing program *Minha Casa Minha Vida* was created as part of the economic stimulus package after the Global Financial Crisis. Colombia is now about to launch a new program to boost the housing sector: 200,000 subsidies for low-income housing and middle-segment housing, half of which will be allocated to the purchase of new urban housing. According to Hugo Fernandez, from the Colombian Ministry of Housing and Cities, this program is expected to have a 6-fold multiplier effect on the economy between 2021 and 2022, contributing by 0.76 pp to the growth of the country's GDP and close to 8 pp to the growth of the national building sector as well as adding about 108,000 direct jobs plus 234,000 indirect ones.

Covid-19 has also evidenced, more than ever, the need for sound housing as part of health policies. It must be noted that prior efforts at upgrading informal settlements in the region have allowed, according to Cities Alliance's LAV (Laboratorio de Vivienda)[19], for better responsive actions in the emergence of Covid-19, which in turn have enhanced the opportunity for more focused and targeted action and dialogue:

In Costa Rica, in recent years, a shift towards a more comprehensive, multi-stakeholder and inter-institutional approach to informal settlements has facilitated the launch of a national protocol to minimize the impact of the Covid-19 pandemic. This protocol has facilitated tracking and mapping the presence of the virus in informal settlements, as well as planning for and delivering water and sanitation to those areas, and in addition, sites for temporary housing and self-isolation. In Bogota, Colombia, a concerted effort to regularize informal settlements over the years has allowed for the integration of those settlements into city and district-level plans that guide the introduction, expansion and funding of services and infrastructure which now, enables the city to identify and work with local communities and organizers to curb the spread of the virus and ensure adequate access to water and other services.

Such evidence suggests the need to include and/or revive the upgrading of informal settlements as part of the much-demanded policy responses to the present crisis. Action should not be restricted to the set of emergency actions, but form part of the broader standard housing policy. This pandemic has indeed proved that overcoming historical urbanization shortages and deficiencies in housing, sewage and water provision are long overdue and must not be tolerated or put off any longer.

Will Covid-19 lead to better housing for all, across LAC?

[18] Débora Freire, Edson Domingues e Aline Magalhães, Cedeplar, 2020.

[19] LAV PEOPLE CENTERED SLUM UPGRADING: South Africa and LAC Exchange, 1st Session (May 7th, 2020) Concept Note: Approaches to Informal Settlement Upgrading in a Covid-19 Era.

US Housing Market Indicators

By Edward Pinto

Introduction

This article sets out data on the US housing and mortgage markets and focuses on the US housing market as it recovers from the coronavirus pandemic and related shutdowns. This article is presented as a Housing Market Nowcast, which uses home purchase loan rate lock activity to provide an advance look at tomorrow's housing market. Since the US market is almost exclusively a 30-year fixed rate market, borrowers generally lock in a rate within a few days of making a loan application, which is a few days after entering into a home purchase contract. These, rate locks in late-May (Week 22: May 25th – May 29th) will become July's home purchase and mortgage activity. Data is provided by the American Enterprise Institute (AEI)

Key takeaways

- In a continuation of the recent strong upward trend earlier in May, purchase rate lock volume for the week of May 25 (week 22) was up 19% from a year ago, providing further evidence that the worst of the near term effects of the COVID-19 pandemic lockdown may be behind us.
  - → Purchase rate lock volume is back to its level from before the onset of the pandemic (weeks 1 to 8) when purchase rate lock volume was up 24% on average compared to 2019.
  - → During the month of May, the market has not only returned to normalcy, but is up substantially from weeks 14-18 when the average weekly year-over-year decline was 15%.
  - → As a result of strong purchase lock volume during the last two weeks of May, combined with strong volume in weeks 1-13 of 2020, year-to-date volume is now running 12% ahead of last year.
  - → For week 22, the only three states more than 10% below last year's volume are Massachusetts (down 12%), Hawaii (down 21%), and Minnesota (down 11%).
  - → Metros that experienced strong tailwinds before the pandemic are the ones experiencing the same strong tailwinds again.[1]
- There are important changes to the mix of borrowers.
  - → The share of borrowers with the highest FICO credit scores now stands at a higher level than before the pandemic.
  - → The share of second homes set a new series' high, while the share of investment homes remains low.
  - → Repeat buyers are coming back into the market.
- National home price appreciation (HPA) appears to be back in the 5-6% range, similar to before the pandemic.
- Cash-out refinance rate lock activity was relatively unchanged from the prior week but continues to run well above the pre-crisis period.

Using newly acquired data from Optimal Blue, a rate lock software provider covering roughly a third of the market, the AEI Housing Center Housing Market Nowcast provides near-real-time insights on the single-family residential housing market convulsing from the effects of the coronavirus pandemic. While Optimal Blue data are used, Edward Pinto is solely responsible for the analysis contained herein.

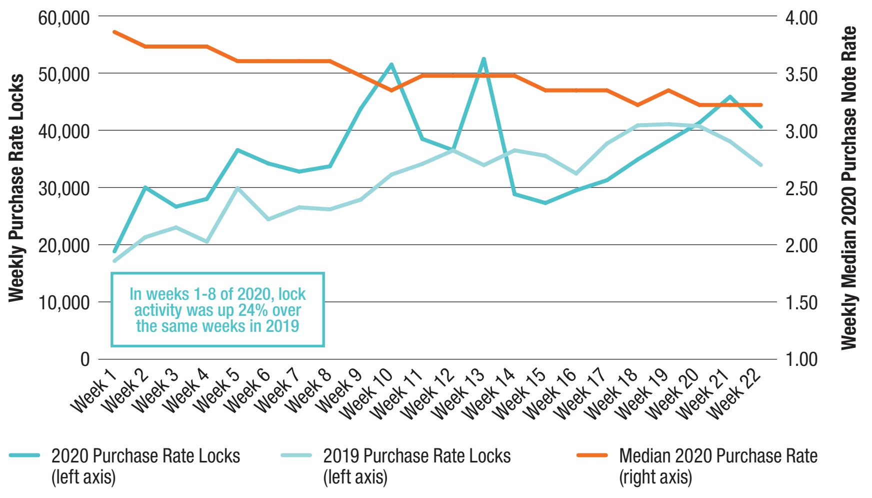
Purchase loan rate locks

In a continuation of a recent strong upward trend, purchase rate lock volume for the week of May 25 (week 22) was up 19% from a year ago, providing further evidence that the worst of the effects of the COVID-19 pandemic lockdown may be behind us.

- Purchase rate lock volume is back to its level from before the onset of the pandemic (weeks 1 to 8) when purchase rate lock volume was up 24% on average compared to 2019.
- During the last 3 weeks of May, the market not only returned to normalcy, but was up substantially from weeks 14-18 when the average weekly year-over-year decline was 15%. This trend has continued into week 22.
- As a result of the last two weeks of May having strong purchase lock volume, combined with strong volume in weeks 1-13 of 2020, year-to-date volume is now running 12% ahead of last year.

We derive trends in application volume from counts of Optimal Blue rate locks. To analyze the impact of the coronavirus pandemic, we overlay 2019 data on top of 2020 data.

CHART 1 Weekly purchase loan rate locks and weekly median purchase note rate



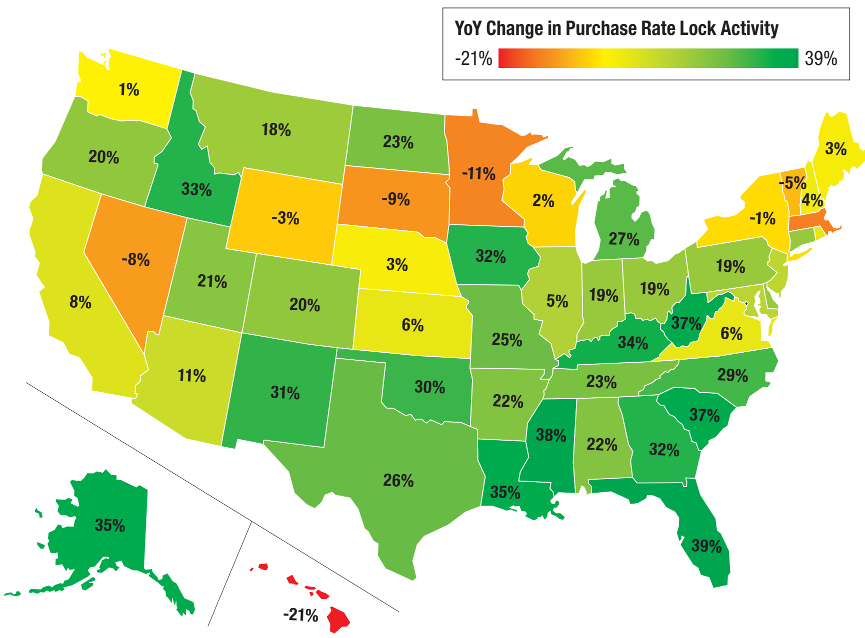
Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

[1] Like a plane flying at a high altitude, tailwinds help grow an economy faster. Similarly, headwinds make growth harder.

State purchase rate locks

- Rate lock activity for week 22 2020 varies greatly across the country compared to the same week a year ago.
- For week 22, the only three states more than 10% below last year's volume are Massachusetts (down 12%), Hawaii (down 21%), and Minnesota (down 11%). Other mostly Southern states are experiencing a lot of tailwinds.

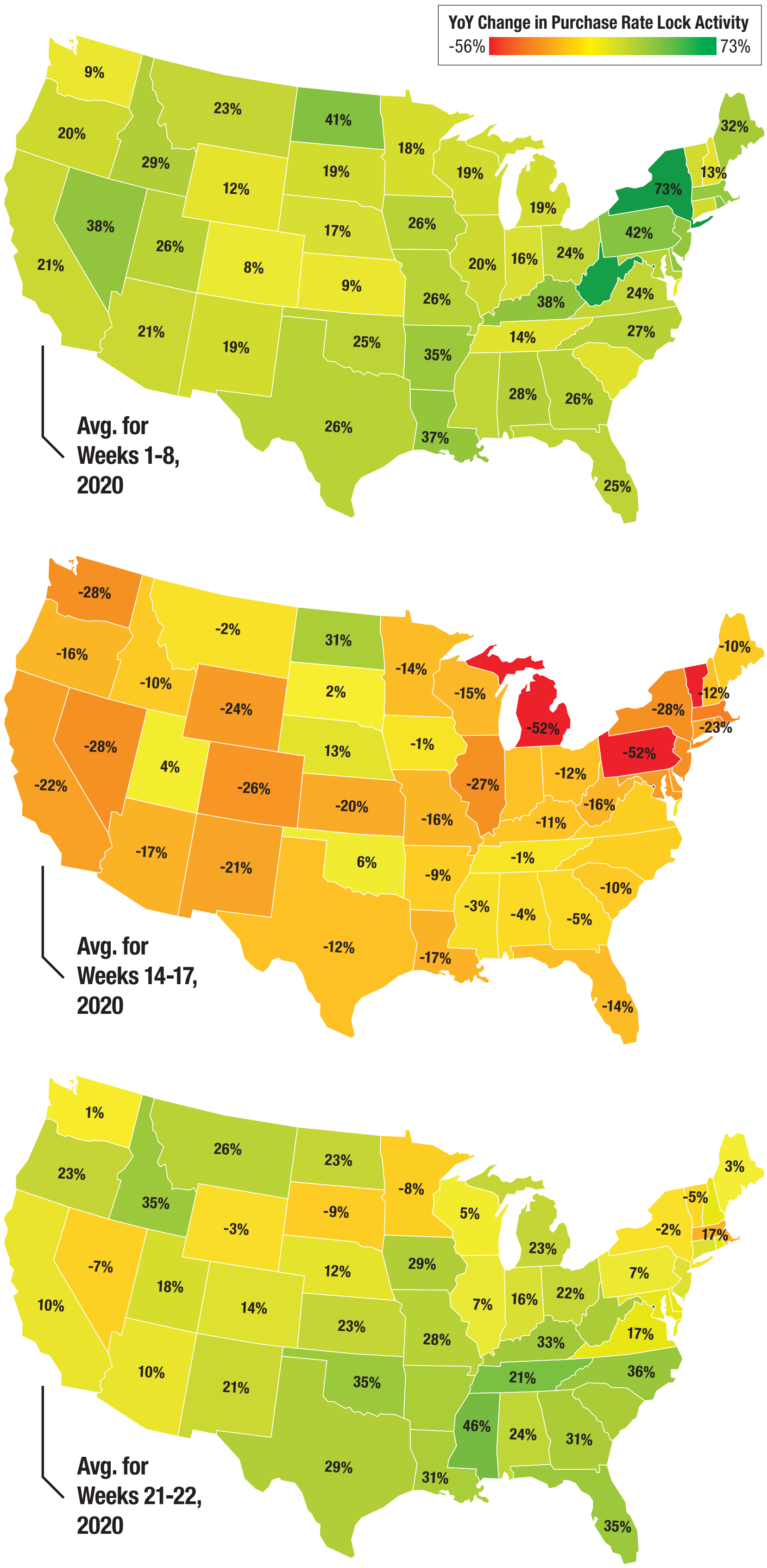
CHART 2 Year-over-year change in state purchase rate lock activity for Week 22 2020



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

State purchase rate lock activity by period

CHART 3 **State year-over-year (YoY) change in purchase rate lock activity by period**



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

Purchase rate lock trends by metro

- Volume is up 19% from last year nationally, yet there are important differences by metro.
- Boston, Las Vegas, and Minneapolis are still seeing large declines, while Jacksonville, Pittsburgh, and Orlando are experiencing large gains.
- Generally, metros experiencing strong tailwinds before the pandemic are experiencing same strong tailwinds again. On the other hand, metros with rather subdued demand before the crisis are lagging behind again. New York, Boston, Philadelphia, and Washington, DC are exceptions, as they were doing well pre-crisis, but are now likely lagging due to the severe nature of the pandemic. Another exception is Las Vegas, which has been particularly hard hit by the decline in travel and gambling. In any event, these exceptions may well experience continuing headwinds in the months ahead.

TABLE 1 **Change in purchase loan rate lock activity from 2019 to 2020**

Metros with declines/ below-average gains	% change in rate locks, week 22: 2019 vs 2020
Las Vegas, NV	-15%
Minneapolis, MN	-13%
Boston, MA	-13%
Los Angeles, CA	-8%
New York, NY	-6%
Virginia Beach, VA	-1%
Seattle, WA	-1%
San Francisco, CA	5%
Philadelphia, PA	6%
Chicago, IL	6%
Washington, DC	7%
Indianapolis, IN	8%
San Diego, CA	9%
Cincinnati, OH	9%
Sacramento, CA	9%
Phoenix, AZ	12%
Kansas City, MO	14%
Cape Coral, FL	14%
Charlotte, NC	15%
Columbus, OH	17%
Cleveland, OH	18%
Denver, CO	18%
Nashville, TN	18%

TABLE 1 (CONTINUED)

Metros with above-average gains	% change in rate locks, week 22: 2019 vs 2020
NATION	**19%**
Dallas, TX	21%
Detroit, MI	21%
Houston, TX	22%
Portland, OR	25%
Miami, FL	26%
Riverside-SB, CA	29%
Austin, TX	31%
St. Louis, MO	32%
Baltimore, MD	33%
Tampa, FL	34%
Atlanta, GA	36%
San Antonio, TX	37%
North Port, FL	38%
Raleigh, NC	39%
Orlando, FL	41%
Pittsburgh, PA	54%
Jacksonville, FL	59%

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

TABLE 2 Metro year-over-year (YoY) change in purchase rate lock activity by period

YoY Change in Purchase Rate Lock Volume	Weeks 1-8 (pre-crisis)	Weeks 14-17 (during crisis)	Weeks 21-22 (post-crisis)
NATION	**24%**	**-18%**	**18%**
Atlanta, GA	29%	-6%	30%
Austin, TX	28%	-12%	32%
Baltimore, MD	25%	-15%	24%
Boston, MA	26%	-33%	-19%
Cape Coral, FL	34%	-22%	25%
Charlotte, NC	20%	-16%	13%
Chicago, IL	21%	-30%	4%
Cincinnati, OH	13%	-20%	12%
Cleveland, OH	14%	-19%	21%
Columbus, OH	35%	-4%	13%
Dallas, TX	24%	-14%	24%
Denver, CO	7%	-30%	11%
Detroit, MI	14%	-56%	20%
Houston, TX	26%	-20%	27%
Indianapolis, IN	1%	-12%	6%
Jacksonville, FL	26%	-1%	59%
Kansas City, MO	18%	-18%	22%
Las Vegas, NV	39%	-32%	-13%
Los Angeles, CA	25%	-23%	-5%
Miami, FL	24%	-31%	10%
Minneapolis, MN	15%	-18%	-11%
Nashville, TN	9%	-6%	13%
New York, NY	38%	-27%	-1%
North Port, FL	34%	-17%	35%
Orlando, FL	23%	-21%	38%
Philadelphia, PA	28%	-32%	2%
Phoenix, AZ	19%	-18%	10%
Pittsburgh, PA	69%	-62%	48%
Portland, OR	21%	-20%	25%
Raleigh, NC	25%	0%	40%
Riverside-SB, CA	32%	-11%	31%
Sacramento, CA	10%	-22%	7%
San Antonio, TX	27%	-4%	42%
San Diego, CA	27%	-20%	23%
San Francisco, CA	4%	-42%	1%
Seattle, WA	5%	-31%	-4%
St. Louis, MO	22%	-17%	27%
Tampa, FL	19%	-9%	31%
Virginia Beach, VA	17%	-5%	28%
Washington, DC	23%	-16%	10%

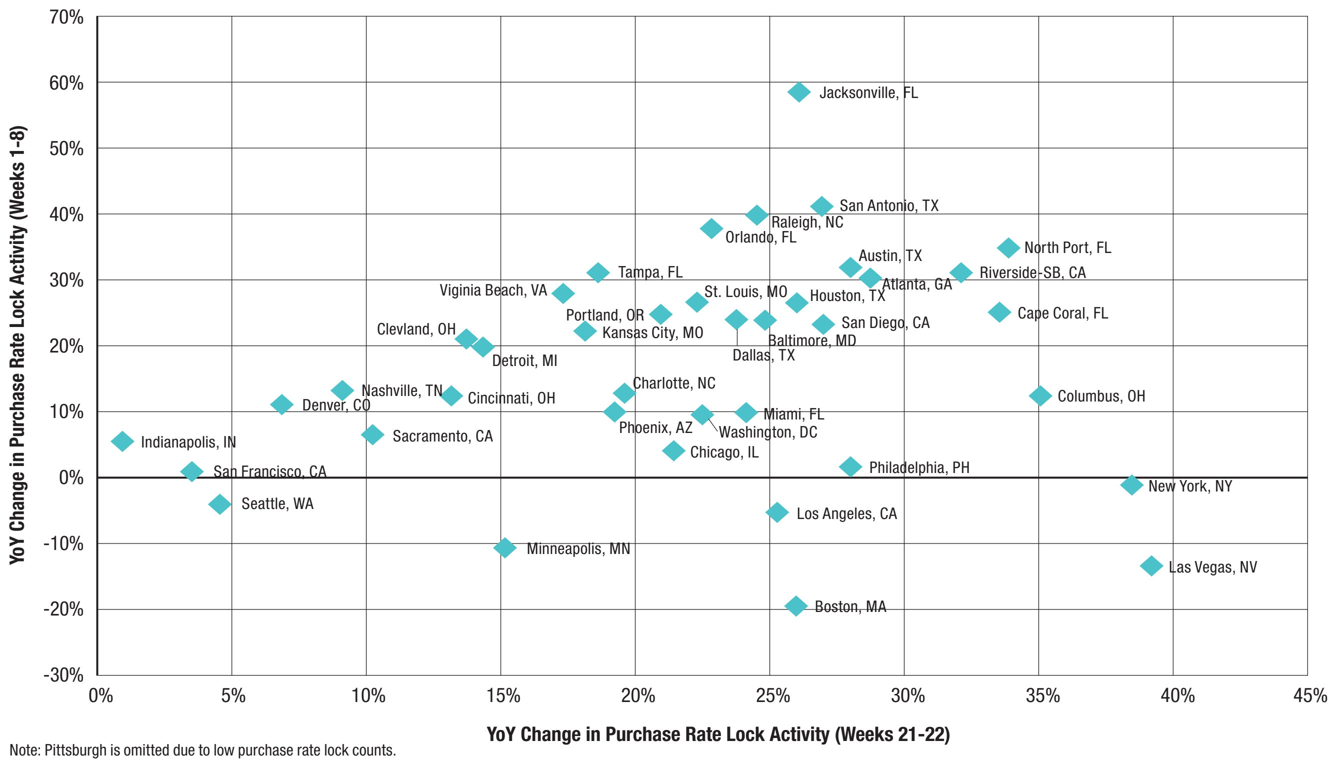
Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

The tables above compare the year-over-year change in purchase rate locks between 2019 and 2020. Table 1 has year-over-year change for the current week. Data are for the largest 40 metros.

These trends are relevant to the future state of the US housing market for two reasons.

- First, geographic areas less affected by the pandemic and which are reopening more rapidly will benefit from more favorable economic tailwinds. These are largely metros in the South and South-West that were already doing well pre-pandemic (Chart 4). While this is expected to have a favorable impact on housing demand, home prices may experience unsustainable growth, unless matched by additional supply. Fortunately, these same areas tend to benefit from looser land use controls that promote additional supply.
- Second, metros in the West, Northeast, and Midwest that take longer to safely reopen will face economic headwinds (Chart 5). This will likely lead to reduced housing demand and, in some areas, more supply as jobs disappear or move elsewhere. Ultimately, this will result in minimal home price appreciation, or even price declines.

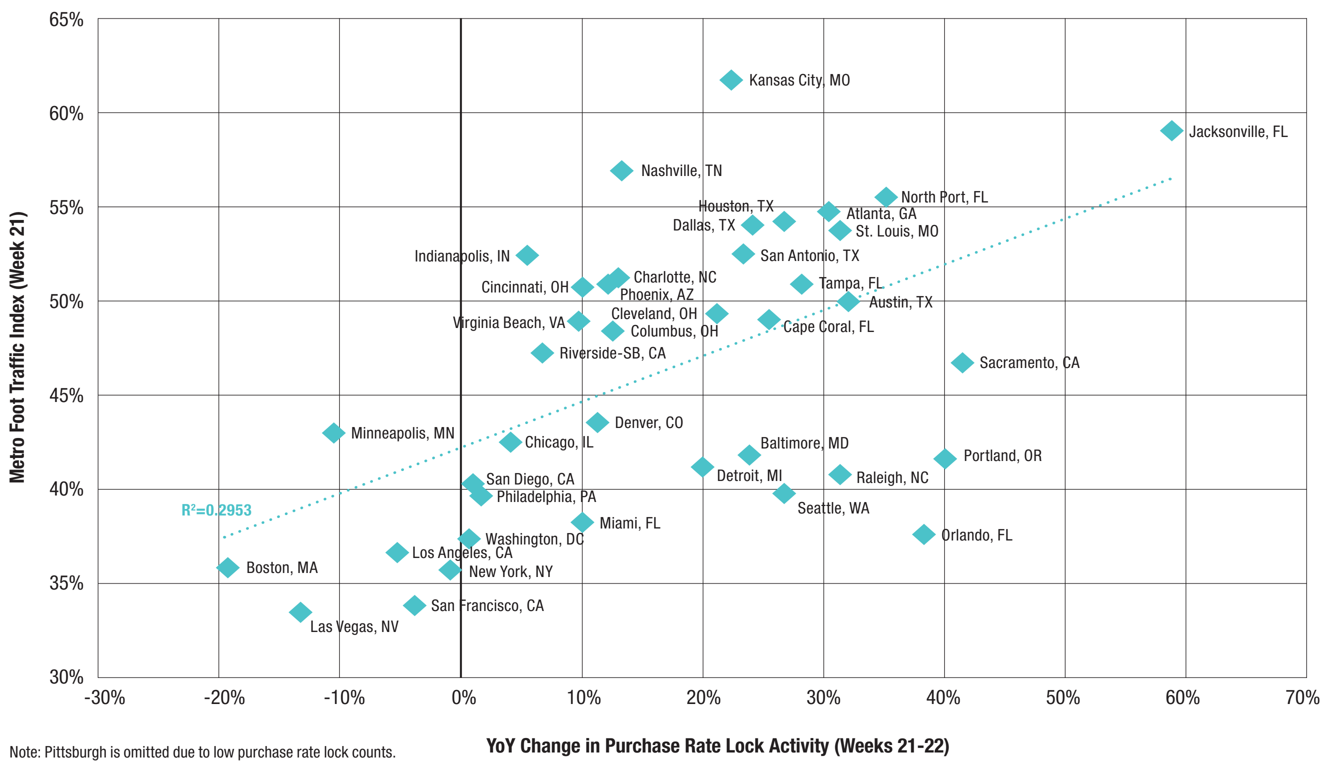
CHART 4 Correlation between pre- (Average for Weeks 1-8) and post-crisis (Average for Weeks 21 and 22) year-over-year (YoY) change in purchase rate locks activity: 2020



Note: Pittsburgh is omitted due to low purchase rate lock counts.

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 5 Correlation between foot traffic (Week 21) and year-over-year change in purchase rate locks activity (Average for Weeks 21 and 22): 2020



Note: Pittsburgh is omitted due to low purchase rate lock counts.

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

Share of purchase rate locks by loan type[2]

- For the week of May 25, 2020 (week 22) the conventional conforming share of purchase loan rate locks was 63%, up from an average of 60% during weeks 1-8.
- The jumbo share of purchase rate locks was 2%, down from an average of 3% from weeks 1-8, but up from 1% last week.
- The Federal Housing Administration's share is down modestly. It now stands at 21%, down from an average of 23% during weeks 1-8.

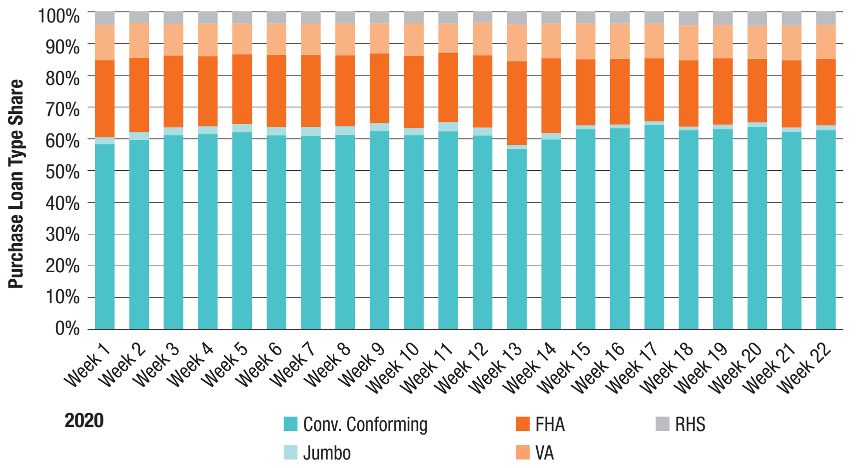
Purchase rate locks by first-time buyer (FTB) status

- From weeks 13-21 2020, FTBs accounted for a higher share of rate locks than in 2019.
- With week 22, this trend has now reverted back to below the 2019 share, which is similar to the first couple weeks of 2020.
- The FTB share now stands at 44.7% of primary owner-occupied rate locks, down from a high of 50% in week 18, down from 46% a year ago, and down from an average of 45.7% before the virus.[3]
- This means that repeat buyers are returning to the market.

Purchase Rate Lock Mortgage Risk Index by first-time buyer (FTB) status

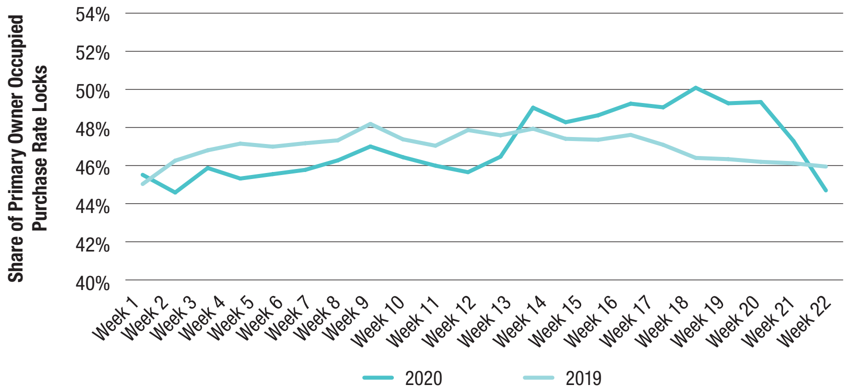
- The return of borrowers to the market over the last 4 weeks does not appear to be driven by looser lending standards.
- For week 22, the purchase rate lock mortgage risk index stood at 11.6%, which is unchanged since week 15. This tightening of credit standards was both welcome and targeted.
- For week 22, the FTB mortgage risk index stood at 14.7%, which is down from an average of 16.3% pre-virus (weeks 1-8).[4]
- For repeat buyers, the index tightened at about a similar rate, although credit has eased slightly in the past week compared to FTBs.
- The spike in week 13 is due to a temporary surge in FHA rate locks, which are on average much riskier than other loan types.

CHART 6 Purchase loan rate locks by loan type



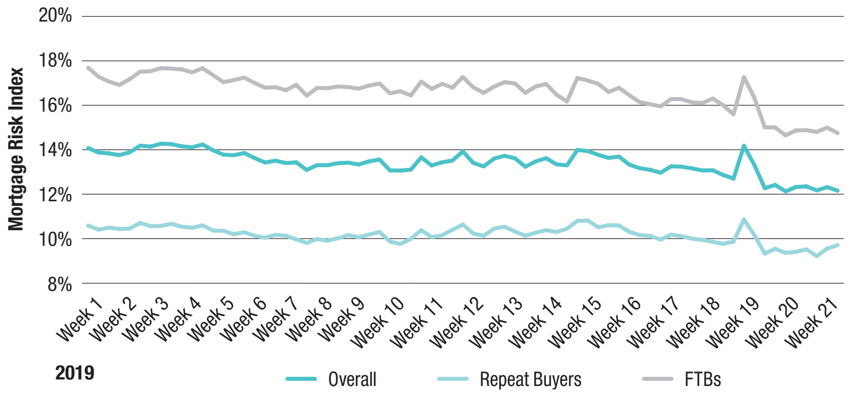
Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 7 First-time homebuyers share of primary owner occupied purchase rate locks



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 8 Purchase Rate Lock Mortgage Risk Index by first-time buyer status (primary owner occupied only)



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

[2] We define conventional conforming as rate locks made at or below the applicable GSE loan limit. For December rate locks, we already apply next year's loan limit. FHFA announces loan limit changes in November and December rate locks will fall under the new limit due to the lag between lock and origination date. Jumbo conventional loans includes all other non-conforming conventional loans.

[3] This statistic includes Primary Owner Occupied home rate locks only.

[4] The AEI mortgage risk index (MRI) measures the expected default rate for a group of loans. MRI is a stress test, similar to a car crash safety rating or hurricane rating for buildings. MRI assesses default risk based on the performance of the 2007 vintage loans with similar characteristics. Series begins in September 2012.

Home price appreciation (HPA) trends

- National HPA remains in the 5-6% range, continuing a recovery that started in week 19. Optimal Blue data indicate that the rate of national HPA for week 22 stood at 5.5%, down from 7.2% during week 10 but up from 3.6% in week 18.[5]

- The index shows HPA accelerating on a year-over-year (yoy) basis starting with the week of January 27, 2019 (week 5). This is consistent with mortgage rates, which have fallen from their peaks of nearly 5% in late 2018.[6]

- Throughout 2019 and 2020 (until early March), the rate of HPA continued to strengthen and reached a high of 7.2% yoy on the week of March 1, 2020 (week 10).

- The index reversed and quickly decelerated and reached a low of 3.6% yoy for the week of April 27, 2020 (week 18).

Purchase loan credit indicators by loan type

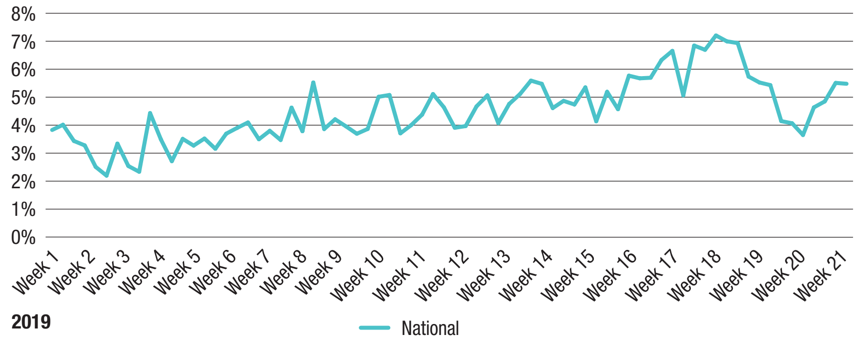
- FHA exhibited the largest amount of credit tightening. Compared to Week 8 of 2020 (the last "normal" pre- coronavirus crisis week), its credit scores rose 11.5 points and DTIs fell 0.6 ppts, although its LTVs increased slightly. This translated into a 2.6 ppts. decrease in FHA's risk index. The tightening is even larger when compared to the same week in 2019 and it is welcome news since the most leveraged borrowers tend to purchase late in a housing boom and then default first, as mentioned above.

- Compared to week 8, credit standards have tightened for Veterans Administration(VA) and Rural Housing Services (RHS), while they continued to ease somewhat for conventional conforming loans compared to week 8 of 2020.

- Compared to week 22 of 2019, credit standards tightened slightly for conforming loans and remained the same for jumbo loans.

The table below reports changes in key credit metrics (credit score, loan-to-value (LTV) ratio, and debt-to-income (DTI) ratios) as well as the Mortgage Risk Index (MRI), a summary measure of credit risk.[7]

CHART 9 Weekly year-over-year national home price appreciation



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

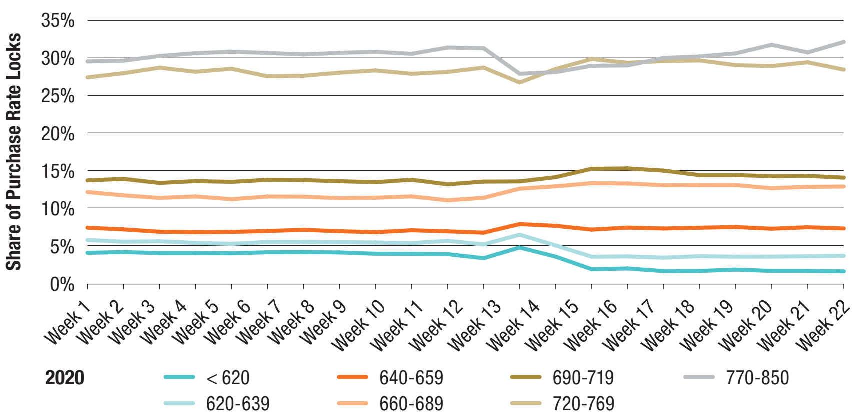
TABLE 3 Purchase loan changes in average credit score, loan-to-value (LTV) ratio, debt-to-income (DTI) ratios, and Mortgage Risk Index (MRI): by loan type (tightening in red)

	CREDIT SCORE		LTV		DTI		MRI	
	Change (in points) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to	
	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22
Conv. conforming	1.5	3.4	1.1	1.1	-0.6	-1.3	0.1	-0.2
Jumbo	2.6	3.3	1.2	1.5	-2.4	-2.6	0.0	0.0
FHA	11.5	13.1	0.2	0.5	-0.6	-0.9	-2.6	-2.9
VA	11.4	12.4	0.0	0.6	-1.1	-1.4	-1.5	-1.5
RHS	6.0	6.7	0.0	-0.2	0.2	-0.1	-1.3	-1.5

NOTE: The most recent week is compared to the same week a year ago and to week 8 in 2020 (Feb. 16 – Feb. 22 2020). Week 8 2020 is benchmark for the housing market before the COVID-19 pandemic and is roughly representative of the first 10 weeks in 2020. A positive number implies that scores have increased for the most recent week relative to the prior week/year. Conventional conforming rate locks have a loan amount at or below the applicable GSE loan limit (including the super conforming loan limit), while jumbo loans have loan amounts above the applicable GSE loan limit. The table reports changes in metrics because of level differences between the Optimal Blue rate lock data and the National Mortgage Risk Index (NMRI) data. Unlike levels, the trends between both datasets line up very closely.

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 10 Overall purchase rate lock FICO distribution



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

[5] Please refer to the appendix for a detailed HPA methodology, as well as a comparison to our quasi-repeat sales HPA using Public Records data.

[6] Due to updates in our HPA methodology, we have revised our previous estimates.

[7] A decline in the MRI indicates credit tightening, while an increase indicates credit loosening. For more on the Mortgage Risk Index, see here.

Purchase rate locks by credit score bin and loan type

OVERALL

- The highest quality borrowers have returned to the market. The share of borrowers with a FICO score of 770+ had initially decreased from 31% to 28%, but this share has recovered to 32% over the past several weeks.
- With the onset of the COVID-19 pandemic, borrowers with the lowest FICO score are less able to get mortgages as lenders tighten up lending standards. The share of borrowers with a score below 640 has fallen from 10% to 5%. This tightening of lending standards is appropriate since the most leveraged borrowers tend to purchase late in a housing boom and are then likely to be among the first to default.
- The drop in borrowers with credit scores below 640 is almost entirely limited to FHA and VA. The credit bin shares for other loan types are virtually unchanged in week 22 compared with early in 2020.

CONVENTIONAL CONFORMING

Among conventional conforming borrowers, Week 22 of 2020 shows remarkably little change in credit characteristics from Weeks 1-11 of 2020. The share of borrowers with a FICO score of 770+ had initially decreased from 43% to 39% in mid-March but has since recovered to 44%, while the share of borrowers with scores below 720 has held steady at 22%.

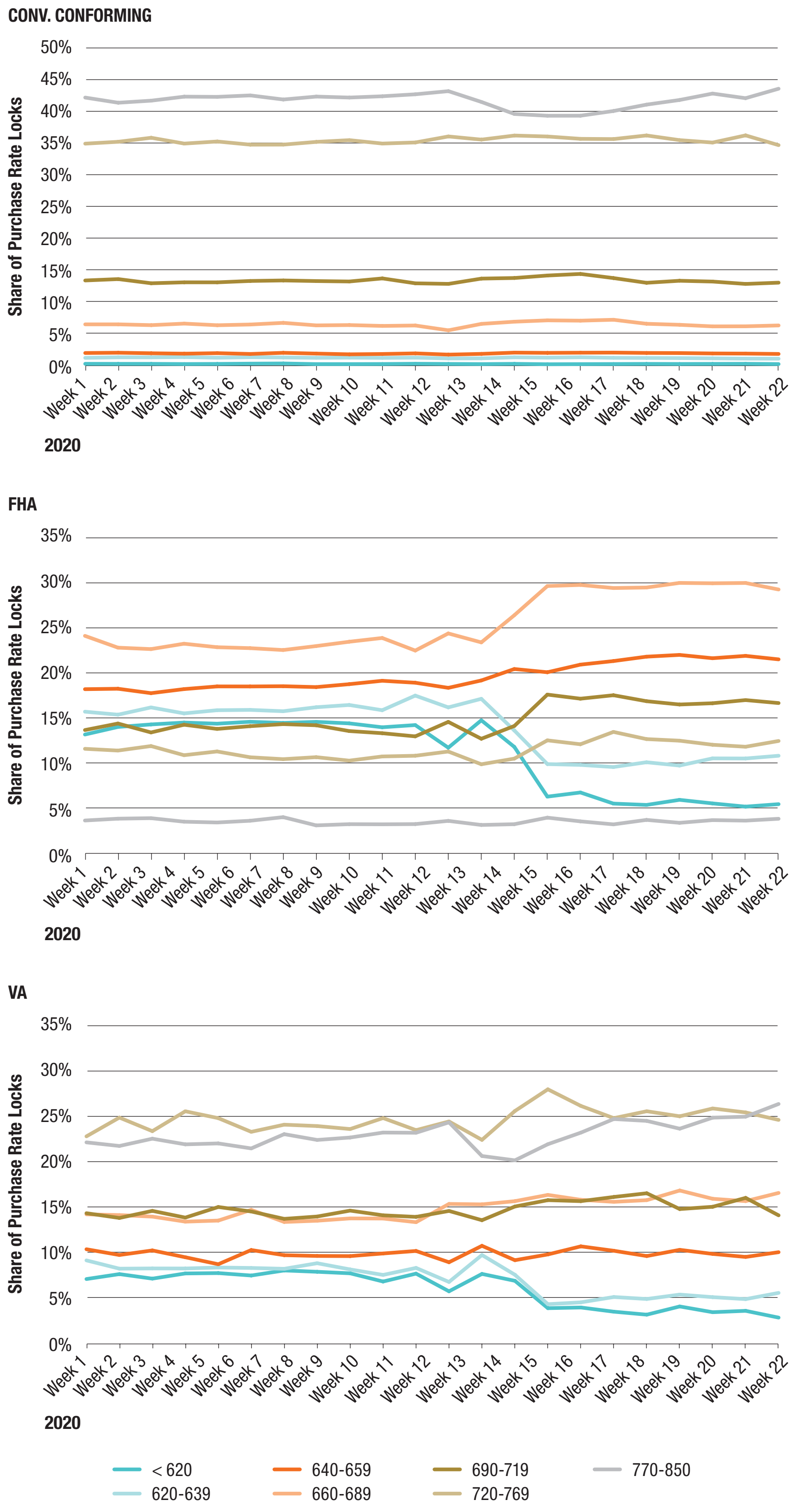
FHA

As a result of targeted tightening in weeks 13-15 (late-March and early-April of 2020), the share of FHA borrowers with credit scores below 640 has halved from 32% to just 16%, with the decline being somewhat greater for credit scores below 620. On the other hand, the share of borrowers with a FICO of 660-689 has increased from 23% to 29%. Again, this tightening of lending standards is appropriate since the most leveraged borrowers tend to purchase late in a housing boom and are likely to be among the first to default.

VA

As a result of targeted tightening in weeks 13-15 (late-March and early-April of 2020), the share of VA borrowers with credit scores below 640 has halved from 16% to just 8%.

CHART 11-13 Purchase loan rate locks by loan type



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

Purchase rate locks for particularly affected borrower groups

With the onset of the COVID-19 pandemic, the share of rate locks with the lowest FICO scores has declined – especially for FHA and VA rate locks. Similarly, the jumbo market has lost market share. This section highlights other groups for which the share of rate locks has also declined. A review of all the tightening steps reveals an effort to control segments with heightened risk while keeping credit flowing to other areas of less concern.

INVESTOR AND SECOND HOME RATE LOCKS

Investor purchases were off to a strong start in 2020. For weeks 1-8, the investor share was running at around 5.2%, up from 4.5% for the same period in 2019. With the onset of the virus, the investor purchase share has declined quite dramatically. This decline has been even greater for the jumbo segment, where the investor purchase share fell from 2.7% in week 13 to just 0.3% in week 15 (not shown).

Interestingly, the share of second home purchase rate locks has initially declined sharply as well. However, since week 13, that share has recovered past its pre-virus level and appears to be making a strong comeback. We will be exploring this trend in subsequent reports.

SELF-EMPLOYED BORROWERS

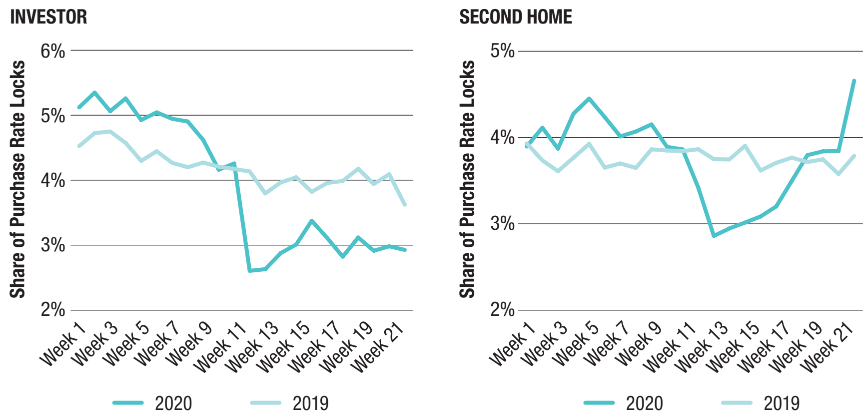
One of the groups most affected by the virus has been the self-employed. They accounted for about 8.0% to 8.5% of rate locks through week 10 – the same share as in 2019. With the onset of the virus, their share has now dropped to just 7% – about 1.5 ppts. lower than in 2019. This decline could be due to the uncertain nature of their income.

NON-U.S. CITIZENS

The share of rate locks by non-U.S. citizens has also declined since the onset of the virus.[8] For weeks 1-8, non-U.S. citizens accounted for 5.2% of purchase rate locks on average. For weeks 17-20, this share had fallen to an average of 4.4%. However, this share appears to be recovering and now stands at 4.5%, just 0.7 ppts. below pre-virus levels.

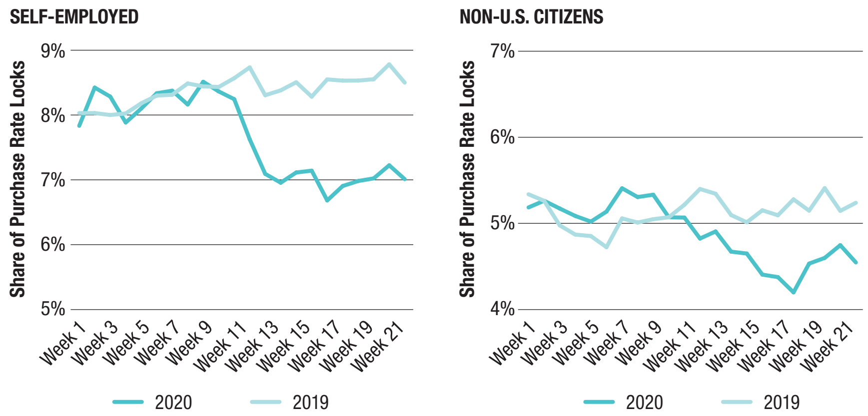
This reduction in the share of non-U.S. citizens should come as no surprise once one examines their profile. On average, non-U.S. citizens have lower credit scores, higher LTVs,

CHART 14-15 Weekly investor and second home share of purchase rate locks: 2019 v. 2020



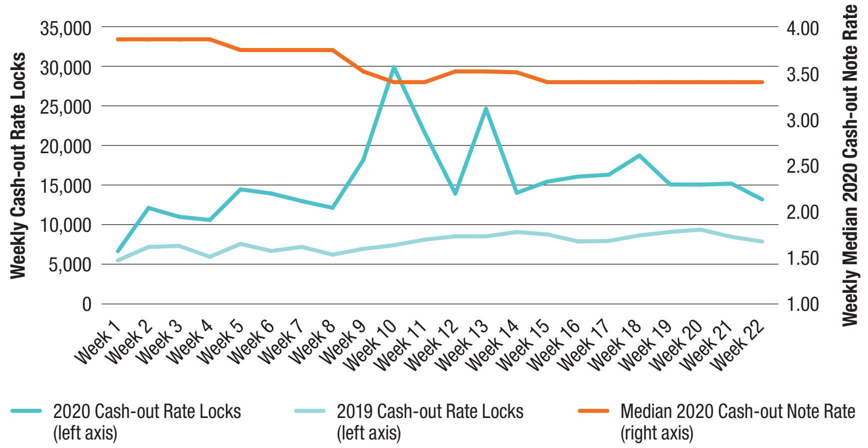
Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 16-17 Weekly self-employed and non-U.S. citizen share of rate locks



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 18 Weekly cash-out refinance loan rate locks and weekly median cash-out note Rate



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

[8] Overwhelmingly permanent and non-permanent residents.

and higher DTIs than U.S. citizens. Compared to citizens, they also tend to rely slightly more on FHA financing and tend to be more frequently self-employed. On its own, each category has declined in share after the virus. The confluence of these factors in this group would therefore only amplify the decline for non-U.S. citizens.[9]

Cash-out refinance[10]

CASH-OUT RATE LOCKS

- For the week of May 25 (week 22), cash-out refinance loan rate lock activity was 64% above that for the same week in 2019, compared to a 73% increase in week 21.

CASH-OUT RATE LOCKS AND CASH-OUT AMOUNTS

- For the week of May 25, 2020 (week 22) cash-out rate lock activity was 9% above that for week 8 in 2020. Cash-out refinance rate lock volume is generally more volatile due to changes in mortgage rates.
- All of the increased activity continues in the conventional conforming loan space.
- The cash-out amount for the week of May 25, 2020 (week 22) averaged $48,400 and ranged from $34,600-$123,000 depending on the loan type.

The Optimal Blue data also allows us to track trends in cash-out rate locks and cash-out amounts. These metrics become increasingly important during times such as today, when home values are undergoing rapid changes and interior inspections are hard to do.

CASH-OUT RATE LOCKS BY LOAN TYPE

- Since the beginning of the year, the conventional conforming share of cash-out refinances has increased from 75% to 86%. At the beginning of 2019, this share was just 61%.
- Over the same period, the share of jumbo rate locks has almost completely vanished.
- The combined share of FHA and VA has fallen from 23% to just 13%.

CASH-OUT REFINANCE CREDIT INDICATORS

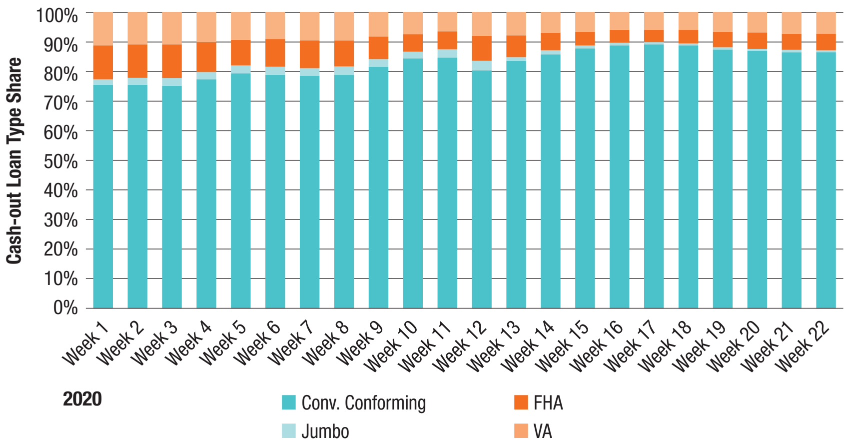
- Credit standards have tightened across the board for cash-out refinances.
- However, some tightening is common when volume increases due to higher quality borrowers entering the market.

TABLE 4 Cash-out refinance rate lock statistics by loan type

	% CHANGE IN RATE LOCKS 2020 WEEK 22		RATE LOCKS SHARE BY LOAN TYPE			AVERAGE CASH-OUT AMOUNT (rounded to nearest $100)
	2020 Week 8	2019 Week 22	2020 Week 22	2020 Week 8	2019 Week 22	2020 Week 22
Overall	9%	64%	—	—	—	$48,400
Conv. conforming	20%	120%	86%	79%	65%	$49,800
Jumbo	-77%	-59%	1%	3%	3%	$123,800
FHA	-30%	-49%	6%	9%	18%	$34,600
VA	-17%	-19%	7%	10%	15%	$40,200

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 19 Cash-out refinance loan rate locks by loan type



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

TABLE 5 Cash-out refinance loan changes in average credit score, loan-to-value (LTV) ratio, debt-to-income (DTI) ratios, and Mortgage Risk Index (MRI): by loan type (tightening in red)

	CREDIT SCORE		LTV		DTI		MRI	
	Change (in points) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to	
	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22
Conv. conforming	13.3	19.5	-1.7	-1.5	-1.6	-2.4	-2.4	-3.4
Jumbo	5.3	8.2	0.0	0.2	-0.9	-2.5	-0.9	-1.5
FHA	23.7	12.2	0.6	-5.3	-2.2	-2.8	-3.1	-5.8
VA	21.8	34.9	-2.1	-9.8	-3.7	-5.1	-3.7	-6.7

NOTE: The most recent week is compared to the same week a year ago and to week 8 in 2020 (Feb. 16 – Feb. 22 2020). Week 8 2020 is the benchmark for the housing market before the COVID-19 pandemic and is roughly representative of the first 10 weeks in 2020. A positive number implies that scores have increased for the most recent week relative to the prior week/year. Conventional conforming rate locks have a loan amount at or below the applicable GSE loan limit (including the super conforming loan limit), while jumbo loans have loan amounts above the applicable GSE loan limit. The table reports changes in metrics because of level differences between the Optimal Blue rate lock data and the National Mortgage Risk Index (NMRI) data. Unlike levels, the trends between both datasets line up very closely.

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

[9] In addition, non-U.S. citizens have hardly any access to VA financing, which has maintained its market share better than FHA during the virus aftermath.

[10] A cash-out refinance: a loan where the borrower withdraws of more than a de minimis amount of equity.

CASH-OUT REFINANCE MORTGAGE RISK INDEX

- Credit standards have tightened substantially for cash-out refinances both overall and for each loan type.
- While some tightening is common when volume increases due to higher quality borrowers entering the market, this time the tightening seems greater than usual.
- This is appropriate, given the high level of credit risk associated with many cash-out refinances.

No cash-out refinance

NO CASH-OUT RATE LOCKS

- For the week of May 25, 2020 (week 22) no cash-out rate lock activity was 57% above that for week 8 in 2020, and 310% above week 22 in 2019.
- No cash-out refinance rate lock volume is generally more volatile due to changes in mortgage rates.

NUMBER OF CASH-OUT RATE LOCKS BY LOAN TYPE

- For the week of May 25, 2020 (week 22), the jumbo share of no cash-out refinances is near 0%, down from an average of 4% for the first 8 weeks of 2020.
- The FHA share has declined from the start of the year and stands now at 6%.
- The VA share has also declined in recent weeks and now stands at 12%.
- The conventional conforming share is now 81%, well above its share of 58% in week 1 of 2020.

NO CASH-OUT REFINANCE RATE LOCK CREDIT INDICATORS BY LOAN TYPE

- Indicators for the week of May 25, 2020 show that credit availability generally tightened for conventional conforming, FHA, and VA compared to 2020 Week 8 and 2019 Week 22.

Appendix 1

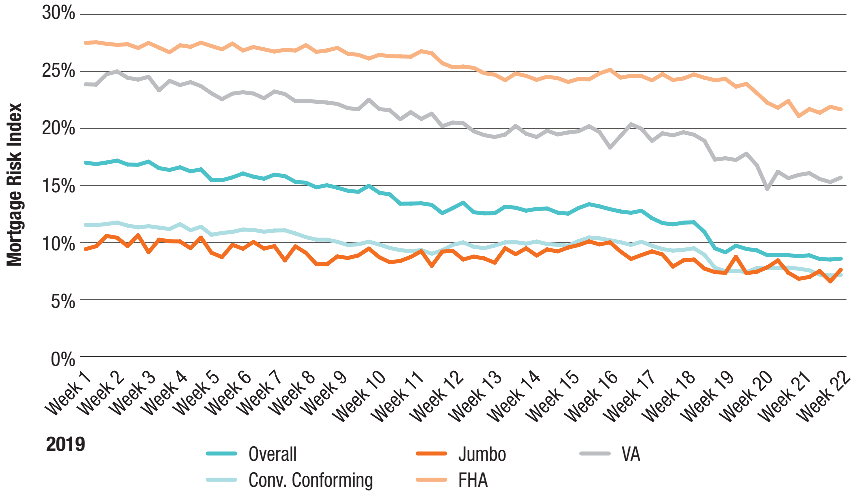
LINKS TO AEI DATA

Link to AEI National and Metro Housing Market Indicators to obtain metro reports

Link to AEI Mortgage Risk Interactive to create your own risk charts

Link to AEI State of the Nation's Housing Market, which provides local housing data

CHART 20 Weekly average Mortgage Risk Index by loan type: cash-out rate locks



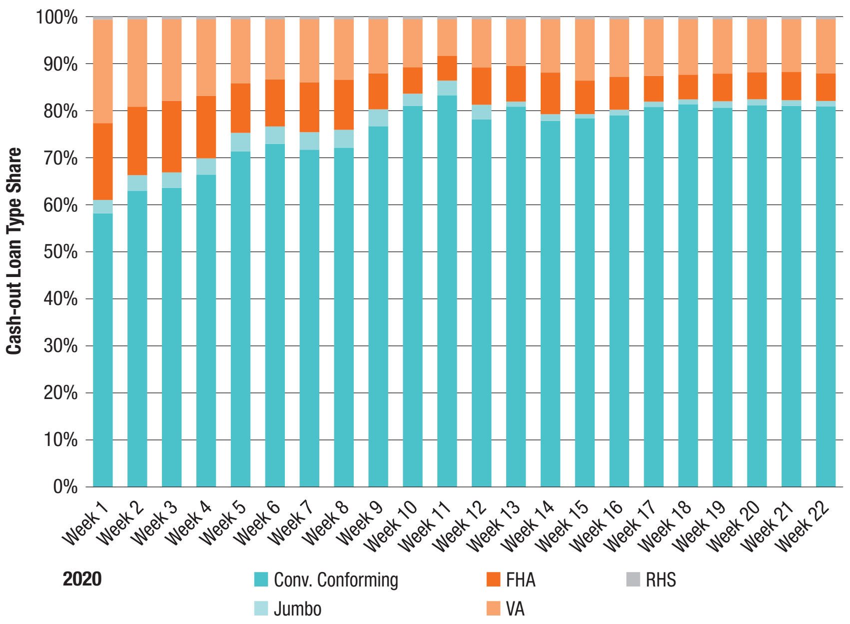
Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

TABLE 6 No cash-out refinance rate lock statistics by loan type

	% CHANGE IN RATE LOCKS 2020 WEEK 22		RATE LOCKS SHARE BY LOAN TYPE		
	2020 Week 8	2019 Week 22	2020 Week 22	2020 Week 8	2019 Week 22
Overall	57%	310%	—	—	—
Conv. conforming	76%	449%	81%	72%	60%
Jumbo	-52%	-20%	1%	4%	6%
FHA	-14%	55%	6%	11%	16%
VA	41%	167%	12%	13%	18%

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

CHART 21 Number of cash-out refinance loan rate locks by loan type



Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

Link to House Prices and Supply Interactive with house price appreciation and supply data

Link to AEI Housing Market Nowcast, which provides near real-time data during the coronavirus era

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AEI Housing Center, www.aei.org/housing

TABLE 7 No cash-out refinance loan changes in average credit score, loan-to-value (LTV) ratio, debt-to-income (DTI) ratios, and Mortgage Risk Index (MRI): by loan type (tightening in red)

	CREDIT SCORE		LTV		DTI		MRI	
	Change (in points) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to		Change (in ppts.) 2020 Week 22 to	
	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22	2020 Week 8	2019 Week 22
Conv. conforming	7.3	15.2	-3.4	-4.6	-1.5	-3.0	-1.6	-3.1
Jumbo	4.4	8.1	-4.0	-5.3	-2.5	-4.7	-1.3	-1.9
FHA	5.2	-0.1	-1.2	-0.4	0.7	-1.7	-1.1	-1.8
VA	23.5	39.6	-2.3	-5.2	-0.8	-2.1	-2.6	-4.9
RHS	22.9	1.2	-3.5	0.9	-2.8	-0.2	-4.3	-0.7

NOTE: The most recent week is compared to the same week a year ago and to week 8 in 2020 (Feb. 16 – Feb. 22 2020). Week 8 2020 is the benchmark for the housing market before the COVID-19 pandemic and is roughly representative of the first 10 weeks in 2020. A positive number implies that scores have increased for the most recent week relative to the prior week/year. Conventional conforming rate locks have a loan amount at or below the applicable GSE loan limit (including the super conforming loan limit), while jumbo loans have loan amounts above the applicable GSE loan limit. The table reports changes in metrics because of level differences between the Optimal Blue rate lock data and the National Mortgage Risk Index (NMRI) data. Unlike levels, the trends between both datasets line up very closely.

Source: AEI Housing Center, www.aei.org/housing, and Optimal Blue

How might the coronavirus crisis affect the financial system and housing finance in the longer term?

By Rob Thomas

1. Introduction

The coronavirus pandemic has triggered the most far-reaching social and economic shock of modern times, affecting almost every aspect of the lives of each one of us. The human suffering of those needing intensive medical assistance together with the tragedy of many thousands of deaths has shaken us all. Our hearts go out to everyone who has had the virus and to the families of those that have passed away as a consequence.

The global response to coronavirus has been unprecedented, but because the world has not faced a threat quite like this before, there has been a large element of experimentation both in terms of the decisions made to curtail the spread of the virus and the response to the economic fallout. What is becoming increasingly clear, however, is that despite extensive government support to ameliorate the effects of the virus, the economic impact will be a lasting one with consequences that are hard to predict at present but likely to be wide ranging.

In this article, I consider the likely medium to longer term impact on the financial system and, in particular, how this could impact the housing finance sector in the UK. To do so, it is necessary to consider first the broader macroeconomic effects and then try to map how these broader changes might impact the financial system in general and the mortgage market in particular. The focus is on the UK but many of the insights apply to other markets as well.

2. Macroeconomic impact

The most dramatic phase of the response to coronavirus, the lockdown, has been likened to placing much of the economy in an induced coma. Government has had to devise support measures to keep the patient alive financially during this coma. But until an effective vaccine is available, economic life cannot return to normal, meaning that elements of the economy will remain in dislocation even as other parts are restarted. For example, in the UK non-essential shops are reopening before restaurants, nightclubs and cinemas.

The first key question for understanding the longer-term impact of the measures to fight coronavirus and support the economy is 'taken together are they inflationary or deflationary?' Some economists are arguing that the huge injection of liquidity by the Bank of England and other central banks coupled with unprecedented fiscal support are inherently inflationary. They argue that the massive stimulus government has unleashed is bound to lead to higher inflation in the medium term.

Of course, the same arguments were made about the response to the financial crisis when fiscal deficits shot up and central banks cut interest rates and engaged in quantitative easing (QE) and measures to maintain bank lending. However, those arguing that we face higher inflation say that it's different this time around because the financial crisis was exclusively a shock to demand while the coronavirus response entails both a shock to demand and to supply, and the curtailment of supply will drive prices up.

This argument is questionable. While it is true that supply has been greatly reduced (with car plants, shops, restaurants and much else shut), capacity has not reduced but simply been mothballed. The low inflation and interest rates of the last decade pointed to excess capacity and inadequate demand in the global economy before the virus. This capacity is intact, and while it is true that some consumers are emerging from lockdown with more cash as a result of the limited opportunities to spend, many others are newly unemployed and others feel a heightened sense of insecurity that justifies hoarding cash. Moreover, a wide swathe of corporates, both big and small, are emerging with lower profits and weakened balance sheets, leaving them in a position where they will need to contain spending as much as possible. There must also be concern about how the enormous bill for government will ultimately be financed. It certainly points to higher levels of taxation or lower government spending in the future, both of which would negatively impact private sector income in the longer term. All this points to more cautious private sector behaviour going forward amongst both firms and households.

This makes the coronavirus crisis deflationary and in that sense similar to the financial crisis of 2008-9. Then as now, higher fiscal deficits and eased monetary policy are leaning against the strong winds of financial retrenchment in the private sector. Gradually, lower interest rates stimulated a revival after the global financial crisis partly through encouraging firms and households to take on more debt. This could happen again but there are reasons to be cautious as to its likely success. Firstly, interest rates came down much more dramatically after the financial crisis than they can now, given how low they already were before the coronavirus struck. This means the windfall to debtors will be much more modest this time.

Secondly, while the financial crisis was in part the consequence of the financial sector being over-leveraged, this crisis has illustrated the risk to a much broader range of firms of having high levels of debt as firms have to keep servicing their debt even as their income plunges. And where firms have needed government support, in contrast to households who have received government transfer payments (i.e. grants), almost all the support has come in the form of loans that will need to be repaid.

Moreover, firms are not only having to deal with the direct impact of measures to prevent the spread of coronavirus but will increasingly also have to deal with second round effects where their income is hit by the broader economic recession. Take for example restaurants. Even when all social distancing rules have been removed (perhaps after a vaccine has been made available), a legacy of higher unemployment across the economy is likely to result in lower demand.

3. The potential for further government support

One reassuring aspect of the coronavirus crisis internationally has been the robust response by governments to the economic consequences. In the UK, Chancellor Rishi Sunak stated that the government would do whatever it takes to protect the economy and followed this up with a wide range of support mechanisms including the furlough scheme, which pays the wages (up to £2,500 a month) of workers laid off by their employers because of the virus as well as support for the self-employed and several loan programmes for businesses, grants for some small businesses and higher state benefits. Some 9.1 million workers were on the furlough scheme by mid-June and it is now estimated to be costing the government £14 billion a month. More broadly, the impact of coronavirus on government finances, both because of increased costs and a steep reduction in tax receipts was made clear in the May deficit which soared to a record £55 billion, greater than the pre-coronavirus prediction for the whole year.

Governments may need to do even more to stimulate a recovery but it seems likely that they will not baulk at doing so. This partly reflects a change in the intellectual climate regarding deficit spending that has taken place over the past decade thanks in part to the rise of Modern Monetary Theory (MMT), a strand of economic thinking that questions the traditional assertion that large government deficits are bad for economic performance. MMT argues that any shortfall in private demand can be compensated for by government deficit spending and, as long as inflation remains under control, this is sustainable because the shortfall in private spending reflects excess saving by the private sector so there should be a ready source of funds available to finance the government deficit.

Moreover, when the central bank engages in QE, it is purchasing government debt in the secondary market (i.e. from investors who have previously bought this debt), which indirectly finances government deficit spending. As the central bank is a branch of government, when it builds up a portfolio of government debt through QE that element of the government's debt is perfectly sustainable because the government owes this amount to itself. When QE was implemented after the financial crisis most commentators saw it as a temporary measure that would be unwound as the economy and government finances improved.

In fact, the Bank of England's government debt portfolio built up using QE has been maintained and is now being expanded once more. So as long as there is a central bank willing to continue buying debt in the market, governments can continue to run large deficits without fear about sustainability. And as long as central banks perceive that economic weakness will drive inflation down, they should be willing to continue to buy government debt using QE as a way to ensure that governments can continue to maintain aggregate demand at a level that is consistent with their inflation targets (which in the UK is 2% on the Consumer Price Index – which was running at 0.5% in May 2020).

Of course, QE also injects liquidity into the banking system, as the central bank pays for the bonds it has bought in the market with newly created money and this forms part of the monetary base (alongside notes and coins). Indeed, QE increased the monetary base (known as M0 in the UK) in May by 2% and some monetarist economists are warning of higher inflation as a result. However, what we saw after the financial crisis, when central banks greatly increased the monetary base, is that the broader money supply increased by less as the lending multiplier contracted and easier monetary conditions pushed up the price of assets such as shares and property rather than goods and services.

Although the broader money supply has increased sharply in recent months this is driven mainly by technical factors (firms drawing down existing credit lines to bolster their cash position) which are a one-off. More broadly, the pattern of inflating asset prices and stable consumer prices seems to be repeating itself now, with stock markets rebounding well while consumer price inflation has fallen. This may be because the investment firms that receive the bulk of QE cash use that cash to buy other financial assets, which does not directly stimulate demand for goods and services nor does it necessarily make physical investment in plant and equipment by firms more attractive.

4. Fragility of the private sector exposed

The emergency low interest rates of the financial crisis actually proved to be the new normal. Over-indebted firms and households were able to stay afloat thanks to low interest rates but the economy never strengthened to the point where it could cope with a return to the previous level of interest rate. Yet, low interest rates stimulated still more borrowing, encouraged by the Bank of England through mechanisms like the Term Funding Scheme, which was seen as a way to try to maintain a healthy level of economic activity by incentivising banks to lend more.

Now we have a crisis where many firms are facing a drastic shortfall in income which is obviously going to be tougher on those with high existing debt servicing obligations. The immediate policy remedy of emergency loans through the Coronavirus Business Interruption Loan Scheme and the Coronavirus Bounce Back Loan scheme initially carry no interest, so do not add to short term debt service obligations, but where they are being used to plug a gap between expenditure and income, they may be keeping firms alive but at the cost of weakening their balance sheets.

In short, this crisis has exposed the fragility of the current economic system, with many businesses, both large and small not having the resources to withstand a sharp decline in income for more than a few weeks without emergency assistance. High levels of debt is a large part of the problem as firms and households require an income to service their debt before meeting their day-to-day obligations. If the only way some firms can emerge from the crisis is with more debt, this does not bode well for their future ability to thrive or support the economy with their expenditure.

5. What does this mean for the financial system?

In contrast to the financial crisis, which stemmed from an over-leveraged banking sector facing huge systemic credit losses, UK banks and building societies went into this crisis with strong reserves of both capital and liquidity. However, the coronavirus crisis is likely to produce a serious spike in credit losses amongst both firms and households because of the way measures to protect the population from infection have shrivelled incomes and due to second round effects, as recession hits. Despite the level of government support available to households and firms, there is no doubt that there will still be many firms and households that suffer serious financial distress and debt defaults are bound to rise from the very low levels seen in recent years.

Uncertainty for lenders is also heightened compared to a normal recession. In previous recessions, credit losses have risen in both corporate and household lending portfolios but action could be taken to mitigate losses. This time around, lenders have had new protocols imposed on them by government that restrict their ability to manage arrears.

Perhaps the most striking examples are the mortgage 'holiday' scheme under which lenders were required to offer a 3-month deferment in payments to any borrower impacted by coronavirus (which has now been extended to 6 months) and the moratorium on home repossessions. Lenders currently have around 20% of borrowers on payment holidays and have limited visibility as to likely arrears rates for borrowers coming out of a payment holiday and uncertainty about how quickly they will be able to take action against these borrowers if government extends the moratorium on repossession proceedings. At the same time, government has been incentivising banks to continue to lend under schemes such as the Term Funding Scheme with additional incentives for SMEs (TFSME), which provides funding to banks which is cheaper for those that increase their lending to this sector of the economy.

So lenders face a similar prospect as they did in the financial crisis: they face higher credit losses coupled with government pressure to maintain or enhance lending to the real economy, but this time with more constraints on their ability to collect from defaulted borrowers. It seems that lenders have never in peacetime been such an instrument of public policy, provided with both carrots (e.g. the TFSME) and sticks (controls on their ability to collect delinquent debt) that contort their behaviour compared to that of a private lender with a free hand to act in its own interests. Counter-cyclical capital buffers have also been relaxed, which will allow banks to operate with lower capital ratios. Although this is what the counter-cyclical buffers were designed for, if we see a prolonged period of heightened credit losses, it may be hard for banks to build their capital ratios back up.

The stability of the financial system over the coming years will depend on a number of factors that are hard to judge at present. The most important factor is the speed with which the country and the world can get back to normal. If a reliable vaccine is found relatively soon, that should allow a much speedier return to business as usual globally and in the UK. But if lockdowns need to be re-imposed over coming years, bad debts are likely to rise further regardless of governments' measures to ameliorate the consequences on the private sector.

Another issue is whether the coronavirus crisis will spark an international economic crisis of some sort. Relations between the US and China have deteriorated after the tentative 'ceasefire' in the previous trade war, which could lead to new economic frictions. Volatility in commodity prices could affect regional economies, for example with the oil price slump threatening a severe downturn in the Middle East, and some commentators have raised concerns about the amount of US Dollar borrowing that has been accumulated by non-US entities. Because these debts have to be serviced and ultimately repaid in US Dollars, there is concern that borrowers will compete with each other for a limited supply of Dollars, which could trigger a global Dollar shortage, pushing up the Dollar, which in turn would make servicing Dollar debts more expensive, which could cause mass defaults.

Still another source of concern must be the Eurozone. The previous Eurozone crisis stemmed from the disconnect between fiscal policy being operated at a national level and monetary policy being set on a pan-Eurozone basis. This prevented national governments like Greece's from using monetary policy to provide the appropriate level of reflation for its economy. Much higher national government deficits across the Eurozone, including in those countries that already have extremely high government debt to GDP ratios, does raise the spectre of another Eurozone crisis. Although the European Central Bank can engage in QE to support national government bond markets, there is still some uncertainty as to what the limits on its largesse might be.

Domestically in the UK, one source of concern is with the so-called non-bank lenders. These non-deposit takers have not had access to the Bank of England support mechanisms available to banks and building societies. Non-bank lenders tend to focus on lending to mortgage borrowers who do not meet the criteria of mainstream lenders as well as offering some SME and unsecured consumer finance. Their difficulties raising funds in the current environment through the securitisation market has not only stymied their ability to maintain lending but calls into question their ability to survive. Although they represent a smaller part of the financial system than prior to the financial crisis, they still advanced over 23,000 loans in 2019 worth more than £5 billion and their demise would reduce competition and leave the non-standard borrower segment they mainly service particularly bereft of future borrowing options, potentially creating a new generation of mortgage 'prisoners'.

In conclusion, for the financial system as a whole, there is great uncertainty as to the scale of shock it might face over the coming years. There are reasons to be cautiously optimistic: UK banks and building societies entered this crisis with strong balance sheets – having much more robust capital and liquidity ratios than they did before the financial crisis; debt servicing costs for borrowers are under control because interest rates are so low and likely to remain so given their stability during this century; and governments have the ability to provide further support to economies, and in particular to some borrower segments, if need be.

However, there are also risks that are hard to quantify that present potentially serious challenges. Large swathes of both the corporate and household sectors are under unparalleled stress, having seen their income squeezed extremely hard. Moreover, we have not seen the full impact of the 'second round' effects that stem from a loss of income not from those directly impacted by coronavirus but indirectly as firms and households that have been directly affected cut back their spending in other areas of the economy. And debt levels in the private sector remain relatively high compared to GDP. Although not quite at the levels seen before the financial crisis in the UK, globally they are at record highs.

While it is impossible to say whether banks will ultimately require further injections of capital from government to replace capital destroyed through future credit losses, so far the omens are positive, with financial markets (both equity and debt markets) not showing the level of concern seen during the financial crisis, although financial markets do not have a good track record of assessing such future risks. But what perhaps we can say now is that the financial system will remain an instrument of public policy to an extent not previously seen in peacetime.

Deposit takers occupy a privileged position in the economy, enjoying an implicit subsidy from their access to central bank support and funding. Ironically, since the financial crisis, sparked by global financial institutions' collective reckless actions, this implicit subsidy has greatly increased through schemes where central banks, including the Bank of England, incentivise banks to lend by providing them with cheap funding. With the likelihood that central banks will be required to ramp up the subsidy to banks to keep the flow of finance open to the rest of the economy, there could well be a quid-pro-quo imposed where government demands more control over banks' decision making processes. Constraining banks' ability to act in their own commercial interests has already been seen with the mortgage holiday and the constraints placed on their ability to pursue defaulted debtors. In short, banks are set to become more like public utilities and less like private sector actors as seen in some countries in the post-World War II period.

Policymakers will also want to give consideration to a conundrum that has been evident since the financial crisis: that while keeping the flow of credit available to the real economy is vital, encouraging the accumulation of more debt within the private sector as a mechanism to maintain economic output carries with it the risk of creating another financial crisis by pushing debt up to unsustainable levels. Attempting to solve this conundrum could again involve government seeking to have a greater role in determining where bank lending is directed, with a focus on lending that supports real economic activity and perhaps an attempt to curtail lending to sectors seen as engaging in financial engineering such as private equity.

6. Impact on the housing and mortgage markets

The housing and mortgage markets fall into the non-essential category of service and government directed that the housing market be closed during lockdown but opened it back up relatively early (mid-May), albeit with social distancing requirements. In the UK mortgage market however, many consumer-facing and back office activities are highly automated and with online communication, so lenders and brokers remained open for business, continuing to support customers throughout lockdown thanks to their own business continuity plans. As a result, important segments of the mortgage market, such as remortgages and product transfers, where a borrower switches from one mortgage product to another with the same lender, continued to function.

For example, many UK lenders have fully automated product transfer offerings. These allow an existing mortgage borrower to go online and apply for a new product offering through the lender's portal. No face-to-face meetings are required. Similarly, many mortgage intermediaries can offer advice to customers wishing to remortgage by video link and the application process is also highly automated, making it possible to switch lenders without any face-to-face meetings.

However, as well as the virtual closure of the housing market, uncertainty over valuations led lenders to pull higher loan-to-value mortgage products because the dramatic slump in sales and the inability to procure physical valuations led to uncertainty about the direction of price movements. The scale of the economic dislocation suggests some downward pressure on house prices is likely which concerns lenders when advancing high loan-to-value loans as the security may fall short of the debt. It is too early to know how large the fall in house prices might be but experts are agreed that some downward correction will take place in the shorter term.

Until lenders are clearer on the likely course of house prices and the broader economy, they are unlikely to go back to 95% loan-to-value lending and some lenders may maintain an 85% loan-to-value cap. Of course, there is something of a chicken and egg problem here, as in the absence of high loan-to-value lending, first time buyers will find it harder to purchase, which will hold the market back.

Longer term, there are reasons to be optimistic about the robustness of the UK housing market and therefore about the strength of the mortgage market. The UK housing shortage remains and is likely to support property prices until the balance of supply and demand is altered, either by much higher rates of building or by a lower population, neither of which look likely. House building rates have already been boosted by the government's Help to Buy scheme, where buyers receive a government funded equity loan, allowing them to access a lower loan-to-value convention mortgage. Help to Buy supported 30% of private sector new build sales in England in 2019 but as this scheme is being phased out from 2021 to 2023, building rates could fall back, exacerbating the housing shortage.

Moreover, the impact of the significant monetary easing we have seen in response to Covid-19 should be supportive of property values in the medium to longer term, as the economy recovers. But this crisis has illustrated the limitations with the market economy and could usher in an era of greater government involvement in the economy which could include more support for homeowners who face financial distress. This would be a positive development given that the support that has been available to UK homeowners has fallen short of that available to those who rent their home.

Decoding a new reality: what does Covid-19 mean for affordable housing finance in Europe?

By Saskia van Balen & Joost Nieuwenhuijzen

Housing providers across Europe are working strenuously to address the immediate health-and-safety-needs of their tenants. This much has been certain from the start of the Covid-19 pandemic. More recently, housing providers have begun to take stock of the latent economic implications of the crisis. In the wake of these developments, housing providers have started to share their first responses to this global crisis.

EFL performed a member survey among CEO's and senior management of housing associations and commercial companies in the housing sector about the effects of the Coronavirus Pandemic on their daily business. With over 50%) response, we confidently present you with an overview of the measures taken in the EFL represented countries. A common concern can be located in terms of the coordination of novel policy tools by stakeholders. In particular, they are required to tackle the immediate, medium- and long-term effects of the COVID-19 pandemic and associated economic crisis.

It has become clear that the COVID-19 pandemic has pervaded many aspects of the affordable housing sector. We asked our members if (and how) their financial strategy has changed due to Covid-19. We sought to find out about the expected effect on P & L, and whether budget plans are being revised. With EFL's gaze set to the future, we inquired how they envision the financial landscape beyond the crisis. What will this mean for the housing sector?

Members report a clear increase of productivity, although aspects of service provision have been postponed. Around 70% of organisations surveyed are introducing new services or activities due to the crisis, either related to home-working or new innovative programmes that are being newly introduced or accelerated during these times.

A shared concern was found to be the availability of capital, potentially due to higher spending on health and the social welfare. At the same time members expect a growing demand for our affordable housing amid rising unemployment, tightening budgets even more. Some EFL members fear that bank financing will become more expensive based on banks' margins with stagnating interest rates on the capital markets, a trend that will directly affect investment portfolios, in particular new construction and (green) investments in stock renovation. Potentially less access to government grants may also contribute to that trend, but there are differences between countries. It is as yet unclear how much public funding will be available to support this, without certain key policy changes. Could this possibly open a door for additional institutional and private investment in affordable housing? The counter- cyclical character of affordable housing investments has in the past shown a certain resilience to market fluctuations and hence a hedge for investors. Some of our members expect growing interest from institutional investors in affordable housing.

Many members are hoping that the housing sector and building energy efficiency will both be an essential part of the post-crisis economic stimulus package at both national and EU level. Although there is a divergence of opinions in relation to future investment volumes, European policies like the Green Deal and the so called 'Renovation Wave' will trigger appetite for better energy performance of large residential portfolios. A recently held seminar among EFL members showed also the importance of this fact: keeping existing dwellings in their current state will gradually increase the risk profile and thus impact on future returns, risk premiums on financing and even insurance premiums.

Many EFL members expect rent arrears and bad debts to increase significantly over the coming months. According to other members, this increase will depend on the 'bounce-back' when restrictions are lifted. A rise in arrears in the short term possibly requires more extended repayment options than would normally be the case. EFL member Radius Housing (Northern Ireland,) is of the opinion that this will doubtless lead to more write-offs than usual. Whilst they may need to consider a lower than expected increase (or freeze) next year, they do hope to see a return to normal rent reviews and increases within two years. Recent figures in the Netherlands show for example that rent arrears happen but are not significant. Yearly rent increases will over the whole sector be introduced in 2020. Depending on how much a specific country is hit by the crisis, other responses have been reported. Another aspect related to market forecasts are expected pressure on sales and thus cross-financing opportunities.

In the midst of all that uncertainty and lack of clarity, many EFL members are already implementing cost reduction programmes for their businesses. A few of them have even opted for governmental or non-governmental COVID-19 funding schemes. Others find it hard to assess the magnitude of additional spending in this situation and are still in doubt whether or not to revise and re-profile their budget. Furlough of employees is taking place, more specifically in the UK where traditionally the number of staff hired by housing associations is considerably higher than in mainland Europe. On an operational level, contacts between (social) staff and residents are traditionally more frequent and these activities have become less frequent or totally absent.

Long term effects of COVID 19 are expected in the working environment. The fast adaptation of video meetings and webinars has strongly reduced physical presence at offices. People working at home has become the default and many expect this will remain a structural effect in the future. Reducing commuting costs, renting less office space and more use of digital communication and digital services will have an effect on the cost and income structure of the social housing business.

No one knows the long-term effects in the post-COVID housing market, but we think it is safe to say there will be lasting effects on the affordable housing sector. EFL will follow the situation from a European perspective during the following months and use it's communication channels like our website www.efl.eu, Twitter and Linkedin to publish future developments.

An exploration of black housing and wealth inequality in the suburbs: a call to action

By Joseph Fraker

1. Introduction

The home is the single largest asset for most middle-class families, with the primary residence for the average household accounting for nearly a third of overall gross household assets (Keister & Moller 2000, Killewald et al. 2017, Oliver & Shapiro 2006). Blacks tend to have more of their overall wealth in their homes with home equity accounting for 37% of total assets compared with 32% for whites (Dettling et al. 2016). This makes housing an important asset to address when looking at ways to reduce the racial wealth gap – research shows that the median black household has roughly 10% the wealth of the median white household (Maxwell et al. 2019). It is especially important to measure given the outsized impact of past housing policies and private sector discrimination in creating these current circumstances.

There is extensive research focused on the extent of low home equity for blacks (Bokhari 2018, Dettling et al. 2016, Harshbarger et al. 2018, Howell & Korver-Glenn 2018, Killewald et al. 2017, Krivo & Kaufman 2004, Oliver & Shapiro 2013, Thomas et al. 2018). First, homeownership rates are lower for blacks than they are for whites, with a rate of 43% for blacks and 74% for non-Hispanic whites (Census 2019). For blacks who do own homes, their homes appreciate at lower rates. Between 1967 and 1988, the average value of white-owned homes increased by $21,900 more than for black-owned homes nationally (Oliver & Shapiro 2007). Research from the Federal Reserve Bank of Saint Louis shows that, nationally, from 1989 to 2013, the annual rate of change in home equity was 1.2% for whites and -0.4% for blacks (Emmons 2017). Other research shows that appreciation rates in metropolitan areas throughout the country were lower for low-income and minority home-owners than they were for white homeowners (Mayock & Malacrida 2018).

In national studies, mean net housing wealth was $215,000 for whites and $94,400 for blacks in 2016 (Dettling et al. 2016). According to The Survey of Income and Program Participation (SIPP) from 2014, whites had an average of $90,000 ($96,380 for non-Hispanic whites) in home equity and blacks had $59,000 in home equity (Census 2019). However, home equity varies across Census regions and divisions, between metropolitan areas and within metropolitan areas. As a result, studies looking at home equity disparities by race often vary significantly depending on the geographic sample used. In addition, some studies parse out the role of racial and ethnic segregation on disparities in home values while others do not. Still others control for factors such as household income, education and other variables. Accordingly, the research presented in this article varies based on differing research designs.

A 2018 study of the 16 most populous American metro areas found that the average home equity was $348,000 in white communities (neighborhoods with fewer than 25% minority residents) and $254,000 in minority neighborhoods (neighborhoods with over 50% minority residents) (Bokhari 2018). The study found that the gap in home-equity between non-white and white communities widened between 2012 and 2018.

A study of Harris County, Texas that used a predictive model to analyze housing values by racial composition found that a neighborhood that is 100% black would be expected to have an average home value of $58,000, while a neighborhood that is 100% white would be expected to have an average home value of $479,000 (Howell et al. 2018). When controlling for housing and neighborhood characteristics, as well as consumer housing demand (which is lower in black communities), Howell et al. [2014] predict average home values to be $127,000 in black neighborhoods and $289,000 in white neighborhoods.

Another study looking at the impact of segregation on home values shows that as segregation increases, differences in home values between blacks and whites increases, and that high economic status blacks have significantly lower value in their homes than high economic status whites (Thomas et al. 2018).

Evidence suggests that part of the disparity in home values between black-segregated and white-segregated neighborhoods is due to an income-stratified and race-stratified housing market. Segregation lowers demand and places a cap on home equity potential for homeowners in minority neighborhoods (Shapiro et al. 2013). Similarly, racial and ethnic stratification and discrimination were identified as being critical to understanding home equity disparities in a study by Krivo & Kaufman [2004]. According to this study, the tendency of whites to avoid minority neighborhoods reduces market demand for homes in these areas, reducing overall home values (Krivo & Kaufman 2004). In this case, the white "majority market" sees higher appreciation rates while the black "minority market" sees lower rates due to suppressed demand.

Another study shows that the average home value in majority white neighborhoods was $341,000 compared with $184,000 in majority black neighborhoods in metropolitan areas (Harshbarger et al. 2018). The authors state that this is a devaluation of roughly $156 billion for black homeowners who live within metropolitan areas nationwide, and a devaluation of $48,000 per home, after controlling for housing and neighborhoods characteristics (Harshbarger et al. 2018).

Understanding the extent of these racial and ethnic disparities in home equity is important for determining the relative effect of housing equity disparities in the overall racial wealth gap. As highlighted by a number of these studies, segregation levels are a critical determinant of the wealth gap, with segregated neighborhoods seeing greater home equity disparities than national home equity disparities.

The purpose of this article is to shed light on one of the main factors that limits wealth accumulation for black Americans – systemic home devaluations in black neighborhoods – and discuss how housing and land use policies and private sector discrimination helped create these circumstances. The article provides an illustrative case from the Atlanta-Sandy Springs-Roswell Georgia Metropolitan Statistical Area (MSA) as an example of how the issue manifests in a city with more contemporary growth patterns, and discusses whether fair housing approaches that seek to relocate residents from low-opportunity to high-opportunity neighborhoods or more community development approaches are best for mitigating the effects of segregation on home values. Finally, the article contemplates what an appropriately large federal response might look like that could help homeowners in these neighborhoods achieve the same home equity and upward mobility potential of similarly situated residents in other neighborhoods.

In addition to the above stated purpose, it is also the intention that this piece can help push policymakers in the United States to adopt significant and lasting reforms that help individuals build wealth in black- and minority-segregated places without having to worry about whether their investments are viable. Much of this research was completed in 2017 and 2018. Since then, new books by Keeanga-Yamahtta Taylor, in RACE for PROFIT, and Andre Perry, in KNOW YOUR PRICE, have helped illuminate the issue.

2. Causes of segregation and existing patterns of segregation

Segregation in the United States has deep historical roots in a variety of public and private sector factors. Federal and local policies like "redlining," Urban Renewal, and the interstate highway system have all created or reinforced segregation, as have exclusionary zoning at the local level and local government fragmentation. Nongovernmental causes include discriminatory real estate practices and restrictive covenants, protests against black integration and the personal preferences of homeowners for living in racially homogenous neighborhoods. Today, resistance to integrating neighborhoods can be seen in more subtle ways, often framed on economic instead of racial grounds. Resistance by local residents to providing affordable housing, and still pervasive exclusionary zoning both perpetuate segregation. As a result of these public and private sector actions, segregation has continued into the 21st century, becoming a feature of the landscape of many American cities and suburbs.

Zoning, a method that local governments use to divide land into different use classifications, has a fraught history of being used to discriminate against certain races, ethnicities and other groups with lower socioeconomic status (Shertzer et al. 2016, Whittemore 2017). Research by Whittemore (2017) and Shertzer et al. (2016) shows that zoning has historically been used to protect wealthier single-family neighborhoods while excluding poor and minority residents. It has also been used to overtly and less directly segregate minority populations and to introduce environmental hazards to neighborhoods, contributing to neighborhood decline and reduced housing values (Krivo & Kaufman 2004).

Today, low-density, single-family zoning is a significant contributor to income segregation of the wealthy. Restrictions on density, such as large lot sizes and setback requirements, tend to increase income segregation among top-income earners (Schill & Wachter 1995) (Lens & Monkkonen 2016). They also tend to increase land values by restricting supply (Schill & Wachter 1995) (Massey & Rothwell 2009). These land use controls are generally implemented at the local level. As a result, local governments are powerfully positioned to include or exclude certain demographic groups.

There is evidence that metropolitan areas with higher levels of local government fragmentation have more racial sorting and segregation (Dawkins, C. 2004, Lewis & Hamilton 2011). Northern cities like Chicago, Detroit and New York have the highest levels of local government fragmentation based on the Metropolitan Power Diffusion Index. They are also metropolitan areas with the highest levels of racial segregation. These fractured urban areas have competing interests and are unlikely to cooperate on areas relating to social equity and housing integration, according to public choice theory, because wealthier areas are more likely to want to hoard resources (Norris 2001). Traditional public choice theory states that individuals and firms will maximize their utility by moving freely between jurisdictions to the one they prefer (Tiebout 1956). However, public choice theory leaves out certain social and cultural characteristics that may inform decisions on where to live, in addition to government and institutional barriers. Evidence from Dawkins (2004) shows that metropolitan areas with a 10% increase in public choice have a four to seven percent increase in segregation across jurisdictions.

Another discriminatory mid-20th century policy was lending discrimination. In 1933, the Homeowners Loan Corporation (HOLC) developed a system of color-coded maps highlighting homes and neighborhoods at higher risk of losing value. These maps, drawn between 1935 and 1940 for 239 cities across the Country highlighted "safe" neighborhoods in green and "risky" neighborhoods in red (Aaronson et al. 2017) (Rothstein 2017). Research on "redlining" demonstrates that the lack of credit availability in areas zoned yellow and red increased segregation and disinvestment, while areas zoned green and blue saw investment (Aaronson et al. 2017). Evidence suggests that "redlining" likely entrenched existing patterns of racial segregation and may have caused existing segregation to become more pronounced. In a study on the lingering effects of "redlining," the authors note that areas on the "wrong side" of neighborhoods graded yellow and red in the HOLC maps saw continued segregation and disinvestment through the 1970s and 1980s, well after the maps were drawn. These trends have declined some in the decades after 1980, but segregation and poverty are still a feature of many previously redlined neighborhoods across the country, indicating that the HOLC maps had significant and lasting effects that can be seen today in lower home values and community disinvestment (Aaronson et al. 2017).

In the decades following World War Two, Urban Renewal and the Interstate Highway Act further entrenched racial segregation. While whites were provided home loans to move to the suburbs during this time, blacks were restricted to designated "redlined" areas in cities (McGrew 1997). Existing black neighborhoods were often leveled to make way for freeway construction or other civic projects, uprooting lives and communities (Fullilove 2004). Those affected were moved into newly built housing projects, almost always in areas that were already predominately black (McGrew 1997). In some instances, alternative housing was never provided (Power 1983).

Even for black residents that could afford to live in the suburbs, restrictive covenants and private sector discrimination often made this impossible. Restrictive covenants were widely used to prevent blacks and other minorities from purchasing homes in new subdivisions. These covenants were often a condition for receiving Federal Housing Administration (FHA) loans (McGrew 1997). Even before the FHA's backing, however, restrictive covenants were popular with real estate companies looking to promote their exclusive new developments (Power 1996). After it was ruled that restrictive covenants could not be enforced in 1948, covenants were still used for marketing purposes until the passage of the Fair Housing Act in 1968 (Whittemore 2017).

Discrimination by brokers and racial and ethnic steering was also common before the Fair Housing Act (Krivo & Kaufman 2004). The Fair Housing Act did not end discrimination by the real estate industry, though. More contemporarily, racial minorities are shown fewer homes in the homebuying process than whites, limiting their potential to move from disadvantaged neighborhoods to higher-opportunity ones (Aranda et al. 2013). In addition, racial minorities often expect to experience discrimination in the home buying process, making them more hesitant to look in certain neighborhoods (Aranda et al. 2013).

In addition to these more formal forms of segregation enforcement, violence and intimidation to oppose racial integration was also common by white citizens and homeowners. Racist attacks were used to expel black residents from white neighborhoods and to deter other potential black homebuyers from moving in (Rubinowitz & Perry 2001). This violence occurred in cities across the country in the beginning and middle of the 20th century and was most common in northern cities (Rubinowitz & Perry 2001). In Chicago whites protested the integration of neighborhoods through rioting and bombings (Power 1983). In Detroit, there were reported to be over 200 attacks on black residents moving into white neighborhoods in the period between WW2 and the 1960s (Rubinowitz & Perry 2001). In Boston, attempts to integrate the city's white public housing were met with cross burnings, property damage and death threats (Rubinowitz & Perry 2001).

Another factor in segregation is personal preference for homogenous neighborhoods. Social science literature shows that blacks and whites have different preferences for where they would prefer to live and that these preferences likely contribute to patterns of segregation (Farley & Krysan 2002). Blacks express a preference for neighborhoods that are equally mixed, while whites prefer neighborhoods that are at least 75% to 80% white (Goetz 2018) (Farley & Krysan 2002).

With the many factors that have historically contributed to segregation and factors that still contribute to it, it is useful to see how segregation and inequality have manifested in cities with more recent population growth. Segregation and housing inequality in many northern cities, where populations in some cases peaked decades ago, looks different than many southern cities that have experienced more recent gains and large amounts of suburbanization. The suburbanization of segregation has been less studied. To investigate more recent trends in the effects of segregation on housing wealth inequality, this article examines the Atlanta, Georgia metropolitan area.

3. An illustrative case: Atlanta-Sandy Springs-Roswell MSA

While blacks have been an integral part of the history of Atlanta from its founding, regional and national trends have had profound impacts on the city's racial composition in the 20th and 21st centuries. The Great Migration, a period of out-migration of southern blacks to northern and western cities that lasted from 1910 to 1970, saw six million blacks move out of the Jim Crow south where economic conditions and race relations were poor, to cities affording greater opportunities (U.S. Census 2012). During this period, the black population living in the south dropped from 90% to 53% of the US black population (Lacy 2016). Beginning in the late 1970s, however, this pattern began to shift with more blacks moving back to southern states, led primarily by college-educated blacks, with a greater share of blacks with college degrees moving south than those without (Frey 2004). In 2010, 57% of the nation's black population lived in the south, with metropolitan areas of Washington D.C, Atlanta, GA, Dallas, TX and Houston TX seeing the greatest gains in black middle-class residents during the 2000 to 2010 period (Lacy 2016).

The suburbanization of poor and minority populations is a parallel story to the national trend of blacks moving to the south. It is also an area that has been under-studied in sociology research (Frey 2015, Lacy 2016, Lloyd 2012). This "suburbanization of poverty" presents unique challenges for residents facing financial hardship, especially around transportation and job access (Lacy 2016). It also burdens suburban jurisdictions that are not used to dealing with poverty concerns and often lack the social services, housing nonprofits, and other resources typically available to larger city centers (Immergluck et al. 2015).

In 2010, 55% of poor people lived in suburban areas (Lacy 2016), and the majority of blacks, Hispanics, Latinos, and Asians lived in suburban locations (Lacy 2016). The population of the suburban poor in 2005 was 1 million greater than the population of the urban poor according to research by Berube and Kneebone (2006). These data contradict the popular idea that poor and minority residents live in cities and wealthy and white residents live in the suburbs. Prior research on the movement of immigrant and minority populations proposed that these groups would "spatially assimilate" into majority white residential neighborhoods as soon as they gained the means to do so (Lacy 2016). Contemporary research shows that, while this is true for some, it is not universal among minority groups, and certain groups have tended to live in more ethnically or racially homogenous areas. Native born blacks, for example, do not fit the spatial assimilation model, many of whom remain in neighborhoods with other middle-class blacks (Lacy 2016). The reasons for this, as is explored earlier in the paper, are complex. They reflect historical patterns of federal government and local government discrimination, private sector housing discrimination, white resistance to integration and personal preferences.

The Atlanta metropolitan area reflects many of these national demographic and geographic trends. Between 1970 and 2000 the percentage of black residents living in Atlanta's suburbs grew from 27% to 78% (Lacy 2016). In the 1990s more blacks moved to the greater Atlanta area than any other American city (Lacy 2016). Meanwhile the share of blacks living in the city center fell as a proportion of total residents.

Defining this transition of blacks to Atlanta's suburbs are profound geographic disparities by income and race. Blacks are highly clustered in the southern suburbs of the Atlanta metro area while whites generally live to the north and far outlying areas. Income exhibits a similar spatial pattern with more white residents correlating with higher incomes and more blacks with lower incomes. Despite these disparities, median household income for blacks was 65.1% that of whites in 2017, a figure roughly three percent higher than the national median, reflecting the relative affluence of the black population in Atlanta compared with other areas (ACS 2017).

Previous research on housing wealth in the Atlanta area has looked at the influence of race, class, and spatial patterns (Immergluck et al. 2015, Pooley 2015, Badger 2016). They show that homes in majority black neighborhoods are valued less than those in majority white neighborhoods, even when factoring for housing and neighborhood characteristics. These circumstances make it difficult for the average black family in Atlanta to build wealth through homeownership and make Atlanta an important case study for understanding housing and wealth inequality in other cities.

The research in this illustrative case of Atlanta builds on the evidence presented by previous studies and provides an up-to-date accounting of housing wealth that reflects the latest data from the American Community Survey,

2018. Additionally, and while worthy of study on its own, Atlanta is emblematic of other, especially southern cities that have undergone similar demographic changes. It is expected that an analysis of housing wealth in Atlanta will reflect that of a typical growing southern city. Patterns of segregation in Atlanta are unique to metro areas that have experienced more recent population growth and unlike the post-industrial cities of the north that saw their populations peak in the mid-20th century. Also, given the relative affluence of the black population in Atlanta compared to other areas, a study of the effects of race, class, and segregation on housing wealth may reflect an upper bound of what a black family might be able to achieve in overall housing wealth given the constraints to home equity accumulation previously discussed.

4. Research design

For this analysis, census tracts in the Atlanta-Sandy Springs-Roswell MSA were chosen that have varying degrees of segregation while controlling for income. Census tracts were divided into three groups to measure racial segregation between blacks and whites: highly segregated (80% to 100%), moderately segregated (60% to <80%), and minimally segregated (40% to <60%). These categories were chosen to obtain samples with similar numbers of census tracts, with all groupings having at least 20 census tracts. This stratification allowed for the greatest sample sizes given the limiting constraint of needing the same income levels for tracts in the sample. It should be noted that the 40% to 60% black and 40% to 60% white categories overlap somewhat, and the category for "white" includes white-identifying Hispanic and Latino residents.

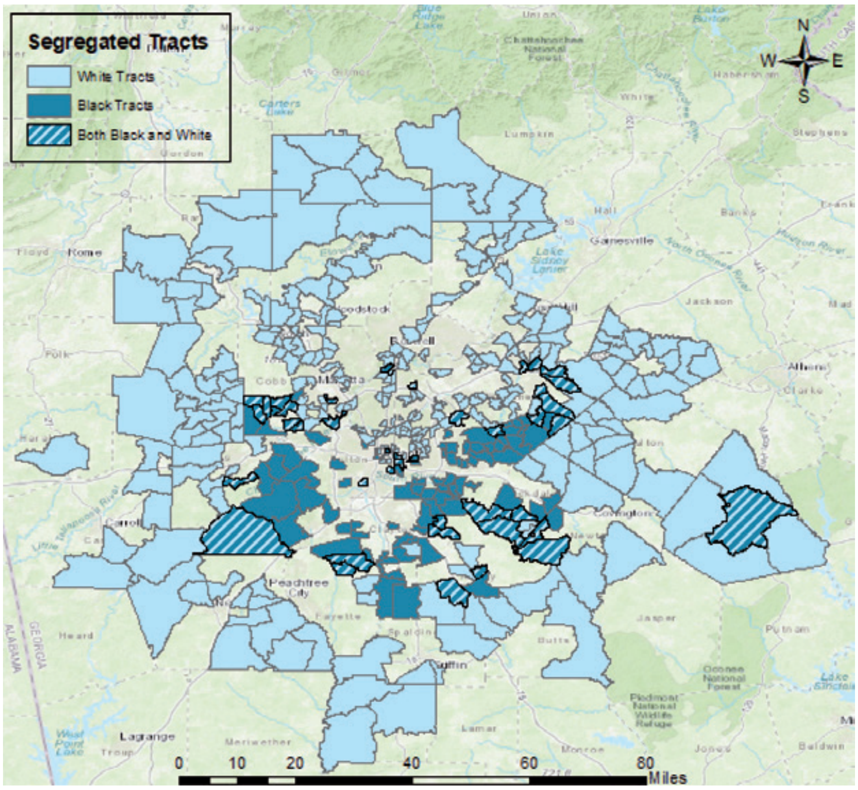
Incomes were measured using the latest American Community Survey year available, 2018. Because there were more tracts with higher incomes for tracts with higher percentages of white households, tracts were deleted from the high end of each of the three white segregated groupings until the average median household incomes for each grouping were within a close range ($1,500). Median household incomes in the sample of highly segregated tracts were about $60,900, while they were about $61,300 for moderately segregated tracts and $62,400 for minimally segregated tracts.

All the data in this analysis is from the American Community Survey (ACS) 5-Year Estimates at the Census Tract level. Census data was chosen, as opposed to Zillow's Home Value Index data or American Housing Survey data for its comprehensiveness and ease of availability. It also includes a variety of other attributes on housing and neighborhood characteristics like income, education levels and house structure, including number of bedrooms and year built. For this analysis, the number of bedrooms was used to approximate square feet of the home, as actual square feet values are not available in the ACS data. To do this, the percent of homes with either three, four or five bedrooms for each tract was calculated and multiplied by 2,500 square feet, a rough approximation of an average home with this number of bedrooms in the Atlanta MSA. These estimations are imperfect but provide for adequate comparative analysis. For higher education levels, the analysis included all those who have either a bachelor's degree or higher.

The ACS home value estimations have limitations in that the house values are survey respondents' estimate for how much their property (house and lot) is worth and not actual sale data (Molloy et al. 2018). Some studies show that survey respondents tend

FIGURE 1 Map of a summary of the census tracts used in the study.

In the study, the black tracts and white tracts are divided into three classifications: Highly segregated, Moderately Segregated, and Minimally Segregated. The summary map below combines these tracts into just "White Tracts," "Black Tracts," and "Both Black and White Tracts" to visualize the study area more succinctly.



Source: Esri, HERE, Garmin, Intermap

TABLE 1 Zero-order correlation coefficients for all variables in the study

	1	2	3	4	5	6
1. Median Home Value	—					
2. Percent Black or African American	-0.51	—				
3. Percent with Bachelor's Degree	0.84	-0.42	—			
4. Median Household Income (2018)	0.80	-0.56	0.78	—		
5. Median Year Structure Built	-0.11	0.00	-0.10	-0.04	—	
6. Median Home Sq. Ft.	0.05	-0.22	-0.04	0.45	0.11	—
7. Estimated Home Value/Sq. Ft.	0.49	-0.18	0.54	0.19	-0.13	-0.57

FIGURE 2 Median home values for owner-occupied homes by percent black for all census tracts in the Atlanta-Sandy Springs-Roswell Georgia MSA

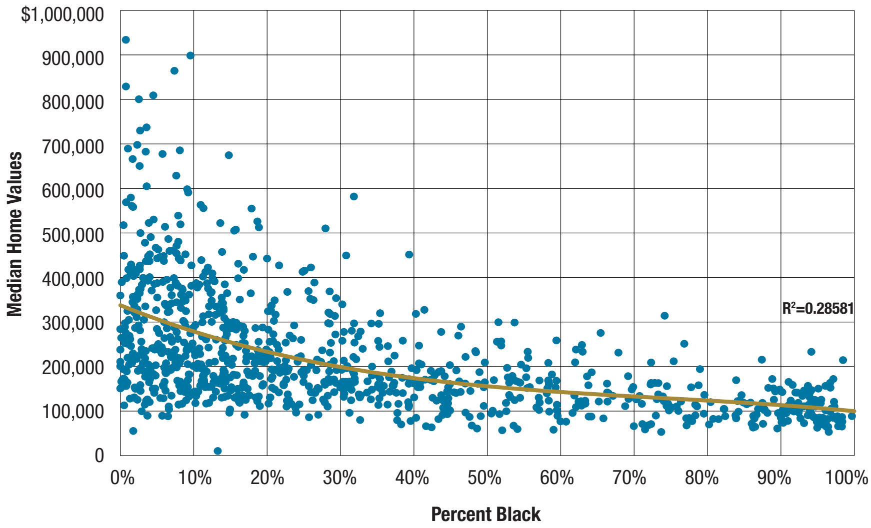


FIGURE 3 Graph depicting average median home values for all census tracts with the same median incomes by the black population in the tracts

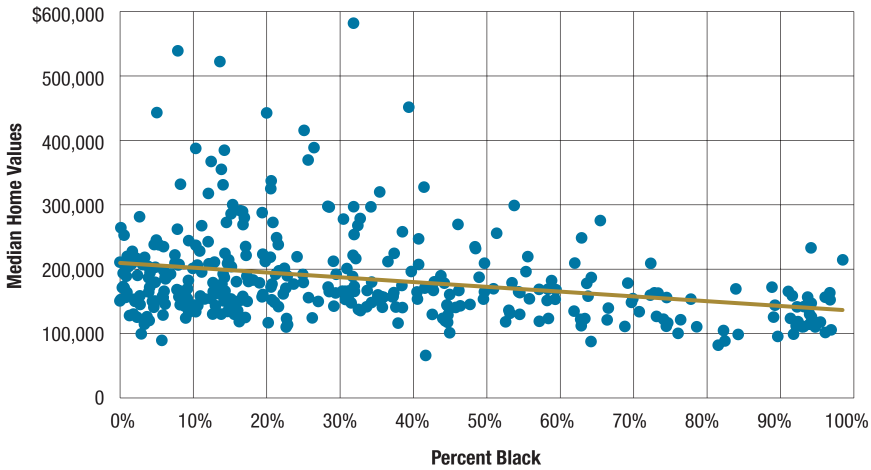
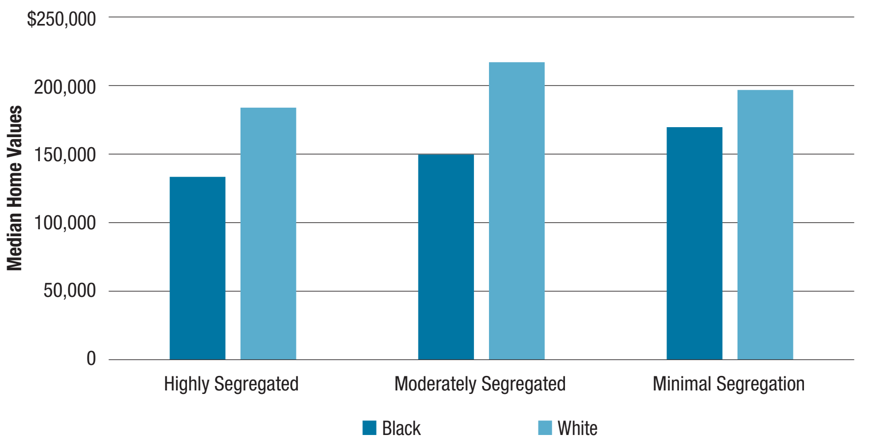


FIGURE 4 Graph of home values in 2018 by segregation level in census tracts with the same median incomes used in the study



to over valuate their homes slightly, with higher income homeowners assessing the value of their homes more accurately than lower-income homeowners (Molloy et al. 2018). Studies looking at this did not address racial or ethnic differences in valuation tendencies.

The study area includes a population of 2,047,925 residents. This is a little over a third of the population of the metropolitan statistical area as whole, which is 5,949,951. While the remainder of the MSA was left out of the study for comparison purposes, similar patterns around home equity and race can be seen throughout the metropolitan Atlanta area. They are not limited to the tracts used in the study (see figures 6 through 8).

5. Results

When looking at all the census tracts in the Atlanta MSA, there is a steady and statistically significant relationship between median property values in a census tract and the share of black residents in a census tract (Figure 2). Owner-occupied homes in tracts that are 90% to 100% white are worth roughly three times that of owner-occupied homes in tracts that are 90% to 100% black. This, of course, is fairly intuitive, as it would be expected that blacks would have lower valued homes due to their overall lower income levels and other socioeconomic indicators.

What is less intuitive is that home values for owner-occupied homes in neighborhoods where socioeconomic indicators are similar are also devalued in black census tracts. When looking at varying degrees of segregation and factoring for income, home values show a similar relationship.

Highly segregated neighborhoods, e.g. neighborhoods with over 80% black residents or over 80% white residents where average median household incomes are nearly identical, median home values in black census tracts averaged $133,377 while they averaged $183,873 in white census tracts in 2018. Highly segregated black tracts depreciated by $30,056, between 2010 and 2018 while highly segregated white tracts gained $7,486 over the same period. Black tracts had a slightly higher proportion of residents with higher education degrees with 32.3% compared to 24.2% for white tracts. On average, homes in black tracts were larger than homes in white tracts, with 87.1% of homes in black tracts averaging either three, four or five bedrooms compared with 79.5% for white tracts. Price per square foot of homes was $92.5 for white tracts and $61.2 for black tracts, while, on average, homes in black tracts were built in 1990 compared to 1992 for the white tracts. These numbers show that homes in highly segregated black tracts were worth $50,496 less in 2018 than highly segregated white tracts, even when black tracts were similar or more favorable for characteristics associated with higher home values than the white tracts.

In census tracts with moderate levels of segregation where median household incomes were similar, median home values were $149,629 in black tracts and $217,039 in white tracts in 2018. Black tracts depreciated by $19,677 between 2010 and 2018 while white tracts gained $118. The white tracts had a slightly higher percent of residents with higher education degrees at 36.6% compared to 28.7% for black tracts. Home sizes in black tracts were larger, with 86.3% and 65.2% of black and white tracts having three, four or five bedrooms, respectively. Price per square foot of homes was $89.9 in black tracts and $133.2 in white tracts. Homes were built, on average, in 1988 for both. These summary values show that moderately segregated black tracts have home values that are even more suppressed, by $67,410 in 2018, compared to white-segregated tracts with similar attributes.

FIGURE 5 Home values after the Great Recession by segregation level for tracts with the same median incomes

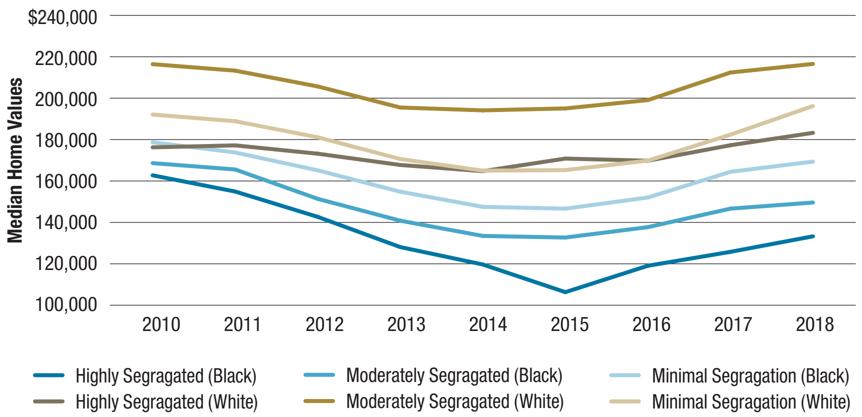
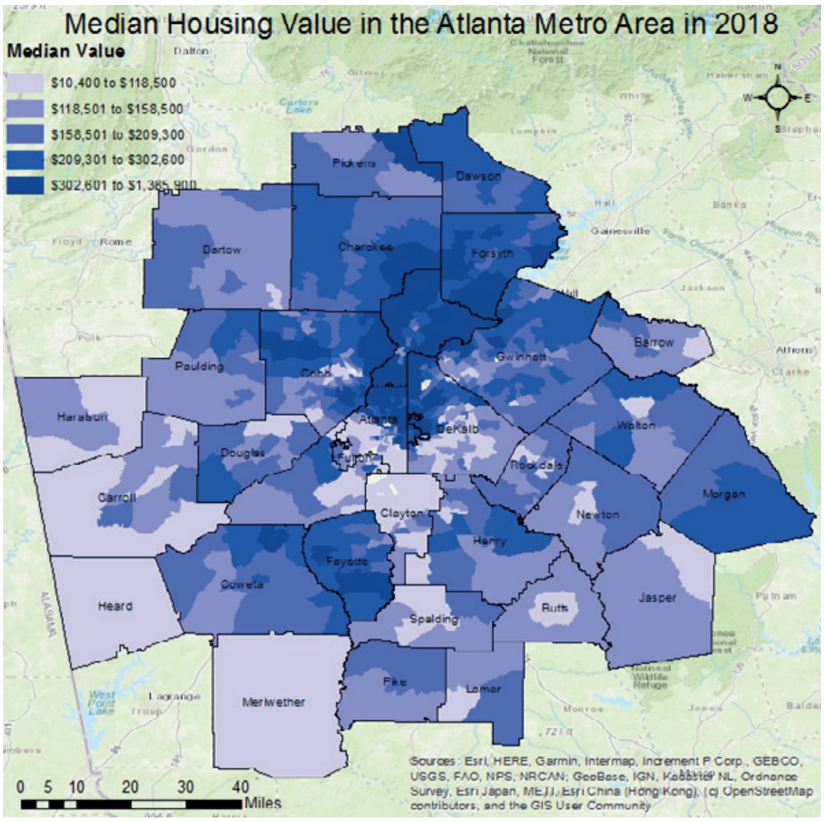


FIGURE 6 Summary of median home values in all census tracts in the Atlanta MSA in 2018



In census tracts with minimal segregation where median household incomes are nearly identical, median home values were $169,640 in black tracts and $196,783 in white tracts in 2018. Black tracts depreciated by $9,692 between 2010 and 2018 compared to an increase of $4,267 for white tracts over the same period. Higher education attainment was 32.1% in black tracts and 38% in white tracts. 75.5% of homes in black tracts and 61.9% of homes in white tracts had three, four or five bedrooms. Price per square foot of homes was $89.9 for black tracts and $127.1 for white tracts, with a typical home in each being built in 1988. Even in cases with lower levels of segregation, just a slightly higher proportion of black residents to white residents is associated with a decrease in home values, in this case, of $27,143.

Over the 2010 to 2018 period, highly segregated white tracts had relatively little housing value volatility from year-to-year. On the contrary, black-segregated tracts saw steep declines in housing values from 2010 to 2015 and a more sudden rebound from 2016 to 2018. The moderately segregated tracts both had similar patterns over the time series but had larger home value discrepancies between white and black tracts for all years. Minimally segregated tracts showed similar patterns, with both white and black tracts seeing declines in values until 2015 and modest rebounds in the years following. There has been an overall increase in the disparities in home values between white and black tracts over the timeseries (figure 5).

The Atlanta metropolitan area, like many other American metropolitan areas, exhibits distinct dividing lines by race and class. These dividing lines are also seen by the distribution of home and property values throughout the area. The predominately white and wealthier suburbs to the immediate north of downtown Atlanta have the highest owner-occupied home values while the predominately black suburbs immediately to the south of downtown have the lowest owner-occupied home values. As you move more to the periphery of the metro area, home values remain relatively high in the northern outlying suburbs and exhibit greater variability in the southern outlying suburbs (figures 6 and 7).

When looking at the ratio of median home values to median incomes in the metropolitan

FIGURE 7 Summary of median home values in all census tracts in the Atlanta MSA in 2018

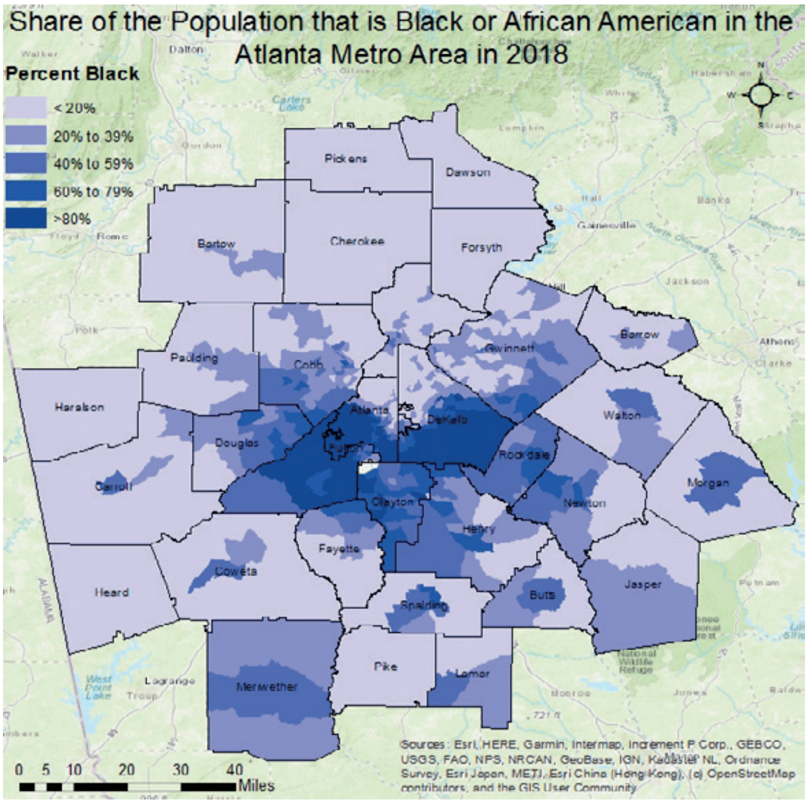
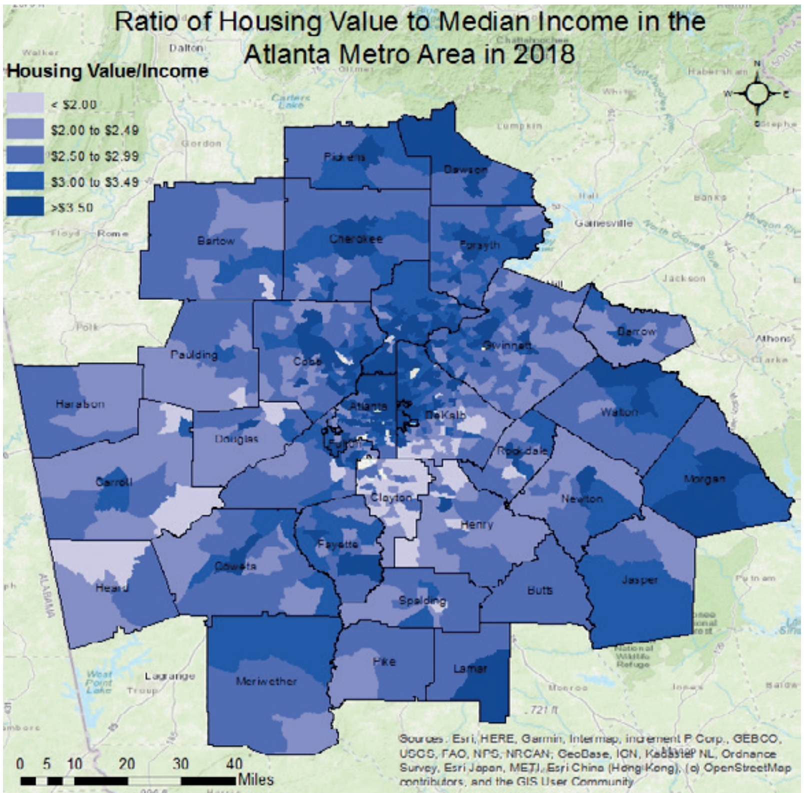


FIGURE 8 Ratio of median housing value to median income in all census tracts in the Atlanta MSA in 2018



area, there is a large part of southern DeKalb County and Clayton County where home value-to-income ratios are low. This reflects the relatively high incomes and low property values for residences here. This area, signified by the cluster of lighter shaded census tracts in figure 8, is majority black and relatively affluent, but home values in these neighborhoods are some of the lowest in the Atlanta MSA. This is an area where many black residents have moved to from Atlanta proper and as part of the Reverse Great Migration from cities in the north over the last few decades. As black residents move to these neighborhoods they are seeing some of the same perils that generations before them saw in cities in the north, this time, with lower home values for the same home as similarly situated whites instead of racial zoning and explicitly racial covenants.

6. Discussion

These results show large disparities in the benefits of homeownership based on race and geography in the Atlanta metropolitan area. As the share of the black population in a given census tract increases, home values decrease, even in communities where incomes are nearly identical and other socioeconomic indicators are similar. Many tracts in the predominantly black southern suburbs of Atlanta, including Clayton County, southern Fulton County and southern DeKalb County have comparable income and education levels to the predominately white tracts on the periphery of the MSA. However, homes in these tracts have less value and experienced greater declines in equity, as well as a slower recovery after the Great Recession. The results suggest that significant public policy interventions are necessary to ensure equal opportunities in the housing market between whites and blacks in the Atlanta metropolitan area. In total, there are over 1.37 million black residents in the Atlanta MSA living in tracts that are over 40% black-segregated that are susceptible to this type of geographic housing market discrimination. This is roughly 69% of the total black population in the Atlanta MSA and about 3.7% of the black population nationwide.

Given the similar patterns of segregation in the Atlanta MSA with other metro areas across the country, these results are at least somewhat transferrable. Indeed, studies looking at Atlanta and other metro areas have found this to be the case. Immergluck and colleagues (2015) looked at zip code level home value data before, during, and after the Great Recession and found that black neighborhoods saw steep declines during and after the Great Recession and very little recovery through 2014. This is consistent with the findings outlined above. The (Immergluck et al. 2015) study also found that this was true even in black neighborhoods with relatively low poverty levels, a finding supported by this analysis. Lending additional support to the results in this article, housing values in white-segregated tracts in the suburbs average 2.91 times median incomes while black segregated tracts in the suburbs average 2.36 times median incomes, according to an analysis by (Pooley 2015).

Researcher David Rusk has referred to disparities in white- and black-segregated neighborhoods as essentially a "segregation tax" imposed on these neighborhoods. Rusk describes how this "tax" is evident in the 100 largest MSA's across the country, and that metropolitan areas with more segregation see disproportionately larger effects (Rusk 2001). Rusk notes that segregation is the only variable that explains differences in the ratio of home values and incomes between blacks and whites.

This "segregation tax" is evident in the Atlanta metropolitan area. The findings from the Atlanta region show that highly segregated white tracts have home values that are $50,496 greater than similar highly segregated black tracts. These values are consistent with other studies including one from Baltimore that shows white homeowners with similar incomes as black homeowners have 30% more value in their homes, and a national study of metropolitan areas that shows that white neighborhoods have 23% more value in their homes than majority black neighborhoods, a difference of about $48,000 per home (Rusk 2001, Harshbarger et al. 2018).

When looking at completely segregated census tracts the results show that 100% black tracts have home values that are just under half that of 100% white tracts. These values are less extreme than the metropolitan Houston area where the average home value was $127,000 in all black neighborhoods and $289,000 in all white neighborhoods, after controlling for socioeconomic characteristics (Howell et al. 2014). When not factoring for income, unsurprisingly, the discrepancy is much greater with homes in highly segregated black tracts having roughly $100,000 in total value compared to $300,000 for homes in white tracts. Making these differences even more pernicious, is the tendency for home values to drop as the percentage of black residents increases (Harris 1999). A cycle that mires black homeowners into a perpetual cycle of wealth stagnation and depletion.

7. Fair housing and community development

There is ongoing debate in the social science literature over what to do about segregation. There is a broad consensus that segregated neighborhoods lead to a variety of disadvantages for minority populations. There is considerable debate, however, as to whether public policies should aim to desegregate neighborhoods, or whether policies should focus on enrichment and community development of neighborhoods that are already segregated. Or, whether it should be a combination of the two (Goetz 2018, Julian 2008).

Desegregation is premised on a fair housing argument. This strategy can be seen through fair housing laws that make government housing assistance for local governments contingent on building their "fair share" of affordable housing. Social scientists in favor of this approach see a variety of benefits, including but not limited to, the fact that it would give minority residents the chance to see their home values appreciate, and reduce the "spatial mismatch" that currently exists between where high poverty neighborhoods are and where jobs are (Goetz 2018). To evaluate the effects of fair housing programs designed to integrate communities, and deconcentrate poverty, the federal government commissioned the Moving to Opportunity study (MTO). The study provided vouchers for families to move from "low opportunity" neighborhoods to "high opportunity" ones and showed generally favorable results, lending credibility to the integrative fair housing approach. Related research looking at the effect of segregation on home values in particular promotes stronger enforcement of fair housing laws to reduce home equity disparities (Rusk 2001). Rusk [2001] argues that housing equity disparities will only be eliminated if metropolitan areas become fully integrated so that housing market demand equalizes across neighborhoods (Rusk 2001).

Community development arguments say that efforts to increase affordable housing and economic opportunities in high poverty and highly segregated neighborhoods are a better approach (Goetz 2018). They argue that more equal distribution of economic and social opportunities to these areas is more advantageous for low-income and minority communities. The process of community development, advocates say, can enliven these neighborhoods with new construction jobs, opportunities for local businesses, and revenue from construction fees and new taxes. Building new affordable housing in these areas can also attract businesses that rely on low-cost workers. The rehabilitation of neighborhoods through nonprofit Community Development Corporations (CDCs) is one method pro community development advocates site as increasing opportunities for existing residents (Goetz 2018). Studies show that newer affordable housing developments that are built by nonprofit CDCs have positive impacts on local property values, while older public housing has more mixed effects (Goetz 2018).

Much of the pro community development argument focuses on how the fair housing approach can be coercive, as blacks express a desire for mixed neighborhoods. Fair housing policies, on the other hand, tend to encourage integration in majority white communities. In addition, minority residents express the desire for more opportunities in their own neighborhoods rather than having to move to predominately white areas to have access to the same opportunities, lending more support to community development (Goetz 2018). These preferences are complicated but given the history of racial bias and violence against black integration, it is not surprising that blacks might find safety in more homogenous communities than are realized through fair housing approaches.

It is here where the argument takes on a moral dimension, as it should be possible for residents in black-segregated neighborhoods to achieve the same economic success and housing wealth as majority white neighborhoods. What complicates the debate between these two approaches is that neither provides for an adequate solution for the type of racial segregation and wealth inequality seen today and seen increasingly in suburbs like those south of Atlanta.

Region-wide inclusionary zoning would distribute affordable housing more equitably, helping to integrate wealthier and whiter suburbs. This approach is important and has increased affordable housing options in the communities that have adopted it, including the suburban areas of Fairfax County, Virginia and Montgomery County, Maryland (Levy et al. 2012). While inclusionary zoning would make wealth-building through homeownership easier for those that moved to inclusionary zoned residences in wealthier and whiter neighborhoods, it likely would not have any effect on home equity-building potential in existing black-segregated communities. Community and economic development in black-segregated areas is more in line with what blacks say they would like for their communities but has additional risks of gentrification and displacement of existing residents or entrenching existing segregation. As Julian [2008] notes, "neither movement has been individually successful in either creating open and inclusive communities of opportunity or making separate equal" (Julian 2008). These approaches do not need to be mutually exclusive, however, as aspects of both are worth pursuing. It is unlikely, though, that these strategies alone are enough to adequately address existing disparities in a housing market that persistently devalues housing wealth in black neighborhoods and provides little opportunity for wealth accumulation. This calls for new approaches that specifically address housing market disparities.

Other interventions, outside of the fair housing – community development paradigm, that could help increase homeownership and create opportunities for home appreciation that have been proposed include making strategic investments in previously redlined neighborhoods. This approach was discussed by multiple candidates for the 2020 Democratic Presidential Primary. While this may be an approach worth taking, it is limited in scope and would do little to mitigate the devaluation of homes in majority minority and majority black neighborhoods in the suburbs.

In his 2020 policy platform, Joe Biden cites the study by Harshbarger and colleagues (2018) and states that a Biden Administration would create a national standard for housing appraisals that limits racial bias in the appraisal process. He intends to reinstate the Affirmatively Furthering Fair Housing Rule that can help address discrimination in housing when there is not specific discriminatory intent, and he proposes a new Housing Bill of Rights to protect homeowners during the foreclosure process and from receiving predatory loans. Biden's platform includes a number of other proposals that should have a positive impact (Biden Plan for Black America 2020).

Much of Joe Biden's platform includes policies that aim to increase homeownership to help reduce the racial wealth gap. What the research in this article shows, however, is that simply increasing homeownership will only reduce the wealth gap if it is coupled with policies that ensure home values in black neighborhoods have the same equity potential as similarly situated white neighborhoods. Ensuring fair appraisal practices are an important step, but more will likely need to be done to ensure the market value of homes reflects the actual appraised value of homes.

Keeanga-Yamahtta Taylor writes about how a culture around homeownership has built up in the U.S. promoting homeownership as ideal even when there are deep disparities that make homeownership not ideal for black Americans (Taylor 2020). For homeownership to be the panacea of wealth-building it is touted as being, the inequities within the housing market will need to be fixed, and homeowners in black neighborhoods will need to be able to receive the same benefits from homeownership as those in other neighborhoods.

Therefore, it is critical that policies account for a housing market that devalues property in black and minority neighborhoods. This could include policies that ensure homeownership is a worthwhile investment through a government backed guarantee, through a program that eliminates the racial housing value gap using a value-based tax credit program. Or, perhaps, an affirmative action program geared towards majority minority or majority black neighborhoods that ensures that the housing values in these locations reflect the overall market of the metropolitan area. Such a program would be expensive and would disproportionately benefit homeowners – who are wealthier than non-homeowners, but it would also encourage homeownership as a worthwhile investment and could increase homeownership rates in neighborhoods where there is less of an incentive to own homes currently due to the devalued market.

As the 2020 election nears, it will be a good opportunity for scholars and advocates alike to promote radical policies for increasing black wealth. This could take many forms and will require a focus on reducing economic inequality overall. Given the disproportionate role housing wealth plays in the overall wealth portfolio of most Americans, though, and given the outsized impact of past housing discrimination in creating these circumstances, creating a program that ensures the housing market functions similarly in black and minority communities is imperative. In the Spring of 2020, the COVID 19 pandemic, which is disproportionately impacting black residents, and protests against police brutality have illuminated the extent of systemic discrimination in America. There is growing sentiment that large structural change is needed to right these past wrongs. Making sure the housing market functions the same in black neighborhoods as it does in white neighborhoods is a critical step in seeing this achieved.

8. Conclusion

Home equity accounts for 63% of all black wealth and 43% of all white wealth (Oliver & Shapiro 2006). Yet blacks do not see the same benefits from homeownership as their white counterparts. The research presented in this article shows that housing segregation is a leading factor in home equity disparities between blacks and whites. In the Atlanta, Georgia Metropolitan Statistical Area (MSA) households in moderately and highly black-segregated census tracts miss out on between \$50,496 and \$67,410 in the home equity potential of their homes after controlling for income and where other socioeconomic indicators are similar compared to homeowners in similarly situated white census tracts. Overall, there are over 1.9 million residents of all races and ethnicities living in neighborhoods in the Atlanta metro area that are susceptible to this type of geographic housing market discrimination. This includes over 1.3 million black residents, roughly 69% of the total black population in the Atlanta MSA and about 3.7% of the black population nationwide. It should be noted that these disparities are not limited to the Atlanta area, they are a feature of cities and metropolitan areas nationwide.

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Covered Bonds, between innovation and tradition: building the Capital Markets Union and shaping a greener future

↳ By Luca Bertalot

1. Background

Following on from the "Glorious Revolution", the dawn of the rule of law led in Europe to the foundation of modern nation states, no longer based and defined by borders or feudal concessions, but founded on a common set of rights pictured by a community sharing the same vision, the same values, the same hope for the future and the same set of civil rights: the right to life, property, freedom and the pursuit of happiness. Against this historical background, in the European Union the concept of the state is translated in an articulated governance and a legislative framework which is designed to find the right political and economic balance between different countries and economic areas. The keystone of this architecture rests on taking the best experiences from every country and sharing these with others, identifying common best practices and setting qualitative benchmarks. This multifaceted process is not always straightforward, especially when the challenge is to design a new financially efficient framework able to embrace different market traditions and best practices. The difficulties are multiplied when in parallel the process must also facilitate common action leading to innovative solutions which will secure financial stability, social and economic growth, and technological innovation; all elements instrumental in guaranteeing the above mentioned fundamental civil rights. Since the financial crisis of 2008 a long and bumpy road has been followed by international and local institutions, which in the intervening period have had to completely reshape the financial landscape of the Old Continent. But before examining the added value of a common legislative framework and where covered bonds stand today, let us look back at their origins and follow the story of how one of the most traditional asset classes in the European financial landscape has been developed and has evolved to become the long-term secure funding tool of choice for so many institutions around the world.

A good storyteller would start the *"fil rouge"*[1] of this story in the late 1760s in Brandenburg, in the Sanssoucis Palace in Potsdam, close to Berlin. It was there that Frederick II introduced a new financial instrument – the *Pfandbriefe* – in August 1769. This legal framework enabled Prussia to restore its finances at that time, attracting capital and foreign investment, mainly from Dutch investors, through the development of a solid financial sector.

This *fil rouge* would travel all around Europe, absorbing new markets and legal best practice, and adapting to different realities. European cities such as Amsterdam, Athens, Berlin, Barcelona, Copenhagen, Frankfurt, Madrid, Milan, Munich, Oslo, Paris, Rome, Stockholm and Strasbourg were planned and/or rebuilt during periods of crisis in the 19th and 20th centuries using this financial instrument to channel private investment to the real estate sector. At the end of this long trip around Europe the storyteller would pick up the *fil rouge* of our story where we started, in Berlin, where this same tool, two centuries later, in the wake of the fall of the Berlin Wall and German reunification, supported efforts to reactivate infrastructures and mortgage markets, thus ensuring liquidity, financial stability and support for the real economy. This new variation of the original tool, known as the Jumbo Pfandbrief, laid down an international financial benchmark for other countries which have also introduced modern covered bond frameworks in the last twenty years. This also paved the way for the establishment of a common EU legislative framework for covered bonds, a real driver of financial integration.

The implementation of a common EU legislative framework in 2019 marks a new milestone in the history of this asset class, which has for a long time strategically supported economic growth, market innovation and financial stability on the Old Continent.

Moreover, the introduction of the EU legislative framework also represents a clear legislative benchmark at a global level, and crowns a series of significant achievements in developing the European Single Market, reinforcing financial stability in financial markets and supporting the concrete implementation of the Banking Union and a Capital Markets Union [CMU]. All this exactly 250 years from the introduction of the first covered bond model, the Pfandbriefe, in Prussia.

The covered bond is simply a finance mechanism linking financial capital markets and the real economy. The macroprudential value of this tool is deeply rooted in the high-quality nature of the collateral and the legal infrastructure protecting investors with a dual recourse mechanism. The focal point of this mechanism is the mortgage system and the lien to a real guarantee. The quality of the collateral is the basis to secure the macroprudential treatment of this financial instrument and it is this quality that was paramount for Fredrick II and that also was the basis for building the EU legislative framework today.

Since the dawn of European history, the mortgage finance mechanism has been used to secure private capital inflows by providing a solid legal framework to protect long-term investors with a legal-financial safe harbour to boost private and public investments in relation to strategic objectives. That was already the case in ancient Athens when the first mortgage finance mechanism was used to collect fresh private capital to invest in market innovation, to build on a large scale a new *triremes* fleet capable of challenging Persian supremacy of

[1] "Fil rouge": French for the "red thread" running through a story.

the Aegean sea and defending the independence of Athens and the future of Greek culture.

Already on that occasion, the mortgage finance mechanism secured capital inflows in a very efficient manner, and Athens was able to rapidly build a new fleet of agile triremes and defeat the Persian fleet in the Salamis battle (480 BC). It is very likely that without this mortgage finance mechanism (ὑποθήκη) Athens would not have been able to build a new fleet and the Persians would have conquered Athens. Without Athens, Greek democracy and its cultural heritage, the western world and Europe would almost certainly look very different from the way we see it today.

Every European country can be proud of having contributed to a little piece of the puzzle of the covered bond market's history and development: the Dutch legal and financial know how of the 17th century (including the *pandbriefe*), the introduction of the first Pfandbrief system by Frederick II in Prussia in the 1769, the Danish *Realkreditobligationer* 1797, the French legislative framework for *Obligations Foncières* introduced by Napoleon III in 1852, the *Credito Fondiario* in Italy in 1866, the *Cédulas Hipotecarias* introduced in Spain in 1872.

Looking back over more recent years, significant developments have taken place in the covered bond industry at European and global levels. As such, the covered bond product faces a changing environment both within Europe and beyond, which brings about new opportunities but also new challenges.

Over the last 15 years, the European Covered Bond Council (ECBC) has provided the entire Industry with a global discussion forum in which to share market intelligence and best practice. This market platform has facilitated discussions on legal developments, securing market innovation and consensus among the community. It furthermore acts as a learning platform for new jurisdictions keen to introduce this asset class or update their Covered Bond framework.

These new developments, which in many respects cover new ground, can only be assessed in the context of the essential role played by the covered bond product in the European financial system as a strategic funding source. The product's key features and macroprudential characteristics provide vital access to capital markets for lenders.

In stressed and distressed market conditions – both historically and more recently – the product benefits from a solid investor base, which enables cost-efficient lending to the real economy. No less than one in four mortgages in continental Europe is financed via covered bonds.

To a certain extent, the success of the covered bond product, both as a crisis management tool and as a cost-efficient lending instrument, has been contingent on the fact that the covered bond industry recognises that continual adaptation to the regulatory environment and evolution in the light of new market conditions is a key ingredient in the product formula.

Indeed, this recipe continues to manifest itself and was exemplified with the establishment of the Covered Bond Label in 2012 when the Industry – led by the ECBC – came together in response to a market-wide need for common qualitative and quantitative standardised disclosure. By means of its standardised covered bond disclosure template(s), the Covered Bond Label has enhanced market transparency, product comparability and financial stability. Further market efforts were undertaken in 2016, when the Covered Bond Labelled Issuers developed the Harmonised Transparency Template (HTT) to provide harmonised cover pool information, thereby facilitating investors' due diligence. At the time of writing, the Covered Bond Label represents 72% of global covered bonds outstanding – a testimony to the central role played by the Industry in the continued progression of the Covered Bond market.

2. New EU Framework for Covered Bonds & Global recognition

From a macroprudential viewpoint, the significance of the covered bond product, both as a crisis management and funding tool for the wider economy, has increased the need for appropriate regulatory and legislative treatment of the asset class, at EU and, increasingly, at a global level. Reflecting this need, significant political developments have taken place over the past year.

In the context of the European Commission's CMU project, noteworthy efforts have been undertaken at an EU level to harmonise national covered bond frameworks in Member States, with market consultations, studies and recommendations having been put forward by the different European Institutions. These efforts culminated with the European Commission's publication in March 2018 of a formal proposal for an EU Framework for Covered Bonds and consequent final political approval of the new legislative package in April 2019, which consists of two elements: a standalone Directive and a Regulation amending the Capital Requirements Regulation (CRR). This package, published in the Official Journal of the EU in December 2019, is to be seen as the reference point for covered bond legislation at EU level, which until now has been deployed across a series of regulatory texts.

Specifically, the Directive entered into force early in January 2020, with Member States now having until 8 July 2021 to transpose the Directive into national law. The legislative package will then become fully operational on 8 July 2022.

The EU legislative framework is principles-based in nature and aims to specify the core elements of a covered bond whilst providing a common definition. Importantly, the EU legislative framework for covered bonds is not meant to result in a uniform model for the covered bond asset class, which is rich in history and tradition. Rather, it aims to provide a coherent legislative reference for the asset class whilst enhancing transparency requirements and defining the key qualitative characteristics of the product in a single text. Importantly, the framework recognises the fundamental role played by the Covered Bond Label as a globally recognised benchmark in improving transparency, harmonisation and setting high qualitative standards in the covered bond space. Moreover, the framework opens the possibility of introducing a third-country regime for covered bonds in European Union law.

Ensuring appropriate regulatory outcomes at a political level is one of the main objectives of the European Mortgage Federation (EMF) – European Covered Bond Council (ECBC). In that respect, throughout the legislative process for the EU framework, we advocated for a high-quality principle-based approach which will ensure that national markets continue to function whilst safeguarding the prominent role of covered bonds as a crisis management tool able to promote:

(i) long-term financing.
(ii) investors' confidence; and
(iii) financial stability.

In order to ensure a coherent and effective implementation of the legislative package throughout the European Economic Area, the ECBC is continuing to closely monitor related developments and stands ready to provide market insights and support the legislative process at national level, and subsequently its market implementation, by acting as market think-tank. The ECBC has established an Implementation Task Force ready to support

European Member States and global stakeholders with market intelligence in implementing the new framework. Concretely, the Task Force is currently finalising reflection points on Articles where a shared position of the market is considered beneficial to the ongoing well-functioning of the covered bond industry.

Looking beyond Europe, regulatory changes of significant importance to the industry are also taking place at a global level. The Basel Committee on Banking Supervision (BCBS) finalised the so-called Basel III Reform in December 2017. Notably, for the first time, the new standards formally recognise the robustness of covered bonds at the global level, reflected in preferential risk weights attached to the asset class. Similarly, the fact that the Basel III recommendations capture the key qualitative features already intrinsic to the Covered Bond Label represents a major success for the Industry. As a global platform and think-tank for the Covered Bond Industry, the ECBC has played a central role in the development of a global covered bond market and in securing appropriate capital treatment for the asset class.

Indeed, as part of the efforts to assist non-European jurisdictions in benefiting from the many advantages linked to the traditional European covered bond product, the ECBC undertook – via its Global Issues Working Group – a study entitled "Covered Bonds: A global perspective" released in March 2019 and an update is planned to be published in April 2020. The Study, which was the first of its kind, presents a comprehensive mapping as well as market analysis pinpointing trigger points for how to develop synergies between traditional covered bond markets and new and emerging covered bond markets.

3. Market developments & EMF-ECBC market initiatives

Covered bonds are, in many aspects, the heart of the European financial tradition and they continue to play a pivotal role in both the finance system itself as well as the real economy. With c. EUR 2.6 trillion outstanding at the end of 2018, covered bonds continue to prove their strategic importance for European capital markets, contributing to effective allocation of capital and, ultimately, to economic recovery, stability and development.

Even though the covered bond market has remained stable in terms of its size across several data series, it is evident that the European Central Bank's (ECB) Covered Bond Purchase Programme (CBPP) has impacted the liquidity of the market in recent years.

Looking more closely at the market itself, it is clear that the most common collateral used for covered bonds is residential and commercial mortgages, which accounts for EUR 2.2 trillion or nearly 87% of the outstanding market in 2018 – a share which has been constantly increasing since 2003, when the figure was only 40%. The major players remain Denmark, France, Germany and Spain, which collectively account for 51% of the outstanding covered bonds in the market. Looking beyond Europe, outstanding covered bonds from non-EU countries accounted for 7.6% of the total in 2018, confirming a growing trend of the previous years. Reflecting the increasing interest from non-EU jurisdictions, with Australia, Brazil, Canada, New Zealand and South Korea having implemented covered bond legislation in recent years. Meanwhile major jurisdictions such as India, Morocco and the Baltic states – to name but a few – are in the process of drafting legislation. It is expected that the new EU covered bond framework and the Basel III Reforms will give a further push to the continuous interest in and development of covered bonds within new countries both inside and outside the EU.

Zooming in on market trends, it is clear that increasing attention is being given to green and sustainable covered bonds, an area which is coming under growing political focus at EU level with the first ever Action Plan on Sustainable Finance having been published by the European Commission in the spring of 2018. Against this background and with a view to facilitating market standards within this new product feature, in 2017 the EMF-ECBC implemented a "Sustainable Covered Bond" market definition via the Covered Bond Label, which is identified by means of a "green leaf" icon appearing next to the ISIN of the relevant sustainable covered bond. Market standards in respect to the different maturity profiles were also facilitated by the Covered Bond Label in 2017, with the implementation of various maturity market definitions. Through these developments, the Covered Bond Label facilitates homogeneous formatted disclosure for almost two-thirds of the global covered bond market outstanding.

As part of its work to best represent the interests of the mortgage and covered bond industries, the EMF-ECBC has continued its market development efforts by coordinating two further significant market-led initiatives (see below) in close cooperation with market stakeholders and political institutions. As with the Covered Bond Label, the purpose of these initiatives is to foster pan-European solutions which can help enhance market transparency and facilitate the convergence of market best practice, whilst creating synergies between the mortgage and covered bond value chain.

4. The European Secured Note (ESN)

In the context of the CMU, and to help strengthen banks' capacity to support the wider economy, the EMF-ECBC has, via its ESN Task Force, analysed the potential for the creation of a new financial instrument, the European Secured Note (ESN), targeting clients such as small and medium-sized enterprises (SMEs) or infrastructure loans, providing them with long-term funding.

The envisaged ESN proposal, which is currently being discussed at EU level, considers long-term financing solutions for loans to these clients replicating the best practices of covered bonds (for funding purposes) and securitisations (for funding and risk-sharing purposes).

5. The Energy Efficient Mortgages Initiative (EEMI)

In the context of the recent announcement of the European Green Deal and its accompanying Investment Plan by European Commission President Ursula Von der Leyen, since 2015 the EMF-ECBC has, in close cooperation with its members and external partners, taken forward work on the development of a standardised, pan-European Energy Efficient Mortgage financing mechanism designed to incentivise EU citizens to improve the energy efficiency (EE) of their home or to acquire an already energy efficient property by way of preferential financial conditions linked to the mortgage.

This mechanism is intended to be supported by a data protocol and portal to collect and access large-scale empirical evidence relating to energy efficient mortgage assets. This will allow a comprehensive analysis of de-risking energy efficiency features, which, in turn, can stabilise the underlying business case that energy efficiency has a risk mitigation effect for banks. As a result, this should represent a lower risk on the balance sheet of banks and could, therefore, qualify for a better capital treatment.

Data collection and analysis with a view to establishing this data correlation began in the form of an Energy Efficient Mortgages Pilot Scheme, which was launched in June 2018. Importantly, it is anticipated that the EEMI will deliver a new product, an "Energy Efficient Mortgage", which could be used for the purposes of green/energy efficient covered bond issuance.

In the medium-term, the intention is to establish an Energy Efficient Mortgage (EEM) Label, which will define the characteristics of an energy efficient mortgage by way of an EEM Convention. This will lay down the conditions for eligibility for the Label, ensuring a quality benchmark. In turn this will support recognition of and confidence in energy efficient mortgages and it will also ensure access to relevant, quality and transparent information for potential borrowers, regulators and market participants in general. The Label will also help to secure and enhance the overall regulatory recognition from a macro-prudential perspective for energy efficient mortgages.

The long-term objective of the EEM Label will be to promote energy efficient mortgages, strengthen the market in such mortgages and foster the perception of energy efficient mortgages as a high-quality financing solution which delivers real benefits for borrowers, lending institutions, the environment and the economy more generally. In line with another goal of the European Commission, namely for the EU to take the lead at global level in relation to sustainable finance, the Label will also establish the benchmark for energy efficient mortgages for a global audience.

Of particular importance will be an annual review exercise managed by a Market Committee in consultation with an Advisory Council to ensure the incremental 'raising of the bar' of the Label's eligibility criteria to create a dynamic process that will allow the market to realign around the common quality benchmarks year after year, thus ensuring a constant enhancement of the quality of energy efficient mortgages over time.

The Label will draw on the EMF-ECBC's experience in designing, establishing, managing and improving the Covered Bond Label.

6. COVID-19

The ongoing COVID-19 pandemic and the containment measures it has necessitated are pushing us into a completely new paradigm, which requires a fresh re-thinking of our traditional economic pillars and social norms.

This situation has profoundly disrupted people's lives and the economy. Global demand, supply chains, labour markets, industrial output, commodity prices, foreign trade and capital flows have all been affected. The pandemic struck the European economy whilst it was on a moderate path and still vulnerable to such shocks. Given the expected severity of this worldwide shock, it is now clear that the European Union (EU) has entered the deepest economic recession in its history.

The European Mortgage Federation – European Covered Bond Council (EMF-ECBC), being mindful of the role our Industry can play in supporting efforts to address this and future economic challenges, has established an Emergency COVID-19 Task Force putting at the complete disposal of the European Institutions its intelligence, expertise and network to support actions responding to the crisis. To this end, the EMF-ECBC seeks to act as a market catalyst and think-tank at European and global levels, fostering and coordinating market and policy actions focused on immediate measures to mitigate adverse systemic impacts.

The work of the COVID-19 Task Force is already underway to, in the first instance, analyse the impacts on mortgage and covered bond markets, compile relevant national, European and international measures and gather critical statistics (see here for the Task Force's dynamic reporting document). Based on this intelligence, the Task Force will move into a second stage, during which it will identify market best practice and solutions with a view to delivering market coordination and support for a future recovery plan. Crucial to this will be a dynamic dialogue with EMF-ECBC members in Europe and globally, as well as European and international institutions and organisations.

The Task Force is composed of retail, funding and investment bank experts, law firms, rating agency and system provider representatives, meets virtually every week and will do so for as long as is necessary.

In particular, we are acutely aware of and concerned about the potential consequences of this outbreak on the economic well-being of each and every European citizen in terms of changes in their income and ongoing living costs, as well as the potential impacts on the entire value chain, the functioning of capital markets and the ability of investors to conduct due diligence.

Against this background the EMF-ECBC stands ready to act in the interests of consumers, lenders and investors to help secure financial stability and stimulate socio-economic recovery.

7. Looking ahead

Covered bonds, the modern spirit of which was recently enshrined in the EU legislative framework, represent an essential engine for the growth of the Old Continent and the creation of the Capital Markets Union. Furthermore, the recognition of the macro-prudential value of this instrument by the Basel Committee in 2010 provided an impetus for global development, especially in emerging countries such as Brazil, Malaysia, Indonesia, Morocco, Turkey and South Africa, but also in established economies such as Australia, Canada, South Korea, Japan and Singapore.

Taking stock of where we have come from, where we are now and where we are heading, it is clear that the market and the environment in which the covered bond functions is constantly evolving and, as such, the work of the ECBC is never done.

At the heart of the unparalleled success of the covered bond product has been the ability to change and adapt to market conditions and assimilate elements of legal structures from across jurisdictions to achieve the very best market practice.

The harmonisation of the covered bond asset class at EU level and now also at the global level represents a new era for the Industry. While principle-based harmonisation as approved by the European legislators with its EU Framework for Covered Bonds represents an opportunity to further develop the market, it is also clear that the Industry is faced with new regulatory, policy and supervisory developments. In conjunction with these, as alluded to above, market conditions, developments and new trends are all impacting and shaping the product here and now and will continue to do so going forward.

In any evolution, there is always a need to preserve the key nature of the product as a crisis management tool rooted in robust qualitative and macroprudential characteristics, which the EMF-ECBC has been advocating in relation to the present covered bond legislative developments at EU and global levels. In this context, the ECBC remains committed to fulfil its role as the leading market think-tank, striving to secure the highest qualitative benchmark in the implementation of the covered bond concept within the EU and beyond, and to defend its justified preferential regulatory treatment going forward.

Aligning public-private partnerships to deliver affordable rental stock: the Low-Income Housing Tax Credit (LIHTC) program in the United States

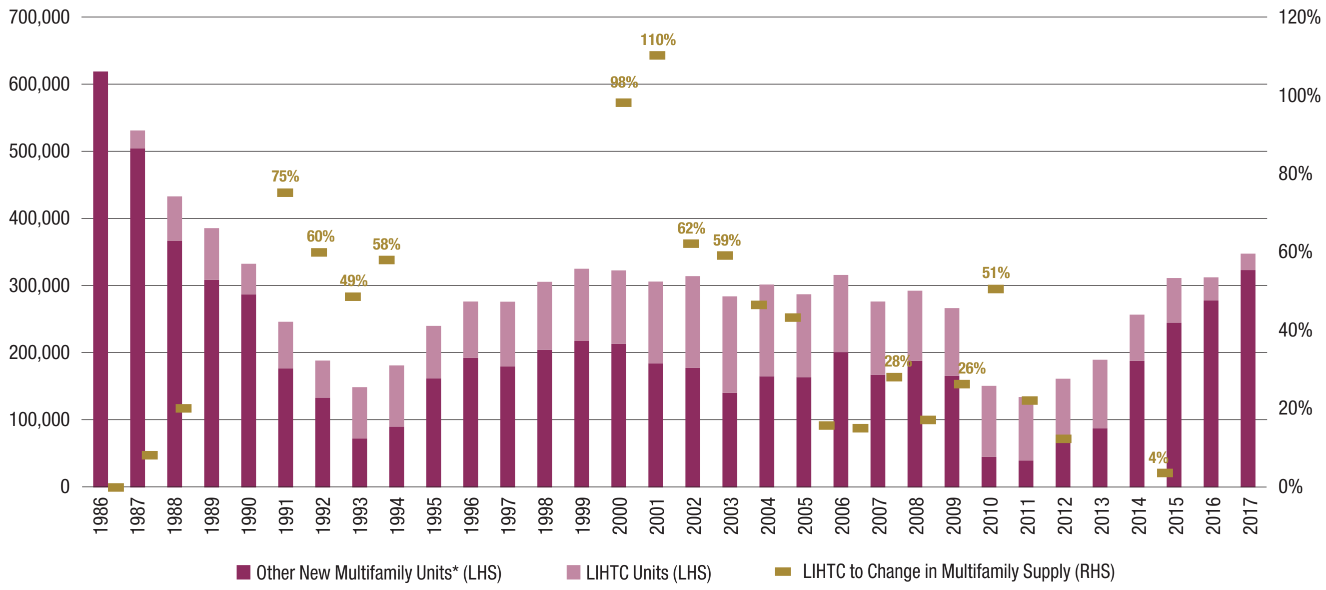
By Christopher Feather

1. Introduction

Access to affordable housing for lower-income and vulnerable households has been a common challenge across residential markets. The problem has become even more acute for rental stock with growing demand from economic and social inequalities, amid rising costs of living, combined with inadequate market supply. Partnerships among governments, developers and financial institutions have generally proved elusive in producing below-market rate multifamily units (Feather, 2019). The mobilization of capital has been a considerable barrier to successful and enduring public-private partnerships on low-cost housing (Ruiz, 2018; DiPasquale and Cummings, 1992). As a result, investment has customarily favored market-rate developments while significantly limiting capital allocation to affordable rental stock. The United States of America has used its national tax code to amplify the flow of private capital into the delivery of millions of rental units for low-income households throughout the country.

The Low-Income Housing Tax Credit program (colloquially pronounced /laı-tek/ from its LIHTC acronym) has channeled over $190 billion dollars into affordable rental supply since its inception in 1986 (Sisson, 2019). Some have called LIHTCs "arguably the most successful and important program in American history for the creation of affordable housing" (Magliozzi, 2011: 2; Lento et al., 2011). Objectively, the LIHTC program is the longest U.S. program delivering affordable housing supply. Other federal programs have had shorter durations in producing new stock, like Public Housing and Project-Based Section 8 Rental Assistance (PBRA) programs that built units from 1949 to 1973 and 1974 to 1983 respectively (Scally et al., 2018).

FIGURE 1 Low-Income Housing Tax Credits and U.S. Multifamily Rental Supply, 1986 to 2017



LIHTC = Low-Income Housing Tax Credit / LHS = Left Hand Side / RHS = Right Hand Side
* Single-family and multifamily rental projects qualify for the LIHTC program.

Source: Author's calculations from HUD, 2020a; Census, 2018; HUD and Commerce, 2009; 2007; 2005; 2003; 2001; 1999; 1997; 1995; 1993; 1991; 1989; 1987.

The LIHTC program is a public-private partnership to amplify affordable rental housing supply. The program is administered at the federal level, through the Internal Revenue Service (IRS) within the U.S. Department of the Treasury, in collaboration with regional and local governments. In essence, the LIHTC program provides tax credits to qualified residential development projects throughout the United States. Investors, ranging from businesses to individuals, purchase these credits, in exchange for equity in the development, to primarily reduce their income tax dollar-for-dollar. While investors reduce their income tax for the face value amount of the credit purchased, developers sell these tax credits at a negotiated discount. Developers leverage additional sources of capital to bridge financial shortfalls in their projects.

The tax credit amount is calculated based on the applicable costs of the LIHTC development. Local housing finance authorities (HFAs) grant one of two types of federal tax credits on LIHTC projects. The 9% tax credit covers 70% of the present value of eligible development costs and the 4% tax credit covers 30% of the present value of eligible development costs. The tax credit amount is allocated over a 10-year period at either the 9% or 4% rates annually. Despite the 9% and 4% names, as enumerated in the 1986 legislation, the credit rates adjust monthly – diverging from their nomenclature in accordance with treasury rates. The IRS determines the monthly credit rates as well as the share of national tax credits budgeted to local housing finance authorities following the formula stipulated in law, generally based on state population.

The success of LIHTCs in the expansion and preservation of affordable housing has attracted international attention from policymakers and financial institutions (Lee, 2017; Gu et al., 2015; Oxley, 2015; Steele and Des Rosiers, 2009). Such recognition has stemmed from the LIHTC program's impact in facilitating, on average, close to one hundred thousand below-market rental homes into U.S. stock each year from 1987 to 2017, as illustrated in Figure 1. In addition, the 3.2 million LIHTC funded units produced nationwide have accounted for an overwhelming percentage of both affordable housing stock built and federally-funded units (Cantwell 2019; Cummings, 2007). These tax credit supported units have further exceeded the supply of other new multifamily apartments for seven years over the program's thirty-year history.

While LIHTCs have delivered affordable housing projects in the United States, the program has experienced several challenges. When decreases in corporate tax rates have been anticipated or actuated, investment has diminished—hindering the production of LIHTC units (Morton, 2018; CohnReznick, 2018). Other critiques have argued the federal government's provision of low-income tax credits crowds out private sector investment that would have been directed to market-rate apartment complexes (Eriksen and Rosenthal, 2010; Malpezzi and Vandell, 2002). Besides the shortcomings, there is broad consensus housing tax credits have helped make quality housing available to low-income households, especially in neighborhoods that would have been out-of-reach for working families, senior citizens and persons with disabilities without the program (Scally et al., 2018; Deng, 2011a; 2011b; McClure, 2006).

This article assesses how the provision of low-income housing tax credits fosters productive public and private sector partnerships. The following is structured into three sections. The first examines the financial operations of the program, focusing on the mobilization of private capital. The next investigates the development and management of LIHTC projects. The third produces applications from the American experience for international housing markets seeking to explore partnerships outside of government that similarly expand investment into affordable rental supply. The research herein helps expand knowledge and awareness on the operations of the LIHTC program (Oxley, 2015), which has been called "one of the least studied federal programs" despite its decades long history (Nedwick and Burnett, 2015: 135). As a result, this article helps establish comparative analysis of the LIHTC program with corresponding tax-based initiatives that seek to spur investment in affordable housing (Guerrini and Schaefer, 2019; Mutero, 2018; Lam and Feather, 2016). Such work on ways to optimize taxation mechanisms can strengthen access to affordable rental housing regardless of place.

2. Financial operations of the LIHTC program

Approximately $9.8 billion are mobilized into LIHTC units each year (Keightley, 2020). The LIHTC program mandates funds be allocated to projects where a specified percentage of rental units are occupied by low-income tenants who pay capped rental rates over a period of at least 30 years. The program specifically requires a minimum number of project units are occupied with tenants who earn at most either 50% or 60% of area median gross income (AMGI) (26 USC §42). Tenants in LIHTC funded homes pay rents and utilities that cannot exceed 30% of their income, adjusted for both the unit's expected occupancy and the number of bedrooms (HUD, 2010). Under these tenant income requirements and rent restrictions, investors – often large publicly-traded corporations – commit to finance a portion of development in a rental project. Yet, these investments in tax credits do not entirely fund the project alone.

The LIHTC program targets the affordable housing component of development projects. Therefore, certain project expenses are excluded from the tax credits generated, particularly those items not subject to depreciation, like land acquisition, as well as insurance and property tax expenses. The funding investors do provide generally covers either 70% of the present value of eligible costs in the form of 9% tax credits or 30% correspondingly in the form of 4% tax credits. The 9% tax credits apply to new construction or substantial renovation of rental projects that are not federally subsidized, while the 4% credits are used for projects receiving federal subsidies, often tax-exempt private activity bonds or PABs (OCC and TREAS, 2008). The 9% tax credits cover a greater amount of costs outright. However, projects financed with 4% tax credits and PABs can cover more costs together, particularly when the bonds have low financing rates (HUD, 2010).

Despite their names, the credit percentages on low-income housing tax credits are not necessarily 9% or 4%. The changing lending environment since the LIHTC program's 1986 origins has led tax credit rates to diverge from their namesakes. The national tax authority, the IRS determines the LIHTC rates each month announcing them as Applicable Federal Rates (AFR). Throughout the program's history the 4% tax credit rate has fluctuated between 3.15% to 3.97% in the AFR index (IRS, 2020). The 9% tax credit rate has ranged from 7.35% to 9.27% (CRS, 2019). The larger tax credit, however, has been at the 9% rate, contrary to the lower interest rate market environment since the 2008-2009 Global Financial Crisis. This is because the U.S. Congress placed a rate floor on the 9% tax credit in 2008 to attract continued investment in the LIHTC program among other economic recovery and stimulus initiatives (HERA, 2008).

LIHTC investment deals are typically joint passthrough ventures between two main project stakeholders: investors and developers.[1] These arrangements are commonly structured as a

[1] Developers have also claimed tax credits for project finance, although this has been less common.

limited partnership or a limited liability corporation (LLC) that consist of a manager, usually the developer, and one or multiple members, typically investors. Investors customarily have an ownership stake at over 99% of the project's equity to fully benefit from the tax credits generated. Correspondingly, developers and their financial sponsors, who act as guarantors for the former's financial obligations, often possess less than 1% in ownership equity; in a limited partnership, these two parties, who typically contribute minimal capital to the project, are referred to as general partners or GPs with their roles in implementing the project. Investors, with their passive role as capital providers, are called limited partners or LPs since they rely upon GPs for the management and operations of their project.

Investors buy the two types of tax credits at a negotiated discount from developers, typically ranging from $0.70 to $0.90 per $1.00 of tax credits, in exchange for their capital commitment – often consisting of three to five payments contributed at different project milestones, such as when construction is completed or when units are leased to eligible tenants. To acquire tax credits for their project, developers submit their proposals detailing LIHTC projects to the local housing finance authority or HFA. The application process is typically opened twice a year. The process is competitive, particularly for the 9% credits that cover a larger amount of costs. HFAs have reported receiving two to three times the applications than the funds available in a given year. Before HFAs can award tax credits, the U.S. Congress budgets for the allocation amount. The IRS then announces the amount of tax credits available regionally. The amount of available tax credits is calculated as either dollars per capita based on the state's population or an arbitrary floor amount, whichever is greater.[2]

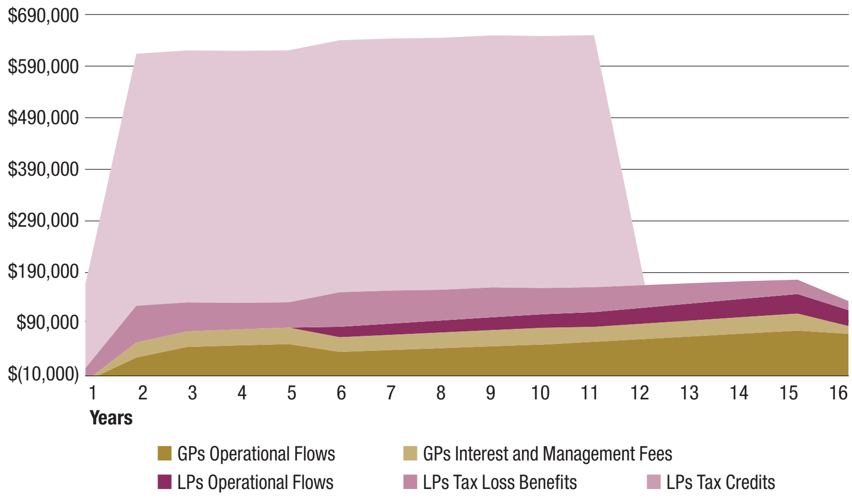
Investors claim their tax credits after the LIHTC units are placed in service or PIS. According to the program, PIS occurs when tenants live in completed units. The federal government requires units be PIS by the end of the second year after the HFA approves the project. To claim their purchased tax credits, investors apply the undiscounted amount to reduce their taxes dollar-for-dollar each year, over a ten-year timeline called the credit period. Although they can claim their tax credits over a ten year period, investors earn these credits by being involved in a LIHTC project over a fifteen year period: referred to as the compliance period.[3] The LIHTC program further stipulates an extended use period (EUP) for an additional fifteen years that projects must continue to provide below-market rates to low-income tenants.

Because tax credits do not cover all expenses and all costs are not eligible for the program, LIHTC projects have a funding gap. Project stakeholders work to identify funding sources for remaining costs, including outstanding needs from the difference in the tax credit balance and ineligible costs. These sources of capital can come from the private sector, in the form of debt with construction loans and mortgages, as well as government support, such as loans, grants and other incentives, like property tax exemptions provided at regional and local levels.[4] The provision of government financial support, however, can complicate the amount of tax credits generated.

The LIHTC program requires a reduction in the amount of tax credits generated when federal grants are applied before a project's compliance period. Those programs that help financially enable the project to rent to low-income residents and do not contribute to the building's development, such as national and local rental assistance, do not affect the amount of tax credits generated. Rental assistance programs are important for project stakeholders since they can maximize cash flow for operations and help improve the financial viability of LIHTC developments. Other demand-side programs, such as government insured multi-family mortgages, make it easier for developers to access financing, including those projects intended to promote urban regeneration. Besides lowering the federal taxes paid, investors receive other benefits for funding LIHTC projects.

Investors have been attracted to the LIHTC program for tax and regulatory benefits as well as project rates of return. Aside from the tax credits, the IRS allows investors to make certain project-related deductions from their taxes. Specifically, operational losses over the life of the project as well as the depreciation of the rental property and accrued interest on debt can be deducted during the fifteen year compliance period that investors must be involved in the project (Paul, 2017). Investors can also receive cash flow from rents and other charges collected from the project, like fees from parking or laundry facilities. Property price appreciation can also contribute to the rate of return. Together with the tax benefits, cash flows and increases in property value, investors have earned significant post-tax returns from LIHTC projects. Some returns have been reported between 5% to

FIGURE 2 Estimated cash flow model* for LIHTC Project with a Limited Partnership



LPs = Limited Partners / GPs = General Partners

* This model assumes LIHTC project units are PIS four months before the conclusion of the first year. The eight-month portion of the first year's tax credit amount is applied to year eleven of the project. The LIHTC project consists of 100 units with a 5% vacancy rate. There is additional financing from a multi-family mortgage with a 9.5% interest rate over a fifteen-year term. Cash flow here is divided with a 70:30 split between GPs and LPs respectively.

[2] The housing credit ceiling for 2020 is the greater of $2.8125 multiplied by a state's population or $3,217,500 (IRS, 2019a).

[3] The credit and compliance periods overlap over the project's first ten years. When the credit period ends, there are five years left of the compliance period. In other words, the first year of the ten year credit period is the first year of the fifteen year compliance period.

[4] Examples of these federal initiatives include Community Development Block Grant (CDBG) and HOME Investment Partnerships programs.

8% (OCC and TREAS, 2008; Such, 2002). In addition, investors have said project yields exceeded their original return estimates by 5.4% (CohnReznick, 2018).

Regulatory benefits are another reason the LIHTC program has been popular with institutional investors, particularly those in the financial industry. Depository institutions, such as banks and credit unions, have been particularly motivated to invest in LIHTC projects to receive favorable ratings under the Community Reinvestment Act or CRA (12 USC Chapter 30). This 1977 law encourages depositories to meet the credit needs of low and moderate-income neighborhoods where they do business. LIHTCs have become one of the most appealing options among other CRA compliant investments (CohnReznick, 2018). As a consequence, depositories substantially invest in relevant LIHTC projects to earn positive ratings from federal banking regulators. Regulatory agencies factor CRA performance when they evaluate banking applications for deposit facilities, mergers, acquisitions and branch openings (Desai et al., 2010).

Investments in LIHTC projects can result in long-term financial gains for project stakeholders. Figure 2 illustrates cash flows investors and developers can receive from a hypothetical LIHTC project with 100 units and 9% tax credits over the fifteen-year compliance period. Under this model, tax credits and deductions are the largest cumulative cash flows with a total value of close to $5.8 million for the project. Investors accordingly expect to receive most of their return from tax credits. Developers receive, in addition to their fee – usually limited to 15% of total development costs for originating and managing the project to completion – about $300,000 from rents and other charges with investors receiving almost $1 million.

Project stakeholders also factor in fees for professionals that support project activities, such as accountants, attorneys, brokers and consultants. Syndicators, who are optional intermediaries that raise money from one or multiple investors to fund developer projects, are typically compensated with a percentage of equity raised and an annual asset management fee (GAO, 2017). Property managers earn periodic fees, ranging from 5% to 10% of the project's gross income. Towards the conclusion of the project's fifteen-year compliance period, investors reassess what to do with their equity in the development.

When the compliance period ends after fifteen years, investors explore what to do with their equity ownership in the project. Investors consider, among their options, exiting the project, selling their equity to developers and possibly reinvesting in another LIHTC project for a fifteen-year time horizon. Developers, particularly non-profit[5] and government types, may be interested in purchasing the project from investors to further preserve affordable rental housing in their community. When buyouts occur, the developer typically assumes assets and liabilities with residual capital divided with investors, depending on either the terms of their partnership contract, which are usually different than the equity distribution, or renegotiated. Alternatively, investors may recapitalize the project depending on circumstances, including available financing and projected returns. Those developers without the necessary funds for buyout may consider refinancing the project to compensate investors as well as conduct maintenance and upgrades on the property.

3. Development and management of LIHTC properties

Real estate developers largely initiate the LIHTC process on behalf of nongovernmental actors. Developers evaluate local housing market conditions and assess the potential for low-income rental projects. They position their evaluation on the criteria and priorities that the relevant HFA, where the proposed project is located in terms of geographical jurisdiction, establishes in the Qualified Action Plan or QAP for the state or territory. The LIHTC program mandates each state complete a QAP incorporating ten dimensions of selection criteria, addressing topics like: the project's location, public housing waiting lists in the area, and the energy efficiency of the project (Ellen et al., 2015). The HFA evaluates LIHTC project applications based on these federal selection criteria as well as other modifications that authorities can make to better serve their constituent communities.

The national requirements the LIHTC program imposes are minimums where authorities may assert more rigorous demands into their QAP. For instance, a common practice for HFAs is to incorporate longer extended use periods into QAPs beyond the 30-year minimum, such as requiring the project preserve its affordability for 45, 50 or 99 years. HFAs also target and prioritize different community needs into their QAP, such as giving preference to proposals that address specific affordable housing needs for a particular rural area in an application cycle. Ultimately, HFAs grade project applications, allocating available tax credits to those proposed developments that receive the highest scores. The application process consequently places the onus on developers to identify opportunities in local real estate markets that serve the affordable housing needs of the community and align with federal government policy objectives for a winning project application.

The LIHTC program further incentivizes projects in two types of areas that are underserved. Specifically, the program gives preferential treatment to projects located in qualified census tracts (QCTs) and difficult development areas (DDAs) (Hollar and Usowski, 2007). The QCTs are defined as areas with poverty rates of 25% or greater, or those where half of households have incomes below 60% of Area Median Gross Income (AMGI) (26 USC §42). The DDAs are places where construction, land and utility costs are high relative to AMGI.

The U.S. Department of Housing and Urban Development (HUD) analyzes community statistics and determines which parts of communities throughout the country are designated as QCTs or DDAs each year. HUD makes this data publicly available for interested parties to determine where QCTs and DDAs are located in their communities (HUD, 2020b). Investors are particularly attracted to projects with either of these designations since the LIHTC program provides an additional 30% in tax credits (Keightley, 2020). The opportunity for boosted credit amounts means even greater equity can be obtained from private capital for LIHTC projects in areas with concentrated poverty levels or prohibitive infrastructure costs related to affordable residential developments.

When applications are approved, HFAs enter into binding agreements with project stakeholders (IRS, 2019b). These contracts irrevocably commit the parties to the exact quantity of below market rate units in their project, called the minimum set aside, fixing the amount of tax credits the project will produce. The maximum amount of tax credits a project generates is calculated as the lesser of the percentage of units occupied by eligible tenants or the percentage of the physical area in a building occupied by eligible tenants. It is common for developers to commit to renting all of the project's units to qualified residents in order to maximize the amount of tax credits

[5] The tax code requires HFAs award at least 10% of their tax credits to non-profit sponsors (26 USC §42).

produced and thus the equity investment in their LIHTC project.

After tax credits are awarded and partnership agreements established with investor commitment and contribution schedules (HUD, 2010), the development of the project begins with the acquisition of land through real estate brokers and construction with general contractors. The close margins associated with affordable housing projects incentivize project managers to ensure their project is built on time and within budget. Federal and state compliance further reinforces stakeholders manage the project in accordance with the national provisions of the LIHTC program as well as local requirements, including the QAP.

The timeline is particularly important in terms of compliance because projects must be PIS; built and completed with tenants occupying the units, by the end of the second year after the HFA awards tax credits. Those units not rented by the end of the first year of the credit period are penalized, earning two-thirds of the tax credits produced and thereby limit the project's investment amount. Partnership agreements typically detail investor compensation, from developers or property managers, if full tax credits are not generated or noncompliance occurs. Once construction is completed, developers transfer the project for property management and leasing.

Property managers are motivated to lease vacant units to qualified tenants in an expedient manner. This step is critical since the LIHTC program requires residents, earning at certain income thresholds, occupy the finished units before the end of the credit period's first year. Investors add further pressure as they seek to apply their credits as soon as possible. Leasing agents accordingly review and document prospective tenant incomes to ensure qualification. Those tenants unable to substantiate their incomes, with documents like employment letters or pay stubs, sign a notarized statement attesting to their income levels. Property managers then sign and date tenant income certificates. Managers are federally required to keep these records through the EUP of thirty years (26 USC §42). Tenants who are not certified or late in providing documentation are prohibited from occupying LIHTC units or the project incurs penalties. As a consequence, project stakeholders often require third party consultants verify these certificates as an internal control in their LIHTC partnership agreements.

The LIHTC program has three income thresholds in determining qualified tenants and maximum rent rates, referred to as Multifamily Tax Subsidy Income Limits or MTSP (HUD, 2020c). Generally, a LIHTC project must have at least 40% of units with tenant incomes no greater than 60% of AMGI or at least 20% of units with incomes no greater than 50% of AMGI (26 USC §42). Project stakeholders often prefer the first option, the 40% at 60% of AMGI commitment, because it is more flexible with tenant incomes and can result in higher rents and therefore greater cash flow from the project. It is common, however, for HFAs to favor project applications go beyond minimums, like those proposals that explicitly target extremely low-income households: defined as incomes no higher than the Federal Poverty Level or 30% of AMGI. Correspondingly, a 2012 survey indicated half of LIHTC households earn below 40% of AMGI. Eligible tenants may be rental assistance beneficiaries from HUD, the U.S. Department of Agriculture (USDA) and state agencies. Rental assistance payments can supplement the difference and maximize LIHTC project cash flow up to the rent restricted ceiling amount (Hollar, 2014; O'Regan and Horn, 2013).[6] Projects may also use a threshold called the average income test or income averaging (IA). IA requires at least 40% of LIHTC project units do not collectively exceed designated income levels at 60% of AMGI in 10% increments from 20% to 80% of AMGI (26 USC §42).[7]

When units are PIS, project stakeholders complete IRS Form 8609. Project managers then submit the form, with other project documentation, for the approval and signature of the HFA. The HFA reviews and certifies the project complies with the LIHTC program and QAP. The HFA returns the form to project stakeholders.[8] Project stakeholders sign and submit this form to the IRS, enabling investors to apply the tax credits earned annually (IRS, 2018).

Compliance and enforcement are important to the effectiveness of the LIHTC program. Without adequate oversight, tax credits may fund construction outside of affordable rental supply. As a result, there are "dire tax consequences" for non-compliant projects (HUD, 2010: 6). The LIHTC program requires HFAs monitor projects within two years of being PIS. The inspections are subsequently conducted every three years. In these physical inspections, the HFA surveys at least 20% of units to certify projects adhere to building codes and condition standards. The HFA also reviews tenant files consisting of initial income certifications, supporting documentation and recertification activities. The program does not penalize tenants in LIHTC units whose income increases above 140% of AMGI in recertification; project stakeholders are allowed to still count the unit as compliant, with the tenant continuing to live there – as long as property managers commit to leasing the next comparable unit to a qualified resident when it becomes vacant (26 USC §42).

In the event a project does not comply, project stakeholders must respond to their HFA within 90 days. HFAs can provide up to six months for project managers to rectify the problem. In response to compliance issues, HFAs file Form 8823 with the IRS, even when the issue is resolved (IRS, 2019b). The IRS reviews this form and determines the appropriate remedy, including loss or recapture of tax credits, is necessary. IRS examiners also conduct audits of LIHTC projects. Egregious issues, such as noncompliance with verified tenant incomes or units that exceed the maximum allowable rent, can lead the IRS to recapture the entirety of tax credits – thereby jeopardizing the project. Project stakeholders therefore value strict internal controls to ensure their development closely adheres to national and local government requirements and standards. Additionally, investors often condition their contributions on the successful completion of independent reviews.

4. LIHTC applications for international markets

The LIHTC program has mobilized hundreds of billions of dollars of investment into the delivery of quality affordable rental supply in the United States. The outcome has been millions of homes for low-income families that likely would not have been available without the program. Despite these accomplishments, the LIHTC program consists of elaborate processes – broadly diagrammed in Figure 3 – and diverse actors: spanning national, regional and local governments and an array of real estate actors from the private and nonprofit sectors. Appropriately, every aspect of the LIHTC

[6] LIHTC projects cannot reject residents because they receive federal tenant-based rental assistance (26 USC §42).

[7] The LIHTC program reduces income averaging to at least 25% of units for projects in New York City (IRS, 2004).

[8] HFAs submit copies of Form 8609 projects to the IRS accompanied with Form 8610 that reports annual credit allocations made and certifies the authorities' compliance with the LIHTC program (IRS, 2019c).

program may not be completely applicable to the context of each housing market outside the United States (Oxley, 2015). There are nonetheless key lessons for those seeking to strengthen affordable rental housing options.

Different market dynamics, tax arrangements and institutional factors can make complete replication of the LIHTC program infeasible for other countries. Yet, housing finance markets can benefit from exchanging experiences to overcome collective affordable housing challenges, including the development of below-market rental supply. The American experience with LIHTCs offers several lessons that can be applied to other housing markets seeking to explore similar ways of using the tax code to expand affordable stock. In this section, we extrapolate several applications for international housing markets exploring tax-based approaches, from the design and implementation of the LIHTC program, to help make affordable rental units achievable for lower income and vulnerable households.

The LIHTC program finances affordable rental units using indirect subsidies from the federal government (Usowski and Hollar, 2008). Through this mechanism, the IRS collects less in taxes from investors who purchase tax credits. This approach differs from direct supply-based programs where governments customarily assume more active roles as financier and developer (Case, 1991). Governments under the direct supply-side approach take on substantial risks, often lacking deep expertise in real estate. As a result, it is common for governments to underdeliver and exceed project budgets, spending large sums of capital for incomplete residential developments (Feather, 2019). Alternatively, the U.S. government in the LIHTC program decides the amount it wants to allocate each year for new tax credits, rather than committing resources to housing projects with operational uncertainties. The indirect tax mechanism helps minimize financial and production risks on government, leveraging the participation of nongovernmental actors in finance, construction and property management (HUD, 2010).

To attract partnerships from investors and developers, the LIHTC program provides several financial incentives. Because of their capital, investors reduce the amount of taxes owed as well as their annual taxable income with credits over ten years and deductions throughout their involvement in the project. Certain investors, like banks, receive additional regulatory benefits from financing CRA-compliant LIHTC projects. Investors and developers also receive cash flows from projects. Aside from the development fee, developers often have the option to eventually buy the property from investors when the federal compliance period concludes. These financial incentives help cultivate strong interest and participation from private and nonprofit sectors. The resulting competition for tax credits benefits the LIHTC program where developers seek to best one another's project proposal by providing the most units to the lowest income tenants for the least amount of credits.

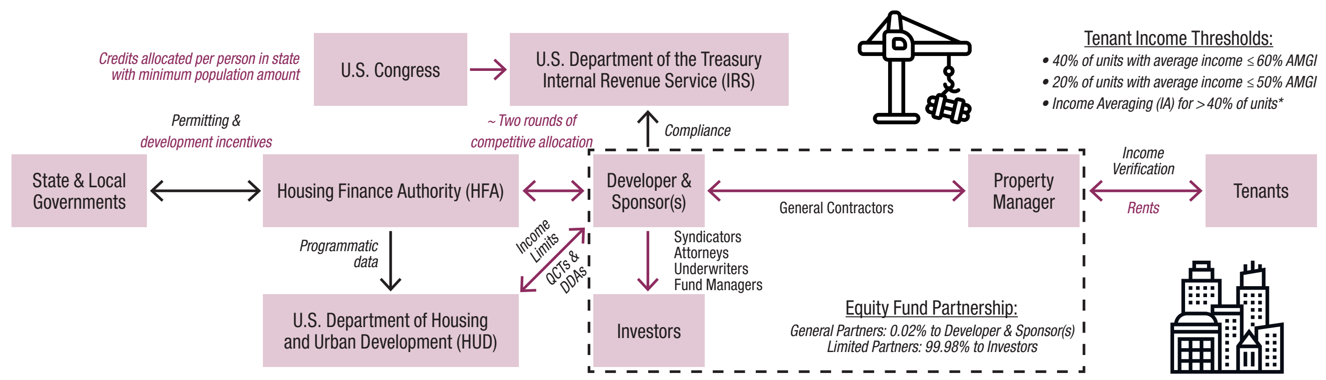
The LIHTC program provides additional financial incentives for projects located in underserved communities – both in terms of concentrated levels of poverty as well as areas with high development costs. Those projects in HUD designated QCTs or DDAs receive 30% increases to their tax credit amount. This inducement helps attract investors and developers to these areas. Communities benefit from the construction of below-market rate rental housing in their neighborhoods.

The LIHTC program also removes deterrents for tenants whose incomes have increased over the time since they first occupied their rent restricted units. Those who increase their household income can continue to live in their home as long as property managers pledge to rent the next available unit to tenants who meet the original income requirement. As a result, the LIHTC program is flexible in encouraging, rather than penalizing, the economic mobility of tenants.

Since these tax credits are discounted and cover eligible costs in LIHTC developments, projects have a financial gap that investors do not cover alone. The LIHTC program consequently relies on an ecosystem that includes private finance and public programs to make 9% and 4% credits work financially. The range of funding modalities – from loans to grants and local tax benefits – helps project managers bridge the financial gap. Aside from enabling more available funds in the tax credit pool, the mix of financial sources also makes it easier for nongovernmental actors to obtain the remainder of funding to participate in the program. The participation of other public, private and third sector actors helps further promote the viability of projects. It also helps extremely low-income households afford adequate housing with rental assistance programs, like vouchers. The LIHTC program explicitly prohibits property managers from rejecting qualified tenants who participate in the Section 8 Housing Choice Voucher program (26 USC §42).

Although LIHTCs are a federal benefit, the administration of the program at the local level enables the project to better serve community needs. The devolved system of HFAs throughout the United States allows local authorities to tailor the national program to the community.

FIGURE 3 Actors and processes in the Low-Income Housing Tax Credit (LIHTC) program



AMGI = Area Median Gross Income / QCT = Qualified Census Tract / DDA = Difficult Development Area

*The average income test is 25% of units for LIHTC projects in high-cost housing areas, particularly New York City.

In this role, HFAs shape the selection criteria for LIHTC projects through the QAP process. HFAs are thus able to prioritize specific needs and ensure below-market rental units endure in their community, oftentimes for lengths of time beyond the federal program's thirty-year requirement. The local administration of the LIHTC program further enables HFAs to closely monitor projects and mitigate noncompliance.

Strong oversight is critical for the LIHTC program. Concerns have long been raised about the vulnerability of the program in circumstances where tax credits are provided to partners who operate in unethical or inefficient ways (Stegman, 1991). Critics argue these worst-case scenarios happen when malign actors channel investment into the construction of developments outside of affordable housing or too few rental units are produced. To circumvent these issues, HFAs are legally required to conduct rigorous physical inspections and tenant file reviews together with audits from IRS examiners. Strict reporting requirements from project managers and HFAs to the IRS have further strengthened intergovernmental coordination on LIHTC projects. The ultimate penalty where the IRS recaptures tax credits for noncompliance issues has led project managers to implement internal control measures to ensure they fulfill program obligations.

The LIHTC program has challenges despite its strengths. The complex process across multiple actors can result in significant transaction costs and barriers to entry for new parties in putting project deals together. The teams of lawyers, accountants, consultants, syndicators, underwriters, sponsors and fund managers in assembling LIHTC deals and ensuring compliance can deter participation and therefore hinder the program from delivering affordable rental housing. The LIHTC program has also been vulnerable to changes in the U.S. tax code. Reduction in corporate rates have diminished the need for businesses to maintain investment in tax credits. Lower demand for tax credits has meant periods of market readjustment with declines in investment. Reforms to optimize the LIHTC process and improve economic efficiency can help make the program's impact even greater.

Governments around the world use tax codes to achieve policy goals. Housing has been no exception with substantial focus on homeownership (Oxley and Haffner, 2010). What has predominately been overlooked is the role of taxes in promoting affordable rental supply. Costs and expertise have limited the success of direct supply-based government approaches. Below-market rental housing has suffered from too little incentives for investment. The LIHTC program with its indirect approach has helped the U.S. government minimize risks. Financial incentives have stimulated interest from investors and developers in the program. The decentralized administration of the program through HFAs helps align national policies with local community needs. Strong local oversight with potent federal penalties ensures nongovernmental actors adhere to the program's intent. These lessons from the American experience with the LIHTC program stand to better inform other countries considering tax-based approaches to strengthen investment in affordable rental supply.

5. Conclusion

Housing shortages, both in terms of the number and quality of units, are commonplace throughout the world. The lack of affordable supply is exacerbated with nongovernmental actors often unable to finance and produce adequate below-market rate housing. In response, policymakers have devised various demand and supply-side programs to deliver access to the low-income and vulnerable. The success, however, of supply-based solutions has largely been limited. The LIHTC program in the United States has a strong record in promoting affordable rental production since its creation in 1986. The federal government's provision of tax credits has resulted in constructive public-private partnerships that have produced millions of high-quality units with below-market rents nationwide from the mobilization of hundreds of billions of dollars in capital.

In this article we explored how the LIHTC program has fostered successful partnerships between public, private and non-profit sectors. We assessed the investment, construction and property management components of the program focusing on two dimensions: financial operations as well as development and administration. These two sections illuminate how the LIHTC program works, providing useful insights for program design in corresponding initiatives. The succeeding analysis yields several applications for international markets exploring supply-based solutions programs through tax codes based on the U.S. experience.

The LIHTC program mobilizes private capital into affordable rental projects through an intricate set of financial operations. The program offers two types of 9% and 4% tax credits that finance the present value of 70% and 30% of eligible project costs. Developers identify other private and public sources of finance to bridge the gap. Projects that integrate other federal subsidies into their financing, particularly PABs, are eligible for the smaller credit. Investors negotiate with developers to buy these tax credits at a discounted rate. Once units are PIS, investors apply the undiscounted amount to reduce the amount of taxes owed annually over a period of ten years. When the project reaches its fifteenth year, investors are allowed to exit and sell their equity to others, oftentimes the developer. While investors may leave the LIHTC project after fifteen years, the federal program requires units continue to have affordable rents for a period of at least 30 years.

Developers catalyze LIHTC projects for nongovernmental partners, evaluating local housing dynamics and submitting proposals that adhere to federal and subnational program requirements. Regional and local HFAs shape selection criteria, compliant with federal requirements, in their state QAP for project applications and stakeholder commitments. Developers acquire land and begin construction after HFAs select which projects receive tax credits. Before tax credits are awarded, HFAs enter into agreements with project stakeholders committing to the quantity of low-income units that will be produced – mainly that at least 40% of units be occupied with tenant incomes not exceeding 60% of AMGI or 20% of units do not exceed 50% of AMGI – and thus how many units will generate tax credits for investors. After construction, property managers lease units with rent restrictions – not exceeding 30% of household income – to tenants with verified earnings that meet selection criteria. Managers report progress to the HFA, that certifies the project complies with the program and their QAP. Project stakeholders regularly comply with the federal and local terms of the program. In events of noncompliance, the IRS recaptures some – if not all – of the tax credits.

The U.S. experience with the LIHTC program has several applications for international markets exploring affordable rental initiatives through their tax codes. The American program uses an indirect subsidy mechanism that minimizes risks for government compared to direct supply approaches. Financial incentives for nongovernmental partners amplify interest in program participation, including developments in underserved communities. The availability of complementary public and private sources of financing help further defray programmatic costs and promote project viability with added scrutiny. The decentralized administration and oversight of the program, through HFAs, leverages local input helping ensure community needs are served. Federal enforcement with IRS audits and strong penalties help mitigate abuse.

The LIHTC program demonstrates governments can realize affordable housing goals with supply-based solutions. The program has experienced challenges, like substantial transaction costs from complex processes or vulnerability to rate decreases in the tax code. As such, the United States of America would benefit from further comparative research with corresponding international tax programs. Further research on other countries' affordable housing tax initiatives can inform program design and further optimize global efforts. The resulting can help make affordable housing a reality where the overdue needs of the low-income and vulnerable are served.

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The rise of impact investing and opportunity in affordable housing

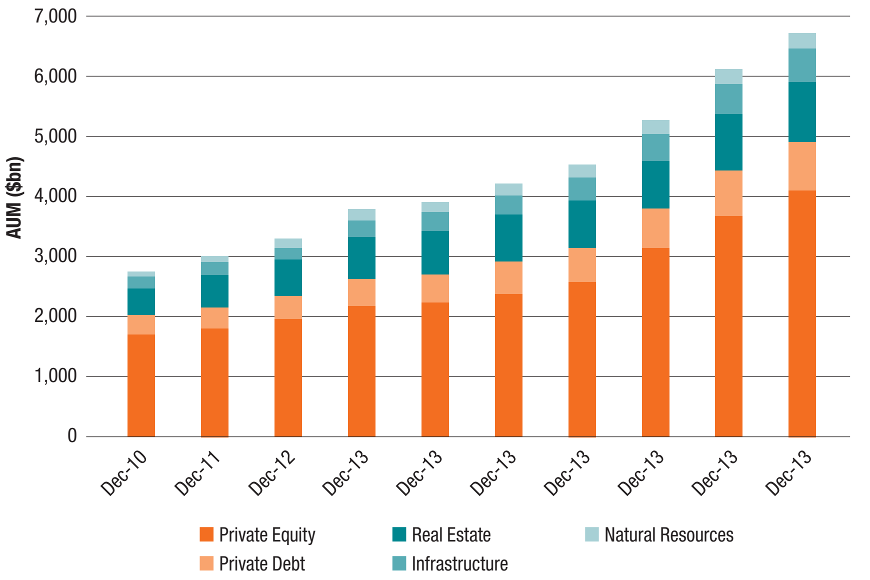
↳ By Josie McVitty

1. Introduction

At a time when allocations to private capital markets are at an all-time high, interest in impact investing is growing in the alternatives industry. Impact investing is an approach to investing that generates positive, measurable social and environmental impacts alongside financial returns. Institutional and private equity investors are becoming increasingly conscious of the social and environmental impact of their investment decisions, amid a global movement to reduce carbon emissions and boost corporate responsibility.

The increase in impact-oriented capital allocations is generating enthusiasm for investment strategies that finance real estate to achieve social and sustainability goals, with investment in affordable housing becoming a popular instrument to achieve those impact targets. This article shares part of the story of the emergence of impact investing and how we see this influencing fund strategies and investment in the housing sector.

FIGURE 1 Global private capital assets under management by asset class (Preqin, 2020)



2. Growing allocations to private capital markets

Allocations to private capital funds and to private real estate strategies have increased markedly over the past decade reaching record levels.

Assets under management were reported to reach their highest level ever in 2019, with US$6.7 trillion across all asset classes, and just shy of US$1 trillion of assets in real estate strategies (Preqin, 2019). Dry powder has reached a record high of US$2.4 trillion, while global fundraising has seen three consecutive years at around US$1 trillion of new capital raised annually. Forbes predicts that the scale of private capital markets will grow five-fold in the coming decade to US$30 trillion, driven by wholesale reallocations from public to private markets. Brookfield reiterates those estimates, reasoning that allocations to real assets and alternatives could increase from 25% of total capital to 60% by 2030 driven by the low interest environment, implying an additional US$25 trillion to flow to alternatives.

Of the total allocations to alternatives, at least US$1.5 trillion of new capital is set to target global real estate over the coming years, while a record US$340 billion of dry powder is sitting unspent in real estate private equity funds at the end of 2019, according to Jones Lang LaSalle.

3. Increasing allocations to impact investing

In parallel, investor's appetite for impact investing has been increasing. The term "impact investing" was coined in 2007 to describe the act of selecting investments with the goal of creating measurable positive social and environmental outcomes, without compromising financial returns. Impact investing is distinct from sustainable and responsible investing strategies in that it requires explicit impact objectives to be set beyond environment, social, and governance (ESG) integration or merely avoiding the negative impacts. The intentionality is set upfront by building the positive impact thesis into the underwriting. The investments are then actively managed for those impact outcomes, with annual measurement and verification, at the same time as for financial returns.

Impact investing sits along a spectrum of investment strategies from traditional investing to philanthropy where there are targeted social and environmental impacts as well as competitive returns as shown in Figure 2.

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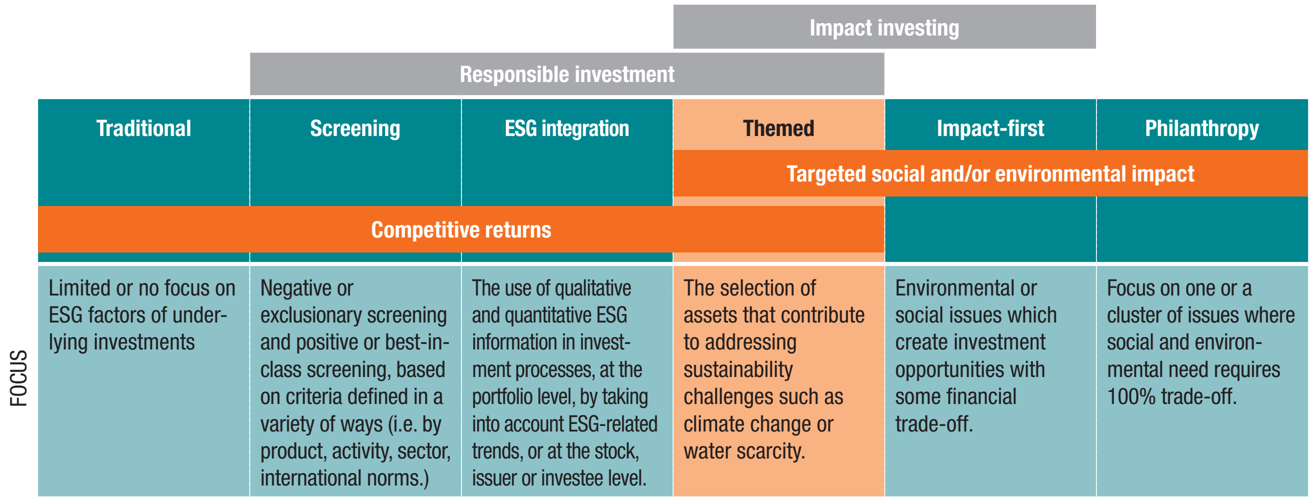
FIGURE 2 The spectrum of impact investing (PRI, 2017)



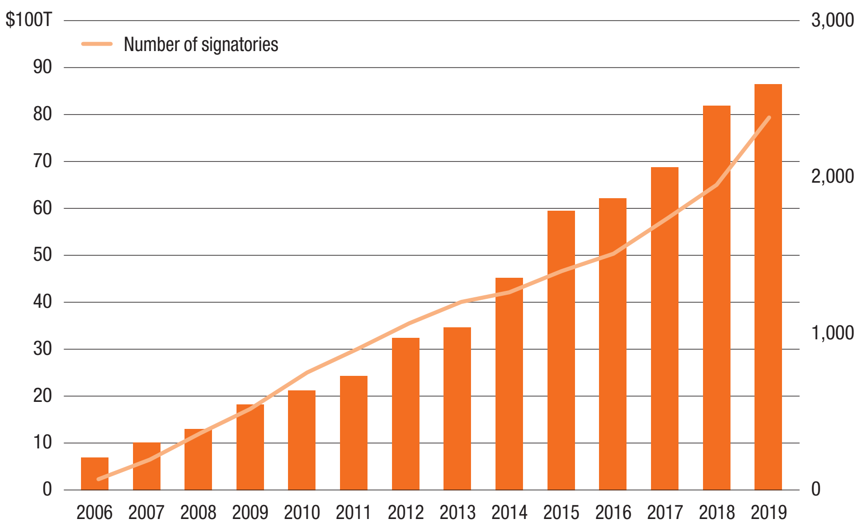
objectives to be set beyond environment, social, and governance (ESG) integration or merely avoiding the negative impacts. The intentionality is set upfront by building the positive impact thesis into the underwriting. The investments are then actively managed for those impact outcomes, with annual measurement and verification, at the same time as for financial returns.

Impact investing sits along a spectrum of investment strategies from traditional investing to philanthropy where there are targeted social and environmental impacts as well as competitive returns as shown in Figure 2.

Since its beginnings, commitments to impact investing have grown markedly. The Global Impact Investing Network (GIIN) is one of the primary industry bodies that brings together the impact market and has overseen this growth. In GIIN's April 2019 report on "Sizing the Impact Investing Market", it was reported that there are more than 1,340 firms active in impact investing, managing US$502 billion in impact investments globally, of which 58% are based in the US and Canada, and another 21% in Europe (GIIN, 2019).

The growth has taken place alongside broader commitments to responsible or ESG-driven investment strategies. Since 2012, the number of signatories to the UN-supported Principles for Responsible Investment has grown from 1,050 to 2,400 funds, a group representing US$86 trillion in capital across public and private markets. Of this, 672 signatories have exposure to real estate with assets under management of US$3.2 trillion, including 64% of the IPE's top 100 real estate investment managers (PRI, 2020)

FIGURE 3 Assets under management of the UN's PRI signatories



The impact investing industry appears to be here to stay. Around one fifth of insurance companies and pension funds are developing impact investing plans, and 44 percent are considering the strategy, according to the UK National Advisory Board on Impact Investing (JLL, 2020). AXA, BlackRock, Bain Capital, Goldman Sachs, TPG and UBS have all made public commitments. BlackRock surprised many when its CEO, Larry Fink, announced on 14 January 2020 that it would place sustainability at the centre of its investment approach in response to shifts in investor preferences.

Continued growth has been driven by demographic and societal shifts, motivated largely by millennials, as well as the establishment of the UN Sustainable Development Goals (SDGs), which have provided a framework for setting and monitoring targets. Barclays' 'Investor Motivations for Impact' report states that in 2017, "43% of respondents under 40 had made an impact investment, compared to 9% of those aged 50-59, and only 3% for those aged over 60" (Barclays, 2018). Return expectations remain at commercial levels, with 82% of investors expecting near or above market returns for an impact investment.

4. Impact Investing and the Housing Sector

The rise of commitments to impact investing is catalysing a new focus for the investment strategies of private managers in the real estate space.

Institutional real estate investors have for some time been incorporating ESG practices into their investment portfolio, which is reflected in the rise of the real assets' sustainability benchmark GRESB. GRESB was founded by a number of pension funds in 2009 and has become a very prominent advocate in this area covering more than US$4.5 trillion in real estate and infrastructure value. In the meantime, the mainstreaming of impact investing has driven more impactful real estate investment approaches, and increased interest in social and affordable housing strategies which sit squarely within the impact lens.

Affordable housing is attractive for impact real estate investors as it combines attractive commercial and social outcomes. Housing offers the opportunity to support social development and social equality in an asset class with favourable long-term returns on investment, a resilience to market volatility and potential for growth. Social and affordable housing is seen as one of the key sectors where investors can make a difference to reach multiple SDGs, including the fight against poverty (SDG 1), sustainable cities and communities (SDG 11), and to help bridge the gap between finance and projects to deliver more responsible investments in housing for those people and communities that need it most.

The case for positive impact in housing is simple to rationalise, which will help to mobilise more impact capital into the space. The UN reports that 1.6 billion people are housed inadequately globally, of which one billion are living in slums. According to McKinsey, the housing affordability gap is equivalent to $650 billion per year, or 1% of global GDP, with the gap exceeding 10% of local GDP in some of the world's least affordable cities. Equally, there is a sizeable investment opportunity. To replace sub-standard housing and meet additional demand by 2025 would require an investment of US$9 trillion to US$11 trillion for construction; or an estimated total cost of US$16 trillion with land.

Even in developed markets the housing need is immense. There are 11.4 million extremely low-income renter households in the US, where only 35 affordable homes are available for every 100 households, which is a shortage that is dispersed across every state and major metropolitan area. Meanwhile, in the UK, a Savills report estimates an annual shortfall of 60,000 affordable homes, which they suggest private investors could tackle, as becoming a for-profit registered provider is becoming attractive for institutional investors looking to provide long-term investment in housing.

Definition of affordable housing prepared by the Global Impact Investing Network
Companies that invest in housing projects, services and infrastructure for which the associated financial costs are at a level that does not threaten or compromise the occupants' enjoyment of other human rights and basic needs and that represents a reasonable proportion of an individual's overall income.

5. Achieving and measuring impact in housing

The impact sector is still fairly fragmented, using a broad range of targets and measurement systems, of which the UN Sustainable Development Goals (SDG), launched in 2015, are the most prominent. GIIN oversees the IRIS (Impact Reporting and Investment Standards) system, which provides a large database of metrics, and was relaunched in 2019 as IRIS+, referred to as a "generally accepted impact accounting system". The IFC launched its Operating Principles for Impact Management, while GRESB and UN PRI remain prominent in the ESG space. Despite the myriad of reporting systems, around two-thirds of respondents to GIIN's 2019 survey said they are using UN SDGs to track their performance when impact investing.

Within the SDGs, investors are able to contribute to a number of dimensions through their investments in the housing sector, primarily SDG 11 (sustainable cities and communities), SDG 8 (decent work and economic growth), SDG 13 (climate action), and SDG 9 (industry, innovation and infrastructure). More details on the measurement and assessment are outlined below.

SDG 11 – Sustainable cities and communities. Central to this SDG is ensuring access for all to adequate, safe and affordable housing and basic services, as well as place-making strategies to improve quality of life in cities. Investments in housing that incorporate principles of inclusive design, access to amenities, and that can be delivered at low cost can help to fill the deficit of well-located and affordable places to live. This SDG is largely measured through assessing the sales or rental prices of housing relative to incomes, the number of units delivered, the socio-economic area in which investments takes place, and the infrastructure and related amenities that are made available.

SDG 8 – Decent work and economic growth. Investment activity in housing generates temporary and permanent employment opportunities directly in construction, facilities management, and indirectly in the supply chain and tertiary service sectors. This job creation and economic stimulus can improve livelihoods by providing a source of income, as well as an ability to up-skill. Key focus areas for investors contributing to SDG 8 include the social and gender mix of those that are employed, and ensuring there are opportunities for a local, low-skilled, youthful and diverse workforce. Other initiatives can involve improving labour conditions for construction workers, and skills transfer, with activities like on-site training for workers.

SDG 13 – Climate action. Impact investors in the housing space have put an increasing focus on sustainable design and green certification to contribute to reducing climate change. It is becoming standard to ensure housing is built with green certification and resource efficient technologies in order to improve the energy efficiency of properties, reduce water and resource usage, as well as the embodied energy that is accounted for in the construction materials. This is shifting the standards and design of affordable housing.

SDG 9 – Industry, innovation and infrastructure. SDG 9 is focused on promoting inclusive and sustainable industrialisation. In financing housing, impact investors contribute to this SDG through upgrading infrastructure and intentional use of small and medium enterprises, as well as local businesses to support local economic development. Studies show local construction activities can help to drive business activity, both in construction but also in the supply chain having a positive spillover effect into indirect activities. Ways to measure this include setting targets for a certain percentage of the development costs to allocate to SMEs and sourcing local businesses to be contracted for ongoing property operations.

Finally, affordable housing can play a major part in contributing toward SDG 1 to end poverty, by providing safe and adequate homes to those that are most at risk.

The IFC's Operating Principles for Impact Management is another relevant framework that has emerged in the impact space. Launched on 12 April 2019, these Principles were developed in consultation with leading impact managers and asset owners to promote greater discipline and transparency in impact investing. The Principles provide a framework to ensure that impact considerations are integrated throughout the investment life cycle and importantly, require independent verification and public disclosure of alignment with the Principles. There are already 97 signatories, including TPG's Rise Fund, AXA Investment Managers, Credit Suisse, BlackRock, amongst other development finance institutions and asset managers.

FIGURE 4 IFC's Operating Principles for Impact Management

Strategic Intent

1. Define strategic impact objective(s), consistent with the investment strategy.
2. Manage strategic impact on a portfolio basis.

Orifination & Structuring

3. Establish the Manager's contribution to the achievement of impact.
4. Assess the expected impact of each investment, based on a systematic approach.
5. Assess, address, monitor and manage potential negative impacts of each investment.

Portfolio Management

6. Monitor the progress of each investment in achieving impact against expectations and respond appropriately.

Impact at Exit

7. Conduct exits considering the effect on sustained impact.
8. Review, document and improve decisions and processes based on the achievement of impact and lessons learned.

Independent Verification

9. Publicly disclose alignment with the Principes and provide regular independent verification of the alignment.

FIGURE 5 The Five Dimensions of Impact (IMP, 2020)

The IMP reached global consensus that impact can be measured across five dimensions: What, Who, How much, Contribution and Risk

Impact dimension	Impact questions each dimension seeks to answer
What	– What outcome occurs in the period? – How important is the outcomes to the people (or planet) experiencing them?
Who	– Who experiences the outcome? – How underserved are the affected stakeholders in relation to the outcome?
How much	– How much of the outcome occurs - across scale, depth and duration?
Contribution	– Would this change likely have happened anyway?
Risk	– What is the risk to people and planet that impact does not occur as expected?

Source: Impact Management Project

Finally, the Impact Management Project (IMP) is one of the most advanced in the impact management and measurement space. IMP is a non-profit forum for organisations to build consensus around how to measure, compare and report impacts on environmental and social issues. They have built a framework for impact measurement around five key dimensions, covering the impact definition, who the beneficiary is, how well-served or under-served they are, a quantitative assessment for how much impact is being delivered, for how long, whether the contribution is meaningful, and finally a risk assessment. Many institutions, including PwC, Partners Group, and Actis have adapted this framework into simple scoring systems that can be applied for rapid and comprehensive impact planning in their own real estate portfolios. The Actis Impact Score does this by applying the framework to set an entry score, a target exit score based on identified impact objectives, followed by annual measurement.

6. Examples of impact investing in housing

GIIN has started reporting on the growth of impact investing in housing. A survey in 2019 reported that impact investing resulted in the financing of 11,000 affordable housing units amongst respondents, or 9 units per US$100,000 invested. It also facilitated access to affordable housing for an estimated 37,000 low-income individuals, including supportive services linked to the provided housing. However, the market is already much broader than this report implies.

In the UK, the first mover is largely recognised as Cheyne Capital, which launched the Cheyne Social Property Impact Fund in 2014. This fund has a target of investing £700 million in housing projects that provide a social as well as financial return. Their strategy is centred around matching long-term investors, largely part of the UK defined-benefit pension funds, with inflation-linked assets which makes the housing sector particularly attractive.

Since then, a number of impact-oriented real estate funds with an affordable housing focus have launched in the UK recent years. In 2018, the Co-op Pension Scheme awarded a £50m mandate to PGIM Real Estate to invest in social and affordable housing, and Legal & General Affordable Homes established partnerships with UK housing associations. CBRE Global Investors announced in January 2019 that it had secured £250m for its debut UK social and affordable housing fund. CBRE's fund is open-ended, and will focus on rental housing, shared-ownership properties, homeless hostels, and housing for 'key workers', such as nurses and emergency-services staff. Its goal is achieving a social impact while targeting a 6% total return.

BMO Real Estate Partners launched an open-ended fund to invest in 'flexible-rent' affordable housing across the UK, with a bespoke ESG measurement framework to ensure impact credentials are being fulfilled. Working with housing associations, the BMO UK Housing Fund will create purpose-built accommodation for low to middle-income households. Its target audience is key workers and it uses a flexible-rent model to ensure housing remains affordable, even through periods of income volatility. BMO is also targeting a 6% return with 4.5% annual distribution. In January 2020, they announced a modest first close, though report a £250m investment pipeline and goal to raise £500m in equity. BMO is one of the latest signatories to the IFC Operating Principles for Impact Management.

Elsewhere in Europe, Caisse des Dépôts raised €900 million for a social impact fund for housing developments in French cities. Switzerland based Partner's Group, launched a US$1 billion impact fund called PG LIFE which is to commit to investments that contribute to the SDGs, and in Germany, the impact investing market was estimated at US$13 billion in 2018. As in other markets, there are a number of examples of residential housing-focused investors, including WohnRaumGesellschaft, one of the first social impact investors in the real estate sector in Germany founded to create high-quality and affordable living spaces in major German cities.

The largest real estate private equity manager, Blackstone, has also shown significant appetite in the space. Though Blackstone has not explicitly labelled its strategy as impact, they have defended their investments in the housing sector, as "bringing significant capital and expertise to address the chronic undersupply of housing in major metropolitan centres around the world". Some examples of Blackstone's investments, include Hembla in Sweden, a listed rental landlord which has a development pipeline of 5,000 new homes in which Blackstone acquired a controlling stake, as well as the company's UK housing business Sage, which has its roots in buying up affordable homes that developers are obliged to build as a condition of planning permission. It has begun partnering with developers to fund new sites, contributing to a goal of 20,000 new homes in five years.

In the U.S., BlackRock announced a new Global Impact Fund in April this year to direct finance toward companies, that are supporting the UN SDG's, including affordable housing. JP Morgan's Urban Renaissance Fund raised US$175m for investing in urban development and affordable housing targeting market returns of c.15% and Nuveen, an American asset manager, has invested US$424m in affordable housing as part of its impact investing strategies, and reports more than 1.8 million mortgages guaranteed and 2.1 million houses built including those for low to moderate income residents.

Internationally, Actis, an emerging markets investor, has shown increasing interest in impact investing through its existing funds, including a series of affordable housing joint ventures, with the real estate arm of Shapoorji Pallonji, one of India's largest conglomerates. The Joyville partnership in India committed US$250m to the delivery of low-cost residential units across India's largest cities, and counts the Asian Development Bank and the IFC as co-investors, with an overall target of 20,000 affordable residential housing units over the 7 year lifetime of the investment. In 2019, Actis and Shapoorji announced another US$120 million in a joint venture for affordable housing in Africa, starting with a 600-unit development in Nairobi. Both projects apply the IMP framework for setting impact objectives at the outset and measuring progress in those initiatives over time.

In South Africa, International Housing Solutions has spearheaded efforts in impact investing in housing in Africa, being the first to invest in green-certified housing on the continent and delivering social and affordable units at below a US$100,000 price point. IHS are continuing to pursue opportunities to raise funds for investment in affordable and social housing in Kenya, South Africa, and Sub-Saharan Africa more broadly.

7. Trends and outlook for impact investing and the housing sector

Impact investing is still in its infancy, though quickly becoming main-stream. As major pension funds and institutional investors continue to announce commitments to impact investing, we can anticipate rising interest in this segment of the market for private managers during fund-raising, as well as toward an investment pipeline that contributes to investors' impact goals.

Affordable housing is a sector which is popular amongst impact investors, and there has already been a number of examples of private fund managers launching strategies in this space with explicit goals of contributing to social and sustainability objectives including the SDGs.

Although there has been some historic suspicion around private equity's participation in the affordable and social housing market, the dual focus on impact alongside financial returns can help to better align the incentives and motives of both investors and ultimately the home-owners and tenants who benefit from more affordable and quality housing. The impact opportunity in private investment can also help to bring more capital into the housing sector to bridge the estimated US$16 trillion funding gap required to replace sub-standard housing.

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