

Creation of a Global Asset Class for Affordable Housing

September 2019





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1 Foreword

The International Housing Partnership (IHP) is a collaborative of more than 175 high-capacity housing nonprofits from Australia, Canada, the United Kingdom, and the United States. More than 2.5 million people are housed in over 1 million homes that are managed or owned by members. Members are actively renewing and developing tens of thousands of units each year and providing services to residents and their communities.

IHP members are committed to global best practice and pursue this through the dynamic exchange of information and experience. The IHP also fosters collaboration and exploration on business practices and the creation of social enterprises.

A consistent theme of exploration for IHP members has been how to unlock efficient and favourable capital solutions that will enable the delivery of more homes and better outcomes for residents. In a 2014 report, McKinsey Global Institute found that "The housing affordability gap is equivalent to \$650 billion per year, or 1 percent of global GDP." The same report also estimated that to build the additional units required by 2025 would require "an investment of \$9 trillion to \$11 trillion for construction; with land, the total cost could be \$16 trillion." On a global scale this is a significant challenge but also an immense opportunity if the right conditions are created to secure investment. In the USA, Canada, Australia and the UK the investment required to meet the scale of the demand for affordable housing will likely run into hundreds of billions of dollars.

It is in this context that the IHP has engaged with Paxon Group (Paxon) through PowerHousing Australia (the IHP representative in Australia). Paxon have undertaken a scoping study outlining the potential for the creation of a global asset class.

Development of the scoping study involved a combination of research and consultation with representatives from each IHP country network. This report identifies the challenges and opportunities in developing affordable housing as a global asset class and the findings are set out in the applicable sections throughout the report.

On behalf of members of the IHP, I'd like to thank the sponsors of this work, the Steering Committee, Working Group and experts who contributed their insights. I'd also like to acknowledge and thank Paxon Group, and in particular Michael Palassis and Paul Tilbrook, for their work on this paper.

Though there are many factors to consider, the opportunity to shape a market globally whilst acting locally should be appealing to IHP members. After all, each member is already changing the world, one home at a time.

Scott Langford

Chair, IHP Global Asset Class Working Group





1 Defining Social and Affordable Housing

IHP members are involved in the provision of two broad categories of housing, social and affordable housing. These classes may have differing names across jurisdictions, however are generally aligned in terms of the key characteristic, being the rent payable by tenants. The two classes are therefore defined broadly, for the purpose of this report, as:

- Social housing: Housing provided at, or near, a full market subsidy, to those in the position of greatest social disadvantage;
- Affordable housing: Housing provided at a discount to market rent, to cater to specific cohorts of tenants.

1.1 Comparison of Social and Affordable Housing

The following sections outline the key differences between social and affordable housing, including:

- Tenant eligibility;
- Rent sources;
- Management style; and
- Housing options.

1.1.1 Tenant Eligibility

Social housing is provided to people who are facing housing stress, with eligibility at a lower income threshold than affordable housing. Additionally, whilst social housing is typically available to anyone who meets the income requirements, affordable housing is often funded by contributors to benefit a specific group. This results in some affordable housing projects existing purely for specific groups such as members of a particular religion, war veterans or people with a disability.

1.1.2 Rent Sources

Social housing is provided at full or near full Government rental subsidies (meaning revenue is largely derived from Government back sources), which combined with a long wait list for dwellings, results in low risk of future cash flows. Conversely, affordable housing is offered at a rate set below the market rate and receives ongoing Government rental subsidies to a lesser extent. This results in a greater dependence on private rent payments, which results in a higher risk of cash flows than social housing.

This distinction is less clear in some jurisdictions, such as the USA where a meaningful amount of the privately owned and managed affordable housing stock is reliant on project-based Section 8 support. This has features that make it more like social housing, with Government paying a larger portion of rent. However, the tenant still pays 30% of their income, meaning there is broad alignment with the rent sources distinction outlined.



1.1.3 Management Style

Social housing is typically governed by a Government policy, and often managed by a Government department or agency, with potential tenants sourced from a wait list. Conversely, affordable housing is managed as a private rental, with rental applications received when a vacancy is advertised. This results in affordable housing having higher cash flow risk due to the longer buffer period between tenants and the slightly increased level of occupancy risk compared to social housing.

1.1.4 Housing Options

Social housing typically provides more options to tenants than affordable housing. This includes the option to change residence, tenure and household members being able to apply to succeed a tenancy. Conversely, as affordable housing is managed like a private rental, tenants are subject to a contract, with subsequent contracts up to the discretion of the landlord.

1.2 Housing Considered within Scoping Study

Consultation with IHP member organisations showed that the majority of projects for which proponents were looking to progress, or seeking funding for, deliver largely affordable housing. This is consistent with the other analysis conducted as part of the study, which suggests that due to the high market subsidy for social housing, it is difficult to establish projects which are self-financing. There are, however, a number of options for the financing of affordable housing projects.

Social housing also generally has a higher level of Government intervention, and policy affecting the provision of subsidies and the eligibility for housing, which drives a greater level of commercial, policy and structural variation across jurisdictions.

Due to this distinction between the two asset classes, this study focuses primarily on affordable housing as the potential target for development of a global asset class, as it is more conducive to projects attracting financing, and presents a more consistent definition across differing countries.

It is possible that once an asset class is developed, social housing or other forms of more subsidised housing may be included in specific projects through additional government intervention or an additional subsidy layer. The specifics of this approach are not tested further within this study.



2 Affordable Housing – Global Status

For each of IHP's delegate countries, the market for provision of, and investment into, affordable housing it at differing states of maturity. The sections below provide an overview of the depth of market in each country, and programs of note which have been implemented in each.

2.1 Australia

2.1.1 Structural and Legal Overview

Affordable housing is administered by the Federal Government Treasury and Social Services Departments and various State and Territory Departments. The percentage of dwellings that are classed as affordable is decreasing, which has prompted Government to explore other methods to increase the supply of affordable housing.¹ Notable affordable housing programs in Australia include:

- The National Housing Finance and Investment Corporation (NHFIC);
- National Affordable Housing Agreement (NAHA);
- Commonwealth Rent Assistance (CRA); and
- National Rental Affordability Scheme (NRAS).

2.1.1.1 The National Housing Finance and Investment Corporation

The NHFIC is an independent, Federal Government backed entity operating a affordable housing bond aggregator and administering the 1 Billion AUD National Housing Infrastructure Facility (NHIF).

The bond aggregator operates by raising money at low interest rates from the wholesale bond market and then issuing low interest loans to assist the provision of affordable housing projects. The bond aggregator has the following key characteristics:

- An independent board responsible for making decisions, which is guided by an investment mandate and reflects the Federal Government's goals for the NHFIC;
- All registered affordable housing providers will be able to apply for low interest loans; and
- The Federal Government will guarantee bonds issued by the NHFIC.²

¹ Australian Housing and Urban Research Institute

² Australian Federal Budget (2017)



The NHIF is a 1 Billion AUD fund designed to help finance critical infrastructure to increase the supply of housing in Australia, specifically affordable housing. For example, financial constraints due to upfront infrastructure costs and coordination issues due to stakeholder and regulatory issues. The NHIF is expected to operate with lenders and State and Territorial Governments to ensure additional funding is provided.³

2.1.1.2 National Affordable Housing Agreement

The Federal Government is working with States and Territories to reform NAHA to provide ongoing funding for a National Housing and Homelessness Agreement (NHHA). The NHHA will combine funding provided for the National Affordable Housing Specific Purpose Payment (NAHSPP) and the National Partnership Agreement on Homelessness (NPAH) to provide approximately \$1.5 Billion per year to State and Territory Governments to support delivery of frontline homelessness services. ⁴

2.1.1.3 Commonwealth Rent Assistance

CRA is a non-taxable income supplement to assist people to rent in the private rental or community housing markets. CRA ranges from \$91 to \$137 per week, payable to singles and families who qualify for eligible social security payments, family tax benefits, service pensions or other income support supplements.⁵

2.1.1.4 National Rental Affordability Scheme

NRAS is a Federal Government initiative provided in partnership with State and Territory Governments to provide financial incentives for up to 10 years for providers of rental dwellings priced at 20% below market rates, to encourage the following:

- Increased supply of affordable housing;
- Reduced rental costs for low to moderate income households; and
- Large scale investment in innovative delivery of affordable housing.⁶

³ National Housing Finance and Investment Corporation Bill (2018)

⁴ Australian Government Department of Social Services

⁵ Australian Government Department of Social Services

⁶ Australian Government Department of Social Services



2.1.2 Investment Opportunities

In May 2019, the NHFIC closed its first bond issue of 315 Million AUD, which was 4 times oversubscribed and launched with a \$2 Billion AUD Federal Government guarantee. The bonds featured a 2.38% coupon, with loans then provided to CHPs over 10 years at a 2.92% fixed rate.

2.2 Canada

2.2.1 Structural and Legal Overview

Affordable housing is decentralised with approximately 80% administered by various state and provincial programs, with the remainder administered by the Federal Government, primarily under the Canada Mortgage and Housing Corporation (CMHC).⁷ The CMHC provides annual allocations to each province and territory, who then design affordable housing programs for local needs. Notable affordable housing programs in Canada include:

- The Affordable Housing Innovation Fund (AHIF);
- Creation of the Housing Investment Corporation (HIC);
- The National Housing Strategy; and
- The Rental Housing Construction Tax Credit (RHCTC).

2.2.1.1 Affordable Housing Innovation Fund

The AHIF is a \$200 Million CAD fund designed to encourage new funding models and innovative building techniques in the affordable housing sector, which will:

- Support development of innovative approaches to affordable housing provision;
- Create inclusive and accessible communities; and
- Contribute to reducing homelessness.8

2.2.1.2 Housing Investment Corporation

The HIC is a special purpose lender created using funds sourced from the Affordable Housing Innovation Fund. The HIC provides long-term, competitive financing to assist in meeting demand for affordable housing.

2.2.1.3 The National Housing Strategy

In 2017, the Federal Government of Canada released The National Housing Strategy (NHS), which includes \$40 Billion CAD over 10 years to increase the number of affordable housing dwellings across Canada. Most notably, the NHS included the National Housing Co-Investment Fund (NHCIF), which provides low cost loans and capital contributions to developers to encourage constructing new or redeveloping aging dwellings.⁹

⁷ Canada's National Housing Strategy (2017)

⁸ Canada's National Housing Strategy (2017)

⁹ Canada Mortgage and Housing Corporation



2.2.1.4 The Rental Housing Construction Tax Credit

In 2013, the Manitoba Province Government introduced the RHCTC program, which provides tax credits over a 5-year period equal to 8% of capital cost for affordable housing, up to a total of \$12,000 CAD per unit, provided the following criteria is met:

- The building consists of 5 or more new residential rental dwellings; and
- At least 10% of dwellings qualify as affordable rental housing dwellings.

2.2.2 Investment Opportunities

In April 2019, the HIC closed its first round of funding for 2 projects in British Columbia and Alberta. The series raised 33.1 Million CAD of Senior Unsecured Notes, with the sole investor being the Canada Life Assurance Company, which showed an interest in investing up to 300 Million CAD. A further 150 Million CAD offering is expected to be placed later this year. The series comprise 2 streams and had the following characteristics:

- Series A raised \$10m on 30-year term at 4.26% to construct a 15-storey building with 135 dwellings; and
- Series B raised \$23m on 40-year term at 4.42% to construct 2 buildings with a total 136 dwellings.¹¹

2.3 UK

2.3.1 Structural and Legal Overview

As an asset class, affordable housing emerged in the UK in the 1980s when the Government transitioned from complete reliance on public sector funding for affordable housing projects, to channelling private sector capital. Today, affordable housing projects are primarily delivered by local authorities and housing associations, which comprise a network of approximately 1,800 organisations, who produce the majority of new affordable housing supply and are represented by the National Housing Federation (NHF).¹²

Notable affordable housing programs in the UK include:

- Housing benefit;
- The Shared Ownership and Affordable Homes Programme (SOAHP); and
- The National Planning Policy Framework (NPPF).

2.3.1.1 Housing Benefit

The Housing Benefit (now part of the Universal Credit) helps people pay their rent if they are unemployed, on a low income or claiming benefits. Housing benefit claims are calculated depending on the following:

- Eligible rent;
- If there is a spare room;
- Household income, including benefits, pensions and savings; and
- Circumstances, including age and disability status of other people in the house.

¹⁰ Government of Canada

¹¹ Housing Investment Corporation

¹² Housing Europe



2.3.1.2 The Shared Ownership and Affordable Homes Programme

The SOAHP introduces shared ownership, which allows a purchaser to buy a share in a home's equity, whilst paying rent on the remaining portion. The SOAHP includes 4.7 Billion GBP in capital grants to assist home purchases.¹³

2.3.1.3 The National Planning Policy Framework

The NPPF sets out planning policies in England and how they should be applied. The NPPF aims to maximise the use of land, improve green belt protections and emphasise converting planning permissions into built homes. The overhauled framework includes the following key measures:

- 10% of homes on major sites should be classed as affordable;
- Builders should be more open about affordable housing commitments at the planning stage;
- Local authorities will be able to account for building speed when issuing
 planning permissions and will be able to revoke permissions if construction has
 not begun after 2 years;
- Councils must adopt a new nationwide standard showing housing needs in their areas;
- Infrastructure must be considered at the pre-planning stage;
- Ancient woodland and aged trees will receive specific protection; and
- Homeowners will be able to add two storeys to existing properties.

2.3.2 Investment Opportunities

In the UK, affordable housing investment opportunities are widespread, however recent uncertainty as a result of Brexit has impacted capital markets and increased rates to approximately 3.70%, about 50 basis points (BPs) higher than the previous year.

MORhomes, which was created by housing associations in the affordable housing sector, is a private borrowing vehicle, which aggregates capital raised on bond markets and provides low interest rate loans to affordable housing providers. MORhomes completed its first issue in February 2019, with 250 Million GBP raised from 20 bond investors. However, rates passed onto housing associations were similar to what was available in the market. This was likely due to it being the first issuance, with later issuances expected to see improved pricing.

Overall, the private placement market continues to be active, with housing associations receiving rates approximately 10 to 40 basis points below comparable public market bond issuances. North American investors are currently the most active investors in private placements.

 $^{^{\}rm 13}$ The Shared Ownership and Affordable Homes Programme 2016 to 2021



2.4 **USA**

2.4.1 Structural and Legal Overview

As an asset class, affordable housing emerged in the USA in the 1980s with the introduction of several programs, which promoted public private partnerships (PPP) for the provision of affordable housing rather than via direct Government intervention.

The USA has a large for-profit build to rent sector, and the private sector still has a larger share of all affordable housing programs. The for profit sector, which generally has a shorter term ownership horizon and provides lower levels of resident services, competes aggressively with non-profits for naturally occurring affordable housing (NOAH) properties, tax credits and other assets.

In the USA, affordable housing provision is encouraged through various local, state and federal programs, with the Federal Department of Housing and Urban Development (HUD) assisting over 5 million households through tenant-based vouchers, project-based subsidiaries and affordable housing provision.¹⁴ Notable affordable housing programs in the USA include the following, although there are myriad other funding sources such as federal block grants, which may be utilised in assembling funding for a project:

- The Low-Income Housing Tax Credit (LIHTC);
- HOPE VI;
- Community Reinvestment Act (CRA); and
- Project-Based Rental Assistance (Section 8).

Another key component of the US system is the Government Supported Enterprises (GSEs), which are key sources of relatively low cost debt for single family and multifamily affordable homes.

2.4.1.1 The Low-Income Housing Tax Credit

The LIHTC program is the primary driver of affordable housing in the USA, with over 3.13 million dwellings constructed since it was introduced in 1986¹⁵ and over \$100 Billion USD in private equity capital generated between 1986 and 2017.16 The LIHTC provides tax credits to developers who build affordable housing to incentivize private sector involvement. The LIHTC works by providing a developer with federal tax credits equal to either 30% or 70% of the eligible costs of affordable housing projects, depending on whether tax exempt bonds are used to finance the project. The credits may then be claimed annually over a 10-year period.¹⁷

¹⁴ US Department of Housing and Urban Development

¹⁵ US Department of Housing and Urban Development

¹⁶ CBRF

¹⁷ US Department of Housing and Urban Development



To qualify as an affordable housing project the following criteria must be met:

- 40% of dwellings must be set aside for renters earning less than 60% of the area's median income, or 20% of dwellings must be set aside for renters earning less than 50% of the area's median income;
- The gross rent, including utilities, must be less than 30% of the area's median income; and
- The above requirements must be met for at least 15 years.

2.4.1.2 HOPE VI

HOPE VI is a program designed to revitalise aging affordable housing dwellings. Under HOPE VI, Public Housing Authorities (PHAs) worked with the private sector to demolish aging affordable housing dwellings and replace them with lower scale, mixed use projects. There s no further funding for HOPE VI, although a capped pilot program, the Rental Assistance Demonstration (RAD) program, has legislation pending to significantly expand that program to deliver similar outcomes.

2.4.1.3 Community Reinvestment Act

The CRA is a federal law enacted in 1977 with the intent of encouraging depository institutions to help meet the credit needs of low- and moderate-income neighbourhoods. It requires depository institutions, amongst other requirements, to invest and make loans for affordable housing, and creates an inducement for the private sector to invest into affordable housing.

2.4.1.4 Housing Choice Voucher Program (Section 8)

The Housing Choice Voucher Program (HCV) provides rental subsidy vouchers to 2.2 million low-income households in the USA (as at 2017). Properties that accept the vouchers receive 30% of income from low-income earners and receive a top up payment from HUD, if applicable, so that total rent received is the Fair Market Rent (FMR) for the area, at a minimum.

2.4.2 Investment Opportunities

HPN has aggressively pursued aggregation strategies for both equity and debt through two generations of business development for its mobilisation strategy. The first major initiation was the creation of the Housing Partnership Equity Trust, a

REIT which focused on NOAH (often described as key worker housing in other countries).

The second generation of business development has been focusing on utilising the US securitisation system to provide senior project debt on preferred terms, such as more liberal underwriting, mainly) through a conduit structure that allows non-profits to participate in securitisation structures typically only available to very large for profit developers and lenders. These two strategies are synergistic, in that the properties that the REIT invests its equity in also need senior project debt, which the conduit could provide on more attractive terms.



3 Defining the Problem and Need

The need for this scoping study has been driven by feedback from various IHP members, that access to capital for affordable housing projects is limited or that capital available for projects is not in the optimal form.

Consultation with IHP members identified a number of key themes in relation to the availability of funding (both debt and equity) for affordable housing projects:

- Projects remain heavily reliant on Government funding, either directly through investment in projects, or indirectly through provision of tax credits, subsidies, planning concessions or other mechanisms which support such projects;
- Where non-Government capital is accessed, there is a widespread view that this
 is often not at optimal terms (for example comparable projects in other sectors
 or jurisdictions are seen attaining lower rates for debt funding), or does not
 reflect the actual risk/return position provided by affordable housing;
- Accessing new forms of capital can be a difficult and time-consuming process
 for project proponents in the affordable housing space. This is because there is
 considered to be a high level of effort required in educating potential investors
 as to the nature of projects before detailed discussions around funding and
 financing parameters can proceed; and
- There is considered to be a general lack of depth and competitiveness in both debt and equity markets across jurisdictions.

While these themes generally identify a need for additional funding, or alternative types of funding, for affordable housing projects, the specific need will vary between delegate countries due to characteristics of housing in each country.

3.1 Funding Need

The need for funding, which the establishment of an asset class for affordable housing seeks to address, varies between countries due to the unique policy, legal, regulatory and commercial characteristics of affordable housing in each. The following sections outline the specific need for funding in each jurisdiction.

3.1.1 Australia

Affordable housing providers in Australia are seeking debt and equity investments, with a focus on equity funding. While debt funding is notionally available through the NHFIC, this is a new system and has not loaned large volumes to affordable housing projects to date. As this system is not well established and understood, providers may also actively seek debt funding. Traditionally this has come from Australian banks, however alternative sources of debt funding are considered attractive by Australian housing providers as they may provide more flexible arrangements on terms more tailored to the provision of affordable housing projects.

3.1.2 Canada

In Canada there is a varied depth of market for investment, with some variance across provincial and municipal jurisdictions where support for affordable housing varies. Generally, there is an appetite for further equity investment from markets, and a greater range of equity sources that are not necessarily dependent on Government credit enhancements.



The Canadian capital debt market is considered relatively interested in providing debt funding to the affordable housing market, however there is potential for greater exposure to international debt funding which may provide more attractive terms.

3.1.3 UK

Affordable housing providers in the UK are seeking debt and equity investments, with a focus on debt. Historically, housing providers in the UK have been provided with large volumes of housing through Government transfer, which providers may use as a source of equity funding at the corporate level through cross-guarantee of properties. This means there has been less of a need for equity funding historically, although some providers are now seeking alternative sources of equity financing where they have already leveraged existing property holdings.

There was a general view presented by UK housing providers that the terms of debt available are not optimal due to the limited depth of market and that offshore markets see more competitive lending in the affordable housing space. In addition, most debt received for housing projects currently is secured, with a desire for unsecured debt due to the greater flexibility afforded.

3.1.4 USA

Affordable housing providers in the USA are seeking both debt and equity investments. Presently, affordable housing providers find equity funding difficult to access, with investors looking at projects as standard real estate structures. There is some opportunity to use LIHTC's to create a structured equity play, however broader access to equity markets at competitive rates would be desirable, particularly where additional equity is required. Not for profit developers often need equity to secure sites before commencing the lengthy process to access LIHTC equity, further driving the need for low cost, non-LIHTC, equity. As the majority of real estate is held in SPV holdings, and properties are encumbered, there is very limited opportunity to use existing properties as collateral.

US housing providers indicated that their view is that other jurisdictions are able to access debt at more competitive terms for comparable housing products, and they would like to be able to access similar markets. US providers have had some success raising funds from European pension funds and Asian investors, and are increasingly seeking to look offshore for funding.

An issue identified by US providers is ensuring differentiation between for-profit providers of affordable housing and the not-for-profit market, who tend to offer greater levels of tenant service, and to retain ownership in developments for longer periods. Making this differentiation better understood may increase the pool of investors seeking to provide funding for not-for-profit providers.

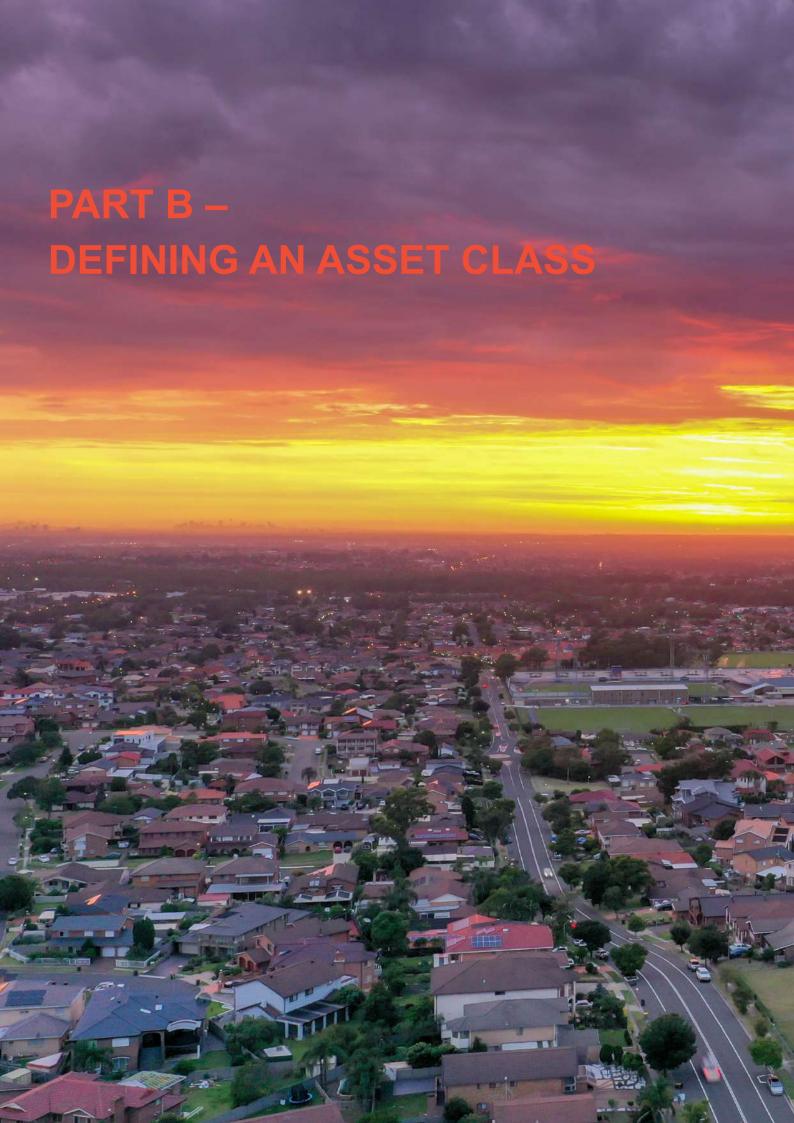
3.2 Offshore Funding Requirements

Consultation with IHP members across all delegate countries identified a common theme of seeking to access international sources of funding, and having encountered difficulties in the past in pursuing offshore finance.

This is largely attributed to perceived difficulty in understanding and overcoming differences in the policy, legal and commercial frameworks for housing provision across countries, on the part of financiers.



Greater access to offshore funding would provide access to a deeper pool of financing, potentially on more appropriate and attractive terms than currently available domestically, for projects. For this reason, members have an interest in the progression of activities to open up offshore funding availability, one of which would be the establishment of a global asset class.





4 Asset Class Definition and Characteristics

An asset class is a grouping of investments that have similar characteristics in the market, which means they have similar risks and returns, are subject to the same laws and regulations, and perform in a similar manner under market conditions.

Historically, there were three types of asset classes: equities, debt and cash. Now there are many different types, including real estate, commodities, financial derivatives and cryptocurrencies, as well as sub-classes within each of these.

Asset classes are defined as they provide investors with a perceived legitimacy about a specific investment and they provide clearly defined investment characteristics and comparable investments, which facilitates investment decision making.

4.1 Asset Class Characteristics

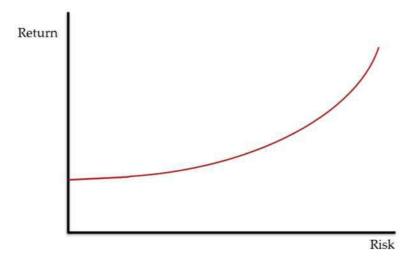
Different asset classes are defined so that investors can target specific characteristics in their portfolios. The following characteristics typically differ across asset classes:

- Risk and return profiles;
- Correlation; and
- Liquidity.

4.2 Risk and Return Profiles

The risk and return profile is an asset's risk and corresponding rate of return. As return is desirable and risk is undesirable, rational investors will only accept more risk to the extent that they are compensated with higher levels of return. Hence, each asset will have a return dependent on its risk level with high risk assets having a high return and low risk assets having a low return. This is shown in a simplified manner Figure 1.

Figure 1: Risk Return Continuum (Indicative)



Each asset class has its own position on the risk-return continuum. The indicative position of a number of generally accepted asset classes is shown in Figure 2.

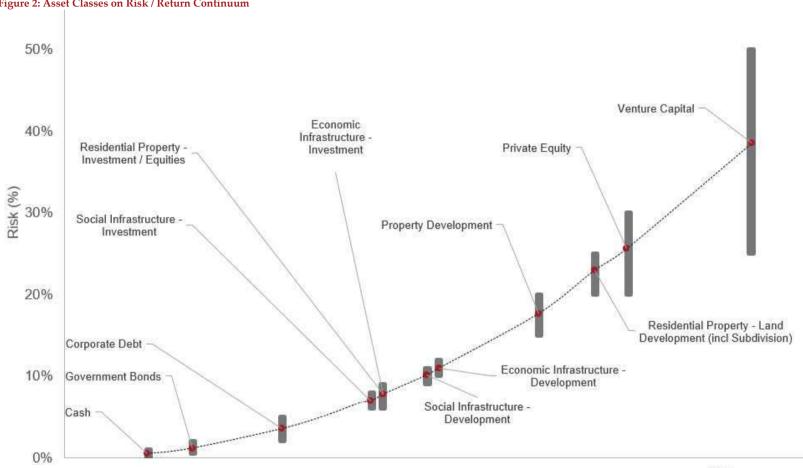


Figure 2: Asset Classes on Risk / Return Continuum

Return



4.3 Correlation

Correlation refers to the degree that prices of two assets move in tandem. Correlation is an asset characteristic due to its ability to diversify, which is an asset's ability to reduce the overall variability of a portfolio if it is uncorrelated with the rest of the portfolio. Diversification typically arises from assets which are uncorrelated or have low correlations with the market. Common diversifying assets include real estate, commodities and exotic asset classes such as vintage art.

4.4 Liquidity

Liquidity is the degree to which assets can be traded quickly, in large quantities at a price that is not far from the current market value. Liquidity arises when assets are traded frequently in high quantities and have a stated value across multiple markets.

4.5 Asset Class Definition

An asset class is defined in terms of its risk profile, return characteristics, correlation and liquidity. In defining an asset class, and determining how individual projects or investments fit within an asset class, organisations (generally ratings agencies) will develop a comprehensive set of risk and return characteristics which distinguish the asset class from other adjacent types of asset.

A risk assessment by a credit rating agency typically analyses five key areas, including:

- Credit quality of the securitised assets;
- Legal and regulatory risks;
- Payment structure and cash flow mechanics;
- Operational and administrative risks; and
- Counterparty risk.

4.5.1 Credit Quality of the Securitised Assets

Analysing the credit quality of securitised assets involves determining the losses incurred under extreme stress. Depending on the asset class, the assessment references generalisations based on historical studies, country risk, transfer and convertibility risk.

4.5.2 Legal and Regulatory Risks

Analysing the legal and regulatory risks involves focusing on the degree to which a security's structure isolates the securitised assets from bankruptcy and insolvency risk. As securitised assets are held under a special purpose vehicle (SPV), the analysis examines whether the separate legal identity of the SPV would be honoured under the relevant legal system.

4.5.3 Payment Structure and Cash Flow Mechanics

Analysing the payment structure and cash flow mechanics involves assessing security documentation and testing cash flows using quantitative models, with the objective to assess whether the cash flows from the securitised assets would be sufficient to make timely interest and principal payments.



4.5.4 Operational and Administrative Risks

Analysing the operation and administrative risks involves analysing the key transaction parties to determine whether they can manage a security over its useful life.

4.5.5 Counterparty Risk

Analysing counterparty risk involves analysing the ability of third-party obligations to hold assets or make financial payments that may affect the creditworthiness of structured securities.



5 Asset Class Benefits

The existence of a defined and understood asset class provides a number of benefits, including the following:

- Greater access to capital markets;
- Lower cost of capital; and
- Alignment with corporate social responsibility.

5.1 Greater Access to Capital Markets

Definition of an asset class leads to greater access to capital markets, as there are a number of categories of investor who will restrict their investment to defined, and possibly rated, asset classes. Definition of an asset class may also allow greater access for retail investors to invest in the asset, whereas non-defined assets are generally restricted to institutional or sophisticated investors.

Having a defined structure for an asset class ensures that the requisite analysis and documentation to fully understand the asset has been developed and is generally publicly available. This enables potential investors to develop an understanding of the asset class without having to undertake significant work on their own behalf, which attracts investment.

5.2 Reduced Cost of Capital

A reduced cost of debt is expected to arise due to a reduced credit spread and economies of scale. With a defined set of investment characteristics, risk uncertainty is reduced, which reduces the credit spread demanded by prospective investors.

Greater involvement of capital markets results in more assets being pooled into a single vehicle, which leads to economies of scale of listing and securitisation costs. Hence, the credit spread required to cover costs financial costs is reduced.

In addition, the development of a defined asset class increases the depth of market available, as outlined above, which is likely to lead to more competitive pricing for capital.

5.3 Alignment with Corporate Social Responsibility

Capital allocation decisions are becoming increasingly difficult due to the rise in corporate social responsibility obligations. This results in firms not purely allocating resources as desired, but also against a set of societal expectations, such as contribution to climate change or other social outcomes. The existence of an established asset class provides an investment vehicle that allows fund managers to maintain investment practices, whilst better understanding impact of investments and maintaining consistency with societal expectations.

Additionally, there is an opportunity for additional capital investment where an asset class is considered to be socially responsible. Socially responsible investing has increased significantly in recent years to an approximately \$500 Billion USD market since the World Bank issued the first Green Bonds in 2008. Due to the growing popularity of socially responsible investing there is potential for additional capital investment in asset classes aligned to these goals.



6 Development of Asset Classes

The process for creating a new asset class is not strictly defined, however there are a number of common steps which can be identified through analysis of asset classes brought to market in recent times, as well as an understanding of the characteristics of established asset classes.

6.1 Steps for Development of an Asset Class

This section outlines a general approach to creating a new asset class, including the following steps:

- Conceptualising a new asset class;
- Product development;
- Meeting legal requirements;
- Operations and product registration;
- Marketing;
- Distribution and product launch;
- Compliance; and
- Product and Profitability Review.

6.1.1 Conceptualising a New Asset Class

Conceptualising the asset class includes outlining the purpose of the asset class, outlining the likely risk return structure, confirming there is adequate demand, outlining what investment products would be targeted, determining what would set it apart from other asset classes and planning how the asset class would develop.

6.1.2 Product development

Product development is the process of turning the conceptualised financial products, used to invest in the asset class, into a tangible product that can be taken to market. This involves the following elements:

- Designing the products to suit the anticipated clientele;
- Ensuring the desired risk return structure;
- Obtaining a credit rating from a rating agency;
- Including measures to improve the appeal of the product, such as aggregating projects into a single security; and
- Standardisation, which improves the liquidity, diversification and return of the product. This can also include the development of sector vehicles that can regularly deliver the product to market.

6.1.3 Meeting Legal Requirements

Meeting legal and regulatory requirements with the relevant regulatory body is necessary to launch an investment product. Law firms are typically engaged to ensure regulations are complied with, ensure intellectual capital is protected using the necessary filings and confirming that requirements such as product suitability and conflicts of interest have been adhered to.



6.1.4 Operations and Product Registration

Operations and product registration include developing the minor details of the investment product offering. This typically includes developing paperwork required for prospective investors and regulatory bodies, such as investment prospectuses, ensuring the initial transaction will be efficiently executed and identifying the risks associated with the initial transaction.

6.1.5 Marketing

Marketing a new product or asset class typically includes attendance at investment conventions, road shows or speaking tours to directly engage prospective investors and promote the asset class to the wider investment industry. Further educating prospective investors is required if investment products or the asset class in general is complex or likely to be misunderstood. This includes provision of literature such as brochures and presentations, through both academic and industry distribution, that effectively communicate the asset class' complexities.

6.1.6 Distribution and Asset Class Launch

Distribution and asset class launch involves developing a sales force to sell the products. This involves determining who will sell the products, who will be approached to purchase the products and compensation, which is highly dependent on the asset class' attributes, which will dictate the level of skill required to trade the asset. For example, a complex asset will be better suited to institutional investors and a simpler asset to retail investors. Once the target market has been identified, distribution channels can then be implemented.

The success of the asset class depends on the risk return trade off, diversification effect and ability to meet investor requirements, such as a desire to invest in socially responsible projects.

6.1.7 Compliance

Compliance with regulations is important for the success of the asset class for legal reasons and public perceptions. For example, if the asset class is repeatedly accessed by investors for whom the asset class is unsuitable, public perceptions of the asset class will deteriorate.

6.1.8 Product and Profitability Review

Finally, reviewing the asset class is required to ensure its ongoing relevance. This includes reviewing sales, projections, unexpected challenges, risk management and ability to satisfy the rationale for initially developing the asset class.

6.2 Asset Class Development Case Studies

The following case studies provide examples of two asset classes that have been developed in recent times, demonstrating precedent for development of new asset classes.

6.2.1 Green Bonds

Green bonds are debt securities issued to raise capital specifically for climate or environmental related projects. They provide a liquid, credible, low project and country risk investment product, which allows investors to incorporate environmental projects into their portfolios.



Green bonds were created in 2006, in response to requests to the World Bank by a group of Swedish pension fund managers. The World Bank created fixed income products that finance climate change mitigation and adaptation projects, financed through other fixed income products. This suited the Scandinavian investors as the products did not include specific project or country risk but maintained the asset class characteristics of other environmental projects, they were familiar with. Additionally, this facilitated retail investors to invest in green projects without having a specific view over each individual project.

The green bond market has benefitted significantly due to their standardised characteristics and due to the 2009 Copenhagen Accord, which asserted that financial markets must be influential in combating climate change through mobilising private capital for mitigation and adaption projects. Several economies subsequently agreed that promoting green bonds was the best strategy.

6.2.2 Infrastructure

In 2017, the Organisation for Economic Cooperation and Development (OECD), at the annual G20 summit, presented a plan to bridge the information gap in infrastructure data and to establish infrastructure as a global asset class. The plan identified the following key actions:

- Mapping the financing and risk allocation of infrastructure;
- Outlining the investment characteristics of an infrastructure asset class; and
- Mobilising private sector investment in developing countries.

To establish an infrastructure asset class, it is necessary to outline the key financing and risk allocations. This includes ensuring superior risk allocation, the infrastructure need is met, a more efficient and competitive market structure is introduced and there is an accurate estimate of the capital involvement required. This attracts the private sector, whose involvement improves risk allocation and understanding between participants, which impacts the optimal capital structure and reduces the cost of capital.

Information availability and transparency of investment characteristics is necessary for encouraging private sector involvement. Information regarding asset pricing and risks facilitate better informed risk evaluation and decision making, and investors require an understanding of infrastructure investors' strategic asset allocation to assist in portfolio construction.

Private sector involvement is necessary in developing countries to establish infrastructure as a global asset class. To attract private sector capital, improved tracking of capital flows with design similar to new financial instruments and funding agreements, such as those present in Direct Foreign Investment, the National Development Bank and Multilateral Development Banks, is required.



7 Global Asset Classes

Despite regional policy, structural, legal and commercial differences, global asset classes have developed. This occurs when asset classes are primarily driven by a single factor, such as mortgage repayments, which are largely indifferent consistent across multiple jurisdictions. Such asset classes maintain their core characteristics globally, whilst exhibiting distinct minor characteristics, such as different mortgage and property ownership laws, in different countries.

The following case studies highlight that there is precedent for global asset classes to develop despite jurisdictional differences. Case studies are presented for the following asset classes:

- Residential Mortgage Backed Securities (RMBS); and
- Build to Rent (BTR).

7.1.1 Residential Mortgage Backed Securities

A RMBS is a securitised product, which encompasses a collection of interrelated residential mortgages. RMBS' are secured by the underlying mortgages and fund interest and principal payments through mortgage repayments.

Although the RMBS market is significant and globally recognised, there are notable legal, structural and commercial differences which have resulted in minor geographical differences within the asset class. Japan, the Netherlands, the UK and Australia are used as reference countries, with the most notable differences including:

- Number of issuers;
- Mortgage market characteristics;
- RMBS characteristics; and
- Collateral performance.

7.1.1.1 Number of Issuers

In the UK and the Netherlands, the RMBS market is concentrated among originators, with the top 3 RMBS originators accounting for approximately two thirds of activity. Conversely, in Australia larger financial institutions could traditionally fund mortgage lending at a cheaper rate using other measures and in Japan, more than 80% of RMBS have been issued by the Japan Housing Finance Agency, a Government affiliated mortgage lender.

7.1.1.2 Mortgage Market Characteristics

There are significantly different mortgage markets in the reference countries, including differences in interest rate characteristics, principal repayment characteristics, underwriting criteria, loan to value ratios, repayment penalties, foreclosure legislation and mortgage insurance characteristics.

7.1.1.3 RMBS Characteristics

There are significantly different mortgage markets in the reference countries, including differences in the type of collateral used in RMBS, whether a standalone of master trust issued, the process for acquiring a legal interest in collateral, capital structure, priority of principal payments, liquidity mechanisms and how readily available loan data is available to investors, which aids investment decisions.



7.1.1.4 Collateral Performance

Due to different conditions in each of the reference markets, performance of the underlying mortgages varies. For example, prepayment rates in the Netherlands and Japan are lower than in the UK and Australia, due to the presence of tax benefits, which reduces the borrower's incentive to repay principal amounts quickly.

7.1.2 Build to Rent

BTR refers to private residential developments, which are intended specifically for renting, rather than sale. Although the BTR market is significant and establish in several countries, there are notable legal, structural and commercial differences which have resulted in minor geographical differences within the asset class. The UK, USA and Australia are used as reference countries, with the most notable differences including:

- Government policy;
- Tax; and
- Culture.

7.1.2.1 Government Policy

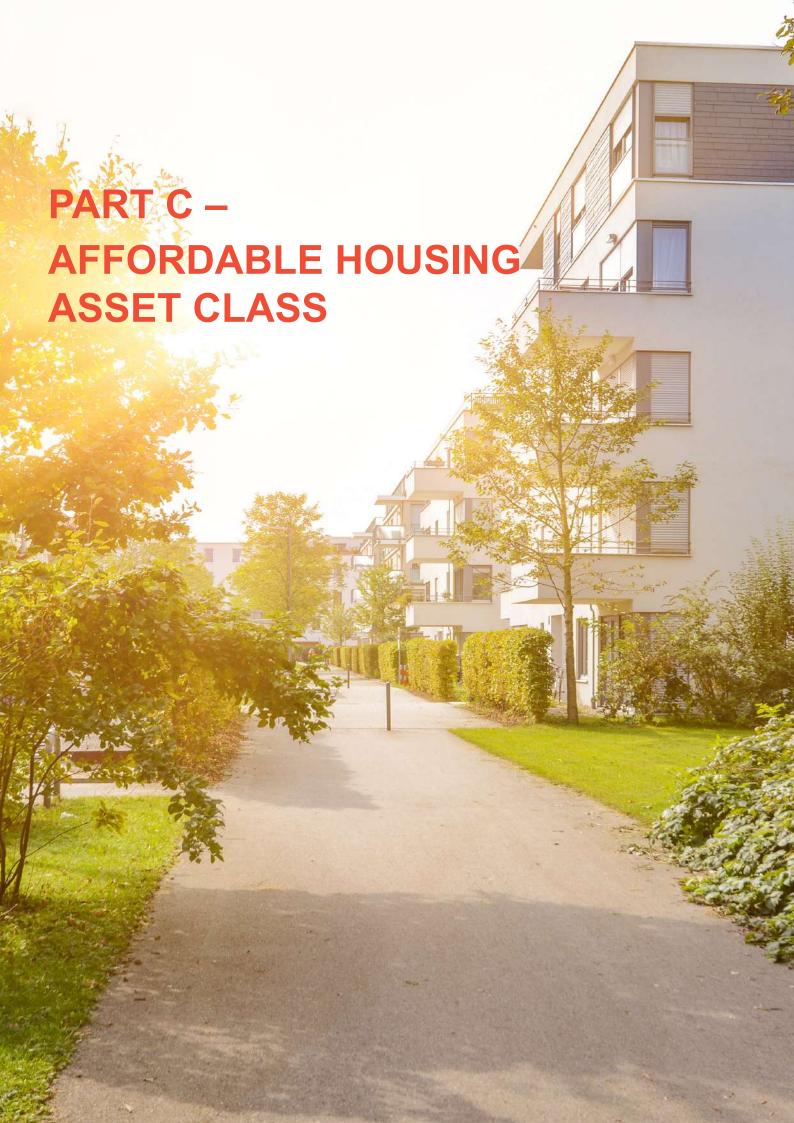
Government policy facilitating BTR differs significantly across the reference countries. In the UK, local councils are looking into BTR developments, in conjunction with private developers, whereas in the USA, Governments have minimal direct involvement in BTR provision.

7.1.2.2 Tax

Tax policy varies significantly across the reference countries. In the UK, BTR is not specifically defined for taxation purposes, which results in BTR developments being charged stamp duty at higher rates than private residences, without receiving value added tax (VAT) commercial concessions. Similarly, BTR in Australia is not particularly addressed, with most policy focusing on traditional retail investing. Additionally, BTR developments incurring higher tax than Build to Sell (BTS) developments. Conversely, in the USA, multi family developments featuring affordable housing dwellings, which comprise approximately one third of developments, receive favourable tax treatment under the LIHTC system.

7.1.2.3 Culture

Cultural differences result in varying levels of popularity for BTR in the reference countries. In the USA, there is preference for lower return developments if they offer long term cash flows. Additionally, there has been a cultural shift towards renting, with the proportion of residents who opt for BTR, despite being able to afford to purchase a home, increasing. Conversely, in Australia, notions such as the Australian dream of owning your own home, result in a lower appetite for renting compared to other countries.





8 Why has an Asset Class not Emerged?

Affordable housing exists as an asset class to some extent within some IHP delegate nations, as detailed earlier, however it has not emerged as a well defined asset class on a global scale. This is due to a market failure, which may be driven by a number of potential factors, including the following:

- Lack of understanding from investors;
- Perceived poor returns;
- Perceived small market size;
- Small project size, making transaction and project costs prohibitive; or
- Lack of precedent projects.

8.1 Limited Understanding

There is a lack of understanding regarding investing in affordable housing from domestic and international project sponsors. On the domestic level, legislation is niche and often complicated, meaning the asset class is not broadly understood. For example the LIHTC system in the USA, is generally considered a complicated system, despite its successful implementation over a long period.

On the international level, there are material policy, structural, legal and commercial differences between jurisdictions. There is a tendency for offshore investors to consider other countries' affordable and social housing markets too difficult to understand, and limited effort is made to bridge this lack of understanding, even despite the commonalities between jurisdictions. This lack of understanding creates confusion and increases the cost associated with investment decisions, which limits investment in affordable housing.

8.2 Perceived Poor Returns

Due to the risk-return trade off discussed in Section 4.2, investors will not invest in an asset if the return offered does not adequately compensate for risk acquired. Anecdotal feedback from IHP members and other sources suggests that investors often perceive the return from affordable housing to be poor, for the simplistic reason that tenant rental payments are lower than market housing and hence the return must be less desirable than that for a market housing development.

This viewpoint does not consider two subtleties related to affordable housing:

While the absolute return from an affordable housing project may be lower than
that of a comparably sized market housing development, the risk profile
associated is materially different. Differing underlying demand for affordable
housing, as well as the existence of various rental support subsidies across
jurisdictions, mean that affordable housing projects generally present a lower
risk profile which is commensurate with the return offered; and



There are a number of structural and policy mechanisms which assist in
potentially making the return achieved from an affordable housing project
closer to a comparable market housing development. These include planning
and tax concession for projects delivering some proportion of affordable
housing, which provide an opportunity to derive a return more palatable to
external investment.

8.3 Perceived Small Market

Where an investment market is small, potential investors may not consider it worthwhile conducting the necessary activities to allow initial investment into the market. These activities may include education to understand specifics of the market, building internal capability to allow assessment of opportunities, and overheads for the ongoing management of investments.

The affordable housing market is not generally well publicised or understood, leading to a perception that the overall market is small. While this may be true on a local scale, across countries or internationally this is not the case. However, this perception of a small market size may deter investors from making the effort to develop resources and capabilities required to make an informed investment decision on participation in the market.

8.4 Small Project Sizing

Investment in affordable housing has generally been at the project level, with the opportunity for corporate level investment limited, particularly in some countries due to the structure of the property and affordable housing market. Where projects are small, the potential for high transaction costs such as due diligence and management, deters investors as the overall return will be limited by the project size.

8.5 Lack of Precedent Projects

In order for an asset class to be developed, a precedent must exist of the nature of project or investment product within that asset class. As affordable housing projects have taken a variety of forms, sizes and structures over past years, there is a lack of common understanding of the precedent project type that may fit within such a categorisation.



9 Affordable Housing Asset Class Definition

It is possible to define the broad risk and return characteristics which define affordable housing, and would be used to characterise an asset class. While there are some differences between delegate countries, due to the nature of Government support, and other commercial, legal, structural and policy differences, there is broad alignment across the delegate countries, sufficient to define the asset class.

9.1 Risk Characteristics

The risk characteristics of affordable housing can also be compared to comparable sub-classes of residential real estate, as set out in Table 1. This table provides an overview of the risk definition of general residential real estate as well as two specific sub-classes; residential mortgage backed securities, and build-to-rent or multifamily real estate. It is noted that the characteristics of build-to-rent are variable across jurisdictions, and particularly that in the USA, where the majority of low-income families live in private, nonsubsidised rentals, the distinction is less defined.

Table 1: Risk Comparison to other Real Estate Asset Sub-Classes

Asset Classification	Risks
Residential Real Estate	Occupancy risk is borne by the investor, as market housing receives no government assistance and is subject to pure market forces in the rental of residential property.
	Residential real estate is considered to be a relatively illiquid asset , due to the limited opportunities to buy and sell when desired (especially in a low growth environment)
	Default risk is borne by the lender, with the property acting as the underlying security. Additionally, the borrower generally has full recourse (although this is not true across all jurisdictions, notably the USA), and should the proceeds from the sale of the property not meet the debt obligations the borrower's assets may be seized.
	Where residential property is utilized for investment purposes and is rented out to the market, the investor bears the risk regarding certainty of receiving rental income . In this regard, the investor accepts a level of default risk, whereby insufficient rental income adversely impacts the ability to of the investor to service their debt obligations.
	Economic risk is prevalent in the real estate asset class, whereby rising levels of inflation and interest rates can not only affect the ability to service debt, but also adversely impact the property value. Interest rate risk and inflation are considered to be economic risks, which is borne by the investor.



Asset Classification	Risks
Build to Rent	Occupancy of housing stock is subject to varying amounts of risk, dependent on tenancy rights and acceptance of long term rental tenancies by the market across jurisdictions.
	Market rental housing receives no government assistance and is subject to pure market forces in the rental of residential property, as such occupancy risk is borne is borne by the investor
	Considered to be an illiquid asset as there exists no market or demand for the (secondary) sale and purchase
	Similarly, with residential real estate, default risk is assumed by the lender with the property acting as security and the borrower generally accepting full recourse on the loan (although not in all jurisdictions as noted above for real estate).
	Rental income is the primary source of income received in a BTR development, as such the investor assumes tenancy risk and the ability of the tenant to service their rental obligations.
	Economic risk surrounding interest and inflation rates, are borne by the investor.
Residential Mortgage Backed Securities	RMBS offer varying levels of risk which are dependent on the underlying mortgages contained within each RMBS. The level is risk is distinguished through the choice of Pool; Pool A, inherently possess less risk than Pool B as the underlying loans are of higher quality;
	Pool A; is issued by an authorised deposit-taking institution (ADI) lender with weighted average seasoning in excess of 18 months, loan to value ratio (LVR) less than 80%, most mortgages are secured by houses in a geographically diversified metropolitan areas and with principal and interest variable rate mortgages
	Pool B; is issued by a non-bank lender with weighted average seasoning of less than a year, LVR in excess of 80%, concentration by region or in apartments, mostly interest only, investment and fixed rate loans.
	An RMBS offers a spectrum of risk, which is distinguished through the choice of Pool. The quality of loans within Pool A are much higher, as such the level is risk is inherently lower than that of Pool B. Given that the RMBS is secured by home loans, the investor indirectly accepts default and occupancy risk . In the even that the borrower defaults on their home loans, the RMBS investor receives first ranking rights over residential mortgages with the property acting as security.
	RMBS investors indirectly assume a level of borrower/tenancy risk . The quality of either the borrower or tenant determines their ability to; service debt obligations or service their rental obligations. However, given that RMBS are defined as a fixed income security, the investor receives a higher level of certainty regarding the return on the investment limiting their level of risk.
	Considered to be a highly liquid asset due to the ease at which it can be traded on the capital markets
	Economic risk surrounding interest and inflation rates, are borne by the investor.



Asset Classification	Risks
Affordable Housing	Although there may be limited government involvement in securing tenants for affordable housing, there is high market demand and the occupancy risk for affordable housing is determined to be low, and particularly is lower than for market housing.
	Generally considered to be an illiquid asset as there exists no market or demand for the (secondary) sale and purchase of the property. It is, however, noted that within the USA project-based Section 8 assisted and LIHTC-assisted affordable housing is traded and is more liquid.
	Similarly, with residential real estate, default risk is assumed by the lender with the property acting as security and the borrower accepting full recourse on the loan.
	The investor assumes tenancy risk regarding ability of the tenant to service their rental obligations. Given the nature of affordable housing tenants, there is an increased level of risk surrounding their ability to secure the necessary income stream to service their rental obligations. However, given that government rental assistance is provided, a portion of their income stream is guaranteed, reducing exposure to the investor.
	Economic risk surrounding interest and inflation rates, are borne by the investor.



10 Affordable Housing Return Profile

The return profile achievable through an affordable housing asset class is defined through reference to comparable asset classes.

The return achieved is likely to vary slightly between countries, dependent on the policy and structural framework in each country, however as identified earlier this is not an impediment to the creation of a global asset class.

10.1 Similar Asset Class Definitions

Affordable housing is considered to have elements comparable to three broad, and well understood, asset classes, as outlined below.

10.1.1 Residential Property

Residential property comprises the land and buildings used specifically for owner occupation and leasing. Residential property typically offers a steady income, long term basis, capital appreciation and diversification, however it typically has low liquidity, large initial capital outlay and may require expertise to manage effectively.

10.1.2 Social Infrastructure

Social infrastructure is generally the responsibility of Government and is often characterised by service charge systems. It includes assets that meet community living needs and accommodate social services, including education, healthcare, social housing, community and recreational facilities and prisons. Social infrastructure typically offers steady income, long term basis and diversification; however, it typically has low liquidity, low returns and is hard to access.

10.1.3 Economic Infrastructure

Economic infrastructure includes assets that support economic activity, and is often characterised by user-pays systems, such as tolls on toll roads or user charges for utility distribution. Economic infrastructure typically offers steady returns, long term basis and diversification; however, it typically has low liquidity, extremely large initial capital outlay, high management costs and susceptibility to design, construction, operation and utilisation risks.

10.1.4 Similar Asset Class Key Characteristics

The following table summarises the similar asset class key characteristics.

Table 2: Similar Asset Class Key Characteristics

Asset Class Characteristic	Residential Property	Social Infrastructure	Economic Infrastructure
Risk-Return Trade Off	Medium	Low	Medium
Correlation with the Market	Medium	Low	Low to Medium
Liquidity	Low (Unlisted), High (Listed)	Low	Low (Unlisted), High (Listed)



10.2 Comparison to Other Asset Classes

The following sections define affordable housing for each delegate country compared to similar asset classes.

10.2.1 Australia

Affordable housing in Australia is similar to social and economic infrastructure for 3 key reasons. First, a portion of rental costs are covered via CRA, which is comparable to Government service payments typically received in social infrastructure agreements and results in lower risk of cash flows. Second, the portion of cash flows that are not covered by CRA are sourced from private tenants, which results in a risk-return trade off more aligned with economic infrastructure. Finally, given the likely volume of potential tenants and level of occupancy risk, the expected utilisation is more aligned to an infrastructure project than residential property where sales and rental risk is higher.

10.2.2 Canada

Affordable housing in Canada varies by state due to varying legislation. Affordable housing is typically similar to economic infrastructure due to cash flows being sourced from private tenants; however, this varies due to two key policies. First, when rent assistance welfare is implemented, affordable housing is closer to social infrastructure, due to consistent cash flows being sourced from the state. Second, when tax credits are implemented, affordable housing is closer to residential property as it becomes more feasible for developers to purchase land, which appreciates.

10.2.3 UK

Affordable housing in the UK is similar to social infrastructure due to the Housing Benefit, which contributes a portion of rental payments, which is similar to service charges in social infrastructure agreements. Additionally, affordable housing exhibits residential property or economic infrastructure properties depending on provision of land. If land is leased or temporarily granted by local governments, affordable housing is closer to economic infrastructure as remaining rent payments are sourced from private tenants, which results in a risk-return trade off more aligned with economic infrastructure. However, if land is owned by developers, affordable housing is closer to residential property due to the appreciation of the land.

10.2.4 USA

Affordable housing in the USA is similar to social infrastructure and residential property for three key reasons. First, a portion of rental costs are covered via HCV, which is comparable to Government service payments typically received in social infrastructure agreements and results in lower risk of cash flows. Second, the portion of cash flows that are not covered by Government are sourced from private tenants, which results in a risk-return trade off more aligned with economic infrastructure. Finally, due to the LIHTC system, affordable housing is closer to residential property as it becomes more feasible for developers to purchase land, which appreciates.



10.3 Summary of Comparison to Established Asset Classes

As an asset class, affordable housing exhibits similar characteristics to several similar asset classes, namely residential property, social infrastructure and economic infrastructure. It generally has a lower occupancy or market risk than residential property, meaning the risk and return characteristics are more closely aligned to social and economic infrastructure classes. This positioning is shown in Figure 3.

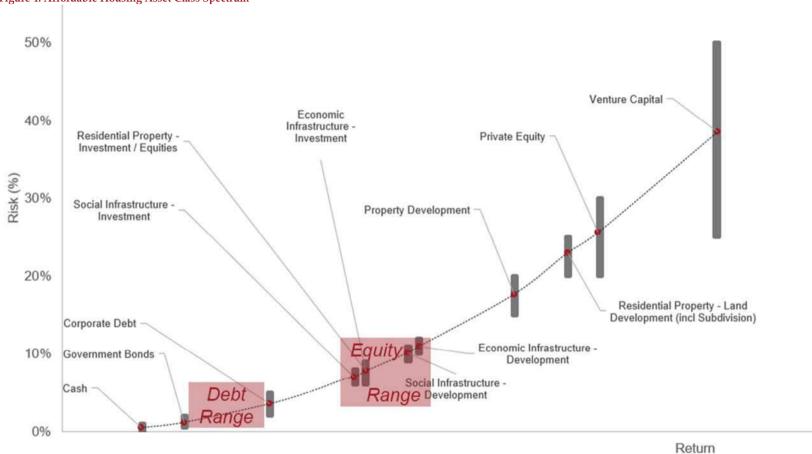
Residential Property

Affordable Housing Economic Infrastructure

10.4 Expected Return

Based on this asset class definition, and positioning relative to comparable asset classes, the expected return for affordable housing can be depicted, as shown in Figure 4.

This acknowledges that differences in the risk/return profile will exist across countries, and also shows the separation of expected return for both debt and equity investment.







11 Findings

The major findings of the scoping study are detailed below.

Finding 1: There is a distinction between social and affordable housing, meaning affordable housing is appropriate for consideration as part of asset class development

There is a distinction between social and affordable housing as investment products. They have materially different risk profiles, primarily due to the degree and structure of Government support. Social housing is typically provided at or near a full market subsidy, whilst affordable housing is typically provided at a lower discount to market rent, with tenant rental supported by Government through direct or indirect policy.

Given these differences between asset classes, which mean that social housing is difficult to become self-financing on a stand-alone basis, this study focuses on affordable housing as the more realistic target for development of an asset class.

Finding 2: Investment in affordable housing is at varied stages of development across IHP delegate countries

Investment in affordable housing is at varied stages of establishment across each IHP delegate country. This is primarily due to earlier involvement by Government in establishing programs for the provision of affordable housing, and associated Government support. Where these programs have been established over a longer time period, such as in the UK, there is a more established network of housing providers and greater volume of housing for which investment is appropriate.

The suitability for investment in affordable housing, which is affected by legislative, policy and structural elements unique to each country, also impacts the attractiveness of affordable housing as a debt or equity investment. Where these differences have existed over time, differing levels and types of investment have emerged across each of the countries represented within the IHP.

Finding 3: Jurisdictions have different funding requirements

Organisations in the delegate countries have different requirements across each country, due to varying levels of market development and the availability of Government-supported forms of funding. For example, some equity funding is available in the USA through use of the LIHTC program, however there remains a need for enterprise capital as either non-LIHTC equity or subordinate debt. In other countries, Government supported debt programs are available, making the availability of equity more challenging.

Similarly, organisations may pursue funding on an individual project basis (as is largely the case within the USA), or corporate lending to the overarching corporate body (as commonly utilised in the UK).

Finding 4: Project proponents desire international capital

Project proponents seeking to deliver affordable housing have increasingly been looking to offshore markets for funding, both equity and debt. The reasons for this may include accessing capital markets, obtaining funding at more competitive terms, and finding funding sources who may have social, ethical or other reasons for considering affordable housing as an investment.



Finding 5: There is a market failure limiting the emergence of an affordable housing asset class

The lack of development of a global asset class for affordable housing may be due to the following factors:

- Lack of understanding from investors;
- Perceived poor returns;
- Perceived small market size;
- Small project size, making transaction and project costs prohibitive; or
- Lack of precedent projects.

Investors may Suffer from Lack of Understanding

There is a lack of understanding regarding investing in affordable housing from domestic and international project sponsors. On the domestic level, legislation is niche and often complicated, meaning the asset class is not broadly understood.

On the international level, there are material policy, structural, legal and commercial differences between jurisdictions. There is a tendency for offshore investors to consider other countries' affordable and social housing markets too difficult to understand, and limited effort is made to bridge this lack of understanding, even despite the commonalities between jurisdictions. This lack of understanding creates confusion and increases the cost associated with investment decisions, which limits investment in affordable housing.

Perceived Poor Returns

Due to the trade off in risk versus return, investors will not invest in an asset if the return offered does not adequately compensate for risk acquired. Anecdotal feedback from IHP members and other sources suggests that investors often perceive the return from affordable housing to be poor, for the simplistic reason that tenant rental payments are lower than market housing and hence the return must be less desirable than that for a market housing development.

Perceived Small Market Size

The affordable housing market is not generally well publicised or understood, leading to a perception that the overall market is small. While this may be true on a local scale, across countries or internationally this is not the case. However, this perception of a small market size may deter investors from making the effort to develop resources and capabilities required to make an informed investment decision on participation in the market.

Small Project Size

Investment in affordable housing has generally been at the project level, with the opportunity for corporate level investment limited, particularly in some countries due to the structure of the property and affordable housing market. Where projects are small, the potential for high transaction costs such as due diligence and management, deters investors as the overall return will be limited by the project size.

Lack of Precedent Projects

In order for an asset class to be developed, a precedent must exist of the nature of project or investment product within that asset class. As affordable housing projects have taken a variety of forms, sizes and structures over past years, there is a lack of common understanding of the precedent project type that may fit within such a categorisation.



Finding 6: It is possible for new asset classes to be developed

There is precedent for the development of new asset classes, in areas such as green bonds and the development of infrastructure as an asset class. In the real estate sector, the development of the build-to-rent or multifamily sector, as well as the introduction of residential mortgage backed securities, are similar examples in recent times of the development of new asset classes.

Finding 7: Precedent Exists for a global asset class with jurisdictional differences;

There is precedent for an asset class with significant jurisdictional differences to become an established global asset class. As RMBS' have become an established global asset class despite significant legislative differences in relation to mortgages and property ownership, it is reasonable to expect an affordable housing asset class can be established despite policy, structural, legal and commercial differences across jurisdictions.

Finding 8: Affordable housing has a definable risk and return profile and is readily comparable to other established asset classes

In order to define an asset class, that asset class must have a readily definable set of risk and return characteristics. Notwithstanding the jurisdictional differences present within affordable housing, it is possible to define a broad set of risk return characteristics which are applicable on a global level.

In general, affordable housing presents a lower risk proposition that other residential property asset classes, due to the greater underlying demand for affordable housing (being housing offered at below market rent). As a result, a lower return level would be expected, for both equity and debt investment.

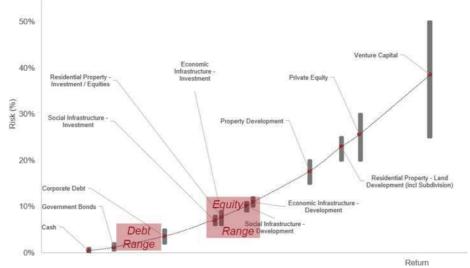


Figure 5: Indicative Debt and Equity Return Range for Affordable Housing



Finding 9: The Requirements to establish an asset class are understood

A new asset class can be established by meeting several requirements, including:

- Definition of the asset class and seeking appropriate ratings;
- Creation of widespread understanding of legal and regulatory treatment;
- Defining and demonstrating an attractive risk return profile; and
- Marketing and other activities to drive demand for product.

There is precedent for the development of new asset classes and sub-classes in recent times, demonstrating the ability to successfully implement this process.



12 Recommendations

The findings outlined above indicate that affordable housing has appropriate characteristics for the definition of a global asset class, and that there is precedent and potential for the development of new asset classes on a global scale. On this basis, a number of recommendations are defined which would assist IHP in progressing the development of a global asset class.

Recommendations are provided in two broad categories:

- Advocacy and Education activities; and
- Market development activities.

12.1 Advocacy and Education Recommendations

12.1.1 Identify and Prepare Investment Market

The findings above show that it is possible to define the risk and return characteristics of affordable housing as an asset class. IHP could lead a program to identify potential investors in each jurisdiction whose investment mandates are aligned with this risk/return profile. This is likely to include the increasing volume of 'mission based' or other investors who seek alignment to Environmental, Social and Governance (ESG) standards, for whom the social benefits afforded through provision of affordable housing provide additional appeal to the asset class.

It is recommended that IHP, at an overarching level, define a common set of characteristics for investors that may fit these requirements.

Individual country delegates would then be tasked with identifying appropriate parties within their own countries, to approach in a targeted manner as outlined below.

Preliminary approaches to these investors should be made, to develop awareness of individual project opportunities, and to seek their support in the development of the asset class.

Generally, financial markets and involved parties will actively pursue opportunities where these opportunities are understood and publicised, so attaining the support of the investor market will provide significant assistance to progressing the asset class development.

The following activities are recommended as part of preparing the investment market.

Road Shows

Within individual delegate countries, relevant industry conferences and gatherings should be identified to target for roadshows to create awareness of the potential for an asset class and the activities of IHP in progressing this.

Preparatory Materials

It is recommended that IHP, through a working group, create common marketing materials which can be utilised in each country showing the potential for the asset class. These would highlight the size, nature and trends of the affordable housing asset class. By having consistent messaging across al delegate countries, this ensures that investors are provided the same information and able to readily engage with fellow investors in other countries.



Comparative Materials

One of the key barriers to cross-border investment has been identified as a lack of understanding of the level of commonality between the affordable housing market in each delegate country. In addition to the marketing type materials discussed above, it is recommended that IHP prepare more technically focussed materials which highlight, in terms of risk and return consistent with ratings approaches, the level of commonality between affordable housing across each of the delegate nations.

12.1.2 Retrospective Identification of Asset Class

One issue identified in progressing the development of an asset class is a lack of understanding of commonality between projects, and the perceived lack of depth of market. IHP members could collectively use their project history to demonstrate the existence of many of the characteristics of an asset class in prior projects. This would show common characteristic between projects, including across jurisdictions, and demonstrate a greater depth of market than may be generally understood to exist by the investment community currently.

For the project history, the following characteristics should be documented so that projects are well understood and high-quality performance against the asset class characteristics can be demonstrated:

- Return projected and achieved;
- Risk allocation and risk characteristics; and
- Performance history (financial and operational).

12.2 Market Development Recommendations

12.2.1 Engage with Ratings Agencies

Development of affordable housing as an asset class will require engagement with, and support from, ratings agencies. It is recommended that IHP, as the overarching body, leads engagement with ratings agencies so that a common approach is made.

This engagement should initially focus on the intended outcome and potential development of the asset class, and seek input on additional information or requirements that the agencies may have to assist in this process.

Prior to engaging with ratings agencies, it is suggested that IHP further develop the explanatory materials outlined above, to demonstrate a level of progress to agencies, and to ensure that they are provided with as much relevant information as possible to assist in the process.

12.2.2 Develop Projects Aligned to Asset Class

Individual IHP members can assist in the development of the asset class through identifying and progressing project opportunities which are aligned to the project characteristics associated with the broad asset class. This alignment may be in the size and/or nature of projects, and the risk profile of the projects.

Alignment of projects will stem from the standardisation of some project characteristics. Standardised investment products are a suggested solution for four reasons. First, this would reduce the number of investment products, which reduces the perceived complexity of affordable housing legislation and legal structures across jurisdictions. Second, this would improve returns by enabling economies of scale, which reduces the transaction costs. Third, this would increase the size of the market, which counters the misconception that the market for affordable housing is small.



Finally, this would improve investment access to affordable housing as the ease of access reduces the effort required to invest.

Standardised products could also be introduced by adopting one of the following recommendations:

- Offering securities with standardised terms; or
- Consolidating individual projects into a single investment vehicle for multiple affordable housing providers, such as a Mortgage Backed Security (MBS) or exchange traded fund (ETF).

12.2.3 Sharing of Financing Sources and Creation of an Information Sharing Platform

The IHP should create an information-sharing platform where its members log and share the sources of financing that have been accessed from institutional capital markets. That way, subsequent funding rounds from other members can seek access to funders who have a pre-existing understanding of the asset class. This will assist in creating a 'market' of funding sources.

12.2.4 Encourage Government Support of Projects

IHP should utilise its ability to lobby Governments to encourage greater Government support of projects

This would take the form of Government sovereign investment funds being deployed in 'first mover' projects, being projects aligned to the definition of the asset class. Government funds would not be deployed as grants or subsidies, but rather as market priced products to demonstrate viable performance of such projects. This funding can then be used as matching funds with other private sector sources as the maturity of the asset class evolves.

This approach would help to rapidly increase the size of the market, as Government provides the necessary liquidity to support the asset class.

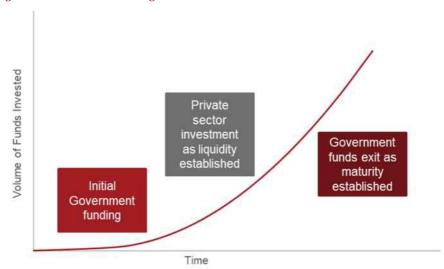


Figure 6: Indicative timeline of growth in asset class



The proposed involvement of Government is outlined below:

- Government would make a significant investment, which would fund several
 affordable housing projects. This would include purchasing standardised
 products across multiple jurisdictions to highlight that investment
 characteristics are industry specific, not project specific;
- It is anticipated that this would provide the requisite characteristics to form a functional capital market. Once markets are sufficiently functional, Government would sell investments; and
- Subsequent steps to further channel investment would follow, such as approaching rating agencies to obtain country specific credit ratings and targeting additional investors aligned to the asset class characteristics.



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