



A case for co-living

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Seemingly no real estate sector is immune to the influences of the Millennial and Generation Z cohorts. Retail has been upended by the disruption caused by e-commerce, driven by these generations' aptitude and proclivity towards technology. Logistics networks have moved closer to them, making delivery faster. Traditional office demand has been disrupted by the acceleration of co-working, as more companies embrace greater locational flexibility to appeal to younger workers.

Yet housing in its traditional forms has remained largely unaffected. While amenities have evolved, the principal fundamentals have not. Inflexible lease terms and early termination fees have remained, while rents, particularly for institutional-quality product, have increased to unaffordable levels for many young renters.

Co-living is an answer to younger generations' desire for flexibility in cities and more affordable premium living; it is a response to an increasingly global workforce - one that exhibits a high degree of mobility, but also one that feels increasingly isolated and craves community. The still-nascent asset class is relatively fragmented globally, but the case for its growth is strong in many of the world's most expensive locales.

For real estate investors, it can be difficult to determine when an asset class has sufficient demand to transition from passing fad to longer-term trend. At the same time, a fragmented, early-stage model may present an opportunity to gain a first-mover advantage and scale for global operators, not to mention the added benefit of cap rate compression as institutional demand increases.

In this paper, we seek to connect the dots between co-living and more established property types and make the case for greater institutional acceptance, as well as define the demand profile of this new asset class, leveraging examples primarily from Asia Pacific, where the asset class is more mature, as well as the UK.

What is co-living, exactly?

Despite the buzz-worthy nature of its nomenclature, co-living is not a new trend, but merely the re-envisioning of an old one. A living environment whereby tenants share resources and space in exchange for lower costs and cultural commonalities harkens back to socially-minded communes of the 1960's, and further still to the boarding houses of the 19th Century. Put more succinctly, co-living in the modern era has been defined as purpose-built and managed developments that include a combination of personal and shared amenity space.¹

While this definition may give us a point from which to evaluate the sector, it does not, in our view, adequately capture the operational aspects that make it unique from other accommodation types. Although not wholly homogenous across regions, most co-living facilities today appear to be a transmutation of several more-established asset types, combining attributes from each (Figure 1). Beyond the element of shared physical space, what we have found through surveying existing co-living facilities today as common traits include:

- Lease term flexibility, but with minimum commitments (typically 1 month)
- Asset-sponsored programming, with an emphasis on creating sense of community
- All-inclusive billing and fully-furnished suite of spaces
- At least one shared habitation space (bedroom, bathroom, living room or kitchen)
- Charged on a per-bed/per-room, not per-unit basis.

Demand - following the cause-and-effect flow

Urbanization

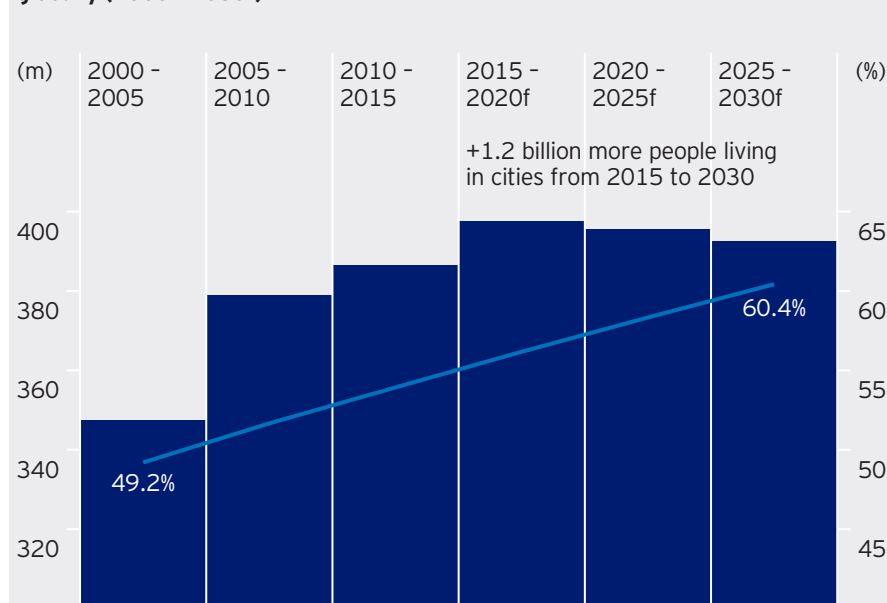
The pace of urbanization in this economic cycle is by now a well-documented global phenomenon. The world's urban population at mid-year 2015 was estimated at nearly 4 billion (49% of the global population), up 766 million from a decade prior.² By 2030, 60% of the world's population is projected to be living in cities - an increase of 1.2 billion people in the span of just fifteen years! (Figure 2).

While much of this urban growth is projected to occur in emerging markets (predominately Africa and India), several ASEAN countries such as Vietnam and

Indonesia, as well as China, Australia, the US and several European countries are projected to see urban growth rates in excess of 1% per annum through 2030 (Figure 3).

This resurgence of the city has put unprecedented pressure on housing. Greater competition for a finite supply of urban housing has led to higher prices, which has made traditional options unaffordable for many cohorts, particularly younger occupants. This affects both for-sale and rental stock, creating what has been widely accepted as an affordability crisis.

Figure 2
Net gain in population living in cities globally (2000 - 2030f)



Source: Invesco Real Estate using data from the United Nations Department of Economic and Social Affairs, Population Division as of September 2018. f = forecast.

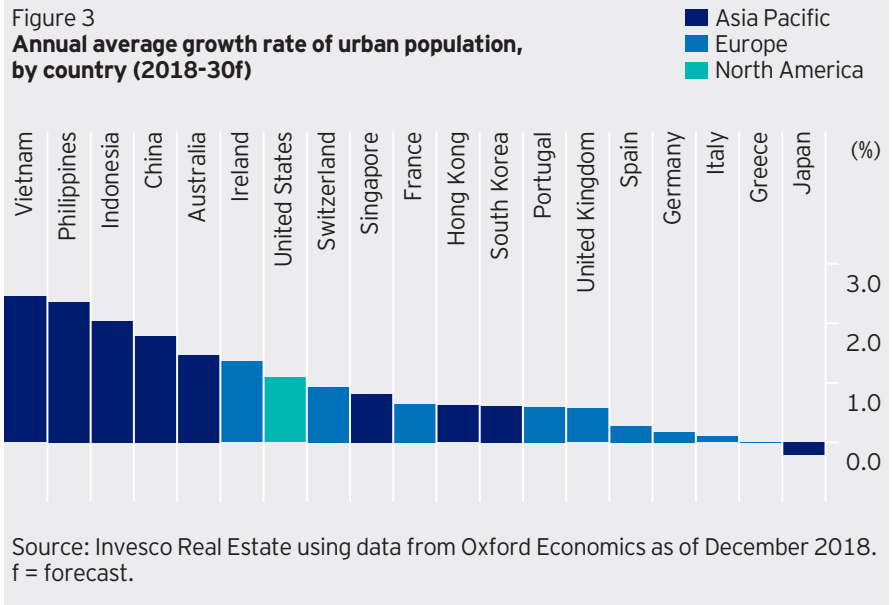
Figure 1

What is co-living?

Co-living combines attributes of many established property types

	Traditional multifamily	Hostels	Serviced apartments	Seniors housing	Student housing	Co-living
Flexibility on lease term but with minimum commitment	✗	✗	✓	✗	✗	✓
Asset-sponsored community programming emphasis	✗	✗	✗	✓	✗	✓
Open to any age/demographic	✓	✓	✓	✗	✗	✓
Hassle-free living solution including furnishing and all-inclusive billing	✗	✓	✓	✓	✓	✓
Shared living space	✗	✓	✗	✓	✓	✓

Source: Invesco Real Estate.



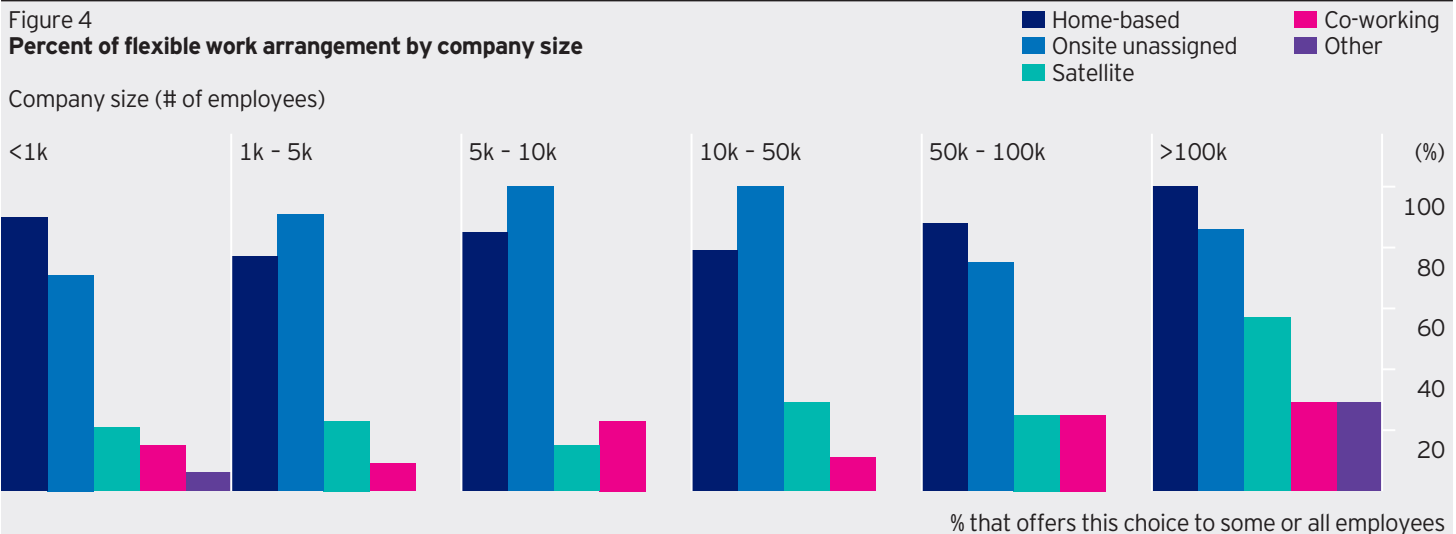
Changing nature of work

Further exacerbating pressures on urban housing is the changing nature of work. The age of loyalty work (whereby organizations met employees' basic needs through pay, benefits and job security in exchange for lifetime commitment³) has given way to a new model based on engagement. In order to attract and retain top talent, organizations have had to rethink how, when and where employees work in order to provide the flexibility they desire. According to a recent survey, most companies have already adopted some form of flexible work (Figure 4).

The ability to move jobs to people and people to jobs also serves to address the worldwide widening skills gap by tapping into broader talent pools. Given the world population's preference for cities, it stands to reason that employees may wish to move between cities but keep their position with their current employer. An employer that can accommodate such a

request is much more likely to retain and instill loyalty among their employees.

More likely than not, many of the same employees who desire varied work locations will be younger age cohorts, as they are untethered by mortgages and families. By 2020, Millennials (generally defined as those born between 1982 and 1996) are expected to make up over a third of the global workforce.⁴ As Baby Boomers retire in greater numbers, Millennials will take their place, further exerting their influence on the workplace. Millennials have exhibited a strong preference for working abroad, with 71% keen to do so at some point in their careers (Figure 5). Many multi-national companies are beginning to create opportunities for employees to engage in international assignments for shorter periods to fulfill this need - co-living allows for these employees to obtain institutional housing in the cities they either want or need to be in, without prohibitive long-term commitments.

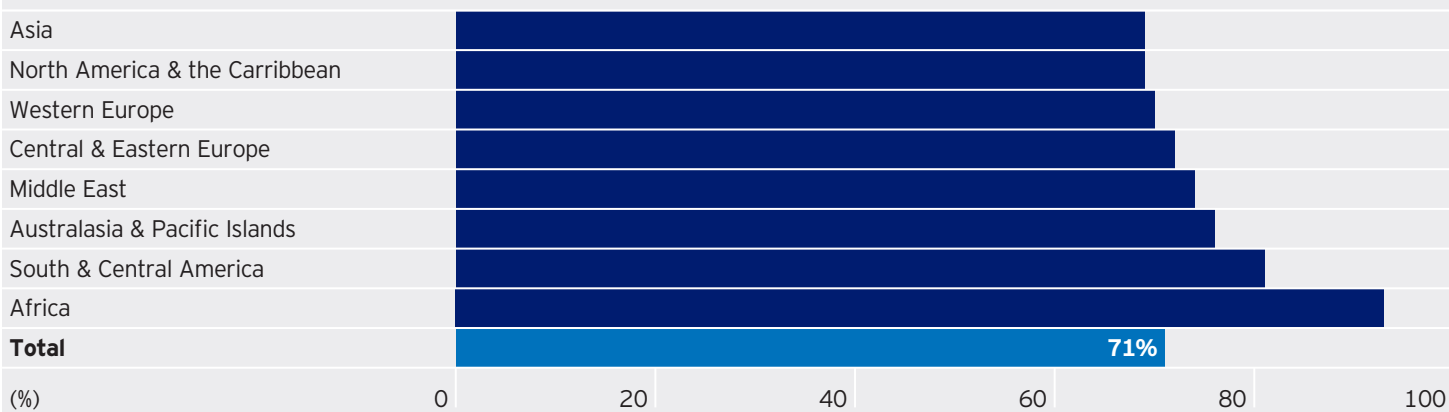


Note: Results reflect a total of 142 survey participants responding on behalf of their organizations. US organizations represented 47% of the sample, Asia Pacific 21%, Africa 5%, Europe 18% and South America 9%. Source: Invesco Real Estate using data from Global Workplace Analytics Fifth Biennial Global Benchmarking Study 2018 and Deskmag's 2017 Global Coworking Survey.

Figure 5

Millennial relocation preferences

Percent of survey respondents across 75 countries that would like to work outside their home country



Note: Results reflect survey of 4,363 recent (2008-2011) graduates across 75 countries conducted in 2011. Source: Invesco Real Estate using data from the PwC Millennials at Work - Reshaping the Workplace survey.

Access > ownership

Technological advancements that have facilitated greater work flexibility have also contributed to a rise in digitally collaborative forms of consumption that are disrupting traditional industries. Dubbed “the sharing economy”, the emergence of online platforms that promote access over ownership have sprung up with increasing regularity in recent years. This shift has been particularly prevalent in cities, driven out of necessity, cost and consciousness, and has penetrated virtually every sphere of urban consumption - car ownership has been replaced by Uber and Zipcar, the former of which, valued at US\$76 billion, exceeds the market capitalization of more established transportation companies such as Delta and American Airlines; ThredUp and Rent The Runway have supplanted clothing ownership; Spotify and Netflix provide content on-demand; LendingClub and WeSura provide shared access to crowdfunding and insurance.

The exponential growth of these business models and their adoption by young urbanites suggests that there is a high degree of comfort with sharing products and services. This acceptance has prompted this same audience to envisage housing in much the same way; that is, as just another product to be shared.

An affordability impetus

These forces - greater urbanization and an increasingly mobile workforce that is less keen to own - may be enough in explaining the need for more urban housing options. But a third component - affordability - is a key ingredient in the recipe for co-living demand.

Across developed economies, income progress (the measure of change in median real equivalent disposable household income) between generations has often supported the notion that the current generation is often better positioned than the last.

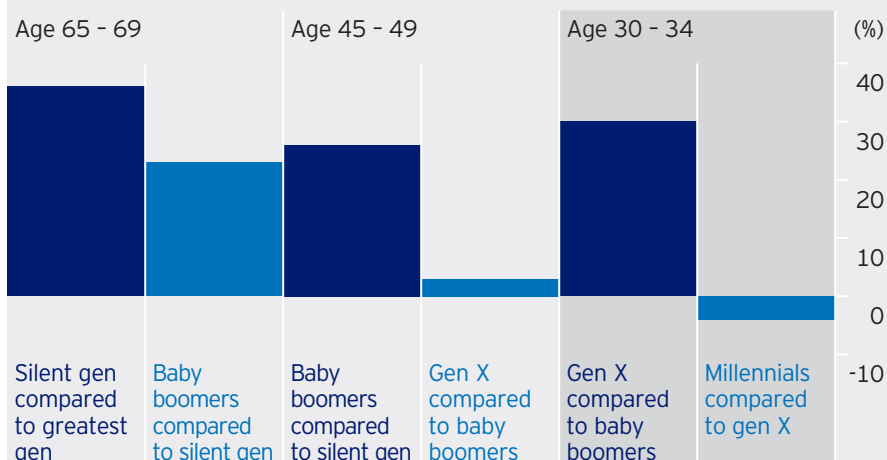
Yet Millennials are the exception to this trend. The Global Financial Crisis and subsequent period of heightened unemployment left

many Millennials unable to obtain full-time employment after graduation, an effect that has continued to truncate their earning potential. Millennial households in the developed world earn approximately 4% less than Gen Xers did at the same age, which has had a profound effect on the group’s unique marriage, childbirth, and purchasing patterns (Figure 6).

More widely though, rents in the most desirable urban locations are well beyond what is affordable for many, regardless of age. The longstanding benchmark for rental affordability in the US has been 30% of one’s after-tax pay; yet many pay well above that for a median-priced apartment. For institutional product, the rental burden is even greater.

Figure 6

Percentage change in median real disposable household income between generations (1969 - 2014)



Note: Before housing costs income, deflated using CPI in each country. Countries included are the UK, the US, Norway, Finland, Denmark, Italy and Spain. Generations are defined as follows: The greatest generation, born 1911-25; The silent generation, born 1926-45; The baby boomers, born 1946-65; Generation X, born 1966-80; The Millennials, born 1981-2000. Source: Invesco Real Estate using data from the Resolution Foundation, Luxembourg Income Study Database, February 2018.

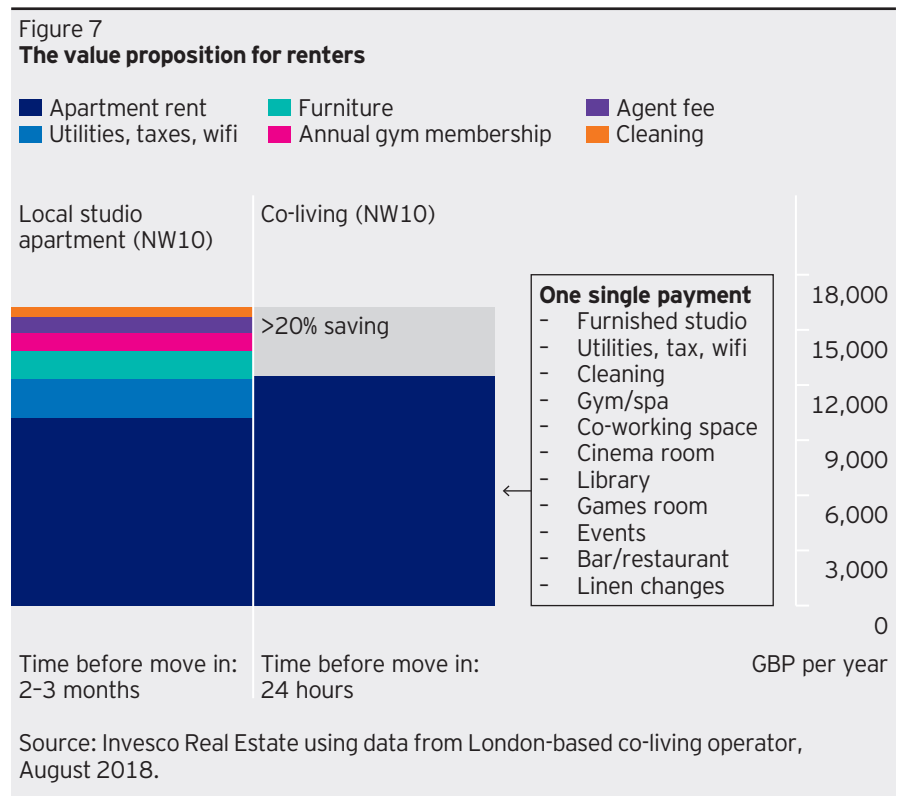
Co-living offers many would-be renters a way to gain entry into the institutional marketplace while simultaneously saving money in aggregate. Take, for example, a traditional studio apartment compared to a room in a co-living facility in London. While on a rent per-private-square-foot basis co-living spaces are more expensive than traditional units, the savings potential is enhanced via greater space and service efficiencies. Most developed western markets' residential offerings are comprised of very aged housing stock (the median age of occupied rental units in the US in 2015 was 42 years). These older buildings are typically less energy efficient, which can in turn elevate monthly utility costs to renters. The improvements in efficiencies offered by modern apartments can offer measurable savings as it relates to broader utility usage. Newer apartments in more dense buildings (those having five or more units built after 2000) consume on average 12% less energy than those built in the 1970s; this, despite newer units having more energy-consuming devices than older ones.⁵

For one payment, a renter gains access to a fully furnished space that includes access to a gym and communal spaces, well-developed programmatic platforms, regularly scheduled cleaning and all-inclusive utilities for 20% less than the comparable studio alternative, let alone the time saved before move-in (Figure 7). Put another way, a renter making an average London income of £37,000 would have an all-in rent-to-income ratio of 43.8% in a traditional studio; this ratio improves considerably with the value proposition of a co-living facility, declining to 33.7% of annual income.

One may assert then that co-living is borne out of economic necessity. Some may rightly wonder whether co-living is merely affordable housing in new packaging. With many institutional investors shying away from engaging in affordable housing for a variety of reasons, a word on distinction is in order.

Affordable housing is often used as a blanket term to cover all manner of residential product - in the US, it can mean subsidized housing (through federal, state or local grants used to offset rents for select populations), low income and rent controlled housing (whereby households making well below the area median income have dedicated and protected housing options), and rent stabilized (whereby households qualify for reductions to market-rate apartments and annual renewals are subject to escalations approved by local administration).

While these are vital to promoting and maintaining diversity in cities, co-living is not beholden to any pricing regulations as dictated by governmental bodies. Thus, while the notion of co-living may have been the result of elevated prices, it is not addressing affordability in the traditional sense (that is, addressing subsidized or controlled). A survey of existing co-living operators' rents today suggests the product is not solving for true affordable housing, but instead is offering a discounted premium product targeted a specific subset of renters. This alone makes co-living more akin to traditional market-rate multifamily product, where owners can determine rent levels and increases independently.



A note on community

A commonality among co-living operators globally is a strong focus on community building. Part of the value proposition advertised is the access to shared spaces and experiences with others that share similar values. But is this aspect of co-living merely a branding mechanism, or is there something more to it?

While it may seem that this notion of “know thy neighbor” is merely a fresh additive to traditional multifamily marketing, there appears to be a psychological shift occurring that suggests co-living may indeed be a solution to societal challenges. According to research conducted in the US, loneliness has become increasingly widespread in young adults, correlated positively with increased social media usage.⁶ This corroborates the results of Space10’s (IKEA’s future-living lab) One Shared House 2030 survey, which suggest the main reason people are interested in co-living is because they want to be social and connect with people in a meaningful way.

Current market landscape

The demand drivers of co-living are robust and not like to weaken any time soon; yet the asset class has thus far been largely ignored by the institutional real estate community, save for a select few who have embraced the concept and spearheaded its expansion.

The most dynamic region in the world for co-living is Asia. Invesco Real Estate estimates that more than 500 professionally-managed locations exist in the region today, with more in the pipeline. The region has exhibited the strongest growth in co-living spaces globally and is gaining increased institutional interest from global investors.

Perhaps most notably is private equity firm Warburg Pincus. Warburg Pincus has been gradually ramping up their investment in Asia Pacific co-living operators Mofang and Weave Co-Living, having invested more than USD \$450 million over the last several years. Mofang is the single largest operator in the region, with roughly 130 locations totaling more than 15,000 units. Weave Co-Living is one of Hong Kong’s first institutional co-living providers with just one operational facility that opened in August 2018; with the recent cash infusion of USD \$181 million from Warburg, the company intends to increase its number of rooms from its current 160 to more than 10,000 in Asia Pacific gateway cities within the next five years.

By comparison, the existing US and European markets combined represent less than half of the estimated co-living stock in Asia. Despite a dearth of institutional for-rent product in Europe, co-living facilities throughout the region total less than 100 as estimated by Invesco Real Estate, with much of the existing footprint isolated to the UK and Germany.

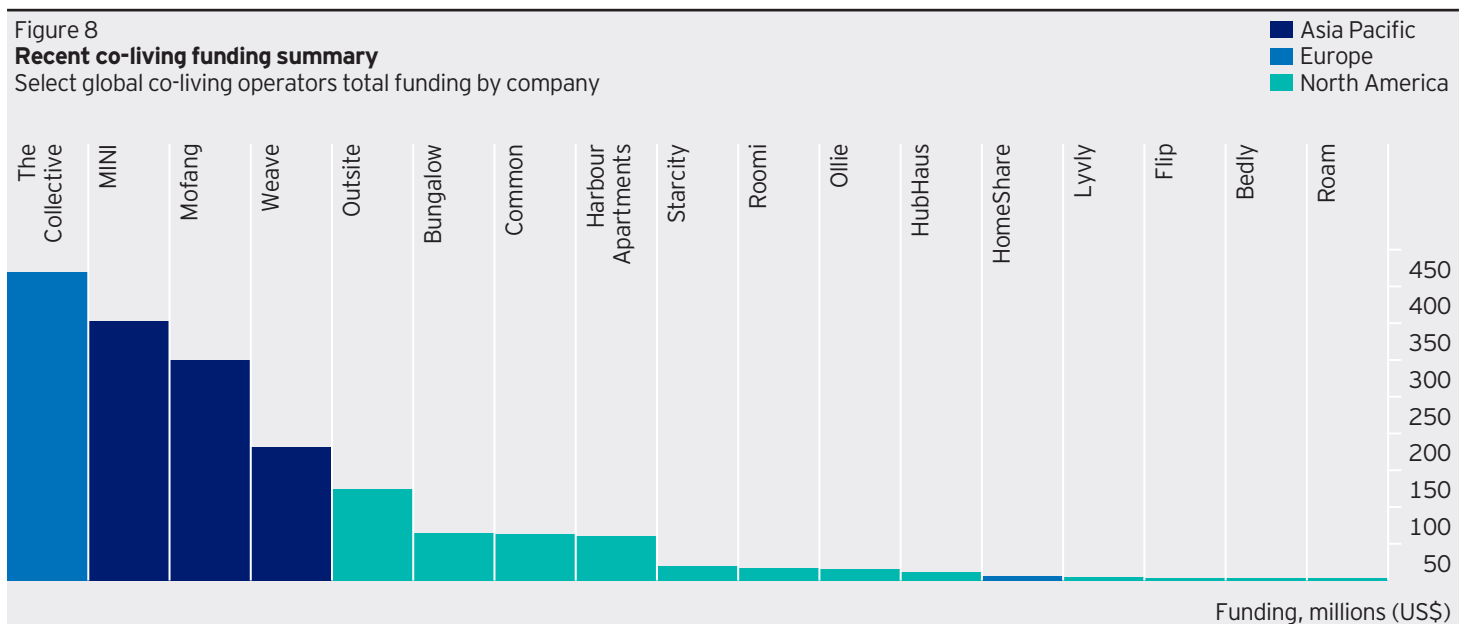
Co-Living Spaces is the largest UK co-living operator, with 8 locations in England, closely followed by The Collective. The better-known of the two, The Collective opened the world’s largest co-living development comprising seven buildings housing more than 730 operating units as of 2018. Medici Living, the German market leader in co-living, has recently expanded from their 15 locations in Germany to include locations in New York, Chicago, the UK and the Netherlands under their Quarters banner, putting their total co-living portfolio nearer to 1,800 rooms.

And this number will grow considerably in the near term. German firm Corestate Capital Holding recently announced its partnership with Medici Living to invest USD \$1.14 billion (€1 billion) in developing an additional 6,000 co-living rooms in another 35 properties, with a focus on investments in Austria, Switzerland, Spain and Poland, in addition to Medici Living’s current target markets. The deal represents the largest single co-living investment worldwide to date.

In the US, the largest operator of institutional-quality co-living properties is Common. Common boasts an average of 1,000 applications per week across 22 US locations they provide property management for, and note their turnover is 15-20% below the broader residential markets they operate in.⁷

Despite the unproven long-term operating covenant of many co-living operators today, funding into the budding sector has totaled more than USD \$1.6 billion, with The Collective (UK), MINI Living (China) and Mofang taking the lion’s share (Figure 8).

Figure 8
Recent co-living funding summary
Select global co-living operators total funding by company



Note: Funding totals based on publicly available information as of the date of this publication and may not be inclusive of funding rounds not publicly disclosed. Source: Invesco Real Estate using data from Crunchbase as of December 2018.

Real estate implications

Part of the challenge posed to real estate investors is how best to create, operate and execute co-living facilities to meet the needs and wants of the target demographic while still achieving satisfactory returns.

Yet by its very nature, where co-living is most needed is where it may be the costliest to create. Co-living as an asset class is only likely feasible in markets with rising affordability burdens due to supply-demand imbalances. While this fares favorably for real estate owners, it can make obtaining land for new co-living development expensive and difficult.

Thus, much of the co-living stock today has been the result of existing building conversions. Approximately three-quarters of global co-living operators reported operating in converted existing buildings after 2016, as opposed to just 27% that were in purpose-built co-living buildings.⁸

Utilizing data from JLL, Figure 9 compares two conversion schemes in Hong Kong - a hotel and residential building to co-living. The results reflect net operating income (NOI) yield increasing between 8% and 12%, after accounting for the capital expenditure and downtime required for conversion.

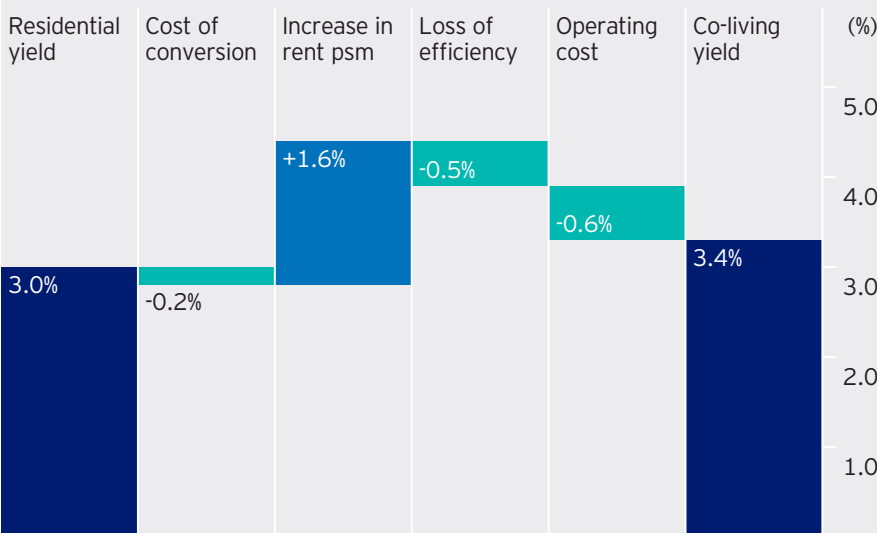
However, conversions can be a lengthy and challenging process - many cities' regulations regarding what constitutes a legal housing unit can hinder redevelopment (such is the case in New York City, where laws dictate housing units must have access to light and air). Juxtaposed against these regulatory challenges, pure-play development may offer the path of least resistance in certain locations.

This may also serve to explain why slightly more than half of co-living facilities today exist just beyond the borders of cities' downtowns or urban cores. In a survey of 50 co-living locations in the U.S., 44% were within a 3-mile radius of the Central Business District; 22% were within a five-mile ring, and 34% were more than ten miles from the respective metros' downtown (Figure 10). However, the results are arguably skewed, as the lion's share of co-living properties that exist in the US today are in New York, which constitutes nearly all the assets that are more than ten miles from a downtown. Ultimately, asset selection and location will be largely dependent on the flexibility of local regulations and the availability of developable land.

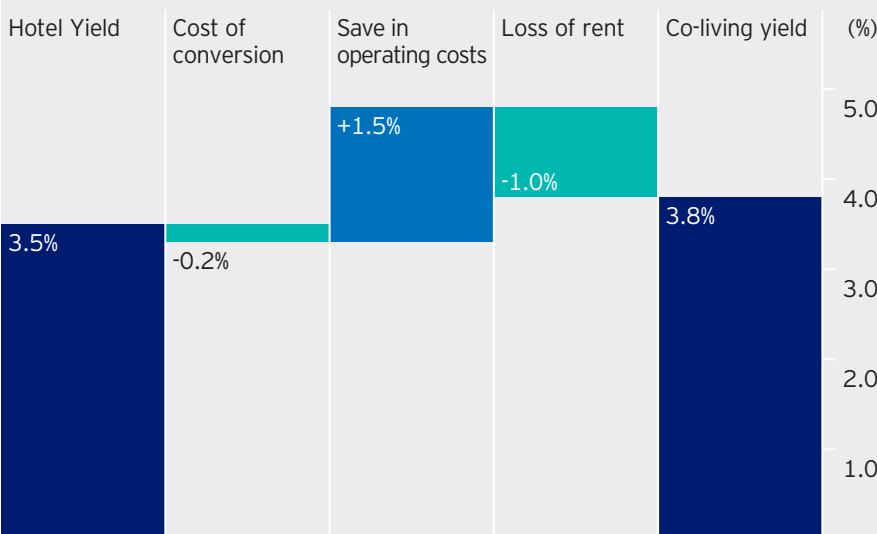
While much of the co-living stock today is in converted buildings, there has been an uptick in new developments' share as well, increasing from 12% prior to 2016 to 27% after. This suggests that as the legitimacy of the asset class has grown, early investors' ability to achieve return hurdles has been sufficient to justify the cost of new development when land is available. But how does co-living's return on development stack up against other property types?

Figure 9
Value creation of co-living conversion

Yield bridge of hypothetical Hong Kong apartment conversion to co-living

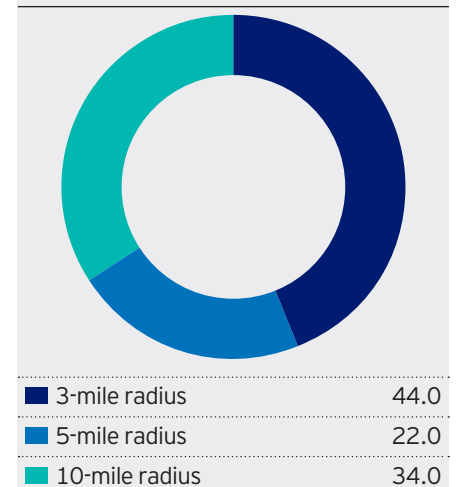


Yield bridge of hypothetical Hong Kong hotel conversion to co-living



Note: assuming 100% hotel occupancy, converting previous hotel gym, F&B areas to co-living common area. Source: Invesco Real Estate using data from JLL, as of Q2 2018.

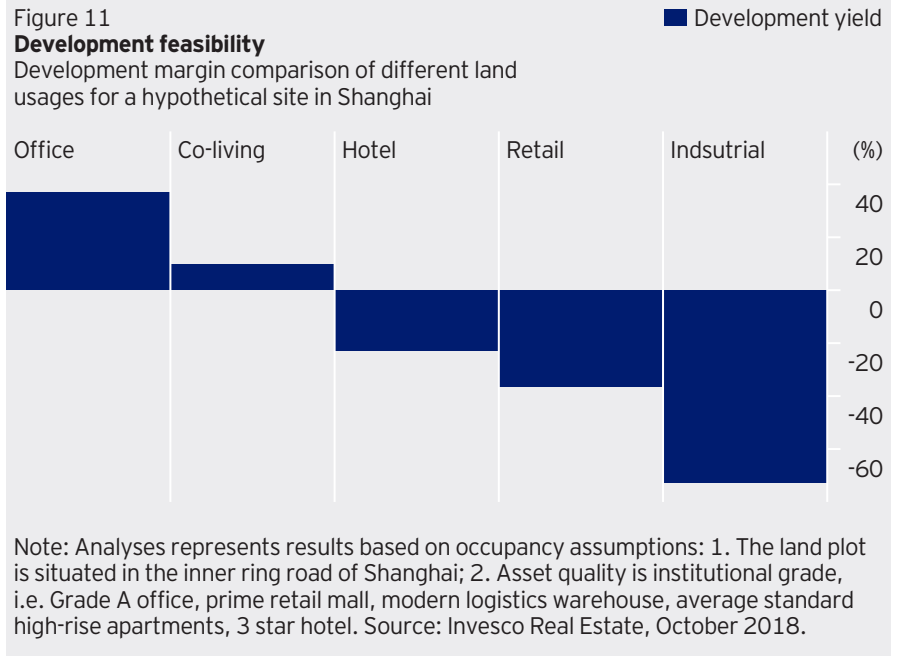
Figure 10
US co-living operators' distance from CBD (%)



Source: Invesco Real Estate using data from ESRI and co-living operators' websites as of November 2018.

Given the relative maturity of the asset class in the Asia Pacific region, Invesco Real Estate sought to analyze a hypothetical co-living development project's feasibility versus other asset types on a site in the inner ring road of Shanghai using assumptions based on operational co-living properties (Figure 11). While actual margins may vary from the assumptions used based on land and development cost, the results show that co-living is the second highest-and-best use for the land site after office. However, given a constricted lending environment for speculative office development, financing availability may be more easily accessed for co-living. And with no pre-leasing requirement, as is the case for office, a new co-living building may deliver quicker to market, minimizing market cycle risk.

The issue of whether to convert or create is due in part to the unique spatial configuration that co-living requires. Achieving the right balance of public and private space in a co-living facility is critical, but can be a difficult ratio to pinpoint. Too much private space negates the positive communal benefits; not enough can lead to clutter, conflict, and ultimately, dissatisfied residents. Data from the One Shared House 2030 survey suggests that many people interested in co-living would rather live in tight-knit communities of smaller sizes (ideally 4 to 10 people) and would rather share internet, gardens, workspaces, and utilities than bathrooms. Lack of privacy was noted as a top concern by respondents.

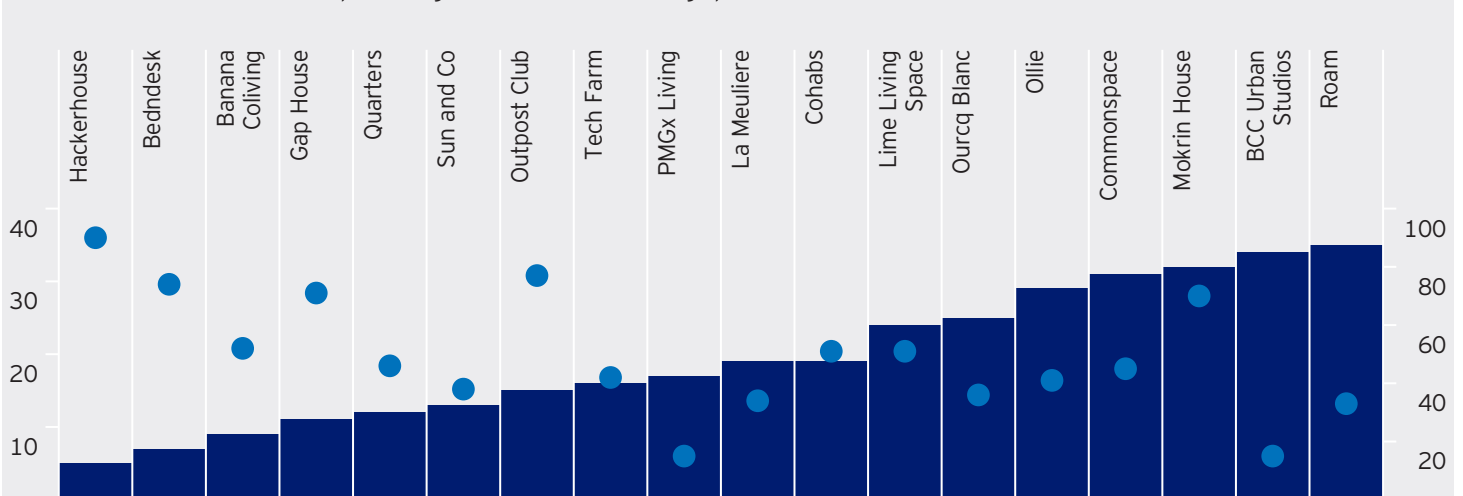


How has this translated into space utilization? Co-living operators have been experimenting with varying degrees of shared and private space, to mixed results. Across eighteen global co-living operators, the average private bedroom measures a rather sizable 19 square meters (205 square feet), although within the sample, the range is significant; the smallest, Hackerhouse, has bedrooms of just 5 square meters (54 square feet), and the largest, 35 square meters (377 square feet). In New York, dedicated private space amongst co-living operators is 18.8 square meters (202 square feet), or roughly 37% of a traditional studio. Shared space across co-living facilities broadly represents roughly 50% of the total usable space of a facility, although that too has considerable variability amongst the sample (Figure 12).

Anecdotal data from the UK suggests that co-living facilities maintain a similar stabilized occupancy to that of traditional multifamily but can add upwards of 10% to operating expenditures as a share of revenue, given the greater usage of shared spaces and potential for more frequent turnover. Significant programming schedules also add greater operational intensity, which may require enhanced staffing dedicated to the function. Despite the potential for an elevated op-ex schedule, yields for co-living appear to offer a 25- to 50- basis point spread above traditional multifamily yields.

Invesco Real Estate believes a partnership with an existing operator could lessen the operational burden through consolidated hands-on property management. Structured waterfall management agreements would ensure interests are aligned and threshold returns are achieved.

Figure 12
Co-living space allocation
Bedroom size and common area percentage across various co-living operators (2018)



Note: Survey results based on responses from global co-living operators in Belgium, Colombia, France, Germany, Great Britain, India, Indonesia, Italy, Serbia, Spain, Sweden, Switzerland, Taiwan and the United States. Operators ordered by size of average bedroom from smallest to largest, left to right. Source: Invesco Real Estate using data from HOMY Coliving, Cohabiter.

Investment implications

The measure of co-living opportunities varies considerably across the globe. While in the US, France, and Germany institutional rental product comprises more than 10% of the total residential market, this share is virtually non-existent in places like China, Hong Kong, Australia and the UK (Figure 13). The fledgling, fragmented nature of these countries' for-rent residential markets suggests more room for growth as the sector gains greater institutional representation, and co-living is like to play a key role in its development.

The opportunity for investors today is to take part in the initial offering of institutional-quality residential product, which is expected to garner significant demand from an underserved population.

However, this offering should take different forms in different parts of the world. The opportunity in the US, for example, should likely target those with lower incomes that have previously been priced out of the institutional market entirely, capturing demand from the informal market, while in Asia Pacific and the UK (where there is limited institutional multifamily product) there is a broader opportunity set to cater to both cost-sensitive individuals as well as middle- to high-income urban renters (Figure 14).

Using an aggregate of city-center studio rent paid by the urban renter pool aged 20-39 as a proxy for co-living market size potential, Invesco Real Estate believes that the US and China represent the greatest investment potential for co-living, followed by Japan, Germany and the UK.

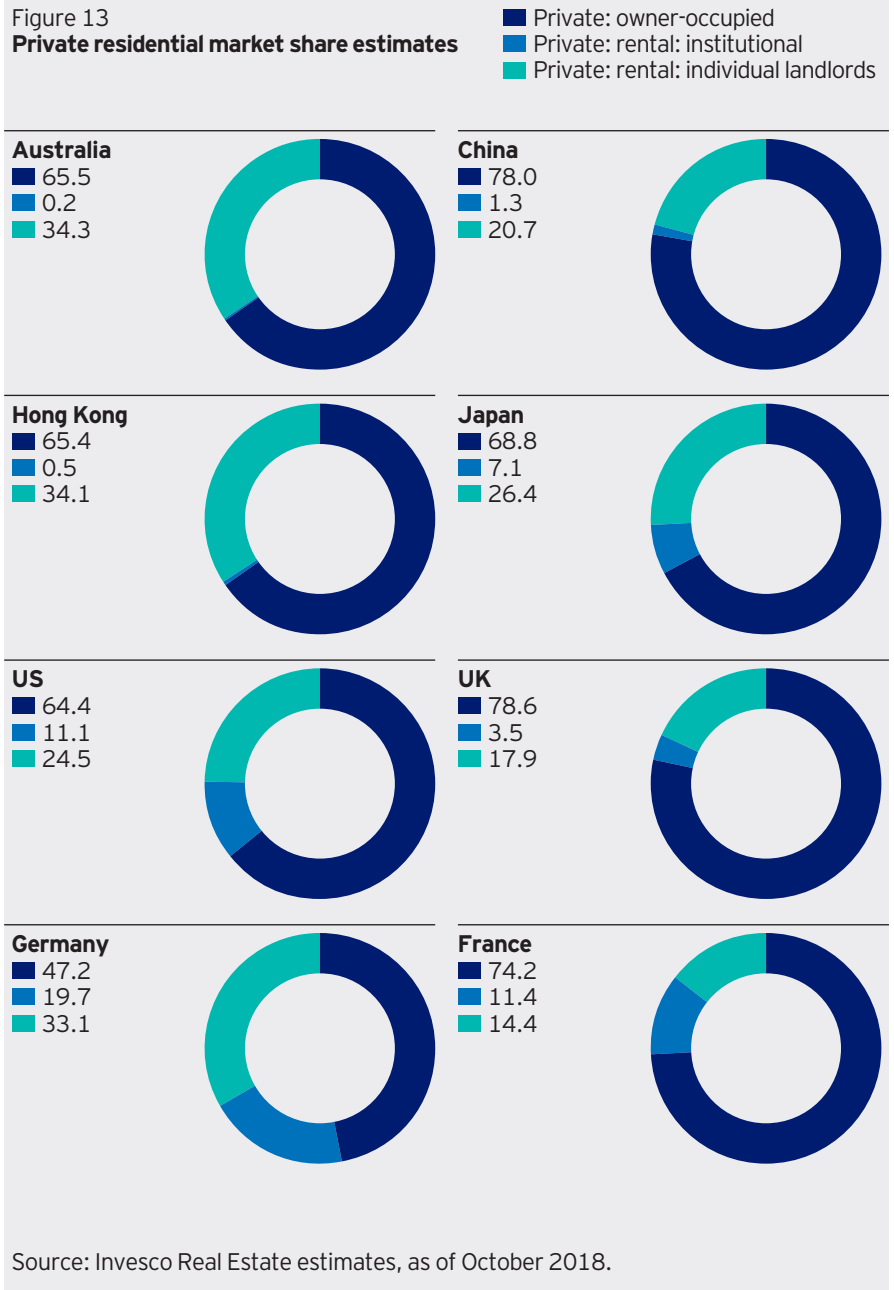
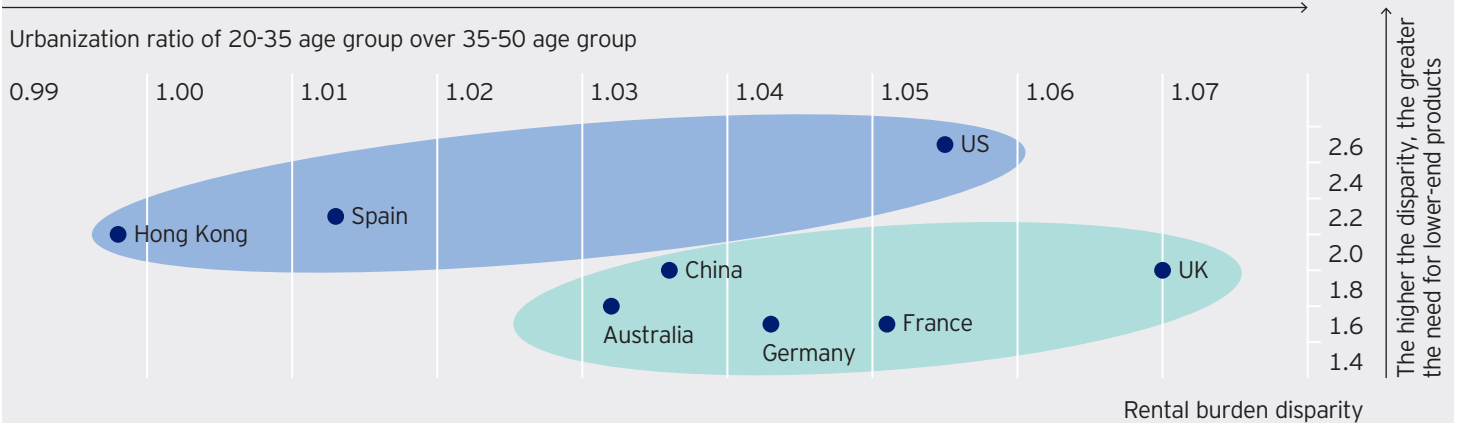


Figure 14
Market opportunity differentiation
Rental burden disparity vs. the level of young transient in cities, selected countries

Legend:
■ Significant rental burden suggests a need for product that offers cost savings over traditional product
■ Lower rental burden + modest transient quotient offer wider co-living opportunity set

The higher the ratio, the greater the need for products targeting the transient young population

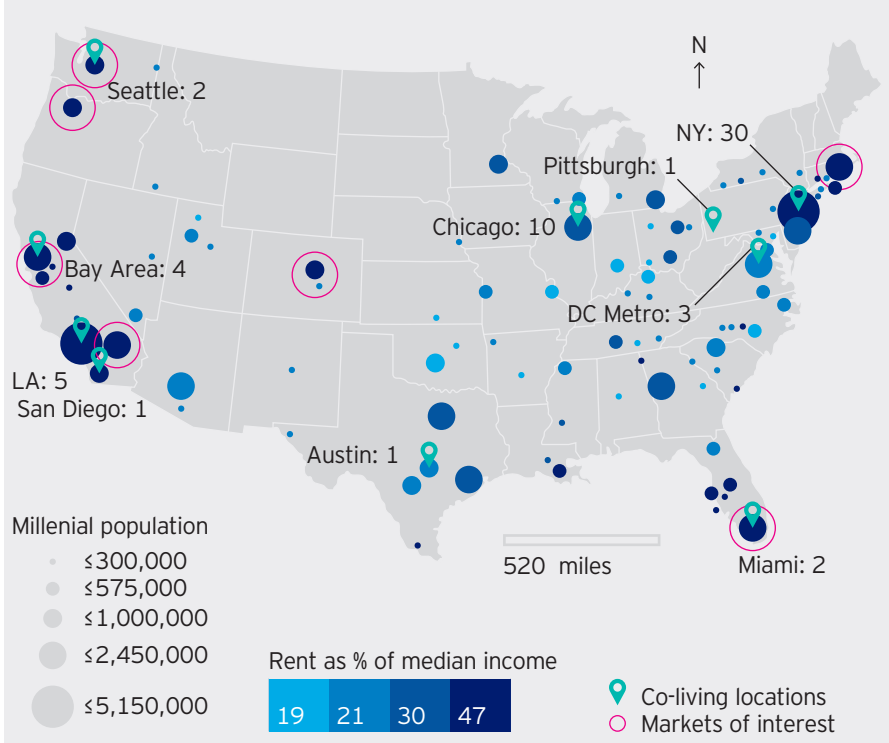


Note: Rental burden disparity is calculated by % of rent over income of the bottom quintile income group over rental burden of median income group. Source: Invesco Real Estate estimates based on data from OECD, Macrobond, Census and Statistics Department of Hong Kong, Shanghai E-House Real Estate Research Institute, the United Nations Department of Economic and Social Affairs, Population Division, October 2018.

Looking more closely at the two biggest countries with potential, cities that boast a sizable Millennial population and high relative housing unaffordability may be primed for co-living. In the US, this includes many coastal markets such as Boston, New York, Miami, Los Angeles, and the Bay Area, as well as a handful of highly desirable inland markets. Of these, several (Boston, Denver, Riverside, and Portland) remain entirely untapped by co-living, while others (Miami, the Bay Area, and Seattle) appear to be underserved (Figure 15).

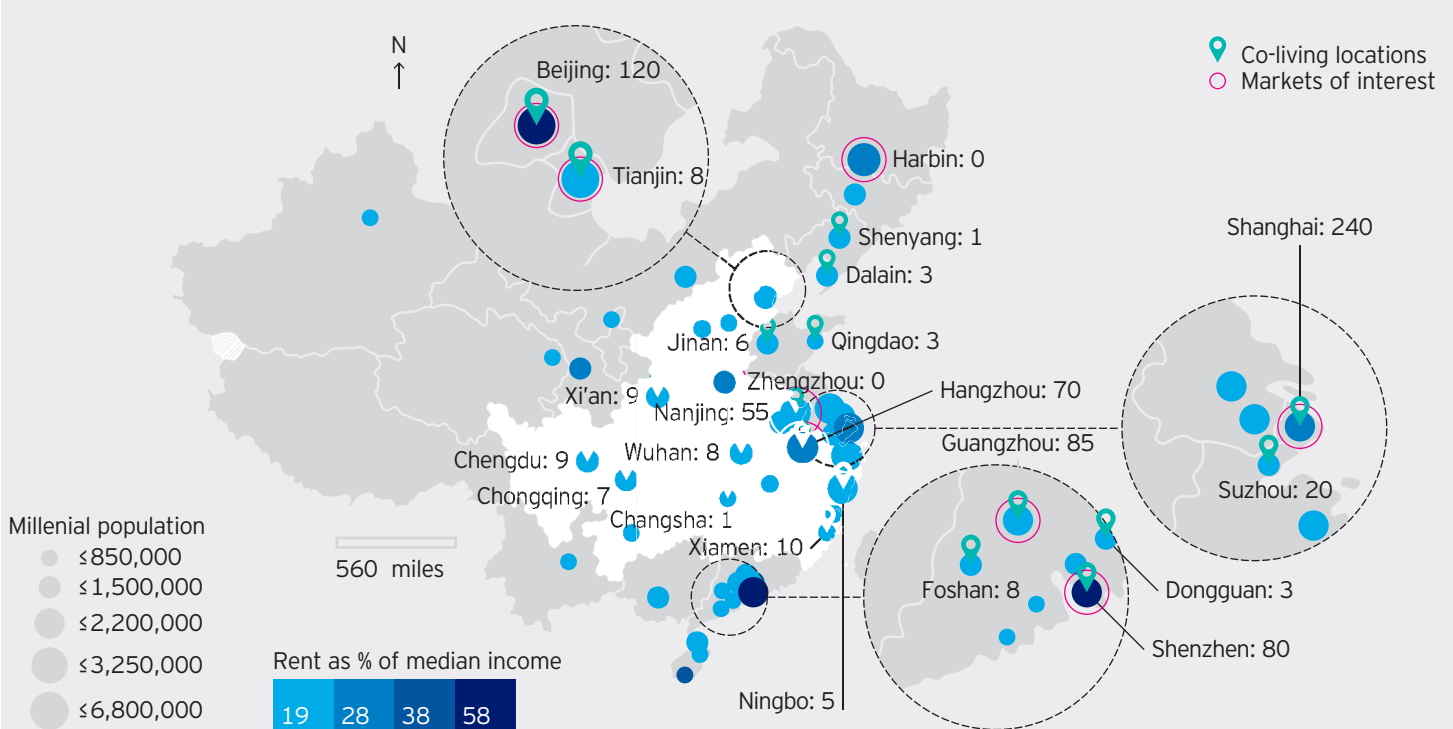
In China, Tier 1 cities (Beijing, Shanghai, Shenzhen, Guangzhou) as well as some Tier 2 cities (Tianjin, Zhengzhou, Wuhan, Hangzhou, Nanjing) stand out with a compelling combination of strong Millennial and migrant population and heightened affordability pressures (Figure 16). Due to the growing supply pipeline in the five-year outlook, some cities mentioned above, primarily Beijing and Shanghai, may reach equilibrium in demand/supply balance in the medium term, and as a result, product differentiation will become increasingly more important. In comparison, Guangzhou, Shenzhen, Wuhan, Tianjin, Hangzhou, Nanjing, Harbin, and Zhengzhou are likely to remain underserved in the near term.

Figure 15
Identifying cities with opportunities (US)
Millennial population, rent affordability and co-living clusters in the US, 2018



Note: Rent as a percent of median income is calculated based on median market rents as reported by Zillow as of August 2018 and median household incomes for the respective metros as of the latest quarter available. Number of co-living locations reflect confirmed locations in each market operated by what Invesco Real Estate defines as institutional operators and includes Roam, Outside, Common, Node Living, X Living (PMG), Quarters, WeLive, Ollie, Outpost Club and Dwell. Data as of August 2018. Source: Invesco Real Estate using data from Zillow, ESRI, and various co-living operators websites as of September 2018.

Figure 16
Identifying cities with opportunities (China)



Source: Invesco Real Estate estimate based on data from EIU, NBS, EhouseChina, Lianjia, and various co-living operators websites as of December 2018.

Conclusion

Co-living has developed as a natural progression from co-working, both responding to similar demographic forces. Both are an answer to younger generations' desire for affordable space in global cities that offers flexibility. Yet while co-working has gained widespread institutional acceptance and integration, co-living has, until now, remained the domain of niche operators.

Yet the profile suggests there is a depth of demand that may warrant a broader institutional response that has not yet materialized. Despite unique operational aspects, co-living can serve as an attractive compliment to a portfolio's residential allocation, offering slightly higher yields but with similar defensive properties, as lease rates can be adjusted quickly to align with market movements.

However, given the lack of data on long-term performance, co-living opportunities should be carefully vetted against their traditional multifamily counterparts, as co-living pricing is likely to be dictated by the strength or weakness of the multifamily market. We prefer pursuing co-living opportunities in infill and infill-adjacent urban locations that offer proximity to transit and employment centers that can offer a discount to existing product.

Figure 17

Summary: draft global strategy recommendations

	Core	Higher return
Sector weighting	- Selective, only in markets with strong rental growth and reasonable pricing	- Overweight
Country weighting	- US, UK, China, Australia, Japan, South Korea, Germany, France, Spain	- Core countries as well as Hong Kong
Execution themes	<ul style="list-style-type: none"> - Strong programming focus - Aspects of private space still desirable; determine if hybrid with mix of studios/1 bedrooms is appropriate - Very active asset management and higher capex - Beware assets in supply-prone submarkets sensitive to pricing softness, as co-living pricing likely to be dictated by strength of traditional multifamily 	<ul style="list-style-type: none"> - Discount-to-market oriented - Consider conversion of traditional multifamily to densify for enhanced yield - Conversion from alternative if co-living is highest and best use - Inclusion of co-working component on site; "one price for all" model
Preferred markets and segments	<ul style="list-style-type: none"> - Premiere infill multifamily submarkets - Proximity to CBDs/employment centers - Product that caters to upper end of new graduate market while offering discount to traditional for-rent market - Markets with under-provision of traditional multifamily products 	<ul style="list-style-type: none"> - Infill-adjacent submarkets - Proximity to transportation/infrastructure - Target cohorts not traditionally captured in institutional multifamily product (new graduates, blue-collar workforce)

Source: Invesco Real Estate, October 2018.

¹ British Property Forum in conjunction with JLL.

² United Nations Department of Economic and Social Affairs Population Division, World Urbanization Prospects: 2018 Revision.

³ Mercer 2018 Global Talent Trends Study.

⁴ Manpower Group Millennial Careers: 2020 Vision, April 2016. Latest data available.

⁵ U.S. Energy Information Administration Residential Energy Consumption Survey 2015. Latest data available.

⁶ American Journal of Preventive Medicine, "Social Media Use and Perceived Social Isolation Among Young Adults in the US", 2017.

⁷ Common website.

⁸ HOMY Co-living survey, Spring 2018.

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