

Emerging Trends in Real Estate®

The global outlook for 2017





Contents

- 2 Executive Summary
- 5 Real estate de-risks
- 12 Real assets
- 19 Trends and top cities in 2017
- 26 Sponsoring organisations







Executive Summary

We looked across the three regional reports in the *Emerging Trends in Real Estate* series¹ and asked ourselves – if geopolitical uncertainty and caution are the watchwords for 2017 – what are the new rules for the real estate industry?

It is striking that while concerns around geopolitics are at unprecedented levels in recent times, confidence in the ongoing flows of capital to real estate remain high.

When we canvassed the views of 21 global real estate leaders they spoke positively about the prospects for real estate in 2017 and beyond. These leaders represent global asset managers, institutional investors, sovereign investment funds and the largest real estate operators who together we estimate control over \$1trn of real estate assets under management.

In a risk-off market where will investors find yield? This report revisits common trends from across the *Emerging Trends in Real Estate* series and identifies how real estate is responding to these challenges.

The Emerging Trends in Real Estate series has also shown in recent years that what we mean by 'real estate" is evolving and becoming harder to define. The boundaries between real estate and infrastructure are becoming increasingly blurred. Our interviews with industry leaders explored the dynamics driving the 'real assets' phenomenon and where this is heading.

Risk off - the new normal

In the recent 20th PwC Global CEO survey, one UK CEO commented "businesses over the last 10 or 20 years have ridden the wave of certainty. With recent events that trend is either being challenged or reversing". Looking at figure 1-1 there is much to concern real estate leaders in 2017.

The current macro-environment of geopolitical uncertainty and fragile economic growth is set to remain a strong feature and real estate will remain in risk-off mode. Global cross border investment into real estate is holding up given the chase for yield and real estate's position as a safe haven, and there will continue to be a 'flight to quality' by the majority of institutional investors.

A global drift back to domestic agendas was seen both as having the potential to kick start stalled economies but also risks upsetting finely balanced interdependencies between countries and regions. As one global interviewee pointed out, "the political world changes the idea that the entire world is moving in one direction, so you're seeing different markets in different ways".

"If protectionism does come through it will take some time to work its way through. It won't be a 2017 phenomena, but the impact will be felt over the next few years."

Interviewee, Global Emerging Trends in Real Estate 2017

Yet, if anything, it could drive capital to diversify. "In a de-globalised world there is more benefit in being diverse. If countries are less in sync you need to build a portfolio that is diverse" says a global asset manager. Genuine concerns remain as one interviewee noted "the thing that worries me most: the flow of human capital, which is very identifiable globally in terms of ideas and talent. If that flow changes, the outlook for the economy is fundamentally different."

¹⁾ Emerging Trends in Real Estate Europe 2017, Emerging Trends in Real Estate Asia Pacific 2017 and Emerging Trends in Real Estate United States and Canada 2017 (www.pwc.com/emergingtrends).

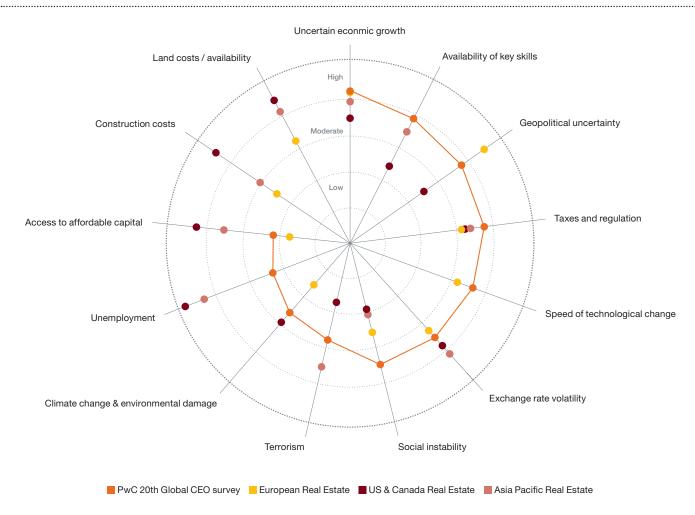
The volume of capital seeking a limited supply of 'core' properties is forcing investors to consider new strategies, lowering return expectations or accessing higher yields by exposing themselves to more operational risk and emerging alternative real estate sectors.

Either way, finding the right risk/return balance will be a key challenge that will be felt throughout the real estate value chain. And to add another further complication into the mix, this challenge will be played out against a backdrop of an industry who's centre of gravity is shifting from a financial asset to an operational business where the customer is king.

"Never in my career have I had so many risks from a political perspective in so many places at the same time."

Participant, Emerging Trends in Real Estate Europe 2017

Figure 1-1 Threats to business in 2017



Source: This chart combines data from the PwC 20th Global CEO survey 2017, Emerging Trends in Real Estate Europe 2017, Emerging Trends in Real Estate Asia Pacific 2017 and Emerging Trends in Real Estate United States and Canada 2017.

Investing into the real assets continuum

Urbanisation, demographics, social change, and resource scarcity will continue to drive the real estate product and value. Customer needs are changing, industry boundaries are being redrawn and the spectrum of investible 'real asset' opportunities keeps on growing. This expanding range of investment opportunities including infrastructure, mirrors the emergence of new, alternative sub-sectors in the real estate sector.

There are many differences in the current approaches to infrastructure and real estate investing, but there are clear benefits to understanding the intersection between them. As one interviewee predicts "if you cross over both sectors you can pick up those opportunities, and that is an approach I think you will see more people taking. But even if you do that, the two teams will still be run by specialists."

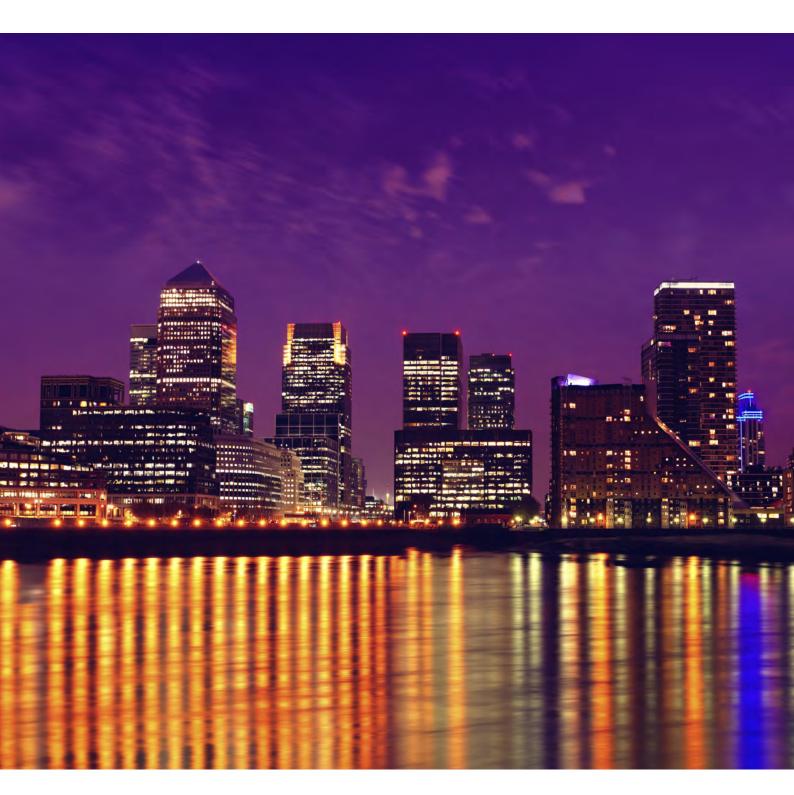
Is the marriage of real estate and infrastructure and the emergence of new alternative sectors across the real asset spectrum a natural evolution of a more mature and sophisticated industry? Or simply a response by asset managers to entice the wall of capital desperately looking for original investment strategies?

The jury appears to be out on the driving forces behind these changes, but the direction of travel is evident. We expect to see a continuing expansion of new, alternative asset classes with specific operational risk and income profiles. And as the list grows longer there will be practical reasons to tap into the synergies between them.

Looking at the overlap between real estate and infrastructure in another way; 'Infrastructure' is often defined by its clear value to the economic health and productivity of communities. But in today's connected worlds of rapid urbanisation, resource constraints, rising inequality and a housing crisis, is it appropriate to view any form of real estate – the built environment in which we live, work, study and play, as anything other than part of 'infrastructure'?

It is clear real estate leaders are getting used to the idea of constant uncertainty and change, and thinking carefully about their next move.

Real estate de-risks



The political and economic uncertainty of the past year is destined to persist throughout 2017 and beyond, but real estate continues to attract capital and demonstrate its resilience as an investment asset class.

According to Real Capital Analytics (RCA), global investments in income-producing assets totalled \$825.7 billion in 2016, a remarkable figure in the era of Trump and the Brexit vote, given the drip-feed of anti-globalisation rhetoric in the US and across Europe.

The 2016 total represents a decline of just 15 percent on the record-breaking 2015, it was still 25 percent up on the 10 year average for global deal volume. What's more, consensus forecasts indicate a similar volume this year as investors allocate capital to real estate for the security of income it offers against other asset classes. It is far from business as usual, however.

Interviews conducted with real estate leaders for this Global edition of *Emerging Trends* indicate that this is an industry firmly in "risk-off" mode. If anything, the concerns and caution evident in each of the three regional

Emerging Trends reports have become more pronounced over time.

And so, though "real estate is profiting from the geopolitical uncertainty and risks in the market" there is a clear "flight to quality" when it comes to investment.

As one investment manager observes: "We've seen a lot more capital going into core and core-plus than into opportunistic and value-add. I think it's probably reflective of the market [generally] that people are trying to de-risk things in the face of all the uncertainty around Brexit and Trump – 'let's batten down the hatches and be a little more conservative.'"

Another global investor concludes: "We're starting to see some inflation ... we have crossed the threshold into rising interest rates, and therefore from a long-term investment perspective if you look at how capital will be allocated, it's being done on the basis of diminished expectations as to returns. And the prevailing sentiment is risk-off."

"People were wrong on Brexit and wrong on Trump, but it is also hard to predict the reaction – people got that wrong as well"

Global investor, *Global Emerging Trends* in Real Estate 2017

The US – the Trump effect

While global investors have had time to come to terms with Brexit and its ramifications across Europe, the election of President Trump in the US has taken populist politics and the debate around de-globalisation to a new level.

"This has triggered a tremor underneath everybody's assumption that globalisation is beneficial," says one US-based interviewee. "I don't think we're going to see a return to Smoot-Hawley [Tariff] but I certainly think you're going to see a much more realistic assessment of globalisation and its benefits and burdens."

"Real estate cycles normally end because of debt, supply or demand shocks, and we don't foresee any of those"

Global investor, *Global Emerging Trends* in Real Estate 2017

Much depends on whether the Trump administration is able to fulfil its pledge to cut taxes and spend heavily on departments and programs favoured by the administration without adding to the US's near \$20 trillion debt. According to another US-based interviewee, by using executive powers the President has essentially turned to regulatory rather than monetary relief as an economic stimulus, "and I think that's very positive for the US and probably for the world because the US will become the engine of growth all over again".

Most American interviewees, however, are cautious about the economic outlook for a nationalistic US and its impact domestically and overseas. "On the supply side, there is some risk," says one. "If Trump really loosens up the banks and dismantles a lot of the disciplines, there is a risk that the banks will go nuts and start over-funding developers."

Another observes: "The Trump election victory is clearly changing sentiment, particularly vis a vis deficit spending in the US and what that might mean for interest rates. About 12-18 months ago, people were talking about deflation and negative interest rates as being a real risk, and you just don't hear that conversation anymore. There's a general consensus now that interest rates are only going one way – up – and probably a lot sooner than we thought."

So far, Trump's embryonic economic policies have had little discernible influence on capital flows into or out of the US. At \$402.3 billion², the US was the most active investment market in 2016. That volume was down 10 percent on 2015 but was simply following a broad global decline. New York, however, claimed London's crown as the top destination for cross-border capital.

"It depends how much the US benefits from being part of the global economy," concludes one global investor. "If the view is that the US doesn't need anybody, and everybody else will follow, I just think it's a misplaced understanding of how the US economy works, and the degree to which foreign capital plays a role. You change the variables in that equation and you fundamentally alter the flow of not just capital but human capital. That's the thing that worries me most: the flow of human capital, which is very identifiable globally in terms of ideas and talent. If that flow changes, the outlook for the economy is fundamentally different."

Europe - the Brexit effect

"The Brexit vote alone has increased the possibility of a European Union break-up, given the fact that one of the cornerstone economies has fallen out," says one global investor.

With the upcoming elections in the Netherlands, France and Germany the idea of other countries following the UK's lead has reinforced the mood of uncertainty that still hangs over European real estate despite better economic conditions than anyone had anticipated in the immediate aftermath of the UK's shock EU referendum result last June.

A Brexit-induced fall in the value of Sterling has fuelled inflation in the UK and lingering economic uncertainty. Deal volume slumped by 41 percent in 2016 compared with 2015³, while there was less capital for developers, especially those exposed to leasing risk.

Interviewees say investors remain uncertain of the ramifications of the UK leaving the EU, while potential vendors are unsure whether or not to sell assets at the current level of slightly softer pricing.

By contrast, Germany has taken over from the UK as Europe's investment haven, as forecast in *Emerging Trends Europe*, despite annual inflation reaching 1.68 percent. RCA says €60.2 billion of commercial property was traded in Germany last year, compared with €59.9 billion in the UK.

"With Brexit, a large factor that any investment strategy has to address – one that is possibly much greater than in the past - which is, does the Eurozone hold? You have to consider what happens if it doesn't," concludes one global investor. "I think that's partly what's driving interest in Germany today. It's the one market to invest in if Europe falls apart. Certainly, Germany would be badly hit but the underlying dynamics and the size and strength of the German economy mean you can take comfort on the downside. Your capital would be safe."

"The smaller and peripheral markets, there is more nervousness around those now"

Pension fund investor, *Global Emerging Trends in Real Estate* 2017

Asia Pacific – too much capital, too few assets

Transaction volumes in the Asia Pacific region registered a 14 percent drop to \$132.5bn in 2016, according to RCA, with slowdowns in Japan and Australia offset by stronger performances in China and most other Asian markets.

Investors noted in particular more big-ticket purchases by institutional investors, together with a decline in the overall number of transactions as buyers balk at rising prices and owners – especially in Japan – opt to hold rather than sell.

Core continues to be the favoured asset class, although as product becomes scarce, many core investors are now also willing to adopt development risk. Growing numbers looking at build-to-core strategies, especially where institutional buyers are likely to be long-term holders of the end product.

At the same time, investors moving up the risk curve in search of yield are diversifying into alternative asset classes that range from data centres to sub-logistics facilities to senior housing. Investors are also casting their nets wider geographically. In gateway cities, this means a migration towards assets in suburban or greater metropolitan areas, a trend that has been particularly strong in Australia. In addition, there is growing interest in emerging-market deals. Both India – which has attracted a significant number of large institutional investors – and Vietnam have recently emerged as promising long-term plays, although shortage of institutional grade stock ensures that most opportunities remain on the development side.

China, meanwhile, continues to be a difficult market to navigate. While it still offers opportunities for experienced investors, deals there are increasingly harder to find. This is partly due to a slowing economy and partly to competition from enormous amounts of domestic capital now seeking a home in real estate assets.

As one global investor observes: "China won't grow at 10 percent anymore, it will drop to 3-4 percent a year. You started with a country of 1-2bn peasants and 100m urban dwellers, now you only have 300m peasants and that has an extraordinary effect on productivity, but that change has stopped. China's infrastructure and real estate has been part of that, and it is going through the same process. Our holdings there are very significant, and if we are looking at new opportunities there, we are very selective."

"The smart money is looking at emerging markets"

Pension fund investor, Global Emerging Trends in Real Estate 2017

Capital flows - winners and losers

"There continues to be excess liquidity for core real estate," says one global investor. "There's just not enough of it in the world. Whichever geography you're in, you will find that pricing for true core has held, if not increased."

There is certainly no shortage of capital allocated to real estate as investors of all stripes continue in their search for yield. The raising of capital continues apace because of the inherent attractions of real estate, not least the positive yield gap over bonds. Commercial property debt funds, for instance, have drawn in new capital from fixed-income investors largely because inflation-adjusted net yields on corporate bonds are close to zero.

As for debt finance, generally, one interviewee comments: "For the European banks, the margins are much better than other asset classes – corporate lending. even project finance have lower margins than real estate. So, we have seen even more lenders going into that space in Europe." There is also the growing presence of mezzanine / debt funds moving in to fill the gap left by banks constrained by regulation.

In the US, allocations to real estate were typically 6-8 percent during the last cycle but the top institutions are now around 10 percent. "You can see bread and butter local pension funds continue to raise their target allocations commensurate with the leading investors," says one interviewee.

"I think there will be more money coming in to real estate but it's going to come from different places. A lot of the US pension funds are getting closer to meeting their allocations," says a global investor.

"But counter-balancing that, there are vast amounts of capital from China and more importantly Japan - Japan is a huge net saver ... there is a lot of capital piling up there that used to go into pedestrian, bond-type investments. But those guys are beginning to look around the globe to try and build multi-asset portfolios, and they have zero real estate allocation."

As to where best to deploy the capital, opinion is divided and there is much that remains open to interpretation or preference.

The strong investment numbers for China and other Asian markets reflect how, as one interviewee suggests, "the smart money is looking at emerging markets". Indeed, RCA's figures show that in 2016 overseas buyers were net buyers in Asia Pacific for the third year running. What is more, the share of cross-border capital climbed to 31 percent in 2016, which is the highest level since 2009 when it was less than 20 percent.

By contrast, the "big institutional, large-cap money is continuing to invest in places where they believe there is now the least amount of uncertainty, which has got to be the US", says one USbased interviewee before adding:

"The volume of dollars will probably continue to go into the big economies but I see hesitation from some of these big global players - concerns over whether they've missed the market."

"Resources and partners become more important than ever in a market like this"

Pension fund investor, Global Emerging Trends in Real Estate 2017

Other American industry leaders believe "Europe is ex-growth". Explains one: "I look at the demographics, I look at the politics, and I find it a pretty unattractive environment."

And yet a European interviewee describes "a kind of gold-rush mood in Berlin" although the current shift of capital into German cities is essentially a regional European story. Few if any German cities feature in the top 20 Global cities. An explanation could be that the dynamics of the European market are not necessarily city-based whereas in an urbanising world, capital is likely to favour those cities with higher critical mass and a well established global brand. For all London's perceived issues and diminished volumes in the current climate, it still features prominently in most top 5 city rankings for real estate transactions alongside New York, Los Angeles, Paris and Shanghai.

"From a capital market perspective, the large German cities will be winners but I don't see London as a loser." says one interviewee.

"That's not necessarily the case for the entire UK but I see London, still, as a very strong investment market and as a strong city. Just because a couple of banks leave the city doesn't mean that London will become less attractive and extremely depressed because over the years the market in the UK, especially London, has become much more diverse and less financially driven."

Whichever city or region finds favour, there is "a cocktail of risks that has never been so diversified" and therefore markets are reflecting a clear "flight to quality".

Says one investor: "There continues to be appetite and inflows of capital to buy quality assets, but what you're seeing though is a distinction between any old real estate and prime. And that's a trend you've seen in the US for a longer period of time, where the high-quality assets continue to command significant premiums because of their safety, how established they are and the cash flows associated with them."

Another interviewee says: "Some who have taken a more aggressive approach to investment - more core-plus, value-add - are thinking aloud about whether they should continue with that or go down the risk profile and accept lower yields to be on the safe side because of all the uncertainties - not just Brexit and Trump but elections in Netherlands, France and Germany. They would rather take a 3 percent deal - safe, well leased, good location, low leverage - than a 5 percent core-plus investment with leasing risks."

Globalisation of capital continues

"Cross border capital flows are telling you that the globalisation of capital remains quite strong," says one global investment manager, summing up the mood of many in real estate.

According to most of the industry leaders canvassed for this Global report, there is unswerving faith in the virtues of globalisation - involving financial and human capital - despite the rhetoric around protectionism.

"Rolling back globalisation is like pushing water up a hill," says one global investment manager. "Capital flows aren't reducing and while it might be affected over the medium term, market forces will prevail over government policy. I think it's overly emotive at the moment, and at some point, sense will prevail."

There is also faith in real estate as an asset class amid the prevailing economic uncertainty. "You may see reduced transaction volumes, but that is not de-globalisation," says one interviewee.

As another global player points out, whoever is in power in Germany or the US, and whether or not it is a soft or hard Brexit, "people still need to eat, still need homes, still need places to work ... real assets will be something of a safe haven".

"You may see reduced transaction volumes, but that is not de-globalisation."

Pension fund investor, Global Emerging Trends in Real Estate 2017

Real assets



In the world of money management, major investment managers and pension plans have created real asset groups, doing away with distinctions between asset classes such as real estate, infrastructure, agriculture and timber. Below we examine what is driving this growing interest in real assets.

A theme across the *Emerging Trends* in Real Estate series in recent years has been that real estate investors consistently cite a dearth in availability of core assets for purchase. Competition for these assets is driving up prices and encouraging investors to consider new strategies for accessing long term yield - including venturing into alternative assets classes of development.

And the same trend is becoming increasingly evident in infrastructure. In a report⁴ published in February 2017, Pregin the private capital research firm, said that 54% of the managers it surveyed reported that it was becoming more difficult to find attractive opportunities, compared to just 2% who were finding it easier. And 74% said they were seeing more competition for core assets.

"When I started talking to capital 15 years ago you would normally be talking to the head of real estate, now you are talking to the head of real assets or illiquids or alternatives."

Global investor, Global Emerging Trends in Real Estate 2017

Real returns

This search for income is no doubt part of the reason we are seeing an increased level of interest in real assets - both in terms of an emerging spectrum of alternative asset classes and in terms of the way in which investors and asset managers are organising themselves.

The global head of private equity at Blackstone, the world's biggest real estate fund manager, recently told Bloomberg that the investment manager was considering setting up an infrastructure investment business, which it hoped could one day be as large as \$40bn.

And infrastructure, and real assets more generally, are at the front and centre of the political and financial world at the beginning of 2017.

US president Donald Trump made a programme of infrastructure spending a major pillar of his election campaign, and financial markets have reacted positively to the expected boost for the US economy that the programme could create.

More generally across the globe, there is an increasing acceptance that spending on infrastructure such as public transport and renewable energy can boost GDP for cities or countries, and that the former in particular can help solve problems such as access to affordable housing.

"We started to look at it from a deal level. If you are investing in a port, shouldn't you be investing around that port as well?"

Pension fund investor, Global Emerging Trends in Real Estate 2017

Client driven change

So what is behind this trend towards real assets strategies and businesses? Is it a long-term change in the way investors are deploying capital and managing assets? How are the changes taking place in practice? And what can the different strands that constitute real assets learn from each other?

As has already been mentioned, there is a definite move among large global money managers to restructure their businesses and create real assets divisions. This can mean different things for different managers, but in general it includes real estate and infrastructure, and usually extends to cover income producing assets such as timber and agriculture.

Managers who have made this move report that it is very much client driven, and mirrors how clients organise themselves.

"Today, pension funds and even sovereign wealth funds often have the same person covering real assets, or at least the same department," says the global chief investment officer at one such firm.

"What we're seeing from clients and market trends point of view is that we are stepping into meetings with investors who are no longer real estate experts or farmland experts but are experts in the entirety of real assets," adds the chief operating officer of another.

Managers report that as well as mirroring the organisation of their investor clients, the change also reflects how these clients view the different strands of real assets and their investment profiles.

"We've been talking to investors about it, and I don't think investors are that concerned about using terms like property or infrastructure - they think about things in terms of yielding assets or income assets" says one head of real assets. "They are less concerned by what it is physically than with its capital characteristics, its long term income stream."

"We think this is just the tip of the iceberg, in terms of being mandated to look after that whole spectrum."

Global Fund Manager, Global Emerging Trends in Real Estate 2017

Pros and cons

"There are areas where these things overlap and we can combine expertise, for example people who liaise with the public sector can do so for both real estate and infrastructure," says one pension fund investor. "We had been doing housing and social housing in both teams, and there was a partial overlap in skill set, so it made sense to have one team."

And some very large specialist real estate fund managers are now actively considering building real assets businesses to meet changing client needs.

Before drilling into the characteristics of the different branches of real assets, it is worth mentioning that there was less consensus among the investors interviewed for this piece that a move towards real assets teams and strategies reflected their objectives and the way they organise their business. While some had combined real estate and infrastructure to create real assets teams, many could not see the point of this move.

"In terms of the move to real assets strategies it is still not clear to me what's in that," said the head of real estate at one global pension fund. "For us it makes sense not to mingle real assets."

"I am not sure why people are creating real assets groups and that is not our business," said another. "We report to the same chief investment officer and the same investment committee and we're not that far apart but the organisations are in separate boxes."

The reason for this scepticism seems to be twofold. First there is a desire for specialisation due to the highly individual nature of both real estate and infrastructure assets.

"It's pretty difficult to see how you can be a specialist in every sort of real estate, and so it is very hard to believe that you can also be an expert in real estate, infrastructure, agriculture and private equity," said the head of strategy at one global pension fund.

"In general I don't think you would mix the real estate and infrastructure strategies. you need dedicated teams to grow them both, and by pooling things you don't have the same knowledge base in each," said another real estate head from a different part of the world.

Secondly, while a head of real assets can argue that: "the capital characteristics of real estate and infrastructure are both long term, often related to economic growth, illiquid and therefore need to be held for the long term," there is also dissension about whether they are that similar.

A way of potentially squaring this circle is to consider the fact that investors from different parts of the world tend to have very different ways of structuring their teams, and there is a perception that there is a greater trend among US pension plans to combine their expertise into a single person covering real assets.

"The Dutch or Australian funds won't do things like this because they have long histories, big teams, and some of the most talented people in those countries go and work for pension funds," said the head of research at one global money manager. "But in the US they are more public employees, with limited travel and staff, so it makes sense for them."

"I don't think the teams or the allocations will be mixed any time soon - the risk and return profile are perceived as being different."

Pension fund investor, Global Emergina Trends in Real Estate 2017

Everyone's a winner

One area of consensus seems to be that infrastructure or agriculture will not muscle in on capital allocated to real estate or vice versa – instead, the allocation to both will increase at the expense of other asset classes like bonds or equities.

"But in general I think allocations to real assets will increase to perhaps up to 25% of portfolios and we've been a bit ahead of the curve on that," said the head of strategy. "But even within that 25% allocation you need some liquidity in the portfolio. Real estate has been an asset class for decades already and has a proven track record."

It is also a much bigger universe global real estate investment in 2015, was around \$1trn5, whereas infrastructure investment was \$349bn, according to Preqin, with agriculture and timber small again. This hierarchy is expected to remain.

"I think real estate will continue to be a winner and real assets will continue to see investment flows coming in from equities and bonds," said a chief operating officer. "The typical institutional investor will have 85 to 90% in fixed income and equities and 15% in alternatives, some of which will be real assets. We think in the next 10 to 15 years that's going to go to a 60/40 split. Given how equities markets have performed, real estate and real assets will be a beneficiary of the denominator effect but also be a beneficiary of investors looking to increase their exposure to that sector."

And the difference in characteristics between different types of real assets will also help the sector to grow, particularly outside of real estate, they add.

"Real estate is the main block, but investors are looking to diversify their holdings away from real estate. It is a large market but it's crowded. Real estate has been on quite a run recently recently and investors are seeing how values are rising. They are asking how values can continue to rise and how they can achieve their returns. Real estate from an investor standpoint is liquid and large and is more correlated with public markets. And investors are asking, where can we get some uncorrelated returns? Whether it's farmland or infrastructure or agriculture, this is less correlated."

Efficiency gains or structural change?

Even if investors or fund managers do not formally merge real estate, infrastructure and agriculture teams, all who contributed to the report outlined how real estate and infrastructure in particular were becoming increasingly blurred.

Partly this is a result of the fact that the definition of what can be constituted in real estate estate is broadening to include a wide range of alternative assets, and that having real estate and infrastructure teams work together can allow investors to access opportunities that otherwise might have passed you by.

"Something that will change is that the boundaries between these categories of real estate and infrastructure on some of these assets is becoming increasingly blurred," says one global sovereign wealth fund investor. "And if you do pool expertise then you have a chance to access some of those investments that otherwise fall through the cracks of real estate and infrastructure. If you look at things like Centre Parcs [the UK holiday village company bought by Brookfield from Blackstone in 2015], that was being looked at by private equity firms that were not real estate specialists who were seeing it more as a corporate which happened to own real estate. Things like caravan parks and car parks also fall into that camp, and even things like hospitals. and so in those less traditional real estate sectors there are opportunities.

Also, there are huge opportunities and overlaps in wide-scale urban infrastructure and investment schemes.

"If you cross over both sectors you can pick up those opportunities, and that is an approach I think you will see more people taking. But even if you do that, the two teams will still be run by specialists."

Pension fund investor, Global Emerging Trends in Real Estate 2017

"We started to look at it from a deal level," says one pension fund investor. "If you are investing in a port, shouldn't you be investing around that port as well?"

Adds another: "Real estate and infrastructure are always two interlinked dimensions of a city, and so we need to look at what we do in a meaningful way. Infrastructure will be key to taking places that are lagging behind and getting them back to growth, and creating an outcome that is good for the next generation. It is not good to look at it in terms of buildings on one side and cities on the other, buildings need access to energy and infrastructure."

Best practices

There is also plenty that the different strands of real assets can learn from each other. Real estate is the more mature asset class, and therefore infrastructure investors can look at it and avoid some of the mistakes that the sector has made.

"Real estate is a more mature market, and real estate funds and JVs and club deals have been around for decades," says one pension fund investor. "Infrastructure is a new market and over the next five years, we will see exits from the first infrastructure funds, and funds needing to be restructured or sold. In that sense the infrastructure world can learn from what's gone on in real estate in terms of how those things are structured and deals executed."

There is also a feeling that infrastructure investment would benefit from the creation of more products and investments at the lower end of the risk spectrum.

"The surprising thing about the infrastructure world is the proportion of funds that are targeting pretty high returns, and thus are in private-equity type structures," says one real estate investor who has looked at the infrastructure fund world. "A high proportion of real estate funds are core and low leverage, and that is a key difference."

In return, real estate could benefit from the long-term thinking that is more common in infrastructure and agriculture.

"In terms of what the two sides can learn from each other areas like agriculture and timber have been very innovative in developing permanent capital vehicles so product structure is an area I think real estate can learn from" says a chief operating officer.

"Real estate can learn how to move beyond the typical private equity structure - we don't believe it is an asset that you should have to flip every so often, it should be an asset to hold forever if you believe in the demographic situation and in the performance of your asset. Perpetual capital vehicles can be better for returns, there's no pressure to sell, you can improve an asset over decades not a short time."

This long-term thinking can influence investment philosophies as well as just fund structures.

"For example, there is a project to create a new public transport system which will transform the way one city will live, which our infrastructure team is funding. We are involved because there is a residential and commercial element that is part of the same project, and we are looking at how we can make the city a better place."

Pension fund investor, Global Emerging Trends in Real Estate 2017

"Putting infrastructure alongside real estate has made us rethink how we view the latter,' says one pension fund investor. "Some infrastructure investments can be for up to 60 years, so it is making us think of real estate in terms of a much longer time frame, deals structured over 20 years. It has also made us examine our conviction levels more. If you are going into an investment for that length of time, you have to have a lot greater conviction that you will see outperformance over the life of the deal than if you were just going in for five years."

There are also key lessons real estate can learn from other branches of real assets in the vital world of sustainability.

"Farmland and timber have been under far greater scrutiny and pressure given they are natural resources and there are a lot of sustainability concerns around them," says one investor. "These sectors have been making great headway in increasing transparency and improving sustainability and I think those lessons are highly transferable to real estate."

"One thing we see is that it is a lot of farmland and timberland investments are in places like South America or Eastern Europe, and when you invest in these frontier countries that can mean a lot of different people and a lot of different stakeholders are involved. When you make a farm or timberland investment it is not just knowing about the megatrends or the net operating income, it is knowing how to engage stakeholders in the asset in the longer term and engaging with the local community."

In terms of where the trend might go, other natural resources such as water could become part of real assets, especially as climate change continues and makes this vital resource more scarce.

As for the trend of real assets investment. there is no consensus about how far it will go, but significant changes are already under way, and even if businesses and teams don't change structure, mindsets have certainly changed.

"Putting infrastructure alongside real estate has made us rethink how we view the latter. It is making us think of real estate in terms of a much longer time frame, deals structure over 20 years."

Investor, Global Emerging Trends in Real Estate 2017



Building a real assets team

Reconciling the different approaches to real assets.

What does the creation of a real assets division mean in practice for major money managers? In one sense, it is simply a way of sales or client-facing staff to offer a broader range of products.

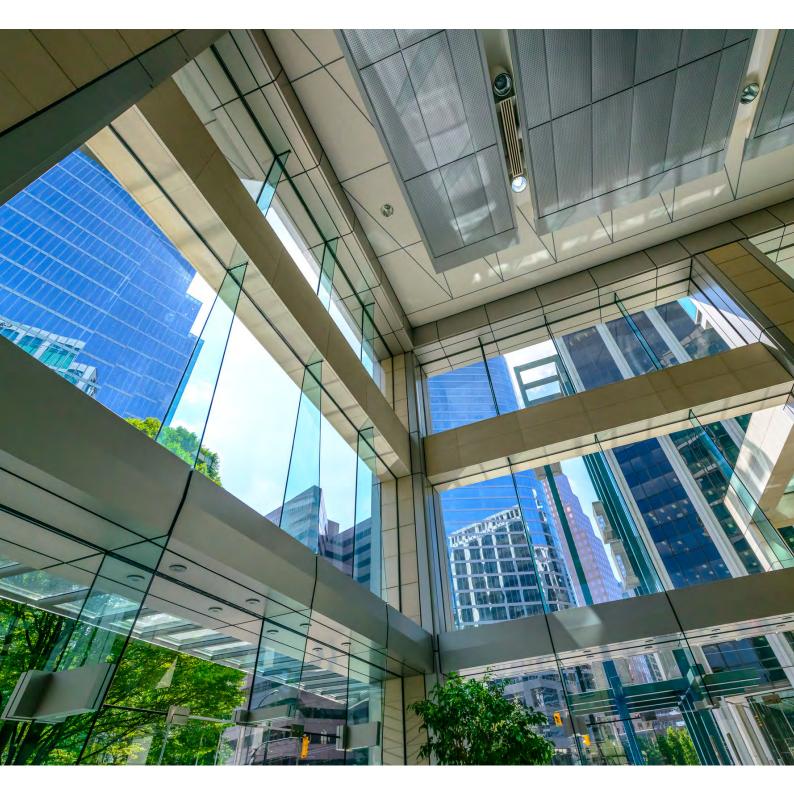
"It is mainly the client facing people rather than investment decision makers," says one chief investment officer. "Everyone who is client facing can go out and talk about the whole real assets business, and they see us as an adviser rather than someone who is pushing product. It will come up at the first meeting with the CIO, where we are talking about client needs."

But beyond this, it can be a way of improving performance.

"There are areas where these things overlap and we can combine expertise, for example people who liaise with the public sector can do so for both real estate and infrastructure," says one pension fund investor. "We had been doing housing and social housing in both teams, and there was a partial overlap in skill set, so it made sense to have one team. How do we extract synergies and extract deal opportunities? I spend my time thinking about that part of it. There were ways of doing research that is more broad and thoughtful and allow us to find more deals. The scale created by combining the businesses also meant that it was worth having a dedicated credit team to really explore the underlying credit worthiness of the tenants in both sectors?"

"You now have a nice palette of options in debt, equity, public and private, and you can structure portfolios up and down the risk spectrum and be more thoughtful in your investment approach," says another chief investment officer. "We look to be more thoughtful with our research and analytics and attitude to benchmarking and approach to investment performance. We can be flexible according to a client's needs, and if they say they want an 8% return with 6% from income we can built the right portfolio, different sectors, emerging markets versus developed, advise them on things they might not have considered like high vield debt. but also advise them of risks they might not have anticipated, like duration risk."

Trends and top cities in 2017



What does a flight to quality mean for real estate in 2017? Below we examine in more detail the data and trends across the Emerging Trends in Real Estate series in 2017.

While the real estate sector adjusts to a prolonged period of uncertainty there will be new opportunities created from this disruption. The pace of change is accelerating and new technologies are helping real estate to radically rethink its structure and products to adapt to the changing needs of the market.

PwC's recent The Future of Industries: Bringing down the walls6 report found that technological change is creating historic shifts in industry footprints. Over the next ten years, the report suggests this process will accelerate and traditional industry classifications will need to be rewritten.

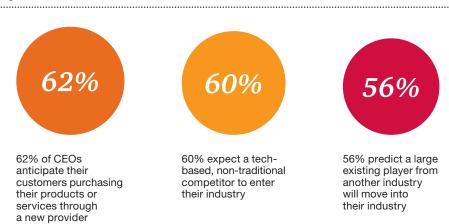
As one CEO states "the biggest change that I see happening in the next 20 years is that there is going to be big overlapping among the different industries. So, there is going to be fierce competition among the mature industries - for example, telecoms will fight with energy companies, energy companies will fight with the automotive companies, and so on."

It is critical real estate businesses understand how industries are evolving and how they can best service future needs. Certainly real estate is not immune to new competitive threats currently from outside its sector as one Emerging Trends in Real Estate Europe interviewee noted wryly "our biggest competitor or threat is a company we do not know yet, which could be two friends working together in a garage."

"We have had to become experts in many more parts of the property market than 10 years ago."

Participant, Emerging Trends in Real Estate Europe 2017

Figure 4-1 The boundaries between industries will erode



Source: PwC CEO Pulse 2016

Trend alert

We identified three trends reshaping the real estate market in 2017 and beyond.

Optionality and flexible spaces

Optionality is a buzzword for real estate occupiers and investors. It allows users to adjust their space needs in terms of size, location, and use as-needed. It gives property owners the ability to maximise highest value and best use based on immediate tenant demand. The opportunities are real, but the execution is complicated with so many moving parts. In a more fluid market with ever decreasing lease lengths optionality may no longer be optional.

"The developer/financier that understands optionality in their projects is the winner. Optionality will be of great value over the next generation."

Participant, Emerging Trends in Real Estate Europe 2017

Operating assets

Across the emerging trends series this year there continues to be a growing interest in alternative or niche sectors which offer a measure of diversification and stability of income returns when mainstream real estate looks expensive and vulnerable. While the yields may be attractive the asset will require more active management and managers who can cope with the operational aspects of real estate.

"Investors have to be careful because there is a propensity to underestimate operational risk but fall in love with yield."

Participant, Emerging Trends in Real Estate Europe 2017

Focus on affordable housing

Affordable housing scores highly in the sector investment and development rankings across the 2017 emerging trends series while the associated costs and availability are a common concern. As recently highlighted in ULI Europe Residential Council's Vision Statement on affordable housing, affordable housing is an issue that is rising rapidly up the city authority agenda impacting quality of life, social inequality and threatening competitiveness nationally and globally. As one US CEO put it "we're not paying enough attention to affordable housing, and I don't mean low-income or government-subsidised. Just regular rents. No new buildings are providing that kind of product. Time will tell if that's going to come back and haunt us. Not everybody makes \$75,000 to \$100,000 a year."

In order to provide affordable products, home sizes are continuing to shrink. In Hong Kong, this trend has taken off in a big way, with at least one major developer adopting the "matchbox" model as a major plank of its development strategy, focusing on apartments with footprints of just over 160 square feet. This is reflects the changing demands from younger (and some senior) occupiers who are willing to accept less personal space as long as they have access to share social facilities such as gyms, kitchens, living areas, and even office space within the same building.

Modern methods of construction can also be part of the solution to affordable housing as modular construction becomes the norm and robots join workers on construction sites.

Affordable housing may be the real estate industries vulnerable spot or an opportunity to move creatively into a large and growing market.

Box 4-1 Successful real estate investors will need to take on more operational risk











Source: Emerging Trends in Real Estate Europe 2017

Sector themes for 2017

How society is changing is shifting the focus of real estate investment from traditional sectors to a wider range of more specialised assets. In particular the idea of sharing space as a practical response to the megatrends including urbanisation, resource scarcity and rapid technological developments will shape our future culture and landscapes.

While there continue to be distinct regional preferences for certain sectors there are also strong structural themes coming through in the Emerging Trends in Real Estate series in 2017.

How we live

In Europe demographics, urbanisation and affordability are fuelling interest in the residential private rented sector (PRS). Similarly the retirement / assisted living and healthcare sectors will need to grow to meet the future needs of the aging population. Notably student accommodation tops the sector lists where interest is broadening beyond the UK and perhaps Germany to Portugal, Spain, CEE and the Nordics.

In Canada a combination of demographic factors and affordability concerns means that a growing number of Canadians will continue to opt to become permanent renters. A trend that has already been seen in the US with rental apartments having a long run of success. Investors and developers in Asia are watching these structural trends closely with affordable and senior housing topping investment and development sector lists in 2017.

Common across the regions is a shift from homeownership to long term renters who in return will expect a high level of customer service and flexibility.

How we work

77% of CEOs in PwC's 20th CEO survey are concerned that key skills shortages could impair their companies growth and it's the soft skills they value most that are hardest to find. Working spaces that nurture creativity and productivity will play an important role in attracting that talent. As a respondent in our Emerging Trends in Real Estate Europe survey put it "the reality is that traditional offices - like the ones we've worked in for the last 20 or 30 years - will change. The way younger people use real estate, the way they work in it, it's changing."

We believe that low economic growth may be a catalyst for change as the pressure to cut costs and get more from space intensifies. For both new and existing office space, functionality will be key with shorter, more flexible leases, more communal and break out areas, a focus on wellbeing and digital connectivity moving from nice to have to must have.

How we play

Traditionally the most customer-focused area of real estate, how we shop and spend our leisure time is complex covering leisure, hospitality and the rapidly evolving space that is at the intersection of retail, logistics and manufacturing. Evidence of this rapidly evolving sector is clear in the increasing amount of mixed use components in retail and the distinction drawn between retail for convenience and retail as an experience.

Emerging technologies are changing how we live and the impact on retail is stark with regional malls / suburban shopping centres languishing at the bottom of the sector lists. Yet the infrastructure underpinning retail is thriving with logistics, warehousing and fulfilment riding high. It is clear the battle over the last mile delivery will be fierce in 2017.

"Talent is going to be the driver for the 21st century."

CEO, PwC 20th Global CEO survey

Figure 4-2 Real estate - the 2030 view



Live | Residential

Key trends

- The urban consumer
- Changes to live/work balance
- Reducing car ownership
- Ageing population

2030 state?

- · Higher density
- More liveable and vibrant urban environments, combining live, work and play
- New growth: healthcare, assisted living

"We'll start seeing a different attitude to size and space. Micro-living is coming."

"Shared ownership, equity release and retirement living are all ripe for opportunity."



Work | Office

"More people work from home. Companies will need less space and it will change the nature of offices fundamentally. It will make a lot of the current office stock obsolete."

"The WeWork concept will not only be used by companies like WeWork but by large employers that need more flexibility to shift their staff back and forth."

Key trends

- Connectivity
- More collaborative working practices
- Artificial intelligence, augmented and virtual reality

2030 state?

- On demand and use of space leasing
- Offices as high-spec "imaginariums"
- Localised work-hubs/satellite offices
- Fewer single-let buildings as corporate requirements become more fluid
- · Domination of shared/serviced offices



Play | Retail and logistics

Key trends

- Ecommerce
- Technology-driven enhancement of customer experience
- Drones, 3-D Printing

2030 state?

- Shopping centres as multi-faceted communities that embrace broader lifestyle needs of communities
- New asset class: urban consolidation hubs

"With ecommerce, we underestimate the extent to which the retail footprint will shrink. We are just in the first phase of that."

"There is probably enough retail space in Europe. I doubt whether it is the right retail space."

Source: Emerging Trends in Real Estate Europe 2017

Top cities in 2017

Top cities for real estate investment in 2017

"The biggest influence on real estate will be demographics."

Global Emerging Trends in Real Estate 2017

"In a knowledge-based economy, I really like to stay in the brain hub markets like Boston."

Emerging Trends in Real Estate United States and Canada 2017

"Strong markets include Raleigh, Denver, Dallas, south Florida, Charlotte, Nashville and Seattle. These locations have good job and population growth."

Emerging Trends in Real Estate United States and Canada 2017

"Berlin... is becoming a global city. People want to work there, there are multiple employment sectors active in the city, and tech is a very big thing there."

Emerging Trends in Real Estate Europe 2017

"As long as the location is prime in a dynamic-enough market, why limit yourself to Alpha cities?"

Emerging Trends in Real Estate Europe 2017



0	
_	

Montreal
Toronto
Vancouver

Canada

Austin

United States

Charlotte Dallas/Fort Worth Los Angelos Nashville Orange County Portland (Or) Raleigh/Durham San Francisco Seattle

Europe

Berlin Copenhagen Dublin Frankfurt Hamburg Lisbon Lyon Madrid Munich Stockholm

Asia Pacific

Bangalore Bangkok Guangzhou Ho Chi Minh City Jakarta Manila Mumbai Shanghai Shenzhen Sydney

Source: Emerging Trends in Real Estate Europe 2017, Emerging Trends in Real Estate Asia Pacific 2017, Emerging Trends in Real Estate United States and Canada 2017



Figure 3-7 Creation of 'place' is becoming the most important factor for real estate performance











effect of seeing consolidation of activity into the major cities and it has driven our view for the last 30 years. So, has that turned? Is there going to be renewed life in some of the smaller cities if you start to think nationally again, as opposed to across Europe?"

"Globalisation has had the

Global Emerging Trends in Real Estate 2017

"In the last 12 months, there's been a sea change among potential institutional partners in terms of the willingness to take the types of risks (emerging markets and development risk) we're taking for the returns that we're generating."

Emerging Trends in Real Estate Asia Pacific 2017

"Still like the upside potential of markets like Seattle and Portland. They look like more affordable versions of San Francisco / San Jose to us."

Emerging Trends in Real Estate United States and Canada 2017

Source: Emerging Trends in Real Estate Europe 2017

Sponsoring organisations



PwC's real estate practice assists real estate investment advisers, real estate investment trusts, public and private real estate investors, corporations and real estate management funds in developing real estate strategies; evaluating acquisitions and dispositions; and appraising and valuing real estate. Its global network of dedicated real estate professionals enables it to assemble for its clients the most qualified and appropriate team of specialists in the areas of capital markets, systems analysis and implementation, research, accounting, tax and legal.

Global Real Estate Leadership Team

Craig Hughes

Global Real Estate Leader PwC (UK)

Bart Kruijssen

European, Middle East & Africa Real Estate Leader PwC (Netherlands)

Byron Carlock

US Real Estate Practice Leader PwC (US)

KK So

Asia Pacific Real Estate Tax Leader PwC (China)

Gareth Lewis

Emerging Trends in Real Estate Global Project Director PwC (UK)

www.pwc.com



The Urban Land Institute is a global, member-driven organization comprising 40,000 real estate and urban development professionals dedicated to advancing the Institute's mission of providing leadership in the responsible use of land and creating and sustaining thriving communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries.

The extraordinary impact that ULI makes on land use decision making is based on its members sharing expertise on a variety of factors affecting the built environment, including urbanization, demographic and population changes, new economic drivers, technology advancements, and environmental concerns.

Peer-to-peer learning is achieved through the knowledge shared by members at thousands of convenings each year that reinforce ULI's position as a global authority on land use and real estate. In 2016 alone, more than 3,200 events were held in 340 cities around the world.

Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

Patrick L Phillips

Global Chief Executive Officer Urban Land Institute

Lisette van Doorn

Chief Executive Officer Urban Land Institute (Europe)

John Fitzgerald

Chief Executive Officer Urban Land Institute (Asia Pacific)

Kathleen Carey

President and Chief Executive Officer, **ULI** Foundation

Anita Kramer

Senior Vice President **ULI Center for Capital Markets** and Real Estate

Urban Land Institute

1025 Thomas Jefferson Street, NW Suite 500 West Washington, DC 20007 202-624-7000 uli.ora

Emerging Trends in Real Estate®

The global outlook for 2017

Based on interviews with the most senior property professionals, the *Emerging Trends in Real Estate® United States* and Canada, Europe and Asia Pacific reports, produced annually by the Urban Land Institute and PwC, are key indicators of sentiment in global real estate.

We have drawn together those regional insights to focus on the most relevant investment and development trends across the globe, the outlook for real estate finance and capital markets, and the long-term influence of megatrends over the industry.

www.pwc.com/emergingtrends www.uli.org

Emerging Trends in Real Estate® is a registered trademark of PricewaterhouseCoopers LLP (US firm) and is registered in the United States and European Union.

© March 2017 by the Urban Land Institute and PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details. No part of this publication may be reproduced in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage and retrieval system, without written permission of the publisher.

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and to the extent permitted by law, the Urban Land Institute and PwC do not accept or assume any liability, responsibility, or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

Recommended bibliographic listing: PwC and the Urban Land Institute. Emerging Trends in Real Estate® 2017. London: PwC and the Urban Land Institute, 2017.

ISBN: 978-0-87420-265-6

Emerging Trends in Real Estate® 2017



