LaSalle

ISA2021

INVESTMENT STRATEGY ANNUAL

Managing Editors

Jacques Gordon
Global Strategist

Richard Kleinman
Head of U.S. Research and Strategy and Co-Chief Investment Officer, Americas

Brian Klinksiek
Head of Europe Research and Strategy and Global Portfolio Strategies

Daniel Mahoney
Senior Investment Strategist

Simon Marx
Senior Investment Strategist

Elysia Tse
Head of Asia Pacific Research and Strategy

Contributors: Research and Sustainability Staff

Petra Blazkova
Mary Burke
Zuhaib Butt
Sophie Carruth
Simone Caschili
Jade Cheong
Amanda Chiang
Ryan Daily
Jake Fansler
Eduardo Gorab
Heidi Hannah
Kayley Knight
Mari Kumagai
Chris Langstaff
Tobias Lindqvist
Frances OseiBonsu
Chris Psaras
Hilary Salter
Kevin Scroggin
Dominic Silman
Sophia Sul
Fred Tang
Dennis Wong
Sabrina Zimmermann

LaSalle Investment Management

Jeff Jacobson
Chief Executive Officer

Julian Agnew
Chief Investment Officer, United Kingdom

Keith Fujii
Chief Executive Officer, Japan

Mark Gabbay
Chief Executive Officer, Asia Pacific

Alok Gaur
Global Head, Client Capital Group

Brad Gries
Head of US Transactions and Co-Chief Investment Officer, Americas

Lisa Kaufman
Chief Executive Officer, Global Securities

Jason Kern
Chief Executive Officer, North America

Philip La Pierre
Chief Executive Officer, Europe

John McKinlay
Chief Executive Officer, Canada

Jon Zehner
Chief Executive Officer, Global Partner Solutions

ISA 2021

The year 2020 has been harrowing. The first half of 2021 is also likely to be very challenging. Real estate owners and operators will continue to be on the front lines coping with the pandemic and its aftermath. Fortunately, the immediate impairment to property income streams is much less severe than initially feared. Unfortunately, the public health ramifications for vulnerable populations and healthcare workers is much worse than predicted in some of the largest countries in the West. Currently, the successful containment of COVID-19 in many of the Asia Pacific countries has not been replicated in either Europe or the Americas.

With vaccine distribution just beginning, it will be many months before inoculations will be readily available to the general public. Our advice is for real estate portfolio managers and investors to hold the course. On the other side of the pandemic lies a landscape that real estate investors will recognize, but it will be different in surprising ways. The strength of the post-vaccine recovery could be one of these surprises.

In Chapter 1, we describe our outlook for the post-COVID-19 economy and what it might mean for real estate markets. The secular trends we follow have simultaneously accelerated and been interrupted. And these trends will continue to morph and affect real estate supply, demand, and performance in unexpected ways. To address these issues, we embarked on a global review of major property types. Our conclusions are summarized in a “Future of” series at the end of the chapter.

ISA2021
INVESTMENT STRATEGY ANNUAL

CHAPTER 1
GLOBAL INVESTMENT OUTLOOK

COVID-19 Economics

The pandemic that descended on the world in 2020 will continue to be an important determinant of the health of national economies and property markets in 2021. A highly synchronized economic collapse, followed by an asynchronous, protracted recovery in many countries, will lead to a wide dispersion of outcomes across major real estate markets. Many industry sectors shut down quickly during the first quarter of 2020. By contrast, a full economic recovery will take much longer than 90 days, and the return to "normalcy" will be diverse in terms of both timing and magnitude. The pace will largely be shaped by public policy decisions, local leadership, and trust in local institutions. These factors will help determine which countries and communities experience a rapid return to a "new-near-normal" and those that lag behind. Eventually, the pandemic will be behind us. For real estate, the post-COVID-19 era will be characterized by a broad range of outcomes, due to the wide variety of response tactics in different countries and cities, and the wide dispersion of returns across sectors.

Public health policy choices are not usually highlighted in the major macroeconomic factors that affect a country's growth trajectory: aggregate demand, capital formation, government spending, and trade.[1] Moreover, fiscal and monetary policies are usually the main policy levers used to guide a national economy that nosedives. In a COVID-19 world, public health directives and measures are central to the length of time it will take to reopen an economy or a property market. These actions, alongside stimulus spending, forbearance directives, and effective public institutions, are all necessary to manage and ultimately control the most damaging impacts of the pandemic on society and on local economies.

Countries where state-guided allocation of capital dominates may hold a temporary advantage over countries with market-driven capital allocation mechanisms. More importantly, countries with strong traditions of collective action and acceptance of central government's influence may have an advantage in controlling COVID-19 relative to nations where traditions of individual freedom supersede government interventions and control.

Many commentators observe that the future course of COVID-19 is unknown or that the virus itself is somehow "in charge." Yet the facts do not support either position. The epidemiological evidence shows a clear pattern—that a high degree of control of the virus is achievable, even without a vaccine. Testing, contact-tracing, adherence to quarantine rules, mask-wearing, hand washing, and social distancing all play critical roles in controlling the spread of the virus during the "living-with-COVID" phase of the pandemic. Prominent among the COVID-19-controlling group are: China, Taiwan, South Korea, Japan, Germany, Finland, Australia, and New Zealand.

In our view, the rising second and third waves of the pandemic will increase the distance between the recovering and partially locked down economies of the world. A series of effective vaccines will be an equalizer, capable of closing the gap between the hardest-hit economies and those whose stricter public health guidelines prevented a destructive second wave. The process of managing the production, storage, transportation, distribution, and administration of a vaccine will take public health organization and skills that have already fallen short in several countries. Experts in the fields of immunology, virology, and epidemiology do not know the specific timing when COVID-19 will be conquered. They tend to agree that efficacious vaccines are well on their way to becoming available and will likely be increasingly available in 2021, and by 2022, most of the developed world will likely have reduced the spread of the virus to very low levels. Thus, investors should maintain a well-balanced real estate investment strategy that anticipates the upcoming "post-COVID-19 era."

THE POST-COVID-19 ERA

Income-earning real estate is directly in the crosshairs of the pandemic. As an asset class, it is positioned along the front lines dealing with changes in mobility, social distancing, and the way that society interacts with the built environment. The dispersion of returns during 2020

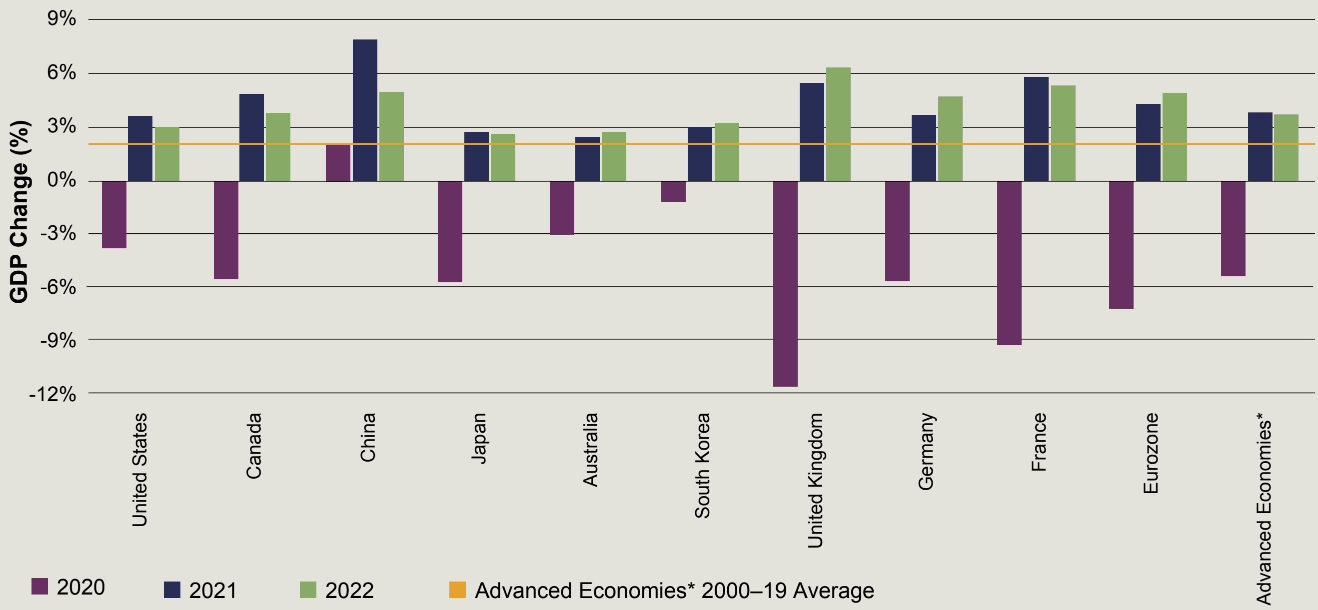
Kierland Village Center, Scottsdale, United States

1 The generalized macroeconomic equation: C+I+G+X-M is used all over the world to estimate gross domestic product, where C denotes consumption, I denotes investment, G denotes government spending, and X-M is the difference between exports and imports.

Sharp Decline in 2020, Followed by Strong Recovery in 2021–22

GROWTH RATE FORECASTS WELL ABOVE THE 20-YEAR AVERAGE

Global Annual GDP Projections



*Aggregation based on Oxford Economics country classification: services.oxfordeconomics.com/api/definitions/WDMacro/GlobalMacroEconomicDatabank.pdf.

Source: Oxford Economics forecast, most recent as of December 1, 2020.

reached record levels in both the listed and unlisted sectors, as some property types thrived (data centers, logistics, life sciences) while others were impaired (hotels, regional malls). The post-COVID-19 economic recovery is likely to include some unexpected surprises as the balance between permanent and temporary changes gradually emerges.

Real estate markets will slowly revitalize as COVID-19 eventually succumbs to a combination of vaccines, therapies, improved testing, and adherence to public health guidance. This transitional process will include adaptations, accelerated changes, and risk re-ratings that have all taken place during the pandemic. Shifts such as the rise of remote working, e-commerce extending to groceries/food, just-in-time delivery, just-in-case logistics, a focus on indoor air quality, touchless sensors, and heightened public health awareness are among the many pandemic-induced changes that are unlikely to disappear.

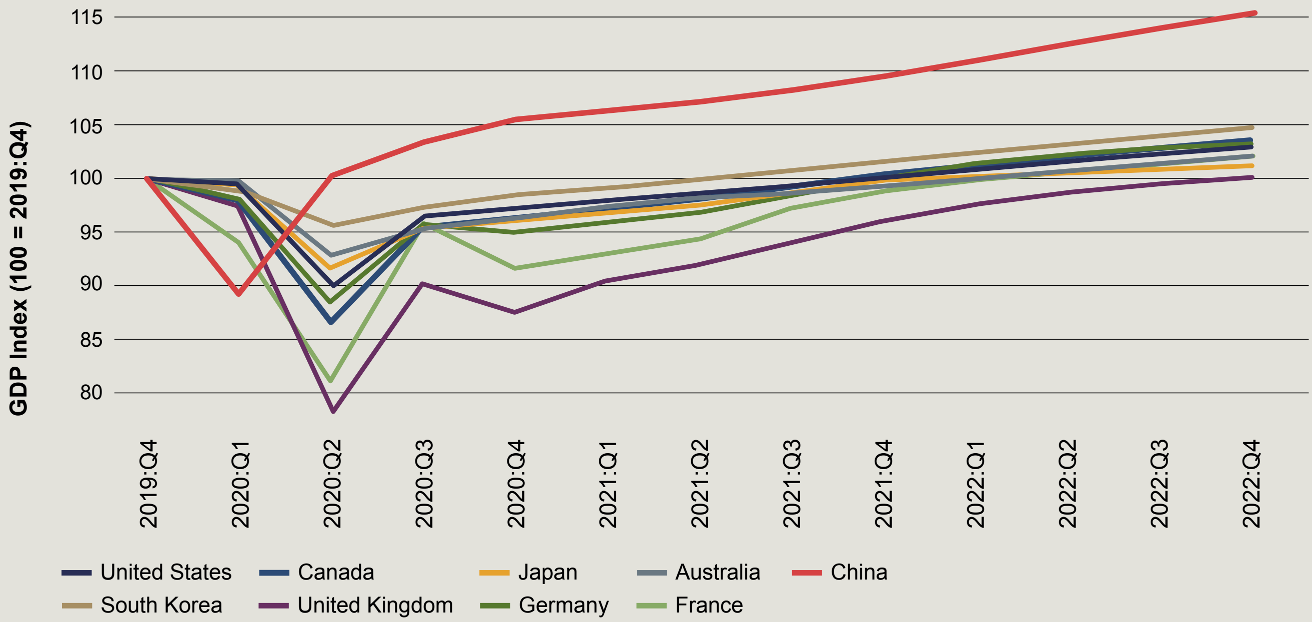
Real estate investors should be aware of the importance of state-led versus market-led success in fighting COVID-19. However, real estate portfolio managers should not overreact to a temporary reliance on stimulus spending or expect that state-sponsored subsidies will continue indefinitely. Private equity real estate investors need to take a longer view than just the next 12 to 18 months. The market-driven approach will almost always lead investors to more vibrant and innovative local economies than those dependent on government largesse. As the COVID-19 threat diminishes, real estate investors seeking outperformance should target local economies that value planning for resilience (ULI video), but also acknowledge the importance of market forces.

The chart above shows that the economies that have fallen the most during the pandemic are also likely to rebound the most, including Canada, the U.K., and France. However, GDP charts, based on annualized rates of change can be misleading. An economy that fell 10% due to the pandemic needs to rebound by 11.1% just to get back to where it was before. The Chinese economy, which experienced a brief contraction in 2020:Q1, will continue to surpass previous economic levels throughout 2021. Another way of showing when various countries are likely to replace the GDP they lost during the pandemic is shown in the chart GDP Lost During Pandemic on page 6. This way of looking at the data shows that some countries in the developed world may not regain their lost economic production until late 2022 or early 2023 (e.g., the U.K. and Italy), while others will replace lost GDP by early 2021 (South Korea) or toward the end of 2021 (the U.S.).

Nevertheless, with central banks pumping liquidity into the asset markets, real estate asset pricing can be expected to continue its upward trajectory, provided that income streams are perceived to be secure. This important proviso will be the litmus test between sectors that are out of favor and those that are not. Tenant income from the favored sectors will get discounted at lower rates than pre-pandemic levels, even though the credit worthiness of tenants may not have shown much improvement. Income from out of favor sectors will get discounted at higher levels, even if some of that income is from reliable

GDP Lost During Pandemic Gradually Replaced by 2021 to 2022

GLOBAL GDP PROJECTIONS: OXFORD ECONOMICS



Source: Oxford Economics forecast, most recent as of December 1, 2020.

sources. This paradox is due to the shift in risk perceptions and realities as a result of the pandemic. Certainly, some of this risk shift is justified—our income growth forecasts for both office markets and shopping centers have fallen sharply. But, the shift could also lead to interesting investment opportunities (and perhaps mispricing) in the years ahead, as investors extrapolate temporary pandemic conditions to the post-COVID-19 era.

In sum, a COVID-19 under-control economy will not behave the same way as a locked down economy, or an economy with high and rising infection rates. It also will not look exactly like a pre-pandemic economy. Secular trends like remote working and e-commerce are accelerating and new disrupters like telehealth and virtual classrooms have become ubiquitous. The key to understanding the future progession of economies and property markets in the years ahead will be to understand and distinguish between temporary, pandemic-induced behavior and permanent or secular shifts in spatial preferences. Consequently, we believe it is wise to revisit the "DTU+E" secular investment trends (demographics, technology, urbanization, and environmental factors) we identified years ago, which will help shape the recovery in the post-COVID-19 era in many countries.

DTU+E Revisited

Investing alongside long-term, thematic trends can, over time, contribute more to positive investment performance than trying to time shorter-run cyclical changes. Yet, timing and pricing also matter as every thematic trend can get over-priced. The 2000–01 tech wreck is an extreme example of how strong thematic trends became dramatically overpriced and capital was allocated indiscriminately, which led to a lot of capital destruction. Twenty years after the tech wreck, Internet-based commerce continues to be a powerful secular trend. Yet, the dot-com boom illustrates the dangers of a gold rush mentality where any secular trend can get indiscriminately over-priced. The premise behind our focus on secular themes is that the likelihood of strong performance improves when these trends act as a tailwind to an investment strategy, rather than a headwind. The acronymic watchword must be GARP, or "growth at a reasonable price."

Currently, a plethora of secular changes can be identified in the capital markets, in politics, and in many spheres of society. For 2021, our view continues to be that the four DTU+E trends are particularly powerful for real estate investors. These trends interact with each other and strongly influence which cities and property types will prosper because, taken together, they are primary drivers of the demand for real estate.[2] However, these trends also constantly change, especially as the supply side responds or when they occasionally get interrupted or reversed, as during the pandemic. Most importantly, once these trends are identified, they tend to quickly get fully priced in both the

2 It is certainly plausible that one or more new secular forces could rise to the level of these four. Just as we added "environmental factors" to the original DTU triumvirate several years ago, other recent trends could be added in the years ahead. The ones we are watching closely include health and wellness, social justice movements, rising inequality of wealth/income, rise of nationalism/populism, and trust or distrust in institutions like government or large corporations. While each of these trends are already very important for society, the question is whether any of them rise to a level that directly shapes real estate markets in the years ahead.

private equity and listed sectors of the investment markets. Investors can outperform the broader market by anticipating how and when these secular trends will shape real estate markets. It is through the process of moving from an incipient or unrecognized trend to one that is broadly accepted that investors will thrive.

In Chapters 2 and 3, we utilize our "fair value" models, which are driven in part by the ultralow interest rates shown in 10-Year Risk Free Rates on page 8, to identify how the DTU+E trends can drive outperformance in 2021–23. Below we recap how these trends are likely to change at the global level.

DEMOGRAPHICS

Human populations are the ultimate driver of all real estate demand. Changes in age structure, socioeconomic status, household composition, ethnicity, and mobility all play important roles in investment strategy and outcomes. Demographic analysis feeds into both the microanalysis of specific districts and the top-down trends across countries. For real estate investors, the cohorts to focus on shift constantly, depending on the targeted product type and how societal attitudes react to major events and economic forces. The current pandemic is a striking example of why demographics are so important for real estate.

Readers will see many references in this year's *ISA* to the ways that demographics are affecting real estate demand: aging societies, movement of millennials to less-dense suburbs, reductions in international travel, increases in domestic travel, and the effect of COVID-19 across the globe.

The secular drivers of real estate demand 10-15 years ago focus on the rebirth of cities, as well as millennials and empty nesters attraction to urban living. Analysis of the demographics of real estate demand for the next 5-10 years should include several new angles:

- The aging of millennials as they enter their 30s and many start families.
- The aging of the baby boomer generation, as they either retire or participate in the labor force longer than previous generations.
- The shifting locational preferences of white collar workers of all ages in some markets, especially when the working from home (WFH) trend continues in the post-COVID-19 era.
- Demographic-driven changes in historic commuting patterns and residential choices are also likely, even after the pandemic is controlled.
- The growing disparity of incomes and wealth within cities and the subsequent pressures on the fiscal health of specific municipalities.
- The way that COVID-19 or climate change affects age and occupational groups differently.
- The ripple effects of climate change on human habitats, creating international pressures to migrate from at-risk regions and putting entire cities at risk (see Climate Risk Analysis Moves into Investment Processes sidebar on pages 24–25).

TECHNOLOGY

A series of industrial revolutions have occurred and each one has been built on the inventions and innovations that preceded it. Scientific, engineering, and entrepreneurial talent came together to create the first industrial revolution in the early 19th century (steam/water), the second at the turn of the 20th century (electricity/internal combustion), the third (computers/information technology) in the post-war 20th century, and now the fourth (digital) revolution.[3] In this fourth industrial revolution, the lines between the physical, digital, and biological spheres are blurred. It brings the digital power of algorithms, data science, IoT, mobile communications, neural networks, and robotics into virtually every aspect of human life. This fourth wave of technology has been building for several decades, yet the pace of change and disruption that accompanies these new technologies is still accelerating. If anything, the pandemic gave these mobile, cloud-based technologies an even faster boost along their adoption trajectories.

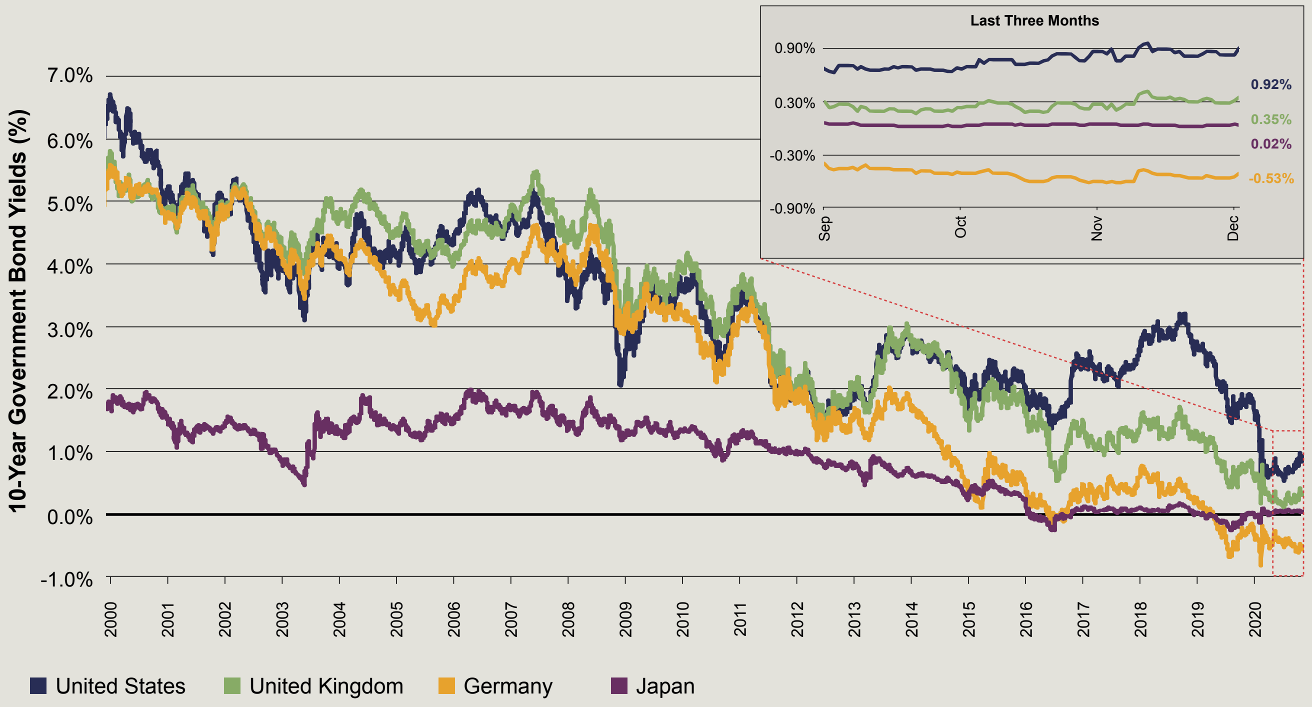
The impact of the Digital Revolution on real estate is readily apparent. International office leasing statistics over the past five years show that in nearly every country,

222 Exhibition Street, Melbourne, Australia

3 Klaus Schwab, the Founder and Executive Chairman of the World Economic Forum, coined the term "fourth industrial revolution."

10-Year Risk-Free Rates at Ultralow Levels

RATES ACROSS ADVANCED ECONOMIES HAVE CONVERGED NEAR ZERO



Sources: Bloomberg and LaSalle Investment Management. Data through December 1, 2020.

technology companies are the leading source of net absorption. Even industries not typically classified as "high technology" are part of this digital wave, including banking/ commerce (fintech), healthcare (telehealth, wearables, AI), manufacturing (3D printing, robotics, augmented reality), pharmaceuticals (life sciences, nanotech, genomics), and real estate and construction (proptech, ER,[4] digital twins). The secular trends that underlie all these technologies often start with basic science, and then take advantage of advances in chip processing power, miniaturization, cloud computing, and 4G (now 5G) communications to bring data analytics to new levels. How the new technologies impact the way that buildings are used will likely become a major theme in the post-COVID-19 era.

Advanced technology brings with it new challenges, especially in the areas of cybercrime, privacy protections, regulations, and "winner takes all" economics. Nevertheless, technology adoption generally occurs in a "path of travel" that moves in an upward-only direction, with advances in one discipline leading to advances in others. The built environment is also likely ready for an accelerated burst of technological improvements as ubiquitous broadband, well-building attributes,[5] and sensors that measure the intensity of building usage and energy efficiency all move to the forefront of how buildings will be evaluated in the future.

URBANIZATION

Of all the secular trends, urbanization[6] is positioned to undergo the most changes: some temporary, some permanent, and many unknown. For centuries, there have been secular trends that dominate human settlement patterns: 1) a rural to urban shift particularly in emerging markets; and 2) rising density in the urban core[7] in both developed and developing markets. These twin trends will continue to favor the growth of dynamic metropolitan areas with diversified economies capable of attracting pools of talented workers. However, in the post-COVID-19

4 Extended realty includes virtual, augmented, and mixed realty technologies.

5 Well-building standards include performance-based systems for monitoring features of the built environment that impact human health and well-being, through air, water, nourishment, light, fitness, comfort, and mind. See: www.wellcertified.com/about-iwbi/.

6 The concept of urbanization is often misunderstood as applying only to dense urban cores. Yet urban economists and geographers understand that "urbanization" applies to the entire range of human settlement patterns in metropolitan areas, including the city center, the urban fringe, suburbia, and even ex-urban nodes that are part of a regional "metroplex."

7 In 2020, this trend reversed as urban residents in Europe and North America fled high-density neighborhoods in the most expensive cities for suburban enclaves or small towns. Time will tell if this trend is temporary or permanent. In many countries, the mixed-use densification of the urban core (including residential, hotels, and offices) took off in the mid-1980s. Because large building sites were hard to find, densification often expanded to include the urban fringe (La Defense, Canary Wharf, Battery Park City, Yokohama, Roppongi Hills, Pudong), a trend that continues to this day in Hudson Yards (New York City), Barangaroo (Sydney), and Stratford (East London). In Asian and North American metros, the trend toward higher density occurred simultaneously in urban cores, in suburban centers (e.g., Belleview, Wash., Bethesda, Md., Mississauga, Ont.) and in satellite cities (e.g., Qingpu or Jinshan outside Shanghai or Incheon and Suwon outside of Seoul). A recurring series of pandemics could conceivably reverse the international densification trend, but this seems highly unlikely.

era, some of the very largest, most expensive, and densest cities could be at risk. Nevertheless, the raison d'être of cities will endure long after COVID-19. These include agglomeration economies that accrue to synergies from co-location and proximity to anchor institutions (e.g., stock exchanges, governments, courts, universities, and cultural assets); deep networks of support services that draw on accounting, advertising, legal, and software talent pools; and geographical advantages from proximity to airports, deepwater ports, and other transportation or broadband networks.

A collection of "genie out of the bottle" arguments can be used to make a case against the largest and wealthiest "gateway cities." These include the footloose nature of top talent in an Internet-connected world, the high cost of living in these gateway cities, recognition that "work from anywhere" strategies can be used alongside a traditional "headquarters," leading to a hybrid virtual/actual collaboration model, and a lingering COVID-19 stigma that could create a long tail of aversion to crowded, transit-served central business districts. Only time will tell how long it will take for a "decay function" to mitigate the bad memories of waves of European and North American mismanagement of the pandemic. In the meantime, the gateway cities of Asia Pacific, including Beijing, Shanghai, Seoul, Sydney, and Taipei, have had early successes reopening, so the positive agglomeration effects evident in these cities may point the way to how any remaining stigma from the pandemic could eventually be overcome.

There are significant differences in each country's cultural and urban planning responses to COVID-19. In auto-centric metros (e.g., the Sunbelt United States, Western Canada, and parts of Germany and Australia), suburban nodes could outperform if they have a sufficient number of amenities and transportation networks to attract the best talent and top technology firms. As we discuss in The Future of Office Properties sidebar on pages 13–16, one of the most valuable features of the modern workplace is the opportunity for face-to-face collaboration, learning, and innovation. A suburban office building will need to provide a stimulating environment and plenty of serendipitous interaction for these functions to occur—not an impossible task, but one that has not been a strong suit of many stand-alone, low-density office parks. At the same time, it may also require a massive public relations effort for urban density to return to its former status as a preferred environment for working and living. In countries with a strong transportation network, the sunk costs of infrastructure will likely induce local governments to do all they can to get commuters back on trains. In any event, the tilt away from crowded central business districts is inevitable at least until 2022 (with the exception of many Asia Pacific cities, such as Shanghai), as employers and talent pools adjust to new workplace strategies. Ultimately,

Ocean Gate Minato Mirai, Yokohama, Japan

Logiport Beijing Tongzhou, Beijing, China

high-density locations will rely on the success of the largest science project in the history of the world: The development, mass-production, and deployment of a collection of effective COVID-19 vaccines.

ENVIRONMENTAL FACTORS

We added the “E” factors to the original DTU trio several years after we selected the other trends. Sustainability issues in energy consumption (heating, cooling, and waste management), construction and refurbishment (reducing carbon dioxide emissions during these activities and using environmentally-friendly building materials), and the risks of climate change alongside building wellness attributes are important considerations for occupiers, investors, lenders, and insurers of the built environment. This rising awareness is occurring despite setbacks in U.S. environmental policy under President Trump, a rising awareness that energy conservation and COVID-19 safety in buildings are not always aligned,[8] and a tepid response to environmental issues in some of the largest emerging markets (e.g., Brazil, Russia, and several Middle East countries).

Nevertheless, since we adopted environmental factors as our fourth secular trend, the environmental, social, and governance (ESG) awareness of institutional investors has expanded, the improvement in measuring energy usage in buildings has led to significant improvements in reducing carbon dioxide emissions, and net zero carbon pledges have been embraced in a number of jurisdictions where LaSalle does business. All of this suggests that environmental factors have gained traction as a secular trend, and the environmental movement has expanded to include “wellness in buildings,” social and racial justice, local community support, and other precepts of impact investing[9] that have been added to the emphasis on energy conservation and decarbonization.

The next phase in analyzing what impact these environmental factors have on real estate investments includes understanding the future of climate change and anticipating how higher insurance costs will influence building operations. The risk management industry is paying close attention to where climate risks like flooding, wind damage, heat, drought, and wildfires can be spread across an actuarially-sound base of assets and where they cannot. Data from climate risk models have become more readily available. The rising cost of insurance is not the only issue; the availability of insurance is also likely to become an issue for investors and lenders. Banking authorities and insurance regulators have already added climate risks to the stress tests they use to assure the long-term solvency of the institutions under their supervision. As time goes by, investors should expect that climate risks will become quantified and integrated into the cost of financing properties (see Climate Risk Analysis Moves into Investment Processes sidebar on pages 24–25).

8 Examples include higher levels of energy required to push air through the highest-rated air filtration systems, or the use of patio heaters to expand restaurants to outdoor spaces.

9 See “Impact Investing in the UK” May 2020, LaSalle Investment Management white paper.

60 London Wall, London, United Kingdom

Regional Headwinds and Tailwinds

When it first surfaced, the new coronavirus did not respect national borders, trade treaties, or the wealth of nations. As 2020 unfolded, public health responses to COVID-19 played an enormous role in the economic resilience or damage sustained by each country. In 2021, the IMF, OECD, and Oxford Economics all expect to see the widest swing in global GDP since 1945. This swing is projected to be 9% to 10% between the 2020 “pandemic” recession (-4.4%) and the 2021 “vaccine” recovery (+5.2%).[10] This economic revitalization, however, will likely play out quite differently around the world. Below is a brief summary by region of what we expect in 2021.

ASIA PACIFIC

Future epidemiologists will note the amazing cases of China and South Korea’s resistance to COVID-19. Together these countries constitute 50% of the region’s GDP and thus far they have the lowest infection rates of any of the larger countries. Including Australia, which also kept its infection rate quite low in comparison to the West, nearly 70% of the region’s GDP enters 2021 with economies well on their way to resuming full capacity. In addition, the Regional Comprehensive Economic Partnership (RCEP) agreement will bring 15 Asia Pacific countries into the world’s largest trading bloc, representing 30% of global GDP. The RCEP will eliminate about 90% of all tariffs within the bloc within 20 years. All five of LaSalle’s key Asia Pacific markets are signatories: China, Japan, South Korea, Australia, and Singapore. The RCEP is expected to accelerate regional integration and reinforce the development of domestic and intra-regional growth to benefit real estate demand going forward.

The headwinds that the region faces are the same ones that have been around for at least the past four years—the volatile state of U.S.-China trade relations, aging populations in North Asia, and the rising levels of government debt in Japan and of corporate debt in China. Currently, both countries can afford to carry this debt due to favorable current account balances in both countries and low interest rates in Japan. We expect the economic outlook for Asia Pacific to remain bright, as intra-regional trade grows and dependency on export markets in the West shrinks.

EUROPE

Europe’s pandemic experience and its impact on economic prospects for 2021 is an exercise in “compare and contrast.” Like a tough final exam question that has no right answer, summarizing the complex outlook for Europe is no easy task. While most major European countries were hit early and hard by the pandemic, their recovery trajectories since have been highly varied. Divergences in economic performance have gapped out, with differences mostly explained by countries’ varying economic structures, public health situations, and economic policy responses. Rates of recovery in 2021 will likely be steeper for the harder-hit countries (the U.K., France, and Spain). In terms of output levels, they will still lag countries that

10 Source: International Monetary Fund estimates, November 2020.

Mason Mill Distribution Center, Atlanta, United States

had greater success in managing the pandemic balancing (e.g., Germany and the Nordic countries).

Brexit has taken a backseat to the pandemic, but much uncertainty remains as to the U.K.'s trading relationship with the European Union. However, the European story is not just about the region becoming more fractured, as there are unifying factors as well. Strong leadership at the European Central Bank managed a robust monetary response across the eurozone. A precedent-setting agreement for mutual borrowing to fight the pandemic's fallout raises the (previously remote) prospect of closer ties within the EU. Despite its clear challenges, Europe's long-run prospects will come down to its robust stock of human capital, a portfolio of strong companies, and dynamic cities that attract investment, migration, and tourists from the world over.

NORTH AMERICA

By almost all measures, the U.S. has mounted a disjointed and lackluster response to overcoming the COVID-19 pandemic, with more cases, a more consistent level of cases, and more deaths.[11] Relative to other nations, the U.S. has clearly performed poorly in containing the pandemic. The approach of some in the U.S. enabled a higher level of economic activity. However, economic forecasts are being dialed back to account for the "third wave" of infection this winter. At first, Canada coped better with the coronavirus, drawing on its experience with SARS. However, Western Canada has been hit hard by the collapse in energy prices and COVID-19 cases are rising across the country in a pattern similar to the U.S.

Both countries face a difficult winter in dealing with the pandemic and the renewed restrictions on travel, restaurants, and gatherings. They are both positioned well for a strong recovery if effective vaccines provide a path to control COVID-19. Both markets also have strong structural tailwinds, with Canada driven by a well-organized system of immigration and rich natural resources, and the U.S. supported by strong leadership in the thriving technology and biotechnology sectors. The upcoming presidential change in the U.S. is fueling optimism that an organized approach to vaccine deployment and a return to global cooperation on the part of the U.S. will also enable 2021 to be a year of strong economic recovery.

The pandemic opens up opportunities, just as it interrupts many others. At LaSalle, the events of 2020 gave our global research team the opportunity to focus on the major sectors that have traditionally formed the backbone of a real estate investment portfolio. With a global crisis like the pandemic, it suddenly became clear that mainline property types were responding differently. And, at first, these differences were even greater between sectors than they were between different geographies. This prompted us to spend the past five months exploring the "future of" each sector and to try to separate temporary from permanent changes that each sector has been undergoing. The conclusions of this global review are summarized in the following pages.

11 Source: The World Health Organization.

The Future of Office Properties

Office investing in the post-COVID-19 era comes down to having a view on the outlook for demand and if the risks on that demand outlook are fairly priced in the capital markets. A global perspective brings insights that might be lost if only one or two office markets are examined. In our review of major office markets around the world, it is clear that demand will be negatively impacted by firm and worker experiences during the pandemic, but there is large variation based on industry, location, asset type, employee base, and market. There are two elements to this negative impact: 1) the cyclical impact of a global recession; and 2) potential secular changes from more remote working and how much space is needed per employee in the office. The extent to which any negative demand impacts rents and values depends on other factors as well, such as supply growth and the strength of fundamentals entering the downturn.

Past cycles show how office rents become volatile as demand falls due to tenants who are eager to save money in a downturn. Landlords respond by offering aggressive concessions like free rent to lure tenants as many more options become available to tenants. Then, as the economy recovers, office demand returns, available space becomes more limited, tenants become less rate-sensitive, concessions disappear, and rents recover. The cyclical strategy to acquire assets at pricing based on depressed rents and/or occupancy has often delivered attractive returns for office investors. Cyclical recoveries have been supported by the long-term growth of industries and activities that use offices, such as business services and technology. The amount of office space per capita increases with economic growth, as tenants commit to expansion space, so long-term economic growth is a double tailwind for the office market.

STRUCTURAL CHANGES

The impact of more remote working and the rising need for flexibility among tenants complicates the demand outlook today. There is ample debate on this, and the data on what the future might hold are limited. The lines of debate are clear. Those who believe office demand will decline emphasize that remote working is a productive, positive lifestyle change for many employees, and it can reduce office space costs for firms. Those who believe office demand will be sustained argue there is value in having employees together in the office and many employees and firms are realizing that remote working on a permanent basis may be suboptimal for building culture, innovation, and training new employees.

In what we label as “Phase 2” or “living with COVID-19,” there are safety concerns about being in the office, restrictions on how offices can be used, and challenges with safely getting to offices. We expect these will dissipate in Phase 3 “COVID-19 under control” and behavior while the pandemic is raging may not be indicative of future behavior. The value of the office comes from bringing employees together. When infection rates are high, this face-to-face collaboration is limited by split staff rules or conference room restrictions. This limits our ability to use current behavior to guide an outlook on the post-COVID-19 era. This lack of clarity is consistent with tenant behavior, as firms seek short-term renewals and leases to preserve flexibility for a future where they do not know what their space usage or demand will look like.

Within this broad debate there are important nuances:

- **Impacts will be at the margin:** The demand for office space does not have to “collapse” for there to be an adverse impact on occupancy, rents, and values. If some workers are in roles that can operate remotely on a full-time basis and they are eager to do so, then space requirements can be reduced. Even a 5%-10% decline in demand could create a period of elevated vacancy. In this scenario, the secular headwind could extend the time to recover to five or ten years or even longer depending on the strength of the secular headwinds, the rate of economic growth, and any changes in supply.

- **Timing matters:** In countries where office leases are long and it is not easy for tenants to sublease excess space, a temporal mis-match problem arises when occupier needs change faster than the term of the lease. This mis-match creates a burden for office tenants and may make more of them reluctant to enter into long-dated lease contracts. This slow pacing of change means structural headwinds will have an extended impact rather than an immediate, large short-term impact. This delay then interacts with the cyclical demand decline and eventual economic rebound. These interacting time dynamics have implications for office space demand, market rents, and asset cash flow.

- **Office space needs are driven by peak demand, not average capacity:** Not all levels of remote working have the same, or even any, impact on office demand. For example, not requiring office attendance on Fridays to provide some flexibility to employees should not impact the amount of office space a firm requires. Office space usage schemes, such as hoteling or hot-desking, which enable employees to “share” desks are needed to reduce space needs for part-time remote working schemes. However, these require scheduling employees for days in and out of the office and thus reduce the value of the office as a place for employees to connect. As we model the impact of remote working, we need to make important assumptions about how many days people are in the office and what level of desk sharing is implemented for different groups.

- **Market, employee, and tenant differences impact the return to the office:** Remote working is more appealing where workers are dealing with longer commutes and have more space at home to work. Culture is also a factor, with some societies, companies, and even departments having a culture that focuses more on being in the office, while others are more comfortable with remote work. Life stage also matters, with early and later career individuals most eager to be in the office, while mid-career individuals, often with young children and competing family demands, may find the appeal of being at home relatively greater.

Office density is the other important secular trend to consider. Prior to COVID-19, density has been a secular headwind as firms moved employees out of private offices and into denser, open-office configurations. Even before the pandemic, densification was stalling or starting to reverse. Firms faced an employee backlash and were starting to reduce density to provide a mix of private and collaboration spaces for employees to work most efficiently. With the pandemic, preserving health has become part of the consideration as well. Many offices are too dense for full occupancy as long as limiting the spread of COVID-19 is a priority. It is uncertain whether health concerns will impact office density targets when the pandemic is controlled, but it seems wise to adjust our demand models to take into account a lingering aversion to high-density workplace environments.

The combination of secular headwinds, cyclical impacts, and investor wariness concerning the future of the office market could lead to significant value loss. While this threat is apparent, among those most knowledgeable about the dynamics of the office market it can be hard to disentangle who is “talking their book” and who is providing an honest view based on thought and analysis. Too often, office owners see only one side of the debate, while others (often in the media) paint doomsday scenarios on the death of the office. As is often the case, the reality is likely to be somewhere in between. Office occupancy advisors, such as tenant rep brokers, architects, and real estate consultants, sometimes paint an image of a future office that is a

KONTOR, Berlin, Germany

radical break for a property type that has historically experienced incremental, not revolutionary, change. Among real estate investors, there is a temptation to look at what is occurring in retail and judge it is better to over-estimate negative secular trends and avoid office investment entirely.

While much remains uncertain, with variations by region or market, we aim to be clear about our current outlook for the office market:

1. **Office investment is higher risk than pre-pandemic. And compared to other property types, investors should be compensated for that risk shift with higher returns.**

   a. Secular headwinds are difficult to forecast precisely and create elevated uncertainty on future, aggregate demand. More uncertainty manifests itself as higher risk.

   b. Asset-specific features that tenants will value highly in the post-COVID-19 era are still largely unknown. Until employees return to the office and the pandemic is contained, we do not know for certain whether electrostatic air filters, windows that open, no-touch sensors, or other building “wellness” programs are going to make a difference in space selection. This lack of knowledge is another risk element.

2. **Secular shifts to office demand are tilted towards the downside.** As we estimate the impacts of remote working and employee density, we believe it is likely remote working will outweigh any benefits from lower density. This means demand forecasts are lower than a pre-pandemic outlook, even absent cyclical dynamics.

3. **We expect secular shifts to drive a slower cyclical recovery, rather than an extreme spike in vacancy.** Secular changes to office usage will be phased in over time. This will lead to a slower recovery as some firms resize their leased space while others expand as their business goes through a cyclical expansion. These timing dynamics lead to a forecast not of an extreme increase in vacancy during the crisis, but a slow recovery from a near-term cyclical increase in vacancy rates.

4. **Tenant location preferences unchanged from pre-pandemic.** The value of the office comes from collaboration. Putting parts of teams in different offices diminishes that value. As more people work remotely, this collaboration value of the office becomes even more significant. This will sustain demand for centrally located offices, which are often transit accessible. There will be growth in out-of-town/suburban coworking, but this is a complement to remote working and is not expected to create a sustained, significant office investment opportunity.

5. **Modern buildings will outperform older buildings.** It remains uncertain what office attributes will make a difference to tenants. It is likely that ventilation and touchless building systems will be new items on tenant checklists, and modern buildings have more system flexibility to meet tenant needs. We believe amenity space will remain of value, even if the uses of that space may evolve. Another dynamic is that higher paid/higher value-add employees are more likely to maintain their current office space, and they are more likely to be in modern buildings. This does not mean that all older buildings are doomed, but they will need to meet the needs of higher-end tenants, which includes amenities, such as high-quality air filters and HVAC systems. The net result will be higher capital expenditures when underwriting older and some newer buildings.

6. **Flexible office demand will be sustained.** The shifting ways that tenants are using offices should enable sustained growth in flexible office space. This might not be the dense coworking operations of the past, and the economic model is likely to change as well.

7. **Tenants that draw demand from office workers will likely be impacted.** The fact that office space needs are driven by peak demand, not average demand, does not help businesses like fitness centers, restaurants, parking, and other services that depend on office occupancy. We expect broader adoption of flexibility in remote working than in moving to full-time remote working. The implication is that in the post-COVID-19 era, there will be fewer workers buying lunch near their offices, fewer people taking transit or needing parking spaces each day, and less need for some workers to live close to their offices. This implies changes that might impact adjacent real estate and office building cash flows tied to retail or other business services, like banking.

GLOBAL SIMILARITIES AND DIFFERENCES

At real estate webinars and virtual conferences, the "future of office" has become a favorite topic. In our view, commentary on the "death of the office" or "things will soon be back to normal, just as they were after 9/11" both miss the point. A structured, data-dependent approach to tracking the future workplace is essential. The performance of office markets in different countries will vary greatly depending on the adoption of remote working practices and the underlying dynamics of cyclical office demand. Post-pandemic, we expect a greater move to remote working in markets like the U.S., where residential living space is larger. In some European cities, especially London, the adoption of remote working seems to be driven more by commuting challenges. In Asia, there is a strong cultural push towards spending time in the office. This is supported by the fact that many workers in Asia, where COVID-19 containment is advanced, have already returned to the office. Houses and apartments in major Asian cities also tend to be smaller, which makes working from home more challenging. Continental Europe cities are between U.S./U.K. and Asia, with shorter commutes that make working in the office less challenging. Design formats, like operable windows and semi-private offices, also make the office environment safer and user-friendly.

Across all markets, long-term growth in office jobs will eventually counter any structural headwinds. Here again, Asia is well-positioned where many markets, especially in China, are growing fast. North America is diverse, with faster growth in Sunbelt markets in the U.S. and immigration driving growth in major Canadian cities. Meanwhile established U.S. markets are likely to experience slower growth. The U.K. faces near-term growth challenges associated with Brexit that could be compounded by cyclical economic factors. Many markets in Continental Europe and Japan are also experiencing slower growth due to mature economies and limited population growth. In these mature markets, other factors, such as shortages of modern office stock and competition for talented workers, are expected to drive balanced office fundamentals.

The key factors that differentiate markets and guide toward the relative long-term demand outlook are

International Comparison of Office Demand Risk Factors

POST-PANDEMIC WITH EFFECTIVE VACCINES WIDELY AVAILABLE

Risk Factors	Commute Time	Safety/ Trust*	Living Space Size	Collaboration/ Innovation	Office Demand Growth	Cultural Factors	Return to Office Progress	Overall Risk
Description → Market Segment ↓	Longer commutes increase appeal of remote working.	Physical risk (elevator rides, windows that do not open) and trust in landlords, employers, govts, and colleagues to help keep them safe.	Larger living spaces make remote work more appealing.	Markets with employees focused on innovation or collaboration activities that benefit from being in an office.	Long-term demand growth counters structural headwinds.	Cultural expectation for employees to be in the office.	Metric of how much return to office has been achieved.	Comparison of greatest and least structural risk.
U.S. Major CBDs								
U.S. Sunbelt Suburban								
U.K. / London								
Continental Europe								
Australia Major CBDs								
Japan (Tokyo 5-Ku)								
China (Shanghai CBD)								

Assessment of Demand Risk Factors — Low Risk to Demand — Moderate Risk to Demand — Elevated Risk to Demand

Note: Safety/Trust captures the physical risk of being in an office, such as long elevator rides in high-rise buildings and windows that do or do not open. It also captures the trust elements of safety, such as if employees tend to trust landlords, employers, governments, and colleagues to do things that will keep them safe.
Source: LaSalle Investment Management.

summarized for some major global office market segments in the table International Comparison of Office Demand Risk Factors above.

OFFICE INVESTMENT IMPLICATIONS

Even in the hardest hit markets, we do not expect office properties to follow the path of retail, with many assets permanently impaired. After a strong rebound in office REIT pricing, following positive news on vaccines, the public market is still pricing in a more severe decline than we expect to see in the private market (as of late November). In the private market, office pricing should adjust downward to account for the higher risks in office investment. This implies a price decline for offices, but not a price collapse. Before the pandemic, we already saw headwinds for office investment in many markets stemming from higher volatility and rising capital expenditures, but some investors and market pricing seemed to overlook those challenges. Meanwhile, the office sector was often an attractive value-add strategy due to the opportunities to sell to buyers who underestimate those challenges. In markets like Tokyo or Western Europe where new supply is more constrained, under-managed older buildings still represent an upgrade opportunity. However, a re-rating of office risk due to a combination of secular demand change and gradual acknowledgement of the chronic capex drag on cash flow from office buildings is likely to raise discount rates and required returns, and therefore erode office pricing from pre-pandemic levels.

The more impacted assets are going to be those with existing vacancy and near-term lease roll because of the impact near-term demand headwinds will have on income. The most insulated investments are going to be those with long-term leases to credit tenants. These assets are positioned to continue to provide a stable income return through a period of depressed demand and rents. There could still be a valuation re-rating from lower market rents, but the value of stable income is increasing across all assets. Specialized office space, such as medical office and life sciences space, also should perform better because of a better demand outlook. The traditional core office asset with a diversified lease roll will sit between these two extremes. And as with any market shift, there is the potential for mispricing that could create investment opportunities. ■

The Future of Retail Real Estate

For nearly 50 years, shopping centers have been one of the core holdings of an institutional real estate portfolio. In 2021–23, retail properties will face many challenges, including the reinvention of stagnating assets. Digital disruption and changing consumer habits were placing considerable pressure on brick-and-mortar retail prior to COVID-19. The pandemic has also significantly impacted the sector, with social distancing measures and the weak economic climate accelerating many of the structural changes already in motion. The fallout from the pandemic is uneven across retail segments; for example, while sales are up at grocery and home improvement stores in many countries, they are down sharply for restaurants and apparel.

RETAIL PROPERTIES STAND OUT FOR THEIR HETEROGENEITY

While all developed markets are home to significant inventories of various types of retail properties, each country has a distinctive approach to the configuration of shops, restaurants, and larger stores. Retail warehouses, which is terminology not used in the U.S., is the largest retail subtype in the U.K. Even terms like "out-of-town shopping centre" and "high street" have different meanings in each country. With the pandemic hitting retail so unequally, these subtypes provide useful shortcuts to understanding institutional investors' exposure to retail. These are summarized in the chart Index Allocations to Retail for three major countries with highly transparent investment indices. The differences between them are illuminating, even though the different naming conventions make comparisons challenging.

At LaSalle, we have dug one layer deeper to analyze tenant mix, which is especially useful when comparing exposure across portfolios. Retail properties that are highly weighted to more essential categories like supermarkets have had higher rent payment rates during the pandemic, while small shops experienced fewer permanent closure rates than we initially projected. Fitness centers and movie theaters, on the other hand, are experiencing solvency issues.

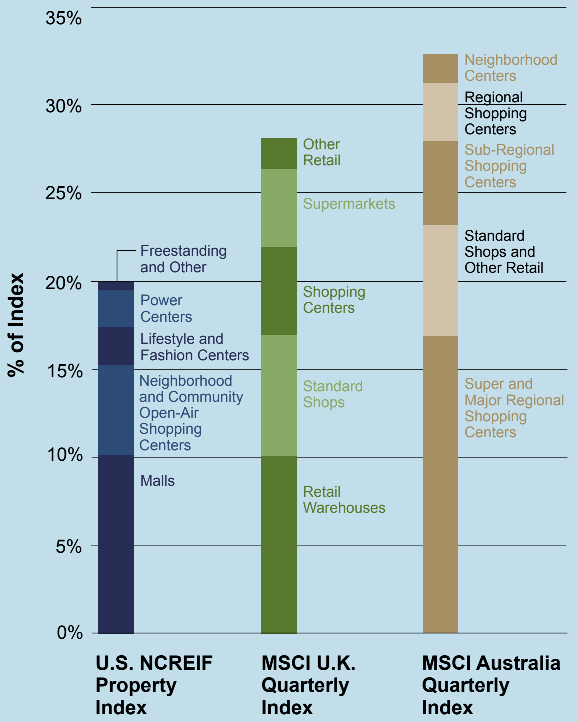
LaSalle's U.S. and U.K. tenant mix, with close to a fifth of gross rent from food retail, compares favorably to REIT averages. In Japan, grocery stores and restaurants also perform well as many citizens resist buying groceries online. In many large shopping centres in Japan, grocery anchors account for a smaller share of rent and gross living area. These centers also include many restaurants and services that occasionally suffer due to social distancing measures, although COVID-19 cases have been more limited in Japan. Some retail subtypes have surprisingly low exposure to some of the most vulnerable tenant types. In Canada, for example, the largest retail REITs rely on apparel for just 5% of their rent.

Below are the key points on retail markets we derived by studying our retail portfolio in a dozen countries:

- Each retail center is a unique collection of businesses that must constantly adapt to its trade area.
- Differences in retail properties within and between countries are greater than any other property type.
- COVID-19 is having a wide range of effects on retail centers, with some more resilient than others. Unlike other property types, the effects on rent collection are immediate and, in some cases, lead to rapid tenant insolvencies.
- In a post-COVID-19 era, many retail property managers will have to change their approach to tenant mix and customer safety. Some may even have to introduce entirely new land uses into their footprint in order to survive, including residential, office, or fulfilment tenants.

Index Allocations to Retail

U.S., U.K., AND AUSTRALIA



Sources: MSCI, NCREIF, and LaSalle Investment Management. Based on data as of 2020:Q2.

Retail Reinvention

In many countries, a growing proportion of retail stock is surplus to tenant demand, making conversion to other uses a potential strategy. A review of several of our retail conversions provides some insights and common themes on this approach. We have repurposed retail space to other uses on a range of asset types, including shopping malls, retail parks, and high street stores across Europe and North America.

We find that there is no “one size fits all” strategy for reinventing or repurposing retail properties. Our review reveals a mix of both adaptive and value-add retail reinvention. The adaptive approach is used when dealing with changes that occur during a property’s holding period. Value-add reinvention, by contrast, is the acquisition of distressed retail with the goal of adding significant value through a repurposing conversion.

All the retail properties we converted have a number of common concerns, including high vacancy, falling rents, rising costs, tenant failures, and impending lease events. In some cases, single-let properties were fully vacant due to a tenant failure. In multi-let properties, we occasionally observe anchor tenant risk, prompting the need to consider defensive action.

Retaining the existing use of a retail property is always the first consideration in a retail reinvention, as this is the fastest and most cost-effective solution, as well as being the most environmentally friendly. However, in projects that proceed to a change-of-use strategy, there are typically no prospective retail tenants due to weak demand; and identifying a retailer to backfill would result in extended voids, excessive incentives, or unacceptably low rents. Competition from a newer nearby property can also be an issue.

When we pursue a reinvention strategy, we have typically reduced the retail component of the project from 25% to 100%. Given densification is a key driver of value creation, while the retail floorspace is reduced, most conversions actually result in an expansion of the floorspace for other uses. Examples of these include Place Vertu in Montreal, Canada and The Galleries in Bristol, U.K. Where this is not possible, one goal of the refurbishments is to maximize the income potential by delivering a better space configuration, along with a change of use. In most cases, we convert retail space to a “beds” strategy, such as residential-for-rent, hotels, and student accommodations. For example, in Los Angeles and Seattle, we converted small ground-floor retail units in apartment buildings into residential units.

Mall properties in North America are typically surrounded by vast parking lots, which can create opportunities as values decline and the underlying land parcels become more valuable for other uses. Malls are often located in high visibility locations adjacent to major highways, making this real estate often well suited to warehouse/logistics and restaurants. They are almost always surrounded by residential properties, which present opportunities for outpatient medical facilities or higher-density apartments.

Residential uses frequently command the highest value per square meter of all the property types. Our retail conversions to residential use have several overlapping themes. They are all located in well-connected urban locations with strong economic growth prospects (e.g., a retail park in Greater London or a middle-class suburb in Montreal). They have high land values, and, in a few circumstances, the land value exceeded the value of the existing asset, providing a particularly compelling case for acquisition. In other cases, the development was de-risked by having secured pre-lets prior to development.

In the current market cycle, converting at-risk retail into high-value residential is not always a viable option. Obstacles include thin occupier demand for the alternative land use, or prohibitive construction costs compared to the projected development value. In some countries, local zoning is often a barrier to conversion. Because sales taxes are collected at the local/municipal level in the U.S., some municipalities

Montecito Marketplace, Las Vegas, United States

Carré Bad Cannstatt, Stuttgart, Germany

have incentives to prevent the conversion of retail properties. Moreover, development risk is inherently higher than leasing risk, and the conversion project needs to deliver a higher risk-adjusted return than retaining its existing use or disposing of the asset. Underwriting an acceptable development profit margin is not always straightforward.

Given these risks, an investor may not wish to undertake a retail conversion themselves. They may instead prefer to obtain planning permission before selling their retail asset to an investor with a higher risk tolerance. Indeed, for some of our assets, the intention was solely to gain development consent for a retail conversion, thereby improving its marketability to potential buyers.

However, obtaining planning permission can be challenging. In several instances, the changes in use were challenged or altered at the planning stage by the local government. For example, they required that the project retain a retail component to support the local economy and as an amenity for the local neighborhood. Moreover, the slow nature of planning systems may result in a missed opportunity to capitalize on short-term demand. The significant impact of lockdowns during the pandemic provides an extreme example of how quickly unforeseen factors can lead to severe market deterioration. In one of our projects, a key objective was to ensure that there was sufficient flexibility in the development masterplan to reflect changing market conditions.

In some of our retail reinventions, the land rezoning facilitated the conversion. Indeed, there are a few instances when the conversions to residential were actively encouraged; planners were aware of the surplus of retail space; and, in many locations, the undersupply of housing. Our best results are achieved by working closely with local governments to reach a mutually beneficial outcome.

Our experience is that the conversion of a retail asset into an alternative use is not a panacea because it can be costly and risky, and securing local approval can be difficult. Yet it also represents an opportunity for the reinvention of hard-hit retail assets, especially as the pandemic provides an impetus for local governments and planning authorities to be more flexible. Retail assets in locations with multiple sources of demand, high land values, and a sympathetic planning board have the highest chance of success. In some cases, however, investors may only partially offset the losses incurred by the original asset. In others, investors can proactively target distressed assets and motivate sellers to take advantage of these factors using a countercyclical strategy. Retail repurposing and conversions will become more commonplace as retail values fall further during 2021.

The Future of Warehouses

The warehouse sector is a top-performer in nearly every country we follow. The pandemic is accelerating this trend and widening the gap between the one-, three-, and five-year performance of these assets as compared to office, retail, and even residential properties. The rise of warehouse properties is easy to explain. The demand drivers have been stronger than any other major property type. Rent growth has exceeded expectations in many markets, despite an active supply pipeline. And most importantly, the capital markets have rewarded the sector with steady capitalization rate compression globally.

Investors will have to grapple with a more complex picture in the next few years. While the demand drivers are expected to remain strong and supply pipelines are rising in a large number of markets, the rising valuations of warehouse properties have reduced entry yields and the narrowing spread between rapidly rising construction costs (especially land costs) and slower increases in stabilized value have reduced returns on build strategies. Despite this, leased and stabilized warehouse properties still trade at a handsome premium to replacement cost in many markets, which attracts more and more money into development strategies.

Looking forward, the warehouse sector is expected to continue to lead performance among the major sectors in the next three to five years. However, returns are expected to trend lower, primarily due to the compression of the going-in yields of income-generating warehouses and the reduction of development margins due to the increasingly competitive development landscape. Over the long term, warehouses that are in close proximity to consumers and transportation infrastructure have the configuration to appeal to modern distribution. Warehouses that favor the implementation of technology are expected to outperform the overall warehouse sector.

Building upon our study of key demand drivers of warehouse markets in the *2020 ISA Mid-Year Update*, we develop a framework on the supply and demand analysis of several of the largest warehouse markets. We focus our study on whether supply will outstrip demand by comparing three types of warehouse markets: high, moderate, and low supply markets. We expect the weight of institutional capital targeting warehouse properties to continue to grow in 2021. Moreover, investors are likely to continue to pay record-high prices for income-generating warehouse assets, partly because the fundamentals are stronger than other property types. As pricing for leased warehouse properties continues to rise and going-in yields decline, many investors are willing to take on additional risks to boost returns through value-added strategies, such as taking on lease-up risk. Some investors have also turned to build-to-core or develop-and-sell strategies since the yield differential between developing a warehouse property versus acquiring a stabilized asset remains wide in many markets globally. We summarize our investment strategy recommendations for the three types of warehouse markets in Warehouse Investment Strategy Recommendations on page 21.

LOW SUPPLY, MAJOR MARKETS

In the largest low-supply markets such as London, Los Angeles (LA), and Tokyo, core warehouse properties are richly priced, and going-in yields continue to compress. Limited opportunities exist to develop near city centers due to limited available land and high construction costs. For example, in LA and Tokyo, land values as a share of replacement costs can be higher than 50%. For the rare land parcels suitable for warehouse development, construction costs are high and residential or office uses may be more valuable or preferred by planning authorities. One response to these market conditions is to build multistory warehouses. This has been the case for several decades in Hong Kong, Singapore, and Tokyo, and is now a trend showing up on the U.S. west coast and in Tier 1 cities of China.

With limited land availability and strong pricing of leased warehouses in these low supply markets, value-added strategies such as speculative leasing, renovating old warehouses to modern specifications (where possible), or converting other property types (e.g., suburban retail) to warehouses can boost returns.

These low supply markets usually have large demand bases to draw upon, but often lack modern warehouse stock. Limited new supply, restricted existing stock of modern warehouses, and a high value placed on proximity to population centers or ports are driving rents up. All of these contribute to low rent affordability in these markets and require tenants to trade-off between infill and peripheral locations. Most new supply serving these markets is built in peripheral locations, such as the Inland Empire market for LA, Chiba and Saitama for Tokyo, and Outer London boroughs or beyond the city boundaries for London. The build-to-core strategy is often attractive in the peripheral locations of these low-supply major markets, as the healthy occupier demand is expected to continue due to the large demand bases that these locations can draw upon.

MODERATE SUPPLY, REGIONAL HUBS

In regional hubs with moderate barriers to supply, such as Madrid, Shanghai, and Toronto, the risk of

Warehouse Investment Strategy Recommendations

	Low Supply, Major Markets (e.g., Los Angeles, London, Tokyo)	**Moderate Supply, Regional Hubs** (e.g., Madrid, Shanghai, Toronto)	**High Supply, Growth Markets** (e.g., Phoenix, Warsaw, Xi'an)
Attribute	Limited land availability	Adequate land availability in the near term	Land widely available
	High construction cost (Land value as a share of replacement cost >50%)	Moderate construction cost (50%> land value as a share of replacement cost >25%)	Low construction cost (Land value as a share of replacement cost <25%)
Implication	Lack of modern warehouse stock	Near-term supply-demand imbalance	
	Rent affordability concerns	Supply constraint over the long term	Increasing barriers to supply over the long term
	Trade-offs between infill and peripheral locations	Moderately reactive supply pipeline	Highly reactive supply pipeline
Strategy	Leasing/Value-added	Build-to-core Develop-and-sell	Develop-and-sell
	Build-to-Core (in peripheral locations)		
	Core Caution on pricing, but most assets well positioned	Core Seek strong locations in these markets	Core Long-term leased assets at income yield premium to low-supply markets

■ Higher Return ■ Core

Source: LaSalle Investment Management, November 2020.

warehouse oversupply is low over the long term, despite some expected supply-demand imbalance in the near term. Recent supply pipelines in these moderate supply regional hubs will be elevated over the next two to three years. Due to the near-term supply pipelines and some headwinds from the COVID-19 pandemic (e.g., offline retailers' demand for warehouse), no to low rental growth is expected in these markets in the near term. The good news is that the supply-demand dynamics in these moderate supply markets are versatile and highly reactive as soon as landlords reduce rents or offer less rental increases during renewal reviews. The supply-demand imbalance can be quickly adjusted, partly due to the large demand base that these moderate supply regional hubs can draw upon.

Additionally, government intervention and increasing land prices are creating barriers to supply over the long term. Since 2007, supply in Shanghai, for example, has been on a declining trend, as the government has intentionally restricted warehouse land supply. Recently, the Shanghai government has further set stringent restrictions on converting industrial land to logistics land, or building warehouses on industrial land. These restrictions are expected to constrain the supply of Shanghai warehouse properties over the long term. In the Greater Toronto Area, the 800,000-acre, provincially mandated green belt prevents development in areas that surround the metro, making supply difficult to deliver and driving up land prices.

Taking all of the above into consideration, for investors with a long-term or flexible investment horizon, they can consider build-to-core strategies in these markets to boost returns, or cautiously search for fairly priced core warehouses in strong locations. For investors with a finite or short-term investment horizon, pricing for leased warehouses would need to be adjusted to reflect the near-term supply-demand imbalance in these regional hubs.

HIGH SUPPLY, GROWTH MARKETS

In markets with high supply, such as Phoenix in the U.S., Xi'an in China, and Warsaw in Poland, this supply needs to be accompanied by strong demand to make them investment targets. These markets are often characterized by strong consumer spending growth, rapid expansion of e-commerce, easy access to low-cost labor, improving national and regional road infrastructure, and most importantly, relatively low rents compared to low supply markets.

Robust supply pipelines work in these markets as long as demand remains strong. Supply in these markets is responsive to economic conditions. As a result, the rent growth outlook is often more moderate than that of low supply markets. The development strategy requires a view that demand will remain strong enough for the asset to lease-up relatively quickly after delivery. This often depends on delivering products that appeal to the key needs of tenants in the market, as there will be competition from other developments. ■

Residential Rising:

Expanding Role of Rented Residential Property

Residential housing is the largest form of real estate in every country, city, and village in the world—and where most have spent an unusually large portion of their time in 2020. So, it may seem odd to think of it as a property type that is still maturing, expanding, and becoming more mainstream. Yet, for the global income-generating subset of residential real estate that is rented out to individual tenants, the past 15 years have been dynamic, with large increases in institutional ownership and emerging residential niche property types. The COVID-19 pandemic will likely result in an even greater role for residential housing in institutional portfolios.

Income-generating residential property markets have mammoth cross-border differences, beginning with even the name of the property type: in North America, these property types are most commonly referred to as “apartments” and “multifamily.” In the U.K., it is the “private rented sector.” For clarity, here we use “rented residential” to describe the property type.

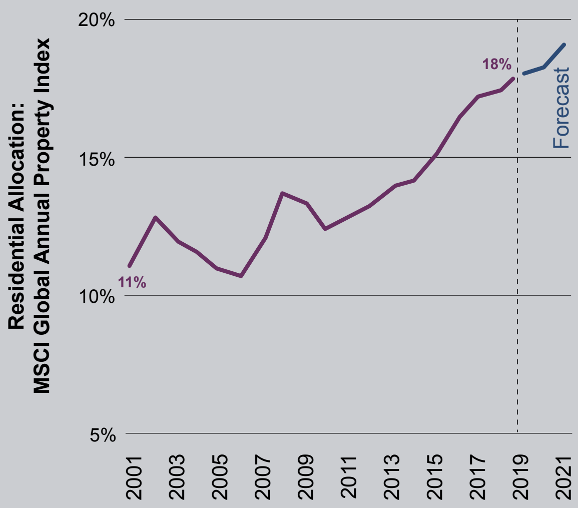
Institutional allocations to rented residential range from the low single digits in Australia and China to a quarter or more of most core portfolios in the U.S. and Switzerland (see Global Index Allocation to Residential). These large differences reflect historic government regulations, social perceptions of rented housing, and the underlying building stock available for investment, factors we examine in more detail below for China and Europe.

This cross-market variation gives rise to meaningful differences in the risk and growth characteristics of rented residential cash flows, as well as the associated diversification benefits. For example, highly regulated rental residential markets like Japan and Germany produce lower beta cash flows with more predictable growth rates. Less regulated markets like the U.S. or U.K. have potential for more cash flow growth but can be associated with more volatility.

Despite distinct cross-border differences, we have identified three rented residential themes common across many markets:

- **Institutional under-allocation:** Rented residential comprises a smaller share of private institutional portfolios, in aggregate, than it does of the built stock.
- **Expansion into new niches:** Even in markets with high levels of institutional rented residential ownership like the U.S., institutional investors are expanding into new niches of rented residential, like active-adult and single-family rentals (SFR). In some markets, niche residential types, such as student housing in Australia and the U.K., were among the first to attract institutional ownership.
- **Changing investor (and tenant) perception:** The COVID-19 pandemic is accentuating the defensive and essential characteristics of rented residential. Prior to the pandemic, rising transparency contributed to changing perceptions, prompting more institutional investors to become interested in “build-to-rent” (BTR) projects in markets with less existing rented residential stock.

Global Index Allocation to Residential



Sources: MSCI Global Annual Index and LaSalle Investment Management (forecast). History to 2019. Latest available data as of November 2020.

These themes are driving rented residential allocations higher, notably in China and Europe.

CHINA

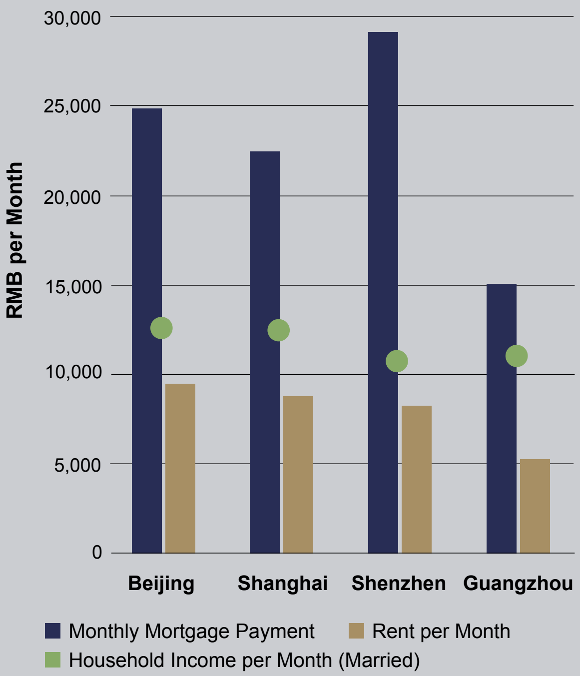
The rented residential sector in China emerged in 2014 when a local investor launched the first professionally managed project in Beijing. As with the early origins of the property type in the U.S. and Germany, government policy proved a key catalyst. Growth in the sector was slow, due to the lack of assets, until the government started to require that developers retain control of a portion of larger for-sale residential and mixed-use projects. Since then, many developers have built rented residential on this retained land.

Developers’ participation has increased the supply of transactable assets. In 2018, the government issued a regulation encouraging insurance companies to invest in the rented residential sector. In the same year, overseas investors, such as GIC and CPPIB, also started to make investments in the sector. These investors, together with the asset-backed security (ABS)/quasi-REIT market, are accelerating institutionalization by providing market liquidity.

Investors are attracted to rented residential in China due to its high growth potential. Growing demand is supported by fast urbanization, low for-sale residential affordability, for-sale residential purchasing restrictions, and an increasing willingness to rent. The individual purchasing restrictions are unique to China. The original purpose of the restrictions was to cool down the residential market, but they have essentially pushed new urban immigrants to the rental market. The cost to rent in major Chinese cities is well below the cost to own (see Cost to Rent vs. Own in Major Chinese Cities on page 23).

Healthy demand fundamentals are driving up market rents. Annual average rent growth in major Chinese cities ranged from 4.5% to 8.5% between 2014 and 2019, although it has

Cost to Rent vs. Own in Major Chinese Markets



Note: Main assumptions: down payment: 30%; Size–100 sqm; mortgage rate: 5.43%; and mortgage term: 30 years. Average household income assumes two income-earners. Raw data are sourced from CEIC and creprice.cn.

not been able to catch up with the increase in for-sale residential prices. The stabilized yields of rental apartments have been driven to a low level that now makes build-to-core strategies feasible, such as greenfield development and conversion. These strategies can provide expected returns in the high teens in 2021.

EUROPE

In Europe, market targeting has come to be thought of as an exercise in selecting winning cities rather than countries. Yet there are vast national differences among Europe's rented residential markets that recall the days of a more fragmented continent. Large differences in tenant protections, regulatory systems, ownership patterns, and physical typologies can in many cases be traced to how each country dealt with housing shortages after World War II.

A comparative study of the U.K. and Germany is instructive. In British cities, neighborhoods leveled during the Blitz were replaced with redevelopments owned by local governments, effectively converting households that were once private renters into tenants of the state. By the 1980s, Thatcherism called for a shift toward private ownership, and a massive "Right to Buy" program transferred these flats to owner occupation. In parallel, the privately rented sector was squeezed by tenant-friendly rules to less than 10% of the housing stock.

In the 1990s, these rules were made more landlord friendly and this created a major shift so that by 2015, the privately rented sector stock doubled. But, until the last few years, landlords were private individuals owning units in blocks, not institutions. Despite the growth in the PRS stock, most institutions have not been able to find suitable, existing whole blocks so have chosen to create their own; i.e., build-to-rent (BTR), usually in partnership with a developer. This has also enabled them to invest at their desired scale. Today, the U.K.'s investable rented residential inventory is mostly recent construction. It is purpose-built to address housing affordability challenges driven by new migration patterns and entrenched NIMBY[1] attitudes toward new supply. Mirroring trends in the U.S., today's BTR landlords in the U.K. compete for young professional renters.

As in the U.K., postwar replacement housing in Germany was built quickly, in this case by a mix of local governments and state-linked industrial corporations. Unlike in Britain, Germany's political winds did not shift in favor of homeownership, and the country remains a "nation of renters."[2] Instead of being sold to individual occupants, German rental housing was traded in large chunks to private equity investors in the 1990s–2000s; these portfolios formed the basis for the listed companies that now comprise the largest segment of the European listed real estate universe. Germany's postwar rental regulation system remains in place, contributing to a low-growth/low-volatility investment proposition, with attractive but slow-going opportunities for enhanced returns through gradual renovation.

Despite the different historical market constructs represented by the U.K. and Germany, a crossover of investment styles is now underway. Investors seeking stable cash flows and looking to make a positive social impact are capitalizing on affordable housing in the U.K. Meanwhile, a new generation of stock in Germany's most dynamic cities is unencumbered by tight regulatory controls and caters to a more mobile population of style-conscious young professionals.

The healthy fundamentals and increasing diversity of European rented residential risk/reward propositions is attracting the attention of core investors. In the early days of the PEPFI balanced index[3] in 2007, there was zero exposure to residential housing in any of the constituent funds. Most residential was held by specialist local and national investors. Today that share stands at just 5% but is rising rapidly; eight of the 12 constituent funds have exposure and the others are seeking entry points. But European rented residential is not a one-size-fits-all proposition. Investors seeking to invest in rented residential need to understand how lingering structural differences at the national level interact with more familiar city-level dynamics. ■

1 Not in My Backyard. Most key British cities are surrounded by vast "greenbelts" in which urban development is highly restricted. The U.K. planning system permits development only by case-by-case approval; there is little ability to develop property of "as of right."

2 Around half of the German population owns their own home, one of the lowest rates of homeownership among developed countries.

3 MSCI's Pan-European Property Fund (PEPFI) balanced index is the European equivalent of the ODCE index in the U.S., reflecting open-ended, pan-European core investment vehicles.

Climate Risk Analysis Moves into Investment Processes

The real estate industry initially responded to climate change by finding ways to reduce a property's greenhouse gas emissions. Beginning in the 1990s, a range of new "green" technologies has been implemented—from innovative construction materials and techniques to novel approaches to measuring (and certifying) energy efficiency. The motivations for these transformations are diverse and overlapping. They include altruistic concern for the environment, reputational positioning or marketing, and the pursuit of a green premium for rents or asset prices.[1]

More recently, the industry has also become attuned to real estate's own physical vulnerabilities to climate change. This has been accelerated by the increased frequency and severity of natural events, such as tropical cyclones, floods, wildfires, and droughts, which have damaged or destroyed properties. Risk scores that capture a property's potential for flooding and other weather-related challenges have made their way into investors' underwriting reports alongside the usual financial ratios and market data.

The motivation for considering climate factors in property assessments is, at its core, about risk and return. Of course, it remains critically important to reduce greenhouse gas emissions for the future of humanity and our planet. But even if we were able to instantly transform our economy into a zero-carbon one, the emissions already released mean that global temperatures would continue to rise for some time. Investors need to know how their assets will fare in a warmer world that is prone to extreme weather.

The awareness of climate change and the availability of climate risk assessment data have both risen significantly over the past few years. The next stage is to fully embed this knowledge into the investment process. In our view, reaching this next step requires unpacking and digging deeper into the two widely-recognized components of climate risk: physical risk and transition risk.[2] We believe that investors who think of these concepts too narrowly are at risk of making poor investment decisions.

1 LaSalle has written extensively about the issue of green premiums, beginning with a white paper titled Environmental Factors & Real Estate Demand: Secular Drivers of Real Estate in June 2017.

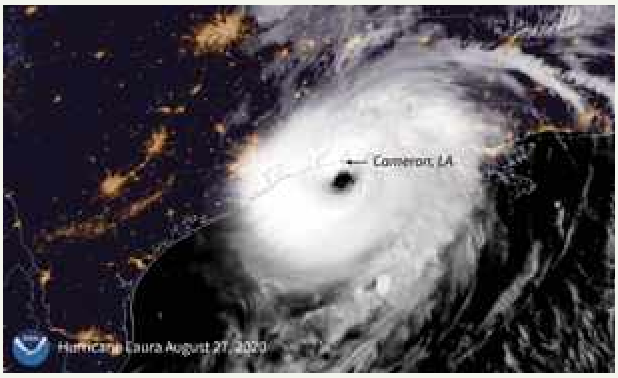
2 Physical risk refers to the chronic and acute impacts of climate change that may lead to physical damage or disruption to an asset or site. Transition risk covers the broader societal, economic, and political implications from climate change as the economy adapts to a warmer world. The introduction of a new local building energy regulation, and cost of compliance, are examples of transition risk.

3 Leading providers serving the real estate industry include The Climate Service, Four Twenty Seven (now part of Moody's), Carbon Delta (now part of MSCI), and Jupiter Intelligence.

At LaSalle, we are undertaking several projects as we integrate physical and transition climate risk into our processes:

- **Translating scoring metrics into measurable risks to capital:** To assess physical risk, investors and managers have sought the expertise of data providers[3] that can provide climate risk evaluations for a specified location. Scores across risk dimensions, such as flooding, sea level rise, heat stress, and cyclones, allow us to get a sense of risk relativities among locations and portfolios.

  The inclusion of risk scores in a due diligence report is important. To ascribe financial measures (or basis points of return) in an asset's underwriting is the necessary next step. We implement a value at risk (VaR) approach when we evaluate climate risk. The VaR measure, part of the classic financial risk management analytic toolkit, estimates how much an investor might lose, with a given probability and during a set period of time. Thinking of climate risk in this way allows for a direct comparison of potential losses from climate-related events to those from other potential sources, such as a cyclical economic downturn.
- **Considering physical risk on multiple geographic scales:** The core output of most climate risk analytics platforms is an evaluation of specific locations; indeed, providers issue competing claims as to the level of detail in the geographic scale they use in their analyses. Spatial granularity at the land parcel level is great for estimating prospective capex needs and insurance pricing, but it may miss the forest for the trees. For example, a site that is not expected to be particularly flood-prone is nevertheless at risk if it is served by infrastructure, such as roads and electrical supply, which could be rendered unusable by flooding.
- **Factoring in mitigation measures:** An evaluation of climate risk should also consider resilience-driven investments made at either the asset or a broader level that might include improvements undetected by climate risk providers. For example, a property might benefit from significant "hardening" improvements, such as moving critical building systems out of basement areas in flood-prone areas. Similarly, government investments in larger-scale infrastructure, such as sea walls, will render some areas less vulnerable, yet climate data vendors vary in the extent to which they incorporate these differences.



Hurricane Laura made landfall in southwestern Louisiana on August 27, 2020. Photo credit: NOAA.

- **Identifying "E" feedback loops in "DTU" trends:** Our DTU+E framework[4] is the basis for our evaluation of longer-term trends and their impact on real estate. These factors do not exist in isolation, as changes that fall under one can have potential effects on the others. Consideration of transition risks must be broadened to consider potential feedback of E-factors into the DTU drivers of secular change. In particular, investors should consider the broader economic and societal aspects of climate change, avoiding a narrow focus on physical damage. For example, chronic flooding or heat stress can influence migratory patterns, driving growth and shrinkage at the metro area or country level.[5]
- **Collaborate closely with partners in the insurance industry.** Not too long ago, many investors looked to insurance as their silver bullet for covering physical climate risk. But they have become increasingly aware that insurance is traditionally provided on shorter horizons than most investment holding periods, and that coverage may increase in cost or simply become unavailable as physical climate risk accelerates. We are working with our insurance providers to understand how they are using climate risk modeling and over what time horizon they are doing this analysis. By understanding their approach, we may be able to better predict the path of insurance costs and where coverage may actually cease altogether.
- **Adopting carbon reduction initiatives to manage transition risk:** In Europe, LaSalle has signed the Better Buildings Partnership Climate Change Commitment to deliver net zero-carbon (NZC) buildings, both for whole building operational carbon and embodied carbon,[6] by 2050. We recently published our European pathway to NZC, which sets out the tasks that will allow us to embed NZC into each stage of the asset life cycle.[7] And at the global level, in late October LaSalle aligned with the Urban Land Institute's Greenprint Center for Building Performance's 2050 NZC goal to reduce the landlord-controlled operational carbon emissions of its global portfolio of managed assets to net zero.

NZC offers the dual benefits of reducing a property's greenhouse gas emissions and mitigating regulatory risks. There is considerable potential for climate-related regulatory changes—from real estate-specific energy standards to generalized carbon taxes—and it is best to prepare for potential changes rather than having to react to them. It is not a coincidence that LaSalle's NZC initiative was launched first in Europe, where climate-related regulations are already entrenched. However, new initiatives are spreading across the globe. In late 2020, Japan's Yoshihide Suga and Canada's Justin Trudeau committed to making their countries carbon neutral by 2050, and we expect similar moves by the Biden administration in the U.S. Climate-related regulations and incentives for a raft of sectors, including property, are likely to follow.

PRICING CLIMATE RISK: SEEKING A STRATEGIC ADVANTAGE

Typically, market participants lack a consistent approach to evaluating climate risk, which may lead to a range of potential investment opportunities. We believe that taking advantage of the relative pricing of green versus non-green buildings can be a channel for value creation.[8] In the case of climate risk, sizing and pricing physical and transition risks with appropriate rigor and nuance will also be a contributor to risk-adjusted performance. Just as investors differentiate themselves by weighing trade-offs between, for example, tenant credit quality and yield; or by calibrating refurbishment capex to maximize ROI, they will need to consider physical and climate risks as an integral part of every business plan. ■

4 In 2012, we introduced the DTU (demographics, technology, and urbanization) secular investment trends that impact real estate markets, adding an "E" (environmental factors) component in 2017.

5 As a thought experiment, consider a parcel on the highest and driest ground in a hurricane-prone urban region. If successive storm events discourage migration and investment in that area, economic growth—and therefore occupier demand—could falter over the long term even if the property itself remains intact.

6 Operational carbon concerns the regular energy consumption of an operational asset. Embodied carbon is emitted during the construction of the building and the manufacturing of the raw materials that make it up. It is thought that embodied carbon makes up at least a third of a building's total carbon footprint over its life, but it is far more difficult to measure than operational carbon.

7 These range from better understanding the operational performance of new acquisitions and the capex required to bring it in line with our decarbonization trajectory, through to the embodied carbon targets we will aim for in our development and refurbishment projects.

8 Note that there are broadly two possible ways to design actionable investment strategies around the pricing of green buildings: 1) when the spread between the "fair" and observed green premium is large, earn the premium by converting a non-green building into one with suitably green characteristics; and 2) when the yield differential between non-green and green is negligible, invest in assets already meeting green criteria.

This year the development of our three-year outlook was the most challenging we have faced in 27 years of producing the *Investment Strategy Annual.* During our analysis, significant information flowed daily relating to COVID-19 infection/hospitalization rates, lockdown/re-opening policies, vaccine trials, U.S. election results, EU–U.K. trade relations, and how the property markets are responding to these fast-moving events.

In the regional summaries in Chapter 2, we try to convey the uncertainty in the forecasts that look beyond the dominance of COVID-19 in our lives. Yet, investors always face uncertainty when making decisions. Perfect information is not an option in normal times, nor will it be in the transition from COVID-19 economics to the post-COVID-19 economy. Our investment recommendations express our conviction that there will be plenty of interesting opportunities during the next three years. Uncertainty is often an excellent breeding ground for opportunity.

Asia Pacific has come through the pandemic in stronger shape than any other region to date. In Chapter 2, our research team discusses the reasons behind this relative success, and the rapid changes that are likely to occur as both “return to work” and the “new normal” are most advanced in this diverse region. Trends we have identified in the past—the rise of intra-regional trade and the steady rise of transparency—are also accompanied by relatively predictable political regimes and high trust in local institutions. These stabilizing influences help reduce the effects of post-pandemic uncertainty.

Europe has been hit hard by the pandemic and by fractured attempts to limit the spread of the coronavirus. It has also been on the forefront of the scientific breakthroughs that are most likely to control the worst effects of COVID-19. The diversity of Europe is a striking feature of our regional outlook, with pockets of growth and strength interspersed among slower-growing economies and weakened property markets. The EU has also shown a surprising ability to develop a pan-European fiscal stimulus system, even as it has avoided, along with the U.K., a similar cooperative stance to the fast-approaching day of Brexit reckoning. Other significant trends covered in the *ISA* include the rise of the “living” sector, as residential properties emerge as a viable investment.

North America shares the same public health mistakes as Europe, but on an even larger scale. It is gearing up for a large experiment in rapid vaccine deployment. The possible success of this technical (and behavioral) feat will likely determine the pace of both economic and property market recoveries across the U.S. and Canada. In our outlook in Chapter 2, we describe how relatively healthy capital markets are likely to discern between sharply contrasting fundamentals. Favorable tailwinds in the warehouse and suburban residential markets are likely to attract even more capital in the years ahead. Headwinds in urban apartments, retail, and office fundamentals could lead to capital shortages and eventually discounted pricing.

ISA2021
INVESTMENT STRATEGY ANNUAL

CHAPTER 2
REGIONAL RECOMMENDATIONS

Asia Pacific

BIFURCATED COUNTRY PROSPECTS: STRONG RECOVERY YET UNCERTAINTY LINGERS

Uncertainty will remain a dominant theme in 2021, although there are signs of bifurcated economic and real estate market performance in the region. China, in particular, is exhibiting relative strength amid the pandemic-led recession. There is widespread belief that conditions in the region are more positive today than six months ago due to the stabilization of the number of COVID-19 cases, positive vaccine news, ultra-accommodative monetary policies, and the record size of fiscal stimulus packages (except in China). All of these factors are fueling an unusual combination of risk-on sentiment in the stock markets, while safe haven indicators are indicating plenty of risk-off behavior with gold prices near their 10-year high and government bond yields near all-time lows.[1] The juxtaposition of risk-on and risk-off sentiment indicates the nervous nature of the capital markets in Asia Pacific as investors oscillate between optimism and risk-averse behavior.

Abhijit Banerjee and Esther Duflo, winners of the 2019 Nobel Prize in Economics, explain in *Good Economics for Hard Times* that people's core beliefs on issues such as trade, immigration, and the role of government are better predictors of how people make economic choices than neoclassical economic assumptions about utility-maximizing behavior. These beliefs are often based on the affirmation of personal values or deep-rooted cultural norms. Understanding these cultural beliefs is necessary as they ultimately drive economic and investment activities. In our *2020 ISA Mid-Year Update*, we discuss the high level of trust that domestic populations place in a majority of the Asia Pacific governments and the important role that this plays in reducing the pandemic risks. This governmental support is facilitating China's nascent V-shaped recovery (see V-shaped Recovery in China below). China's recovery, in turn, puts other major Asia Pacific countries in a favorable position in the post-COVID-19 economic outlook. LaSalle expects that economic conditions in Asia Pacific will remain weak by historical standards in the near term, but are well-positioned in the global context, all of which is beneficial to the real estate market recovery in the region.

Tenants' and investors' core beliefs as revealed in surveys can also provide insight on the outlook for the real estate sector. As shown in the Asia Pacific Leasing Survey on page 29, tenant activities improved in Asia Pacific in September, even though downside risk remains as evidenced by elevated incentives. In an environment where leasing and buying/selling transactions are limited, these surveys may offer forward-looking views on the performance of real estate assets/portfolios, and identify potential risks.

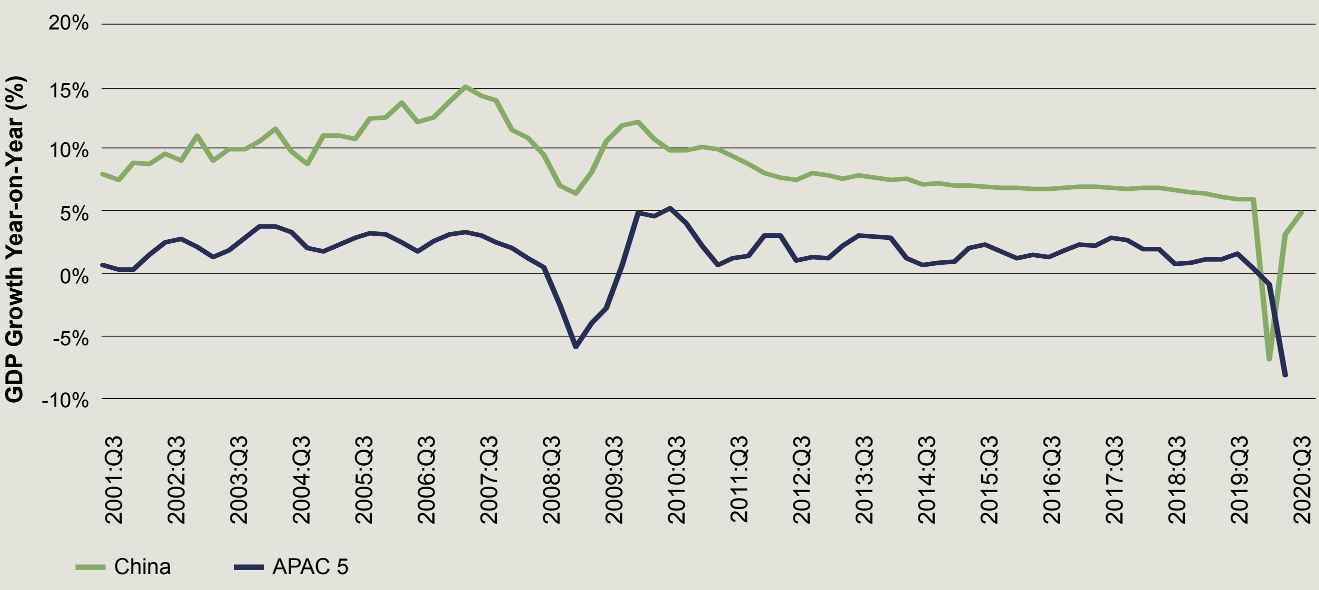
RELIANCE ON CHINESE ECONOMY AND DOMINANCE OF DOMESTIC AND INTRAREGIONAL CAPITAL

The tensions between the U.S. and China are unlikely to go away (especially in trade), but may de-escalate over time under the new Biden administration in the U.S. It is impossible today for a country to become entirely self-sufficient. In the first six months of 2020, the U.S. was the biggest buyer of Chinese goods.[2] In response to the U.S.–

1 Bloomberg, November 24, 2020.

2 The General Administration of Customs of China, as of June 2020.

V-Shaped Recovery in China



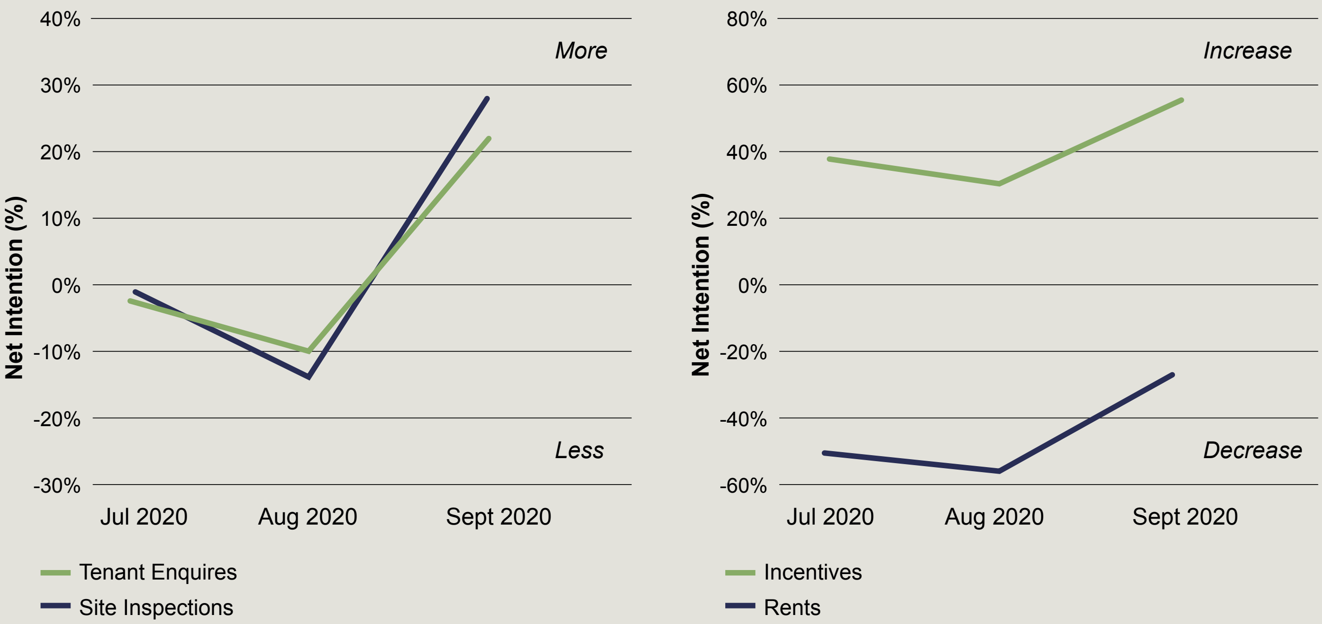
Note: APAC 5 comprises Australia, Hong Kong, Japan, Singapore, and South Korea.

Sources: CEIC (APAC5, as of 2020:Q2) and CEIC (China, as of 2020:Q3).

Asia Pacific Leasing Survey

TENANT ENQUIRES AND SITE INSPECTIONS

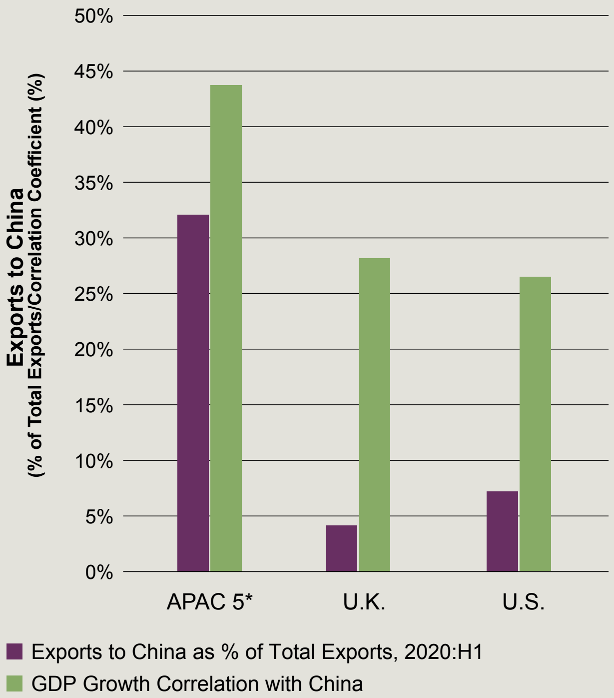
RENTS AND INCENTIVES



Note: Net intention is calculated as the net percentage difference between positive and negative answers.
Source: CBRE, as of October 2020.

Reliance on the Chinese Economy

EXPORTS TO CHINA AS A % OF TOTAL EXPORTS AND GDP GROWTH CORRELATION BETWEEN CHINA AND OTHER COUNTRIES/REGION



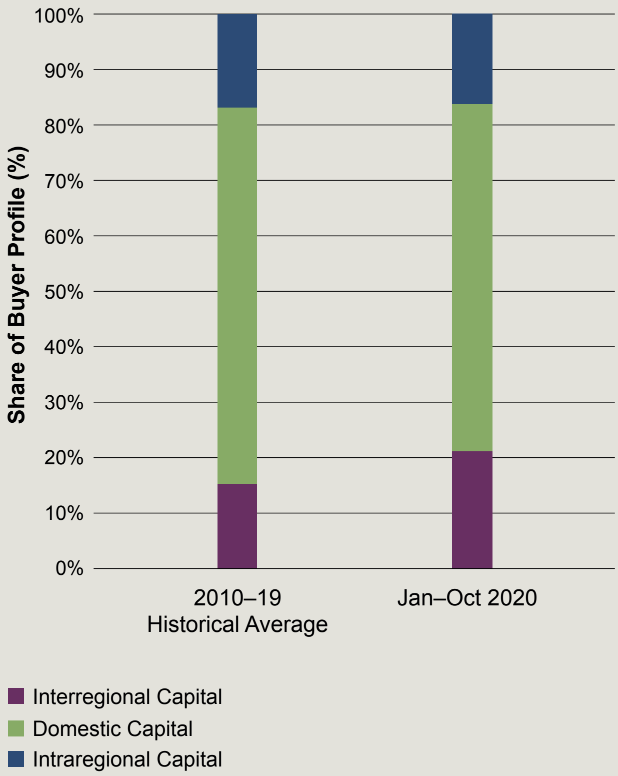
*APAC 5 comprises Australia, Hong Kong, Japan, Singapore, and South Korea.

Exports to China as a percentage of total exports is based on the amount of exports during the first half of 2020. GDP growth correlation is calculated using the real GDP growth of each country/region on a quarterly frequency year-on-year from 1992:Q1 (U.K.), 1992:Q4 (France and Germany), 1995:Q4 (Asia Pacific), and 2003:Q4 (U.S.) to 2020:Q2.

Source: CEIC, as of October 2020.

Domestic and Intraregional Capital Dominates in Asia Pacific

ASIA PACIFIC REAL ESTATE TRANSACTION VOLUME BY BUYER PROFILE



Data are based on independent reports of income properties and portfolios valued at U.S.$10 million or greater. Income properties include the following types: apartment, office, retail, industrial, and hotel in Australia, China, Japan, South Korea, Hong Kong, and Singapore.

Source: Real Capital Analytics (RCA), as of October 2020.

China trade war, the Chinese government announced the "Dual Circulation" strategy in May 2020 to expedite the transition to an economy supported mainly by domestic demand and supplemented by external demand. This strategic change was reinforced in the 14th Five-Year Plan (2021–25) released at the end of October and is anticipated to drive domestic consumption in China to grow faster than exports over the next five years. This new economic strategy is expected to have a positive effect on real estate sectors, particularly warehouses, as demand is largely domestic-driven. Additionally, increasing household income is emphasized in the 14th Five-Year Plan. Higher income drives more consumer spending, higher retail sales, and more demand for warehouses.

The surge in exports in 2020 demonstrates that China's supply chain is relatively intact and pressure-resistant. Most notably, China's trade with other countries in the region is leading the recovery of global exports (see Reliance on the Chinese Economy on page 29). The structural trend of the dominance of domestic and intra-regional capital for Asia Pacific real estate is expected to continue (see Domestic and Intraregional Capital Dominates Asia Pacific on page 29). As China likely continues to recover, its leading position and domination in intraregional activities could benefit the rest of the region's economies and real estate markets going forward.

STABLE POLITICAL LANDSCAPE

Yoshihide Suga became Japan's Prime Minister on September 16. He has pledged to continue his predecessor's fiscal and monetary policies. The "Abenomics" policies are expected to continue as "Suganomics" (see Suganomics to Provide Policy Continuity in Japan). The Bank of Japan left its aggressive monetary policy unchanged on PM Suga's appointment, which instilled confidence in the global capital markets. By the end of October 2020, Japan had announced fiscal stimulus of more than 40% of GDP, with

Suganomics to Provide Policy Continuity in Japan

FROM ABENOMICS TO SUGANOMICS

Aggressive Monetary Policy
- No major change from Abenomics

Expansionary Fiscal Policy
- No major change from Abenomics

Structural Reforms
- Promote digitization
- Promote women in the workforce
- Strengthen local economies
- Promote market-based competition

Economic Growth and Inflation

Source: LaSalle Investment Management, as of November 24, 2020.

Logiport, Osaka Taisho, Japan

a focus on infrastructure spending and financial support for corporations and households to cushion the pandemic's impact.

In China, Presidential Xi Jinping can remain "president for life" as term limits were removed in 2018. The stability of the political leadership should help ensure the balance of monetary and fiscal measures in mitigating the impact of COVID-19 in the short term and the economic reforms in the long term. While the People's Bank of China (PBOC) continues to focus on reducing the debt problem (by not further reducing interest rates), the Chinese government in April 2020 announced that substantial investments would be made in new infrastructure (including high-speed rail and subway systems, 5G, data centers, etc.), equivalent to a total of 15% GDP for 2020–25.[3] All of these measures should drive a sustainable recovery of the domestic economy and real estate occupier demand, particularly from the tech industry, and should provide infrastructure support for the logistics sector in China.

In South Korea, President Moon Jae-in and his governing Democratic Party (DP) won the parliamentary election in April 2020 riding on the successful response to the pandemic. The historically strong support for the DP has allowed the government to announce stimulus packages of about 15% of GDP. Despite the recent decline in public support for the president and the government, the parliamentary majority would allow South Korea to step up pandemic containment measures and additional stimulus packages if needed.

3 Source: Goldman Sachs' estimation, as of October 2020

Synchronized Monetary and Fiscal Stimulus in Asia Pacific

	Announced Monetary Stimulus			Announced Fiscal Stimulus					
	Current Interest Rate*	**Monetary Stimulus** since 2019:H2		**Estimate Fiscal Stimulus** (as a % of GDP)	**Short Term** (to mitigate exogenous shocks like COVID-19 and bushfires)		**Medium to Long Term**		
		Rate Cuts/Other	Liquidity Injection		Households	Corporates	Households	Corporates	Infrastructure
Japan	(0.10)%		✓	42.5%–44.0%	✓	✓	✓	✓	✓
Australia	0.10%	✓	✓	24.5%–25.5%	✓	✓			✓
Singapore	0.25%	✓		20.0%–21.5%	✓	✓		✓	✓
South Korea	0.50%	✓		15.0%–16.0%	✓	✓	✓	✓	
Hong Kong	0.86%	✓	✓	11.5%–12.5%	✓	✓	✓	✓	✓
China	Shibor: 2.64% MLF: 2.95% LPR: 3.85% RRR: 9.4%	✓	✓	16.5%–19.0%	✓	✓	✓	✓	✓

*Interest rate movements are as of November 20, 2020, based on the Reserve Bank of Australia's cash rate; China's two-week Shanghai interbank offered rate (Shibor), one-year medium-term lending facility (MLF), one-year loan prime rate (LPR), and reserve requirement ratio (RRR) for financial institutions; Hong Kong Monetary Authority's base rate; Japan's key short-term interest rate; Singapore's one-month interbank offered rate; and the Bank of Korea base rate.

Sources: The Services Australia (as of October 6, 2020); the Singapore Ministry of Finance, the Monetary Authority of Singapore (as of August 18, 2020); the Hong Kong Monetary Authority (as of September 15, 2020); the Cabinet Office of Japan (economic measures announced on December 5, 2019); the Cabinet Secretariat of Japan (fiscal stimulus and financial support on COVID-19, as of May 27, 2020); the Ministry of Finance of Japan (social welfare spending due to consumption tax hike, as of December 20, 2019); the Ministry of Economy and Finance of South Korea (as of September 22, 2020); and the Ministry of Finance of the People's Republic of China and the People's Bank of China (as of September 4, 2020).

In Singapore, the People's Action Party has dominated the political environment since 1959. Its strong leadership and strong fiscal balance sheet enable the government to issue strict lockdowns and implement fiscal stimulus packages amounting to ~20% of its GDP.

In Australia, the JobKeeper Payment scheme is a subsidy for businesses and not-for-profit organizations that were significantly affected by COVID-19 but made an effort to retain employees. The measure is an effective way to support the labor market and real estate demand.

In major Asia Pacific economies, most fiscal stimulus packages are directed toward small and medium enterprises as they contribute to 70%-90% of total employment. Major countries in the region have the capacity to release more fiscal stimulus (particularly China) if a resurgence in COVID-19 infections threatens the economic recovery (see Synchronized Monetary and Fiscal Stimulus in Asia Pacific above). This is another reason why the region is likely to be stronger and more resilient coming out of the pandemic.

ECONOMIC OUTLOOK

We have finetuned our Relative Framework for the Asia Pacific Economic Outlook Post COVID-19 that we introduced in the *2020 ISA Mid-Year Update.* Countries with relative success in keeping the pandemic under control, a significant domestic economy, effective monetary and fiscal stimulus packages, and room for more stimulus are expected to lead the economic recovery in the region. The ranking of the relative strength of major Asia Pacific economies remains the same as six months ago, with China leading, followed by Japan, South Korea, Singapore, Australia, and Hong Kong (see Asia Pacific Post-Pandemic Economic Outlook on page 32). This framework reinforces our conviction that domestic and intraregional recovery in Asia Pacific will contribute more to the economic recovery in the region than external influences from outside the region.

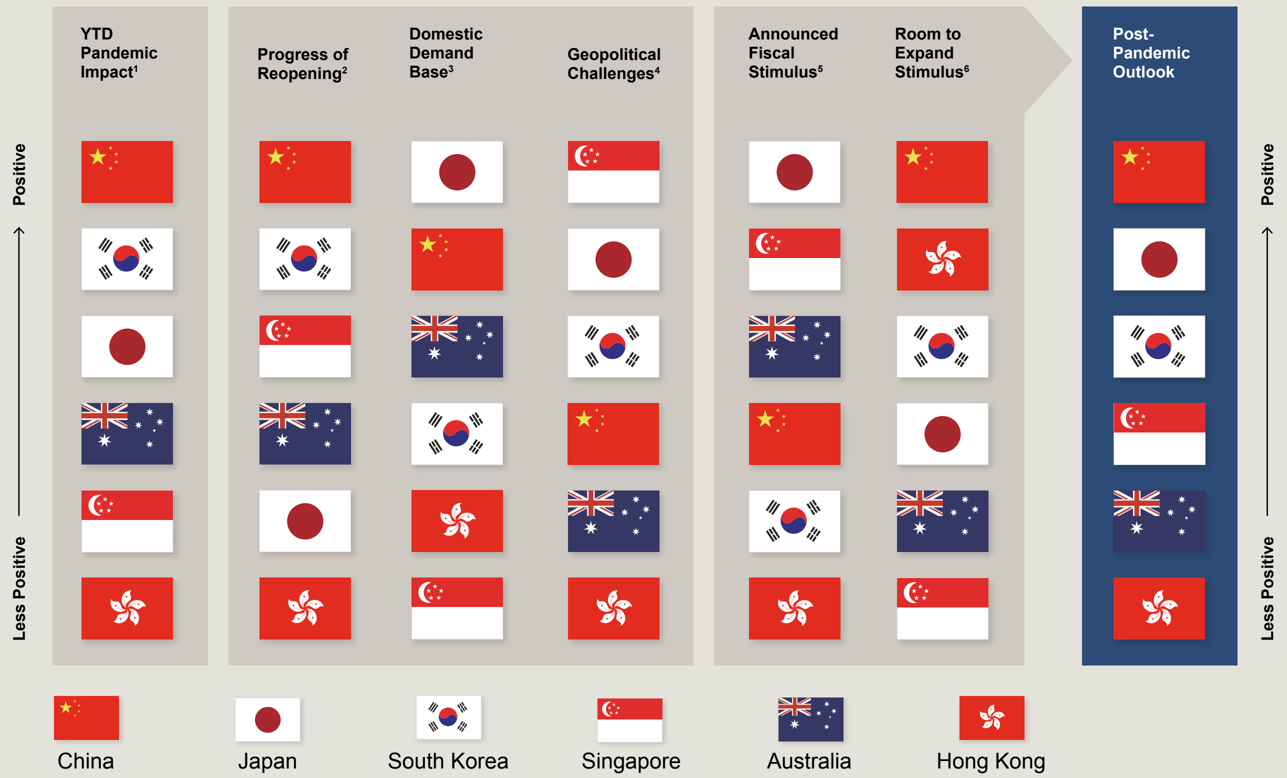
REAL ESTATE SECTOR SHIFT

Private equity and institutional investors are driving investments in the industrial sector across the region. The pandemic has accelerated the shift toward online retailing, enhancing the strong demand for industrial assets. The industrial transaction volume as a share of the total Asia Pacific real estate transaction volume has gradually increased over the past 10 years.[4] The increase in industrial transaction volume is primarily at the expense of the retail sector. We find a similar trend for the amount of funds raised for sector-specific strategies in Australia, China, Hong Kong, Japan, Singapore, and South Korea, where the share of industrial-specific strategies increased tenfold from 2010 to 2019.[5]

4 The Asia Pacific real estate transaction volume data are sourced from RCA, as of 2020:Q2.

5 The funds raised refer to the fund size at the final close. The funds raised by real estate sector-specific strategies data for the Asia Pacific 6 are from Preqin, as of 2020:H1.

Asia Pacific Post-Pandemic Economic Outlook



1. YTD Pandemic Impact: The impact on GDP and employment since the start of the pandemic in each country.
2. Progress of Reopening: The 14-day rolling average of new COVID-19 cases per 1,000 population, the cumulative COVID-19 deaths per 1,000 population, and Google Mobility Index. Google Mobility Index covers movement trends over time by geography, across different categories of places, such as retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential.
3. Domestic Demand Base: Gross domestic production excluding exports.
4. Geopolitical Challenges: Potential impacts on trade due to the U.S.–China trade war, Hong Kong unrest, Japan–South Korea, China–Australia tensions, etc.
5. Announced Fiscal Stimulus: Existing and planned COVID-19-related fiscal stimulus.
6. Room to Expand Stimulus: Takes into consideration whether there is room for additional monetary stimulus (e.g., further rate cuts) and fiscal stimulus, the health of the government fiscal balance sheet in each country, whether the country has a reserve currency, etc.

Sources: Oxford Economics, World Health Organization, International Monetary Fund, and LaSalle Investment Management, as of November 2020.

Asia Pacific Investment Recommendations: 2021

	Core	Higher Return
LaSalle's Best Opportunities	Modern warehouses in well-located and supply-constrained submarkets	
	(China Tier 1 and satellite cities, Seoul, highly selective in Australia Eastern Seaboard, Tokyo, and Osaka)	(China Tier 1 and satellite cities, selective China Tier 2 cities, Seoul, Tokyo, Osaka, and Nagoya)
	Multifamily (Japan)	Highly selective office locations/specifications with flexible exit timing (Tokyo, Osaka)
		Multifamily (Japan, China Tier 1 cities, Seoul, Sydney, Melbourne, Hong Kong, Singapore)
Other Opportunities	Modern warehouses (highly selective in Singapore)	
		Opportunities with pricing adjustment (Beijing, Shanghai CBD, Melbourne CBD, Sydney CBD, and Singapore CBD offices; Shanghai retail; conversion to multifamily)

Source: LaSalle Investment Management, as of December 2020.

The robust investor demand for industrial logistics facilities across the globe and the region in recent years is expected to expand the investable universe of the industrial sector in 2021 and beyond. The ongoing sector shift in transaction and fundraising activities is likely to drive investors, particularly asset allocators, to broaden their real estate portfolios to include more industrial assets in Asia Pacific as a way to complement other property types.

MARKET/SECTOR OUTLOOK AND INVESTMENT STRATEGIES

The impact of the pandemic on Asia Pacific real estate markets/sectors has been uneven. In Japan, the office, logistics, retail, and multifamily sectors remain the most resilient in the region, while China and Singapore logistics sectors show the earliest signs of recovery. Australia offices and Asia Pacific retail and hotels have been the most negatively impacted. While there is abundant liquidity, the Asia Pacific real estate market/sector recovery is expected to continue to be uneven in 2021. Bifurcation of total returns is expected to continue. Our market/sector recommendations for Asia Pacific are highlighted in Asia Pacific Investment Recommendations: 2021 on page 32).

Office: Despite the relative success of working remotely, it is likely to be just one work option, not a permanent replacement for corporate office space in major Asia Pacific markets. The progress of workplace re-opening across Asia Pacific has been stronger than in other regions. Many office markets in the region have achieved high return-to-office ratios of leased space, which signals the willingness to return to offices is much higher than anticipated. In China, where the pandemic has largely been under control since April, the estimated return-to-office ratio was more than 90% in September 2020, while the ratio was 70%–80% in South Korea. In office markets where government restrictions on office capacity were stringent (e.g., Melbourne and Singapore), return-to-office ratios were lower (see Asia Pacific Return-to-Office Ratio of Leased Space). These return-to-office ratios are important to track. The sooner people can and are willing to return to work in their offices (or offices with a kind of "new normal"), the smaller the permanent impact of remote working on the future of offices.

The relatively high return-to-office ratios in a large number of markets are partly due to the Asian business culture and local dynamics. Face-to-face encounters are viewed as essential business rituals in China, Japan, and South Korea. Furthermore, the relatively low average living space in highly urbanized Asian cities (particularly in Japan and Hong Kong) also makes remote working challenging. There are also technical challenges for remote workers (reliable Internet access) and for businesses to protect information security and confidentiality. In 2021, we expect bifurcation of performance among office markets in Asia Pacific, partly driven by the uneven impact of remote working, with Japan office markets to continue to outperform the rest of the region, because remote working is less attractive and supply remains relatively constrained. In the meantime, we expect office demand to continue to decline in markets such as Australia and Hong Kong, as demand dwindles due to the worst recession in decades.

Asia Pacific Return-to-Office Ratio of Leased Space

Country	Market	Back-to-Office Ratio (%)
China	Shanghai	> 90%
	Beijing	> 90%
South Korea	Seoul	70%–80%
Japan	Tokyo	82%–88%
	Osaka	88%–90%
Hong Kong	Hong Kong	50%–70%
Australia	Brisbane CBD	61%
	Sydney CBD	40%
	Melbourne CBD	7%
Singapore	Singapore	30%–35%

Sources: JLL (all markets except for Australia and Japan), as of September 2020; the Property Council of Australia (Australia), as of October 2020; for Japan cities, the ratio is sourced from the Google mobility index for workplace from Google COVID-19 Community Mobility Report, monthly average as of November 17, 2020. The percentage represents the mobility trend for places of work that returned to the baseline. The baseline is the median value for the corresponding day of the week during the five-week period from January 3, 2020 to February 6, 2020.

We expect CBD offices in major Asia Pacific office markets (e.g., Tokyo Central Kus and Singapore CBD) to remain relevant in the post-COVID-19 era as locational attributes (e.g., amenities and access to skilled workers) remain important to companies. All these factors suggest that CBD offices remains attractive. Nevertheless, pandemic fears could influence some companies' decisions to relocate some operations to selective decentralized offices, but likely to limit to those with good locational attributes and affordable rents.

In the current market cycle, tenant profiles are increasingly important in mitigating operating income risks. For core strategies, we recommend caution in the near term, due to the disconnect between weakening office fundamentals and robust capital markets. For core and non-core strategies, we continue to favor offices in Tokyo and Osaka due to the size of these markets, the depth of liquidity, and the relatively healthy occupier markets. Investors with a high risk tolerance should monitor Shanghai, Sydney, Melbourne, and Singapore CBDs and Beijing office markets as the weakening fundamentals could provide opportunities at reasonable prices.

Industrial: We continue to favor investments in Asia Pacific logistics. The resiliency of logistics demand during the pandemic suggests that it is primarily supported by


Qingpu, Shanghai, China

domestic consumption in Asia Pacific markets, particularly e-commerce, more than global trade. The need for more timely deliveries has also intensified the demand for logistics facilities in infill locations to be close to consumers. These changes in logistical needs are expected to continue to support logistics demand, particularly in China and South Korea, where domestic consumption is driving the recovery. For core strategies, we continue to favor logistics markets in the Eastern Seaboard of Australia (i.e., New South Wales, Queensland, and Victoria), Tokyo, Osaka, and Tier 1 and their satellite cities in China due to their relatively large populations. Strong investor demand for logistics facilities has been driving prices to historic highs. The good news is that ultra-low interest rates are making the yield spreads of stabilized logistics assets wider and more attractive than a year ago. For high-return strategies, we continue to favor build-to-core logistics markets in Tier 1 and their satellite cities and highly selective Tier 2 cities in China, the Greater Seoul area, Tokyo, Osaka, and Nagoya supported by the attractive logistics development yields.[6]

The increasing adoption of online grocery shopping in the region is expected to raise demand for cold storage facilities. Online penetration rates for grocery shopping were high in China and South Korea before the pandemic. In the first eight months of 2020, online grocery sales in China and South Korea grew by 16% and 43%, respectively, from the same period in 2019.[7] There is potential for further growth, as consumers have started to shift their food shopping from offline to online, seeking convenience and to avoid in-store shopping. This trend is expected to support temperature-controlled warehouses, particularly in China and South Korea. However, investors need to be mindful of the risks associated with investing in this niche sector. The rents, construction, and operating costs of temperature-controlled warehouses are higher than those of traditional venues. However, the depreciation of refrigeration equipment usually reduces the total return over a long holding period. Additionally, capital market liquidity and exit strategies have not been fully tested. Investors with a higher risk tolerance may want to consider developing cold warehouses or converting older warehouses to cold storage facilities in appropriate locations. In these instances, investors should have a well-defined exit strategy, as well as experienced leasing and asset management teams.

Retail: In 2021, we expect the retail sector to remain weak in most Asia Pacific markets due to cyclical weaknesses and the structural disruption of e-commerce. While e-commerce sales growth is expected to taper from the peak of the pandemic, the structural disruption to the sector will continue. The downward pressure on traditional retailers' profits is expected to force more retailers to move to or add online platforms. The reduction in liquidity for retail assets globally is another headwind for the sector. Therefore, we are not in favor of retail assets for investors with a low risk tolerance.

Despite these headwinds, the retail sector in the region is evolving, particularly in China where the e-commerce penetration rate is one of the highest globally. The retail sector in China has been the most advanced in adapting to the e-commerce disruption in Asia Pacific. We expect it to perform relatively better than other retail markets in the region over the short term, due to China's early containment of COVID-19 and the large domestic consumption base. Additionally, the increasing share of experience-based tenants (e.g., health and beauty, education, foods, and online retailers' offline showrooms) demonstrates the transformation of retail formats in China. Relatively low vacancies and low levels of projected supply, especially for infill shopping malls, support the retail sector's performance in China.

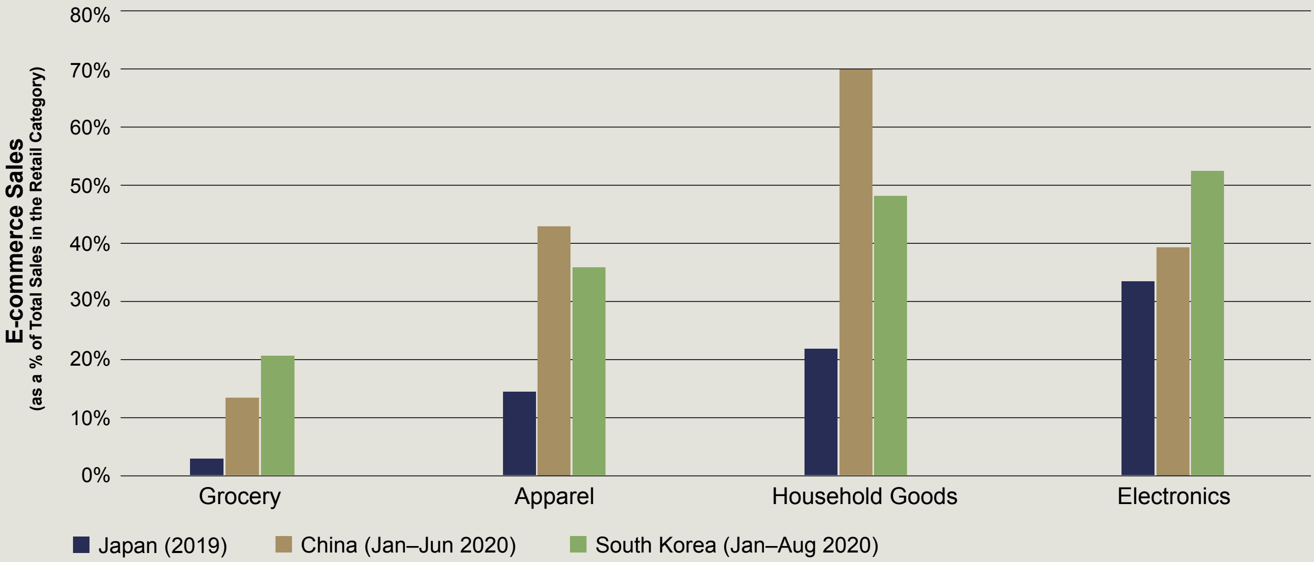
Japan is another area of resiliency within the region. Offline retail demand from some apparel and household goods tenants remains relatively healthier compared to global peers (see Asia Pacific E-Commerce Penetration Rates Vary by Category and Country on page 35).[8] Investors who can tolerate risk should be highly selective when evaluating retail investments, and only if repricing opportunities arise. Additionally, curating the tenant mix could reduce the negative impact on incomes. Grocery, food and beverage, entertainment, and pharmaceutical tenants are less vulnerable to the disruption from e-commerce. Nonetheless, in 2021, any occupancy improvement from shifting the tenant mix is expected to be at the expense of rents.

6 The logistics development yield data are based on LaSalle Investment Management estimates as of October 11, 2020.

7 The online grocery sales growth data are from the National Bureau of Statistics of China and Statistics Korea, as of August 2020.

8 The data for the online penetration rate for apparel are from the Ministry of Economy, Trade and Industry of Japan, as of December 2019.

Asia Pacific E-commerce Penetration Rates Vary by Category and Country



Sources: The Ministry of Economy, Trade and Industry of Japan, as of 2019; the Ministry of Commerce and the National Bureau of Statistics of China, LaSalle Investment Management, and Statistics Korea, as of August 2020.

Multifamily: We continue to favor the multifamily sector in Japan, the only country with an institutional multifamily rental sector in the region. We target Tokyo, Osaka, and Nagoya where demand for multifamily properties is expected to remain stable in the post-COVID-19 era. They are the largest metropolitan areas in Japan. Between 2014 and 2019, 75% of the new jobs created in Japan were concentrated in these three metros. Job opportunities in these metros are expected to continue to drive demand for multifamily properties. In-migration, a key driver of occupier demand, is expected to slow temporarily due to the pandemic. However, our stress test shows that occupancy rates for multifamily assets in these metros are expected to remain resilient even if in-migration declines by 25% in the next 12 to 18 months.

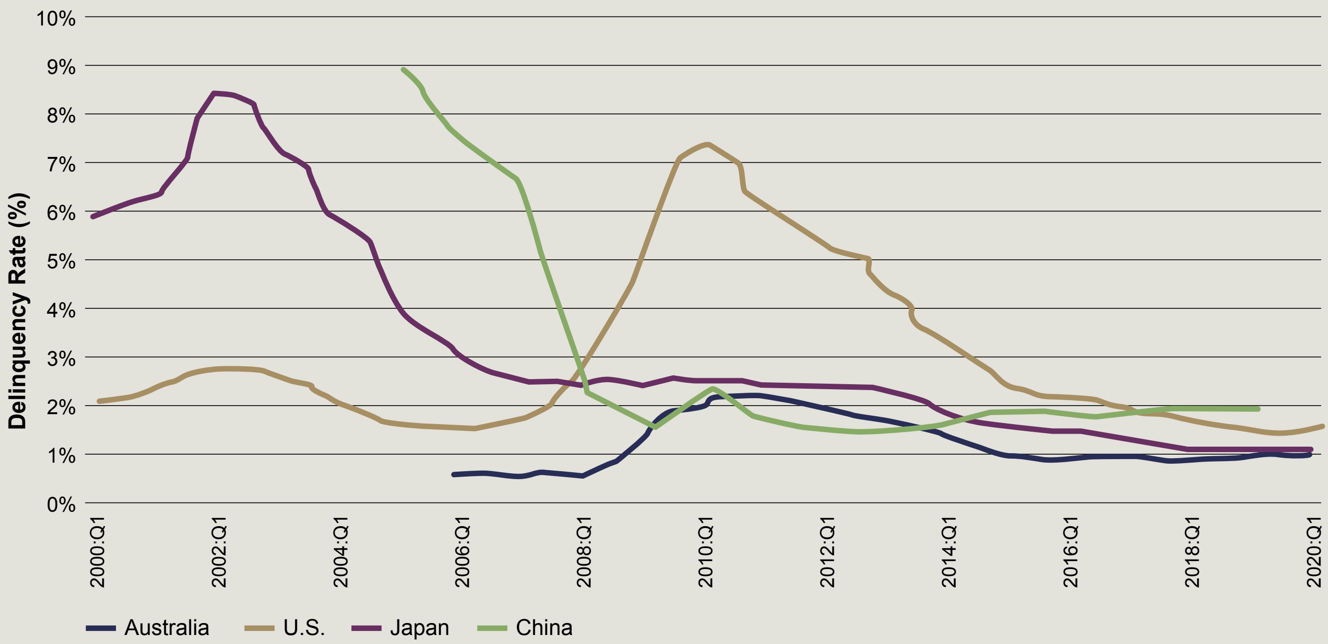
KW Residence Kojimachi, Tokyo, Japan

For higher-return strategies, we favor build-to-core strategies or conversion to multifamily in Australia and China. The growing pool of renters in Australia and China due to unaffordable housing ownership is expected to support demand for multifamily properties. In Tier 1 cities in China, demand is also supported by high urbanization rates and restrictions on housing purchases by in-migrants. Well-managed multifamily rental assets in the post-COVID-19 era could experience accelerated demand. However, the multifamily sector in Asia Pacific (except Japan) is not yet institutionalized. Headwinds for the sector include lack of operating expertise, capital market liquidity, and untested pricing evaluation.

Lodging: The hotel industry remains the hardest hit sector in the region due to pandemic-related travel restrictions. In 2021, travel restrictions combined with domestic economic stability are likely to increase domestic travel more than international travel. Despite growing numbers of bilateral travel agreements signed or currently under negotiation, global travel is not expected to return to pre-pandemic levels until 2024.[9] This trend is expected to benefit hotels targeting domestic visitors as the re-opening in several Asia Pacific countries progresses. It is still too early for investors to consider this sector, unless there are substantial pricing discounts or business plans for

9 Source: International Air Transport Association, as of November 24, 2020.

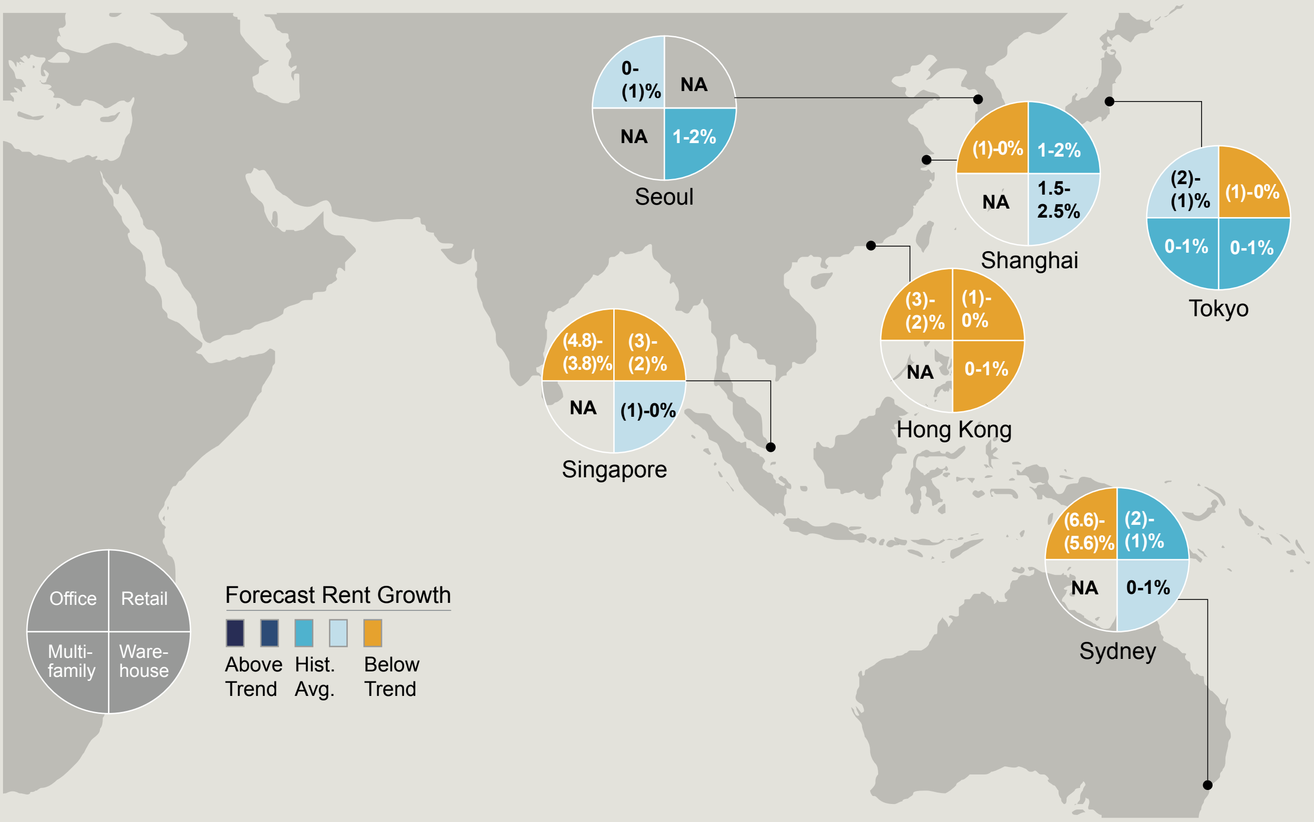
Bank Loan Delinquency Rate



Sources: CEIC, as of 2019 (China); as of 2020:Q1 (Australia and Japan); and as of 2020:Q2 (U.S.).

Real Estate Fundamentals—Asia Pacific

FORECAST ANNUAL AVERAGE NET EFFECTIVE RENT GROWTH: 2021–23



Note: The color coding for each market is based on each respective market's/sector's historical net effective rent growth performance. Light blue indicates that the forecasted net effective rental growth is in line with the historical long-term average, while above/below trend ratings indicate that they substantially exceed/trail their respective historical averages.

Source: LaSalle Investment Management, as of November 2020.

alternative usages to compensate risks. The various governmental support measures (e.g., China's subsidies and tax exemption program, Japan's Go-To Travel, and SingapoRediscovers) for the Asia Pacific hotel sector also suggest that distressed opportunities are still limited in the near term.

CAPITAL MARKET OUTLOOK

In 2021, as most central banks in Asia Pacific are expected to keep interest rates near historical lows, capital market liquidity remains abundant. Accommodative monetary policies, the hunt for yields, and the region's leading position in the pandemic recovery are the key reasons why we have not seen substantial real estate pricing discounts in the worst recession in decades.

Bank loan delinquency rates also provide insight on why we have not seen substantial pricing discounts or distressed sales. In Japan, the bank delinquency rate is at a 20-year low, leading to healthy real estate capital market liquidity (see Bank Loan Delinquency Rate on page 36). Although delinquency rates have increased slightly in Australia and China, they are still substantially lower than those during the early 2000s or the Global Financial Crisis. In China, it is unlikely that the PBOC will further loosen monetary policies in 2021. The Chinese government recently took serious measures to cut leverage among real estate developers. The borrowing costs for these developers are relatively high in China as compared to other countries. This phenomenon could create capital stack opportunities for equity investors who have a higher risk appetite. However, broad-based distress is unlikely in China, as the Chinese property market remains resilient and continues to attract various sources of capital.

In Australia, monetary policies are expected to remain accommodative for an extended period. The accommodative loan repayment moratoriums and other emergency measures that have helped forestall bankruptcies in 2020 are expected to decline as businesses reopen. The withdrawal of these measures could increase financial distress amid the weak economic environment, which could result in opportunities for risk-tolerant investors. We also do not expect widespread distress in Australian real estate markets, as real estate is well-supported by domestic superannuation capital and cross-border capital due to the country's highly transparent real estate market characteristics.

Some companies that are benefitting from government stimulus measures might not survive once these measures end. Economic realities like this remind us to continue to focus on tenant credit. In 2021, most companies are expected to evaluate their hiring plans. In a normal economic environment, it typically takes about six months for macroeconomic trends to filter through to real estate fundamentals (see Real Estate Fundamentals—Asia Pacific on page 36). The pandemic has accelerated structural trends in both positive and negative ways. There is a probability that rental revenues and occupancies (or rental income) could deteriorate in 2021. In turn, pricing movements could be driven by the anticipation of rental income movements. The performance of assets that are inherently weak in terms of location, specifications, and tenant profiles is expected to be further bifurcated from the performance of assets with strong characteristics. Thus, risk-averse investors should remain defensive in the near term. Their approach should be to actively manage their tenants to secure their income and to recycle weak assets while liquidity is abundant. Risk-tolerant investors could consider strategies to support tenants who are better positioned to survive the pandemic. Asset and liquidity management are critical. However, due to uncertainties in the macro environment and global capital markets, it is too early to take on duration risks.

Europe

A FRACTURED RESPONSE

Europe's COVID-19 pandemic experience will one day provide fertile ground for comparative studies on the efficacy of its governments' widely varying public health and economic strategies. On the public health side, responses have ranged from extremely strict lockdowns in

Manhattan Loft Gardens, London, United Kingdom

France and Italy to a laissez-faire approach in Sweden. The U.K. has taken a more reactive path, lurching between a relaxed stance and renewed lockdowns. In terms of economic support, many continental European countries ramped up long-established "short work" schemes that subsidize wages over potentially extended periods of reduced demand. The U.K.'s vast furlough scheme, by contrast, represents a much larger one-off stimulus, but came with a cut-off date that ended up being dropped and the arrangement extended through the first quarter of 2021.

These differences matter for real estate. European countries with better control over the pandemic, and sustained support for the individuals and firms impacted by it, exhibit a greater sense of normalcy. The starting point is also important. Just as a COVID-19 infection is more severe for people with pre-existing conditions, countries with pre-existing economic malaise are in a worse state to manage the fallout. For example, Italy's higher unemployment and debt levels constrain its potential for resilience. At the time of writing in November 2020, many European countries had entered second lockdowns. Of the major economies, Germany seems to be doing the best at sustaining some semblance of normal life, while the U.K., France, and Spain face the tightest restrictions. But these relativities can change rapidly. The European winter is typically long, damp, and chilly—this one is likely to feel especially so.

Yet there are reasons to be optimistic about Europe in 2021. As Winston Churchill famously stated, "Never let a good crisis go to waste." The unrelated and unresolved ailment of Brexit elevates uncertainty for the U.K. in 2021.

Allegro Living, Birmingham, United Kingdom

But it has also caused a shift in the balance of power within the European Union, which has allowed a major and welcome step toward European fiscal integration, in the form of its first joint borrowing and spending program. Like the European policymakers who brokered this ground-breaking deal, real estate investors disciplined enough to temper undue optimism, but also creative enough to overcome excessive pessimism, will do best in this complex environment.

UNITED KINGDOM

CONTINUAL CRISIS MANAGEMENT

Prime Minister Boris Johnson's new Conservative government had barely three months to settle in before the COVID-19 pandemic necessitated difficult decisions. Many of its public health choices were criticized as Britain's death toll rose above that of its European neighbors. But the decision to provide fiscal and monetary policy support, which initially ranked among the most generous in the world, mitigated the worst of the job losses and company insolvencies. The scale of this support is a key reason that Oxford Economics projects a recovery in GDP in excess of the eurozone's over 2021–22. Nevertheless, uncertainties as to the shape, duration, and size of government support persist. The expiring furlough scheme will eventually transition to a less generous replacement in 2021.

While the second wave of the pandemic ensures that all European countries face a significant headwind as they move into 2021, the U.K. has another entirely of its own making. The Brexit issue—and most significantly the Northern Ireland conundrum—was largely overlooked during the first half of 2020. Stumbling trade negotiations over the summer brought the problem sharply into focus, and the risk of no trade deal before the year-end deadline is once again a topic of debate. Whether a full or partial agreement will be reached at the final hour is unknowable. Nonetheless, senior government officials espouse the desire for full sovereignty, which implies a willingness to walk away from trade negotiations and suggests a greater likelihood of a "No Deal" Brexit. The collapse of the economy due to the pandemic would act as a screen for the worst of the fallout, obscuring its impact amidst the broader malaise.

One effect of the Brexit negotiations is to compound real estate occupier and investor uncertainty triggered by the pandemic. Spikes in Brexit uncertainty since 2016 have temporarily but meaningfully depressed both leasing demand and purchasing activity. This threat will manifest most acutely between now and the second quarter of 2021.

In the short term, the economic impact of Brexit will be hard to discern amid the shorter and sharper effect of the pandemic. Estimates from the London School of Economics and Oxford Economics suggest the pandemic could cost between 2%-4% of GDP over two years. By contrast, the drag from Brexit could ultimately cost between 3.7% (deal) and 5.7% (no deal) of GDP, but realized over a number of years. The U.K.'s success in striking trade deals and reorienting its economy away from the EU over the next few years will be the determining factor in whether these Brexit projections come to fruition. Much will hinge on the strength and adaptability of London, both as a global financial center and as a leading city for technology and other services. Other regions in the U.K. may also play an important role on the international stage; for example, the pandemic is highlighting the country's strength and capacity in pharmaceuticals and biotechnology.

CONTINENTAL EUROPE

A SURPRISING SHOW OF UNITY

Given the consternation over Brexit in the U.K., it is perhaps ironic that having the British out of the negotiating room was likely the factor that allowed EU leaders to strike a precedent-setting "recovery fund" deal in July 2020. While the €750 billion fiscal package represents only around 4% of the bloc's GDP, it breaks a long-standing taboo in triggering the joint issuance of mutually guaranteed debt. Brexit, by ejecting the perennially intractable U.K. from the discourse, could have been a turning point in favor of further European integration. This would be a strong structural positive for the EU as a whole, and for its more indebted members like France, Spain, and Italy.

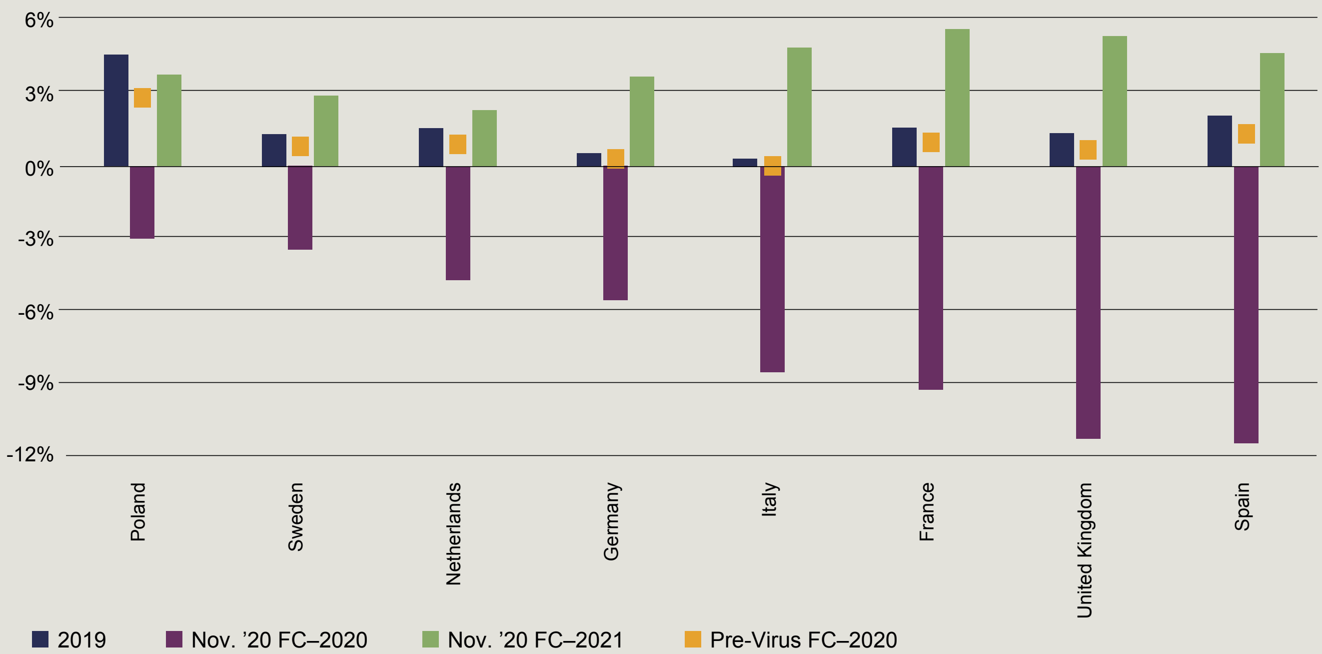
But despite this act of unity, Continental Europe remains fragmented across a range of economic, policy, and COVID-19-related dimensions. As is often the case, an aggregate view of the continent conceals considerable variation among countries (see Economic Outcomes Vary Widely Across Europe below.) The pandemic caused the European economy to collapse, with eurozone GDP projected to decline by 7.5% in 2020, the largest fall in the eurozone's history. At the national level, the GDP decline estimates for 2020 range from just -2.2% for Norway and -3% for Poland to -11.4% for the U.K. and Spain. The public health disparities are even greater. COVID-19 deaths per million in Belgium, the worst-hit major country in Europe, are running more than 7.5 times higher than the rate in Germany, and more than 14 times higher than in Finland.

The key drivers of variation in economic outcomes are the degree of exposure to the worst-hit industries and the scale and duration of governments' economic support. As is the case across the globe in 2020, the sectors that saw a particularly large and sustained hit are the retail and hospitality industries. Europe's manufacturing-driven economies suffered a short but sharp decline early in the year, as the globe's China-centric supply chains ground to a halt. But the eurozone's manufacturing PMI has since recovered to levels last seen in 2018, as goods flows have resumed even while people remain at home. It is now clear that Spain, France, and Italy are experiencing the worst conditions among the major economies, while Germany, the Nordics, and the Netherlands are faring better. Central and Eastern European economies have held up relatively well so far, though their recoveries have been reliant on strong consumer spending, rather than their usual driver of manufacturing output.

Economic Outcomes Vary Widely Across Europe

DISPERSION TIED TO ECONOMIC STRUCTURE, VIRUS CONTROL, AND POLICY RESPONSE

European GDP Growth Forecasts
(Pre-Outbreak vs. Latest; %)



Sources: LaSalle Investment Management (November 2020) and Oxford Economics (January 2020 and November 2020).

Lindenstrasse, Berlin, Germany

In 2021, a critical channel to watch is the labor market; a surge in unemployment in Continental Europe would cause lasting damage and slow the recovery. Eurozone unemployment has been cushioned by government support schemes, such as Germany's long-standing Kurzarbeit (short-time working), which allows employers to keep workers on their payrolls despite weak demand. The recovery path for GDP and household incomes will be largely determined by the ultimate damage done to the labour market, but this will only become clearer as public support is scaled back.

The European Central Bank continues to provide ample monetary stimulus, easing financial conditions. Given the substantial weakening in the inflation outlook, the ECB could expand its asset purchase program in the coming months. The weak growth and inflation outlook for 2021 means that monetary conditions are still expected to remain ultra-loose for an extended period; Oxford Economics does not expect interest rates to start to rise until 2024.

In summary, the impact of the pandemic will vary given the different policies put in place and as a result of different economic structures across the region. Eurozone GDP growth is forecast to pickup to 4.3% in 2021, but it is not expected to return to its pre-crisis level until 2022, with the hardest-hit countries seeing slower recoveries. Real estate investment flows have largely followed the contours of this variation, with the strongest economies attracting the most investor activity.

CAPITAL MARKETS: A NARROW WINDOW OF INEXPENSIVE DEBT

The pandemic and associated lockdowns are contributing to a period of subdued investment activity, with commercial real estate investment in Europe dropping to its lowest level since 2014. Cross-border capital has been disrupted the most given the lack of in-person meetings and an inability to tour assets. Even so, total investment activity in Europe has been surprisingly resilient throughout the year; volumes have declined by 17% year on year in 2020, slightly better than in North America or Asia Pacific.

But as with many things this year, variation abounds. In some of Europe's smaller markets—Belgium, Denmark, Portugal, and Switzerland—transaction activity was slightly up this year. In Germany, Europe's largest investment market, transaction activity fell by 15% in the first nine months of 2020. The main factors supporting Germany's relative resilience are its safe-haven status; the size, scale, and sophistication of the domestic investor base; its more effective response to the COVID-19 pandemic; and its strong public finances. Germany's activity stands in contrast to the U.K., the second-largest investment market in Europe, where volumes were down 30% over the same period. The U.K.'s investment volumes have been soft since the Brexit vote, as cross-border investors remain cautious on its impact. Elsewhere, investors have adopted a wait-and-see attitude; investment volumes declined substantially in France, Spain, Italy, and the Netherlands.

Despite the emergence of non-traditional lenders, Europe remains largely reliant on the banking system for debt capital. Many banks have adopted a more risk-off approach,

Bergère, Paris, France {click on photo for video tour) scaling back leverage, increasing loan margins, and focusing on prime assets. In addition, the low interest rate environment will continue to suppress already fragile bank profitability in an industry that has struggled to recover from the GFC. That said, loan-to-value (LTV) ratios were relatively conservative prior to the pandemic, suggesting a smaller hit to balance sheets than during the GFC. LTVs range from 50%–55% in the U.K. and France for senior loans on a prime office asset, 55%–60% in Germany, and 40%–45% in Spain. The low cost of commercial real estate debt and conservative LTVs means borrowers face rather comfortable interest coverage ratios.

Moreover, due to the recent fall in swap rates, the all-in cost of debt has fallen sharply to record lows. With this in mind, we expect lending activity to pick up in 2021 as confidence returns to the market, both for traditional and higher-return opportunities. And yet there are likely to be remaining financing gaps in 2021, which will bring opportunities for alternative lenders. Banks will continue their risk-off approach and will likely continue lending at lower LTVs, and focusing on core, stabilized assets. They are likely to exhibit limited appetite for transitional development or operating assets. And while more risk-averse traditional lenders may continue to abstain from the market in 2021, mezzanine, higher-leverage whole loan strategies, and transitional financing will likely play an increasingly important role in the liquidity of the real estate market, and we see attractive risk-adjusted returns in this space.

SECTOR FUNDAMENTALS AND STRATEGIES

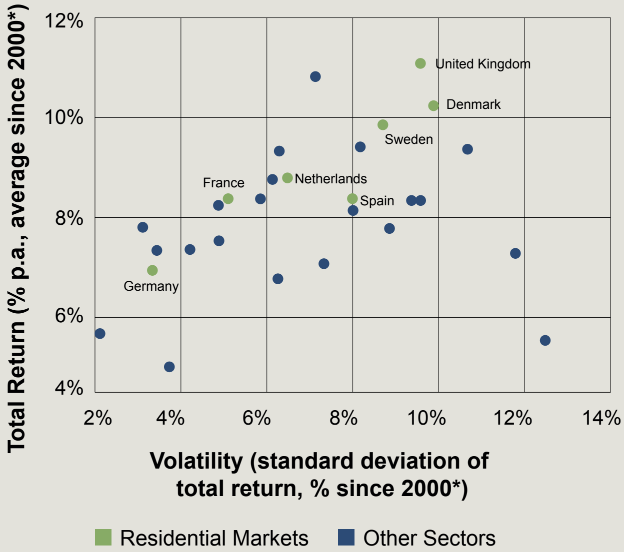
The pandemic has intersected with and intensified an already ongoing and vast—but heretofore gradual—transformation of European real estate portfolios.

New Loft, Amsterdam, Netherlands

European Residential Offers Strong Risk-Adjusted Returns

HISTORICAL PERFORMANCE HAS BEEN STRONG

Total Return vs. Volatility Across Property Sectors
(Average % p.a. since 2000* and Standard Deviation*)



*Data for Spain is since 2004.
Sources: LaSalle Investment Management, MSCI, and ONS, all from September 2020.

Traditionally, institutional property in the U.K. and Europe has been dominated by the office and retail sectors. A look at the Pan-European Property Fund Balanced Index from MSCI, which tracks diversified pan-European open-ended funds, is telling. As of the second quarter of 2020, 72% of its capital value was made up of office or retail assets, leaving just more than a quarter for everything else, including logistics, residential, and alternatives. In contrast, 49% of the corresponding NCREIF ODCE Index for the U.S. was comprised of office and retail.

But the dominance of office and retail in the region has been fading. For at least several years before the pandemic, investors have sought to increase their exposure to European logistics and residential assets—"sheds and beds" in the lingo. Both sectors have been rightly identified as beneficiaries of compelling secular trends (e.g., e-commerce growth and urbanization) and a growing investable stock. They have also demonstrated their value within portfolios. Evidence from MSCI underscores residential's excellent risk-adjusted return and downside-resilient income characteristics (see European Residential Offers Strong Risk-Adjusted Returns above). Meanwhile in the logistics sector, long known for flat real rents, recent rental growth is being sustained at high levels in many markets.

The trends driving the growth in the logistics and residential sectors have only been accelerated by the pandemic. With concerns about the future of offices adding to longer-standing worries about retail, TINA

European Investment Recommendations: 2021

INVESTMENT THEMES PLAY BOTH SIDES OF CAPITAL MARKETS "CHASM"

	Core	Higher Return
Best Opportunities	Urban logistics and modern motorway logistics (Well-connected big box and dominant hubs)	Logistics development and multi-let industrial
	Residential (Urban build-to-rent (BTR), affordable, and family housing)	Residential development (Includes for-sale, urban BTR, family housing, and retirement housing)
	Secure long-term income offices (Prime in key centers with low vacancies and strong, well-connected micro-markets)	Office refurbishment and build-to-core (Strongest locations only; avoid near-term office leasing risk)
	Inflation-linked with high site value; ground leases and income strips (Primarily a U.K. opportunity)	
	Affordable housing, retirement housing, healthcare, educational facilities	Niche sectors (Emerging sectors such as self-storage)
Other Opportunities	Long-term income-producing retail warehouse/retail parks (Food-anchored retail in demographically strong markets)	Repriced retail repositioned to alternative use
		Repriced hotels (With strong covenant and/or operational manager)

Source: LaSalle Investment Management (November 2020).

(There Is No Alternative) has joined FOMO (Fear of Missing Out) as reasons investors are targeting European logistics and residential.

This has created a chasm between logistics and residential on the favored side of a great divide, and office and retail on the unfavored side. The former are manifestly strong, but aggressively bid, especially in relation to the amount of stock available for investment in the less mature European context. There is far less competition in the office and retail sectors, where the outlook is murky and investors are seeking pricing discounts. While this sector bifurcation is not unique to Europe, the legacy positioning of portfolios in this region means the desired portfolio rotation is especially great, putting strains on both sides of the divide.

In our view, the investors in European property that will be most successful in 2021 will be those who can be active on both sides of the chasm (see European Investment Recommendations: 2021 above). They must avoid overpaying for logistics and residential, while cautiously taking advantage of mis-pricing in the more traditional sectors. When buying logistics and residential assets, investors must determine when and where it is appropriate to embrace bullish rental assumptions to win a bid. Logistics and residential assets have performed strongly, but it is quite possible to overpay for a good thing, especially when there are pockets of potential oversupply. Likewise, it may pay to be contrarian in the less favored sectors, but this will require waiting for pricing to adjust, as well as a high degree of conviction in the location and the asset itself.

OFFICE: CHALLENGING NEAR TERM, OPPORTUNITY LONG TERM

The near-term outlook for the European office sector is considerably less certain than it was prior to the pandemic. Business leaders largely view remote working as a success and overall will likely require less office space in the future. Precisely how much less space and over what time period these changes occur will vary by market. Given the rate at which leases are due to expire or break in the short term, an accelerated transition to remote working will not impact office rents immediately. Other market factors such as cyclical vacancy will be more influential in the immediate future.

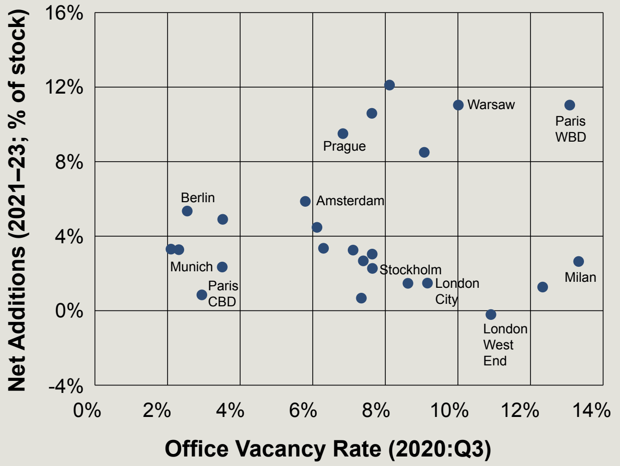
Different preferences and attitudes toward work will lead to variation by country. For instance, there are several reasons why offices in Continental Europe may not be impacted by remote working as much as offices in the U.K. Continental Europe offices generally have lower density (i.e., more office space per worker), shared cellular offices where spaces are shared with only a few close colleagues, and openable windows for natural ventilation. Meanwhile, workers in larger metro areas reliant on long commutes by public transport, such as London and Paris, will be less keen to return to their desks than those in more compact cities in the post-COVID-19 era.

During the most challenging period of the lockdown, there was almost no leasing activity. These low levels should not persist throughout 2021, but we do expect a drop in demand. The depth of tenant demand from a wide variety of sectors and companies' preference for high-quality

Collaboration-Driven "Front Office" Markets Offer Strong Fundamentals

UNDERSUPPLY IN STRONG DTU+E LOCATIONS TO PREVENT SHARPER RENTAL DECLINES

Current Office Vacancy vs. Future Supply



Note: Paris submarkets are JLL future supply as a percentage of stock rather than PMA net additions. Vacancy rates for Brussels, Helsinki, Milan, Luxemburg, Amsterdam, and Stockholm are as of 2020:Q2.

Sources: PMA (October 2020), JLL (2020:Q3), and LaSalle Investment Management (November 2020).

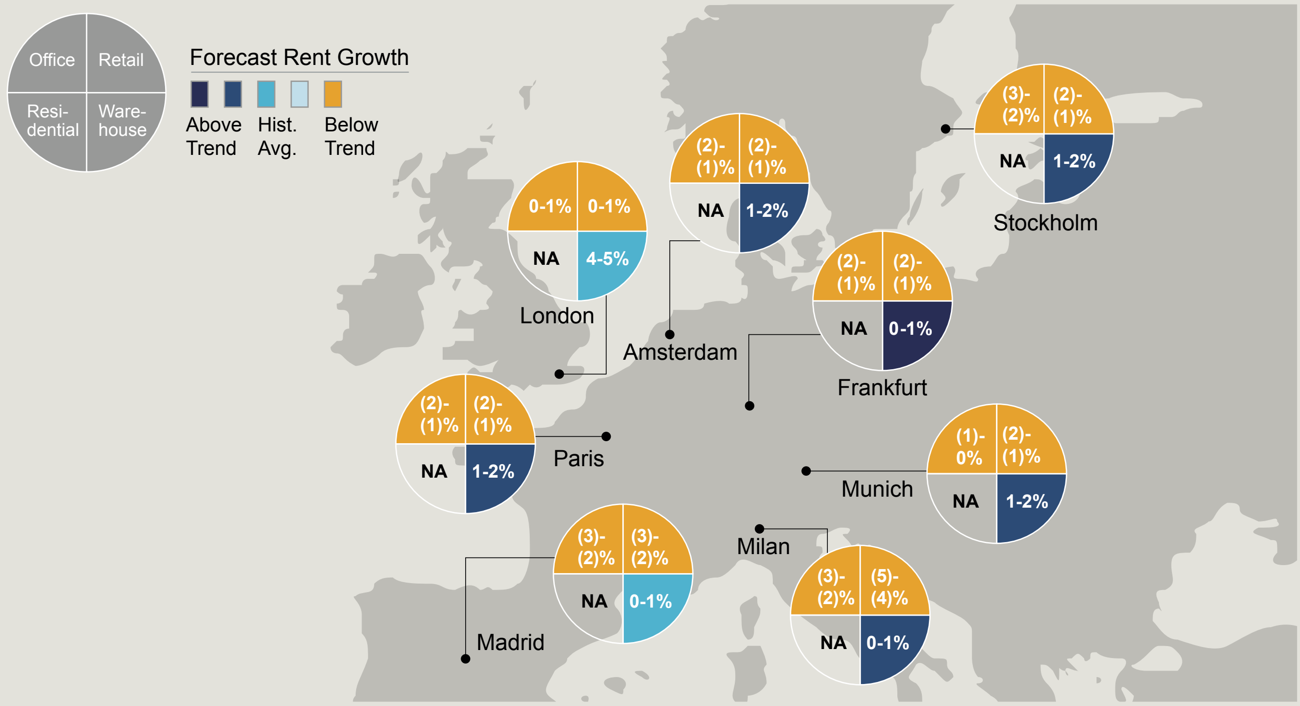
office space in accessible locations are both expected to persist.

The key difference between the pre- and immediate post-pandemic periods will be the significant amount of second-hand space we expect to come onto the market. This will be particularly apparent in fast-moving markets like London. While we do not believe this will depress demand for the best space, it may limit its future rental growth potential, as the balance of power will shift from landlord to tenant. After years of declining office vacancy rates to historically low levels, we have seen a reversal over the past few quarters. Many of Europe's most creative key cities are at least entering this period from a position of strength, with low vacancy and relatively small pipelines (see Collaboration-Driven "Front Office" Markets Offer Stronger Fundamentals). In 2021, we expect the emergence of an office market in Europe that is polarized by quality.

Coworking and flexible offices are a known risk to the office sector in Europe, especially in cities where they make up a large share of demand, like in London. These operators have been severely impacted during lockdown, and for some the damage may prove to be terminal. However, there is a growing acceptance that flexible working goes hand-in-hand with remote working. These operators likely will still play a pivotal role in the evolution of the office sector.

Real Estate Fundamentals—Europe

PRIME RENTAL GROWTH, 2021–23 (% PER ANNUM)



Note: The color coding for each market is based on each market's/sector's historical net effective rent growth performance. Light blue indicates that the forecasted net effective rental growth is in line with the historical long-term average, while above/below trend ratings substantially exceed/trail their historical averages. Office is prime (not net effective in Europe); retail is high street shops (Central Europe forecasts are based on country prime, not city); and warehouse is motorway logistics (forecasts and history; not urban logistics).

Sources: LaSalle Investment Management, PMA, and JLL, as of November 2020.

London's pricing discount to other global markets persists and may even grow in 2021 depending on how the pandemic and Brexit issues evolve. This could be reached through both higher asking yields and, for foreign investors, a weaker pound sterling. We may even see long-held assets put onto the market by over-leveraged investors or open-ended funds seeking to meet their redemptions. Long-term investors will see this as a rare window of opportunity. By contrast, pricing for prime office assets across Europe has remained stable, with yields continuing to sharpen in Germany's major cities (see Real Estate Fundamentals—Europe on page 43).

With the twin challenges of a major recession and the more widespread adoption of remote working hanging over office markets in Europe, office investment opportunities in 2021 will need to be priced carefully. Should European markets avoid the downside scenarios for these challenges over the first half of 2021, we would expect the strong fundamentals in the major markets to re-emerge broadly intact. Older readers may well recall that the "death of the office" has been predicted a number of times before, yet the sector has bounced back in an adjusted form.

RETAIL: THE HARDEST HIT SECTOR

The fate of retail across Europe is likewise a story of variation. Heading into 2020, U.K. retail was arguably already under more stress than any other real estate sector in the world. The year is on track to see the U.K.'s highest ever number of store closures, notwithstanding extensive government support. Retailers have the upper hand in virtually every negotiation with landlords, even in the best performing schemes.

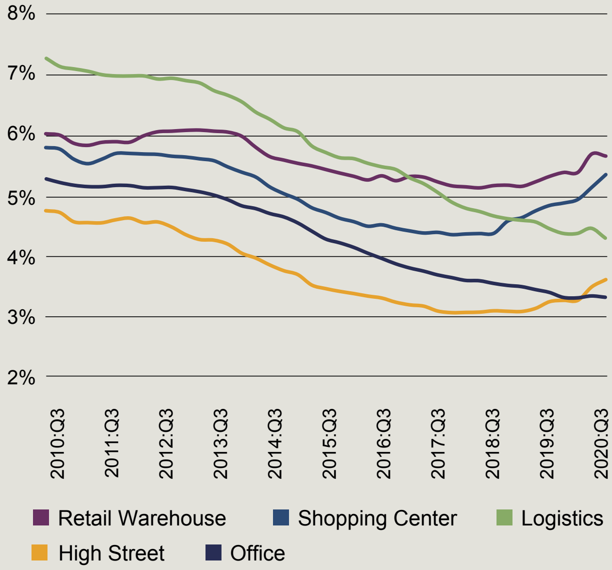
By contrast, the retail sector in Continental Europe began 2020 in a relatively stronger position and has performed better so far. There are two key structural differences between the Continent and the U.K. that likely contribute to these differences. First, shopping centers in the U.K. tend to be anchored by department stores, which are undergoing structural decline, while malls in Continental Europe are typically anchored by more convenience-oriented supermarkets or hypermarkets. Second, e-commerce penetration remains much higher in the U.K. than on the continent.

But it remains unclear whether retail prospects in Continental Europe will ultimately deteriorate in-line with the U.K. experience. Indeed, the pandemic is prompting e-commerce growth in places where it had lagged. For example, Southern Europe's historically low e-commerce penetration was once chalked up to a supposedly cultural preference for in-person shopping. But it may have had as much to do with customers lacking familiarity with retailers' websites. Tighter lockdowns in France, Spain, and Italy made online shoppers out of many holdouts, as learning how to buy online became a necessity.

Increasing Divergence Between Retail and Other Sectors' Yields

LOGISTICS YIELDS ARE COMPRESSING, RETAIL IS EXPANDING, AND OFFICE IS STABLE

Prime Yield by Sector
(All Europe; %)



Sources: LaSalle Investment Management (November, 2020) and JLL (2020:Q3).

The European retail market is customarily segmented into shopping centers, high streets, and retail warehousing. But these traditional divisions are not necessarily the fault lines along which market conditions are fragmenting. Instead, retail destinations that are patronized disproportionately by international tourists and city center office workers are struggling. Retail locations surrounded by residential rooftops and catering to daily necessities have been more resilient. These patterns have upended historical patterns among retail subsectors. Normally the most resilient U.K. market segment, Central London high streets, are experiencing the impact of fewer office workers and a near total lack of foreign tourists. This decline in people has affected Europe's smaller cities less than the larger ones, due to the latter's reliance on public transport.

The capital markets have responded to the challenges faced in the retail sector by largely seizing up (see Increasing Divergence Between Retail and Other Sectors' Yields above). According to JLL, since 2017 prime yields for all U.K. retail have expanded by 155 basis points, and by 155 bps for U.K. shopping centers. Continental Europe has fared better, with a 25 bps expansion for all retail and a 60 bps expansion for shopping centers. However, these figures, based on valuers' estimates for a theoretical prime asset, likely understate the magnitude of the true repricing, given transaction volumes are so low as to obscure liquidity and

Euskirchen Logistics Unit, Euskirchen, Germany {click on photo for video tour)

price discovery. Initial yields implied by public market signals suggest a pan-European retail yield expansion of around 220 bps over the same period, according to Green Street.

From what limited evidence there is, asking yields for certain retail assets are approaching levels that would generate attractive returns from income alone. The key questions investors should ask about an asset are whether its income and tenant line-up are sustainable, and if yield compression will be forthcoming for properties that weather the storm. In 2021, we anticipate the strongest urban retail parks moving into fair value territory, followed by the best high streets in top towns. Due to their physical limitations, complexity and, in part, tenant homogeneity, secondary shopping centers will lag behind unless there is a strong case for redevelopment (see The Future of Retail Real Estate sidebar on page 17).

While we expect to see the bottom of the current cycle for prime retail pricing in 2021, lesser quality retail may take longer to find a floor. Fundamentals will continue to be under stress, even in the post-COVID-19 era. This is because more fundamental changes still need to be made, not least the removal or conversion of a considerable part of the retail stock. We may see more government time devoted to major issues regarding the outmoded business rates system in the U.K. and online sales taxes across the region. However, what, when, and if such changes will happen is unknown.

LOGISTICS: EVERY INVESTOR'S FAVORED SECTOR

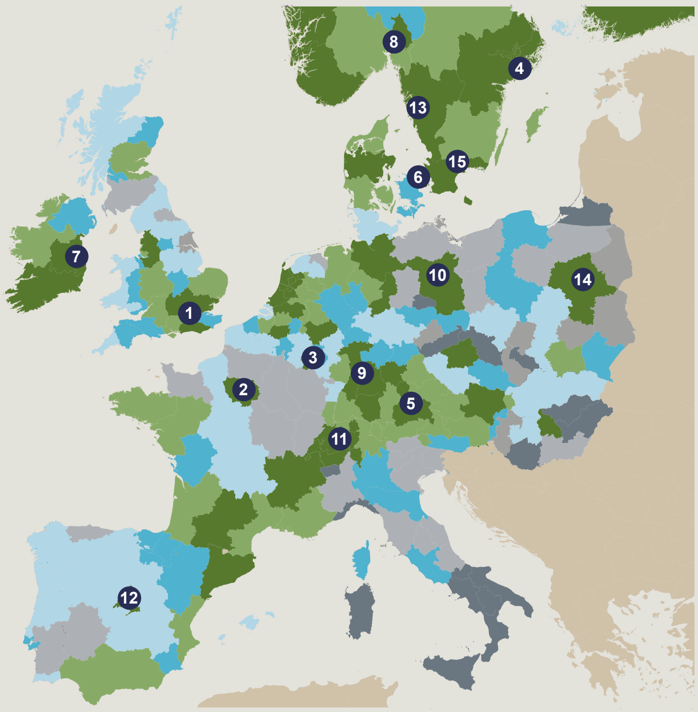
In Europe, as elsewhere, logistics has been the stand-out sector for occupier fundamentals throughout 2020. A sharp increase in e-commerce, nearshoring of manufacturing, and stock buffering, triggered by the pandemic, will bring long-term gains to the sector. Given the temporary closure of non-essential retail stores, e-commerce has been the biggest part of this story in 2020. Over 20% of European logistics take-up in the second quarter was by e-commerce users, the highest on record. Moreover, the events of 2020 highlight the need for resilient supply chains, with demand spiking in order to house just-in-case inventory. We anticipate that inventory building and back-filling orders will lead to highly resilient demand prospects in 2021.

The big question in underwriting logistics investments today is more about supply than demand. The supply of logistics property in typical out-of-town "motorway" locations has historically been quite elastic, with construction quickly ramping up in response to real rental growth. Prior to the pandemic, we identified the risk of speculative supply creeping back into the European market, especially in parts of the U.K., Spain, the Netherlands, and Poland.

The most robust rental growth potential is in urban infill locations, where there is strong demand and competition from other land uses reduces the supply reaction. Last-mile and urban logistics occupiers require proximity to customers and business partners, which reduces transport costs and enables them to pay higher rents. The value of an infill logistics location is a function of its surrounding density and congestion, which is why the biggest spikes in urban logistics rents have been recorded in London and Paris. Investors able to appropriately balance optimism for further growth with realism about the potential supply response in a given location will be best placed to realistically price logistics assets.

Brexit will impact the logistics markets in the region. Should the U.K. government fail to agree to a trade deal with the EU, in early 2021 the short-term demand close to ports of entry will be unprecedented, as new customs checks are suddenly introduced, triggering stockpiling and temporarily increasing demand in northern French and Dutch markets, as well as the U.K. and Ireland. However, this interim issue is unlikely to generate enduring investment opportunities of scale, given that the disruption to trade flows will eventually be eased through technology and greater screening capacity. In the longer term, however, Brexit is likely to reshape goods flows enough on the margins to influence logistics demand, but the impacts will be diffuse and difficult to predict.

E-REGI Index 2020—Headline Results



LaSalle E-REGI 2020

1. London
2, Paris
3. Luxembourg
4. Stockholm
5. Munich
6. Copenhagen
7. Dublin
8. Oslo
9. Stuttgart
10. Berlin
11. Zurich
12. Madrid
13. Gothenburg
14. Warsaw
15. Malmo

Very Strong
Strong
Good Medium
Poor Medium
Weak
Very Weak
No Data

Source: LaSalle Investment Management, as of August 2020.

RESIDENTIAL: COMING INTO ITS OWN

For the first time in the history of the *ISA*, we cover European residential as a sector unto itself, rather than under the banner of "niche" or "alternatives." This reflects the tremendous gains this market has made in terms of liquidity and the scale of the investable stock. The investment case, broadly speaking, remains compelling. The residential sector in Europe is characterized by persistent undersupply and demographic-driven demand. While aggregate, European-level demographic trends are lacklustre, the cities richest in human capital (see E-REGI Index 2020), are likely to resume their role as magnets for economic migrants as the pandemic ebbs.

But the residential sector in Europe is hot, and risks can be hard to spot amidst the glow. So much of the investment activity in the sector in recent years has taken place in the form of forward-funded, build-to-rent properties targeting young professionals. There are pockets of clear oversupply, especially in parts of Manchester, England. Even where supply is less of an issue, submarkets catering to office workers will see their fortunes tied to the return to workplaces in 2021. Investors who assumed big rental premia were attainable by packing properties with amenities the market had not seen before may get caught out by pandemic-induced penny-pinching. In contrast, middle-market and affordable housing segments, especially those targeting young families, remain chronically undersupplied.

Another issue to watch in 2021 is the impact of changing rental regulations. Limits on pandemic-related tenant evictions have joined other recently imposed restrictions to constrain landlords. But investors should not necessarily fear all rent regulations. Continental European markets have been regulated for many years, under relatively transparent systems accepted by investors. We broadly view them as "a feature, not a bug" of the market. Regulations make income stickier and moderate volatility; for example, renters in Germany typically stay in a property for around seven years, compared to an average of around 18 months in the U.S. Investors who understand the nuances of regulatory systems can work within them to identify value-creation opportunities, while creating resilient income streams.

NICHE ALTERNATIVES: CONTRASTING SECTOR CHOICES

The pandemic has had a polarizing effect on Europe's niche sectors. For example, self-storage and healthcare have proven resilient, while the hotel and leisure sectors, and to a much lesser extent the student housing sector, have suffered due to government-imposed restrictions on movement. As a result, the investment opportunities in 2021 for the more resilient niche sectors are based on strong fundamentals, while those in the worse affected sectors will be driven by attractive pricing.

Both the self-storage and healthcare sectors are characterized by resilient, needs-based demand and growing investor interest. In the self-storage sector, product awareness and investable stock is growing, albeit from a rather small base. While there was a slight drop-off in tenant demand for care homes in 2020, these and other healthcare facilities have solid long-term demand drivers. We also expect the pandemic to spur interest in the emerging life sciences property sector in 2021.

By contrast, there is no undersupply of hotels, leisure properties, and U.K. student housing. Weak demand in 2020 has therefore been felt more keenly and thus values have fallen farther. These sectors are not facing the same existential threats as retail, although we do expect some lasting impact in 2021 due to the decline in international tourism, business travel, and global student mobility. Their outlook is closely tied to the duration and magnitude of the pandemic. Investors with a positive view on these sectors may view the current discounted pricing as a short window of opportunity. Hotels in strong tourist locations or those catering to the burgeoning domestic "staycations" trend will be most in demand in 2021.

LONG INCOME: A FIXED-INCOME SUBSTITUTE

The reason for the continued expansion of the long-income strategies lies in its primary purpose: to act as a bond-like substitute when bond and index-linked bond yields are at record lows. As such, there is as much focus on covenant strength, lease length, and capital requirements as there is on the asset itself. This is most evident for income strips, the lowest-risk opportunities, where the physical attributes of the asset are more-or-less inconsequential. Long-income investors are largely ambivalent of the sector in which the tenant operates, except for where the outlook for that sector threatens their solvency.

Pricing at the core end of this sector has remained remarkably resilient in 2020, with no outward movement in yields. Appetite from investors remains, and we see further yield compression in 2021. This demand has been further bolstered by the downward shift in bond yields, making pricing on these bond-like substitutes appear even more attractive on a relative basis. While long income has predominately been a U.K. strategy, activity is increasing in Continental Europe, especially for some niche asset types such as healthcare properties.

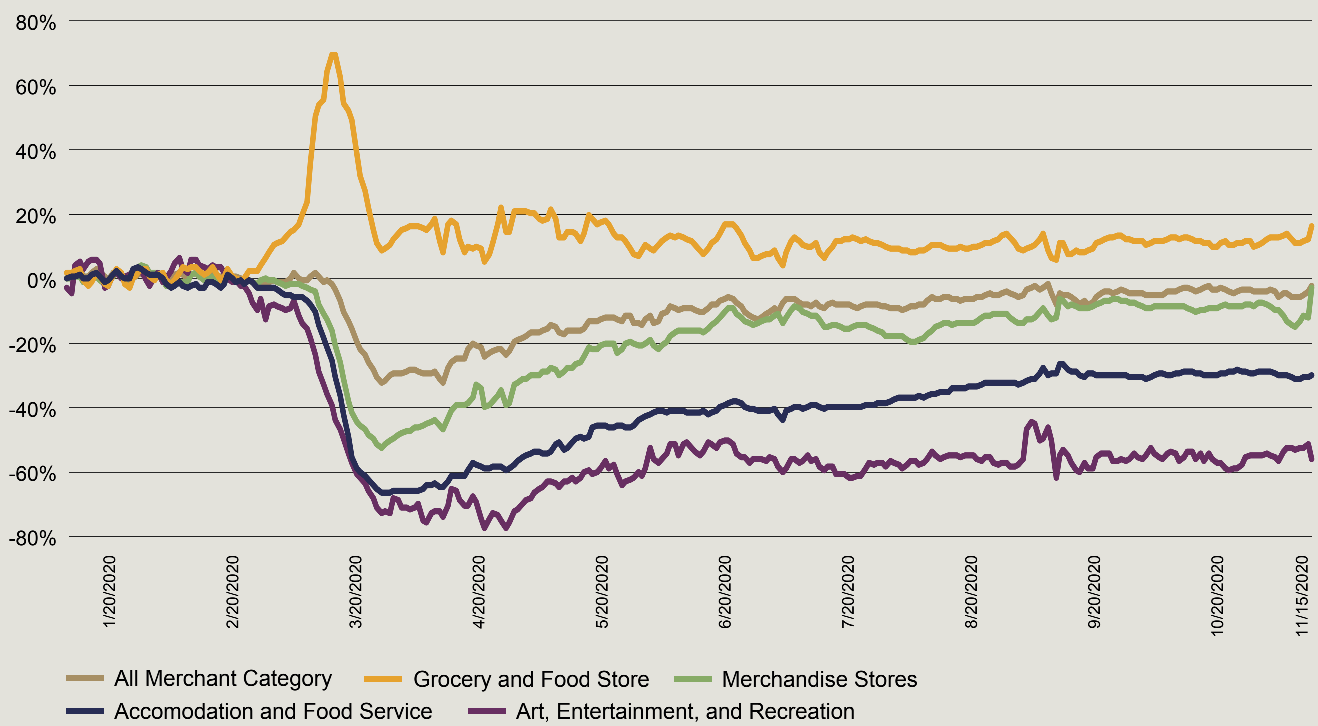
North America

PANDEMIC ENDS PERIOD OF TRANQUIL MARKET CONDITIONS

Nearing the close of a turbulent year, we reflect on the damage done to the U.S. and Canadian economies and real estate markets and discuss our outlook for the future. Perhaps obvious, but worth highlighting: We fully expect 2021 will be better than 2020. There have been enough

U.S. Spending By Merchant Category Shows Stability and Even Growth in Goods Categories During Pandemic

HOTELS, FOOD SERVICE, AND ENTERTAINMENT REMAIN DEPRESSED



Note: Data are through November 15, based on the most recent update as of December 1, 2020. The change is compared to January 4–31 and is seasonally adjusted.

Source: Affiinity Solutions via Opportunity Insights from collaboration of Harvard University, Brown University, and the Bill & Melinda Gates Foundation.

scientific advancements in fighting and controlling COVID-19 that we believe 2021 will be the year the pandemic will be contained in North America. This prospect underpins our views and if it takes longer, that would certainly have a material impact on our outlook.

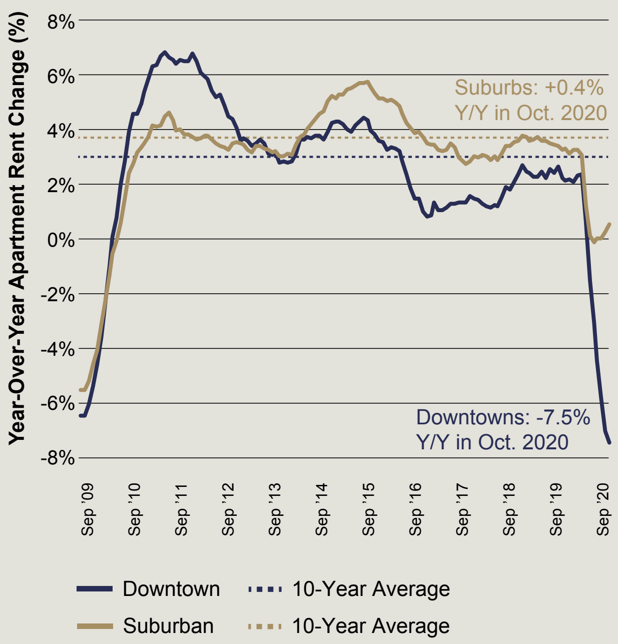
Joe Biden will be inaugurated as the 46th President of the U.S. in January 2021. And while it is not certain, it seems likely there will be a divided government with Republicans retaining control of the U.S. Senate. Divided government means we do not expect major changes in policies that will impact the economic outlook. Major spending or tax reform initiatives are unlikely and the outlook for containing COVID-19 is going to have more impact on the economy than policy.

The remarkable stability in economic growth, vacancy rates, capitalization rates, property values, and transaction volumes we highlighted in recent editions of the *ISA* came to a halt as the pandemic erupted across North America. This led to a record decline in GDP, higher vacancy rates, a collapse in transaction activity, and a lack of visibility on property values in 2020.

In the U.S., COVID-19 infection rates and mortality rates are among the world's highest. Canada's infection and mortality rates have been comparably lower but this is not sparing the country from lockdowns, economic decline, and significant impacts on real estate. While the pandemic is posing a greater challenge to the U.S. from a public health perspective, Canada has a second challenge to deal with in terms of sharply lower energy prices. Although both countries had strong starts to their recoveries from the shutdown phase of the pandemic, the pace of recovery slowed in late summer and fall. The spread of COVID-19 has ebbed and flowed throughout 2020, but despite rising numbers of new cases in the late fall/early winter, shutdowns have been only selectively implemented at a local or regional level.

The U.S. and Canada appear to have found a level of economic activity that can be sustained during the pandemic. Sectors most linked to bringing people together are depressed, while sectors oriented around goods—both necessity and otherwise—are closest to normal. The U.S. Spending by Merchant Category chart on page 47 shows that home improvement store sales are up significantly year-on-year while hotel, entertainment, and restaurant spending remain depressed; the data on Canada are very similar.

U.S. Suburban Apartment Rent Growth Has Stabilized While Downtown Apartments Continue to See Dramatic Rent Declines



Sources: RealPage and LaSalle Investment Management. Data through October 2020. Latest available as of November 2020.

CYCLICAL RECOVERY EXPECTED

Looking to 2021 and 2022, there are both cyclical and secular dynamics to consider. The U.S. and Canadian economies are poised for a solid cyclical recovery once the health and safety issues are under control. GDP is projected to recover to prior peak levels by the end of 2021 and job growth to follow by 2022–23, with Canada leading the U.S. in terms of jobs recovery. We expect a virtuous cycle of increased spending on services leading to business expansion and hiring in late 2021 and into 2022. However, this view may change if depressed conditions in hard-hit sectors persist and additional fiscal support is not provided. Both the U.S. and Canadian economies were helped by large and effective stimulus measures in the shutdown phase of the pandemic. As the pandemic persists, there is a need for additional support for unemployed workers, provincial/state and local governments, and the travel and hospitality sectors. If this does not occur, there may be a decline in overall economic activity and more permanent economic damage. In the U.S., despite the ongoing partisan rancor, some fiscal stimulus measures are expected in early 2021.

A strong cyclical recovery also depends on the flow of credit. The credit markets are currently very supportive, and both the Federal Reserve and the Bank of Canada are committed to maintaining liquidity. But there is a tipping point where economic damage overwhelms that support. It is hard to determine when that could be reached, but recent news on effective vaccines makes it likely the pandemic will be controlled before debt defaults drive a vicious downward cycle in credit availability, further defaults, and job losses.

TEMPORARY AND PERMANENT PANDEMIC-DRIVEN SECULAR SHIFTS

Real estate investment in 2021 and beyond will be driven as much by secular shifts as the pandemic-driven cycle.

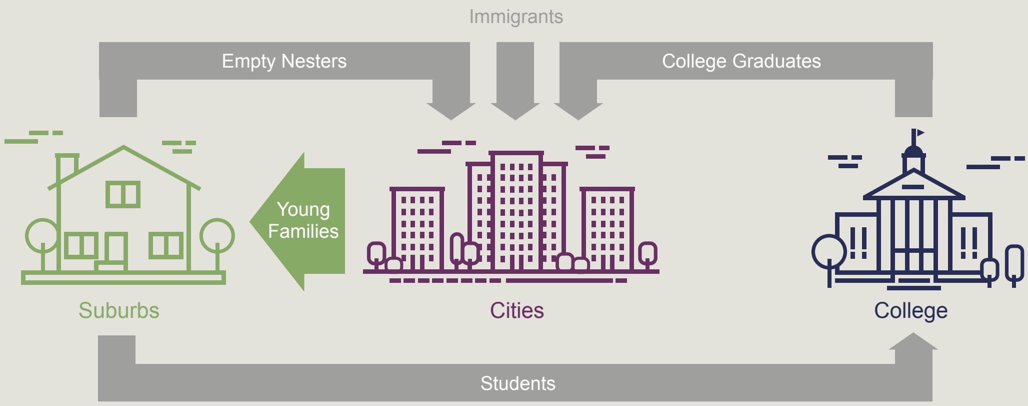
Two key secular questions that impact real estate investment strategy are location preferences for urban relative to suburban locations and the economic growth outlook of different metro markets. A feature of the U.S. and Canadian markets is that a large share of the population, and institutional real estate investment as well, is in suburban locations. These locations are less dense than traditional urban core areas but denser than rural areas and with a significant population base. Many U.S. metros developed during the post-World War II automobile age and thus lack robust mass transit systems, so many markets are best viewed as primarily suburban rather than urban. In Canada, urbanization within the major metros has been a significant growth driver in recent years, but the pandemic is driving a renewed interest in suburban locations among companies (i.e., office tenants) and individuals (i.e., apartment and condo residents). The pandemic is stalling the re-energization of urban cores in the near term, with apartment demand and rent growth in urban areas severely lagging suburban locations (see the U.S. Suburban Rent Growth chart on page 48).

Real estate investors are right to ask if these are temporary or permanent changes. Pre-pandemic, we believed there was greater value in suburban apartments in the U.S. than in urban apartments. There were no great supply constraints on urban apartments and no reason to accept the lower yields/higher pricing that urban assets seemed to command. In addition, shifting demographics means population growth of the young family cohort is going to become a tailwind for suburban locations in 2021 and beyond after demographic trends were a tailwind for urban locations during much of the last decade. This dynamic is framed in the Migration Dynamics During Pandemic Favor Suburbs graphic below. We nonetheless expect a recovery for urban locations, which will drive demand for urban apartments, offices, and to some extent retail.

The appeal of urban places is driven by a desire to be close to a place of employment and to have proximity to lifestyle amenities (restaurants, bars, entertainment, etc.). Currently, the amenities of urban living are no longer an attraction due to the need for social distancing. The schematic and table show how the pandemic created temporary trends that accelerated migration out of urban areas and slowed migration to those urban areas. But in the post-COVID-19 era, we expect previous trends to resume and demand for urban living to recover. Thus, if real estate pricing reflects a sustained period of depressed urban apartment rents, we view that as a buying opportunity.

Real estate investors in the U.S. are also faced with a market selection call. This can be framed both in terms of some traditional dimensions and some unexpected ones. In the 2020 *ISA*, we highlighted the increasing attractiveness of what we called “secondary” markets. This has been reinforced during the pandemic. The so-called “primary” or “gateway” markets in the U.S. (e.g., Boston, New York City, Washington DC, Chicago, San Francisco, and Los Angeles) have underperformed in terms of

Migration Dynamics During Pandemic Favor Suburbs, but Shift Expected to be Temporary

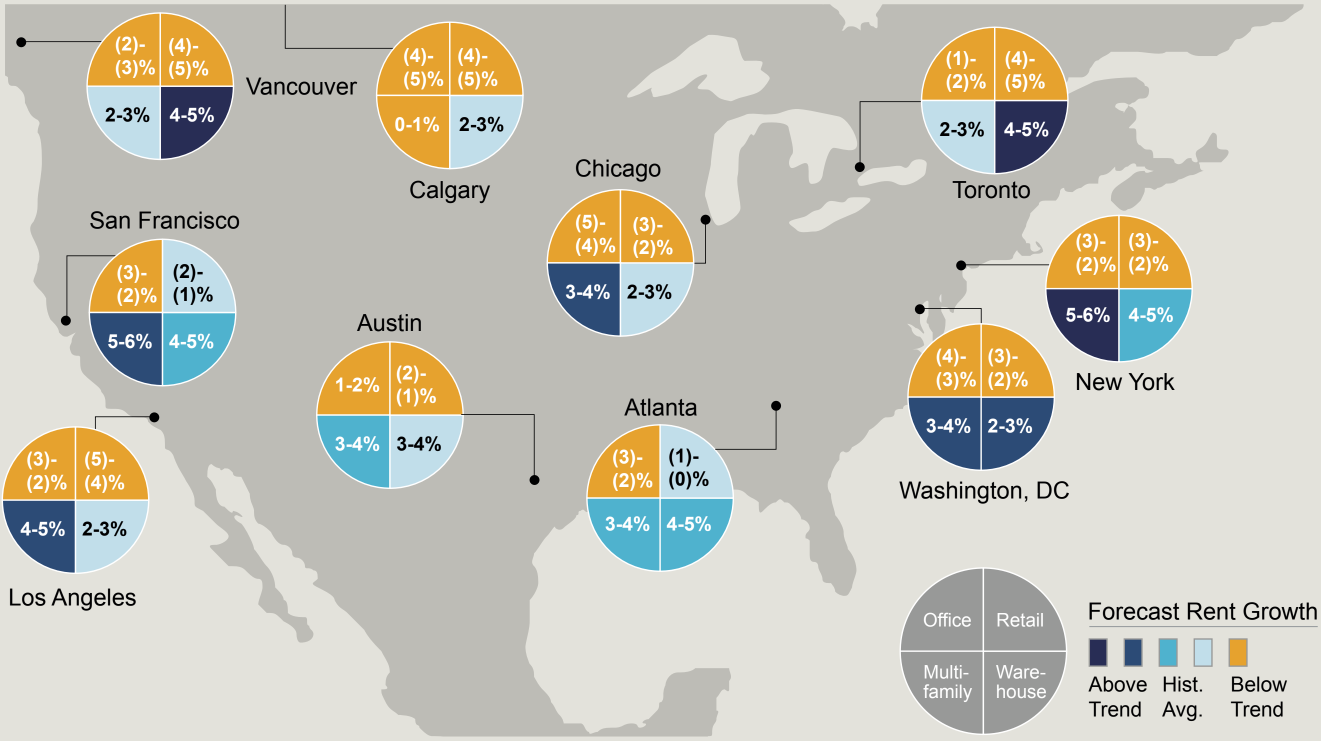


	Pandemic Migration Impact	Post-Pandemic Outlook
Immigrants	Flow of new urban residents reduced.	Rebound in flow, with upside from immigration reform.
College Graduates Starting Careers	Closed offices and amenities leading some to move back home.	Rebound in urban migration when offices and amenities open again.
Young Families	Suburban migration accelerated as yards and more living space have greater appeal during pandemic.	Pandemic is pulling forward future demand but will not impact long-term flows.
Empty Nesters	Limited amenities remove reasons to move to cities.	Migration will resume, with lower costs for urban living a potential upside.

Source: LaSalle Investment Management.

North American Rent Growth, 2021–23

(THREE-YEAR AVERAGE)



Note: The color coding for each market is based on each market's/sector's historical rental growth performance. Light blue indicates that forecasted rental growth is in line with the historical long-term average, while above/below ratings substantially exceed/trail their historical averages. Retail consists of community and neighborhood centers. San Francisco warehouse is Oakland market; New York warehouse is Northern New Jersey market; and New York retail is Long Island market.

Sources: CBRE-EA, MPF Research, JLL, and LaSalle Market Tracking System as of 2020:Q3.

economic activity, real estate occupancy, rent growth, and returns. These markets are more urban, so part of their lackluster performance is due to the headwinds on urban areas discussed above. In addition, the regulatory burdens, climate risks, and growth challenges of the gateway markets are increasing. Investors favoring primary markets should consider shifting more activity toward markets with a stronger growth outlook and less regulatory and climate risk. Historically, investors have viewed stronger growth in Sunbelt markets as balanced by limited supply constraints. In 2021, the increased risks of regulations and higher costs of living in primary markets suggest a more balanced approach to these two market categories. The rent growth outlook for several of the primary markets and two of the higher growth Sunbelt markets (Austin and Atlanta) is shown in North American Rent Growth, 2021-23.

In Canada, the pandemic has thus far had a relatively equal negative impact on the economies and market fundamentals of Montreal, Ottawa, Toronto, and Vancouver. Calgary and Edmonton, however, are also being disproportionately impacted by sharply lower energy prices. A sharp increase in e-commerce purchases is boosting industrial demand and fueling the growth of necessity (food and drug) retail sales. Office demand in the near term remains questionable as an increasing number of tenants return space to the market directly or through subleases. However, eventual control of the pandemic will partially reverse this trend. Immigration, which had been a substantial driver of population growth and apartment demand by extension, is being sharply reduced by various travel restrictions. As a result, apartment fundamentals are weaker, but this is likely to quickly reverse as the pandemic wanes. Mis-pricing in this sector will create good acquisition opportunities in 2021–22.

A new lens to put on market selection in the post-COVID-19 era is industry mix. Tourism has been one of the hardest hit industries during the pandemic, which has disproportionately impacted specific U.S. markets (e.g., Orlando and Las Vegas). We expect these markets will experience a strong rebound when the pandemic is controlled. We saw in the initial reopening phase that people desperately want to travel, dine out, and broadly consume experiences. Until the pandemic is controlled, tourism-based economies will struggle severely, but in our view this is purely pandemic-driven and not secular.

The outlook for energy markets including Houston, Calgary, and Edmonton is clouded by sharply lower energy prices and reduced demand for oil and gas. Longer term, these markets are likely to somewhat recover as economic growth resumes and energy prices become more supportive of office demand. In the meantime, opportunistic plays are possible for best-in-class, well-located assets as these markets gradually reduce their economic dependence on energy and shift towards tech, life sciences, and other sectors to drive growth.

CAPITAL MARKETS SUPPORT REAL ESTATE INVESTMENT

The rapid and effective intervention of the U.S. Federal Reserve and Bank of Canada stabilized markets early in the pandemic. With capital remaining broadly available and credit flowing in the financial system, the ingredients for a strong rebound are readily available. In both the U.S. and Canada, interest rates dropped sharply in 2020 for both government and corporate bonds, which made the return available from real estate investments relatively more attractive to investors (see Real Estate Income Yield Spread to Corporate Bonds below). The stabilization of the financial markets also enabled lending to real estate to resume rather quickly, especially for properties where there is greater confidence in future cash flows.

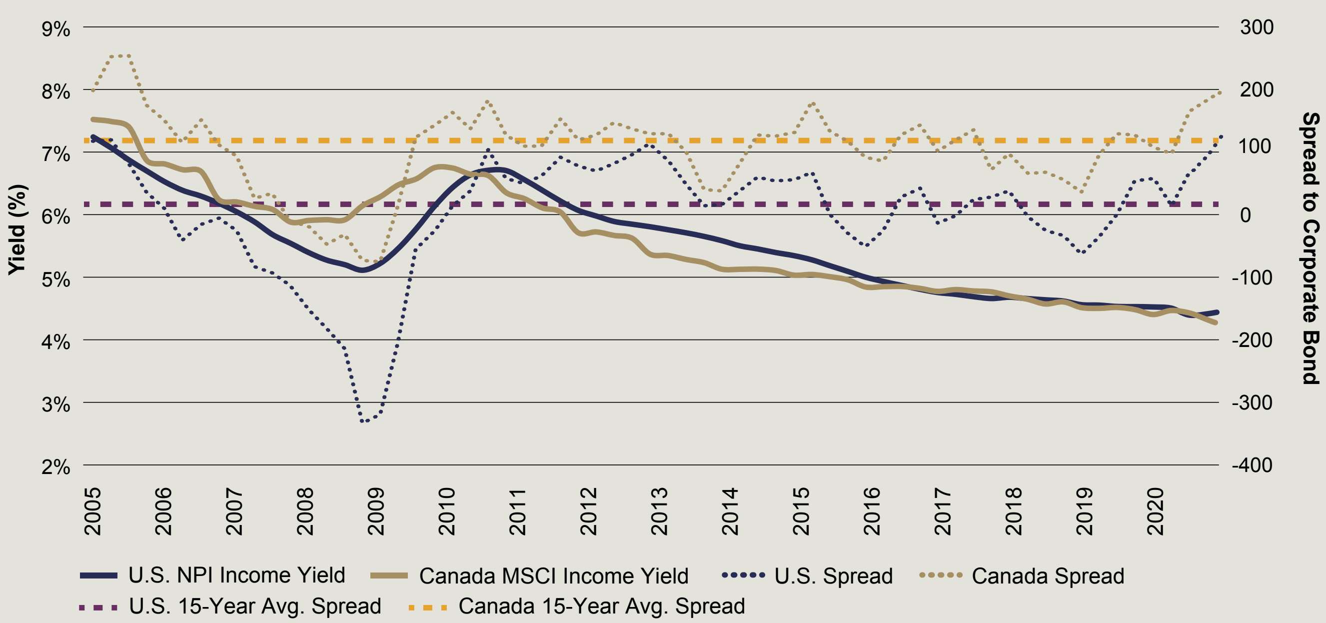
Despite healthy debt availability for real estate, there has been a rapid and significant decline in transaction volumes. Economic uncertainty and lack of visibility on pricing are the key contributing factors, in addition to the logistical challenges of conducting building tours and inspections during a pandemic. Some of these issues have been resolved, but remain a challenge relative to normal times.

Following the rapid shift in the economic outlook as the pandemic expanded, a process of price discovery was required in the private real estate market. This has been occurring slowly since the spring when shutdowns ended. While the public REIT market indicated sharp value declines, most private real estate owners rejected the public market pricing as not indicative of private real estate values. This has proven largely correct as segments of the market where trades have resumed support a view that private real estate values have been more stable and are potentially even higher. Following the positive news in November on the effectiveness of the first COVID-19 vaccine candidates, public REIT pricing further improved. Our expectation is that as market activity resumes, pricing will be closer to pre-pandemic levels than the initial, sharp declines in the public REIT market indicated.

Uncertainty about values is weighing on capital flows to real estate, but in 2021 and 2022 we think this will be resolved and we expect robust flows of equity capital to real estate. Real estate's relative value compared to other asset classes is strong due to the low interest rate environment, with low borrowing rates further boosting real estate returns even as pricing for some assets sets new records. This will attract new capital to real estate, particularly from high and ultra-high net worth investors. Domestic real estate investors with diversified portfolios are seeing value gains in their stock and bond portfolios,

Real Estate Income Yield Spread to Corporate Bonds is Wider Than Average in Canada and U.S.

INDICATIVE OF ATTRACTIVE REAL ESTATE VALUE RELATIVE TO OTHER ASSET CLASSES



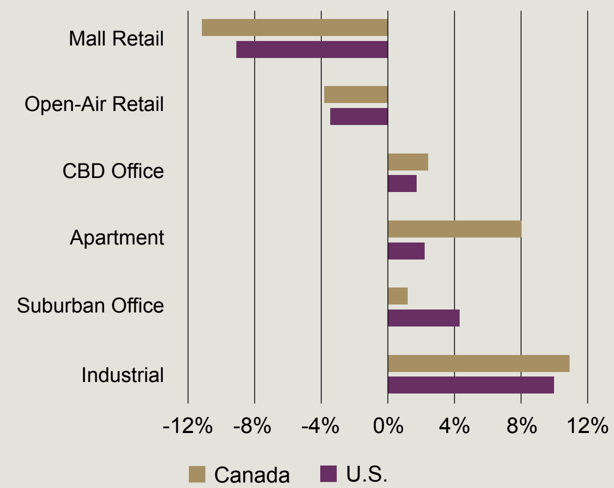
Sources: NCREIF, LaSalle Investment Management, Moody's Economy.com, Bloomberg, and MSCI Canada Property Index. Baa yields through December 2020. NCREIF and MSCI data through 2020:Q3.

prompting a need to shift capital to real estate to maintain allocation targets.

Real estate in the U.S. and Canada is also looking more attractive to foreign investors, especially to those hedging these investments as lower interest rates reduce hedging costs. Getting this capital invested, however, may have to wait until global travel resumes. The one mixed source of capital is the REIT market, where some sectors are at net asset value (NAV) discounts that give a signal to sell assets in the private market, while others are at NAV premiums, which is a signal to buy assets on the private market.

Wide Gap in Property Type Returns, with Industrial Leading and Retail Lagging

2020:Q3 Trailing-Year Unlevered Total Return by Property Type



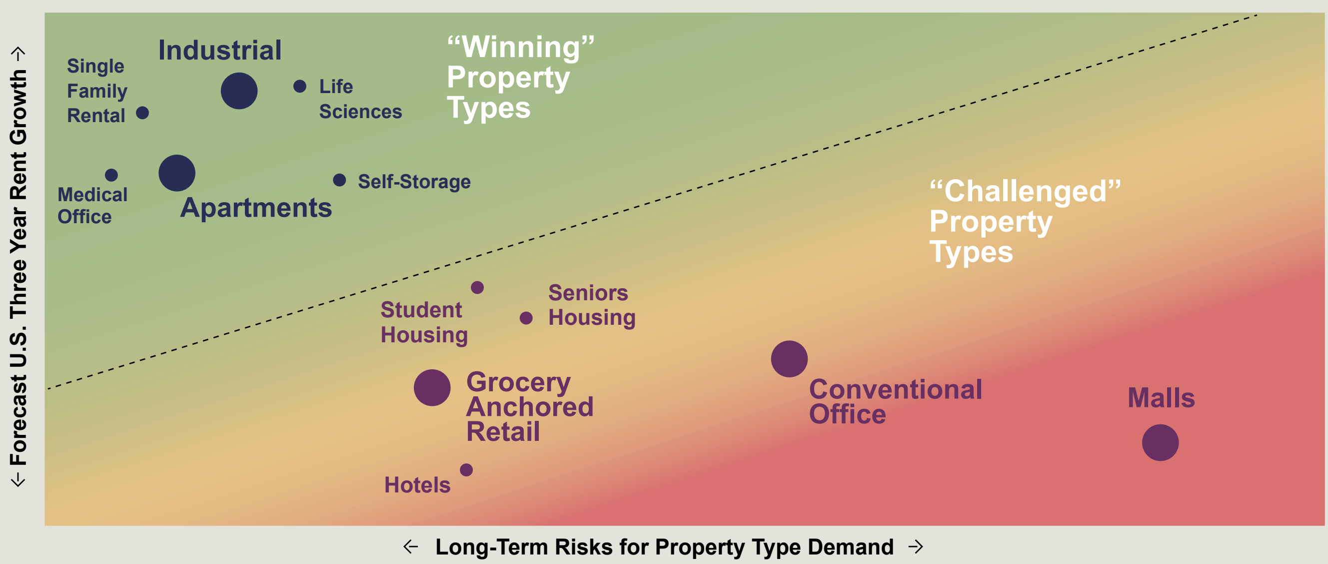
Source: LaSalle Investment Management. Data as of December 2020.

WINNING AND CHALLENGED PROPERTY TYPES

There are currently vast and perhaps even historically wide differences in fundamentals, pricing, and investor interest between real estate property types (see Wide Gap in Property Type Returns). This is underpinned by two competing market dynamics: historically low interest rates and an uncertain demand outlook due to both the pandemic and structural shifts. The low interest rate environment makes real estate income attractive relative to fixed income alternatives and lower borrowing rates, boosting leveraged income and returns given current capitalization rates and pricing. Historic spreads between corporate bond yields and real estate income yields are one data point indicative of this value.

The competing dynamic is the short-term and potential long-term headwinds for real estate demand during and after the pandemic (see Divide Between “Winning” and “Challenged” Property Types). While the interest rate dynamic impacts all property types, the demand challenges are playing out to different degrees for different property types, which is creating a large spread between property types. In the U.S., the “winners” include industrial, suburban apartments, and some specialty property types, such as medical office, life sciences real estate, and self-storage. In Canada, industrial has been the clear winner, followed by apartments, which have seen a modest weakening of fundamentals but are still preferred by investors who like their long-term stability. For these sectors, the short-term demand shift has been limited and there is confidence in the long-term income. Thus, investors are willing to put high values on those cash flows, sustaining and even boosting real estate values. While competition for stabilized assets continues to rise,

Divide Between “Winning” and “Challenged” Property Types Drives Performance, Investor Appetite, and Investment Strategy



Note: Traditional sectors shown in large font. Specialty sectors shown in smaller font.
Source: LaSalle Investment Management as of December 2020.

Illumina, San Diego, United States

the solid fundamentals outlook increases the appeal of value-creation strategies such as lease-up or development.

The “challenged” property types of retail, office, hotels, senior housing, and student housing are experiencing more severe short-term demand shocks and there are structural questions on long-term tenant demand. Consequently, investors lack confidence in the ability of these sectors to generate stable cash flow. This limits equity investor interest and as lenders share the same concerns, debt spreads are widening. These factors lead to depressed deal flow with most investors looking for discounts relative to pre-pandemic levels to take on the risk associated with long-term cash flows.

Individual assets in these challenged sectors do not always fit within the property type narrative. For example, long-term, single-tenant retail or office, especially with a credit tenant, can achieve strong pricing. Conversely, an urban apartment building with falling occupancy and declining rents may not generate investor interest. While aggressive values make sense for some assets, our view is that higher returns should be required from most assets in these challenged property types to compensate for the higher risks. These decisions are nuanced to specific property type and asset situations and are among the most important decisions investors will make in 2021.

Our outlook on office, retail, and industrial from a fundamentals perspective broadly matches with our views in The Future of... sidebars on pages 13–23. For industrial, ongoing new supply in 2021 will temper long-term rent growth, but demand tailwinds will maintain strong investor interest and sustain property level cash flows. For office, we see the demand headwinds as leading to an extended recovery.

REAL ESTATE RETURNS DISPARATE, WITH PRICING VARIED AND UNCERTAIN

An outlook on real estate returns for 2021–22 requires a clear view on fundamentals, capital needs, current pricing, and future pricing. This is extremely challenging in times of rapid change. And that challenge is increased by the wide dispersion in property type outlooks discussed above.

For the winning property types, new investment returns will trend lower. As this occurs, it will boost values for held properties and index returns. We expect the NPI and MSCI returns to include positive appreciation in 2021 and beyond as growing income and higher valuations improve property values. In some cases, these increases are happening fast, but there may still be some opportunities for investors to get ahead of them. For these property types, unleveraged, property-level new acquisition returns are moving below 6% to 5.5%. NPI and MSCI index returns, however, are expected to fall into the 6%-7% range in the coming years as this market move gets reflected in appraised values.

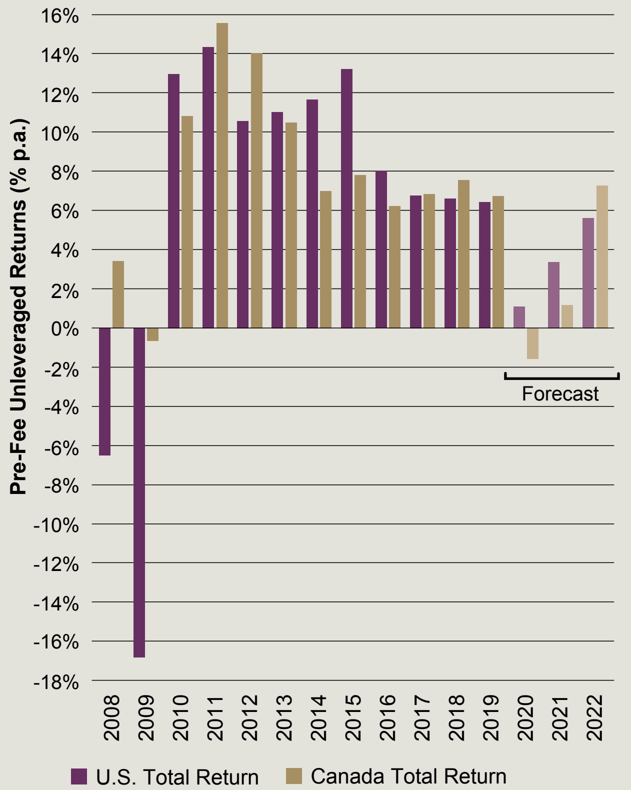
For the challenged property types, the dynamics are different as there is limited visibility on current pricing, so it is difficult to provide a new investment return. Our expectation is that these will be higher than the winning property types as investors conservatively underwrite and expect more return to compensate for the higher risk. For the two Indices, we expect both deteriorating fundamentals and higher capitalization rates to lead to continued negative appreciation. This leads to Index returns close to 0% in 2021 as negative appreciation offsets the income return; and in subsequent years, returns of 4%-5% as appreciation remains flat (see U.S. and Canada Total Returns Forecast to Recover Following 2020 on page 54).

Bringing together the outlook for the winning and challenged property types implies overall index returns of 3%-4% in 2021 before moving up to around 5%-6% in 2022–23. However, the dispersion in property type returns means specific portfolios are likely to show meaningful differences from the Indices based on property type and sub-property type allocations.

PANDEMIC IS THE DOMINANT, BUT NOT ONLY RISK FOR INVESTORS TO NAVIGATE

In an environment of elevated uncertainty, there are numerous risks. They start with the pandemic. The failure to contain the pandemic by mid-2021 will delay the timing of our recovery projections. In addition, the potential reimplementation of economic lockdowns amid the current rise in COVID-19 cases could lead to further economic damage (more permanent business closures, higher unemployment), and would extend the timeline for an economic recovery in the U.S. and Canada beyond 2021–22.

U.S. and Canada Total Returns Forecast to Recover Following 2020



Sources: NCREIF, MSCI, and LaSalle Investment Management. Data as of November 2020.

There are also tail risks around growing deficits or an economic recovery that could lead to higher interest rates and inflation. Higher interest rates in the next two years would be a major surprise, but economic outperformance could lead to higher interest rates than the market is pricing in 2023 and beyond. This would likely be associated with higher inflation and real estate can play an inflation hedging role in a multi-asset portfolio. In the U.S., risks around social and political cohesion will persist in 2021, while in Canada, the outlook for the energy sector is a key risk. There is a lower risk that relaxation in U.S. immigration policy could reduce immigration as a growth driver in Canada.

The largest real estate-specific risk is the outlook for office demand. The range of impacts that structural shifts could have on demand is remarkably wide. The assumption is more working from home will be a long-term headwind for office demand, but one that growth will be able to overcome in most markets in 5–10 years. However, the structural headwinds might lessen or be severe enough to lead to historically high vacancy rates for an extended period of time. This breaking one way or another would impact office returns and overall real estate returns.

Retail also presents a wide range of potential outcomes, but these hinge more on investor attitudes than demand. Even before the pandemic, investors were leery of retail. If this accelerates across a broader part of the retail sector, it would be a negative, but investors might also view the pandemic as a severe shake-out, and surviving assets might be viewed as long-term winners.

INVESTMENT RECOMMENDATIONS

The best real estate investment opportunities in the U.S. and Canada in our view are the winning property types with steady and even growing tenant demand (see North American Investment Recommendations: 2021 on page 55). In the warehouse sector, this is very broad, with a variety of attractive and stabilized physical formats (big box, multitenant, shallow bay). Stabilized warehouse assets with long-term income are attractive, but development and lease-up situations to create those kinds of assets are even more attractive.

Rental residential demand has held up well in some markets and locations in the U.S. and Canada, presenting opportunities to access stable income streams. In the U.S., there are emerging opportunities to access rental residential income in emerging physical and investment formats, such as single-family homes for rent, build-to-rent single-family subdivisions, and age-restricted/active-adult apartments. In both the U.S. and Canada, there are other specialty property types that fit this profile of steady tenant demand leading to stable cash flows, including self-storage, medical office, data centers, and life sciences. Across all these winning property types the demand outlook is positive and pricing is the investment challenge. Our view is that pricing is still attractive, especially relative to other asset classes and given low borrowing rates, which will help sustain investor interest despite record pricing (see U.S. and Canada Recommended Tilts Reflect Bias Toward Property Types with Stronger Fundamentals Outlook on page 55).

Opportunities in the challenged property types will come by finding deep value whenever asset pricing falls to a meaningful discount to pre-pandemic levels for fundamentally strong properties. The impact to fundamentals in office, retail, and some specialty property types like hotels and senior housing is material. Value adjustment is required for these sectors to present opportunities in 2021. With transaction volume limited in these sectors, it is difficult to determine whether the required value is available, but we expect more opportunity to emerge as highly leveraged owners start to experience pressure from lenders. Another potential opportunity is in the segments of these sectors with less cash flow impact but where values decline due to broader investor sentiment. This might include long-term leased offices and grocery-anchored retail.

North American Investment Recommendations: 2021

BEST OPPORTUNITIES LARGELY IN "WINNING" PROPERTY TYPES, WITH POTENTIAL INCOME OPPORTUNITIES IN SEGMENTS OF "CHALLENGED" SECTORS

LaSalle's Strategy Recommendations

Property Type	Core	Higher Return
Multifamily	U.S. and Canada: Durable suburban markets, off-price urban	U.S.: Development, single-family, and other residential alternatives Canada: Urban and suburban repositioning, build-to-core
Office	U.S. and Canada: Select long-term leased assets	U.S.: Deep value on strong assets Canada: Suburban renovation/lease-up
Retail	U.S.: Top STARS* centers with leading supermarkets Canada: Urban grocery-anchored, best-in-class super regionals	U.S.: Deep discount power and community centers Canada: Mispriced urban, repositioning (conversion, densifying, adding mixed use)
Warehouse	U.S.: Secondary markets with credit tenants Canada: Large bay warehouse/logistics	U.S. and Canada: Modern warehouse development Canada: Major market lease-up, Alberta recovery plays
Niche	U.S.: Medical office, self-storage, life sciences Canada: Data centers, self-storage, student housing	

■ Best Opportunities ■ Secondary Opportunities

*Supermarket Trade Area Ranking System. Proprietary LaSalle Investment Management ranking of more than 40,000 U.S. supermarket-anchored shopping centers.

Source: LaSalle Investment Management, as of December 2020.

U.S. and Canada Recommended Tilts Reflect Bias Toward Property Types with Stronger Fundamentals Outlook

Property Type	U.S. Core Tilt*	Canada Core Tilt*	Positives	Cautions
Apartment	↑	↑	Demand strong and asset-level cash flow stable.	Near-term fundamentals softening in urban locations and not clear that pricing has similarly adjusted.
Industrial	↑	↑	Strong demand and investor interest.	Pricing and long-term supply risk. Small bay at higher risk.
Office	↓	↓	Select assets offer stable income and potential for discounts.	Elevated risk associated with long-term demand outlook.
Retail	↓	↓	Grocery-anchored demand durable. Potential for mispricing.	High level of tenant defaults and over-supply of competitive spaces.
Niche	↑	↑	Good risk-return balance and under-represented in indices.	Pricing and operational skill set required.

■ Canada Only ■ Applies to Both Markets

Note: Tilts are recommendations on acquisitions at current market pricing for delivering outperformance over the next three to five years. They are relative to index weights.
Source: LaSalle Investment Management.

Real estate's contribution to mixed-asset portfolios has been shaken by the global pandemic, but the foundation for strong performance in the future remains intact. As the crisis gradually recedes in 2021, we expect that real estate will remain attractive to investors seeking higher yields than investment-grade bonds and less volatility than growth stocks. The reasons for allocating part of an investment portfolio to real estate remain firmly in place.

Real estate portfolio construction is now a more complex task, with many options to consider. The range of investment styles continues to broaden and includes momentum/growth, a strong income or value orientation, and a dislocation/distress option. It is possible to tailor a strategy that combines domestic, international, mainstream, and niche positions in a way that would have been nearly impossible in the past. As secular growth trends slow down around the world, it also makes sense to examine the risk-return attributes of real estate debt, alongside equity. Debt can be structured as a low-risk, fixed-income substitute. It also works well as a moderate to higher risk strategy that relies on gaps in the capital markets as well as the broader real estate market to perform well, but with an added layer of downside protection.

Our updated estimate of the real estate investable universe in Chapter 3 highlights the rapid rise of alternative property types. A high-performing portfolio should have more of these non-traditional property types than in the past. The specialized nature of many of these niche property types means that investment managers will need to acquire new skills or partner with highly-skilled specialists, given the operation-intensive nature of data centers, life science buildings, student housing, self-storage, and other emerging sectors.

CHAPTER 3
PORTFOLIO STRATEGIES

The Case for Real Estate in 2021

After more than a decade of strong performance, real estate income was severely threatened in 2020. Fortunately, the initial financial effects of the pandemic turned out to be less harsh for properties' net operating income than many high-frequency[1] indicators seemed to signal. Rent collection levels appear to have avoided investors' worst fears, averaging above 90% for offices, rental residential, and logistics buildings and between 60% and 90% for retail properties among the higher grades of Class A and B properties. However, the lingering effects of a weakened global economy and new waves of coronavirus lockdowns, especially in the Americas and Europe during the winter of 2021, will hurt some tenants' ability to renew leases or to remain solvent.

The good news is that the entire asset class has not been permanently impaired in 2020. Moreover, institutional-quality assets have shown much higher resilience than older Class C properties. Nevertheless, the pandemic has created a serious setback in several sectors, especially those that serve the most vulnerable tenants, such as lower-income occupants and small businesses. It has also accelerated the secular decline of entire sectors in specific countries (e.g., regional malls in the U.S. and U.K.), nearly shut down other sectors temporarily (tourist-oriented retail and business hotels), while also boosting the fortunes of the logistics sector and specialized property types like data centers and life science buildings.

Taken together, stabilized and leased real estate are showing a high degree of resilience. Real estate's income spread to investment-grade bonds has widened as bond yields have fallen. In the current ultra-low interest rate environment, real estate typically offers fair value among other fixed-income alternatives. The resiliency of the asset class is based on the core principles underpinning any real estate allocation. The fundamental reason for including real estate in a mixed-asset portfolio is its long-term performance, which is not going to be undone by COVID-19. Other compelling reasons to incorporate estate include:

- **Strong risk-adjusted returns with diversification:** Real estate raises the risk-adjusted return of a multi-asset class portfolio in two ways. First, by maintaining competitive performance over many different cycles (see Real Estate's Relative Performance below). Second, by not moving in lock-step with other major asset classes, it acts as a shock absorber and diversifier when stocks, bonds, or other alternatives are volatile. Twenty years of correlations between major asset classes demonstrate the power of civersification through real estate.
- **Unique financial characteristics with inflation hedging:** Leased property has a different mix of contractual income and capital value than all other asset classes. Buildings generate rental income with varying

1 REIT prices plummeted 44% between February 21 and March 23. Footfall at retail properties fell by more than 50%, unless the shopping center was anchored by a grocery store or a drug store. Visits to office buildings in the largest cities that depend on mass transit fell by 90%.

Real Estate's Relative Performance

TRAILING PERIOD RETURNS BY ASSET CLASS AND COUNTRY: TO 2020:Q3*

Average Annual Total Return	Global Stocks[1]	Global RE Securities[2]	Global Corporate Bonds[3]	Global Government Bonds[4]	U.S. Direct Property (NCREIF)[5]	U.K. Direct Property (MSCI/IPD)[6]	Canada Direct Property (MSCI/IPD)[7]	Australia Direct Property (MSCI/IPD)[8]	Japan Direct Property (MSCI/IPD)[9]
1 Year	9.1%	-17.3%	5.5%	3.5%	2.0%	-3.2%	-0.5%	0.9%	5.0%
3 Years	8.4%	0.3%	5.1%	4.3%	5.1%	2.2%	4.4%	6.5%	6.1%
5 Years	10.9%	3.6%	5.0%	3.3%	6.3%	4.1%	5.4%	8.7%	6.8%
10 Years	10.8%	7.0%	4.7%	3.4%	9.4%	7.1%	8.3%	9.6%	5.9%
20 Years	5.1%	8.8%	5.7%	4.1%	8.3%	6.9%	9.3%	9.9%	—

*Stocks, REITs, bonds, and private real estate data are through 2020:Q3, except in Japan, where data are through 2020:Q2.

Note: The information shown is based on the research and market analysis of LaSalle Investment Management, and does not constitute a guarantee with respect to performance.

Notes on Sources
1. MSCI All Country Gross World Total Return Index in local currency.
2. S&P Global Developed Index in U.S. dollars.
3. Citigroup World Corporate Bond Index Total Return in U.S. dollars (local currency history not available prior to 1999).
4. Citigroup World Government Bond Index All Maturities Total Returns in local currency.
5. U.S. NCREIF Property Index Total Returns in U.S. dollars.
6. U.K. MSCI Quarterly Standing Property Total Returns in British pounds; data prior to December, 2001 is MSCI Annual. U.K. MSCI Quarterly Index used in all time periods available.
7. Canada MSCI Quarterly Standing Property Total Returns in Canadian dollars.
8. Australia MSCI Quarterly Standing Property Total Returns in Australian dollars.
9. Japan MSCI Quarterly (Based on monthly index) Standing Property Total Returns in Japanese yen.

Suwanee Distribution Center, Atlanta, United States

degrees of inflation/deflation protection, along with an equity-like residual payment that is anchored by replacement cost and market dynamics at the time of sale. This anchoring provides a hedge against price index (CPI or PPI) volatility and shares the characteristics of other "real" assets. The asset class also has experienced rapidly rising transparency as more high-frequency data becomes available to real estate managers.

- **Large asset class:** After stocks and bonds, real estate represents the third largest repository of the world's wealth. When residential real estate is included, real estate's size is comparable to the size of the entire corporate bond market. Our most recent investable universe indicates that income-earning real estate represents approximately one-sixth of the world's real estate assets (see LaSalle 2021 Global Real Estate Universe below). As investment-grade corporate and sovereign bond yields fall to closer to zero—$18 trillion or 26% of all bonds are negative yielding[2]—real estate's positive yield looks more attractive to pension funds and retirees.
- **Stability and low volatility:** Approximately two-thirds of the long-term returns from equity real estate come from the income component of returns, which typically exhibits bond-like stability. This ratio is even higher for real estate debt investments where the investor is typically well-insulated from changes in collateral value. Although the capital value component of income-earning properties delivers more volatility to private equity investors, both transaction- and appraisal-based real estate returns exhibit a Sharpe ratio comparable to securitized asset classes like stocks, convertible debt, and investment-grade bonds. Even though the growth prospects for real estate income took a step backward in 2020 due to the pandemic, the discount rate used to value these income streams also fell. The net result has been value stability for all but the most affected sectors like hotels and regional malls.
- **An accessible asset class:** Real estate investment vehicles have increased in number and offer both institutional and individual investors many more options than in the past. Whether held in a securitized vehicle,

2 Source: Barclays Global Aggregate Bond Index, November 2020.

LaSalle 2021 Global Real Estate Universe

Defining the Universe	
Public Real Estate	The gross asset value of real estate owned by REITs and REOCs listed on public exchanges. Includes vertically-integrated development companies in emerging markets, but not exclusive homebuilders or infrastructure REITs.
Institutional Invested Real Estate	The unleveraged total value of all professionally managed real estate portfolios, both public and private.
Total Income-Producing Real Estate	Value of existing stock of all commercial (office, retail, inductrial, alternatives) with the potential to be income-generating and all currently rented residential buildings. Owner-occupied residential homes, infrastructure, and agricultural land are not included

Sources: Oxford Economics, Citigroup, Bloomberg, NCREIF, MSCI, Investment Property Forum (UK), National Bureau of Statistics of China, U.S. Bureau of Economic Analysis, U.S. Federal Reserve, and company financial statements. The public universe reflects estimates as of 2020:Q2. The institutional-owned and total-income producing estimates are for year-end 2020.

like a listed REIT, or in a private equity fund, real estate retains all of its characteristics over a medium- to long-term horizon (see Channels to Access Real Estate below).

Today, a diverse range of investment vehicles and risk-return approaches can be used to build a real estate portfolio, compared to 20 years ago. An investor employing a higher risk strategy should look for development, redevelopment, distressed assets, repositioning, and renovation opportunities. A well-balanced strategy may include value-add and opportunistic investments structured to deliver different performance relative to core investments across the business, credit, and property cycles.

Specialized property types that require operational expertise are growing faster than core property types. Investments in data centers, cell phone towers, healthcare facilities, hotels/resorts, social housing, senior housing, student accommodations, laboratories, single-family homes, and furnished apartments will alter the risk-return mix of a portfolio and increase the diversification of real estate income streams. By analyzing each subsector relative to the five reasons listed in The Case for Real Estate on page 58, real estate investors should focus on investing in hard assets capable of generating secure income. The asset class "case" weakens considerably when investing in real estate operating businesses with risk profiles that behave more like venture capital or other forms of public/private equity. Likewise positions in emerging "proptech" companies will have more in common with other venture capital investments than with real estate.

Debt Strategies

As pension plans and other forms of retirement savings schemes mature, they become more reliant on this income to pay out a stable benefit to their participants. The twin "black swan" events in 2020—a pandemic, followed by a global recession—have come at a time when investment-grade yields on fixed income and dividends on large-cap stocks are both at record lows. As a result, investors may be looking for real estate to generate the same or higher levels of dividend income, just as the yields in other asset classes are falling. Real estate debt instruments are a logical place to find this income.

Many real estate investors are making debt investments alongside real estate equity allocations for exactly this reason. Debt is a defensive stance when capital value downside seems as, or more, likely than upside. Mature pension funds also have a preference for contractual income secured by pools of collateral that would otherwise be difficult to assemble in an equity program. Like real estate equity, there are many styles of real estate debt investment, delivering different mixes of risk and return. Where a debt strategy fits on the risk-return spectrum will determine how various economic scenarios will affect investment performance. Regardless of this positioning, the overall risk/return trade-off of debt is different than equity, which can make real estate debt a useful complement in a diversified portfolio.

Real estate debt investment ranges from traditional low loan-to-value (LTV) senior mortgages to mezzanine and structured "special situation" investments that target higher return and risk. Traditional mortgages have a risk

Channels to Access Real Estate (Debt and Equity)

Channel	Summary Definitions
Direct	An investor buys and holds real estate investments utilizing mostly in-house expertise and capabilities (see also Separate Accounts below).
Real Estate Securities	Exchange-traded operating companies or REITs, with underlying assets backed by physical real estate assets.
Commingled Fund*	A vehicle that pools capital from various sources. Managed by a real estate investment manager and set up as a perpetual life vehicle (open-end fund) or a finite-life vehicle (closed-end fund).
Fund of Funds*	A commingled fund established to acquire interests in other commingled funds.
Joint Ventures (JV)*	A partnership between a real estate operator and a single capital partner, typically to acquire a property or properties.
Clubs*	A partnership between a real estate operator and multiple capital partners to acquire and manage a property.
Co-investment*	A partnership between a commingled fund and a capital partner(s) whereby the capital partner provides a portion of the equity capital to acquire a property(s), typically because the capital requirement is too large for the commingled fund.
Separate Accounts	An investment vehicle set up for a single investor by a dedicated third-party investment manager. This type of account can invest in any combination of direct, indirect, public, private, debt, and equity as agreed between the investor and the manager.

*Together commingled funds, funds of funds, club joint ventures, and co-investment approaches can be termed "indirect."

Source: LaSalle Investment Management.

profile similar to investment-grade, fixed income instruments and many institutions consider them as such. By contrast, the higher risk/higher return part of the market is driven by non-traditional real estate lenders (NTRELs) who are not part of a traditional banking institution.

These NTRELs broadly use the following three methods to generate more return than a traditional mortgage:

- Lending at higher LTV ratios on the underlying asset, either in a whole loan or a mezzanine loan form.
- Lending against assets undergoing renovation or being developed, increasing the risk around the underlying collateral.
- Leveraging the loan portfolio by borrowing a part of the capital used to make the loan.

Many NTRELs utilize a combination of all three options. There are also tweaks to other lending terms that can boost returns, such as recourse provisions, capitalization of interest, and access to more future borrowing, if values or net operating income improve.

With so many structuring options, it is difficult to characterize all NTREL performance in the same risk-return category to know exactly how each debt strategy will perform under different economic and market conditions. There is also limited historical return data and/or broad-based experience on the functioning of some structures during downturns. However, previous experience in a downturn can be more important than a robust data set. We believe that these are some of the most important attributes of an effective debt strategy: 1) close underwriting of the underlying collateral; 2) a willingness to intervene when business plans go wrong; 3) retaining a significant "at risk" position even when leveraging underlying loan portfolios; 4) careful project selection and borrowers with successful track records; and 5) lending where the largest pools of debt capital (usually banks and insurance companies) are absent.

Senior debt investment will be a solid return generator for investors navigating both stable and moderate downturn environments. Mezzanine positions are more vulnerable if they were secured prior to the pandemic. However, as bank capital becomes less available and asset values reset, the mezzanine market in 2021 will likely shape up as a market where higher yields can be earned, even with much more conservative underwriting as the global recession is still going to be a factor. Economic and real estate market conditions would need to deteriorate more to impact debt returns compared to equity investments. The trade-off for receiving more durable returns from debt is that the upside is limited and asset impairment can be rapid in mezzanine positions once value thresholds are breached.

The current economic outlook for recession conditions in the first half of 2021, followed by a robust recovery in the second half, supports the inclusion of debt investments in real estate portfolios. These investments can help diversify a portfolio as their performance will not move in tandem with equities, thus helping to smooth performance across market cycles. The limited upside of senior debt is less of a negative in a volatile phase of the cycle when appreciation going forward is unpredictable.

In summary, there are many varieties of debt investments and investors should evaluate which methods are being used to enhance returns and to what degree. A balanced strategy across LTV levels, asset status, and step-in rights could produce durable performance in mildly adverse market conditions. The mezzanine debt markets, like the equity markets, are becoming more efficient as they grow. The pandemic revealed which lenders are sailing too close to the wind, many by leveraging their already risky positions. In 2021, the more prudent debt funds will take advantage of the gaps in the capital markets opened up by the pandemic and the failures of the most aggressive lenders.

Accessing the Real Estate Investment Universe in 2021

Each year, LaSalle's research and strategy team estimates the size of the income-producing real estate universe by country and by segment. Our analysis shows that, as of the end of 2020, institutional-owned real estate totals ~$10.2 trillion, a 4% decline from a year ago. The modest reduction in value is due to the pandemic, but the value decline is also offset by the continued migration of properties from non-institutional categories to professionally managed asset pools, as well as new development and redevelopment. There are many ways

State and Grand, Chicago, United States {click on photo for video tour}

111 Emerald Hill, Singapore

for investors to access the real estate opportunity set. Tools like the real estate universe estimates show investors where the channels of access overlap with the underlying opportunity set. This is a first step in designing a global investment strategy targeted toward desired performance objectives.

One of the key characteristics of real estate is its high and rising degree of accessibility. The number of real estate investment vehicles has risen, creating a wide array of options for both institutional and individual investors. In the table Channels to Access Real Estate (Debt and Equity) on page 60, we summarize the main ways to access real estate and each channel's characteristics. While the multitude of structures and vehicles adds complexity, the diversity of offerings is also a positive feature. Investors can select a structure designed to provide a balance between the control, liquidity, diversification, and size of the investment.

Despite all the different structures, they have common underlying characteristics. For instance, the academic literature shows that, even with higher short-term volatility, real estate security performance approximates direct real estate over longer periods. Nevertheless, the financial structure does alter the upside/downside characteristics and liquidity of any given real estate investment. For example, investors can access real estate debt in public markets through commercial mortgage-backed securities (CMBS), and in private markets through commingled private debt funds, indirect and multimanager channels, as well as through separate accounts. Similarly, equity-like returns from real estate are available to investors through public market vehicles (REITs and property companies), as well as private markets through any combination of separate accounts, commingled funds, and indirect approaches. Categories of Real Estate Investment Structures below illustrates nine broad channels of access for real estate investors.

Portfolio Balance

The nine approaches mentioned above carry relative benefits, constraints, and varying degrees of complexity. Investors will face inherent trade-offs when choosing a combination of vehicles that will fit well in their investment strategy. For 2021, the brisk rise of alternative property types and the rapid changes in the institutional

Categories of Real Estate Investment Structures

Real Estate Equity	Direct ownership of assets through in-house teams of external managers	Commingled Equity Funds	Co-investment Joint Ventures Clubs	Fund of Funds Equity Debt	REITs / Listed RE companies
Real Estate Debt	Direct ownership of loans backed by real estate	Commingled Debt Funds	Co-investment Syndicated Loans		CMBS / RMBS
	Private Real Estate				**Public Real Estate**

Source: LaSalle Investment Management.

Relative Advantages of Different Real Estate Investment Structures

	Control	Liquidity	Ease of Execution	Diversification	Access to Higher Returns	Access to International	Access to Niche
Securities	5	1	1	1	4	1	1
Fund of Funds	5	4	2	1	2	1	2
JV / Club / Co-investment	3	5	3	2	1	1	2
Commingled Funds	4	3	3	3	3	2	4
Core	4	3	2	2	4	2	4
Non-core	4	5	4	3	1	2	4
Debt	4	5	4	3	3	3	3
Separate Accounts	2	2	5	3	1	3	3
Direct Investing	1	2	5	4	1	3	3

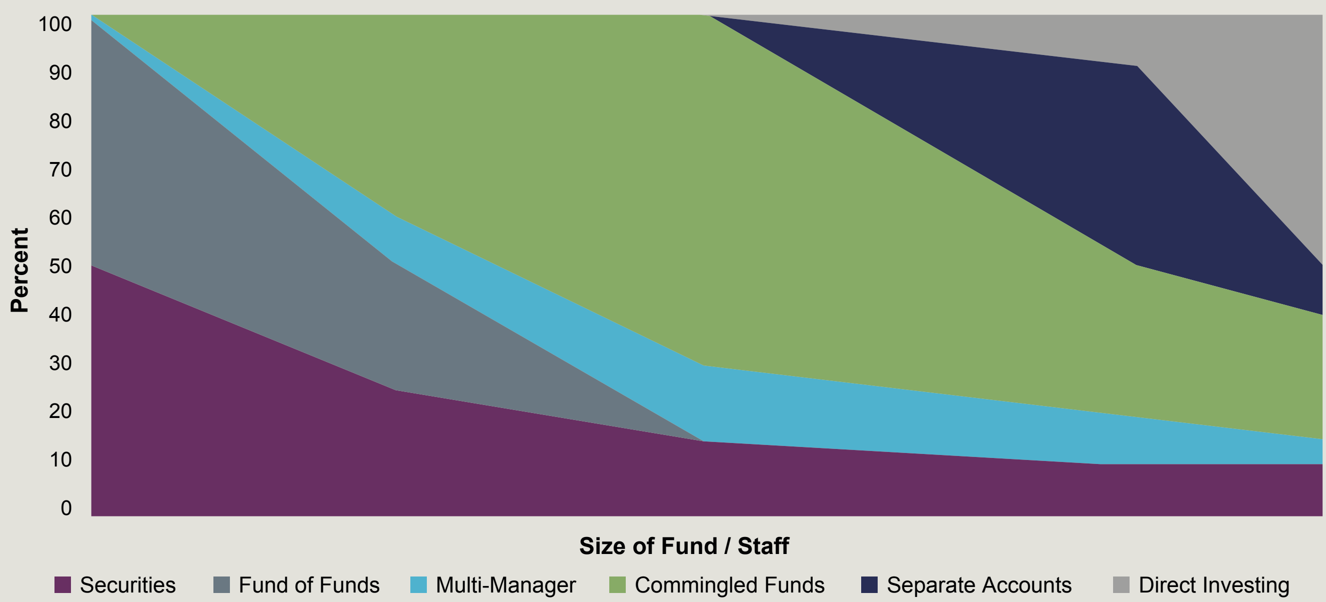
Highest 1 2 3 4 5 Lowest

Source: LaSalle Investment Management.

benchmarks used to measure performance require a close understanding of which categories will work best for highly-specialized property types, and those that will work better for more traditional property types. The table Relative Advantages of Different Real Estate Investment Structures above provides the relative attributes of the various investment structures. This table highlights that in contrast to commingled funds and direct ownership, real estate securities and various indirect approaches provide a comparatively simple tactic for investors seeking access to international and niche-sector real estate.

The model shown in Indicative Mix of Real Estate Investment Vehicles by Investor illustrates how investors are well-served by building a real estate portfolio using concurrent approaches. Smaller investors, despite possible resource constraints, can still achieve a diversified and professionally managed exposure to real estate by using a combination of real estate securities and

Indicative Mix of Real Estate Investment Vehicles by Investor Size



Source: LaSalle Investment Management.

Zenith CS, Pinghu, China

multimanager routes. Even the largest institutions often retain external expertise via separate accounts, commingled funds, multimanager or external securities, alongside internally-managed assets. Larger investors with an allocation to real estate that is well over $1 billion display a greater preference for direct investments and separate accounts than smaller investors, whereas commingled funds are more commonly sought by investors whose real estate allocations are under $1 billion. Securities or non-exchange-traded REITs (especially daily NAV REITs) work best for individual investing less than $1,000,000.

Many institutional investors consistently report that they are under-invested in real estate relative to their target allocation[3] due to the lack of suitable assets that achieve targeted returns. Yet our real estate universe estimates show that institutionally-owned real estate only comprises about 20% of all income-producing property. The migration of properties from entrepreneurial or family ownership to institutional, professional management still has an incredible journey ahead. Our Summary Table indicates where professional management has made the greatest progress and where the markets are dominated by corporate-owned or family-owned assets.

The process of "institutionalization" involves many steps as more types of specialized real estate migrate from developer/founder-controlled entities to investment vehicles with professional management. These steps include setting up systems for fiduciary governance, aligning management interests with investor interests, and reporting on financial performance alongside a growing focus on meeting environmental social governance (ESG) goals. All of these steps take time and effort to implement. In the post-COVID-19 era, we are likely to see an acceleration of specialized asset categories joining, and even supplanting, traditional property types in professionally managed real estate portfolios in the coming years.

PREDICTABLY UNPREDICTABLE

The macro-economic, political, and social outlook that sets the stage for investment plans and strong performance are the focus of the *Investment Strategy Annual*. The pandemic and the ensuing global recession raise the importance and difficulty of these tasks. Even as vaccine distribution gets underway, it will be many months before inoculations are readily available to the general public and economies are restored to their prior strength. During this COVID-19 "end game," our advice to investors is to focus on these five themes:

1. Expect the dispersion of returns to continue.
2. Invest in the rise of alternatives.
3. Anticipate changing mobility and density preferences.
4. Separate permanent from temporary shifts.
5. Balance three styles: growth, income, and dislocation.

The first four themes are addressed in the first two chapters of the *ISA*. The fifth item is about portfolio construction. In past years, we have developed global model portfolios that presume a generic investor without any domestic bias or currency/tax concerns. Over time, we realized that none of our clients fit this description, so we have omitted this section. Instead, we welcome the opportunity to work in a customized way with any client needing help with portfolio strategy.

While COVID-19 is still raging, it may seem pointless to speculate too much about the future. But, for fiduciaries, entrusted with the assets of others, taking a view on the outlook for 2021–23 is a necessity, not an option. An investment manager's task is not to predict the future precisely. Instead, we must balance risk and return without having perfect foresight. That means pursuing investments and positioning portfolios to perform well, without knowing for sure when the pandemic is brought under control or exactly how societies and economies will respond. More important than perfect forecasting ability is an explicit macro-economic and thematic framework to help portfolio managers filter and recognize opportunities when they turn up. Deal flow, like the pandemic itself, is inherently unpredictable. Strategic preparation in advance, though, can be disciplined, thorough, and predictable.

3 Hodes Weill & Associates 2019 Real Estate Allocations Monitor.

We are proud to do our part to help the environment.

Printed on FSC®-certified paper manufactured with electricity in the form of renewable energy (wind, hydro, and biogas), and includes a minimum of 30% post-consumer recovered fiber.

The FSC® trademark identifies products that contain fiber from well-managed forests certified by Rainforest Alliance® in accordance with the rules of the Forest Stewardship Council®.

Copy Editor: Kathryn Clark, Precision Write
Design: Smith Design Co., Wilmette, Ill.

LaSalle™

Amsterdam
Atlanta
Baltimore
Chicago
Hong Kong
London
Los Angeles
Luxembourg
Madrid
Mexico City
Munich
New York
Paris
San Diego
San Francisco
Seoul
Shanghai
Singapore
Sydney
Tokyo
Toronto
Vancouver

lasalle.com