Economic Analysis

CRE after Covid - existential crisis and reinvention, business as usual, or full steam ahead?

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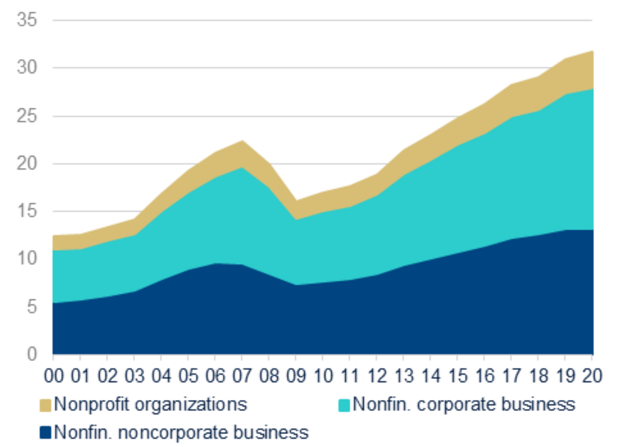
The U.S. is slowly exiting the Covid induced recession and is on track to post the highest rate of growth in almost 40 years. The economic expansion will be driven by effective vaccination, the reopening of the economy, strong job creation, elevated savings, pent-up demand, massive fiscal support, and accommodative financial conditions. The commercial real estate (CRE) industry will benefit greatly from these conditions, which will help drive down vacancies and support rent growth. That said, the structural challenges that the industry was facing before the pandemic, driven by changes that new technologies bring and reshape the way we live, work, and shop, have only intensified. CRE is a large segment of the economy and its adjustment will not come without a cost, but this will be a long-term process and some segments will fare better than others. Despite a reprieve provided by strong economic growth over the next several years, offices and retail CRE will continue to face challenges, possibly triggering an existential crisis and going through an adjustment process with very low new construction, and only in strategic locations, as well as repurposing. The apartments segment is likely to get close to pre-recessionary conditions soon, albeit with some readjustments due to changes in preferences of renters. Industrial CRE, on the other hand, will benefit greatly from the fast growth in the coming period and the structural transformation of the economy.

CRE – a large part of the economy's assets

Non-financial businesses and nonprofits own close to $32tn of real estate assets (Figure 1), equivalent to close to 39% of all assets owned by these sectors of the economy. Some of this real estate might not necessarily be CRE in the traditional sense of the term[1]. Nareit specifically estimated the value of multifamily properties, offices, retail, healthcare, hospitality, industrial, flex, and self-storage CRE, at around $16tn in 2018, which is equivalent to $17.5tn in 2020 terms[2]. This still represents a significant part of the economy: over one-fifth of total assets of all non-financial businesses and non-profit organizations and 83% of GDP. That said, the share of real estate in the total business sector assets has been in a long term decline (Figure 2), and the Covid pandemic accelerated the structural forces that weighed on it, primarily through a wider acceptance of telecommuting, which is challenging the office market, and e-commerce, which is adversely affecting retail CRE. The long-term decline reflects lower real estate investment, as new business models gained importance over time, offering new channels for product and service delivery and attractive investment returns.

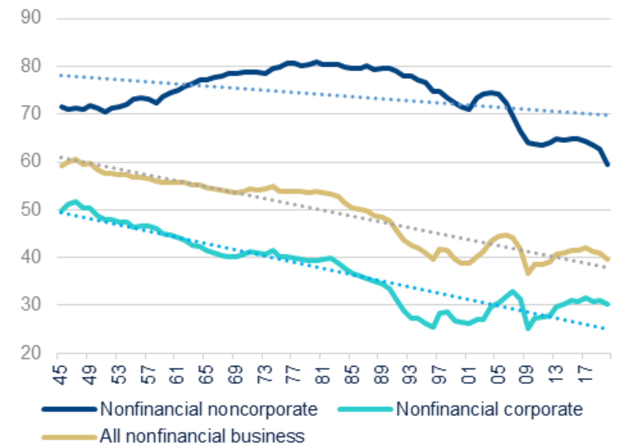
1: Examples include hospitals, churches, schools, land investments, etc.
2: See Nareit (2019) https://bit.ly/31bWeJU

Figure 1. **Nonfinancial business assets** ($tn)



Source: BBVA Research and FRB

Figure 2. **Real estate as a share of non-financial business assets** (%)



Source: BBVA Research and FRB

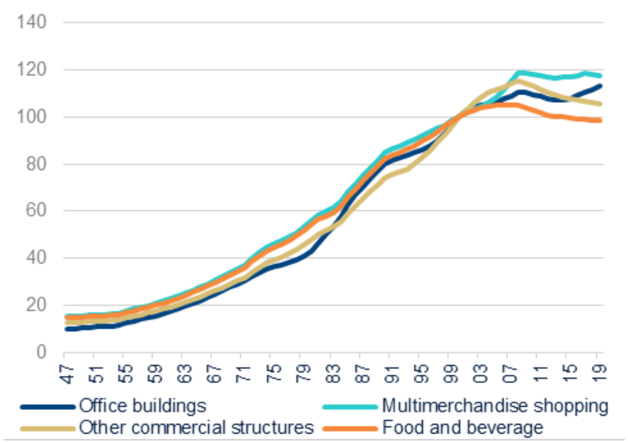
Real-estate investment trends and the role of technology

In addition to the overall long-term trend, office and retail CRE investment experienced a particular decline around 2008, during the Great Recession, which can be observed in the net stock quantity indices, which show a clear structural break (Figure 3). The data suggests that over the last twelve years, CRE investment in the office and retail segments was enough only to sustain the outstanding stock, with some upgrades, unlike in the previous period, when the stock kept consistently growing. The stagnation in the net stock of offices and retail structures occurred while the stock of other fixed assets, including multifamily residential structures, continued to expand more or less like before 2008 (Figure 4).

While the stock of offices and retail CRE stagnated, intellectual property assets were growing at a high rate. This divergence is a reflection of the economy becoming more knowledge-intensive and less real-estate-intensive. The trend intensified in the early 1980s, arguably as the business applications of inventions built on semiconductors and computers gained traction and started to become widely used in day-to-day processes. While the quantity index of all net fixed investment increased by five times since 1960, the quantity index of net private intellectual property (IP) investment increased by 30 times. The investment in IP products and services was particularly strong in the 1990s and during the last ten years (Figure 5). Not surprisingly, the share of IP investment in total private fixed investment in monetary terms is now more than three times higher compared to sixty years ago (Figure 6). These developments will continue, as industry after industry reorganizes to adjust to the new technological realities.

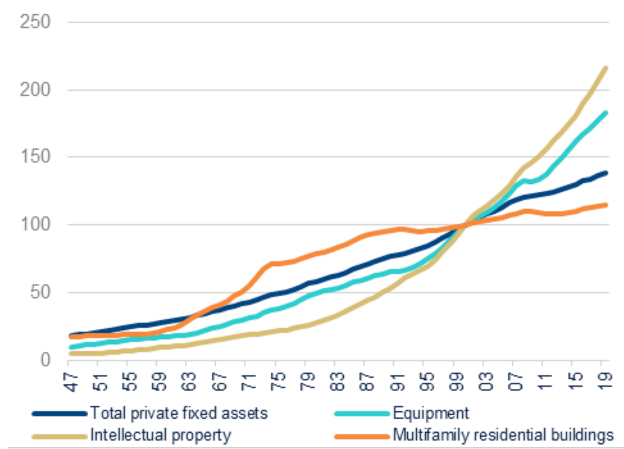
In this sense, the stagnation in the stock of offices and retail CRE is a reflection of an intensified creative destruction disrupting the two segments. The Covid recession only accelerated the transition to more flexible work arrangements and increased the reliance on e-commerce, denting the demand for these two types of assets. The office and retail segments will receive a reprieve over the next few years from the return to work by many employees and the above-average economic expansion and will remain a necessity of modern life for many decades to come, but the demand growth in these two segments will be very low and in some locations negative, despite some attractive and strategic locations still offering growth opportunities.

Figure 3. **Net stock, private office and retail structures, quantity** (Index, 2000=100)



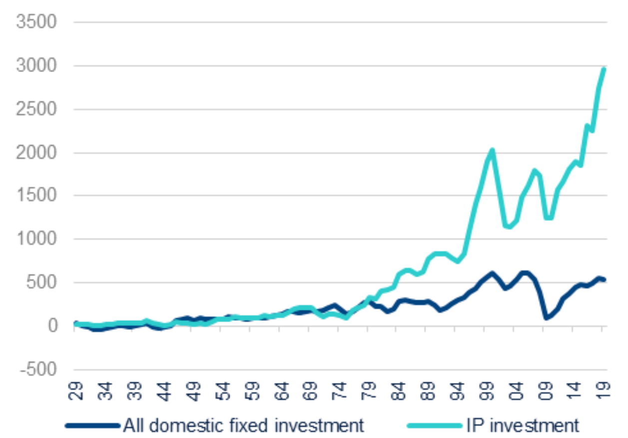
Source: BBVA Research and FRB

Figure 4. **Net stock, private fixed assets, quantity** (Index, 2000=100)



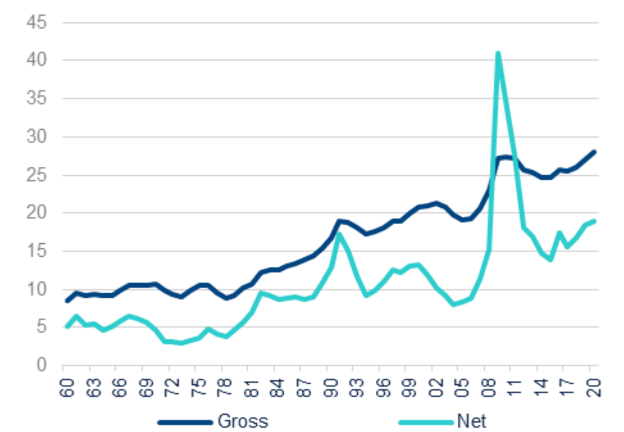
Source: BBVA Research and FRB

Figure 5. **Net private investment, quantity** (Index, 1960=100)



Source: BBVA Research and FRB

Figure 6. **Share of intellectual property investment in total fixed investment** (%)

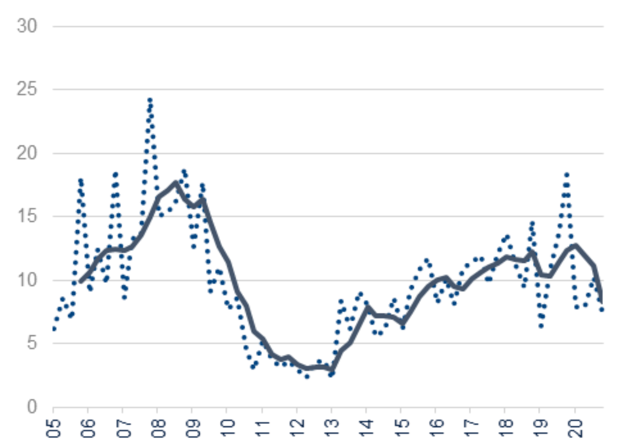


Source: BBVA Research and FRB

Offices

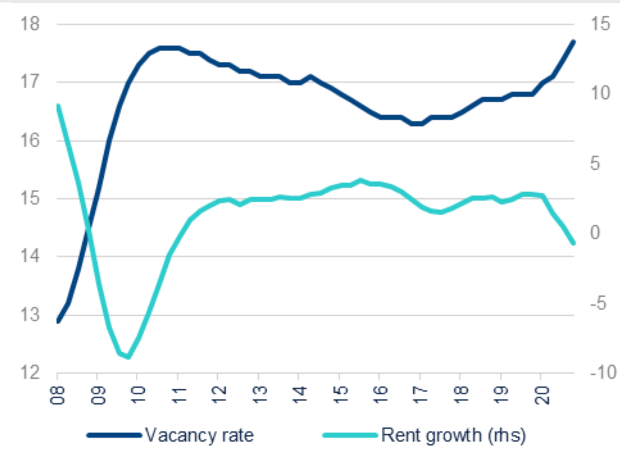
Office construction over the last cycle remained below the levels reached during the preceding period, despite solid gains in office employment. Cost-containment measures resulted in a progressively lower square foot allocation per employee, declining from 140 sq. ft. per employee in 2000 to 120 sq. ft. before the Covid recession. With the onset of Covid, the structural challenges intensified and the modest decline in completions that started in the middle of last year (Figure 7) is only the beginning of what is likely to be a more significant fall in completions and then a sustained low level of new construction over the next decade. Office vacancies increased sharply in the second half of last year and rents fell, as landlords starting offering generous incentives (Figure 8).

Figure 7. **Office completions (Million sq. ft.)**



Source: BBVA Research and REIS

Figure 8. **Office vacancy and effective rent (% and % YoY)**

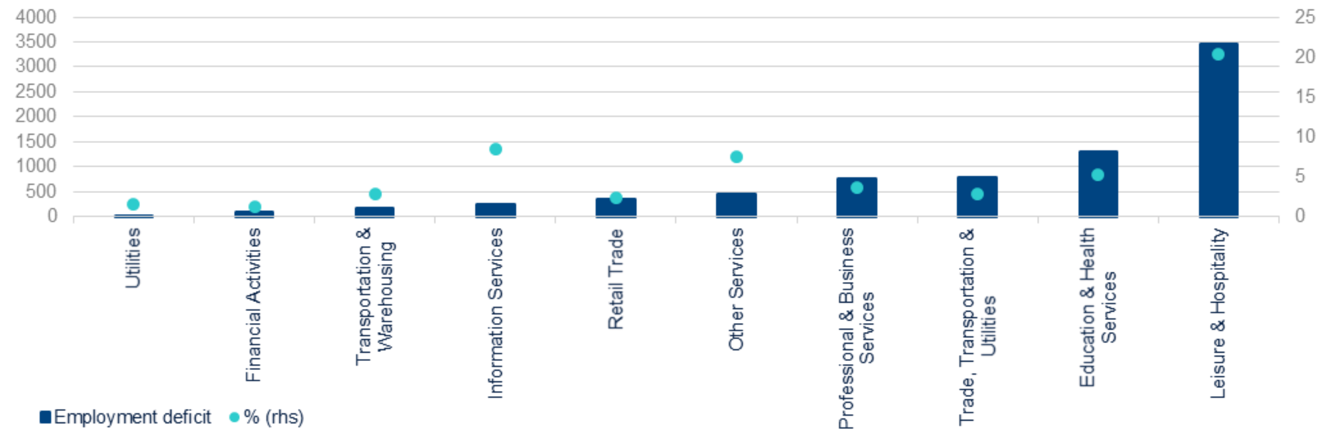


Source: BBVA Research and REIS

While the largest losses in employment during the Covid recession occurred in leisure and hospitality, large office-using sectors also posted significant declines that will weigh down on the demand in the short-term. Employment in professional and business services, financial activities, and information – three sectors that account for the majority of office use – is still down by 3.4% compared to pre-pandemic levels (Figure 9). That said, in light of the progress made on the vaccination front and the implemented and planned stimulus measures, the risks to employment are tilting to the upside, which became evident in the March employment report[3].

3:: See https://bit.ly/39xWTtR

Figure 9. **Payroll employment deficit since February 2020, by industry, services** (K and %)



Source: BBVA Research and BLS

The cyclical drivers of lower office employment and cost-cutting measures by businesses were significantly mitigated by fiscal and monetary support last year, which precluded a wave of business bankruptcies and even higher unemployment than what was experienced. Going forward, a strong expansion, the ongoing shift toward a service-oriented, high-tech economy, as well as efforts by policymakers to increase employment with large spending and investment plans, will counterbalance the headwinds over the short- to mid-term, but the environment in the segment will remain challenging from a structural standpoint.

Over the mid-term, the outlook for the industry depends on the balance between greater workspace per employee, which will be required to maintain social distancing in the post-coronavirus world, and the ability of a large share of the office workforce to telecommute (Figure 10). With a large number of workers being able to partly work from home, office spaces will be reimagined to have a greater focus on collaboration areas rather than workstations. While over time density considerations might move down in the list of priorities, they are still going to be a positive partial counterbalance to telecommuting in the long run.

Figure 10. **Office demand sensitivity analysis to density, change in office employment and telecommuting**

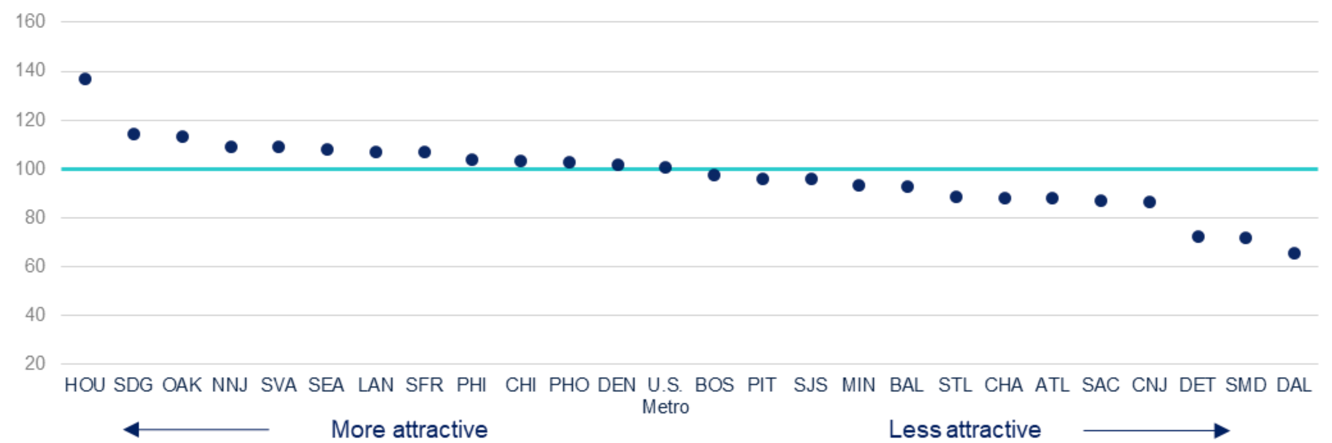
		Sq.ft. per employee and increase relative to pre-pandemic baseline				
Change in office employment relative to pre-pandemic baseline	Increase in telecommuting relative to pre-pandemic baseline	120	150	180	210	240
		0%	25%	50%	75%	100%
6%	20%	-15%	6%	27%	48%	70%
6%	35%	-31%	-14%	3%	21%	38%
6%	50%	-47%	-34%	-21%	-7%	6%
4%	20%	-17%	4%	25%	46%	66%
4%	35%	-32%	-16%	1%	18%	35%
4%	50%	-48%	-35%	-22%	-9%	4%
2%	20%	-18%	2%	22%	43%	63%
2%	35%	-34%	-17%	-1%	16%	33%
2%	50%	-49%	-36%	-24%	-11%	2%
0%	20%	-20%	0%	20%	40%	60%
0%	35%	-35%	-19%	-3%	14%	30%
0%	50%	-50%	-38%	-25%	-13%	0%
-2%	20%	-22%	-2%	18%	37%	57%
-2%	35%	-36%	-20%	-4%	11%	27%
-2%	50%	-51%	-39%	-27%	-14%	-2%

Source: BBVA Research

Like all real estate, CRE is highly location-specific, so the conditions for the asset class will be highly dependent on the local economic conditions and prospects. At any given time, some locations might offer better prospects than others due to a mix of characteristics, including vacancies, prices, rents, economic growth, employment, etc. We use CRE risk premiums from different geographies to identify areas of opportunity and risk for investors and lenders. A risk premium is a component of the cap rate and is property- or geography-specific. The risk premium is higher when net operating income is higher relative to price and vice versa. Higher risk premia can reflect worse economic fundamentals but sometimes can also reflect underpriced markets. The BBVA Relative CRE Attractiveness Index[4] takes into account the risk premium signals, together with the underlying economic fundamentals for each location, as well as for the national economy. When it comes to offices, the index suggests that Houston, despite the highest vacancy rate at over 25% relative to 17.7% nationally, now has attractive office CRE opportunities due to low prices. Despite years of overbuilding, challenges faced by the Oil and Gas sector since 2015, and the Covid disruption, Houston has a resilient and diversified economy and is well-positioned to attract new businesses in the coming years. Other metro areas with relatively attractive office markets are San Diego and Oakland. At the same time, the balance of income (itself a reflection of rents and vacancies), prices, and economic fundamentals seem to be least favorable in Dallas, Suburban Maryland, and Detroit (Figure 11).

4: See Blazheski, F. (2018). Geographic relative CRE attractiveness index. BBVA Research, https://bit.ly/2PNtbtl

Figure 11. **Relative attractiveness of different metro areas, offices** (Index)



Source: BBVA Research

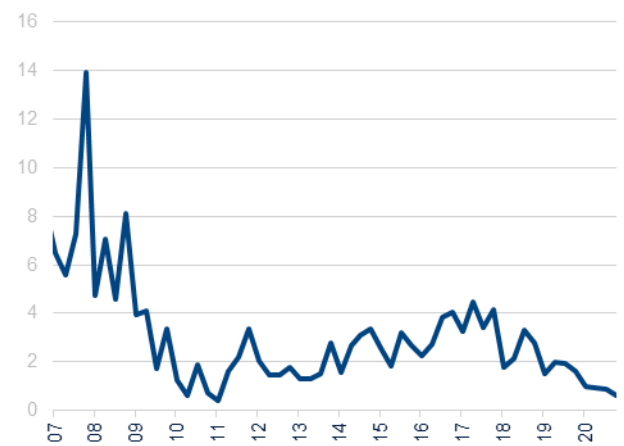
While the demand trend for office space will be impacted negatively over the long term, the need for physical proximity and space for interaction needed for collaboration in most organizations will ensure that office CRE continues to have a large presence in our work and economy. Large cities with high office employment will remain attractive due to network and agglomeration effects – key catalysts for innovation. At the same time, the necessity to maintain social and organizational capital will continue to require consistent opportunities for people to work in close physical proximity. Lower levels of office construction going forward will soften the pressure on vacancies. In sum, while the traditional office will have to undergo significant changes, it will remain a necessity in the foreseeable future, despite stagnant demand. The transition to a less office-intensive environment will be long, as telecommuting, despite its success and benefits, remains an imperfect substitute to the traditional work environment. In this sense, cities that understand the new paradigms and adapt better to remain safe and attractive will have the upper hand. This implies that new investment will be geared toward meeting companies' needs for more limited but diversified and flexible footprints across multiple attractive metro areas, in locations with convenient commute access that provide social amenities both in the office and in the surrounding areas, making them attractive to knowledge workers and facilitating interactions that complement telecommuting, which will remain a widespread work practice after the Covid pandemic.

Retail

The retail segment is the most at-risk CRE asset class. When Covid induced widespread shutdowns, it placed particular pressure on small service-oriented businesses. At the same time, the structural challenges to the industry from e-commerce accelerated, with the share of non-store in total retail sales increasing from 15% to over 20%, and then stabilizing at 17%. A large number of small businesses simply closed, and some of the largest retailers, mostly mall-based ones, went into bankruptcy and some out of business. Despite the very low level of new completions over the last decade (Figure 12), which was keeping the market balanced, the wave of store closures in 2020 led to a glut of retail space. To this, CRE operators responded with increased discounts, lower rents (Figure 13), and short-term, and thus riskier leases.

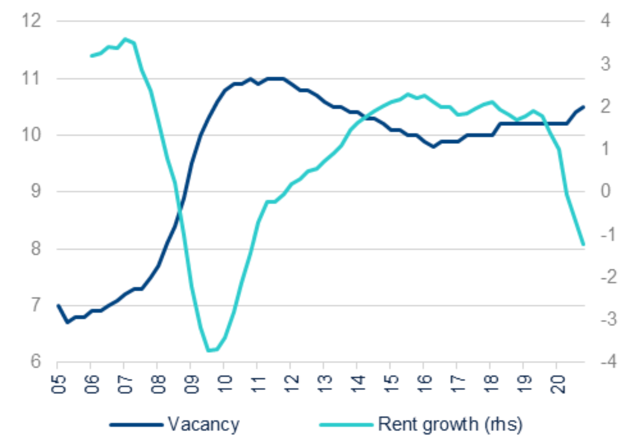
On an optimistic note, more favorable rental terms in 2021 are resulting in positive net store openings, which will contribute to the stabilization of the market in the short- to mid-term. Over the mid to long term, low new construction and intensified repurposing of some of the existing inventory into other use or mixed-use developments will keep vacancy rates from increasing dramatically. In the long run, the future of retail CRE lies in smaller, walkable, and open neighborhood retail areas that provide support to retailers' digital sales channels. New construction will be in support of broader real estate development initiatives in locations that can grow their population due to attractive lifestyles, affordable cost of living, and employment opportunities.

Figure 12. **Retail completions, quarterly rate (Million sq. ft.)**



Source: BBVA Research and REIS

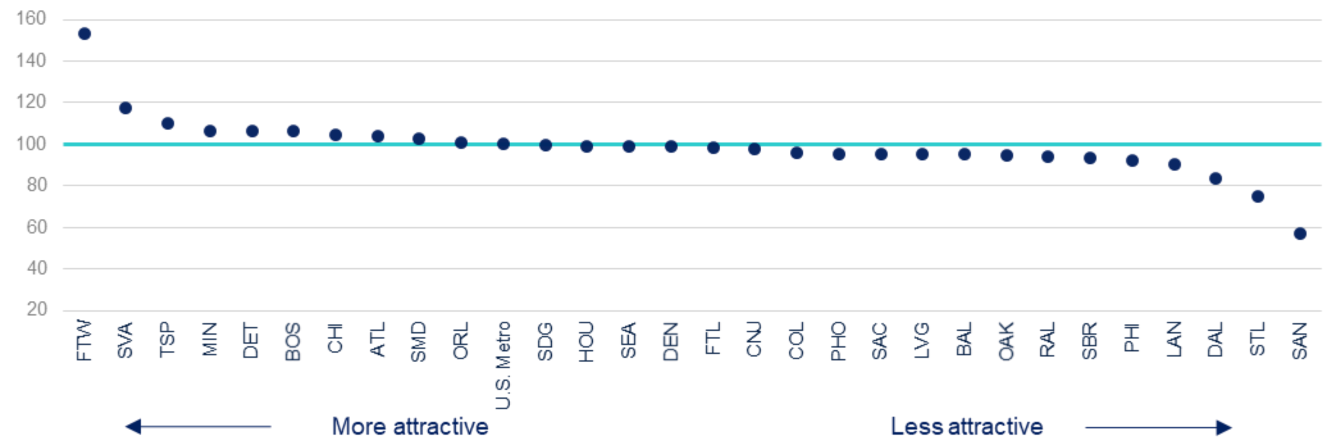
Figure 13. **Retail vacancy and effective rent (% and % YoY)**



Source: BBVA Research and REIS

Despite the overall challenges that the retail market is experiencing, there are still some markets where more opportunities exist relative to others. The balance of net operating income, prices, and economic fundamentals captured by the BBVA Relative CRE Attractiveness Index suggests that Fort Worth and Suburban Virginia have an attractive mix of features, while Seattle and San Antonio sit on the other side of the spectrum (Figure 14).

Figure 14. **Relative attractiveness of different metro areas, retail** (Index)



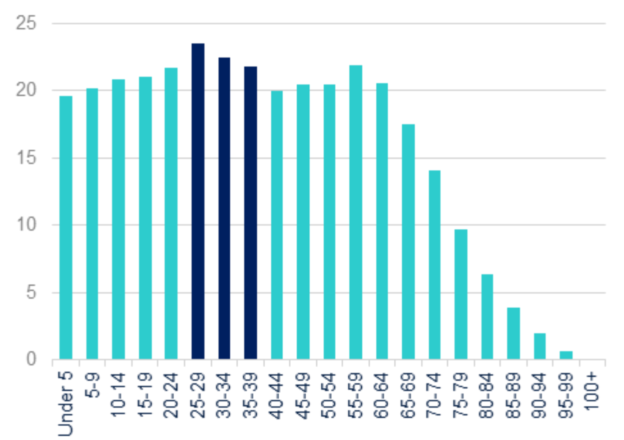
Source: BBVA Research

Apartments

Covid also significantly affected the apartments segment. Vacancies increased and rents fell, which would be expected in any recession, but the pandemic also led to a decline in the attractiveness of larger cities, where apartments are more prevalent, at the expense of suburbs and single-family homes, because of telecommuting. How sustained this new trend will be remains an open question, but it is reasonable to expect that some of the change in preferences will persist beyond this downturn. Additionally, the pandemic led to large eviction bans, which contributed to landlords missing rental income for extended periods. On a positive note, apartments, unlike offices and retail, are residential units, which will remain in demand due to the general shortage of housing because of consistent underbuilding over the last decade.

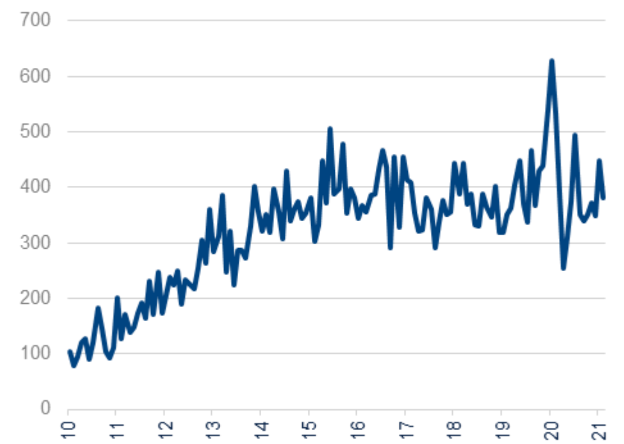
Between 2010 and 2020, the apartment segment benefited from the strong demand for housing, as Millennials, a much larger generational cohort than the preceding GenX, started living independently (Figure 15), flocking to large metropolitan areas. Moreover, Millennials continued renting for longer periods compared to previous generations. At the same time, older residents that have or were downsizing also contributed to higher demand. The favorable market conditions and attractive interest rates led to a solid level of new construction, and multifamily housing starts remained solid even through the Covid pandemic (Figure 16).

Figure 15. **Population by age group in 2019, Millennials in dark blue** (Million)



Source: BBVA Research and Census Bureau

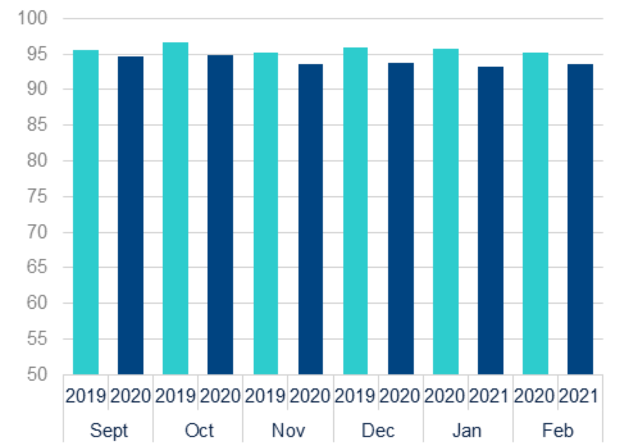
Figure 16. **Multifamily housing starts** (Thousands, SAAR)



Source: BBVA Research and Census Bureau

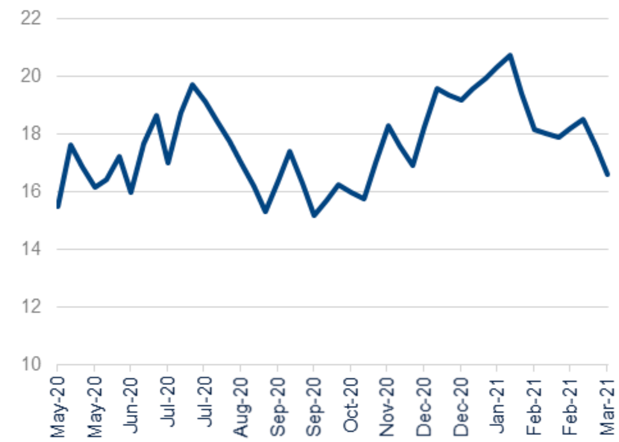
When unemployment increased to close to 15% in April of last year, some landlords experienced late or incomplete rent payments. However, the swift actions taken by Congress quickly contained these pressures, and rent payments increased. Currently, with unemployment still elevated at 6% and employment short over 13.6 million jobs compared to February of last year, rent payments are comparable to before the pandemic (Figure 17), at least when it comes to professionally managed apartment units. That said, landlords other than professional apartment renting companies are facing more difficult conditions, especially if they rent to lower-income individuals that were employed in service industries such as hospitality, which were disproportionately adversely affected by the decline in employment. Small independent landlords provide half of the rental units in the U.S. and are facing challenges from accruing back rent during an extended period of eviction moratoriums, currently in force until the end of June. According to the household pulse survey conducted by the Census Bureau, over 16% of renters are reporting that they have not paid their last month's rent (Figure 18). Renters and landlords with accrued back rent will find it difficult to resolve the issue once the eviction moratoriums are lifted as many renters will not be able to come up with a large lump sum to make these payments. As a result, the Biden administration is intensifying the efforts to provide rental assistance, of which the largest part comes through the recently signed American Rescue Plan, which is expected to deliver $21.5 billion in emergency rental assistance. Even so, the damage that small landlords have experienced will be difficult to entirely remedy, forcing some to sell their units, leading to a further decline in the affordable housing supply.

Figure 17. **Rent payments, professionally managed apartments** (%)



Source: BBVA Research and NMHC

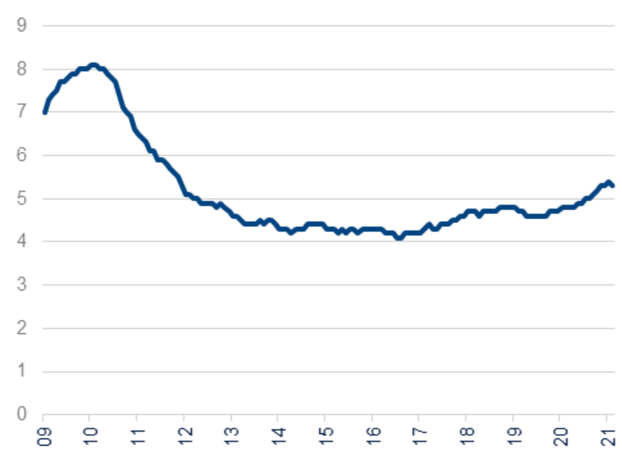
Figure 18. **Last month's rent payment status, not paid as a share of respondents who replied paid or not paid** (%)



Source: BBVA Research and Census Bureau

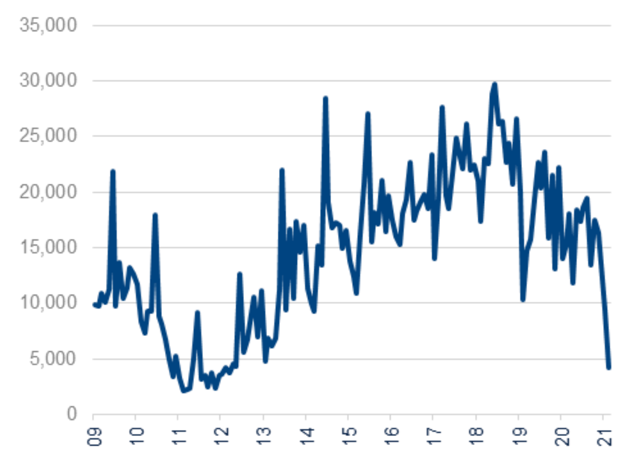
According to REIS, the asking average rent declined from $1,508 in May to $1,456 in February. Vacancy rates also increased, but remain significantly lower than in the wake of the Great Recession (Figure 19). Going forward, the increase in employment due to pandemic control and vaccination, strong economic growth and accommodative financial conditions, as well as lower number of apartment completions (Figure 20), will ensure that apartment vacancies decline and remain favorable for CRE operators, investors, and lenders.

Figure 19. **Apartment vacancy rate** (%)



Source: BBVA Research and REIS

Figure 20. **Apartment completions** (Units)

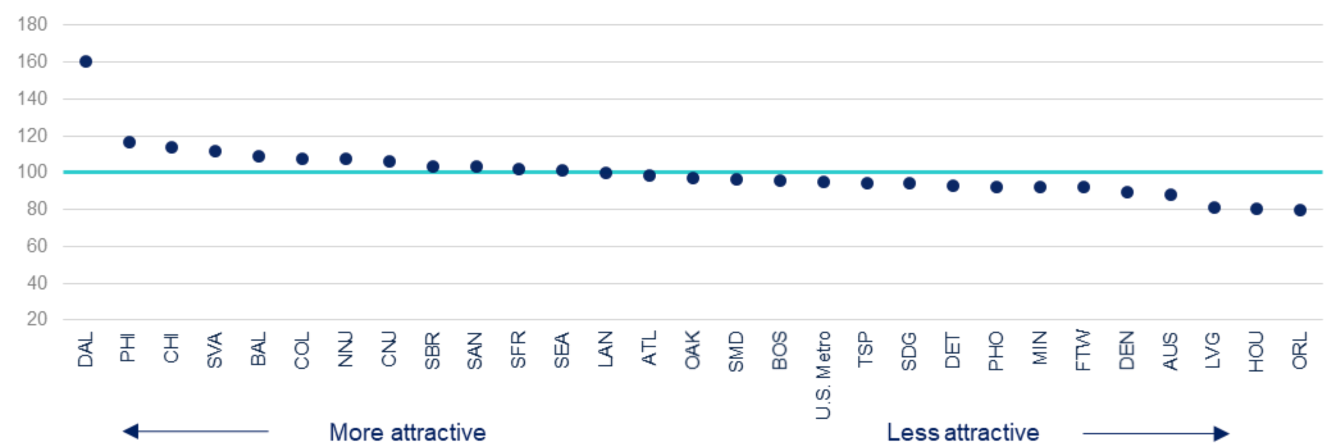


Source: BBVA Research and REIS

The increasing trend of apartment prices was also interrupted in May. Going forward, prices will be supported by a tight overall supply of single-family housing, which indirectly benefits the multifamily market. Additionally, the recovery of the economy, favorable interest rates, and an active monetary policy that supports asset prices will limit downside risks. Relative to 2019, rolling cap rates have declined by less than 20 basis points, despite a much larger decline in the yields of long-term treasuries, implying greater risk premiums and thus a cushion for new investors.

The BBVA Relative CRE Attractiveness Index suggests that the locations with the most attractive apartment markets currently are Dallas and Philadelphia, which provide opportunities to both investors and lenders. On the flip side, Orlando and Houston might be somewhat overpriced relative to the actual economic conditions on the ground (Figure 21).

Figure 21. **Relative attractiveness of different metro areas, apartments** (Index)



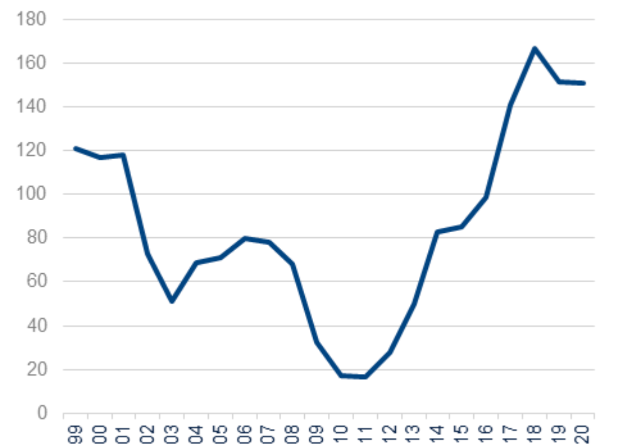
Surce: BBVA Research

Beyond the current downturn, the apartment segment will benefit from younger cohorts renting for extended periods, as well as Baby Boomers, the second-largest generational cohort, downsizing in larger numbers. While central business district apartments were more attractive than suburban locations over the last decade, the tide could turn as teleworking becomes more widespread and commute times become less of a concern, particularly in suburban locations that provide cultural and shopping experiences in addition to recreation facilities, parks, and nature preserves. Over the long term, the attractiveness of large metro areas will persist, as they provide agglomeration and network benefits that are very important in the new knowledge-intensive economy and are difficult to replicate in the virtual world. Therefore, large cities are expected to remain attractive for young professionals seeking to jumpstart their careers or live in vibrant dense environments. While some reinvention and adjustment will be needed, apartments will remain the most stable segment of CRE in the coming years.

Industrial

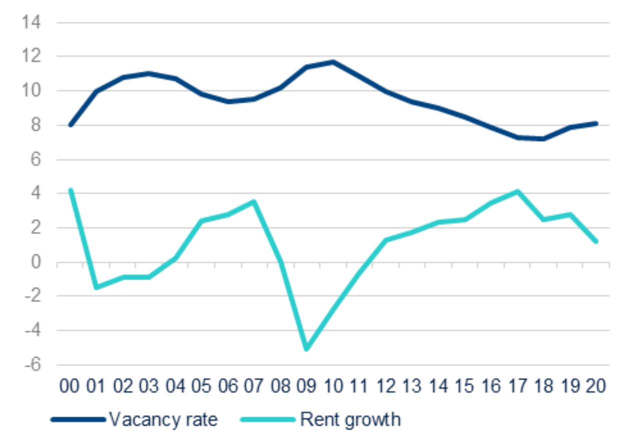
The same forces that present headwinds to retail CRE – e-commerce and changing preferences, are increasing demand for industrial warehouses. Also, the large fiscal stimulus implemented to date and the infrastructure package proposed by the Biden administration are highly supportive of other forms of industrial CRE. This will provide strength to new industrial completions, which remained strong through the pandemic (Figure 22). Industrial vacancies were relatively low going into the current downturn, implying that the slowdown in rent growth during 2020-2021 (Figure 23) will be short-lived. That said, conditions will vary significantly by location, as some metropolitan areas have been experiencing stronger speculative buildout relative to others. Over the long term, this segment will also benefit from re-shoring of some industries, and growing demand for new and sustainable technologies.

Figure 22. **Industrial completions, annual rate (Million sq. ft)**



Source: BBVA Research and REIS

Figure 23. **Industrial vacancy and effective rent (% and % YoY)**



Source: BBVA Research and REIS

Bottom line

The Covid recession led to higher vacancies and low or negative rent growth across all CRE segments, but much of the damage was mitigated by quick and massive fiscal and monetary policy intervention. Fast economic growth in the coming period will be highly beneficial, but the structural headwinds to offices and retail will remain. Over the long term, these segments will face flat demand and low new construction, but will remain an important fixture of our daily life and economy. CRE operators will have to adjust to the new preferences and demand, and reinvent their offerings, expand in strategic locations and repurpose some of the properties that face particularly low demand. Multifamily apartments will benefit from housing shortages and demand from aging and downsizing Baby Boomers. At the same time, industrial CRE will benefit from both the cyclical and structural forces in play.

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