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REAL ESTATE

Perspectives in today's real estate market

09 June 2020

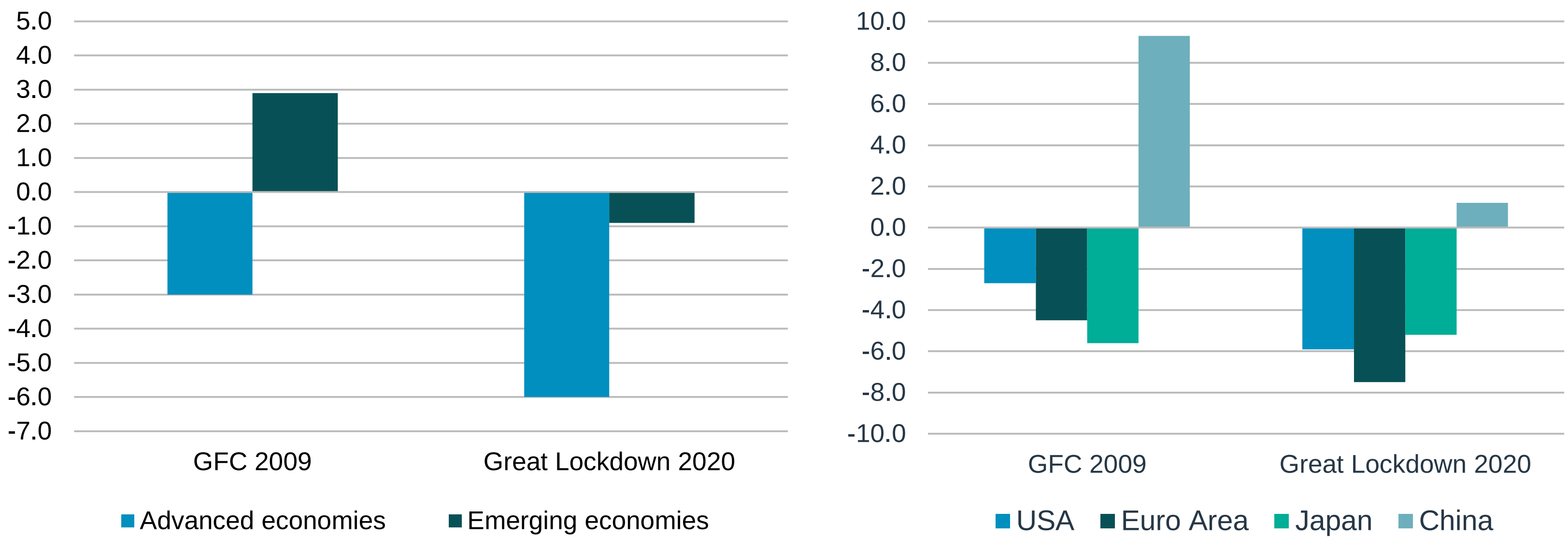
Nuveen Real Estate Global Research

Real estate investing in a post-coronavirus world

Macro backdrop: GFC pales in comparison to the Great Lockdown

- The last 30 years of cap rate compression is likely over given the very low interest rate environment.
- Next decade is likely to be slow growth given high government debt burdens post-coronavirus, favoring property types that rely less on economic growth to generate income.
- More pandemics are likely to occur in the future which means real estate portfolios need to positioned for more resilience from a property type, city, and tenant perspective.

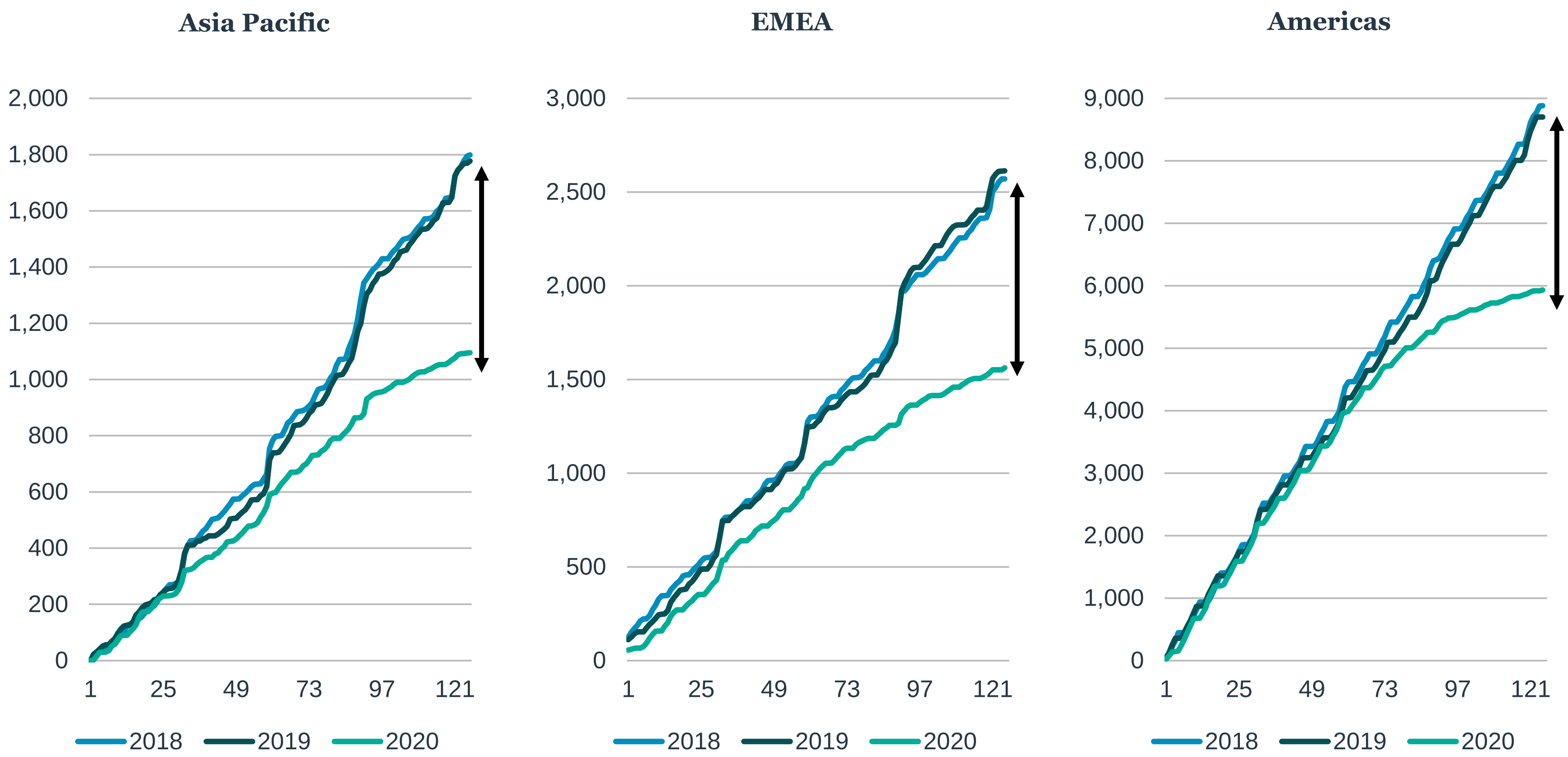
Global GDP base case growth projections GFC pales in comparison to the Great Lockdown



Source: Nuveen Real Estate, IMF

Global slowdown of real estate investment activity

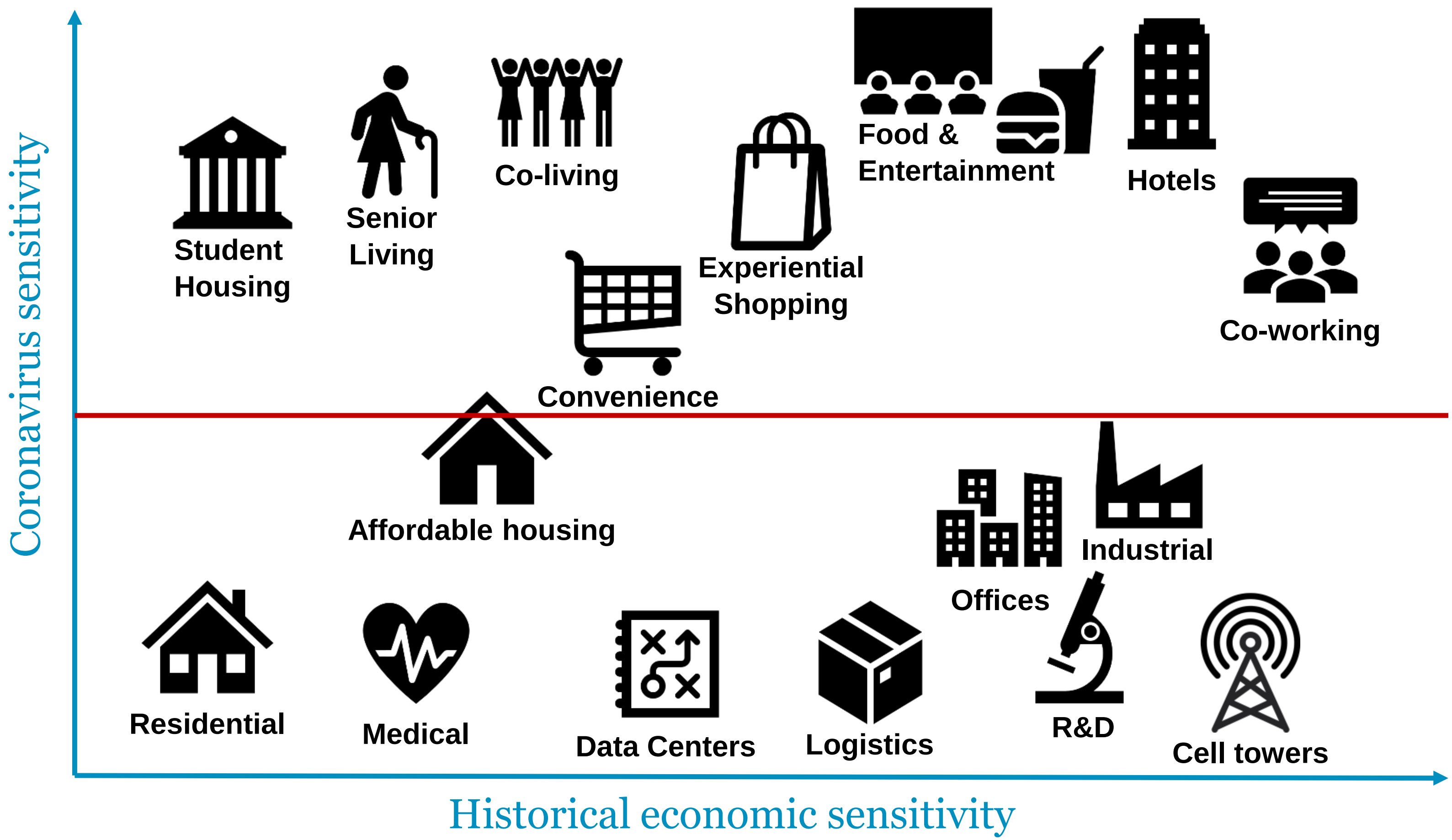
Asia and Europe ahead of the curve (Cumulative daily deal count)



Source: RCA

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

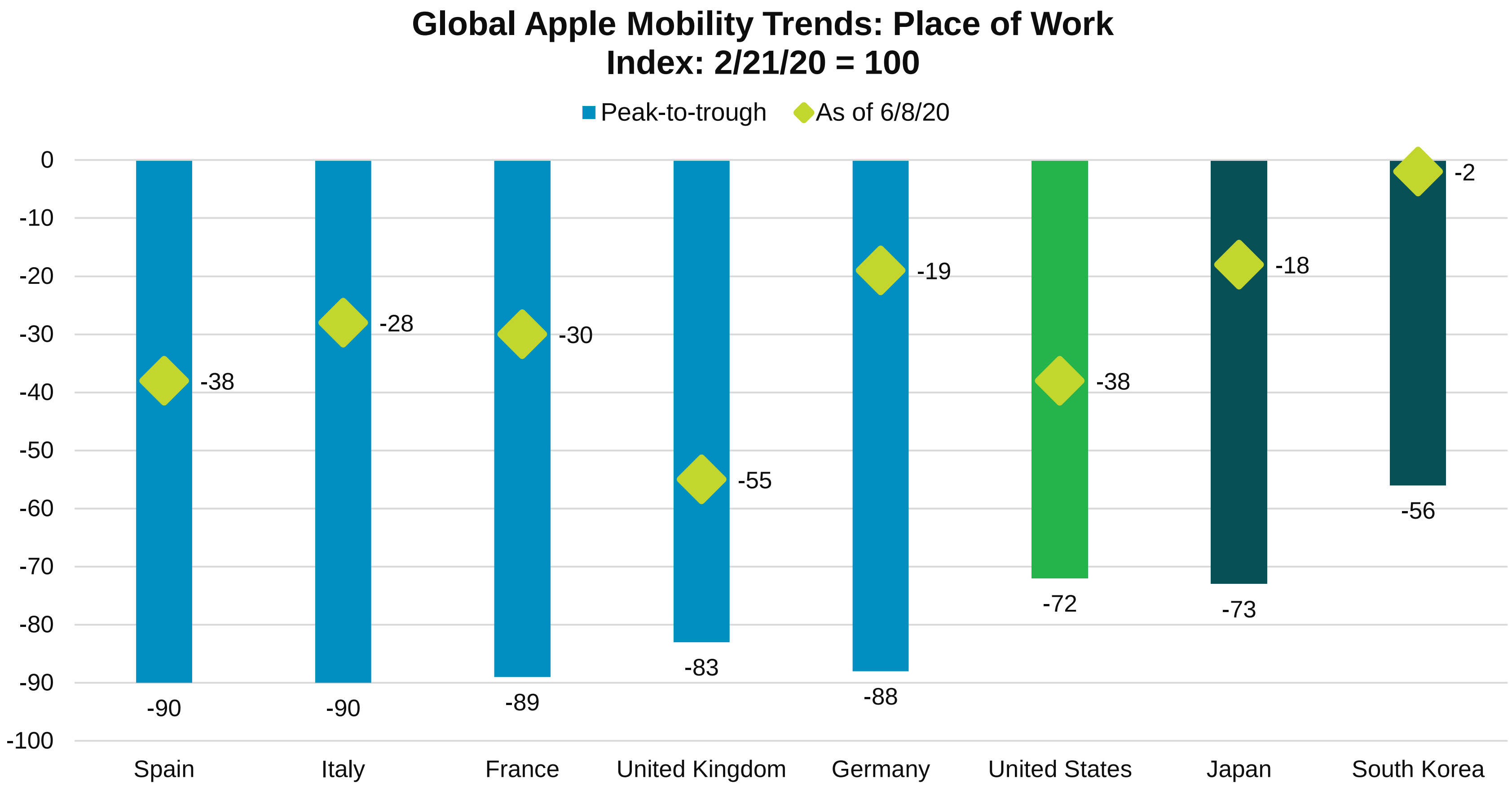
Sector sensitivity differs from previous recessions



Source: Green Street Advisors, Nuveen Real Estate

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

Tracking real time movements (country level)



Source: Apple Mobility

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

Economic scenarios and real estate implications

Nuveen Real Estate hypothetical economic scenarios loosely follow IMF global outlook

Scenario 1	Scenario 2	Scenario 3
• Time limited shock; deep but short-lived recession • Pandemic comes under control in Q2 • Major policy initiatives limit corporate defaults and job losses • Bounce-back from Q4; pent up demand stimulus from early 2021	• Extended lockdowns - epidemic under control late Q3 • Deep recession extends into Q3; slow recovery from Q4; rebound 2021 • Corporate defaults surge as finance conditions tighten; job losses intensify	• Pandemic extends to 2021 with second round of outbreaks • Demand and activity collapse beyond the direct impact of the health emergency • Ballooning public debts and massive bankruptcies leads to financial instability
Real estate implications		
• Prime rents stable (except retail) and occupier markets slow down into 2021 as corporate sector takes stock; rapid recovery from 2022 • Cost of debt leads to short-lived, modest yield rises for core in Q3 and Q4 2020 primarily in riskier cities/sectors • Good opportunities for Value Add	• Prime rents contract modestly in 2021, improving from 2022 depending on market and sector • Core yield begin to rise slowly from Q2 2020 intensifying into 2021; fully re-price in 2022 • Opportunities for core investments and very good for Value Add	• Prime rents fall rapidly from Q4 2020 to 2022; stable 2023. More volatile markets feel greater pain • Yields rise sharply from Q4 2020 till 2022 – but not as damaging for core income as in GFC • Repricing late 2022/early 2023

June → July → August → September → October → November → December

Source: Nuveen Real Estate, IMF

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

Asia Pacific-specific view

Regional: As local infection and death rates continue to trend lower, market optimism has returned despite still very choppy economic outcomes. An uneven recovery is still to be expected in the coming months, as gradual opening up of economies boosts domestic activities but an uncertain global outlook will continue to cloud prospects for export demand. There are plans to create travel bubbles, between Australia and New Zealand and between Southern China, Macau and Hong Kong, in order to first allow business travel and then tourism to restart and reboot regional economies.

Hong Kong:
Passing of the national security law has added an extra layer of uncertainty to Hong Kong's recessionary economy, and questions surrounding status as a global financial centre.

Market	Risk
Australia	Neutral
China	Neutral
Hong Kong	Unfavorable
Japan	Neutral
New Zealand	Neutral
Singapore	Unfavorable
South Korea	Neutral

- Favorable
- Neutral
- Unfavorable

Investments	Risk
Prime	Favorable
Secondary	Unfavorable
Development	Unfavorable
Debt	Favorable

Japan/South Korea:
The Bank of Korea has lowered interest rates to an all-time low of 0.25% while a third supplementary budget worth 1.8% of GDP is being planned as consumer price deflation sets in. A second wave of infection has returned to Tokyo, post lifting of the state of emergency early this month. Footfall at retail and recreation venues are half of normal, and 30% of the workforce is working from home.

Singapore:
Singapore to resume business travel to six provinces in China from June 8, as the economy begins to open up in phases. Retail sales plunged 40.5% in April on lockdown measures.

Prime: Resilient and fundamentally strong markets & assets to provide most attractive long-term income & returns

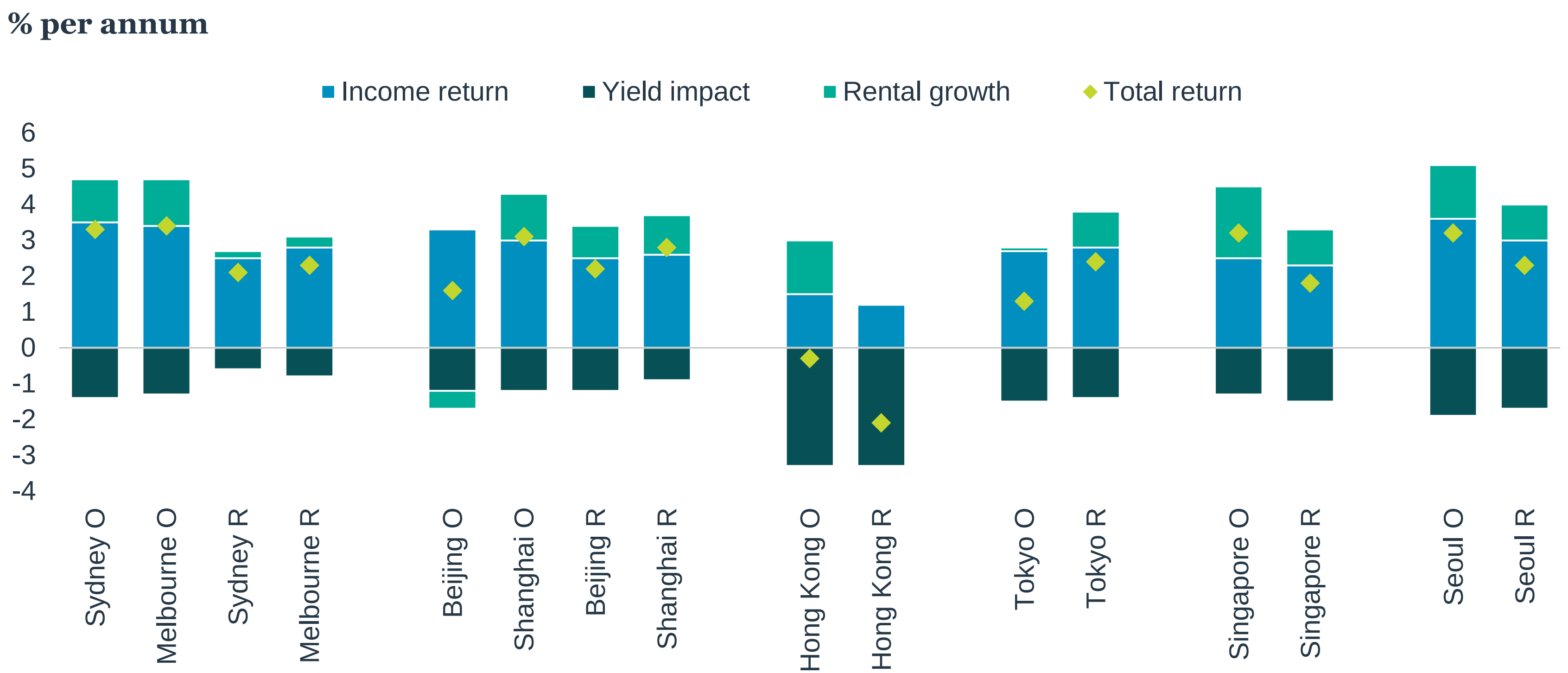
Secondary: Pricing & income security under pressure as financially weak tenants are most vulnerable under current setting

Development: Uncertainty heightened in terms of construction period and leasing discussions

Debt: Flight to safety assets and increased banking stress provide opportunities for lenders

Lower for longer

5-year average returns for office



Source: Nuveen Real Estate

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

European-specific view

Regional:

- Germany, Austria, the Netherlands and Denmark have coped well with the crisis and are set to recover faster, also due to their fiscal strength.
- France, Spain and the U.K. have had crisis management deficits, but are still in a relatively favourable position.
- Italy is most at risk to struggle with generating a strong recovery.

Market	Risk
Germany	
U.K.	
France	
Italy	
Spain	
Netherlands	
Austria	

Favorable
Neutral
Unfavorable

Sector	Risk
Office	
Retail	
Logistics	
Housing	

Office: Developers have been more disciplined than in previous cycles, but it is a cyclical sector

Retail: Woes likely to be exacerbated with pain spreading to countries such as Germany, Spain and Italy, where retail has held up relatively well

Logistics: Benefits from structural tailwinds but development activity is strong, and it has been a very cyclical market historically

Housing: Demand is based on demographics and is generally a less cyclical sector. Beware of less stable niches such as co-living or student housing

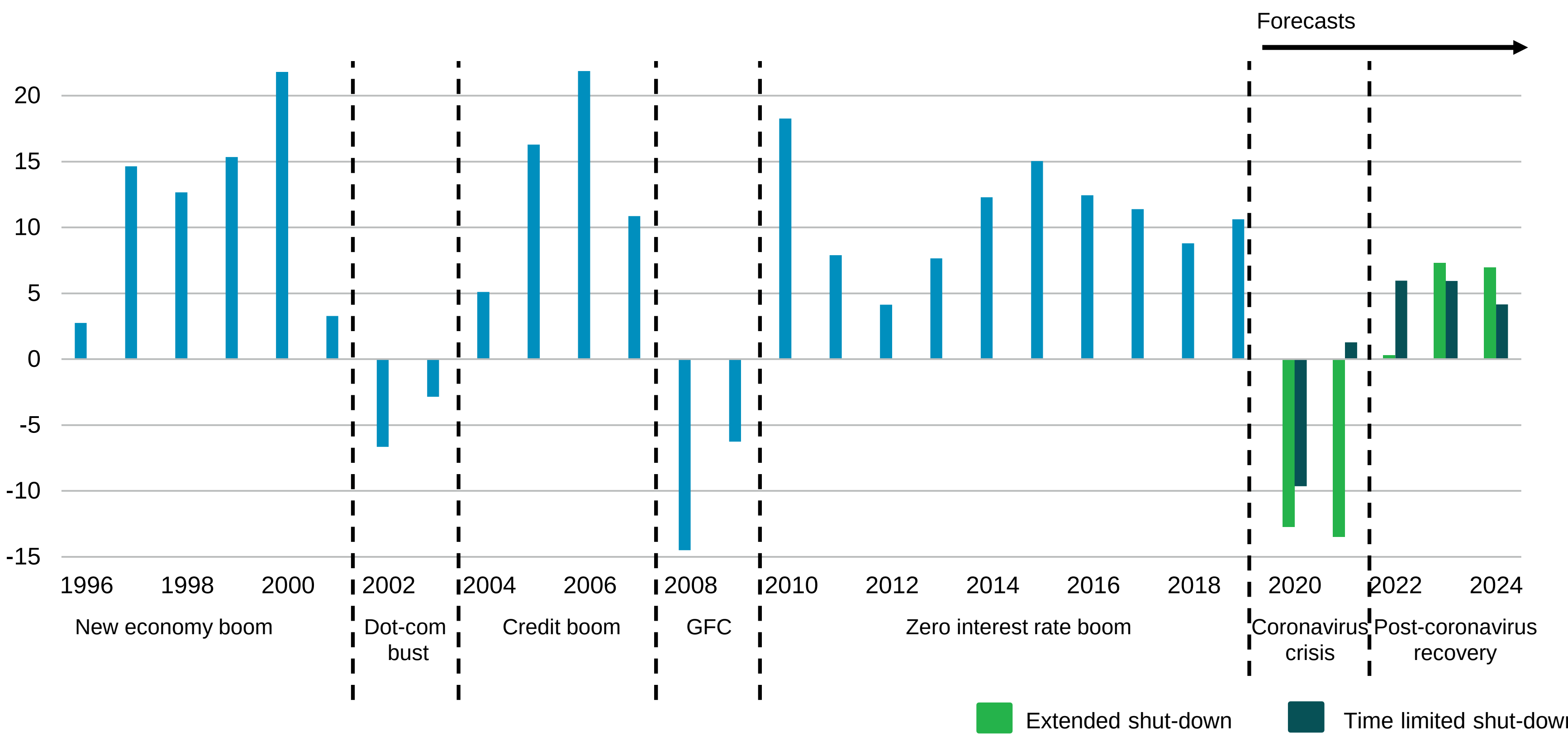
Investments	Risk
Prime	
Secondary	
Development	
Existing value-add	
Future value-add	
Debt	

- **Prime:** Assets with tenants with good covenants are always the best bet in hard times
- **Secondary:** Assets are first to suffer from weaker tenant demand and falling investment liquidity
- **Development:** Leasing activity could suffer if occupier tide turns
- **Debt:** With sensible LTVs and covenants is much better placed than equity exposure

Total return trajectory for European office

Similar magnitude of decline as in previous recessions to be expected

All European office prime total cumulative return in %



Source: PMA *PMA models less GDP decline, but more drawn out negative impact compared to the IMF
OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

U.S.-specific view

Regional: All 50 U.S. states have re-opened which is helping re-start the U.S. economy. The June 5th employment report showed there were 2.5 million jobs added to the U.S. economy and the unemployment rate fell to 13.3%. However, there have been 20 million jobs lost this year, compared to 8.7 million during the GFC, and the unemployment remains at historical highs. Daily update data sets show that while economic activity has likely bottomed out, the recovery remains slow. For example, OpenTable reservations remain 50% to 90% below year ago levels across U.S. cities but traffic has picked up considerably across U.S. cities.

During Q1 2020, U.S. GDP fell at annualized rate of 4.8% and is expected to fall at any where between 30%-40% in Q2 2020. The U.S. economy is on track to shrink nearly 6% this year, more than twice that seen during the GFC.

According to Green Street's Commercial Property Price Index, aggregate U.S. real estate is down 11% in the first five months of 2020. Property values began to fall in April and May 2020 as the full effects of coronavirus were felt. Malls and lodging properties have seen values fall 25% in the last three months while student housing and strip retail have fallen around 15%. Retail values were falling before coronavirus but the pandemic has rapidly accelerated the number of retailers filing for bankruptcy. Meanwhile industrial, manufactured homes and life science values have fallen a mere 5% since coronavirus began to impact U.S. real estate values. Public REIT markets continue to suggest U.S. real estate values are down somewhere in the 20% range.

While Q1 2020 office, industrial and apartment rents did not fall, we expect rents will fall throughout the remainder of 2020 as the full effects of coronavirus are felt by households and businesses alike. Further, we expect office, industrial and apartment vacancy rates to increase 200 basis points from their Q1 2020 cyclical lows by the end of 2020. According to Green Street, 90% of rents for essential retail were collected in April and May but only 39% of rents were collected for non-essential retail.

Sector	Risk
Office	Neutral
Retail	Unfavorable
Industrial	Neutral
Housing	Neutral

Neutral
Unfavorable

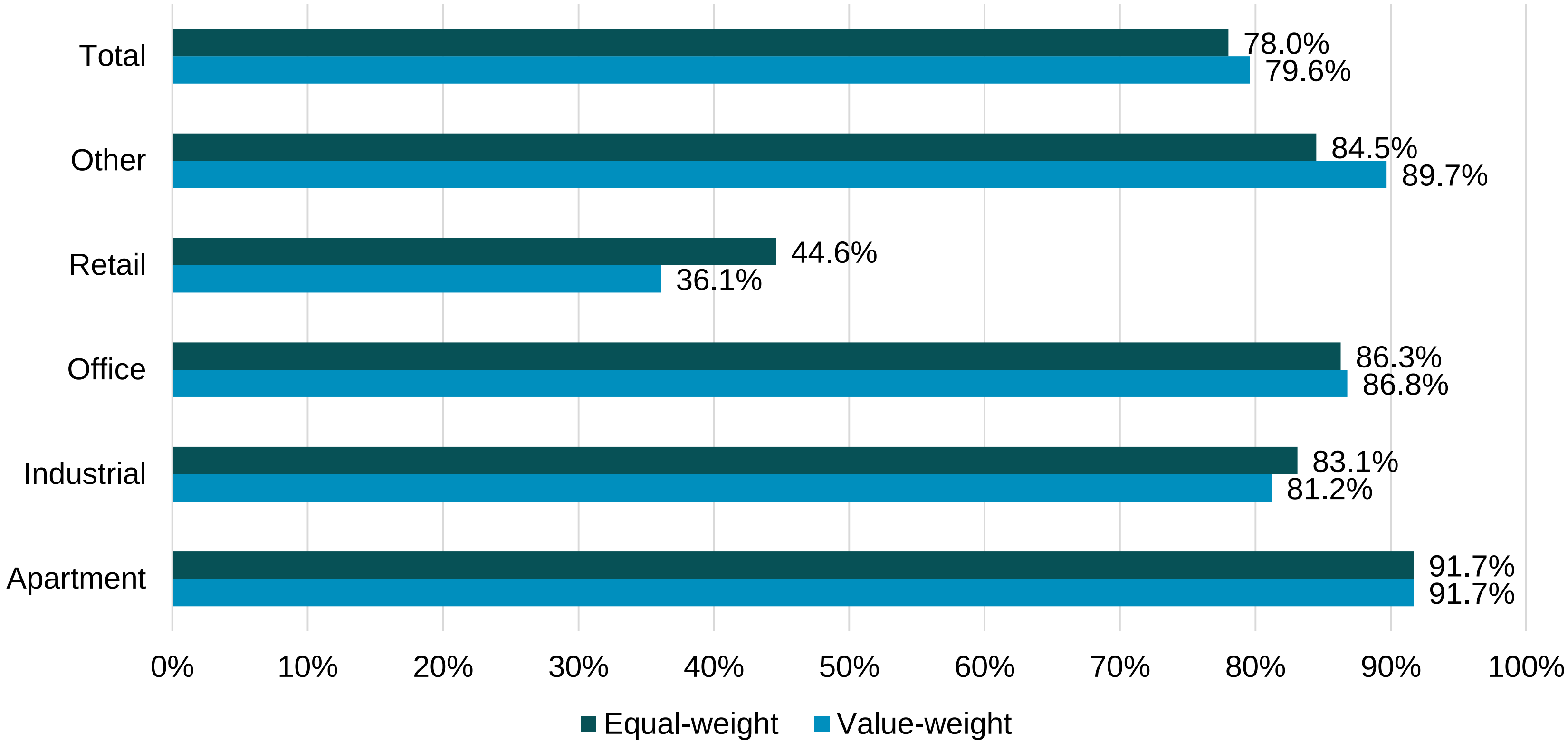
Office: CBRE-EA expects U.S. office rents to fall 6.4% in 2020 with vacancy rates rising more than 200 basis points this year. However, they also predict the sector will bounce back in 2021, re-gaining most of what was lost during 2020. The biggest unknown for the office market is whether office tenants will demand more or less office space in a post-coronavirus world.

Retail: Woes likely to be exacerbated and to accelerate retailer bankruptcy filings. Major retailers to file bankruptcy thus far include J.C. Penney, J. Crew, Neiman Marcus, True Religion and Modell's Sporting Goods.

Industrial: Expected to see only a modest fall in values, rents and occupancy rates. CBRE-EA expect rents to fall 1.5% in 2020 with vacancy rates rising just over 200 basis points. Warehouses that have exposure to high yield and small businesses will likely see rents fall more than 1.5% this year.

Housing: According to RealPage, occupancy rates dropped 80 bps in May to 95.2% and effective rents fell 0.5% for the year ending May 2020. Tourism focused markets such as Las Vegas and Orlando as well as LA and the Bay Area are seeing rents fall the most.

U.S. rent collections by property type



(1) The sector value-weights are the aggregate funds' rent collected divided by the aggregate funds' rent due for each sector. The value-weight for the 'Total' is the aggregate funds' rent collected divided by aggregate funds' rent due.*(2)* The sector equal-weights are the average of each fund's rent collected as a percentage of the rent due for each sector. The equal-weight for the 'Total' is the average of each sector's equal-weight percentage shown.

Source: NCREIF NFI-OE Rent Analysis as of December 31, 2019, Nuveen Real Estate impact compared to the IMF

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES

Real estate investing in a post-coronavirus world

Key takeaways

Macro backdrop

- The last 30 years of cap rate compression is likely over given the very low interest rate environment across developed markets
- The next decade is likely to be slow growth given high government debt burdens post-coronavirus, favoring property types that rely less on economic growth to generate income
- More pandemics are likely to occur in the future which means real estate portfolios need to positioned for more resilience from a property type, city and tenant perspective

Thematics

- Coronavirus has not caused a paradigm shift for real estate, rather it has accelerated already-present underlying trends such as:
  - A further push towards online shopping
  - The restructuring of retail real estate – retailers with strong balance sheet to survive and take more market share as weak retailers file bankruptcy
  - A rise of the digital economy
  - De-globalization, re-routing of supply chains
  - Movement towards the suburbs and the sunbelt cities
  - Destruction of wealth during this crisis leads to more demand for all forms of rental housing

Sectors

- Highest long term conviction around the alternative property types in housing, industrial/logistics, technology and healthcare
- Definitions of core and alternative sectors will likely need to be re-visited in a post-coronavirus world
- Getting the sectors and city calls 'right' generates the majority of real estate's alpha

Cities

- Large expensive cities such as New York City, London or Singapore to see near term rental and value declines but in the longer term will survive and thrive as rents and values get reset
- Movement towards the suburbs and the sunbelt cities in the U.S. and lower cost, high quality of life cities in Europe

Source: Nuveen Real Estate

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