






CoreNet Global & Hochschule Fresenius Heidelberg present:

MaSTERTALK REAL ESTATE

The new online real estate seminar series from CoreNet Global and Hochschule Fresenius Heidelberg

| | | |
|-------------------|---|---|
| 16/09/2020 | <i>MasterTalk #6</i> | Speakers: |
| | MARKETS IN TURMOIL |  |
| | OR BUSINESS AS USUAL |  |
| | How will real estate markets develop after Covid 19? |  |
| |  CORENET GLOBAL Central Europe Chapter |  HOCHSCHULE FRESENIUS UNIVERSITY OF APPLIED SCIENCES |

Prof. Dr. Thomas Beyerle
Managing Director &
Head of Group Research
Catella

Tim Armstrong
Head of Occupier Services
& Commercial Agency
Asia Pacific
Knight Frank

Marcus Rayner
Vice Chairman
Colliers International

An aerial photograph of a city in winter, likely Stockholm, Sweden. The scene is dominated by historic, multi-story buildings with snow-covered roofs and facades. In the foreground, a canal is partially frozen, with several boats docked along the banks. The sky is a clear, pale blue, suggesting a bright day. The overall atmosphere is cold and serene.

MasterTalk Real Estate

CATELLA

The European Real Estate Markets – Winter is coming

Prof. Dr. Thomas Beyerte

Catella Assumptions for the coming years

THE FORECAST OF FUTURE MARKET DEVELOPMENTS DEPENDS ON A VARIETY OF FACTORS, SOME OF WHICH ARE INFLUENCED BY NATIONAL LEGISLATION. NEVERTHELESS, A NUMBER OF FACTORS CAN BE IDENTIFIED WHICH HAVE A SUPERORDINATE FUNCTION. THE FOLLOWING GENERAL ASSUMPTIONS ARE BASED ON THESE FACTORS WHICH DIFFERS BETWEEN REAL ESTATE SECTORS AND COUNTRIES:

- There will be no second lockdown even if the number of infections increases again, a vaccine against Covid-19 will be available in 2021.
- The number of insolvencies will increase significantly, but mainly small enterprises are affected directly, CRE market will be affected by banks' credit defaults, tightening credit constraints and finally higher financing costs.
- Lower for longer: Ultra loose monetary policy will be continued and central banks will allow Inflation overshooting in the short-term (Average Inflation Targeting).
- Home Office: Office space requirements will decline - moderately in the medium to long-term by approx. ~10 %.

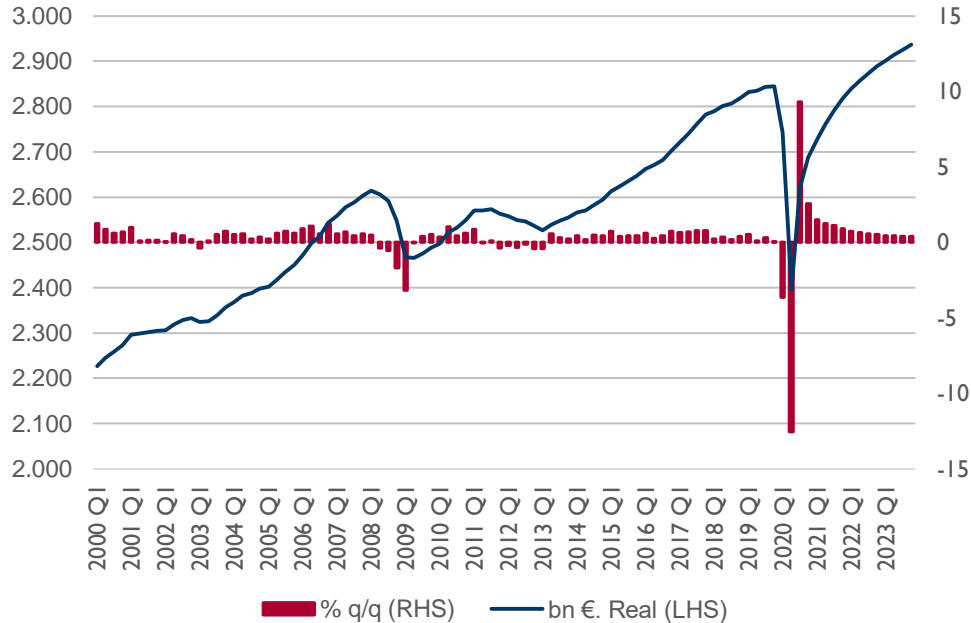


ECONOMIC OUTLOOK



Economic Outlook

Real GDP: Eurozone Forecast



Source: Catella Research, Oxford Economics

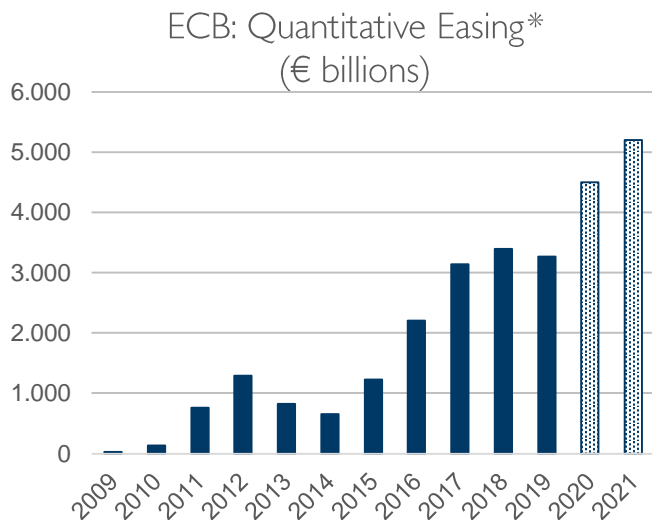
We appear to be seeing two opposing trends in macro fundamentals. Economic indicators, like the PMI, the Ifo or inflation, are coming in above expectations. But we are also seeing a sharp increase in infections around the globe.

On a positive note, forward-looking sentiment data and real-time activity indicators show that the economy is now starting to recover as quarantines are being lifted.

But with the pandemic hitting some countries harder than others and various degrees of policy responses put in place, the recovery will be uneven across the region. We expect eurozone GDP to contract 7.8% this year, before a solid pick-up to 6.4% growth in 2021.

- Retail sales in Germany and France rebound in May and June
- Labour market data signal some stabilisation
- We expect economies to recover in a tick-shaped fashion
- Fixed income investment will fall sharply to 11.3% in 2020
- But the approval of the EU's €750bn recovery fund should boost investment prospects over the coming years.

From Lender of last Resort to Buyer of last Resort



*Non-standard lending to the banks (via 3-year LTROs and TLTROs) + outstanding stock of assets purchased by the ECB (gov bonds, covered bonds, corporate bonds & asset-backed securities)

Source: Catella Research, Oxford Economics

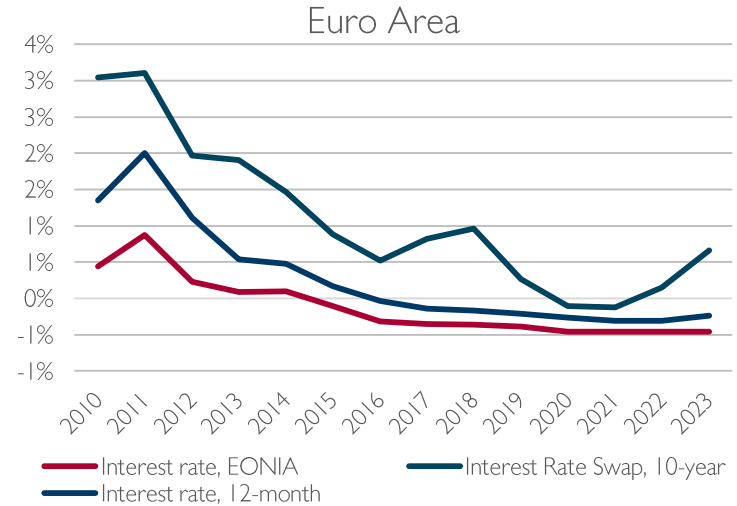
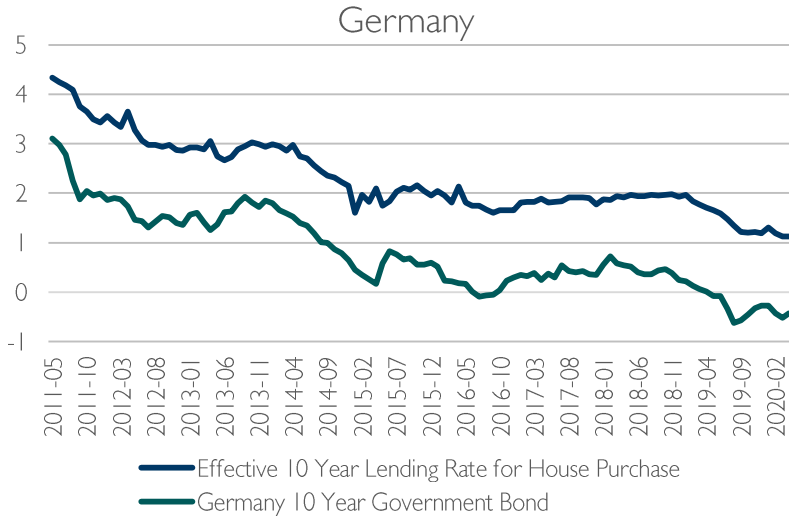
Monetary responses: “Whatever it takes”

ECB: Additional asset purchases of €120 billion until end-2020 under the existing program (APP). Additional €750 billion asset purchase program of private and public sector securities, expanded the size of the PEPP by €600 billion to €1.35 trillion. The duration has been extended to at least June 2021, and the ECB will reinvest maturing securities until at least the end of 2022. Euro appreciation has raised the stakes for ECB policy: The weak growth and inflation outlooks mean that we still expect monetary conditions to remain ultra-loose for an extended period; we do not expect interest rates to start to rise until 2024.

Risikbank: Extended asset purchases from SEK 300 billion to SEK 500 billion up to the end of June 2021. In September, the Riksbank will also begin purchasing corporate bonds. The Executive Board has further decided to cut interest rates and extend maturities on lending to banks. At the same time, the repo rate is held unchanged at zero per cent.

FED: Federal funds rate were lowered by 150bp in March to 0-0.25bp. Purchase of Treasury and agency securities in the amount as needed (including ETFs). Expanded overnight and term repos. Lowered cost of discount window lending. Reduced existing cost of swap lines with major central banks and extended the maturity of FX operations. Switch to Average Inflation Targeting (AIT) announced.

Yields Likely to Keep Down for Longer



- The low interest phase and a lack of alternative investment opportunities should lead to a further increase in the real estate allocation of multi-asset investors.
- The March sell off in bond and equity markets and the sharp rise in volatility increase the attractiveness of real estate investments.
- The question is whether the demand for office space can keep up.

Economic Recovery but Remaining Risks

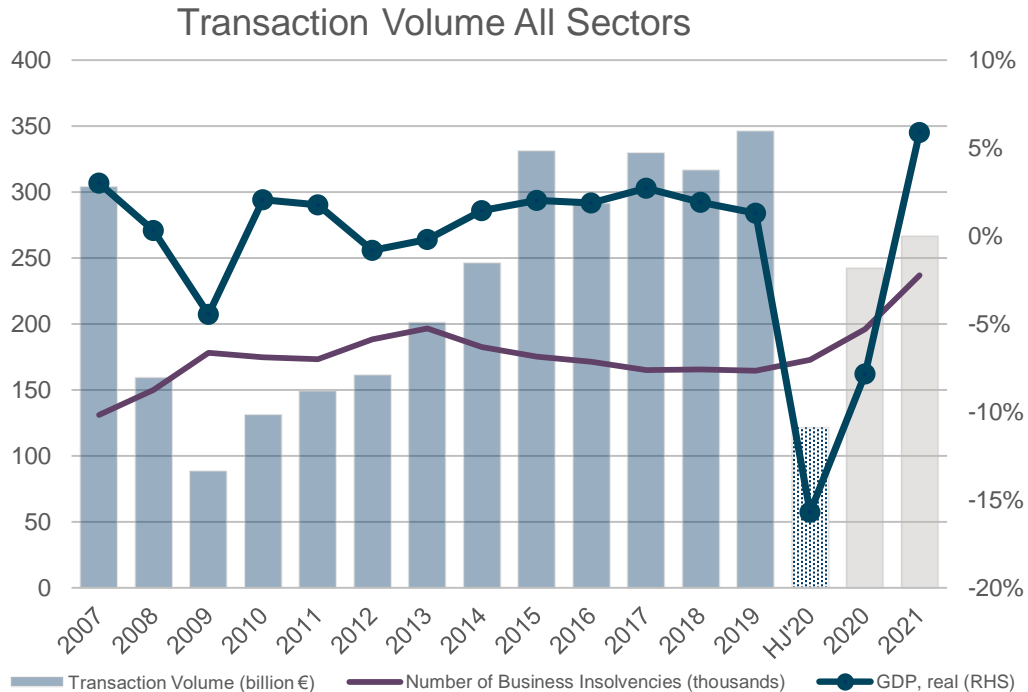


- Central banks and politicians will prevent a follow-up financial crisis
- Combined fiscal & central bank aid will approach 30% of GDP by year-end, with loan guarantees worth 50% of GDP
- Monetary policy supports real asset prices
- Virus trends will not lead into a second wave of harsh lockdowns – infection wave in Europe remain suitable flat
- Economic recovery rebounds rapidly – no V-shape but rather a tick-shaped recovery profile
- Retail sales in May raised by 17.8% in Eurozone
- Environment for real estate investments remains good, still high amount of available capital



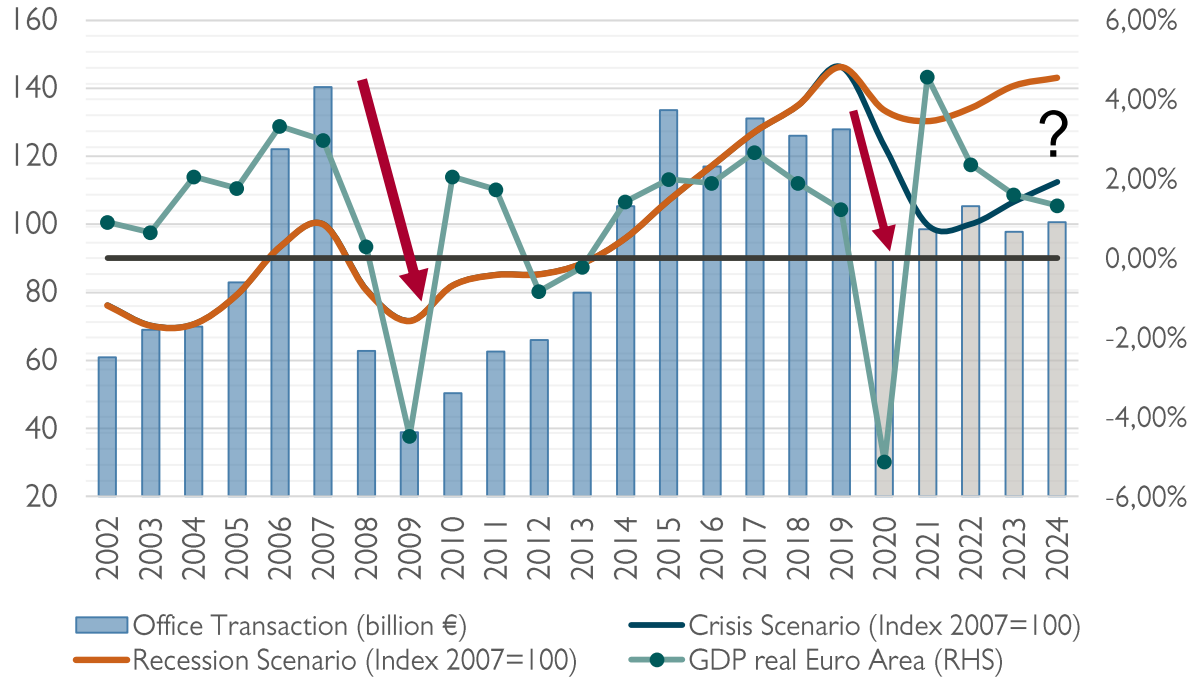
- Fiscal deficits arising from loss of revenue will not drive growth
- Collapsing world trade will feedback into growth and disinflation
- Risks that the labour market could suffer more long-term: The OECD unemployment rate increased by an unprecedented 2.9 percentage points in April 2020 to 8.4% (by 18.4 million to 55 million)
- Liquidity difficulties could turn into solvency problems for many companies
- Brexit: A failure to secure an agreement on the future trading relationship could also result in lower growth, particularly for the UK

European Transaction Volume vs. GDP & Insolvencies



- A record-high increase in insolvencies is expected.
- Unlike in 2007-2009, all regions and countries are expected to post double-digit increases in insolvencies. Bulk of insolvencies to be recorded between H2 2020 and H1 2021.
- The uncertainty triggered by Codiv-19 resulted in a slowdown in investment activity in Q2 in most European markets as investors became more cautious, but hope that we may have passed the nadir of this cycle in May.
- Brexit caution continues to be a factor and explains the huge gap between the investment volumes in the UK and in Continental Europe.

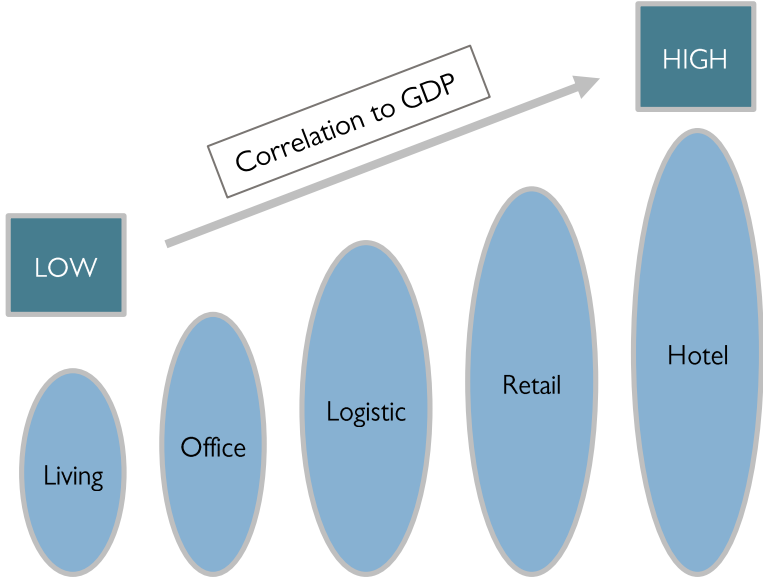
Office: Transaction Volume vs. GDP & Capital Growth Index



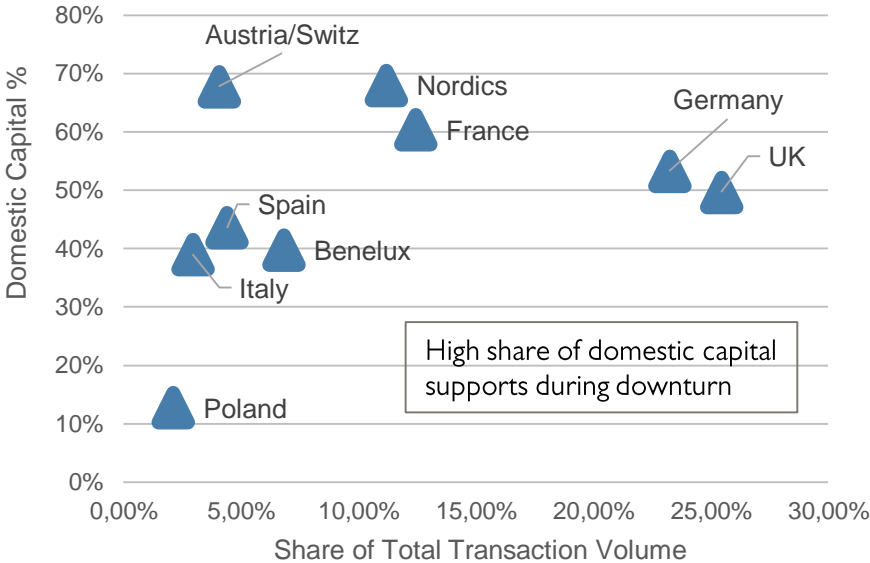
- Take up: Demand in all European markets in Q2 2020 was 33% down on the Q1 level.
- Comparing take up in H1 2020 to the take up in the first half of 2019 the percentage of cities which have recorded a slowdown reaches 88%.
- An overall decline of transaction volume in the range of 20-30% for 2020 seems probable

GDP Correlation & Transaction Volume by origin

While the housing market is mainly driven by demographics and household income, the GDP impact (Covid-19) on the hotel market is very high.



Transactions by Country and Capital Source (average since 2010)

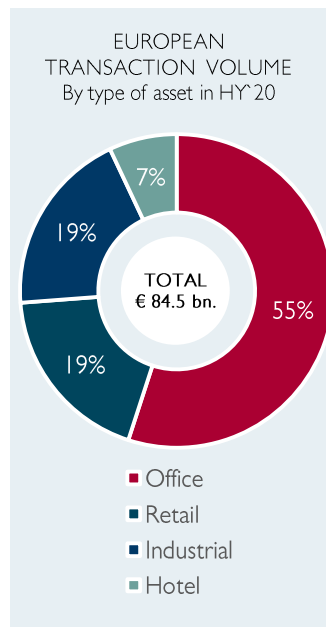




CATELLA

Commercial Investment Market Quick facts

Country Review HY – Commercial Investment Market



| | | |
|--------------|--|--------------------|
| 1 | Germany | € 25.2 bn. |
| 2 | United Kingdom | € 13.3 bn. |
| 3 | France | € 12.8 bn. |
| 4 | Nordics (SE, FI, NO, DK, IS) | € 11.7 bn. |
| 5 | Turnaround Europe (IE, PT, ES, GR, MT, CY, IT) | € 8.4 bn. |
| 6 | Benelux (BE, NL, LU) | € 7.0 bn. |
| 7 | Central Europe (PL, CZ, SK, HU) | € 3.4 bn. |
| 6 | Austria & Switzerland | € 2.0 bn. |
| 9 | Eastern Europe | € 0.7 bn. |
| Total | | € 84.5 bn.* |

* Commercial = office, logistics/industrial, retail, hotel



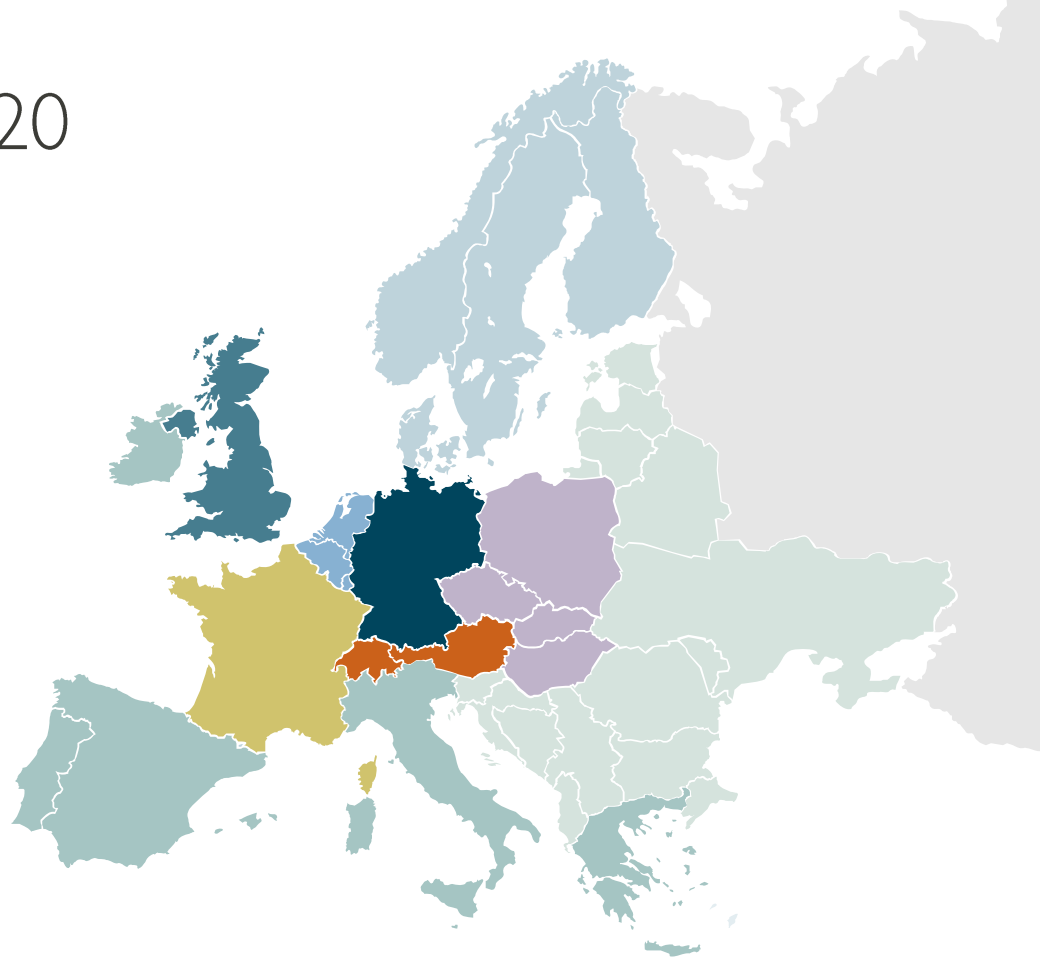


Residential Investment Market Quick facts

Country Review – HY 2020

| | | |
|--------------|--|-------------------|
| 1 | Germany | € 12.2 bn. |
| 2 | United Kingdom | € 7.2 bn. |
| 3 | Nordics (SE, FI, NO, DK, IS) | € 3.9 bn. |
| 4 | Benelux (BE, NL, LU) | € 2.2 bn. |
| 5 | France | € 2.1 bn. |
| 6 | Central Europe (PL, CZ, SK, HU) | € 1.4 bn. |
| 7 | Turnaround Europe (IE, PT, ES, GR, MT, CY, IT) | € 1.2 bn. |
| 8 | Austria & Switzerland | € 1.3 bn. |
| 9 | Eastern Europe | € 0.0 bn. |
| Total | | € 31.5 bn. |

* Residential and student housing properties with minimum 10 units. Condominium transactions and single family houses are excluded.

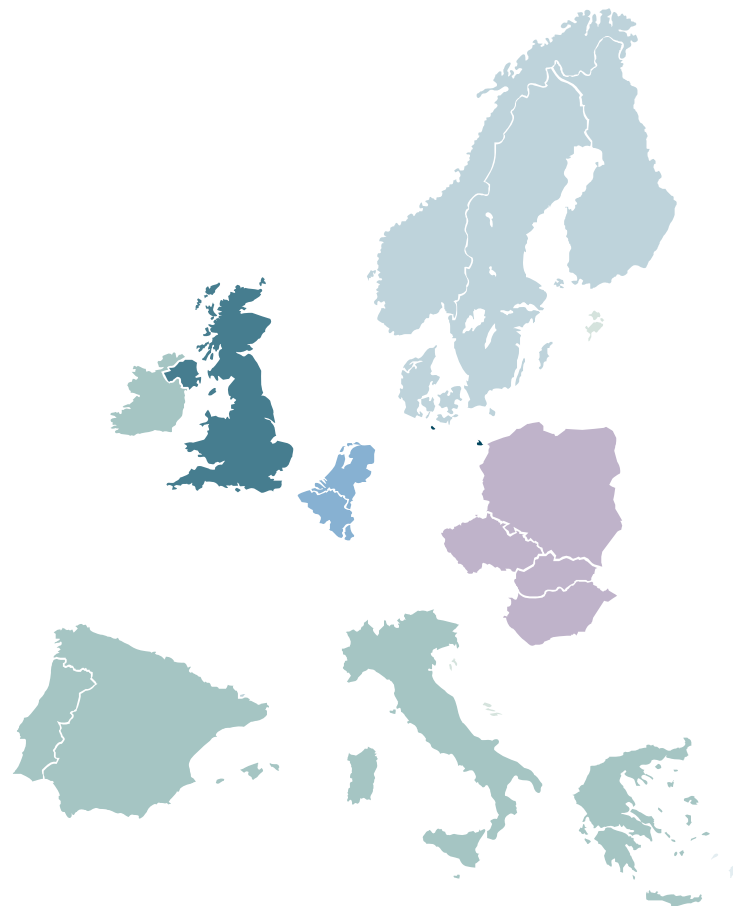


Country Focus – HY 2020

| | |
|-------------------------------------|------------------|
| Nordics (SE, FI, NO, DK, IS) | € 3.9 bn. |
| Sweden | € 1.9 bn. |
| Denmark | € 1.4 bn. |
| Finland | € 0.4 bn. |
| Norway | € 0.2 bn. |
| Benelux (BE, NL, LU) | € 2.2 bn. |
| Netherlands | € 2.1 bn. |
| Belgium | € 0.0 bn. |
| Luxembourg | € 0.1 bn. |

* Residential and student housing properties with minimum 10 units. Condominium transactions and single family houses are excluded.

| | |
|---|------------------|
| Turnaround Europe (IE, PT, ES, GR, MT, CY, IT) | € 1.2 bn. |
| Spain | € 0.7 bn. |
| Ireland | € 0.4 bn. |
| Portugal | € 0.0 bn. |
| Italy | € 0.1 bn. |
| Greece | € - |
| Cyprus | € - |
| Malta | € - |
| Central Europe (PL, CZ, SK, HU) | € 1.4 bn. |
| Poland | € 0.1 bn. |
| Czech Republic | € 1.3 bn. |
| Hungary | € 0.0 bn. |
| Slovakia | € - |





CATELLA

Implications For Asset Classes...

| Expected implications for asset classes from the demand side | | |
|--|------------|-------------|
| Asset class | Short term | Medium term |
| Healthcare | ↗ | → |
| Food Retail | ↗ | → |
| Logistic/Industrial | → | ↗ |
| Residential | → | → |
| Office | → | → |
| Hotel | ↘ | ↗ |
| Co-Working | ↘ | ↗ |
| Serviced Apartments | ↘ | → |
| Leisure | ↘ | → |
| Retail/Shoppingcenter | ↘ | → |

Logistics and residential real estate as beneficiaries of the crisis

Logistic/Industrial: suffers in the short-term from disrupted supply chains while e-commerce boosts demand of some goods (Food, drugstore, medicines), profits in the long-term from higher safety stock levels and reshoring-trend

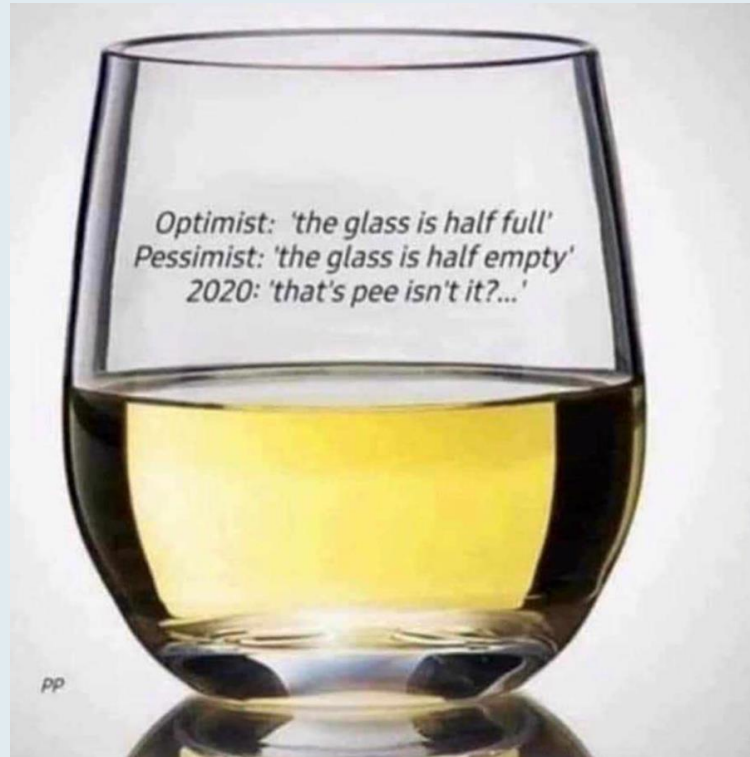
Residential: relatively insensitive to exogenous shocks, more likely to be determined by population growth and long-term trends

Office: react cyclically, too a very high degree dependent on economic recovery

Hotels and restaurants are particularly hard hit by COVID-19 but and easing restrictions and catch up events could lead to a strong increase in second half of the year

Retail is under pressure (exc. food), private consumption may rise sharply after the crisis

But this also means that now is the time for real estate investment to continue to proactively pursue real estate issues sustainable for investments to be made in line with digitalisation, risk management and ESG.



*Optimist: 'the glass is half full'
Pessimist: 'the glass is half empty'
2020: 'that's pee isn't it?..'*

pp

Asia-Pacific Real Estate

Tim Armstrong

COVID-19's impact

How has real estate values and investor sentiment changed?

How Has COVID-19 Impacted Real Estate Values?

H1 2020

- Commercial values are declining or expected to decline across most sectors.
- Industrial showing most resilience.
- Current value declines driven by weak rent growth.

ASIA PACIFIC VALUATION DATA DASHBOARD

| MARKETS | CITY | Prime Residential | | Prime Office | | Prime Retail | | High-tier Industrial | | High-end Hospitality | |
|-----------|--------------|-------------------|----------|----------------|----------|----------------|----------|----------------------|----------|----------------------|----------|
| | | VALUE MOVEMENT | FORECAST | VALUE MOVEMENT | FORECAST | VALUE MOVEMENT | FORECAST | VALUE MOVEMENT | FORECAST | VALUE MOVEMENT | FORECAST |
| AUSTRALIA | Sydney | → | ↓ | ↓ | → | ↓ | ↓ | → | → | ↓ | ↓ |
| | Melbourne | → | ↓ | ↓ | → | ↓ | ↓ | → | → | ↓ | ↓ |
| | Brisbane | → | ↓ | ↓ | → | ↓ | ↓ | → | → | ↓ | ↓ |
| | Auckland | → | → | ↓ | → | ↓ | ↓ | → | → | ↓ | ↓ |
| | Christchurch | → | → | → | → | ↓ | ↓ | → | → | ↓ | ↓ |
| EAST ASIA | Beijing | ↓ | → | ↓ | ↓ | ↓ | ↓ | ↑ | → | ↓ | ↓ |
| | Shanghai | ↑ | ↑ | ↓ | ↓ | ↓ | ↓ | ↑ | ↑ | ↓ | ↓ |
| | Guangzhou | ↓ | ↑ | ↓ | ↓ | ↓ | ↓ | → | → | ↓ | ↓ |
| | Shenzhen | ↑ | ↑ | ↓ | ↓ | ↓ | ↓ | ↑ | → | ↓ | ↓ |
| | Hong Kong | → | → | ↓ | ↓ | ↓ | ↓ | → | → | ↓ | ↓ |
| | Taipei | ↑ | ↑ | ↑ | ↑ | ↓ | ↓ | ↑ | ↑ | ↓ | ↓ |
| | Tokyo | → | → | → | → | ↓ | ↓ | → | → | ↓ | ↓ |
| | Seoul | ↑ | ↑ | ↑ | → | ↓ | ↓ | ↑ | ↑ | ↓ | ↓ |
| | Mumbai | ↓ | ↓ | ↑ | → | ↓ | ↓ | → | → | ↓ | ↓ |
| | NCR | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | → | → | ↓ | ↓ |
| ASEAN | Singapore | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| | Kuala Lumpur | ↓ | → | ↓ | ↓ | → | ↓ | → | → | ↓ | ↓ |
| | Penang | → | → | → | ↑ | ↓ | ↓ | ↑ | ↑ | ↓ | ↓ |
| | Jakarta | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | → | → | ↓ | ↓ |
| | Bangkok | ↓ | ↓ | → | → | ↓ | ↓ | → | ↑ | ↓ | ↓ |
| | Manila | → | ↓ | → | ↓ | ↓ | → | → | → | ↓ | ↓ |
| | Phnom Penh | ↓ | ↓ | → | ↓ | → | → | → | → | ↓ | ↓ |

How About Cap Rates?

H1 2020

- Cap rates have largely remained stable in H1 2020 supported mainly by low interest rates.
- However, quite a few markets are forecast to see cap rates expand going forward; putting more pressure on values.

| ASIA-PACIFIC COMMERCIAL YIELDS | | | |
|--------------------------------|------------|-------|----------------|
| CITY | SECTOR | YIELD | YIELD FORECAST |
| SHANGHAI | OFFICE | 4.4% | ↑ |
| | RETAIL | 4.5% | ↑ |
| | INDUSTRIAL | 5.1% | ↓ |
| BEIJING | OFFICE | 4.5% | ↑ |
| | RETAIL | 5.0% | ↑ |
| | INDUSTRIAL | 5.5% | ↓ |
| SEOUL | OFFICE | 4.5% | ↑ |
| HONG KONG | OFFICE | 2.8% | → |
| | RETAIL | 2.6% | ↓ |
| | INDUSTRIAL | 2.9% | → |
| TOKYO | OFFICE | 3.4% | → |
| | RETAIL | 4.6% | ↑ |
| | INDUSTRIAL | 4.5% | → |
| MANILA | OFFICE | 5.9% | → |
| | RETAIL | 7.1% | ↑ |
| BANGKOK | OFFICE | 6.5% | → |
| KUALA LUMPUR | OFFICE | 6.5% | → |
| | RETAIL | 6.8% | ↑ |
| | INDUSTRIAL | 7.0% | → |
| SINGAPORE | OFFICE | 4.0% | → |
| | RETAIL | 4.7% | → |
| | INDUSTRIAL | 6.2% | → |
| JAKARTA | OFFICE | 6.5% | ↑ |
| | RETAIL | 8.0% | ↑ |
| SYDNEY | OFFICE | 4.4% | ↑ |
| | INDUSTRIAL | 5.5% | ↑ |
| MELBOURNE | OFFICE | 4.7% | ↑ |
| | INDUSTRIAL | 6.3% | ↑ |
| INDIA (TIER-1 CITIES) | OFFICE | 8.6% | → |
| | RETAIL | 8.4% | ↑ |
| | INDUSTRIAL | 8.8% | → |

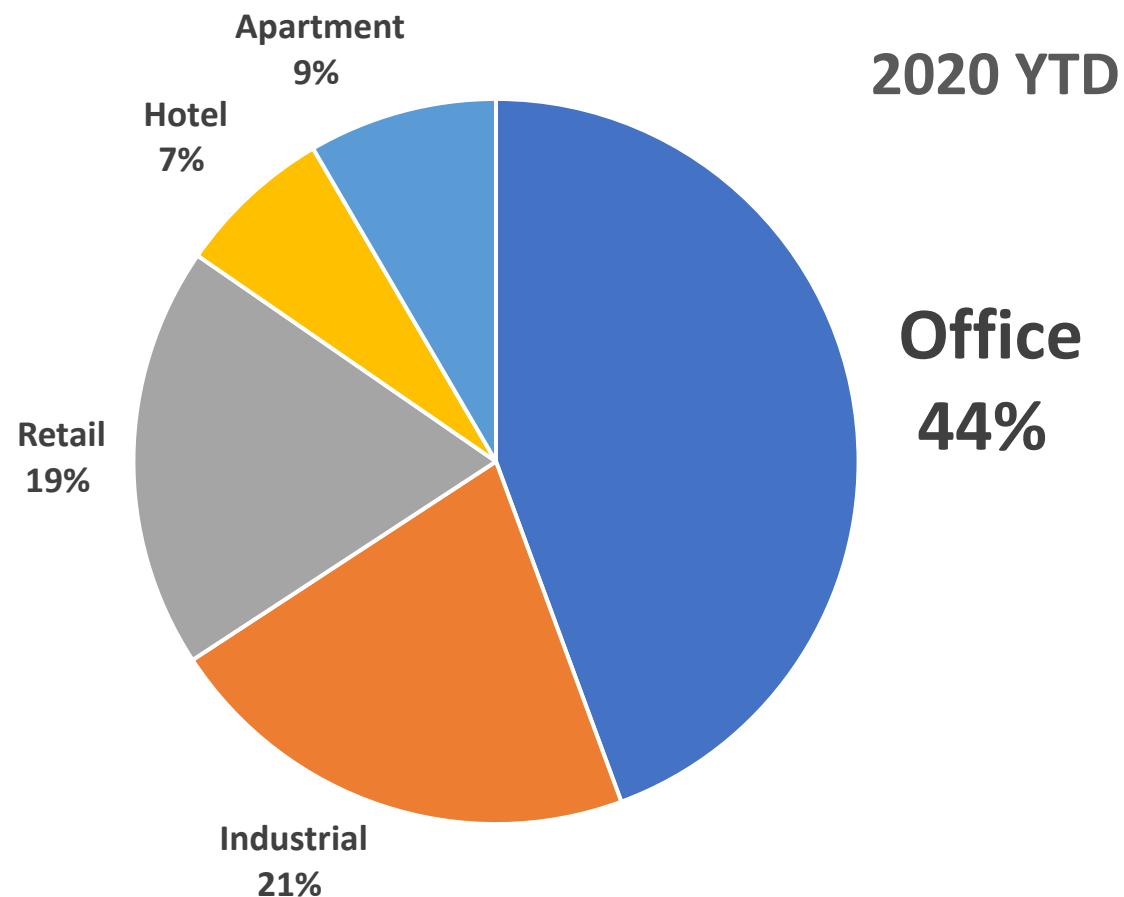
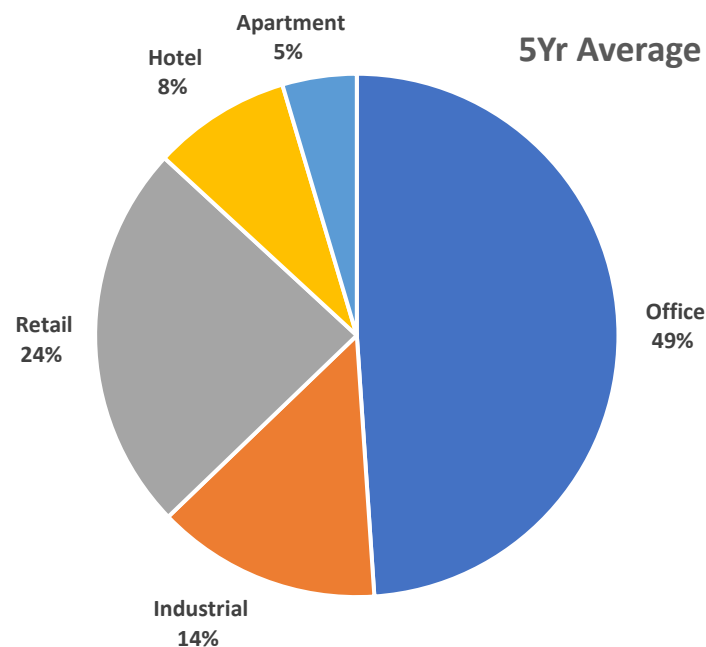
Commercial Transaction Volume Declines

Asia-Pacific (2019 to date)



Growing Investor Appetite For Industrial Assets

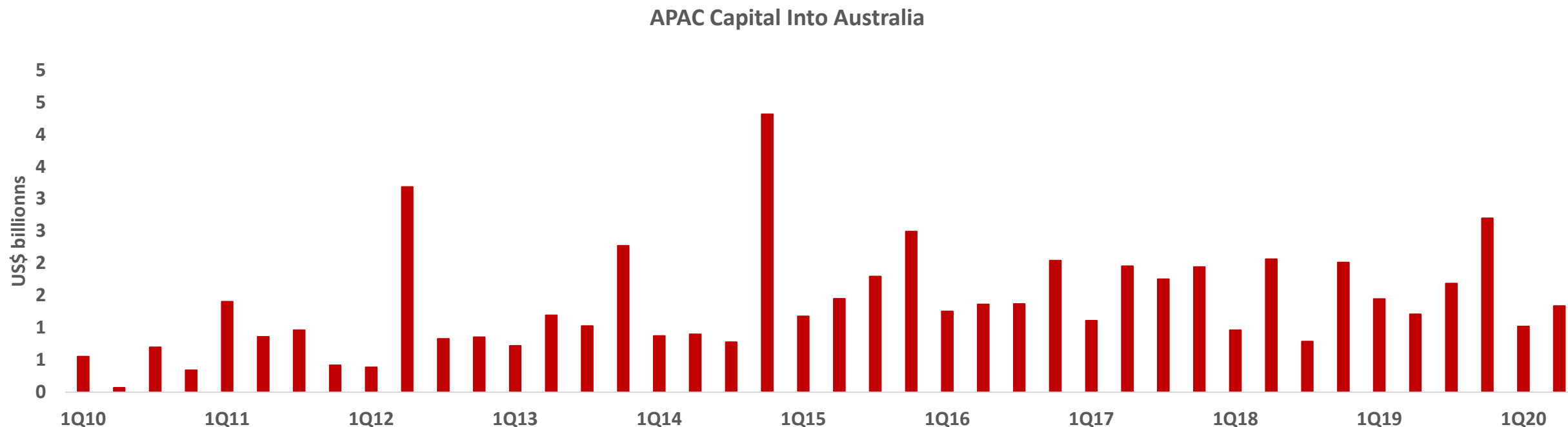
Sector Breakdown as of end-Aug



- **Office remains the most popular asset class across the Asia-Pacific region**
- **Industrial market share is 50% higher compared to its 5-year historical average**

Flight To Safety And The Rise Of Safe Havens

A look at APAC capital into Australia

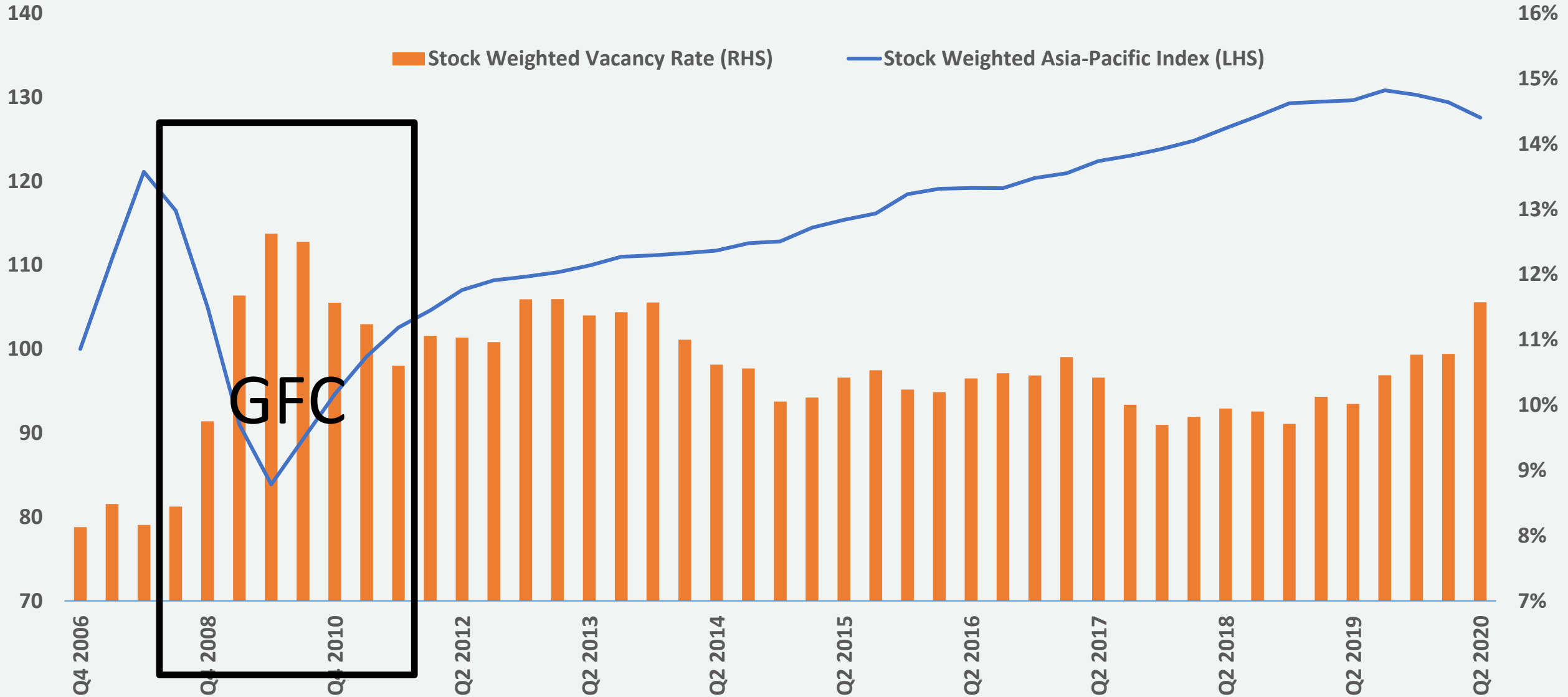


- **Asia-Pacific capital invested in Australia amounted to US\$1.34bn in Q2 2020**
- **This is up 31% QoQ from Q1 and 10% YoY from Q2 2019**
- **Highlights the flight to safety trend as investors are left with little choice within APAC**

Asia-Pacific's recovery

A look at the office
sector

Asia-Pacific Office Historical Performance



Office: Leasing Recovery As Markets Eased Lockdowns

| City | Leasing Activity (end-May) | City | Leasing Activity (end-June) | City | Leasing Activity (end-July) |
|--------------|----------------------------|--------------|-----------------------------|--------------|-----------------------------|
| Sydney | ↑ | Sydney | ↑ | Sydney | → |
| Jakarta | ↓ | Jakarta | → | Auckland | ↓ |
| Singapore | ↓ | Singapore | ↓ | Jakarta | → |
| Kuala Lumpur | ↓ | Kuala Lumpur | ↑ | Singapore | ↓ |
| Bangkok | ↑ | Bangkok | ↑ | Kuala Lumpur | ↑ |
| Manila | ↓ | Manila | ↓ | Bangkok | ↑ |
| Phnom Penh | ↓ | Phnom Penh | ↓ | Manila | ↓ |
| Tokyo | ↓ | Tokyo | ↓ | Phnom Penh | → |
| Seoul | ↓ | Seoul | ↓ | Tokyo | ↓ |
| Taipei | ↑ | Taipei | ↑ | Seoul | → |
| Shanghai | ↓ | Shanghai | → | Taipei | → |
| Beijing | ↓ | Beijing | ↓ | Shanghai | → |
| Guangzhou | ↑ | Guangzhou | ↑ | Beijing | ↓ |
| Shenzhen | → | Shenzhen | ↑ | Guangzhou | ↑ |
| Hong Kong | → | Hong Kong | → | Shenzhen | ↑ |
| Mumbai | → | Mumbai | → | Hong Kong | → |
| Delhi | → | Delhi | → | Mumbai | → |
| Bangalore | → | Bangalore | → | Delhi | → |
| | | | | Bangalore | → |

Office: Market Balance Tilted In Tenant's Favor

| City | Market Favourable Conditions (end-May) | City | Market Favourable Conditions (end-June) | City | Market Favourable Conditions (end-July) |
|--------------|--|--------------|---|--------------|---|
| Sydney | Tenant | Sydney | Tenant | Sydney | Tenant |
| Jakarta | Tenant | Jakarta | Balanced | Auckland | Tenant |
| Singapore | Tenant | Singapore | Tenant | Jakarta | Tenant |
| Kuala Lumpur | Tenant | Kuala Lumpur | Tenant | Singapore | Tenant |
| Bangkok | Landlord | Bangkok | Landlord | Kuala Lumpur | Tenant |
| Manila | Tenant | Manila | Tenant | Bangkok | Balanced |
| Phnom Penh | Tenant | Phnom Penh | Tenant | Manila | Tenant |
| Tokyo | Landlord | Tokyo | Landlord | Phnom Penh | Tenant |
| Seoul | Balanced | Seoul | Balanced | Tokyo | Balanced |
| Taipei | Landlord | Taipei | Tenant | Seoul | Balanced |
| Shanghai | Tenant | Shanghai | Landlord | Taipei | Landlord |
| Beijing | Tenant | Beijing | Tenant | Shanghai | Tenant |
| Guangzhou | Balanced | Guangzhou | Tenant | Beijing | Tenant |
| Shenzhen | Balanced | Shenzhen | Tenant | Guangzhou | Tenant |
| Hong Kong | Tenant | Hong Kong | Tenant | Shenzhen | Tenant |
| Mumbai | Balanced | Mumbai | Balanced | Hong Kong | Tenant |
| Delhi | Balanced | Delhi | Balanced | Mumbai | Balanced |
| Bangalore | Balanced | Bangalore | Balanced | Delhi | Balanced |
| | | | | Bangalore | Balanced |

Asia-Pacific's recovery

A look at the industrial
sector

Industrial: Leasing Hardly Slowed

| City | Leasing Activity (end-May) | City | Leasing Activity (end-June) | City | Leasing Activity (end-July) |
|--------------|----------------------------|--------------|-----------------------------|--------------|-----------------------------|
| Sydney | → | Sydney | → | Sydney | → |
| Auckland | → | Auckland | → | Auckland | → |
| Jakarta | ↑ | Jakarta | → | Jakarta | → |
| Singapore | ↓ | Singapore | ↓ | Singapore | ↓ |
| Kuala Lumpur | → | Kuala Lumpur | → | Kuala Lumpur | → |
| Bangkok | → | Bangkok | ↑ | Bangkok | ↑ |
| Manila | → | Manila | → | Manila | → |
| Phnom Penh | ↓ | Phnom Penh | ↓ | Phnom Penh | ↓ |
| Tokyo | → | Tokyo | → | Tokyo | → |
| Seoul | → | Seoul | → | Seoul | ↓ |
| Taipei | → | Taipei | → | Taipei | → |
| Shanghai | ↑ | Shanghai | → | Shanghai | → |
| Beijing | ↓ | Beijing | ↓ | Beijing | ↓ |
| Guangzhou | ↑ | Guangzhou | ↑ | Guangzhou | ↑ |
| Shenzhen | → | Shenzhen | ↓ | Shenzhen | → |
| Hong Kong | → | Hong Kong | → | Hong Kong | → |
| Mumbai | ↑ | Mumbai | ↑ | Mumbai | → |
| Delhi | ↑ | Delhi | ↑ | Delhi | → |
| Bangalore | ↑ | Bangalore | ↑ | Bangalore | → |

Industrial: Market Conditions Mostly Balanced

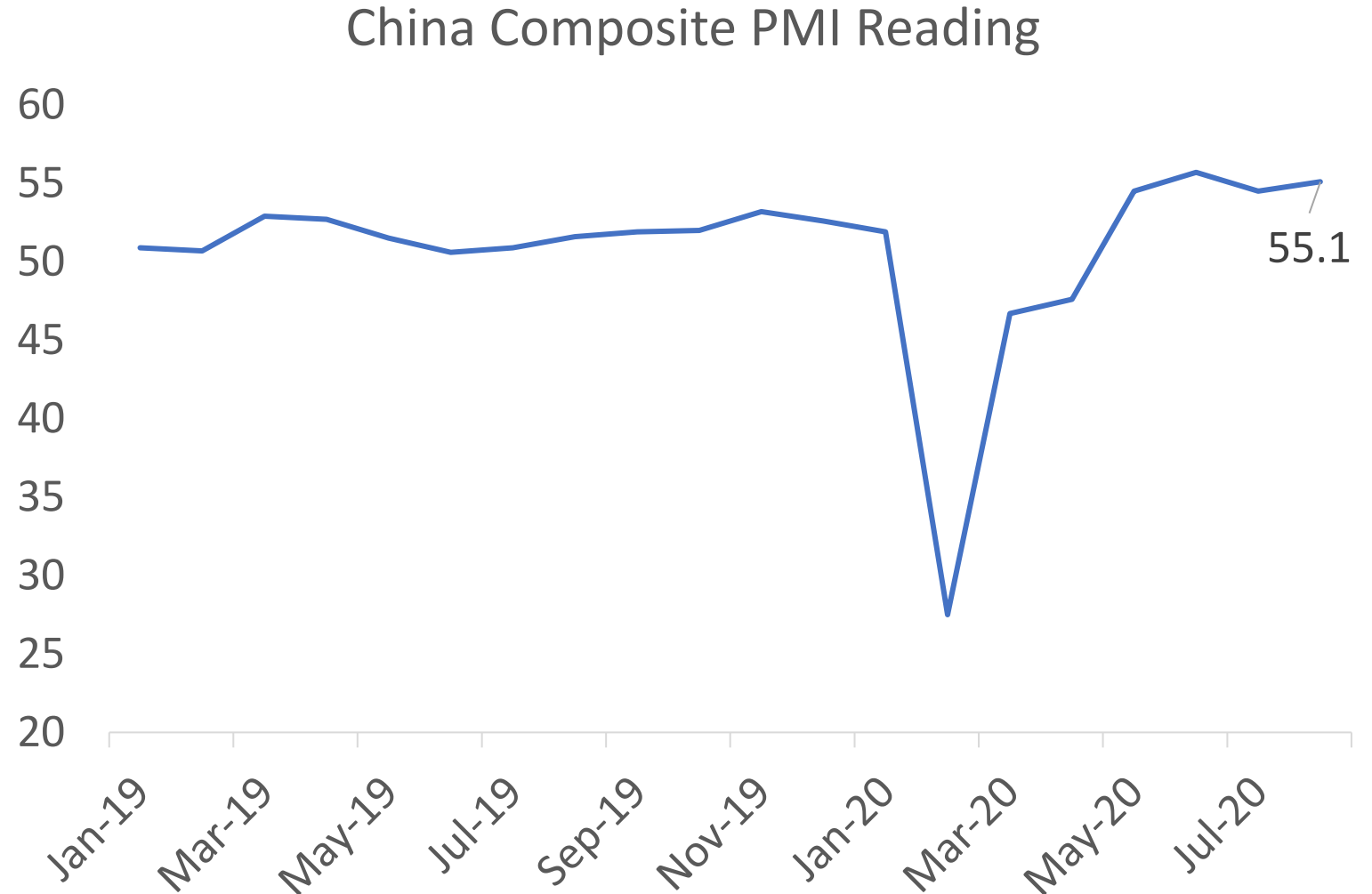
| City | Market Favourable Conditions (end-May) | City | Market Favourable Conditions (end-June) | City | Market Favourable Conditions (end-July) |
|--------------|--|--------------|---|--------------|---|
| Sydney | Tenant | Sydney | Tenant | Sydney | Tenant |
| Jakarta | Balanced | Jakarta | Balanced | Auckland | Balanced |
| Singapore | Tenant | Singapore | Tenant | Jakarta | Balanced |
| Kuala Lumpur | Balanced | Kuala Lumpur | Balanced | Singapore | Tenant |
| Bangkok | Balanced | Bangkok | Balanced | Kuala Lumpur | Balanced |
| Manila | Balanced | Manila | Balanced | Bangkok | Balanced |
| Phnom Penh | Tenant | Phnom Penh | Tenant | Manila | Balanced |
| Tokyo | Balanced | Seoul | Balanced | Phnom Penh | Tenant |
| Seoul | Tenant | Taipei | Tenant | Tokyo | Balanced |
| Taipei | Balanced | Shanghai | Balanced | Seoul | Balanced |
| Shanghai | Tenant | Beijing | Tenant | Taipei | Balanced |
| Beijing | Tenant | Guangzhou | Tenant | Shanghai | Tenant |
| Guangzhou | Balanced | Shenzhen | Tenant | Beijing | Tenant |
| Shenzhen | Balanced | Hong Kong | Balanced | Guangzhou | Landlord |
| Hong Kong | Tenant | Mumbai | Tenant | Shenzhen | Balanced |
| Mumbai | Balanced | Delhi | Balanced | Hong Kong | Tenant |
| Delhi | Balanced | Bangalore | Balanced | Mumbai | Balanced |
| Bangalore | Balanced | | | Delhi | Balanced |
| | | | | Bangalore | Balanced |

Asia-Pacific's recovery

A look at China's
Economy

Leading Composite PMI Indicator Has Turned Positive

- China's composite PMI has recovered since May.
- Current reading of 55.1 in August indicates healthy recovery trend
- Current PMI outpaces 2019's 51.9 average reading.
- IMF GDP forecasts
 - 2020: 1%
 - 2021: 8.2%



Construction Activity Returning To Normal

- Construction starts in July fell -4.5% YoY.
- Construction starts rate of decline continues to decelerate.
- Returning construction activity will support GDP recovery given its real estate's large contribution

Construction Starts Growth Normalizing



Real Estate Market Overview

Marcus Rayner, Vice Chairman | USA

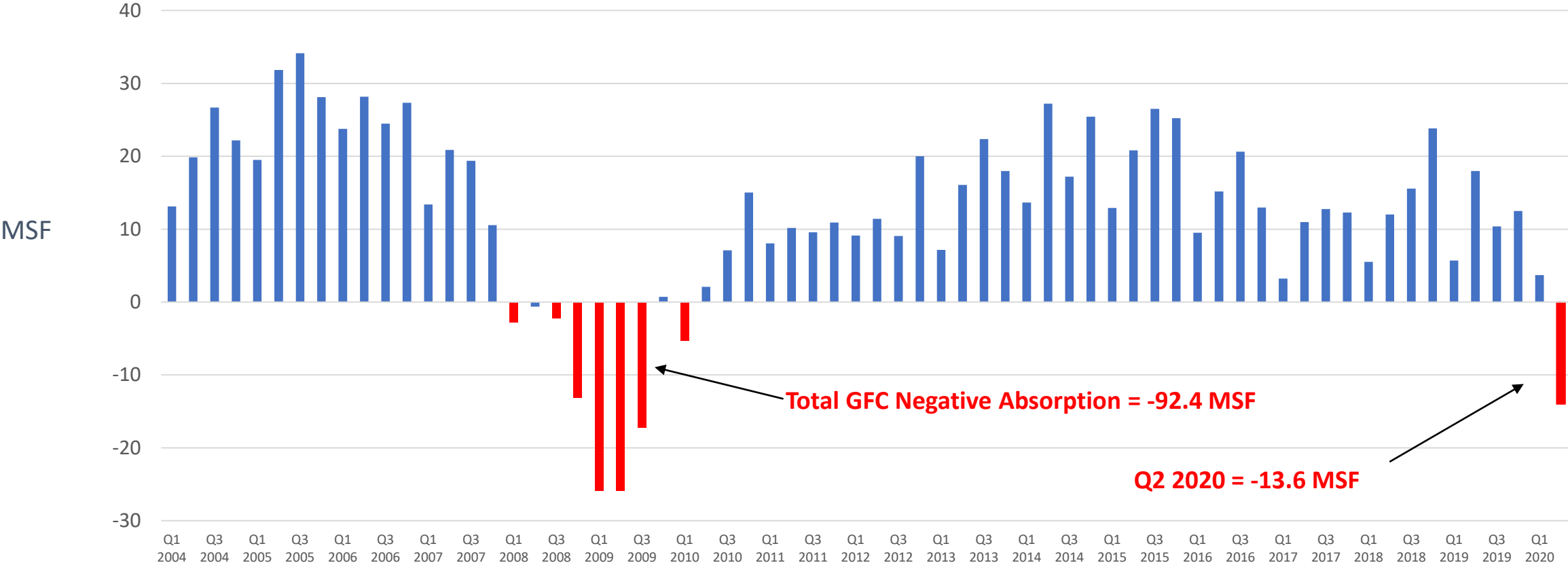
September 16th, 2020





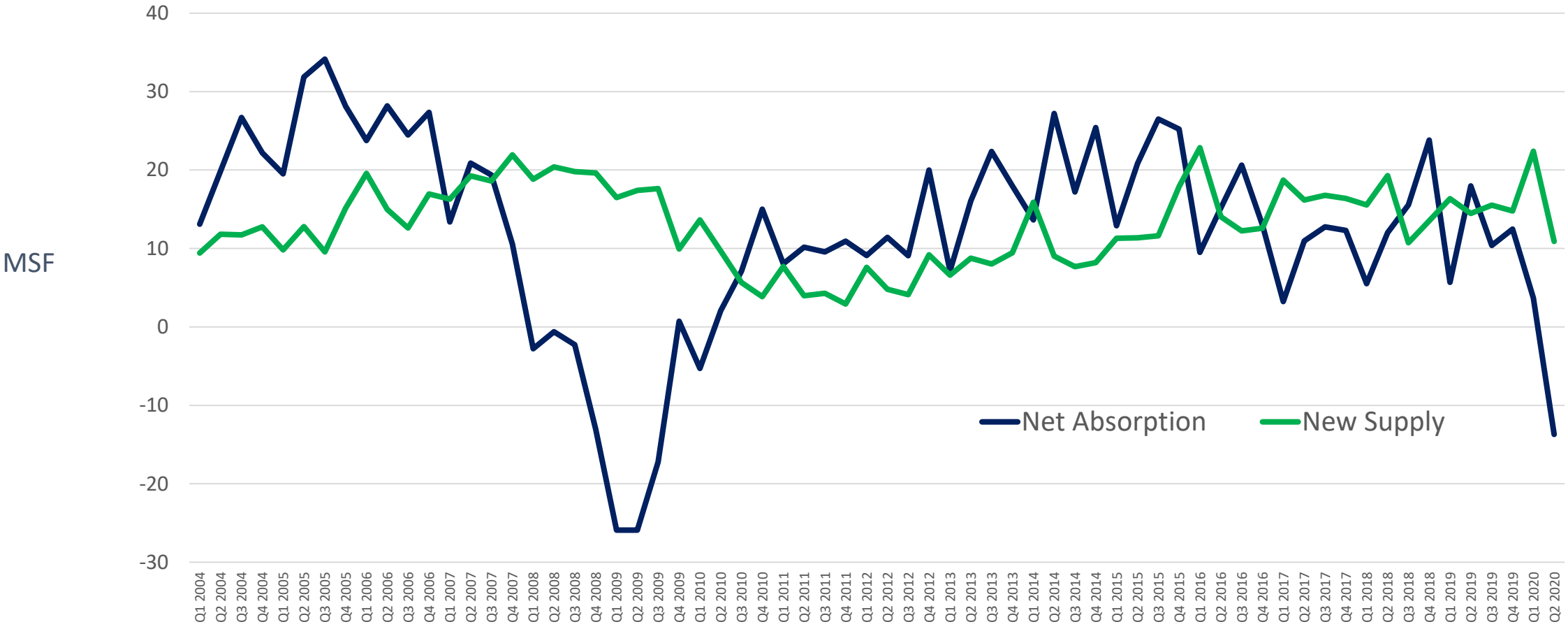
U.S. Office Market

U.S. Office Market: Net Absorption: 2004 – Q2 2020



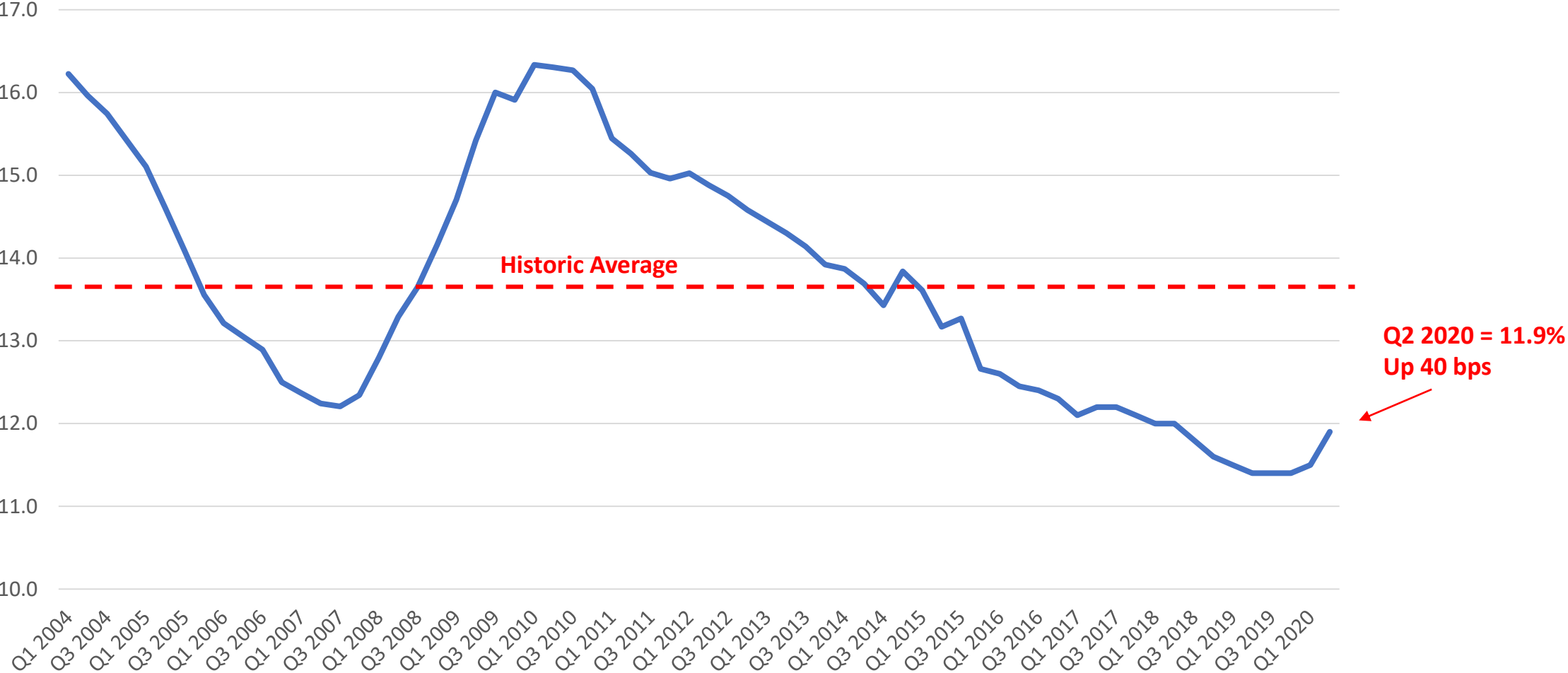
Source: Colliers International

U.S. Office Market: Supply & Demand 2004 – Q2 2020



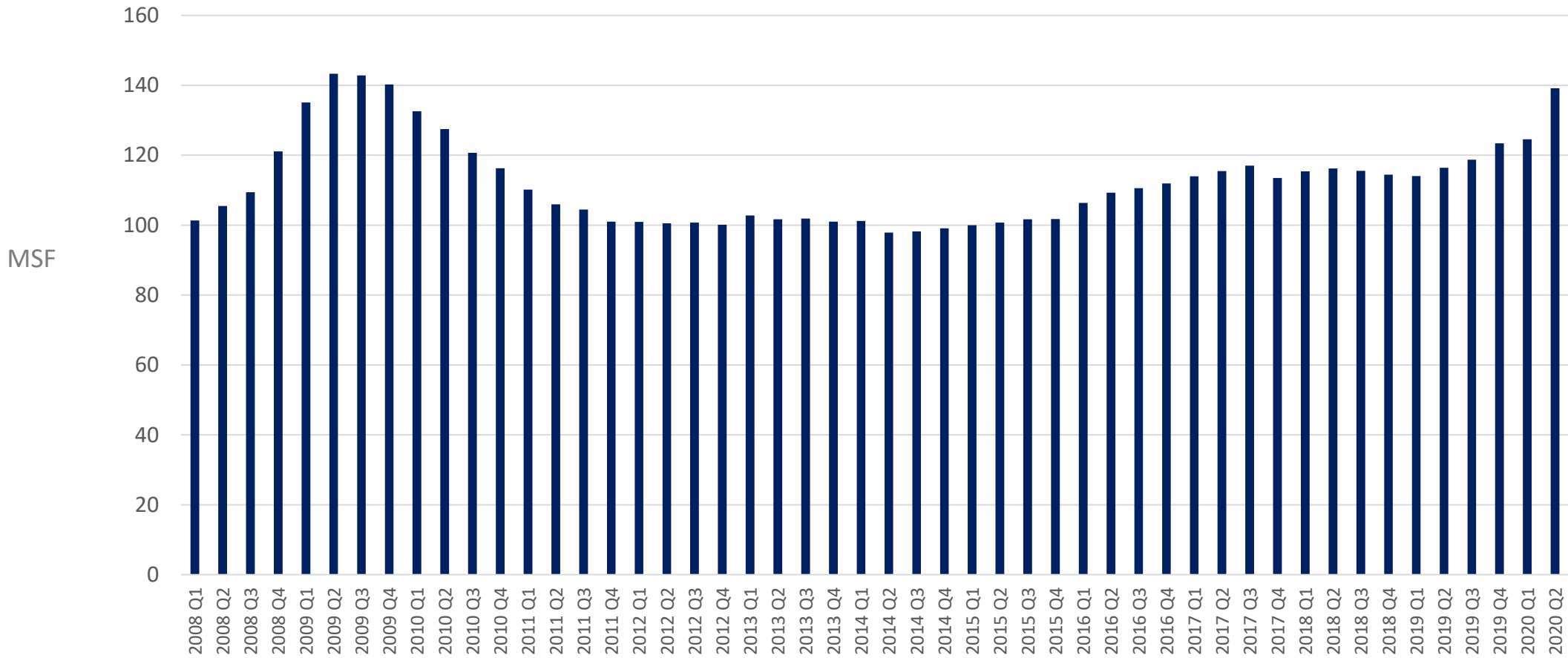
Source: Colliers International

U.S. Office Vacancy Rate: 2004 – Q2 2020 (%)



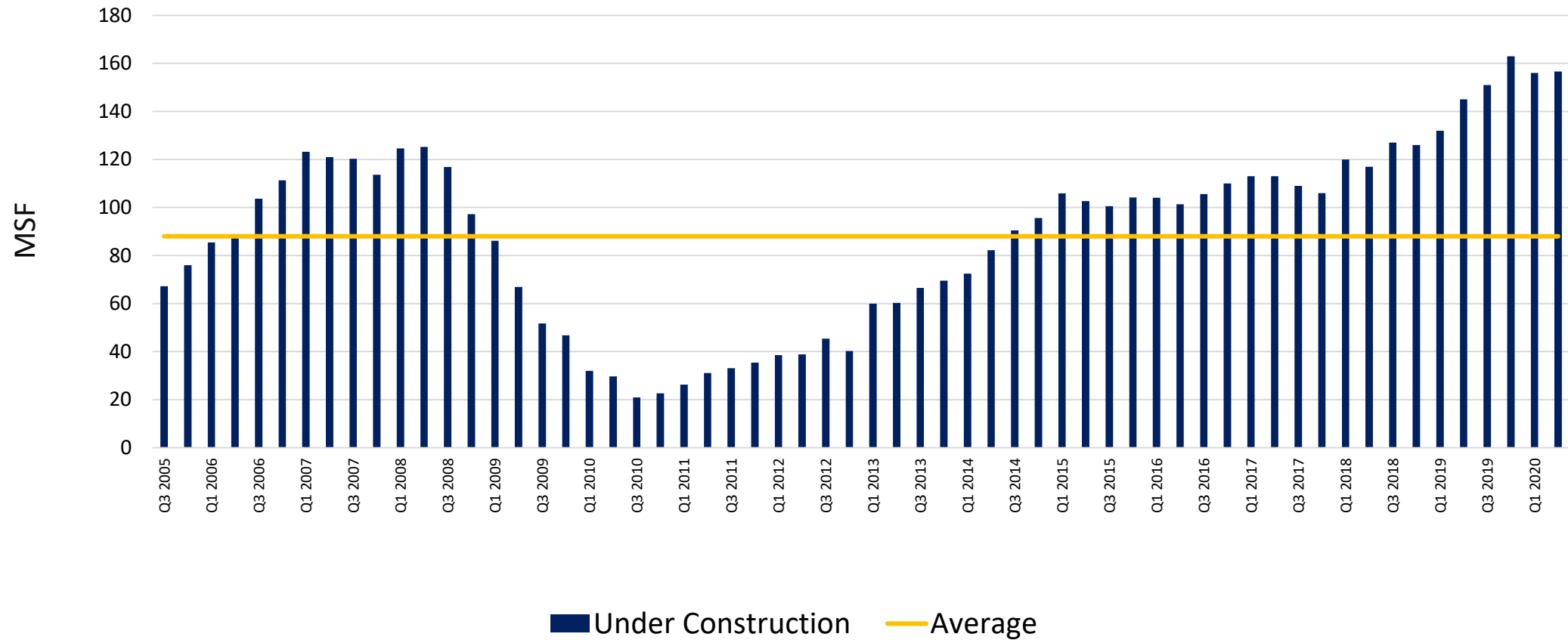
Source: Colliers International

U.S. Office Market: Sublease Space 2008 – Q2 2020



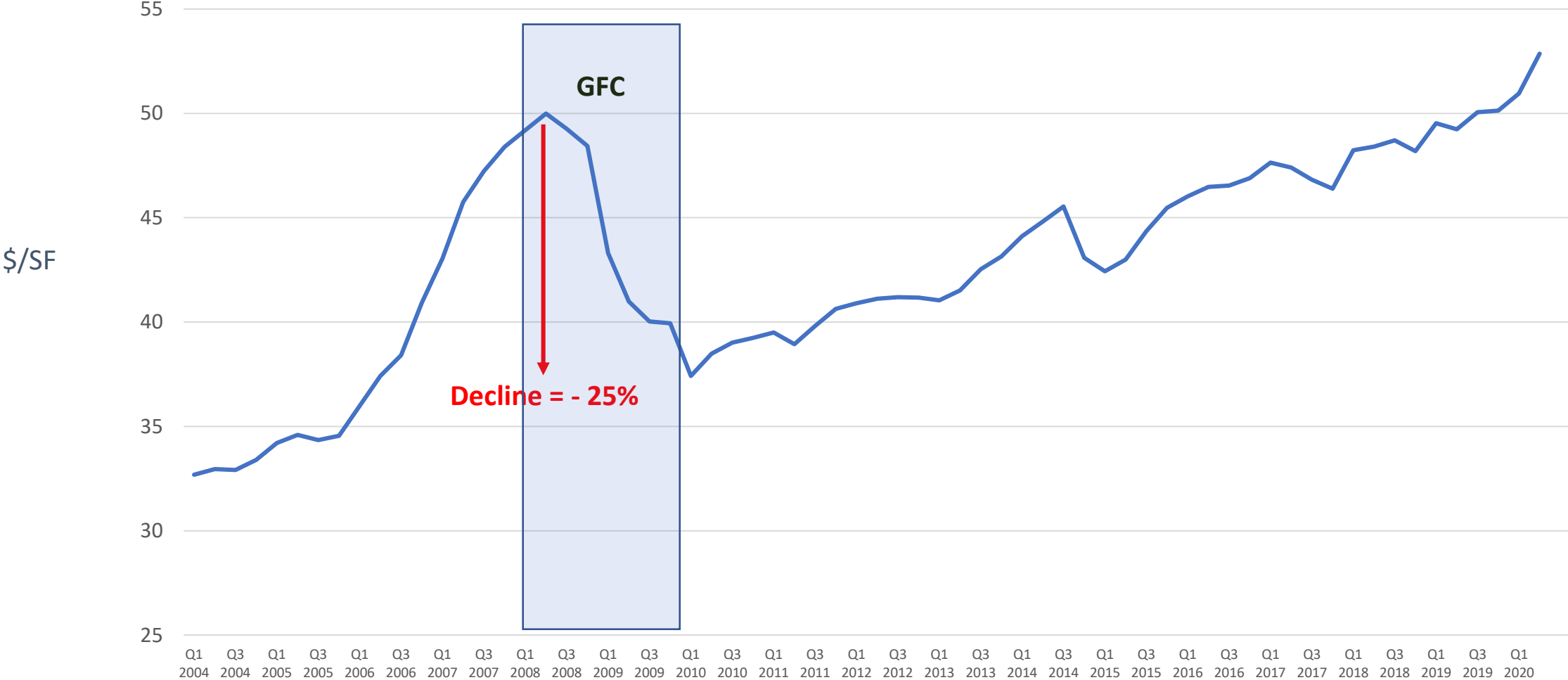
Source: CoStar

U.S. Office Market: Floorspace Under Construction



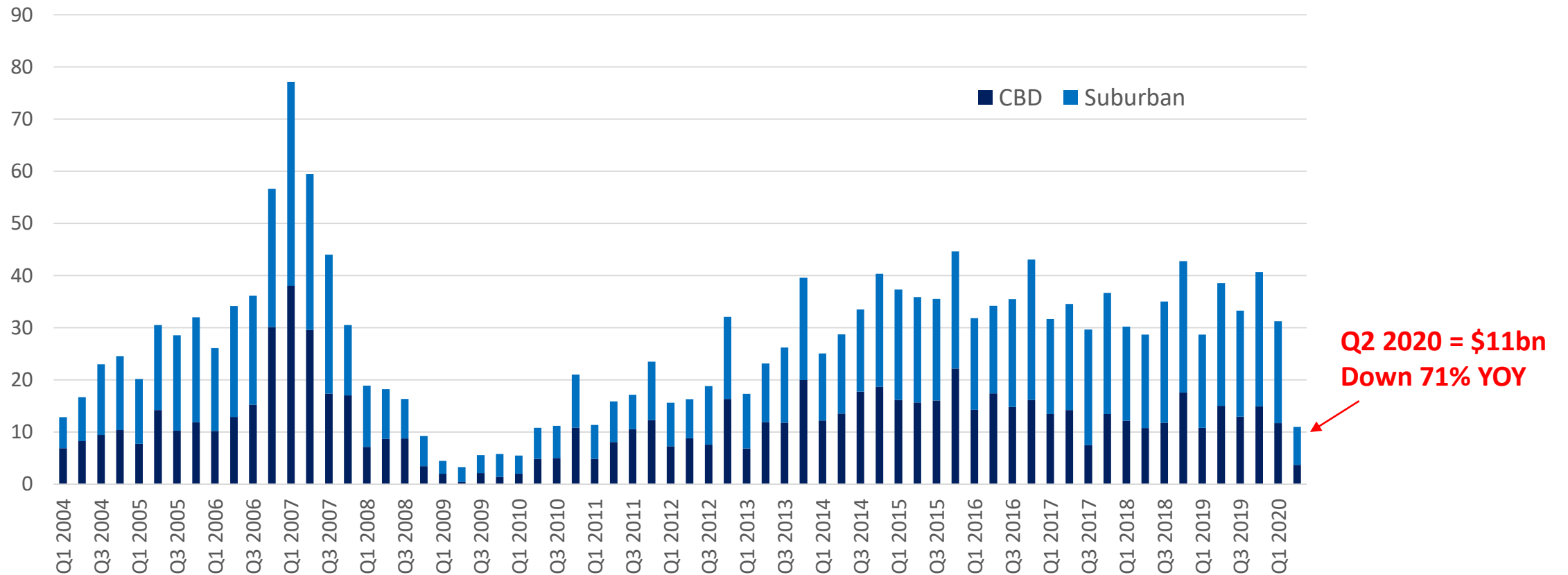
Source: Colliers International

U.S. Office Market: Class A CBD Asking Rents 2004 - 2020



Source: Colliers International

U.S. Office Investment: 2004 – Q2 2020 (\$bn)



Source: Real Capital Analytics

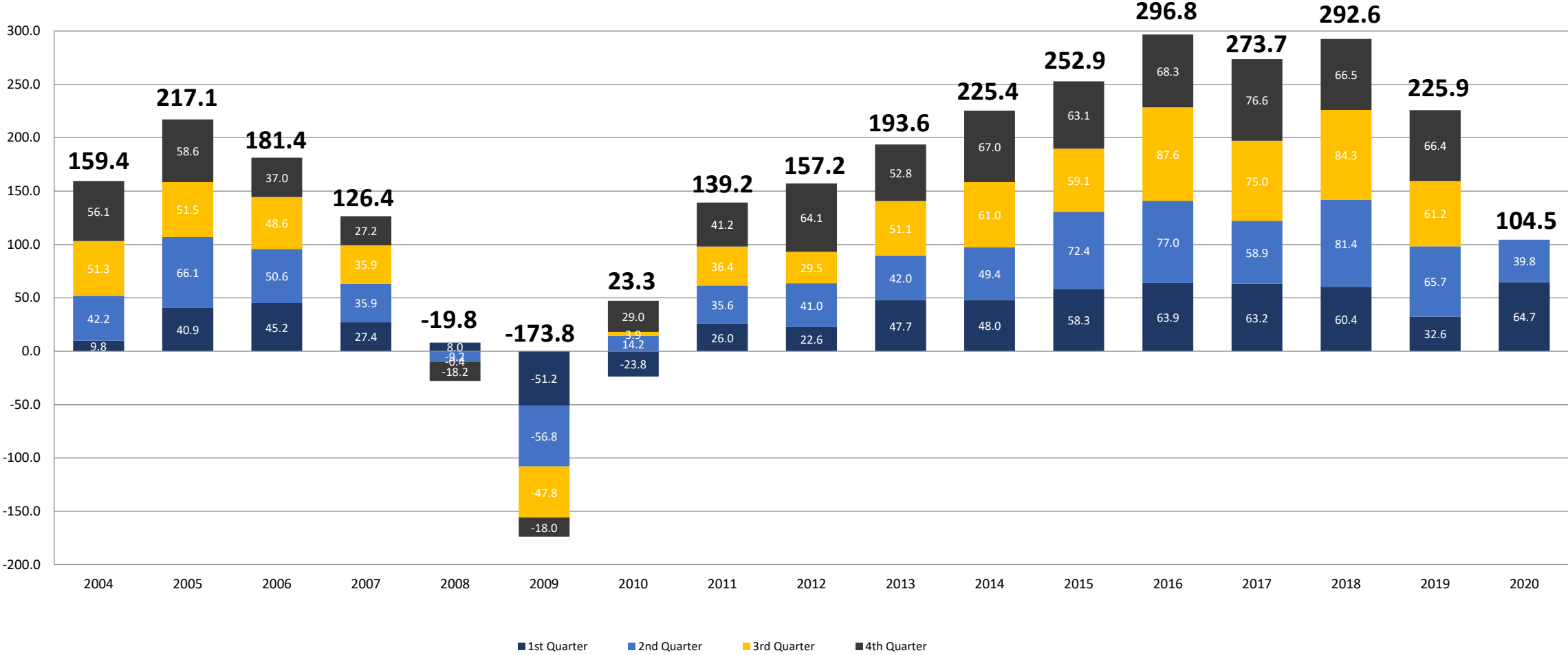
U.S. Office Market: Recap & Outlook

- Negative absorption for the first time 10 years. Downtown markets hardest hit
- Firms reassessing space needs and premises strategy
- Return to the office to take several quarters and involve new space standards
- Vacancy is rising but remains low by historic levels
- Construction levels are elevated. Project timing being revisited
- Rents are holding up for now
- Rising sublease space + subdued demand = falling rents
- Sales market on hold pending price discovery
- In summary:
 - A further 12 months of adjustment
 - No upturn in CRE metrics until late 2021/early 2022

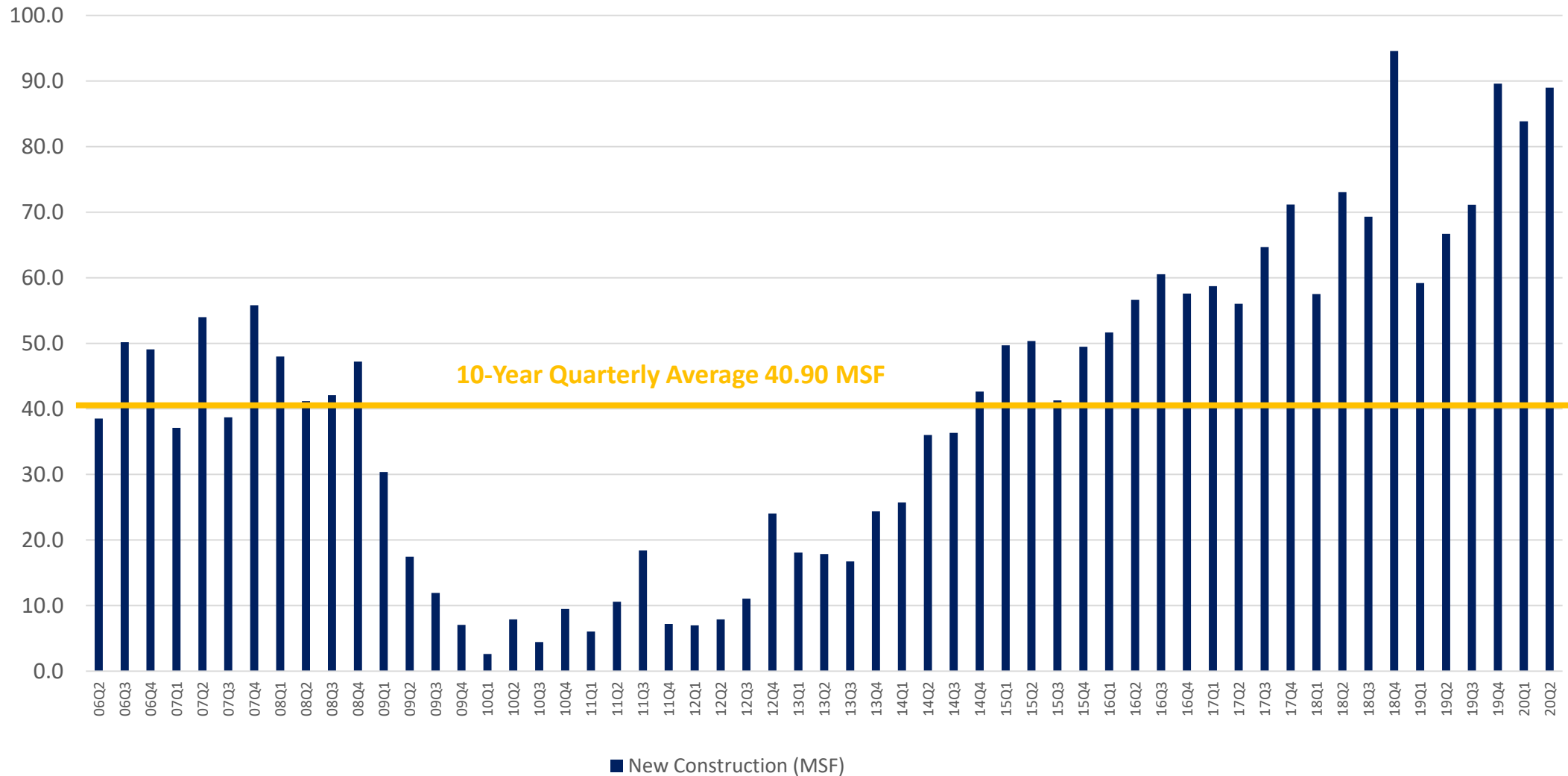


U.S. Industrial Market

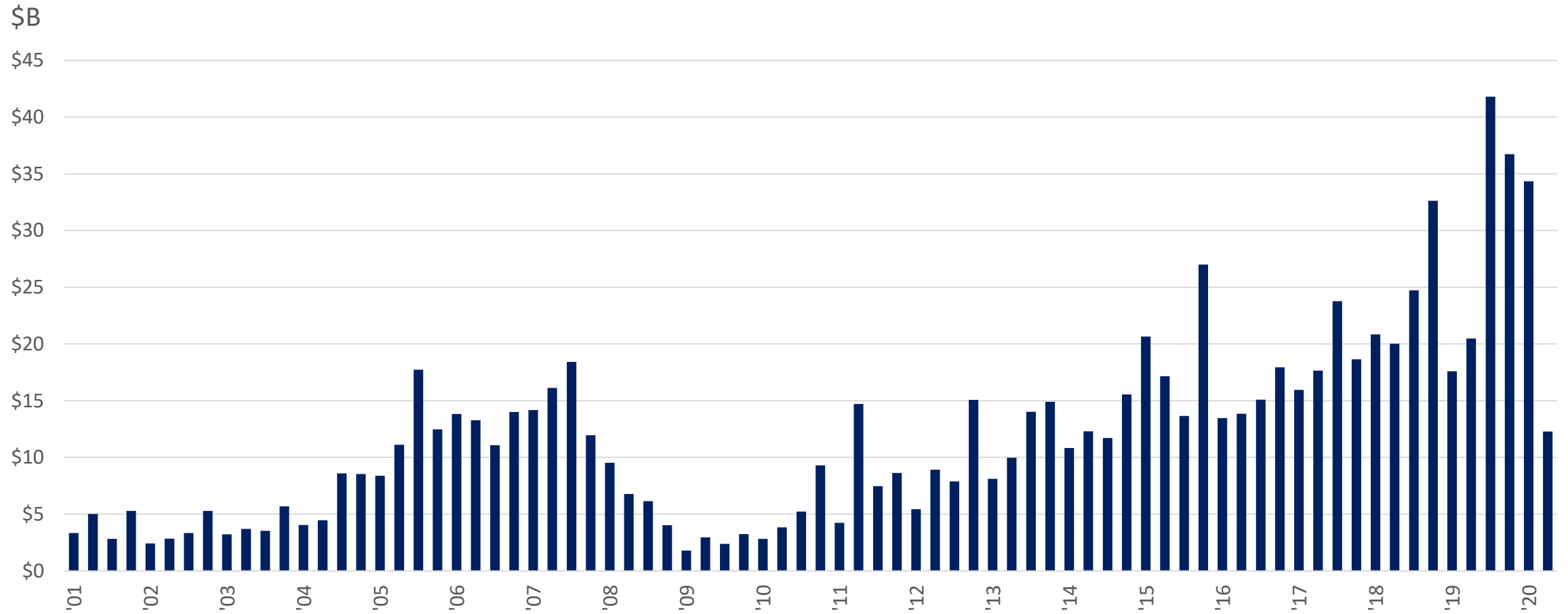
U.S. Industrial Net Absorption Remains Positive



Industrial New Supply Remains High as Projects Continue

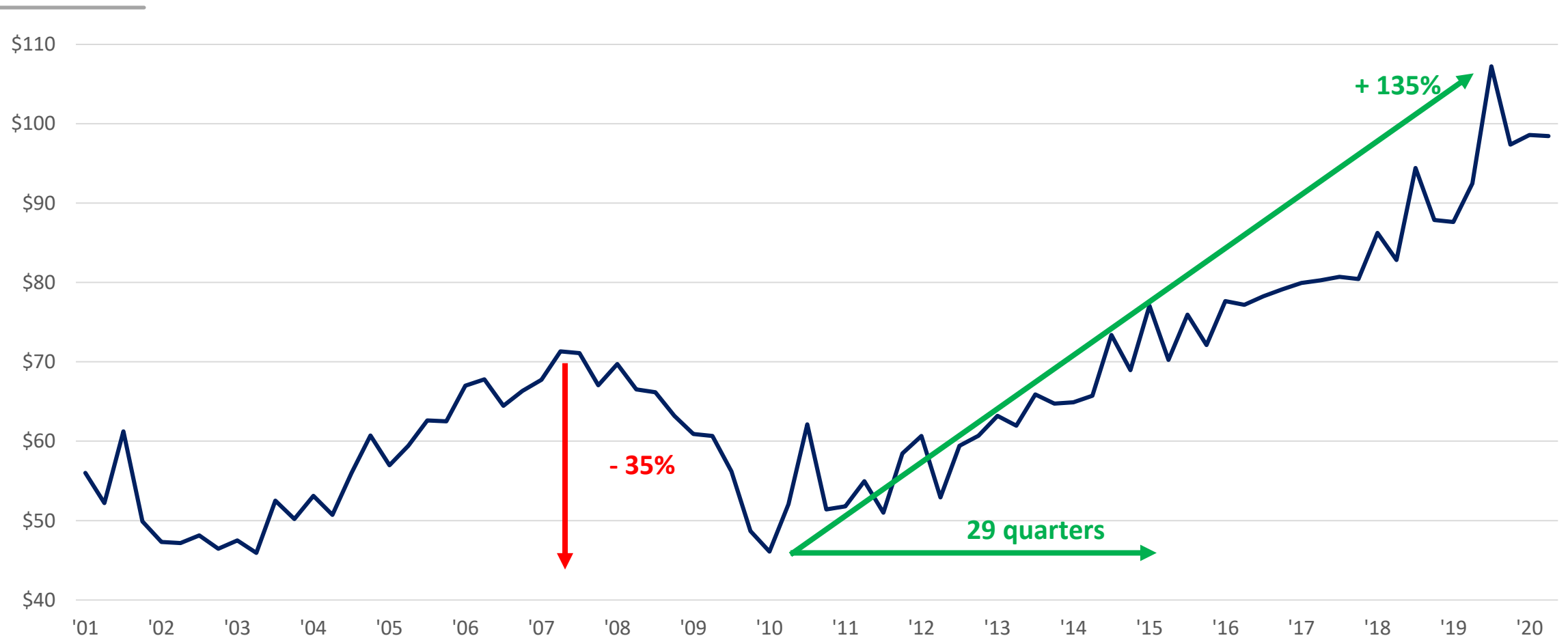


U.S. Industrial Sales Volume: Average Pricing 2001 – YTD 2020



Source: Real Capital Analytics

U.S. Industrial: Average Sales Price PSF 2001 – YTD 2020



Source: Real Capital Analytics

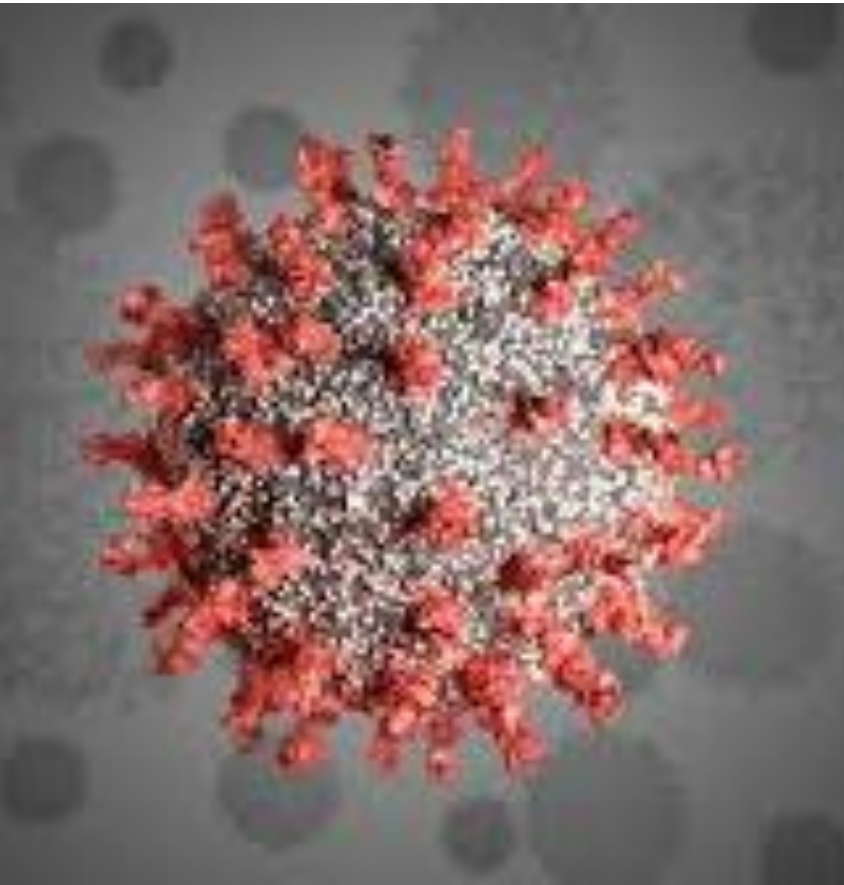
U.S. Industrial Sector: Cap Rates Inch Higher



Source: Real Capital Analytics

U.S. Industrial: What's Next?

→ COVID-19



→ RESHORING



- Decreased reliance on China
- Rising offshore costs/wages
- Faster responsiveness
- Reduce unemployment/create jobs

→ AUTOMATION



- Artificial intelligence
- Sophisticated mobile apps
- IoT Connectedness
- Collaborative robots (cobots)





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Accelerating success.