

ECONOMETRIC ADVISORS PRESENTS

ACCELERATION OF E-COMMERCE AND IMPLICATIONS FOR RETAIL & INDUSTRIAL

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OVERVIEW

E-COMMERCE AND THE VALUE IN RETAIL SPACE

- Good news & bad news
- Value in retail space
- Real estate implications

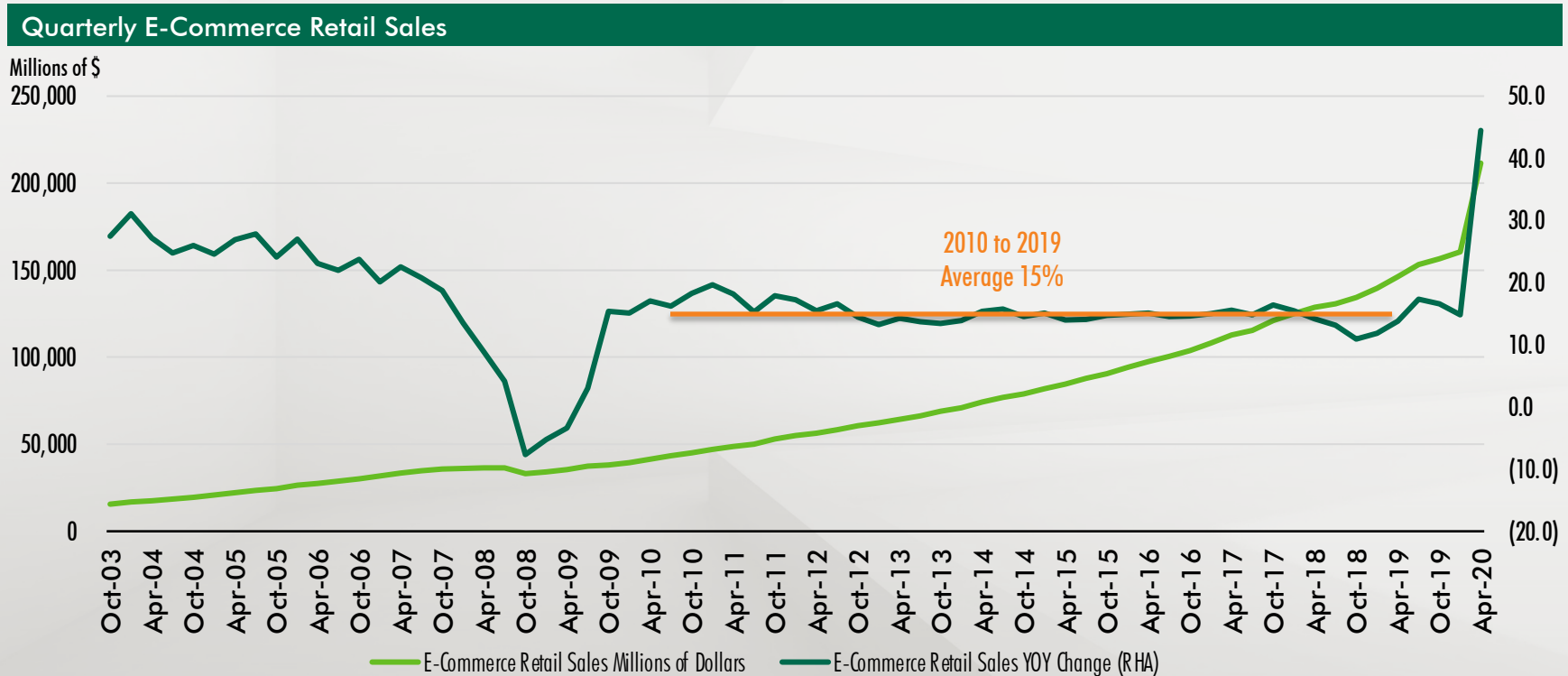
INDUSTRIAL AND MODELING E-COMMERCE

- Growing importance of e-commerce
- Short-term vs. long-term
- Modeling e-commerce in industrial market performance

UNDERSTANDING THE E-COMMERCE OUTLOOK

- The COVID-19 pandemic and the future path of e-commerce
- Impact on industrial market fundamentals

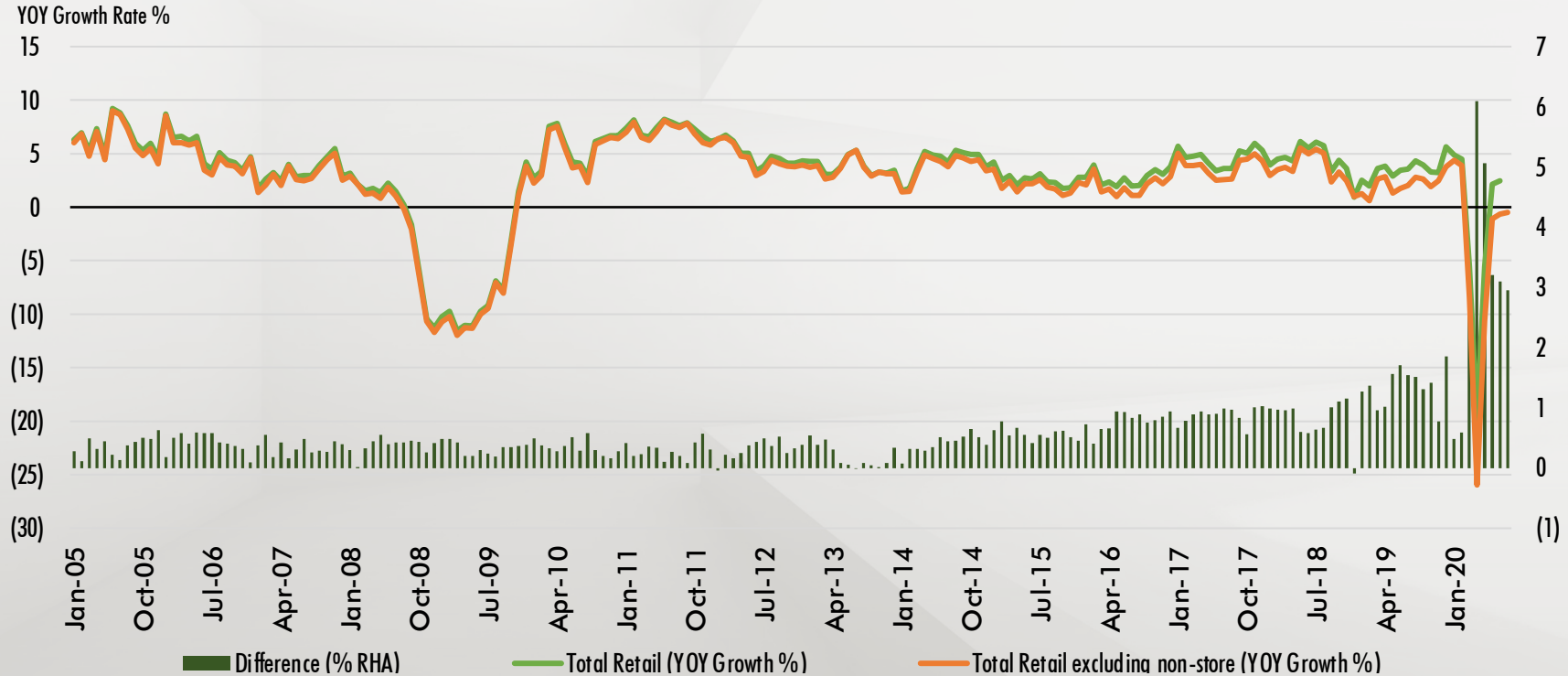
E-COMMERCE GROWTH SURGES DURING PANDEMIC



Source: St. Louis Federal Reserve Bank, Q2 2020.

E-COMMERCE'S ROLE IN TOTAL RETAIL

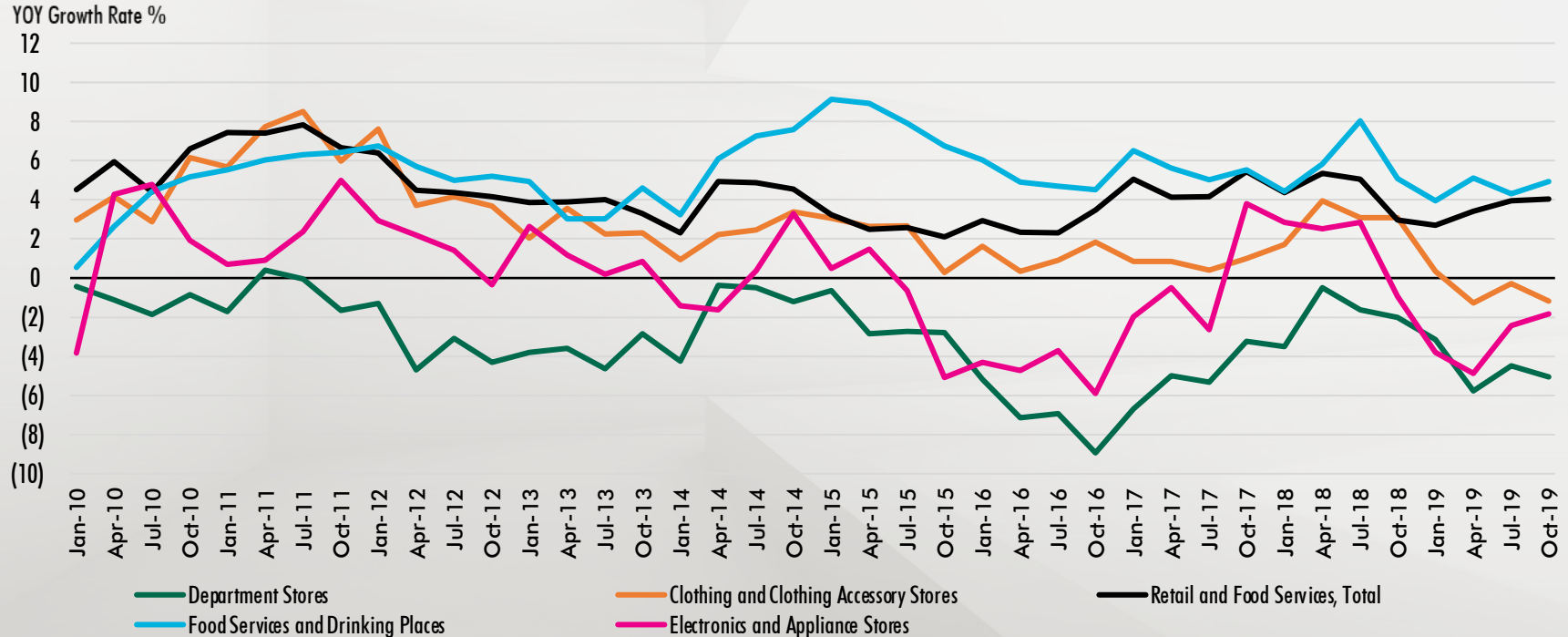
E-Commerce Retail Sales, Percent Change from 1 Year Ago, Quarterly, Seasonally Adjusted



Source: St. Louis Federal Reserve Bank, Q2 2020.

HOW E-COMMERCE CAME INTO PLAY—BEFORE THE PANDEMIC

Retail Sales Growth YOY %



Source: St. Louis Federal Reserve Bank, Q2 2020.

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SOME BAD NEWS FOR BRICK AND MORTAR STORES

NATIONAL & LARGE REGIONAL RETAILERS (EXCL. SMALL BUSINESS)

Approx. 9,000 announced & 4,250 actual retail store closures as of September 16th.



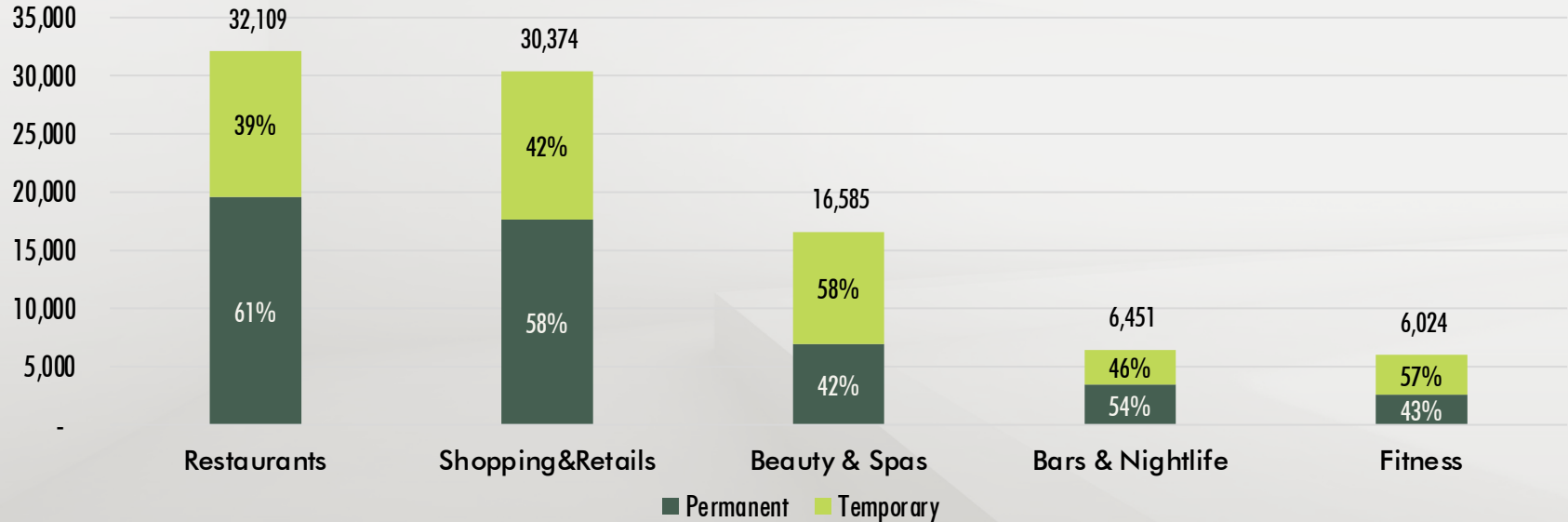
- More store closures
- Co-tenancy Agreement

Source: CBRE Research, Creditintell, as of September 21, 2020.

SOME BAD NEWS FOR BRICK AND MORTAR STORES

Experiential Retailers Hit Hard By Pandemic Consumers Still Fearing Indoor Spaces

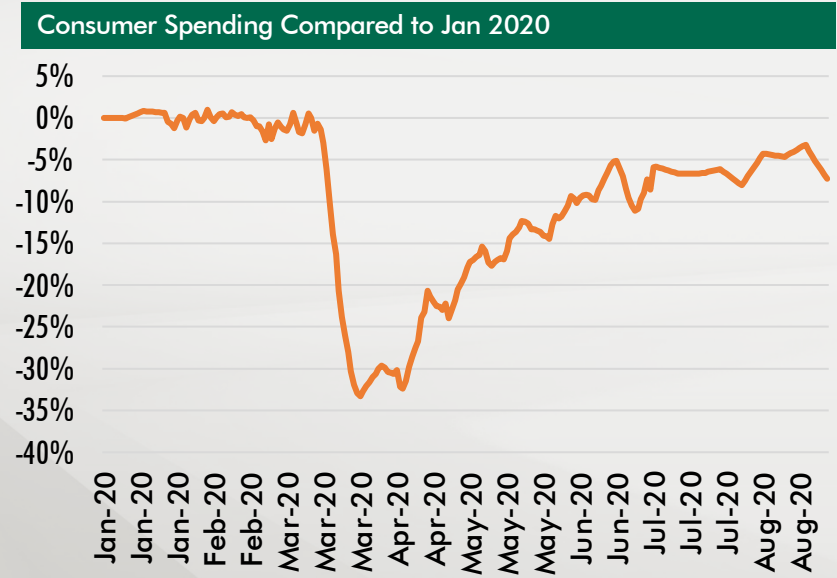
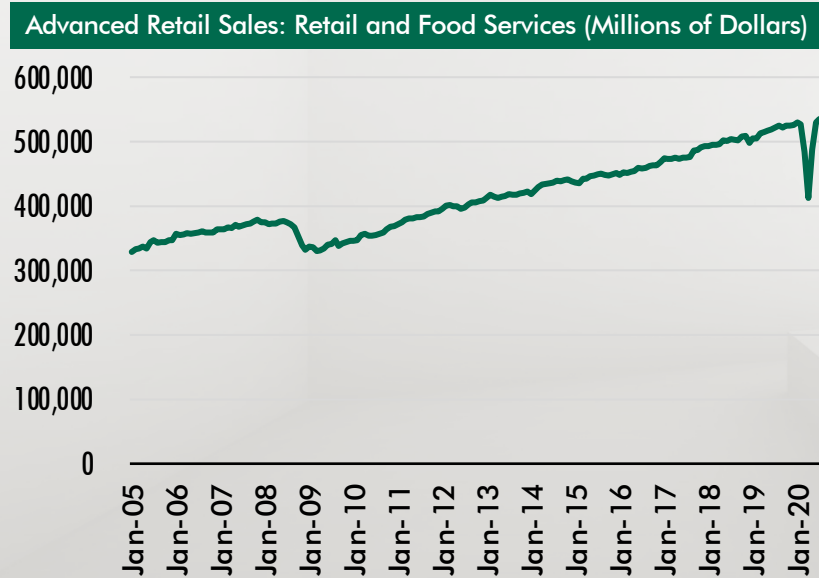
Number of Businesses Marked Closed On Yelp that Were Open March 1st



Source: Yelp Economic Average, National Restaurant Association September 2020.

SOME GOOD NEWS FOR BRICK AND MORTAR STORES

Macro Fundamentals Are Improving Rent Collections Recovering



Source: St. Louis Federal Reserve Bank, Nareit Rent Survey, Opportunity Insight, Q2 2020.

SOME GOOD NEWS FOR BRICK AND MORTAR STORES

SOME RETAILERS AND THEIR PHYSICAL STORES ARE DOING WELL

- More and more retailers are focusing on omni-channel (BOPIS/Curbside/Drive-up)
- Retailers that focus on brick and mortar
 - Essential retailers
 - Off-price retailers
 - Health and wellness

E-COMMERCE IS COSTLY AND GETTING MORE COMPETITIVE

- Last mile problem: high and unpredictable cost along with higher consumer expectations
- Reverse logistics: more returns than traditional stores; the depreciation of products; cost of shipment and handling of returns
- Consumer acquisition and retaining their loyalty will become more and more expensive

STILL VALUE FOR BRICK AND MORTAR STORES!

Source: Retail Dive, Company Earning's call, Capgemini, CNBC news 2020 Q2.

A HEALTHY RETAIL INDUSTRY: MIX OF STORE AND E-COMMERCE

E-COMMERCE WILL CONTINUE TO TAKE MORE SHARE IN RETAIL SALES IN THE LONG RUN

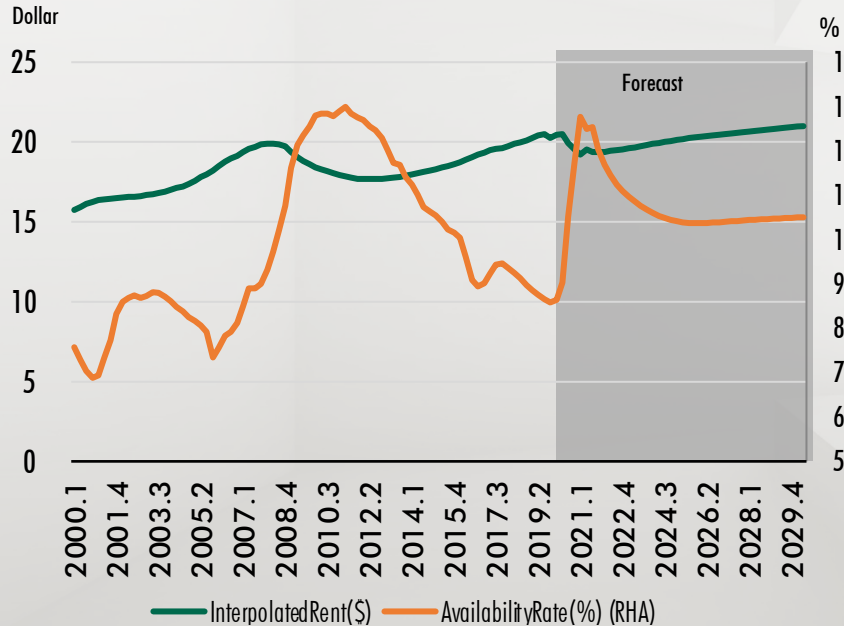
- The habit of shopping online will persist
- Our current baseline estimates that in 2030, the e-commerce penetration will reach 30%

RETAILERS LEVERAGING BRICK AND MORTAR STORES FOR MORE PURPOSES

- BOPIS/Curbside/Drive-by → **Convenience**
- Fulfillment, Distribution and Return Center → **Convenience**
- Marketing tool → **Engagement**
- Community center → **Engagement**
- Unique experience → **Experience**

REAL ESTATE IMPLICATIONS

SHORT TERM REAL ESTATE FUNDAMENTALS ARE NOT GOOD



OPPORTUNITIES

- Opportunities depending on several factors
 - Location
 - Urban Vs Suburban
 - Breaking up with the malls
 - A healthy tenant mix
 - Essential retailers
 - Expanding retailers
 - Retailers that attract foot traffic
- Quality of real estate
 - Space for omni-channel
 - Open-air
 - Small format

Source: CBRE Econometric Advisors, Q2 2020.

E-COMMERCE IN INDUSTRIAL

GROWTH IN E-COMMERCE PRODUCES SIGNIFICANT TAILWIND FOR INDUSTRIAL DEMAND

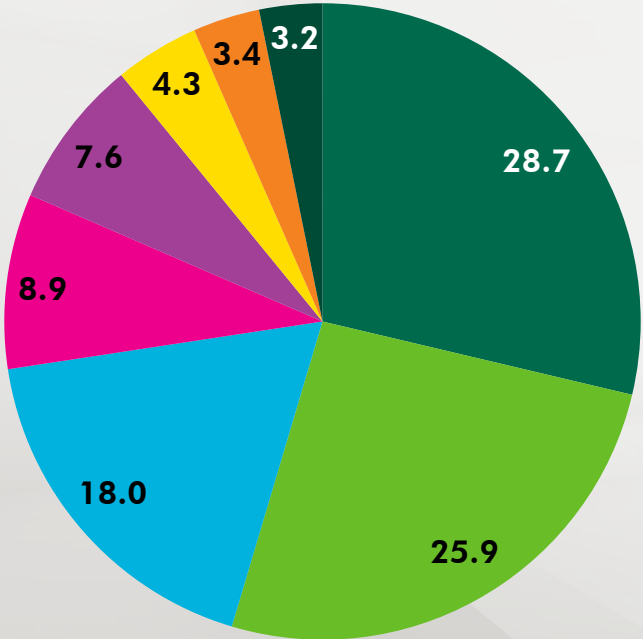
- Fulfillment of last-mile delivery requires rethinking of retail supply chains
- E-commerce typically requires more industrial space than traditional

COVID-19 PANDEMIC HAS BROUGHT E-COMMERCE AND INDUSTRIAL INTO THE FOREFRONT

- Social distancing and statewide lockdowns caused a Q2 surge in e-commerce spending
- Retailers and logistics providers have aggressively pursued expanding e-commerce capabilities

TRANSACTION DATA SHOWS IMPORTANCE OF E-COMMERCE

YTD Share of Industrial SF Transacted



■ 3PL ■ E-commerce ■ General Retail & Wholesale ■ Food & Beverage ■ Manufacturing ■ Medical ■ Building Materials & Construction ■ Auto, Tires and Parts

Source: CBRE Research.

IMPLICATIONS FOR INDUSTRIAL

SHORT TERM BUFFER

- Demand for warehousing space sustaining industrial absorption
- Minimal impact to sector despite massive hit to broader economy

LONG TERM TAILWIND

- Accelerates existing trend of share gain in retail
- Retailers rethinking existing supply chains, increasing investment in e-commerce-focused facilities
- Lower availability, higher rent growth over the next several years

MODELING E-COMMERCE IN INDUSTRIAL

PREVIOUS MODEL STRUCTURE - INDUSTRIAL

INTERRELATIONSHIP BETWEEN MARKET FUNDAMENTALS

- Previous models estimated the relationship between rent growth, availability, and construction
- Models consider recent performance in market fundamentals and revert to long-run averages for fundamentals

EMPLOYMENT-BASED MACROECONOMIC INFLUENCES

- Models also consider the relationship between market fundamentals and the macroeconomy
- Local macroeconomic conditions are captured by metro-area employment
- CBRE forecasts metro employment, used to guide fundamentals forecasts

MODEL UPDATES

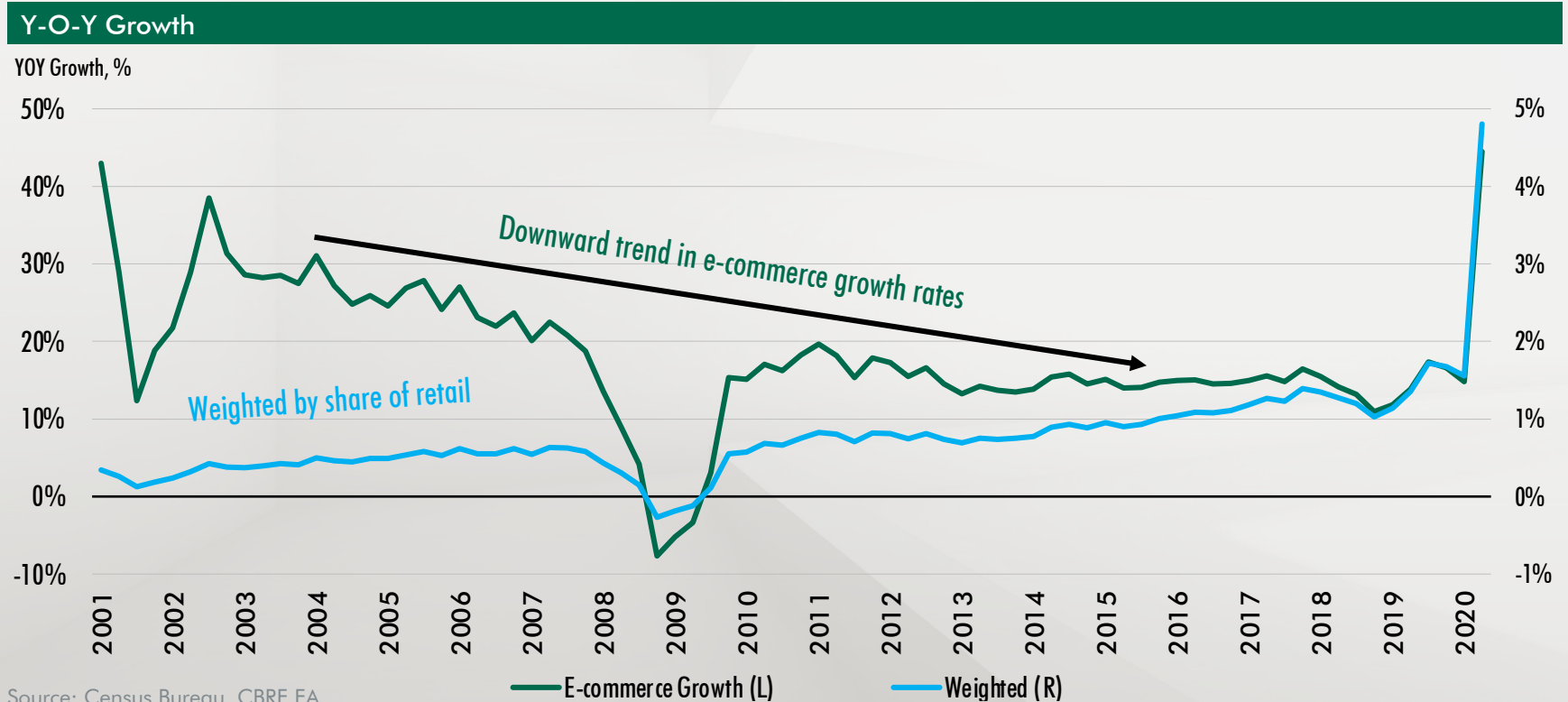
CURRENT MODELS USE E-COMMERCE AS AN ADDITIONAL EXOGENOUS VARIABLE

- CBRE EA generates forecasts on inflation adjusted national e-commerce retail sales and share of total retail
- E-commerce growth is weighted and included into metro area forecasts as an exogenous variable
- Previous model structure left largely intact, with local employment still used in market models

USE OF E-COMMERCE VARIES BY MARKET

- Like employment, individual metros vary considerably with respect to how they respond to e-commerce
- Several markets show no statistical relationship between e-commerce and market fundamentals

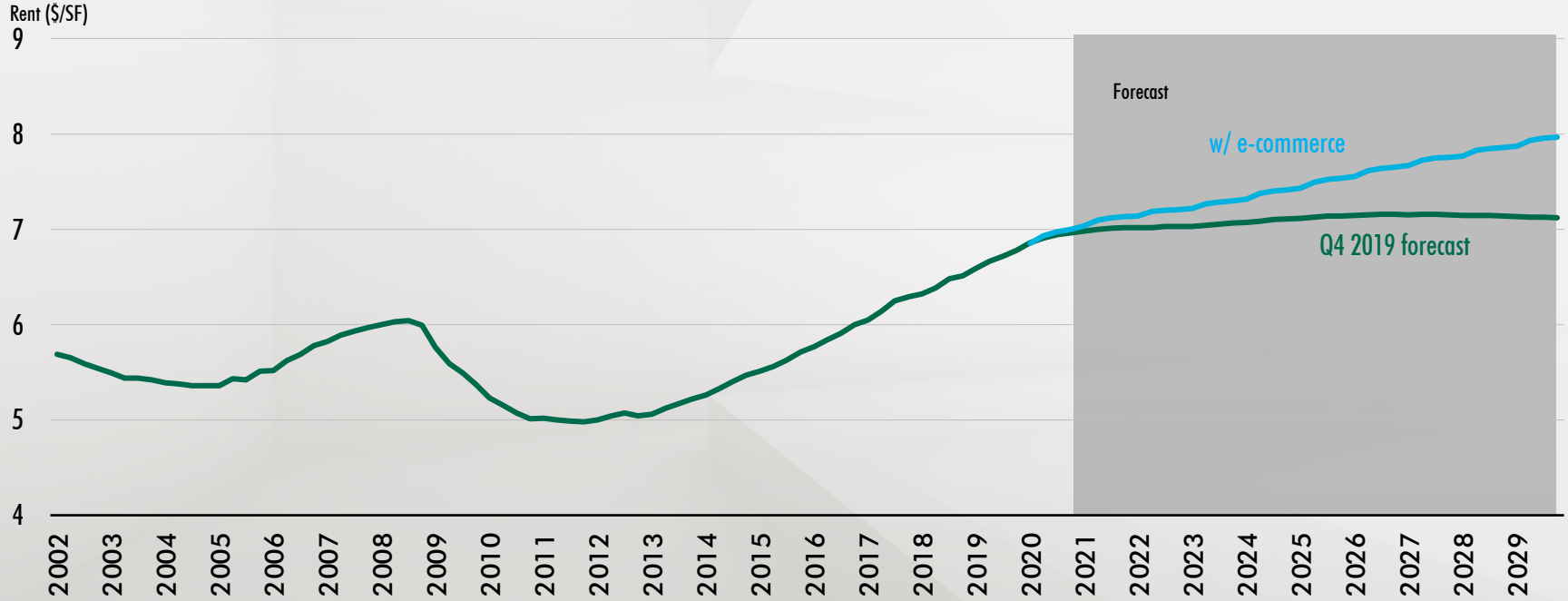
E-COMMERCE DATA IS WEIGHTED FOR MODELING PURPOSES



Source: Census Bureau, CBRE EA.
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INCLUDING E-COMMERCE BOOSTS INDUSTRIAL MARKETS

Pre-pandemic Forecasts, Rent (\$/SF)



Source: CBRE EA, Q4 2019.

COVID-19 PANDEMIC HIGHLIGHTS FOCUS ON E-COMMERCE

SEVERAL OPEN QUESTIONS REMAIN ABOUT THE FUTURE OF E-COMMERCE

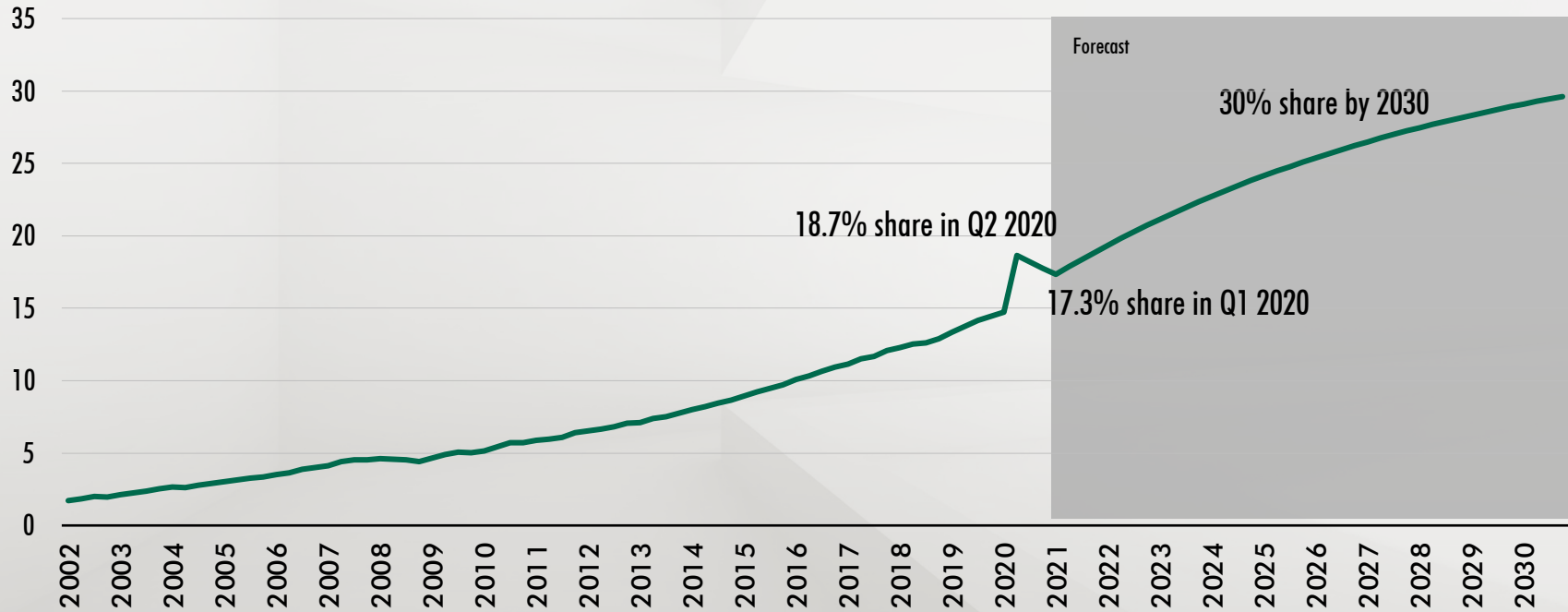
- In the short run, how much of the recent spike in e-commerce returns to brick and mortar stores when the pandemic passes?
- In the long run, where does e-commerce settle as a share of retail spending and at what speed does e-commerce gain share going forward?

EA'S E-COMMERCE FORECAST HINGES ON SEVERAL ASSUMPTIONS ABOUT THE FUTURE OF E-COMMERCE

- Size of pandemic spike
- Retreat from short-term spike
- E-commerce terminal share of retail
- Speed of share gain

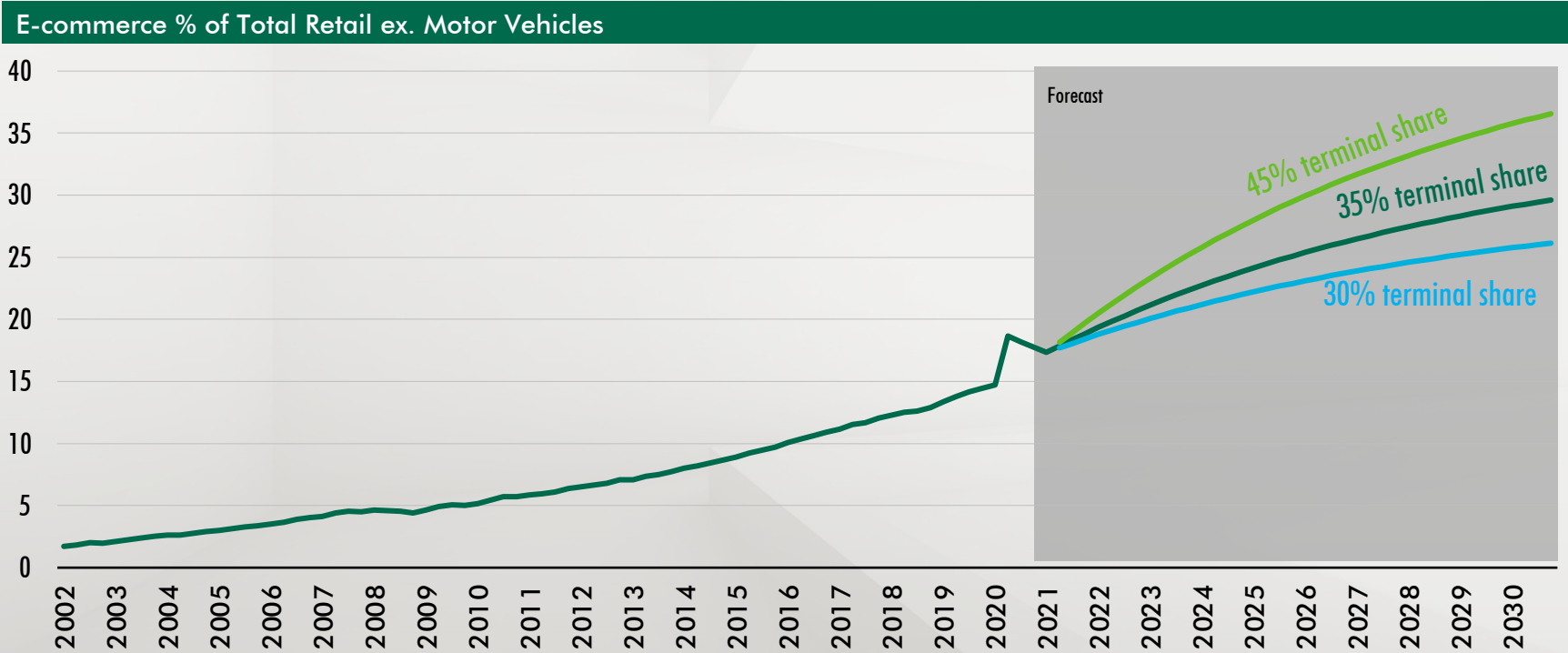
E-COMMERCE OUTLOOK CALLS FOR LASTING SHIFT IN SHARE OF RETAIL

E-commerce % of Total Retail ex. Motor Vehicles



Source: CBRE EA.

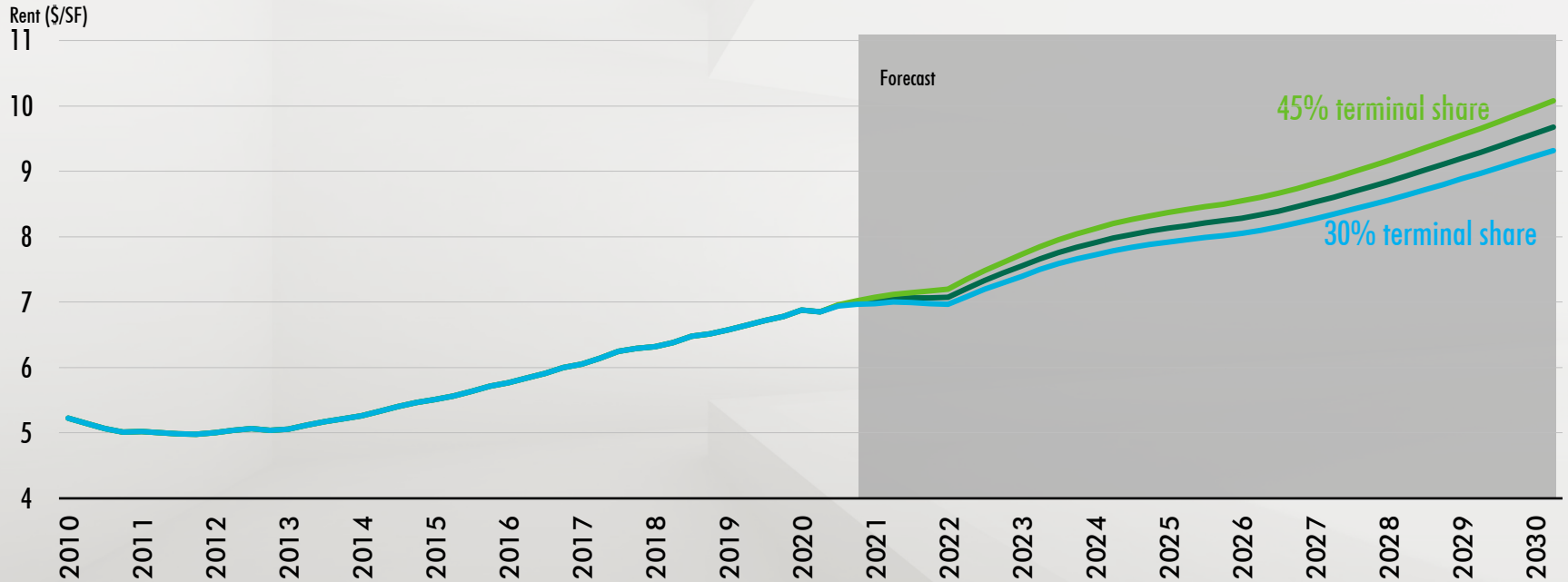
ALTERNATIVE SCENARIOS – LONG-RUN SHARE



Source: CBRE EA.

ALTERNATIVE E-COMMERCE SCENARIOS – IMPACT ON MARKET FUNDAMENTALS

Industrial Rent Forecasts, \$/SF



Source: CBRE EA.

— Baseline — Terminal 45 — Terminal 30

FUTURE WORK

FORECASTER INTEGRATION

- Would allow for custom e-commerce-based scenarios outside of broader macroeconomic environment

ESTIMATING LOCAL E-COMMERCE ACTIVITY

- Current models look at the impact of national e-commerce trends on market activity
- Local or regional e-commerce activity may be more relevant for certain markets

INVESTIGATING BUY ONLINE, PICKUP IN STORE IN E-COMMERCE

- Some of the recent surge has been driven by online purchases with curbside pickup
- These types of purchases may have a different effect on industrial demand