COVID-19: CROSS-CUTTING TRENDS TOWARD A NEW REALITY

PART I: TEMPORAL OR STRUCTURAL? Prepared for: LAI

May 27th, 2020



OVERVIEW

- The crisis and recovery timeline
- The response a work in progress
- From the temporal to the structural toward a new (ab) normal
- Cross-cutting real estate trends (next session preview)

THE CRISIS AND RECOVERY TIMELINE

PUBLIC HEALTH VERSUS THE ECONOMY?

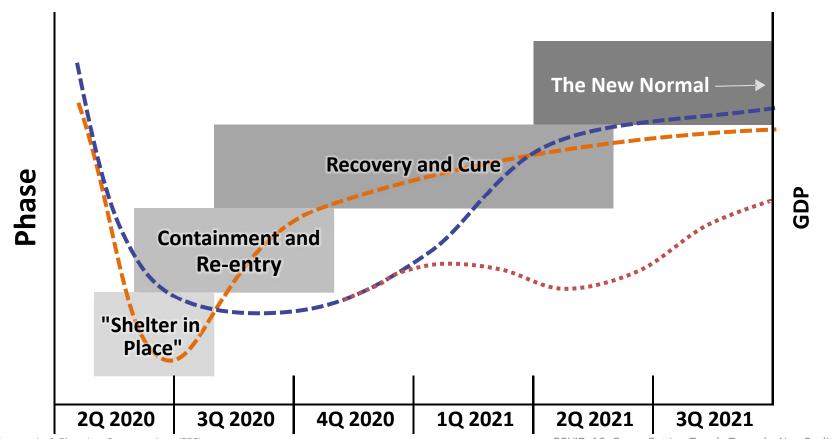
Human interaction is critical to most economic activity

Social distancing and public health concerns:

- Restrict access to places where goods and services are produced / consumed
- Reduce consumer and producer confidence
- Creates downward ripple effect on spending



THE SHAPE OF THE CURVE?



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THE BULLS, THE BEARS, AND THE REST

The Bulls

- Marie Owens Thomsen, Indosuez Wealth Management:
 - "I am attached to the notion this is a temporary crisis. You hit the pause button, and then you hit the start button, and the machine starts running again."
- Dean Mon, NAHB: "...there is an undercurrent of long-term positivity in the housing market that will likely allow for a strong rebound."
- Donald Trump, POTUS: "We're going to have, just a tremendous surge. I think it's gonna be like a rocket ship. I really believe that"
- Flon Musk: "Take the Red Pill!"

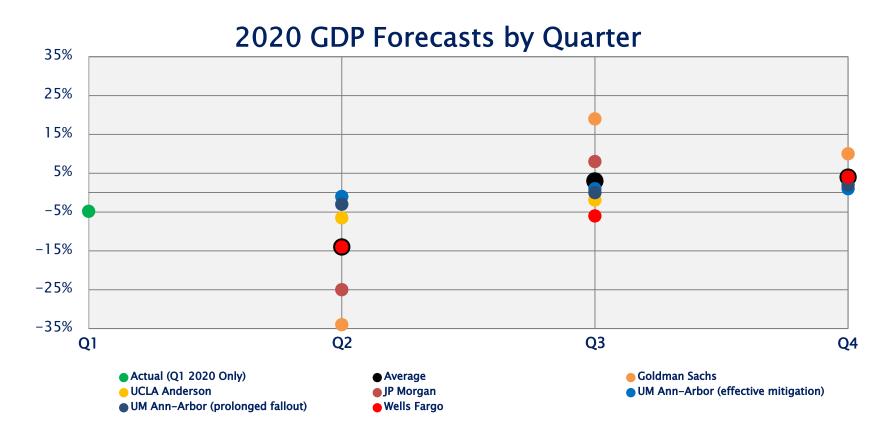
The Bears

- Thomas Wright and Kurt Campbell, Brookings: "COVID-19 lays bare the weaknesses of the American system for all to see."
- IHS Markit, recent research note: "It will likely take two or three years for most economies to return to their pre-pandemic levels of output."
- Jes Staley, Barclays: "I would be surprised if corporations in professional services kept more than 50% of their real estate..."
- Sam Zell: "Part of the problem is lack of deals... Sellers...still remember the prices that were available seven or eight weeks ago. The buyers are looking at a very different world and expecting to see significant discounts. When you've got that big a spread, nothing happens."

The Shrewd:

Warren Buffett, Berkshire Hathaway: "Be fearful when others are greedy, and greedy when others are fearful."

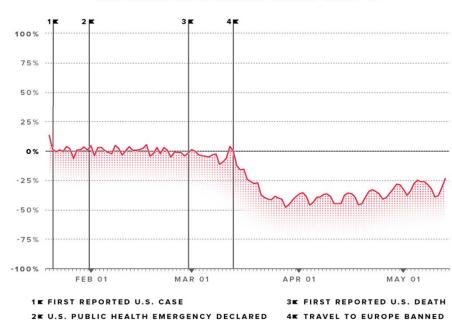
UNCERTAINTY IS THE ONLY COMMONALITY



BUT IMPACTS ARE IMMEDIATE AND DRAMATIC

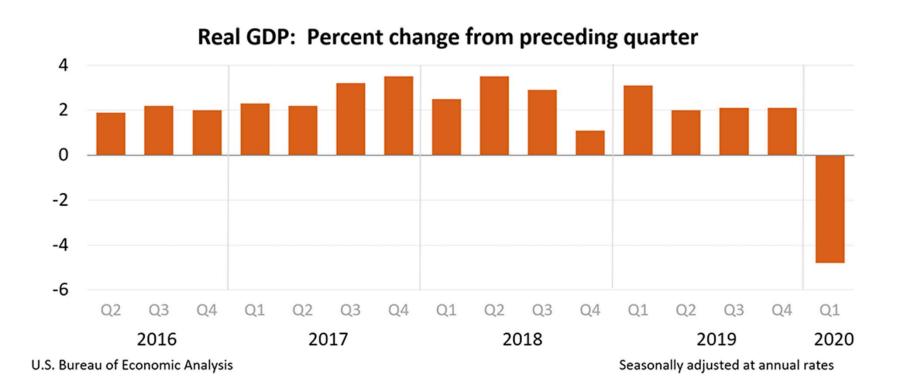
- \approx 70% of GDP tied to consumer spending
- $\approx 20\%$ of household spending is discretionary

U.S. CONSUMER SPENDING DURING COVID-19

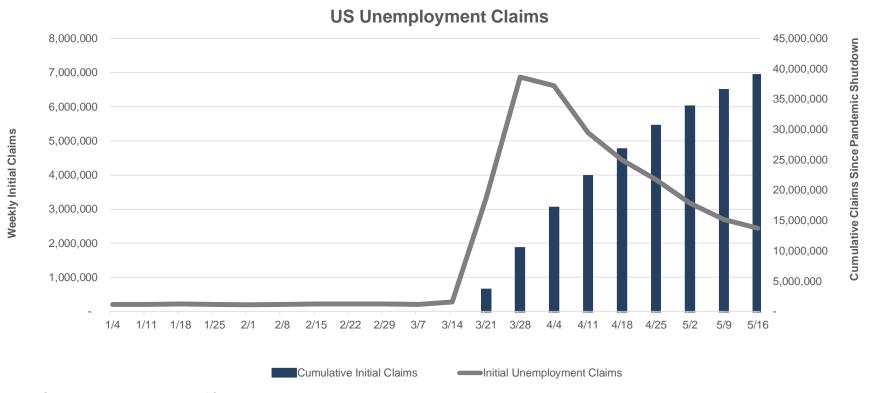


Source: Visual Capitalist; 1010Data

...AND WORSE THAN MOST INITIAL PROJECTIONS



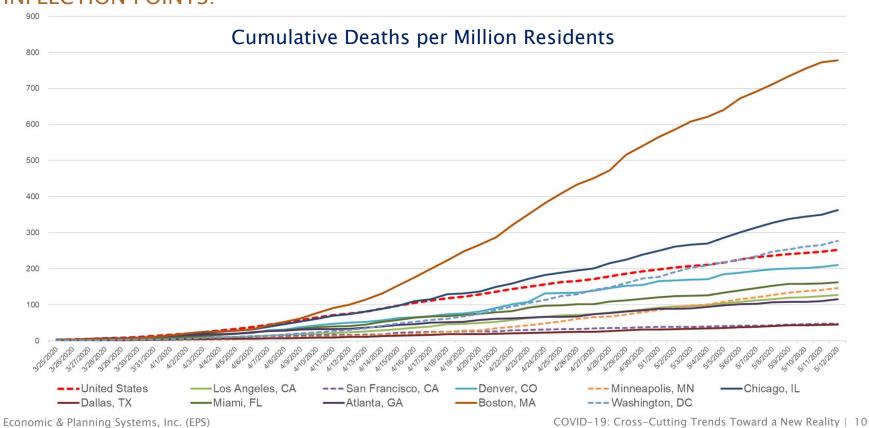
WITH DEPRESSION ERA UNEMPLOYMENT LEVELS



Source: Federal Reserve Bank of St. Louis.

PUBLIC HEALTH: WHERE ARE WE NOW?

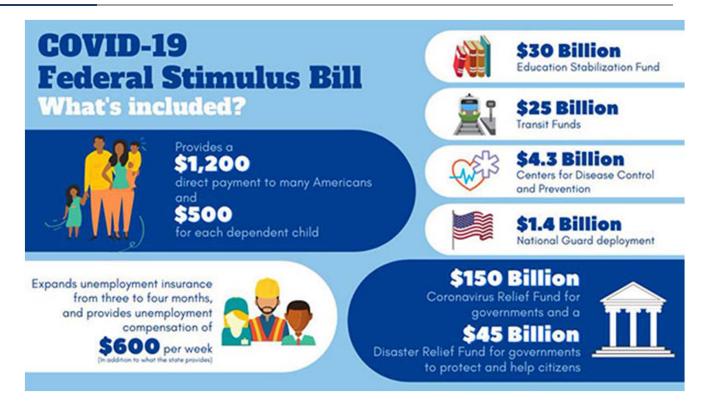
INFLECTION POINTS?





FEDERAL ECONOMIC RESPONSE BIGGER / FASTER THAN GFC

- But what's next?
- And will future levers have diminishing returns ("Stagflation?")



PUBLIC HEALTH RESPONSE LARGELY ON STATES

	New York, NY	1,767	
8 I	Boston, MA	778	
	Philadelphia, PA	503	
·	Chicago, IL	363	
1	Washington, DC	277	
as of May 12, 2020	Seattle, WA Milwaukee, WI	176 173	
ıŭ	Los Angeles, CA	127	ı
4	Pittsburgh, PA	110	
DEATH RATE			-
۲ I	San Jose, CA	68	
품 l	San Diego, CA	61	
-	Phoenix, AZ	57	
	Charlotte, NC	52	

Conservative

Metro, State	Deaths per Million Residents	Metro, State	Deaths per Million Residents	Metro, State	Deaths per Million Residents
New York, NY Boston, MA Philadelphia, PA Chicago, IL Washington, DC	1,767 778 503 363 277	Denver, CO	211		
Seattle, WA Milwaukee, WI Los Angeles, CA Pittsburgh, PA	176 173 127 110	Atlanta, GA	116	Miami, FL Minneapolis, MN	163 147
San Jose, CA San Diego, CA Phoenix, AZ Charlotte, NC San Francisco, CA Portland, OR	68 61 57 52 47 43			Nashville, TN Dallas, TX Austin, TX Salt Lake City, UT Houston, TX Orlando, FL	62 45 42 42 40 29

Geographic Location within United States
New England
Mid-Atlantic and Southeast
Central
Mountain
Pacific

GOVERNMENT RESPONSE

Moderate

Relaxed

MUNICIPALITIES: MORE RESPONSIBILITY / FEWER RESOURCES

Local governments have few levers because:

- Most need to balance their budgets (they can't borrow)
- Revenues largely depend on transactions (e.g. retail sales, hotel stays, gas taxes)
- First round of CARES only provided direct aid to nation's 36 largest cities

Local public services responsibilities remain high

- First responders
- Public safety and enforcement

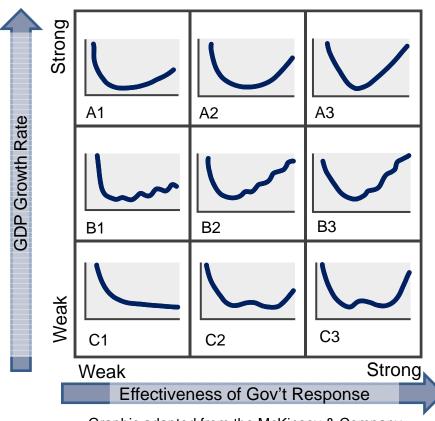
Major furloughs and lay-offs already underway

 Nearly 90% of U.S. cities (and 98% of cities with 50,000 to 500,000 people) are now expecting budget shortfalls

SUCCESSFUL OUTCOMES REMAIN A WORK IN PROGRESS

Economic recovery depends on length and severity of public health threat

- Models vary on spread, duration, and fatality (will we "flatten the curve"?)
- Full recovery may not occur until vaccine and / or remedy (12 – 18 months)
- Potential for virus return / mutation (pandemics become "the new normal")

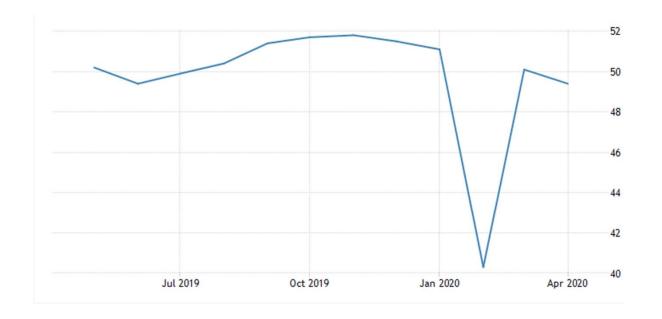


Graphic adapted from the McKinsey & Company.

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LESSONS FROM CHINA

- Manufacturing **PMI** plummeted but quickly rebounded
- But trend of recovery has yet to be established
- And the U.S. is **NOT** China

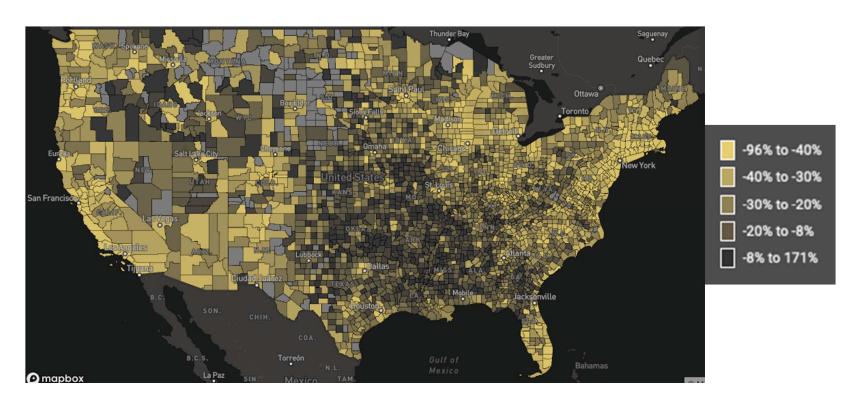


Actual	Previous	Highest	Lowest	Dates	Unit	Frequency	
49.40	50.10	52.30	40.30	2011 - 2020	points	Monthly	

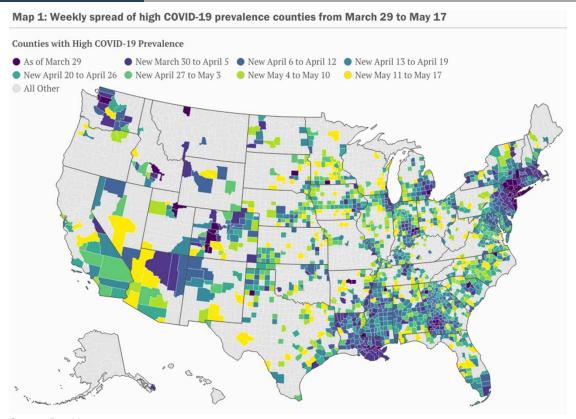
Source: Trading Economics

INDIVIDUAL BEHAVIOR - WIDE VARIATIONS

VEHICLE MILES TRAVELED SINCE INITIAL SHELTERING



WITH PUBLIC HEALTH IMPLICATIONS



Source: Brookings

FROM TEMPORAL TO STRUCTURAL – TOWARD A NEW (AB) NORMAL

LONG TERM CHANGES IN PREFERENCES AND BEHAVIOR?

Major social, economic or military events of the past (e.g. Great Depression, WWII) left indelible mark on entire generations

- Will prolonged pandemic create engrained habits around "social distancing" with profound effects on work and consumer preferences for space, privacy, security, etc.?
- Potential for reversing of decade long trends related to:
 - High density multifamily living
 - Shared workspace, open floor plates, extensive common areas
 - Vibrant, mixed-use urban districts
 - Transit Oriented Development
 - The "Experience Economy"

WATERSHED MOMENT FOR NEW TECHNOLOGIES AND SERVICES?

Beta-test moment for technology and services that reduce the need for face-to-face interaction.

- For E-Commerce: Amazon Prime; "click and collect"; food delivery, curbside pickup
- For remote social interaction and entertainment: On-Demand content (Netflix);
 online learning; legal, medical, services; real estate closings
- For Video-conferencing: (Zoom, Microsoft Teams, Blue Jeans, Google Meet etc.)
- Will the performance and market acceptance of these tools / practices accelerate investment, innovation, and diffusion?
 - Home networks struggling to keep up
 - Amazon experiencing delivery hick-ups
 - Blue Apron, the food-delivery service, saw stock price jump 500 percent

PARADIGM SHIFT FOR WORK SPACE?

On the one-hand:

- Innovations continue to enhance the quality, reliability, and efficiency of remote communication and information exchange
- About 56% of US workforce hold jobs at least partially compatible with remote work – but only 3.6% works at home half-time or more

On the other-hand:

- The need for face-to-face collaborations, working in teams, impromptu meetings, mentoring, all central to productivity and worker satisfaction
- A decade + re-emergence of CBD office markets demonstrates importance of urban amenities to location and space preferences of "knowledge workers"

"The best way to send information is wrap it up in a person." Robert Oppenheimer



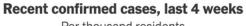
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WILL SETTLEMENT PATTERNS BE DISRUPTED?

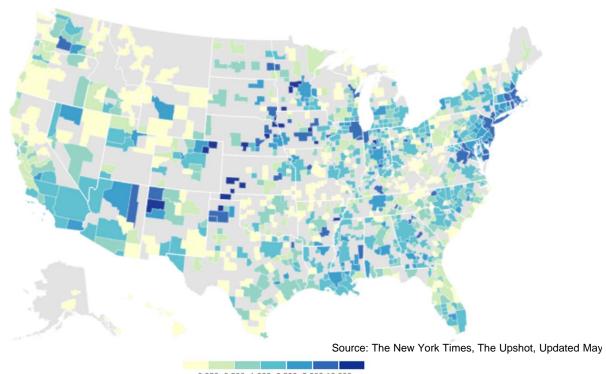
Place-Types

- Gateways vs. hinterlands
- Urban cores versus suburbs or exurbs?

Overwhelming concentration of Covid deaths in more dense counties, by a factor > 3



Per thousand residents



0.250 0.500 1.000 2.500 5.000 10.000

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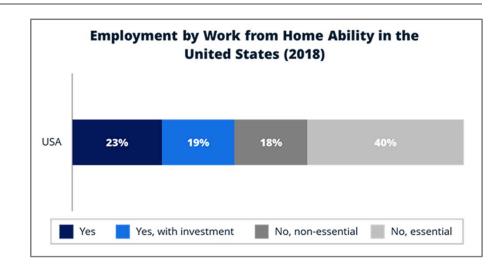
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ACCENTUATING THE DIGITAL DIVIDE

The so-called "digital divide" may exacerbate economic disparities and accelerate market consolidation in numerous sectors.

"It's a shame it's taken a pandemic for people to realize if you don't have internet access you're cut off from participation in society."

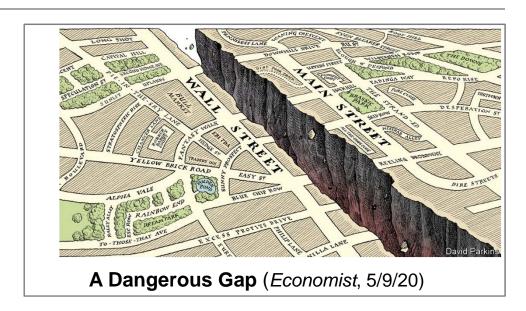
- Gigi Sohn, FCC
- Pew Research: 53% of Americans say internet has been essential during the outbreak
- The FCC: 21.3 million Americans are without any internet access at all



EXACERBATING THE ECONOMIC DIVIDE

COVID-19 is punctuating the wealth effect, contributing to accelerated bifurcation of societal wealth and culture

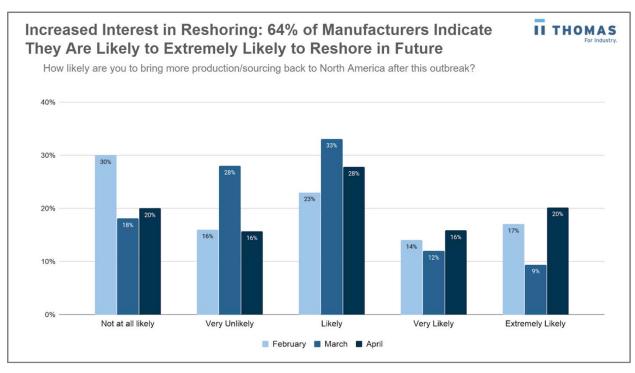
- ≈40 percent of Americans live paycheck to paycheck with many in sectors highly susceptible to disruption.
- Job losses, erosion of credit, etc. could expand homelessness and "permanent underclass."
- "Cash rich" investors can use crisis to automate, hire contract workers, increase market share, acquire distressed businesses / assets, etc



ANOTHER BLOW TO TRADE AND GLOBALIZATION?

Will Pandemic accentuate political trend toward protectionism and isolationism?

- De-globalization of supply chains to mitigate risk
- Changed perception of travel
- Tightened immigration policy

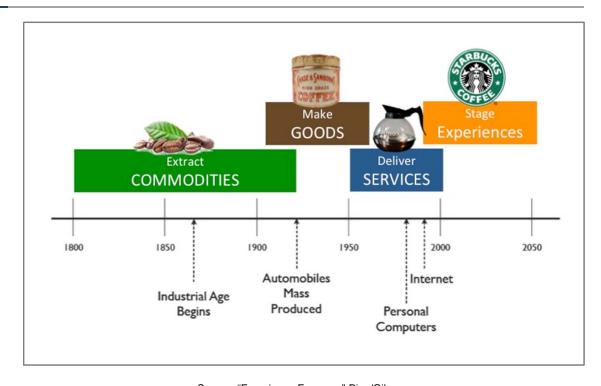


Source: Thomas Publishing Company

RETRACTION IN THE EXPERIENTIAL ECONOMY?

Experience oriented consumption underpins economics of numerous industries with significant multipliers:

- Entertainment (shows)
- **Sports**
- Travel & Recreation
- Lifestyle goods and services (dining)
- Accommodations



Source: "Experience Economy" Pine/Gilmore

DEFINING MOMENT FOR POLITICS AND PUBLIC POLICY?

Government Intervention

- How will Federal (or state / local) intervention during this crisis affect public confidence of the governments' ability to address major issues?
- Will crisis create a sense of shared responsibility and heightened awareness of economic, environmental and social issues?

Politics

- The pandemic and perception of public response will likely affect November election
- A return to region-oriented governance and economics?
 - "The center of gravity of our politics is moving out of Washington...to local," Rahm Emanuel

DISCUSSION: HOW TO RE-START AND RE-SHAPE ECONOMY

Best approach to maximizing return on stimulus investment to address overlapping threats and opportunities?

- The Safety Net
 - Unemployment insurance
 - Universal income
- A Jobs Program for Labor Surplus (includes highly capable younger workers)
 - Re-training initiatives (migration to knowledge-based trades and services)
 - Address Infrastructure deficiencies
 - Broadband (5G) expansion across the "digital divide"
- Adaptation and Resiliency
 - Future threats of climate change (e.g. Sea Walls, natural disaster mitigation)
 - Improved health care

CROSS-CUTTING REAL ESTATE IMPACTS (A PREVIEW)

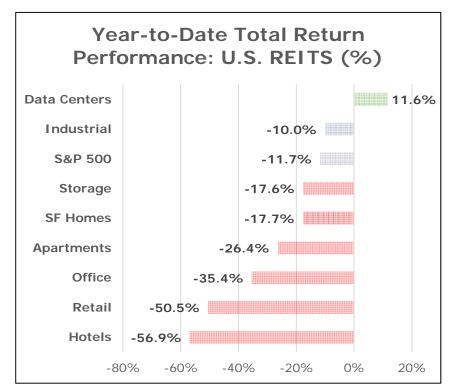
PANDEMIC'S CROSS CUTTING REAL ESTATE IMPACTS

"Real time" market activity

- Sale volumes down, but prices "sticky"
- Most REIT values fall faster than S&P
- Low interest rates and demand slump creates opportunities for capitalized investors
- Temporary forbearance (with conditions)

Supply:

- "Construction stop" orders vary by locality (Google)
- Long-term planning efforts continue in earnest
- Opportunity to "set the table" in anticipation of recovery "bounce"



Source: FTSE Nareit U.S. Real Estate Index Series Daily Returns, May 14th, 2020

PRELIMINARY TAKE-AWAY

Type of	Potential Impact by Real Estate Sector						
Market Impact	Single-Family Residential	Multifamily Residential	Office / R&D Flex	Essential Retail	Discretionary Retail	Warehouse / Industrial	Hospitality
Short-term	•	♦	•		—	(—
Structural	\Rightarrow	♠	\Rightarrow	•	•		1

IMPACTS LIKELY TO DIFFER BY LOCATION AND FORMAT

Corridors:

Creates opportunities to reposition under-performing and antiquated commercial strip formats, mini-centers, small lot, single-owner, mom & pops, etc.

Downtowns / CBDs:

How to facilitate bounce back as dining / entertainment hubs with mixed-use office and residential sectors

• Adaptive reuse of larger retail / entertainment venues:

Accelerates closures and on-going re-purposing for mixed-use residential, fulfillment centers / distribution hubs, and other (e.g. high-tech campus and innovation center concepts)

Suburban Environments:

Potential to capitalized on changing preferences and millennial life-cycle trends

DISCUSSION AND COMMENTARY

Please join us for Session 2 (June 3, 2020 10:00AM PDT): Charting the Course: **Sector-specific Impacts!**

Building on the initial session, EPS will engage with LAI membership to take a deeper dive into the implications for residential, commercial, and mixed-use development. As communities reopen amidst an uncertain viral outlook, how will consumer behavior and preferences adapt, and what are the implications for property classes?

> Provide your questions to David Zehnder at dzehnder@epssac.com and we'll do our hest to address them next week!