Brave New World
The Economic Outlook, and What’s Next for Real Estate
Agenda

1. Welcoming Remarks
2. COVID-19 – Thinking Through Economic Scenarios
3. COVID-19 – Property Types and Geographic Markets
4. What’s Next, and What Can We Really Know?
5. Questions & Answers
COVID-19 – Thinking Through Economic Scenarios

Victor Calanog PhD, Head of CRE Economics
Moody’s Analytics
Concentration Risk Apparent Given Identified Cases

Source: US CDC, as of April 27, 2020
COVID-19 Economic Transmission Channels

1. Tourism/Leisure/Hospitality
2. Trade
3. Commodity prices
4. Financial markets
5. Confidence

Combination of Supply and Demand Shocks Complicates Forecasts
What Does the Crystal Ball Say (Today?)

Real GDP, annualized quarter/quarter growth rate

Sources: BEA; Moody’s Analytics
Concentration Risk: Virginia and Maryland

*Source: US CDC, county and state departments of health, data as of April 27, 2020.*
Property Types & Geographic Markets
Shorter Lease Lengths = The Front Lines

Share of Leisure and Hospitality Employment

Largest WeWork Leases Relative to Metro Inventory

Source: Moody’s Analytics

Source: Moody’s Analytics REIS; CompStak
TSA Checkpoint Data: March 2020 versus March 2019

Source: Transportation Security Administration, as of April 1, 2020
Recession & Protracted Slump | Multifamily

- Baseline expected a record high in terms of deliveries for 2020: over 300,000 new units.
- Recession and protracted slump scenarios produce an increase in vacancies, but construction pullback is a countervailing effect.

Source: Moody's Analytics REIS
For Washington, DC, we were expecting about 7,500 new units to come online by year-end 2020 (it would have been a record high).

36.5% supply growth pullback for Recession, and 45.1% pullback for Protracted Slump means vacancies still rise, but not as much.
Protracted Slump | Anacostia/Northeast DC*

* Moody’s Analytics’ Anacostia / NE submarket includes all of Ward 8 in SE and most of Ward 7 including parts of NE DC

Source: Moody’s Analytics REIS
Protracted Slump | Major DMV Multifamily Markets

- Historical reaction functions to downturns determine the relative focus and magnitude of distress in various property types and geographic markets.

<table>
<thead>
<tr>
<th>MSA</th>
<th>State</th>
<th>Vacancy Increase (bps)</th>
<th>Vacancy Level (2020)</th>
<th>Effective Rent Declines</th>
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<tbody>
<tr>
<td>Richmond</td>
<td>VA</td>
<td>439</td>
<td>8.3%</td>
<td>-3.2%</td>
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<tr>
<td>District of Columbia</td>
<td>DC</td>
<td>270</td>
<td>8.5%</td>
<td>-2.6%</td>
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<td>VA</td>
<td>227</td>
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<td>-2.8%</td>
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<td>MD</td>
<td>221</td>
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<td>-3.0%</td>
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<td>Baltimore</td>
<td>MD</td>
<td>207</td>
<td>6.2%</td>
<td>-1.9%</td>
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<tr>
<td>Norfolk/Hampton Roads</td>
<td>VA</td>
<td>176</td>
<td>5.7%</td>
<td>-1.7%</td>
</tr>
</tbody>
</table>

- Recent record of oversupply will position any geographic market for distress, if demand pulls back abruptly (as per a recession or protracted slump scenario).

- Recent record of poor performance, particularly when vacancies have been rising and/or rent growth has been moderating, suggests markets will not fare as well in a downturn.

- Richmond will likely take a bigger hit in terms of occupancies – but outside of the DC area, markets like New York and San Francisco tend to be more volatile (1.5-2x or more) in terms of effective rent declines.
Office & Retail Do Not Fare as Well

Office Fundamentals | Protracted Slump

Retail Fundamentals | Protracted Slump

Source: Moody’s Analytics REIS
Major DMV Markets in a Protracted Slump: Office

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<tr>
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<td>New York</td>
<td>10.7%</td>
<td>-22.0%</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Norfolk/Hampton Roads</td>
<td>19.1%</td>
<td>-5.4%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Richmond</td>
<td>16.1%</td>
<td>-5.3%</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Baltimore</td>
<td>20.1%</td>
<td>-6.7%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Suburban Virginia</td>
<td>22.4%</td>
<td>-6.7%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Suburban Maryland</td>
<td>21.4%</td>
<td>-6.4%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>14.5%</td>
<td>-4.4%</td>
<td>-1.4%</td>
</tr>
</tbody>
</table>

- Office effective rent growth will take a hit given the depth and magnitude of the recession.
- How will office space evolve? The case of Google.

Source: Moody’s Analytics REIS; CompStak
Major DMV Markets in a Protracted Slump: Retail

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<tbody>
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<td>10.3%</td>
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<td>-2.3%</td>
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<tr>
<td>Suburban Virginia</td>
<td>8.4%</td>
<td>-12.4%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Suburban Maryland</td>
<td>9.8%</td>
<td>-12.1%</td>
<td>-1.6%</td>
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</tbody>
</table>

- Retail will suffer worse than office given pressure from e-commerce and effect of economic closure on stores.
- Need to go case by case: Example of Macy’s

Source: Moody’s Analytics REIS
# Industrial Warehouse/Distribution Markets

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<tbody>
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<td>10.7%</td>
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<td>10.0%</td>
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<td>-2.3%</td>
</tr>
<tr>
<td>Suburban Virginia</td>
<td>7.0%</td>
<td>-5.9%</td>
<td>-1.7%</td>
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<tr>
<td>Suburban Maryland</td>
<td>11.6%</td>
<td>-5.1%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>9.9%</td>
<td>-3.1%</td>
<td>-1.4%</td>
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</tbody>
</table>

*Source: Moody’s Analytics REIS*
What’s Next, and What Can We Really Know?
Idiosyncratic Shocks? Some Experience

Los Angeles Multifamily Fundamentals, 1988 to 1998

• The Northridge Earthquake of 1994 remains the costliest earthquake on record in the US ($26.4 billion in damages, 2018 dollars)

• Net positive for Los Angeles multifamily fundamentals – but why?

• This is the optimistic case: that demand remains strong in urban areas where multifamily properties tend to cluster.

Source: Moody’s Analytics REIS
Idiosyncratic Shocks? Potential Negatives

New Orleans Demographics, 2000 to 2019

- Hurricane Katrina in 2005 devastated New Orleans and the area suffered a permanent shock to demand.

- Multifamily fundamentals received a temporary boost because of destroyed units, but over the long run weaker demand did not sustain occupancies.

- What will happen post-COVID-19?

Source: Moody's Analytics
Applications: Portfolio Analysis

NOI Change

Market: San Diego, CA
Submarket: Downtown
NOI Growth: -8.3%
Value Change: -0.9%

Market: Dallas, TX
Submarket: Oak Lawn
NOI Growth: -9.8%
Value Change: -8.7%

Market: Louisville, KY
Submarket: South/Airport
NOI Growth: -10.3%
Value Change: -11.9%

Source: Moody’s Analytics REIS | Baseline scenario as of EOM March 2020
Applications: COVID-19 Impact Assessment Tool

https://cre.reis.com/covid-19

COVID-19 Outbreak: Impact on CRE

New York Metro, NY

COVID-19 Impact on New Construction - Office

New York Metro, NY

Kings County

Yes

 DEC 27, 2020

10

$1,871,370

25

$2,602,092

New York City

Total COVID-19 cases

11,500

464

91.4% of metro cases

Total CRE properties:

Office: 142

Retail: 405

Industrial/Distribution: 55

Employment impact: Low

Market insight:

Braving COVID-19 Fallout Despite Recent Balanced Growth

Return to Map
• AIA / AICP credits available.

• Join us for an upcoming event
  • Digital Happy Hour - Thursday April 30th
  • Staying Sane While Staying Virtual – May 5th
  • Development in Prince George's County – May 12th

• Get involved with ULI Washington - Committee and Council Applications through May 31.

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