Economic Implications of the COVID-19 Crisis Webinar

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Speakers

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Economic Implications of the COVID-19 Crisis

April 9, 2020

Ronald Temple
 Agenda

- Key building blocks to exit the COVID-19 crisis
  - Healthcare solutions
    - Testing
    - Therapies
    - Vaccine
  - Monetary policy
  - Fiscal stimulus
- Economic implications
- Policy response to date
- Investment Implications
The United States Continues to Lag in Testing

% of Population Tested

% of Population (dark blue) vs % Positive (RHS) (light yellow) for various countries as of 25 March 2020.

Norway  Switzerland  Italy  Hong Kong  Australia  Singapore  Germany  South Korea  Canada  Spain  Finland  USA  UK  France

Source: Worldometers Info
Mobility Restrictions Are in Place Globally

Government Response Stringency Index

As of 5 April 2020

OxCGRT collects publicly available information on 11 indicators of government response (S1-S11). The first seven indicators (S1-S7) take policies such as school closures, travel bans, etc. are recorded on an ordinal scale; the remainder (S8-S11) are financial indicators such as fiscal or monetary measures. Please note that this measure is for comparative purposes only, and should not necessarily be interpreted as a rating of the appropriateness or effectiveness of a country’s response.

Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, Datawrapper
16% of Workers Are Most Vulnerable to Shutdowns

As of May 2019
Healthcare includes protective services and law enforcement occupations. Social services and religious workers are included under “Education”. Extraction workers are included with construction and production occupations.
Source: Bureau of Labor Statistics
High Frequency Data: US Restaurant Revenue

Restaurants, Revenue in Week Ending April 3rd vs. Same Week in 2019 (% YoY)

As of 3 April 2020
Source: Womply, based on data from credit card transactions of small businesses
High Frequency Data: US Hotel Revenue per Available Room

Hotel Revenue Per Available Room (% YoY, Weekly)

As of 28 March 2020
Source: Deutsche Bank, STR
33% of Americans Work for Companies with <100 Employees

Employment by Firm Size (Millions)

Annual Payroll By Firm Size ($ Trillions)

As of 2016
Source: Census Bureau
US Jobless Claims Total ~17 Million in Three Weeks

Unemployment Insurance: Initial Claims, State Programs (Thousands)

As of 4 April 2020
Source: Department of Labor, Haver Analytics
US GDP Estimates Vary Wildly: Q2 versus Q3

2Q2020 GDP Estimates
(% QoQ Annualized)

3Q2020 GDP Estimates
(% QoQ Annualized)

As of 8 April 2020
Source: Bloomberg
US GDP Estimates Vary Wildly: 2020 versus 2021

<table>
<thead>
<tr>
<th>Bank</th>
<th>2020 GDP Estimates (% YoY)</th>
<th>2021 GDP Estimates (% YoY)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nomura</td>
<td>-10</td>
<td>6</td>
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<tr>
<td>Goldman Sachs</td>
<td>-9</td>
<td>5</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>-8</td>
<td>4</td>
</tr>
<tr>
<td>JPMorgan Chase</td>
<td>-7</td>
<td>3</td>
</tr>
<tr>
<td>UBS</td>
<td>-6</td>
<td>2</td>
</tr>
<tr>
<td>Barclays</td>
<td>-5</td>
<td>1</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>-4</td>
<td>0</td>
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<tr>
<td>TD Bank</td>
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<td>-1</td>
</tr>
<tr>
<td>CIBC</td>
<td>-2</td>
<td>-2</td>
</tr>
<tr>
<td>RBC</td>
<td>-1</td>
<td>-3</td>
</tr>
</tbody>
</table>

As of 8 April 2020
Source: Bloomberg
High Frequency Data: European Restaurant Visits

Number of Seated Dinners at Restaurants
(% YoY, 3-day moving average)

As of 25 March 2020
Source: OpenTable
High Frequency Data: European Electricity Use

Electricity Usage (% YoY) vs. (Thousand MW)

As of 5 April 2020. Spain as of 1 April 2020
Source: ENTSO-E, Goldman Sachs
European Employment Data Shows Similar Shocks Are Coming

Employment Metrics, Change from Prior Month (Persons)

- Germany: Workers Eligible for Short-Time Working Allowance (Inverted)
- Spain: Employment Contracts

As of March 2020

The German government supplements salaries for those workers, whose employer applied for short-time working allowance on their behalf. Number of employment contracts in Spain is approximated by social security affiliations at month's end.

Source: National agencies, HSBC, Haver
High Frequency Data: China Steel Inventories

Steel Inventories, First Week of Lunar New Year = 0
(Million Tons)

As of 20 March 2020
Source: Wind, HSBC
High Frequency Data: China City Traffic Levels

City Traffic Levels, First Day of Lunar New Year = 0
(Index, 7-day moving average)

As of 22 March 2020
Note: Amap traffic congestion index is the ratio of the actual travel time in a city to the time under no traffic. The index in the chart average levels of 100 cities.
Source: Wind, Amap.com, HSBC
High Frequency Data: China Power Coal Consumption

Power Coal Consumption, First Day of Lunar New Year = 0
(Index, First Day of Lunar New Year = 100)

As of 22 March 2020
Source: Wind, Morgan Stanley
Monetary Stimulus: The Fed Has Acted Aggressively

Federal Reserve, Announced Actions

- 150bps rate cut to 0% Fed Funds Rate
- Unlimited purchases of Treasuries and MBS
- Primary Dealer Credit Facility (PDCF)
- Term Asset-Backed Securities Loan Facility (TALF)
- Commercial Paper Funding Facility
- Money Market Mutual Fund Liquidity Facility
- $2.3 trillion funding to corporations, SMEs, state and local governments through:
  - Primary Market Corporate Credit Facility (PMCCF)
  - Secondary Market Corporate Credit Facility
  - Main Street Lending Program
  - Expanded TALF

Federal Reserve, Total Assets

($ Billions)

As of 9 April 2020
Source: Federal Reserve
Monetary Stimulus: The Fed Is Not Alone

Central Bank Rate Cuts
(4-quarter change, bps)

As of 27 March 2020
Source: JP Morgan
Fiscal Stimulus: The CARES Act Offers Sweeping Assistance

Intended Funds Use
($ Billions)

<table>
<thead>
<tr>
<th>Category</th>
<th>Intended Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>$604.0</td>
</tr>
<tr>
<td>Large Business</td>
<td>$500.0</td>
</tr>
<tr>
<td>Small Business</td>
<td>$377.0</td>
</tr>
<tr>
<td>Other</td>
<td>$519.5</td>
</tr>
</tbody>
</table>

- Student Loans: $377.0
- Unemployment Assistance: $222.0
- Cash payments: $500.0
- Cash payments: $604.0
- Federal Reserve: $500.0
- New Loans: $377.0
- Loans Relief and Grants: $377.0
- Hospitals and Healthcare: $519.5
- Local Governments Assistance: $519.5
- Other: $519.5

Source: Committee for a Responsible Federal Budget
Fiscal Stimulus: Support Provided Throughout Europe

Fiscal Packages By Tool (% of GDP)

As of 2 April 2020
Source: Citi
Debt Markets: US Investment Grade Issuance at Record Levels

Average Monthly Investment Grade Issuance
($ Billions)

As of March 2020
Source: SIFMA
Debt Markets: US High Yield Issuance Has Collapsed

Average Monthly High Yield Issuance
($ Billions)

As of March 2020
Source: SIFMA
Riskier Nonfinancial Corporate Debt Grew Rapidly since 2009

Data are for nonfinancial corporations. Corporate bond data are based on ICE Bank of America Merrill Lynch indices for US dollar denominated corporate debt publicly issued in the US domestic market and do not reflect the same concept as aggregate corporate credit data. Leveraged loan data do not reflect the same concept as aggregate corporate credit data.

Source: UBS, ICE, Bank of America Merrill Lynch, Bloomberg
US Leveraged Loan Quality Has Deteriorated

Distribution of Leveraged Loan Issuance by Debt-to-EBITDA
(%)
Economic Summary

- The critical requirements to exit the COVID-19 crisis are the healthcare requirements:
  - Testing
  - Therapies
  - Vaccine

- Monetary stimulus is aggressive and effective

- Fiscal stimulus is on target, but execution and timeliness are critical

- 2Q20 contraction likely to break records in the US and Europe
  - Visibility beyond 2Q20 is minimal

- Rebound unlikely to be as sharp as many expect
  - Long-term economic damage is likely, especially as small businesses fail
  - Policy intervention is intended to mitigate the damage; the question is whether it will succeed

Opinions as of April 2020 and are subject to change.
Investment Implications

- **Fixed Income:**
  - Security selection critical
  - Zero short-term rates and QE likely to be sustained for extended period of time
  - Yield curve control possible in Europe and the US
  - Avoid leveraged loans, high yield, CLOs for now
  - Investment grade attractive within credit

- **Equities**
  - Security selection critical
  - Focus on quality – balance sheet strength, funding, liquidity
  - Gauging viability very important for long-dated cash flow stories
  - Opportunities amidst capital raises – convertibles

- **Alternative Investments**
  - Excessively leveraged projects/firms/properties vulnerable
  - Opportunities to capitalize on distress

Opinions as of April 2020 and are subject to change.
Questions

Please type your question(s) into the “Question” field in your control panel. We will read aloud and reply.

Follow Up Questions:

- Tony Dote: tony.dote@lazard.com | 212.632.6439
- Dan Doonan: dan@nirsonline.org | 202.457.8190
Additional Resources

The following selected resources can be useful for ongoing updates to statistics.

https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6

https://www.worldometers.info/coronavirus/#countries

https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports

https://docs.google.com/spreadsheets/d/e/2PACX-1vRwAqp96T9sYYq2-i7Tj0pvTf6XVHjDSMIKBdZHXiCGGdNC0ypEU9NbgS8mxea55JuCFuu1MUeOj5/pubhtml#

https://www.federalreserve.gov/monetarypolicy/policytools.htm

https://www.federalreserve.gov/releases/h41/

COVID-19 Case Count Updates

New Daily Confirmed Cases, Thousands

- World
- China
- US
- Rest of the World

Cumulative Confirmed Cases, Thousands

- China
- US
- Italy

As of 7 April 2020
Source: Johns Hopkins, WHO, Haver Analytics
COVID-19 Case Count Updates

As of 6 April 2020
Source: Johns Hopkins, New York Times
COVID-19 Case Count Updates

New York

Florida

Louisiana

Michigan

As of 7 April 2020
Source: Johns Hopkins, WHO, Haver Analytics
COVID-19 Case Count Updates

Confirmed New Cases

- New York
- US
- US exc. New York

Confirmed New Cases

- Pennsylvania
- Indiana
- Missouri
- Georgia
- Texas
- Kentucky
- California

As of 7 April 2020

Source: Johns Hopkins, WHO, Haver Analytics
COVID-19 Case Count Updates

China, Daily New Cases (Jan 23 = 0)

South Korea, Daily New Cases (Feb 21 = 0)

China changes the way data is collected

Italy, Daily New Cases (Mar 9 = 0)

New York City, Daily New Cases (Mar 22 = 0)

As of 7 April 2020
Source: Johns Hopkins, WHO, Haver Analytics
Ronald Temple, CFA
Managing Director, Co-Head of Multi-Asset and Head of US Equity
Lazard Asset Management LLC (New York)

Ronald Temple is a Managing Director and Co-Head of Multi-Asset and Head of US Equity. In this role, Ron is responsible for overseeing the firm's multi-asset and US equity strategies as well as several global equity strategies. He is also a Portfolio Manager/Analyst on various US and global equity teams. He joined Lazard in 2001 with ten years of global experience including fixed-income derivative trading, risk management, corporate finance and corporate strategy in roles at Deutsche Bank AG, Bank of America NT & SA and Fleet Financial Group in London, New York, Singapore, San Francisco, and Boston. Ron has an MPP from Harvard University and graduated magna cum laude with a BA in Economics & Public Policy from Duke University. He is a member of the Council on Foreign Relations, the Economic Club of New York, Duke University’s Graduate School Board of Visitors (Chair), Duke University’s Talent Identification Program Advisory Board, and the New York Society of Security Analysts (NYSSA). He also served as a trustee of the Link Community School in Newark, New Jersey, from 2006-2014, as a member of the Trinity Board of Visitors at Duke University from 2006-2012 and a member of the Financial Accounting Standards Advisory Council from 2013 to 2015.
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