Welcome to BCG's Global Alumni Town Hall

- Thank you for joining us today from a global community of 25k people worldwide.

- This is our first global live session and first of many others to come. So, stay tuned.

- This challenging time has brought us together, but we wanted to connect with all of you as unique and valuable members of the BCG community.

- Before we begin, don't forget:
  - You're all muted for a better audio experience
  - In case of tech issues, write to alumni_relations@bcg.com
  - We'll share some of these slides with you tomorrow
Key Speakers

Today

Rich Lesser
CEO

Adam Farber
Global Leader, Healthcare Practice

Martin Reeves
Chairman, BCG Henderson Institute

Sharon Marcil
Chief Marketing Officer & Leader for US Federal Government
What we'll cover

- How BCG is managing through this global crisis for our people, our clients, and our communities
- Current facts and plausible scenarios on the pandemic
- Disruptions to the economic and business landscape and what BCG is doing to support various sectors
Launched dedicated Response Teams around the world, focused on:

- Protecting the health and wellness of our people and supporting new ways of remote working
- Being there for our clients
- Making a positive impact in the world to address the humanitarian crisis
Where are we: very different scenarios have emerged around the world

How can we generalize across the different scenarios?

Source: Johns Hopkins CSSE

v March 31, 2020
Current Economic Landscape related to COVID-19
Calibration of potential scenarios

Precendents

Intenstity and duration of past epidemics

<table>
<thead>
<tr>
<th>Shape (duration)</th>
<th>SARS</th>
<th>MERS</th>
<th>Seasonal flu</th>
<th>Spanish Flu</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2-3 mo.</td>
<td>&lt;0.01%</td>
<td>0.1%</td>
<td>&lt;0.01%</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>-6-12 mo.</td>
<td>1%+</td>
<td>1%+</td>
<td>1%+</td>
<td>1%+</td>
</tr>
<tr>
<td>Recurrent</td>
<td>1%+</td>
<td>1%+</td>
<td>1%+</td>
<td>1%+</td>
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</tbody>
</table>

Current forecasts

Range of expert projections

<table>
<thead>
<tr>
<th>Shape (duration)</th>
<th>Intensity (deaths as % of pop.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2-3 mo.</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>-6-12 mo.</td>
<td>1%+</td>
</tr>
<tr>
<td>2+ years</td>
<td>?</td>
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</tbody>
</table>

1. US projections based on prior slide; Italy projections based on similar ratio applied to Italy's relative starting position (few high-quality projections available for Italy)

Source: Johns Hopkins CSSE, BCG Henderson Institute analysis
Countries seeing different COVID-19 trajectories

Cumulative COVID-19 deaths (log scale)

Source: Johns Hopkins CSSE, BCG Henderson Institute analysis
Testing key in braking tradeoff between control/cost

- Economic cost
- Social disconnection

- Capacity increase
- Precision quarantine & surveillance
- Vaccination (18+ m away)
- Quarantine
- Immunity certificates
- Shield immunity
- Pulsed distancing
- Social distancing
At this point, Covid-19 a deep V-shape, clear risk of U

Expected impact of COVID-19

- Global recession highly likely
- US H1 '20 drawdown likely larger than in '08
- Shape not yet fixed - could be V or U shape
- U-shape triggered if shock to labor, capital, and productivity growth is large enough

Source: NBER, BEA, BCG Center for Macroeconomics analysis
Forecasts are increasingly negative

**China**

Δ GDP growth (in %)
- Baseline: 6.0%
- BPI moderate (29.2.): 5.7%
- BPI severe (29.2.): 5.2%
- OECD (02.3.): 4.8%
- Oxford Economics (06.3.): -0.6%
- HSBC (23.3.): 3.0%
- Rabo Bank (12.3.): 2.4%
- UBS (18.3.): 1.5%
- JP Morgan (20.3.): 1.1%
- Oxford Economics (24.3.): 1.0%
- Nat. Bureau (20.3.): 0.6%
- Rabo Bank (12.3.): 0.2%

**Europe**

Δ GDP growth (in %)
- Baseline: 1.3%
- Oxford Economics (29.2.): 1.0%
- OECD (02.3.): 0.9%
- Oxford Economics (06.3.): 0.6%
- UBS (11.3.): 0.3%
- Rabo Bank (12.3.): -0.1%
- JP Morgan (20.3.): -0.1%
- Rabo Bank (12.3.): -0.8%
- Goldman Sachs (20.3.): -1.7%
- Stat. Office EU (17.3.): -2.2%
- Oxford Economics (27.3.): -2.3%

**USA**

Δ GDP growth (in %)
- Baseline: 2.0%
- OECD (02.3.): 1.9%
- BPI (29.2.): 1.8%
- Oxford Eco. (06.3.): 1.3%
- UBS (24.3.): 0.9%
- Bank of Am. (19.3.): 0.8%
- Rabo Bank (12.3.): 0.7%
- MS (base) (17.3.): 0.2%
- Rabo Bank: -0.3%
- JP Morgan (20.3.): -1.9%
- MS (bear) (17.3.): -2.0%
- Morgan Stanley (22.3.): -2.3%
- MS (base) (23.3.): -3.0%
- Goldman Sachs (20.3.): -3.8%
- JP Morgan (27.3.): -4.3%
- Goldman Sachs (31.3.): -6.2%

**Note:** MS = Morgan Stanley 1. Estimated since GDP growth mentioned for second half of 2020 as average

**Source:** BrokerReport, Webresearch, BCG analysis
Spectrum of sector fragility

Note: $1Bn+ market-cap US Companies from all GICS sectors except for Financials and Real Estate (N=1421); Company is marked “at-risk” if cash position can go to zero due to revenue stress caused by lockdown without any additional equity funding, major cost control, extra-ordinary cash gains/asset sales, debt moratorium or excess debt funding over and above retiring debt; Revenue shocks bands estimated per industry basis China and US lockdown peak impact.

Source: Capital IQ; BCG Henderson Institute Analysis
Multi-timescale thinking required

React
Recession
Rebound
Reimagine

Immediate  Mid-term  Long-term
~60% have started recession preparation
But only 25% are looking at opportunities

Source: BCG COVID-19 Company Survey; BCG Henderson Institute Analysis

<table>
<thead>
<tr>
<th>Have Taken</th>
<th>Plan to Take</th>
<th>Not Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast cash-flows and make liquidity assessments under potential stressed scenarios</td>
<td>60%</td>
<td>31%</td>
</tr>
<tr>
<td>Assess viability of current investment plan</td>
<td>56%</td>
<td>38%</td>
</tr>
<tr>
<td>Put in place a cost-discipline plan</td>
<td>56%</td>
<td>40%</td>
</tr>
<tr>
<td>Modify dividend policies or share buy-back plans</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Assess investment/M&amp;A opportunities that may arise from a potential downturn</td>
<td>25%</td>
<td>35%</td>
</tr>
</tbody>
</table>

- ~92% of companies expect recession
- ~60% have started recession preparation
- But only 25% are looking at opportunities
How to decode the emerging future

Understand social shifts
- Crisis
- Social shifts
  - New ways of working
  - New policies
  - New consumer behaviors

Scan for mavericks

Study high-frequency data
- ~90% recovery in movement of people & goods
- ~85% recovery in power consumption
- ~100% recovery in property transactions

Find patterns that reduce friction
- Friction
  - Old
  - New
Key leadership imperatives

- Be purposeful
- Commanders' intent
- Multiple clock-speeds
- Engage
- Cut through bureaucracy
- Keep imagination alive
BCG's Health Care Practice
Government actions, medical response, and public engagement are critical to COVID outcomes

Government policies to contain COVID and economic stimulus

**Epidemiological scenarios**
Outbreak shape & intensity

**Medical response**
Medical treatment capacity
- Workers, ICU beds, ventilators, protective equip, drugs, vaccines

Testing, Tracking, Tracing, and Technology
- Capacity, availability, speed to results, contact tracing, case & immunity tracking, new technologies

**Economic & financial scenarios**
Intensity & geometry of shock

Public engagement and adherence
To the situation, policies, and communication

Sector/company specific
Retail
Travel
Auto
Etc.
BCG's Health Care Practice is engaged globally to support our clients in their response to COVID-19

Governments & health systems
Supporting planning, intervention design and efficient deployment of services, resources and capacity

Health care providers
Addressing surge in patient volumes, equipment and personnel needs and shift in care mix, operations and network coordination

Biopharma
Supporting solutions for rise in treatment demand; paths to accelerate promising therapies, digital transformation of operating model (R&D, supply chain, commercial)

Med Tech
From planning to managing throughput and distribution of in-demand PPE and life saving medical equipment (ICU, ventilators, disposables, diagnostic testing)

NGOs
Coordinating R&D investments to accelerate vaccine discovery
Supporting low-infrastructure countries in response to the pandemic
Developed the P.L.A.N.\(^1\) tool to enable decision-making across the HC value chain and beyond

**What it does:**

**Inputs:**
- Choice of epidemiological models with varied assumptions
  - Disease prevalence based on deaths
  - Population data at age and zip levels
  - Detailed supply parameters: number of hospital beds, ICU beds, ventilators, staff, PPE

**Outputs:**
- Flexible, interactive visualization of disease progression at the US county level
- Time series view of infection rate, severity distribution, recoveries and deaths
- Demand for hospitalization, ICU, vent care

**What to use it for:**

**Scenarios:** predict supply / demand imbalances at the US county level based on epidemiological assumptions and data

**Decisions:** Inform policy and business decisions e.g.: prioritizing resources, or allocation (capacity, supplies, business continuity, etc) based on risk

**Assessment:** understand risk based decisions and interventions across public/private sectors

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Example: P.L.A.N.¹ model output

**Denver, Colorado**

Total Population: 722,912 (Age 60+: 16%)
Estimated Initial Starting Cases: 1,566 as of March 22nd (Based on 0 observed deaths, 7 speeding deaths)

- Total # of Beds: 2,510
- Total # of ICUs: 205
- Total # of Ventilators: 415

Selected Scenario: Imperial College Covid-19, weak

**Active Cases at:**
- 15 days: 5,678
- 30 days: 13,614
- 60 days: 80,128
- 90 days: 94,810
- 120 days: 29,492

**COVID Cumulative Cases thru 90 Days:** 448,106
62.0% of Total Population Infected
449,424 recovered through 90 days
2,305 deaths through 90 days

5,969 Untreated Patients at 90 Days

**Patient Need at 90 Days**
- Bed - NON-COVID: 1,570
- COVID: 5,318
- Total: 6,887 (72% of total capacity)

- ICU - NON-COVID: 129
- COVID: 1,069
- Total: 1,218 (59% of total capacity)

- Ventilator - NON-COVID: 162
- COVID: 664
- Total: 826 (199% of total capacity)

**Remaining Capacity of ICUs:** -1,013 (Selected Geos: -1,013)

**Number of ICUs Needed**

- 15 days: 129
- 30 days: 129
- 60 days: 129
- 90 days: 129
- 120 days: 129

**Legend**
- none
- weak
- moderate
- strong

Impact on the Public Sector
BCG public sector clients have expressed need for support across a number of areas

Supply chain
- Managing supplier risks
- Sourcing supply of critical materials (e.g. PPE)
- Contingency planning
- Enabling end to end digital supply chain platforms

Operating model & continuity
- Remote working / social distancing
- Maintaining operations as people fall ill
- Managing employee risk
- Digitizing analog processes and rapidly prototyping solutions

Project management
- Coordinating between agencies, private sector, NGOs, etc.
- Creating rigorous process for COVID activities
- Prioritizing work

General advisory
- Economic recovery and stabilization
- Partnering with private sector
- Learning from previous outbreak management (e.g. Ebola)
- Analyzing impacts and scenarios
BCG is supporting through formal case work and thought leadership

**Support response to COVID-19**
- On-the-ground support to avoid halting operations
- Reprioritization of business objectives
- Helping essential industries scale up operations

**Thought leader to Public Sector**
- Hosting roundtables with public sector leaders
- Publicizing materials on best practices from previous epidemics and early learnings from COVID-19
- Coordinating with high level government officials on BCG perspectives

**Support Public / Private coordination on COVID-19**
- Hosting industry-specific roundtables with CEOs
- Leveraging breadth of BCG private sector knowledge and expertise to inform public sector response (and vice versa)
- Leveraging BCG relationships to improve coordination across groups

**Digital efforts related to COVID-19**
- Deploying data scientists at Gamma to estimate and reduce both the public health and economic impacts of the virus
- BCG’s Digital Ventures rapidly prototyping products to accelerate essential government functions

Conducted in addition to COVID-19 case work

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1. Industries deemed essential by local/federal governments in providing care and supporting communities during lockdown or "stay-in-place" orders
Closing Round
Thank you for joining us today

Global Alumni Team is ready to help you at alumni_relations@bcg.com

Local Alumni Teams at your service in every BCG office. Check www.bcg.com/alumni/groups.aspx

Weekly new content on COVID-19 available at bgc.com & a refreshed bgc.com/alumni with videos, news and career tips

Dedicated social media groups to BCG Alumni in Facebook and LinkedIn

Your data is valuable; please keep your information updated so you never miss a message and an invitation!