

# WEBINAR: THE IMPACT OF COVID-19 ON THE INSURANCE INDUSTRY

Session 10

28 July 2020

# OUR PANELISTS



**John Q. Doyle**  
President and CEO  
**Marsh**



**Prashanth Gangu**  
Partner, Head of Americas P&C Insurance  
**Oliver Wyman**



**Santosh Perumbadi**  
Partner, Financial Services  
**Oliver Wyman**



**Rupal Kantaria**  
Director, Oliver Wyman Forum  
**London**

# WEBINAR AGENDA

<b>00</b>	Introduction	<b>5 mins</b>
<b>01</b>	A conversation with John Q. Doyle	<b>40 min</b>
<b>02</b>	Managing P&C in Turbulent Times	<b>15 min</b>
<b>03</b>	Additional Q&A	<b>If time</b>

# 01

## **A CONVERSATION WITH JOHN Q. DOYLE**

Panelists: John Q. Doyle and Prashanth Gangu



**John Q. Doyle**  
President and CEO  
**Marsh**



**Prashanth Gangu**  
Partner, Head of Americas P&C Insurance  
**Oliver Wyman**

# 02

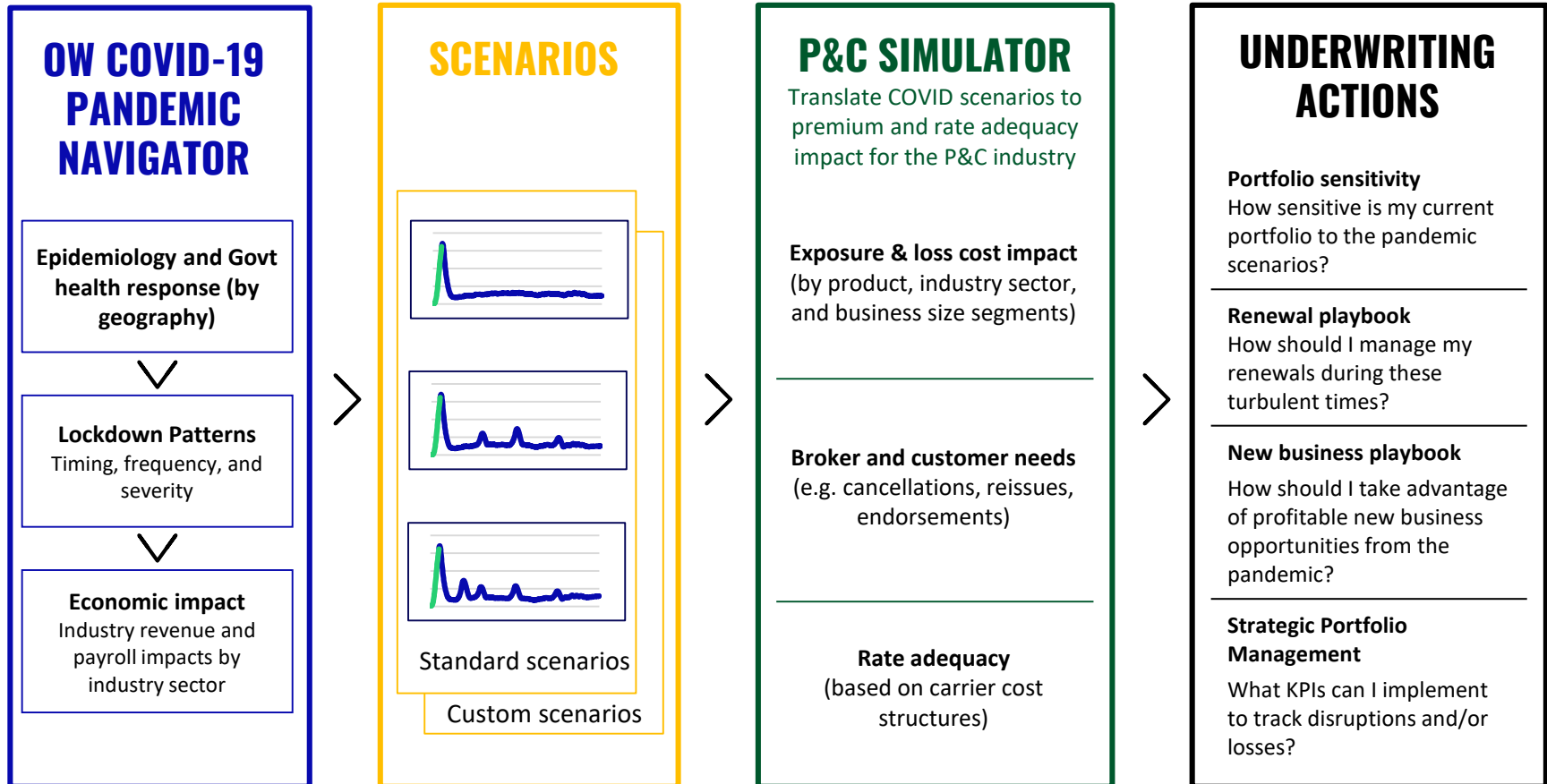
## **MANAGING P&C IN TURBULENT TIMES**

Panelists: Prashanth Gangu and Santosh Perumbadi

# EXECUTIVE SUMMARY

- Covid-19 has created an unprecedented level of disruption to the global economy—we believe the key to understanding future economic scenarios and their likelihood on linking underlying epidemiology to future economic scenarios is critical for policy and strategy development.
- Oliver Wyman’s “**Pandemic Navigator**”, dynamically projects near-term case counts and informs a range of scenarios over the next 12-18 months
- Oliver Wyman’s tool is being used by governments, cities and corporations across the globe.
- P&C insurance company results will diverge significantly based on how they handle the crisis. Best practice players are using scenario planning to set underwriting strategy, balance their portfolio, hedge against adverse scenarios and successfully convert growth opportunities
- We are building two applications to help our clients study the scenarios and outperform the market:
  - **P&C Simulator**: A driver-based model that translates COVID-19 scenarios into impacts on premium, exposures, losses and rate adequacy for the P&C industry over the next 12 months at a granular level
  - **Commercial credit modeling**: Monitor credit risk at a company level across COVID-19 scenarios to manage Trade Credit portfolios
- These tools are valuable in helping P&C insurers through critical underwriting and portfolio management decisions in the next 12-18 months across several topics, including:
  - Portfolio sensitivity analysis
  - Renewal playbook
  - New business playbook
  - Strategic portfolio management to support ongoing monitoring over the next 12 months
  - Credit loss modeling

# UNDERWRITING ONE-YEAR INSURANCE CONTRACTS, IN AN ENVIRONMENT WITH SIGNIFICANT MACRO-LEVEL VOLATILITY, IS CHALLENGING





## EXAMPLE: GENERAL LIABILITY IN THE RETAIL (NON-FOOD) INDUSTRY

	Scenario A: Smart and lucky	Scenario B: Plausible but pessimistic	Scenario C: Economic crisis
Economic impact	<ul style="list-style-type: none"> <li>• <b>Revenue: -14%</b></li> <li>• <b>Foot traffic: -10%</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Revenue: -23%</b></li> <li>• <b>Foot traffic: -22%</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Revenue: -33%</b></li> <li>• <b>Foot traffic: -25%</b></li> </ul>
Impact on exposure	<ul style="list-style-type: none"> <li>• Exposure basis: total revenue</li> <li>• T&amp;Cs (deductible, limit, coverage): no change</li> <li>• <b>Exposure change: -14%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Exposure basis: total revenue</li> <li>• T&amp;Cs (deductible, limit, coverage): no change</li> <li>• <b>Exposure change: -23%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Exposure basis: total revenue</li> <li>• T&amp;Cs (deductible, limit, coverage): no change</li> <li>• <b>Exposure change: -33%</b></li> </ul>
Impact on loss costs	<ul style="list-style-type: none"> <li>• Frequency: <ul style="list-style-type: none"> <li>• Foot traffic: -10%</li> <li>• Change in legal actions: flat</li> </ul> </li> <li>• Severity: <ul style="list-style-type: none"> <li>• Increased medical costs +5%</li> </ul> </li> <li>• <b>Net loss cost change: -5%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Frequency: <ul style="list-style-type: none"> <li>• Foot traffic: -22%</li> <li>• Change in legal actions: flat</li> </ul> </li> <li>• Severity: <ul style="list-style-type: none"> <li>• Increased medical costs +10%</li> </ul> </li> <li>• <b>Net loss cost change: -14%</b></li> </ul>	<ul style="list-style-type: none"> <li>• Frequency: <ul style="list-style-type: none"> <li>• Foot traffic: -25%</li> <li>• Change in legal actions: flat</li> </ul> </li> <li>• Severity: <ul style="list-style-type: none"> <li>• Increased medical costs +15%</li> </ul> </li> <li>• <b>Net loss cost change: -14%</b></li> </ul>
Impact on combined ratio	<ul style="list-style-type: none"> <li>• <b>CR: +9 pts</b></li> <li>• Assumption: 35% expense ratio, of which 20% fixed</li> </ul>	<ul style="list-style-type: none"> <li>• <b>CR: +12 pts</b></li> <li>• Assumption: 35% expense ratio, of which 20% fixed</li> </ul>	<ul style="list-style-type: none"> <li>• <b>CR: +27 pts</b></li> <li>• Assumption: 35% expense ratio, of which 20% fixed</li> </ul>
Implied rate action	<ul style="list-style-type: none"> <li>• <b>Rate needed: +12%</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Rate needed: +15%</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Rate needed: +33%</b></li> </ul>

# THE P&C SIMULATOR PROVIDES EXPOSURE, LOSS AND COMBINED RATIO IMPACTS BY SCENARIO, SIZE, INDUSTRY SECTOR AND PRODUCT

Scenario: **Med**  
 Business size: **Overall**      Set scenario and business size for all tabs

## Δ exposure

	GL	Other PL	D&O	WC	Property	Auto	Total
Energy	-56%	-56%	-6%	-8%	-11%	-6%	-27%
Airlines	-67%	-67%	-7%	-33%	-13%	-7%	-32%
Financials	-27%	-27%	-3%	-13%	-5%	-3%	-15%
Real Estate	-27%	-27%	-3%	-13%	-5%	-3%	-15%
Industrials	-29%	-29%	-3%	-7%	-6%	-3%	-9%
Utilities	-17%	-17%	-2%	-9%	-3%	-2%	-7%
Retail: Food	3%	3%	0%	3%	1%	0%	2%
Retail: Non-Food	-23%	-23%	-2%	-18%	-5%	-2%	-14%
Health Care	-6%	-6%	-1%	-5%	-1%	-1%	-4%
Technology	-11%	-11%	-1%	-5%	-2%	-1%	-5%
Manufacturing	-28%	-28%	-3%	-18%	-6%	-3%	-14%
Construction	-37%	-37%	-4%	-29%	-7%	-4%	-24%
Wholesale	-22%	-22%	-2%	-14%	-4%	-2%	-11%
Trucking	-3%	-3%	0%	-1%	-1%	0%	-1%
Transportation	-26%	-26%	-3%	-15%	-5%	-3%	-11%
Hospitality	-70%	-70%	-7%	-38%	-14%	-7%	-45%
Public entities	-6%	-6%	-1%	-3%	-1%	-1%	-3%
Services	-27%	-27%	-3%	-13%	-5%	-3%	-15%
<b>Total</b>	<b>-30%</b>	<b>-25%</b>	<b>-3%</b>	<b>-16%</b>	<b>-5%</b>	<b>-2%</b>	<b>-15%</b>

## Δ loss costs

	GL	Other PL	D&O	WC	Property	Auto	Total
Energy	-45%	30%	125%	-24%	5%	-55%	-14%
Airlines	-56%	103%	175%	-10%	5%	-66%	-7%
Financials	-22%	40%	125%	-27%	15%	-8%	10%
Real Estate	-22%	40%	125%	-27%	15%	-8%	1%
Industrials	-19%	28%	125%	19%	0%	3%	10%
Utilities	-7%	32%	125%	16%	0%	3%	10%
Retail: Food	7%	26%	175%	30%	15%	13%	21%
Retail: Non-Food	-14%	70%	225%	21%	5%	13%	19%
Health Care	6%	63%	225%	21%	5%	4%	22%
Technology	-4%	23%	125%	-21%	15%	3%	13%
Manufacturing	-18%	70%	225%	7%	0%	3%	14%
Construction	-26%	74%	125%	-5%	0%	-35%	-16%
Wholesale	-12%	42%	125%	11%	0%	-20%	2%
Trucking	7%	13%	125%	26%	0%	-1%	12%
Transportation	-15%	63%	175%	11%	0%	-24%	-5%
Hospitality	-60%	114%	175%	-15%	15%	-70%	-25%
Public entities	4%	38%	175%	-20%	15%	8%	-1%
Services	-22%	80%	125%	-27%	15%	-8%	14%
<b>Total</b>	<b>-22%</b>	<b>64%</b>	<b>169%</b>	<b>-2%</b>	<b>8%</b>	<b>-16%</b>	<b>3%</b>

## Δ combined ratio (w/o rate change)

	GL	Other PL	D&O	WC	Property	Auto	Total
Energy	+40	+142	+84	-8	+13	-30	+23
Airlines	+59	+346	+118	+31	+16	-37	+99
Financials	+11	+62	+79	-7	+14	-3	+23
Real Estate	+11	+62	+79	-7	+14	-3	+15
Industrials	+17	+56	+80	+18	+5	+4	+15
Utilities	+12	+40	+78	+19	+3	+7	+12
Retail: Food	+2	+13	+104	+15	+8	+7	+27
Retail: Non-Food	+12	+77	+140	+32	+7	+10	+27
Health Care	+9	+46	+136	+18	+4	-2	+17
Technology	+8	+26	+77	-9	+11	+3	+13
Manufacturing	+16	+90	+141	+23	+5	+4	+23
Construction	+21	+117	+81	+29	+6	-19	+15
Wholesale	+13	+55	+78	+21	+4	-10	+12
Trucking	+7	+11	+75	+16	+0	-0	+8
Transportation	+15	+78	+110	+21	+4	-12	+8
Hospitality	+69	+421	+119	+35	+24	-39	+51
Public entities	+8	+30	+106	-10	+10	-4	+2
Services	+11	+95	+79	-7	+14	-3	+27
<b>Total</b>	<b>+21</b>	<b>+82</b>	<b>+106</b>	<b>+15</b>	<b>+10</b>	<b>-8</b>	<b>+19</b>

## observed market rate trends (current)

	GL	Other PL	D&O	WC	Property	Auto	Total
Energy	5%	23%	23%	5%	21%	5%	13%
Airlines	5%	23%	23%	5%	21%	5%	11%
Financials	5%	23%	23%	5%	21%	5%	15%
Real Estate	5%	23%	23%	5%	21%	5%	14%
Industrials	5%	23%	23%	5%	21%	5%	10%
Utilities	5%	23%	23%	5%	21%	5%	16%
Retail: Food	5%	23%	23%	5%	21%	5%	12%
Retail: Non-Food	5%	23%	23%	5%	21%	5%	12%
Health Care	5%	23%	23%	5%	21%	5%	11%
Technology	5%	23%	23%	5%	21%	5%	16%
Manufacturing	5%	23%	23%	5%	21%	5%	13%
Construction	5%	23%	23%	5%	21%	5%	6%
Wholesale	5%	23%	23%	5%	21%	5%	12%
Trucking	5%	23%	23%	5%	21%	5%	7%
Transportation	5%	23%	23%	5%	21%	5%	8%
Hospitality	5%	23%	23%	5%	21%	5%	9%
Public entities	5%	23%	23%	5%	21%	5%	10%
Services	5%	23%	23%	5%	21%	5%	13%
<b>Total</b>	<b>5%</b>	<b>23%</b>	<b>23%</b>	<b>5%</b>	<b>21%</b>	<b>5%</b>	<b>11%</b>

## expenses

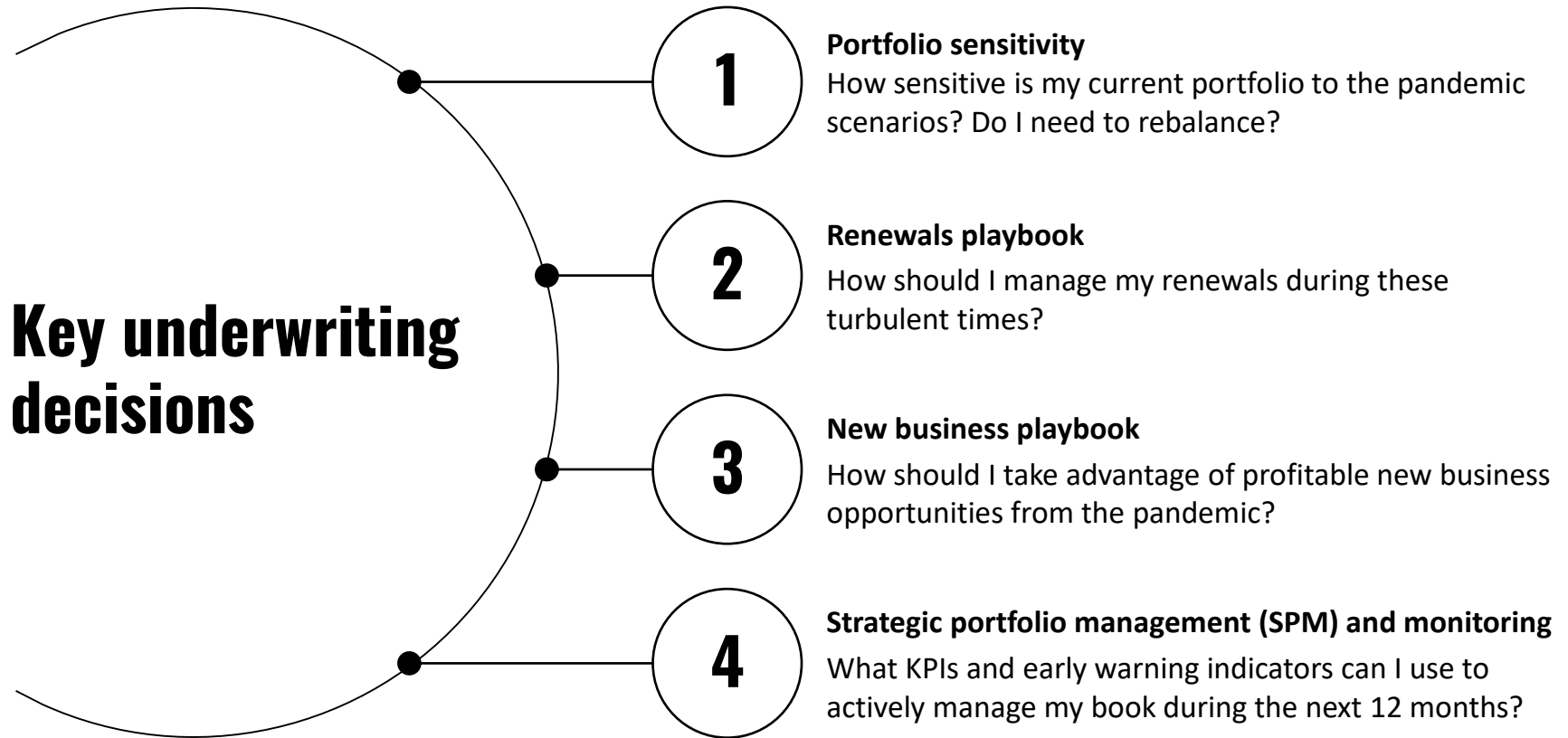
	GL	Other PL	D&O	WC	Property	Auto	Total
Energy							
Airlines							
Financials							
Real Estate							
Industrials							
Utilities							
Retail: Food							
Retail: Non-Food							
Health Care							
Technology							
Manufacturing							
Construction							
Wholesale							
Trucking							
Transportation							
Hospitality							
Public entities							
Services							
<b>Total</b>							

20% fixed  
15% variable

## additional rate needed (to offset impact on combined ratio)

	GL	Other PL	D&O	WC	Property	Auto	Total
Energy	50%	178%	105%	-10%	17%	-38%	28%
Airlines	74%	432%	148%	39%	20%	-46%	49%
Financials	14%	78%	99%	-8%	18%	-3%	29%
Real Estate	14%	78%	99%	-8%	18%	-4%	19%
Industrials	21%	70%	100%	23%	6%	5%	18%
Utilities	14%	50%	97%	24%	4%	4%	15%
Retail: Food	2%	16%	131%	19%	11%	9%	14%
Retail: Non-Food	15%	97%	175%	40%	9%	12%	34%
Health Care	11%	58%	171%	22%	5%	-2%	21%
Technology	10%	32%	96%	-11%	14%	3%	16%
Manufacturing	21%	113%	177%	28%	6%	5%	28%
Construction	27%	146%	101%	36%	8%	-23%	19%
Wholesale	17%	68%	98%	26%	5%	-13%	15%
Trucking	9%	14%	94%	20%	1%	0%	10%
Transportation	19%	98%	137%	26%	5%	-16%	9%
Hospitality	86%	527%	149%	44%	29%	-49%	63%
Public entities	10%	38%	133%	-12%	13%	-5%	3%
Services	14%	119%	99%	-8%	18%	-4%	33%
<b>Total</b>	<b>26%</b>	<b>103%</b>	<b>133%</b>	<b>18%</b>	<b>12%</b>	<b>-10%</b>	<b>24%</b>

# THE P&C SIMULATOR HELPS INSURERS OUTPERFORM THE MARKET DURING THESE TURBULENT TIMES



# APPLICATIONS OF THE P&C SIMULATOR

	Project	Description	Impact
1	<b>Portfolio sensitivity analysis</b>	<ul style="list-style-type: none"> <li>• Run portfolio through the P&amp;C Simulator using standard assumptions</li> <li>• Produce heatmaps showing rate needs across portfolio using standard OW scenarios</li> </ul>	<ul style="list-style-type: none"> <li>• Identify, at a high-level, areas of risk/opportunity</li> <li>• Understand sensitivity of portfolio to different scenarios</li> </ul>
2	<b>Renewal playbook</b>	<ul style="list-style-type: none"> <li>• Develop account-level renewal strategies using insights from Simulator               <ul style="list-style-type: none"> <li>– Drivers and scenarios will be customized based on insurer’s book</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Achieve above-market returns across pandemic scenarios</li> <li>• Execute renewal tiering using scenarios</li> </ul>
3	<b>New business playbook</b>	<ul style="list-style-type: none"> <li>• Develop playbook to win new business in a COVID-19 environment               <ul style="list-style-type: none"> <li>– Using insights from Simulator and road-test with Marsh</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Proactively target profitable growth opportunities and increase win-rate</li> </ul>
4	<b>Strategic Portfolio Management and monitoring</b>	<ul style="list-style-type: none"> <li>• Support portfolio monitoring and pricing adjustments over the next 12 months via:               <ul style="list-style-type: none"> <li>– Ongoing calibration of P&amp;C Simulator drivers and impact</li> <li>– Ongoing revision of COVID scenarios</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Dynamically re-evaluate book by monitoring early warning signals (COVID-19 and economic developments)</li> <li>• Provide real-time guidance to underwriters</li> </ul>
5	<b>Trade Credit loss modeling</b>	<ul style="list-style-type: none"> <li>• Credit modeling for the Trade Credit portfolio using OW-approaches that are complimentary to internal efforts</li> </ul>	<ul style="list-style-type: none"> <li>• Mitigate Trade Credit portfolio risks</li> </ul>

# Q&A

Panelists: Prashanth Gangu and Santosh Perumbadi

# APPENDIX

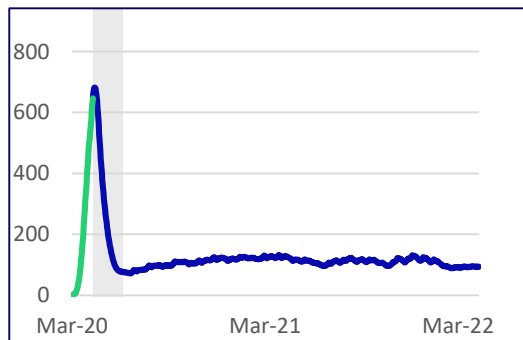
# FOR THIS CONVERSATION, WE MODELED THREE SCENARIOS

## Scenario A

“Smart and lucky”

We open successfully and further lockdowns are not necessary in the future

### New case count and lockdown projections

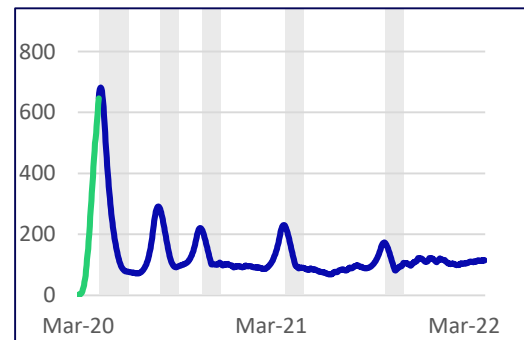


## Scenario B

“Plausible but pessimistic”

We open successfully but daily new and active cases grow through the summer, resulting in further lockdowns in the future

### New case count and lockdown projections

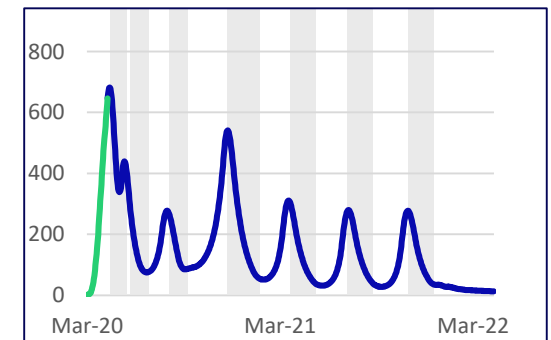


## Scenario C

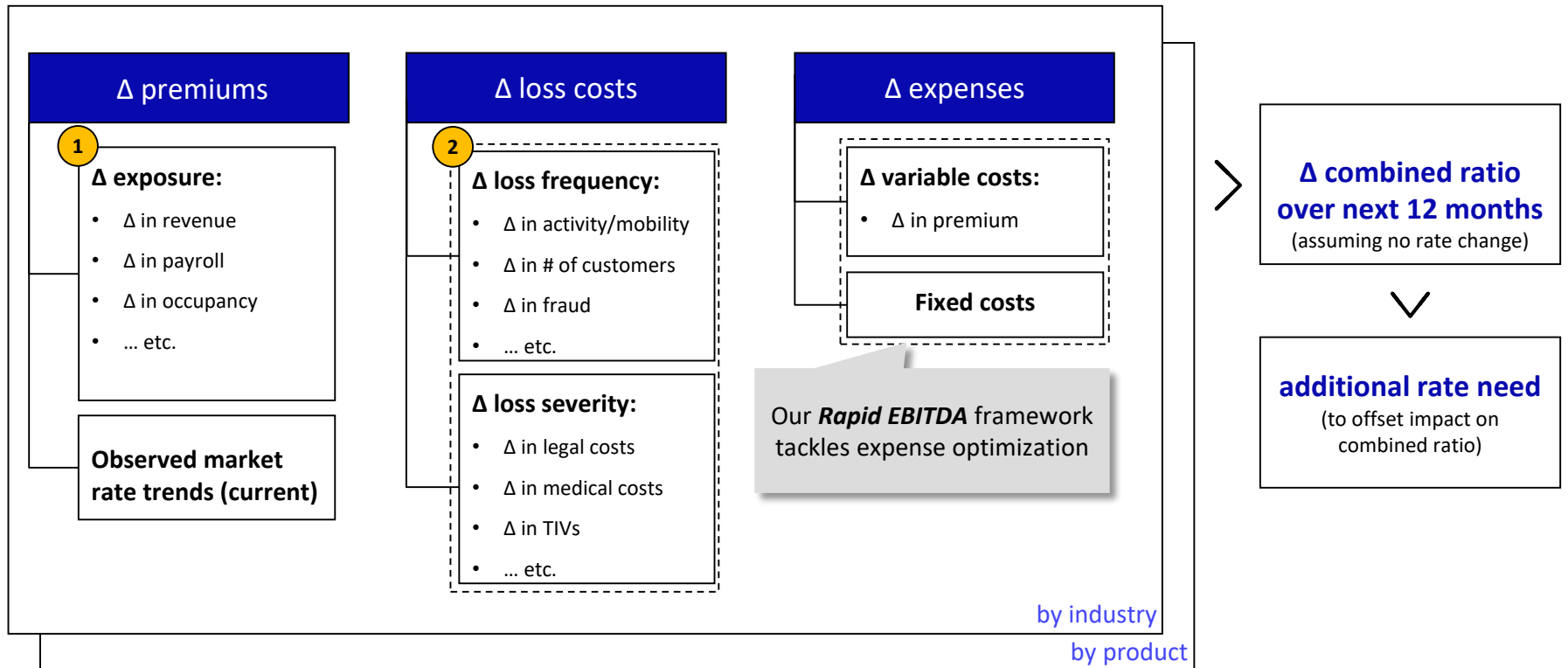
“Economic crisis”

Multiple outbreaks occur over the next year, and frequent lockdown measures are required to keep those outbreaks in check

### New case count and lockdown projections



# WE SIMULATE UNDERWRITING PROFITS USING A DRIVER-BASED APPROACH



Evaluation and calibration of each driver is supported by extensive research:

Industry specific economic activity

Legal & regulatory changes (covid-related)

Market rate trends

Oliver Wyman industry practices

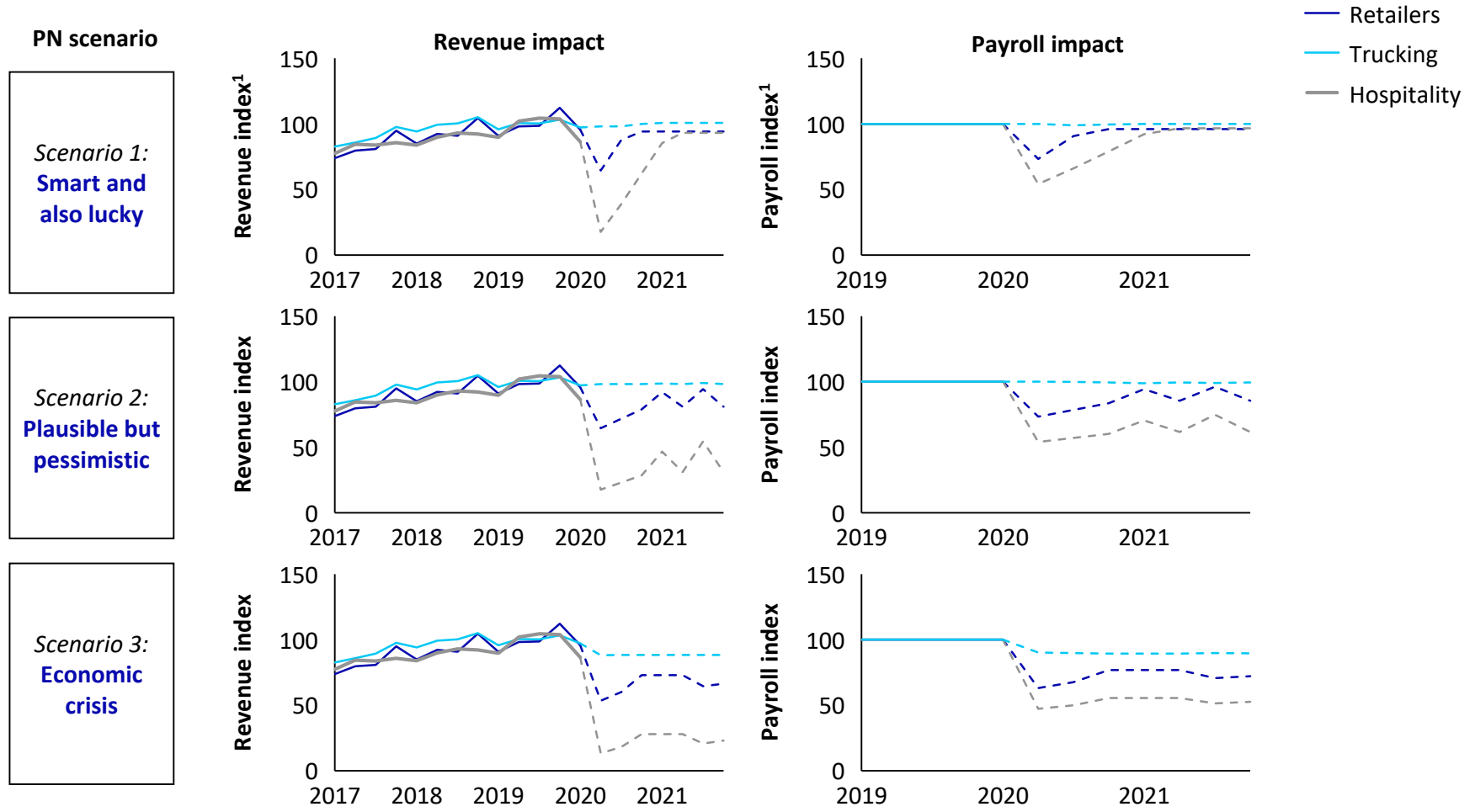
Expert input from:

- Marsh
- Guy Carpenter
- NERA



# 1 EXPOSURE IMPACT: WE PROJECT INDUSTRY-LEVEL REVENUE AND PAYROLL IMPACTS FOR 20+ INDUSTRIES ACROSS THE SCENARIOS

Three industry sector examples shown below



1. Revenue and payroll indexed based on 2019 averages  
 Source: Company filings; Oliver Wyman Analysis

# 2 LOSS COST IMPACT: : GRANULAR LOSS DRIVERS ARE DEFINED FOR EACH PRODUCT LINE AND THEIR IMPACTS ARE CALIBRATED FOR EACH INDUSTRY SECTOR

Loss cost drivers identified for each product and industry

■ Primary Driver  
■ Secondary Driver  
■ COVID-19 Uncertainties

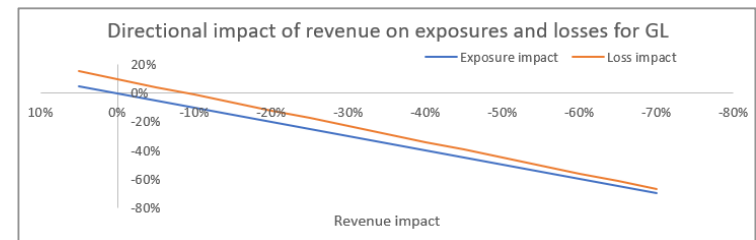
Product Line	Frequency Drivers	Severity Drivers
<b>GL</b>	<ul style="list-style-type: none"> <li>Activity (e.g. Foot Traffic)</li> <li>Probability of Accidents</li> </ul>	<ul style="list-style-type: none"> <li>Medical Costs</li> <li>Legal Costs</li> <li>COVID-19 Legal Uncertainties</li> <li>Fraud</li> <li>Distribution of Injury Complexities</li> <li>Limits &amp; Deductibles</li> </ul>
<b>D&amp;O</b>	<ul style="list-style-type: none"> <li>Lawsuits Due to Financial Performance</li> <li>Lawsuits Due to COVID Mismanagement</li> </ul>	<ul style="list-style-type: none"> <li>Legal Costs</li> <li>COVID-19 Legal Uncertainties</li> <li>Fraud</li> <li>Limits &amp; Deductibles</li> </ul>
<b>Other PL</b>	<ul style="list-style-type: none"> <li>Lawsuits Due to COVID Mistakes</li> <li>Discrimination or Unfair Treatment</li> <li>Medical Malpractice Liability Claims</li> </ul>	
<b>Auto</b>	<ul style="list-style-type: none"> <li>Miles Driven</li> <li>Less Experienced Drivers Let Go</li> <li>Cars on Road</li> <li>Non-Owned Autos</li> </ul>	<ul style="list-style-type: none"> <li>Faster Driving (Due to Fewer Cars)</li> <li>Cost of Repairs / Replacements</li> <li>Medical Costs</li> <li>COVID-19 Legal Uncertainties</li> <li>Increased Time Off</li> <li>Limits &amp; Deductibles</li> </ul>
<b>WC</b>	<ul style="list-style-type: none"> <li>Employee Layoffs</li> <li>Work From Home</li> <li>COVID-19 WC Claims</li> <li>Hiring New Employees</li> </ul>	<ul style="list-style-type: none"> <li>COVID-19 Legal Uncertainties</li> <li>Increased Time Off</li> <li>Limits &amp; Deductibles</li> </ul>
<b>Property</b>	<ul style="list-style-type: none"> <li>Negligence Due to Vacancy</li> <li>COVID Property Contamination</li> <li>Crime Due to Vacancy</li> <li>Accidents with Activity Changes</li> <li>BI Due to Non-COVID Accidents</li> <li>BI Due to Shutdowns</li> <li>Negligence Due to Budget Cuts</li> </ul>	<ul style="list-style-type: none"> <li>COVID-19 Legal Uncertainties</li> <li>TIV</li> <li>Fraud</li> </ul>

P&C Simulator allows loss drivers to be customized for each carrier's portfolio

## Calibrating frequency and severity drivers for each industry and scenario

	Frequency		Severity					Coverage expansion COVID multiplier	Loss cost impact
	Δ Activity	Δ Danger	Δ Medical	Δ Legal	Δ Fraud	Δ Limits/Ded			
Energy	-60%	0%	0%	15%	10%	0%	0%	0%	-37%
Airlines	-60%	0%	0%	15%	10%	0%	0%	0%	-69%
Financials	-31%	0%	0%	15%	10%	0%	0%	0%	-15%
Real Estate	-31%	0%	0%	15%	10%	0%	0%	0%	-15%
Industrials	-27%	0%	0%	15%	10%	0%	0%	0%	-8%
Utilities	-17%	0%	0%	15%	10%	0%	0%	0%	6%
Retailers	-24%	0%	0%	15%	10%	0%	0%	0%	-4%
Health Care	-4%	0%	0%	15%	10%	0%	15%	0%	22%
Technology	-15%	0%	0%	15%	10%	0%	0%	0%	7%
Manufacturing	-27%	0%	0%	15%	10%	0%	0%	0%	-7%
Construction	-34%	0%	0%	15%	10%	0%	0%	0%	-17%
Wholesale	-21%	0%	0%	15%	10%	0%	15%	0%	0%
Trucking	-3%	0%	0%	15%	10%	0%	0%	0%	23%
Transportation	-26%	0%	0%	15%	10%	0%	0%	0%	-6%
Hospitality	-63%	0%	0%	15%	10%	0%	0%	0%	-53%
Public entities	-9%	0%	0%	15%	10%	0%	0%	0%	18%
Services	-33%	0%	0%	15%	10%	0%	0%	0%	-15%

## Sensitivity analysis of revenue vs. loss cost by product line



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