



Webinar in
Risk Management



COVID 19

Response to business risks & championing them!

 Tuesday 16th June 2020  1030 – 1200 IST

Register Now

<http://www.actuariesindia.org/index.aspx>

PANELISTS

Mr. Satyan Jambunathan

Chief Financial Officer,
ICICI Prudential Life Insurance



Mr. Rajosik Banerjee

Partner and Head,
Financial Risk Management, KPMG



Mr. Adarsh Agarwal

Appointed Actuary,
Digit General Insurance



Mr. Varun Gupta

Chief Risk Officer,
TATA AIA Life Insurance



MODERATOR

Mr. Bikash Choudhary

Chief Risk Officer and Appointed Actuary,
Future Generali India Life Insurance



Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Mr. Bikash Choudhary

Emcee & Moderator for the session
CRO & AA, Future Generali Life Insurance

CPD



Recording



Mute



Q&A



Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Mr. Kailash Mittal

**Chairperson AGRM
Partner, KPMG**

Research Projects



- Initiated with an objective of some focused research and development
- Expression of Interests floated for both Project mentors & teams
- Volunteers shortlisted and organized into four teams
- Project topics
 - Risk management in Guaranteed Annuity Options for Employee Benefit schemes
 - Catastrophic risk modelling
 - Risk management techniques in Annuities
 - Credit Risk

Risk management in Guaranteed Annuity Options for Employee Benefit schemes

Mentor: Suranjan Banerjee

Team Members:

1. Satish Thuwal
2. Nikhil Gupta
3. Ajay Shekhar

Project details:

- Guaranteed Annuity Options (GAO)
- The biggest risk to the provider of such an option is the risk of interest rates falling below the guaranteed level.
- Providers can hedge this risks with financial instruments, typically a receiver swaption.
- The intent is to explore this and come with an efficient risk adjusted framework

Catastrophic risk modelling

Mentor: Sourav Roy

Team Members:

1. Dhairya Parikh
2. Harsh Agarwal
3. Shibyan Shu Sharma
4. Shyam Dhanania

Project details:

1. Historical study of various catastrophe impacting India
2. Trends in economic, insurance and human impacts of such catastrophes
3. Study of statistical theories of modelling various catastrophes from risk quantification and pricing of coverage perspectives
4. Case study of various catastrophe models available in the market

Risk management techniques in Annuities

Mentor: Swati Gupta

Team Members:

1. Aman Loharuka
2. Sanil Shah
3. Rajat Gupta
4. Yash Sidhpura

Project details:

1. Identify key risks
2. Suggest ways to mitigate these risks
3. Determine an optimal portfolio of assets to minimize investment risk
4. Suggest a methodology to project mortality improvement rates

Credit Risk

Mentor: Amruth Krishnan

Team Members:

1. Vardhan Chheda
2. Kumar Sudheer Raj
3. Siddhi Kharkia

Project details:

1. Study some of the structural credit risk models for corporate defaults with a focus on the Merton/KMV model.
2. Apply the model to the Indian market, benchmark vs credit ratings and credit spreads where available.
3. Run a comparison against other credit models and / or tailor the structural model to the Indian market.



Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Mr. Sunil Sharma

Key note address – President, IAI
CRO & AA, Kotak Life Insurance

Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Mr. Varun Gupta

CRO, Tata AIA Life Insurance

POLL QUESTION 1

- Let us start the session with a quick poll...

Pre COVID 19 Context

- India slowing growth -courtesy the '4 balance sheet' problem
- Life Insurance
 - Asset Side: Defaults
 - Liability Side: Interest rates
 - Product Mix: Untenable Super cheap Term Insurance rates



Mortality (1)

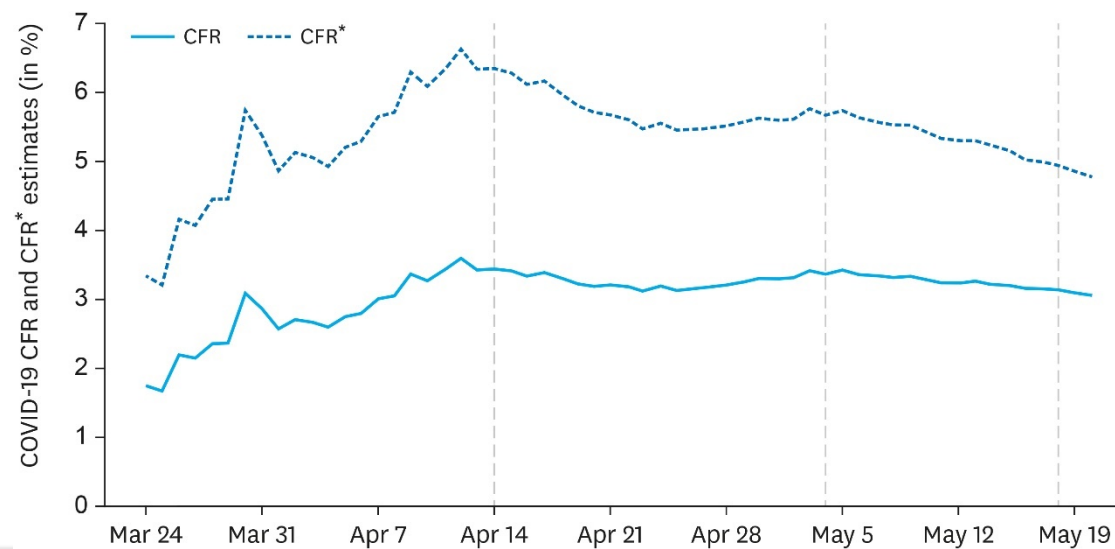


Institute of Actuaries of India

Area	Pop Density 000s Per Sq Mile	Age Skew < 60 Yrs	Age Skew Bet 60 and 70 Yrs	Age Skew > 70 Years	COVID Deaths* per million
US	0.09	78%	12%	11%	~400
India	1.08	90%	6%	4%	~15
UK	0.71	76%	11%	13%	~625
Spain	0.24	74%	11%	15%	~600
Italy	0.52	71%	12%	17%	~575

*Deaths+ Seriously Critical 15th June Worldometers.info

Age Range	COVID Imperial Report IFR	COVID 19 CFR India*
0-10	0.00%	1.7%
11-20	0.01%	0.2%
21-30	0.03%	0.3%
31-40	0.08%	0.6%
41-50	0.15%	2.4%
51-60	0.60%	6.6%
61-70	2.20%	14.3%
71-80	5.10%	20.1%
80+	9.30%	22.2%

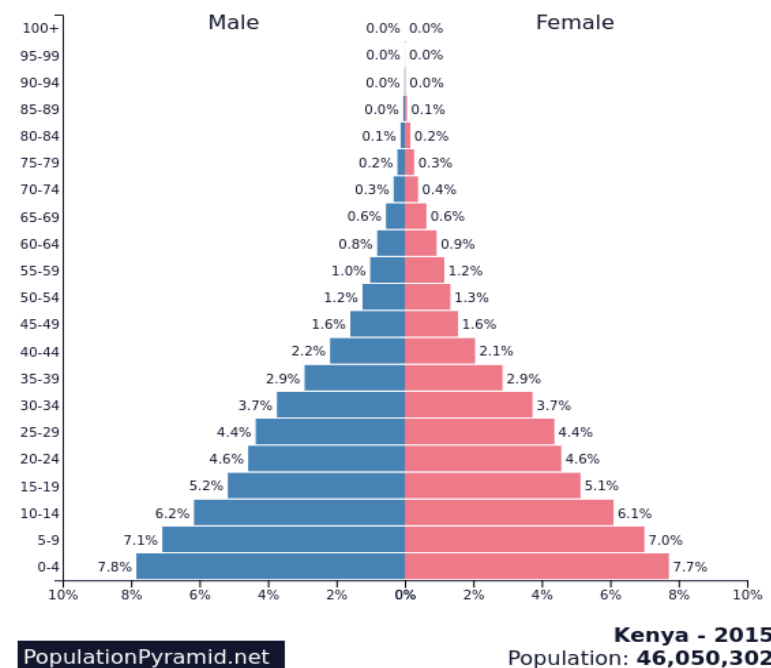


*India May 20 Data; Equal risk, unequal burden? Gender differentials in COVID-19 mortality in India

www.actuariesindia.org

Mortality (2)

- Arrive at expected COVID Mortality
 - Age Mix
 - Already Morbid Population
 - Geographical Spread
- Watch out for IBNR
- Mid-Long term mortality
 - Anxiety – Deaths of Despair
 - Neglect of underlying conditions



Interest Rates



10 Yr. Gsec Interest Rates going down

Reverse Repo @3.75%

Non Par Lines of Business most impacted

Capital impact

New Business Pricing

Mid/Long Term Impact

Increasingly difficult to create meaningful endowment products

Product Mix and Volumes

The shift in demand unlikely to be uniform

Protection Vs Savings

ULIP Vs Traditional

Premium Paying terms

Move from F2F to Digital Selling

Who led the digital transformation of your company?

- A) CEO
- B) CTO
- C) COVID-19

Sent



Looking Ahead

<i>Save Costs</i>	Understand your budget Cut non essential Expenditure
<i>Create a Layer of Protection</i>	Check for capital at hand
<i>Understand Tail Risks</i>	The Perfect Storm Tail Events are surprisingly correlated
<i>Acquire Skills</i>	Be a Generalist
<i>Create Opportunities</i>	Product Mix Mining Existing Customer Base

Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Mr. Rajosik Banerjee

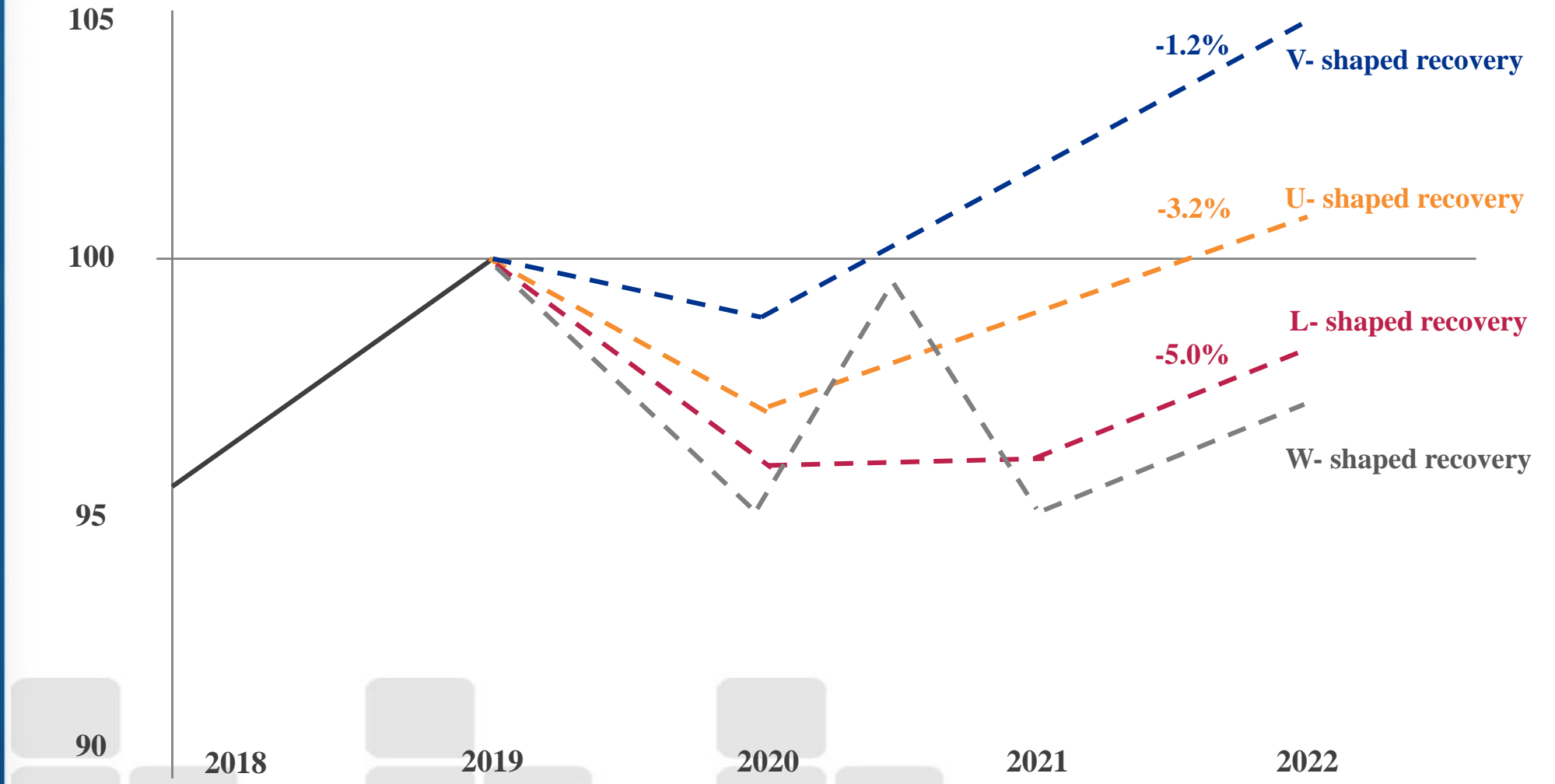
Partner & Head Financial Risk Management, KPMG

What has the earlier crises taught us?

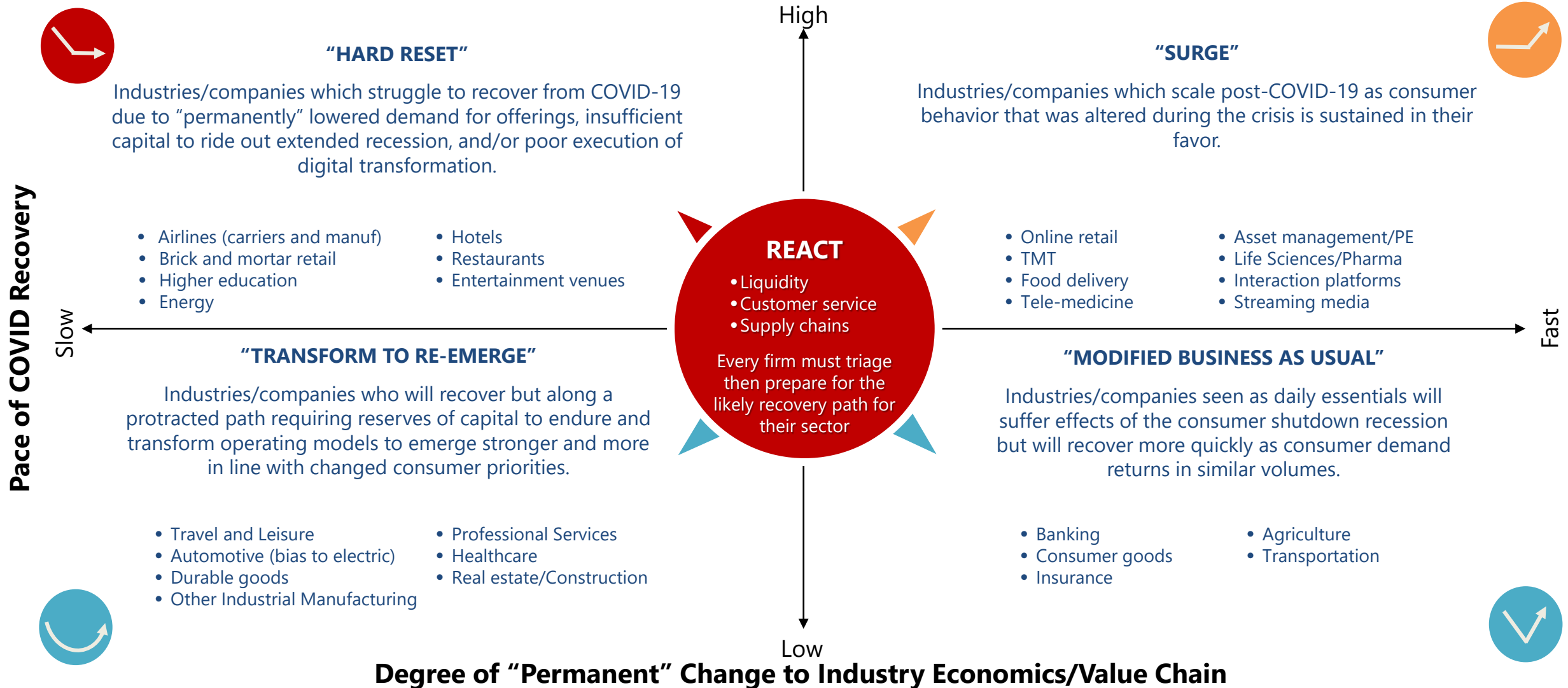
Sector	Data	2008	2009	2010	2011	2012	2013	2014	Recovery time to 2008 baseline (# years)
BFSI	Sum of End User Spending (\$M)	186,891	176,261	177,111	181,868	191,017	201,317	212,766	4
	Growth %		-5.69%	0.48%	2.69%	5.03%	5.39%	5.69%	
Consumer	Sum of End User Spending (\$M)	116,400	110,520	110,792	113,028	117,885	123,056	128,333	4
	Growth %		-5.05%	0.25%	2.02%	4.30%	4.39%	4.29%	
Transportation	Sum of End User Spending (\$M)	28,958	26,949	26,837	27,348	28,659	30,082	31,592	4
	Growth %		-6.49%	0.42%	1.91%	4.79%	4.97%	5.02%	
Telecom	Sum of End User Spending (\$M)	70,950	68,747	69,961	71,856	75,187	78,665	82,775	3
	Growth %		-3.10%	1.76%	2.71%	4.64%	4.63%	5.22%	
IT	Sum of End User Spending (\$M)	45,648	42,833	43,362	44,735	46,790	49,016	51,548	4
	Growth %		-6.17%	1.24%	3.17%	4.59%	4.76%	5.17%	
Energy & Utilities	Sum of End User Spending (\$M)	75,864	69,281	69,451	70,606	73,609	76,993	80,483	5
	Growth %		-8.68%	0.25%	1.66%	4.25%	4.60%	4.53%	
Healthcare	Sum of End User Spending (\$M)	37,804	36,232	36,180	36,751	38,146	40,055	42,208	4
	Growth %		-4.16%	-0.14%	1.58%	3.80%	5.00%	5.38%	
Manufacturing	Sum of End User Spending (\$M)	44,432	39,224	39,248	39,985	41,518	43,274	45,237	6
	Growth %		-11.72%	0.06%	1.88%	3.83%	4.23%	4.54%	
Government	Sum of End User Spending (\$M)	151,101	148,539	150,904	155,647	163,026	170,644	178,116	3
	Growth %		-1.70%	1.59%	3.14%	4.74%	4.67%	4.38%	
Education	Sum of End User Spending (\$M)	12,980	12,643	12,688	12,665	12,919	13,345	14,053	4
	Growth %		-2.60%	0.35%	-0.18%	2.00%	3.30%	5.31%	
Total Sum of End User Spending (\$M)			731,229	736,534	754,488	788,755	826,446	867,112	4
Total Growth (%)			-5.20%	0.70%	2.40%	4.50%	4.80%	4.90%	

Source: Gartner IT Metrics data

What shape of recovery do you expect?



Varying degrees of COVID-19-driven shifts will result in an “alphabet soup” of recovery



COVID 19: Themes that will impact across sectors

Non-Financial Sector

- ❑ **Supply Chain interruptions** hampering forward and backward integrations
- ❑ **Slowdown** in existing as well as new order book
- ❑ **Sub-optimal capacity utilization** due to reduced workforce
- ❑ **Lock-in of receivables** due to non-payment by customers
- ❑ **Increased costs** due to IT, Infrastructure Revamp, BCP
- ❑ **Uptrend in Cost of Goods** due to volatility in raw material prices
- ❑ **Inability to refinance** WC limits

Financial Sector

- ❑ **Higher ALM mismatches** in Overnight-3M bucket due to moratorium on loans
- ❑ **Worsening of asset quality** in both wholesale and retail books due to rating downgrades
- ❑ **Downward pressure on NIM** due to rate cuts
- ❑ **Slowdown in loan demand** owing to muted economic growth
- ❑ **Higher haircuts** due to volatility in collateral prices

Areas for applying stress testing

Potential
COVID- 19
Impacts



Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Institute of Actuaries of India

Mr. Adarsh Agarwal

Appointed Actuary, Digit Insurance

Non Life – Impact of Covid-19

- Pricing and Underwriting
- New Products
- Claims Handling
- Impact on Top Line
- Impact on Bottom Line

POLL QUESTION 2

Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Mr. Satyan Jambunathan

CFO, ICICI Prudential Life

POLL QUESTION 3

Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Panel Discussion

Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



Ashish Ranjan

Closing Comments & Vote of Thanks
Member, AGRM

Upcoming Webinars

Title	Date
Assessing Value-For-Money of Investment Funds and Managing Single Factor Risks	19 June 2020
Pricing of Crop Insurance	26 June 2020
Town Hall with President (For IAI Student Members)	28 June 2020
Adapting to trends in Life Insurance	1 July 2020
1 st TechTalk in Employee Benefits- Compensated Absences and other long term employee benefits (For IAI Student Members & Non Members)	9 July 2020
Impact of IFRS 17 on Product Design and Pricing	16 July 2020
Webinar on Ayushman Bharat Scheme	24 July 2020

Webinar hosted by Advisory Group on Risk Management

June 16, 2020

COVID19 - Response to business risks & championing them!



CPD Questions

Webinar hosted by Advisory Group on Risk Management

Institute of Actuaries of India

A Statutory body Established by An Act of Parliament

Thank You

