

# Hospitality Tomorrow

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**Speaker Notes**

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Hello everyone.

I have been asked to share our views on the financial markets outlook together with comments on emerging technologies that may help society cope with the viral contagion risks that we are currently facing; a lot to cover in 10-12 minutes, so I will race through some prepared comments and will take questions afterwards.

Firstly let me say that we are in uncharted territory. Every aspect is unprecedented.

- A full-on pandemic,
- A complete lack of preparedness,
- Most of the world's economies in complete lockdown,
- No political leadership or coordinated response,
- Uncertainty over the changing nature of the virus itself with no vaccine solution in sight,
- Every country, every industry impacted and
- Unemployment is now on a scale that will likely surpass the levels of the Great Depression.

We have become accustomed to being in control of our lives and at no other time in modern history have we felt so out of control. The psychological impact will remain with us for some time to come.

So where do you start?

First let's look at the economic forecasts - it has been said that only in economics can the Nobel Prize be won by two people with diametrically opposite views.

I have been in the financial markets for over 40 years and I have never seen such a complex mix of problems. Indeed all of this is creating complex change across nearly all aspects of our lives that is happening concurrently and at a speed that no one can adapt to.

But adapt we must.

# Latest World Economic Outlook

## Growth Projections

The COVID-19 pandemic will severely impact growth across all regions.

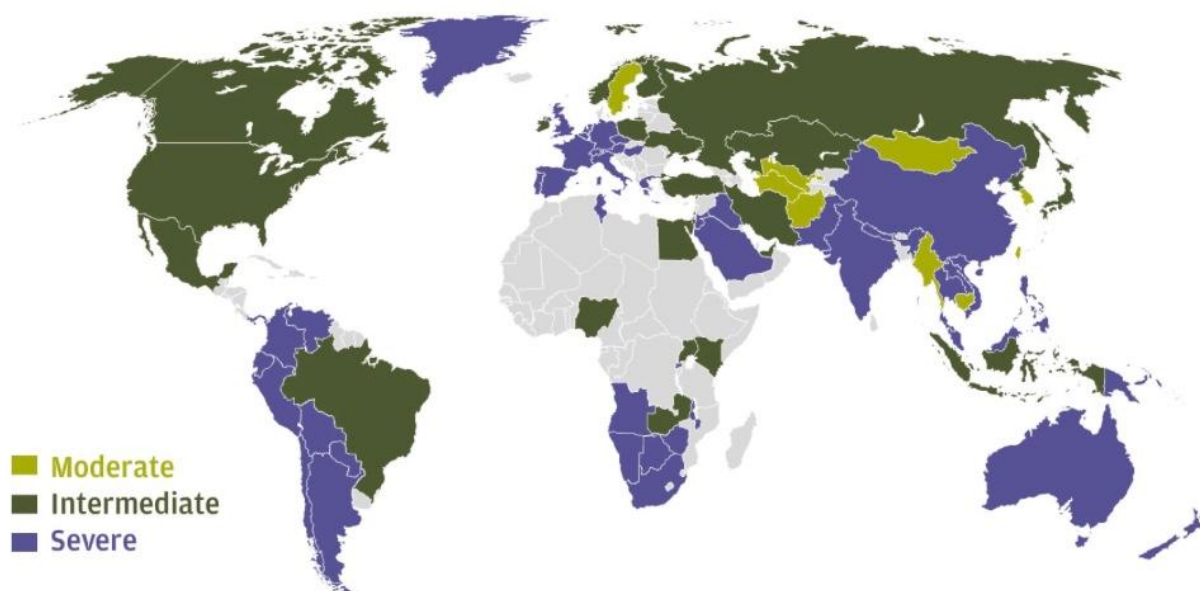
(real GDP, annual percent change)	PROJECTIONS		
	2019	2020	2021
<b>World Output</b>	<b>2.9</b>	<b>-3.0</b>	<b>5.8</b>
<b>Advanced Economies</b>	<b>1.7</b>	<b>-6.1</b>	<b>4.5</b>
United States	2.3	-5.9	4.7
Euro Area	1.2	-7.5	4.7
Germany	0.6	-7.0	5.2
France	1.3	-7.2	4.5
Italy	0.3	-9.1	4.8
Spain	2.0	-8.0	4.3
Japan	0.7	-5.2	3.0
United Kingdom	1.4	-6.5	4.0
Canada	1.6	-6.2	4.2
Other Advanced Economies	1.7	-4.6	4.5
<b>Emerging Markets and Developing Economies</b>	<b>3.7</b>	<b>-1.0</b>	<b>6.6</b>
Emerging and Developing Asia	5.5	1.0	8.5
China	6.1	1.2	9.2
India	4.2	1.9	7.4
ASEAN-5	4.8	-0.6	7.8
Emerging and Developing Europe	2.1	-5.2	4.2
Russia	1.3	-5.5	3.5
Latin America and the Caribbean	0.1	-5.2	3.4
Brazil	1.1	-5.3	2.9
Mexico	-0.1	-6.6	3.0
Middle East and Central Asia	1.2	-2.8	4.0
Saudi Arabia	0.3	-2.3	2.9
Sub-Saharan Africa	3.1	-1.6	4.1
Nigeria	2.2	-3.4	2.4
South Africa	0.2	-5.8	4.0
Low-Income Developing Countries	5.1	0.4	5.6

Source: IMF, *World Economic Outlook*, April 2020

You have all been following the daily media coverage of the crisis. Lots of opinions, many misleading, a lot inaccurate and that's just our medical experts and political leaders.

The simple truth, four months into this crisis, is that we are still unsure of the nature of this virus let alone how it will develop over coming months. Having been mostly affecting older people with pre existing health conditions, there are new cases emerging among young children that look like they could be in some way associated with the virus.

**Containment will likely impact the economy more than case count; Severity of COVID-19 containment measures imposed**



Estimates of the financial impact globally range anywhere from US\$3T to a whopping \$20Trillion. With a global GDP of around US\$87T going into this crisis the fall in global GDP even at the lower number is huge and remember the longer we stay immobilised the worse it will get.

Our best guess and median estimates fall in a range of US\$5-7 Trillion and that assumes that lockdowns end by mid-year.

This scale of impact is unprecedented in Peace Time and dwarfs the financial crisis of 2008. Not only will companies fail but whole industries might never fully recover and many will look very different to how they did just three months ago.

Unemployment is at levels not seen since the Great Depression, reported numbers from Asia are never clear but there may be over 200 million people unemployed globally as a consequence of Sars-Cov 2. US unemployment is now at nearly 15% (25M) and rising. Estimates of China's workforce impact vary to as high as 80 million of the 800 million or so workers. The picture is the same everywhere and it is almost certain that many of these jobs will be lost forever.

We should also remember that this pandemic struck at a time of already considerable uncertainty for the global economy. US trade tensions – with everyone not just China, a no deal hard Brexit, growing global credit concerns, persistent low or negative interest rates from the 2008 crisis, a slowing China, slowing Germany, the EU in disarray, sadly all of this when the majority of healthcare systems around the world are underfunded and unprepared for a pandemic shock of this nature, even lacking basic PPE Inventories.

Ironically, all of this despite a pandemic risk being one of the greatest fears of the establishment elite that gathers at Davos each year. Walking the talk will be the new challenge for political leaders.

Along the way we have picked up an oil markets crisis, amplified by OPEC's own incompetence.

On the positives, there are some. The fiscal policy response by governments has been huge. Over US\$10T globally, with the US leading the way as usual and the EU hesitant as usual, disagreeing and disappointing. Huge corporate and sovereign bailouts will be necessary. Moral hazard will again be evident and future taxpayer's money will be used yet again to bail out wealthy shareholders. Indeed, how much of this stimulus gets into the real economy and not into stock market portfolios is another question.

Some countries will do better than others. The US is agile and has already committed to serious stimulus. The IMF forecasts the US recovery in 2021 at 4.7% - the same as the Euro area - after contractions of 5.9% and 7.5% respectively in 2020, against forecasts for global growth of 5.8% in 2021 overall. Only China (1.2%) and India (1.9%) will show positive GDP growth this year, with China bouncing back to 9.2% in 2021.

The EU region is of great concern, a no deal Brexit is looking increasingly likely and the usual bickerings over money will only get louder as the crisis deepens. It will test EU Members' commitment to the Union.

So in summary of the economics and markets outlook, things are very, very bad and will likely get a lot worse before they get any better. And this excludes a 2<sup>nd</sup> wave of further mortality as we move out of lockdown too soon.

On the positives, Governments can print money and let their successors figure out the challenges later. At near zero interest rates there are options for creative financing. Long dated Government bonds or even perpetual ones at historically low rates that pushes financing the cost of this crisis into the future.

What indicators should we be following?

- a) The timing of the **end of lockdowns** and their phased recoveries – every day piles on further pressure,
- b) The rate of change of **unemployment** once economies are released again, we should expect big falls in unemployment.
- c) Escalating **credit default risks** along the way, there will be. If the banking system starts choking up there will be déjà vu
- d) **Consumer confidence indicators** – these are expected to remain weak and flat line for a good while into the future, expect very little from normalised spending. There will be pent up demand but any sustained bounce will be good news.
- e) Governments will accumulate fiscal deficits of immense proportions, the US perhaps US\$5.00 Trillion the UK possibly as high as US\$400B. **Taxes** will have to rise for companies and individuals. Policy makers will initially adjust their tax take to stop these deficits from growing but in time they will need to put measures in place to reduce them. Austerity is on its way back after this spending spree.
- f) **Deflation. Perhaps the greatest risk to policy makers** but price deflation is absolutely necessary in a world of collapsing demand.



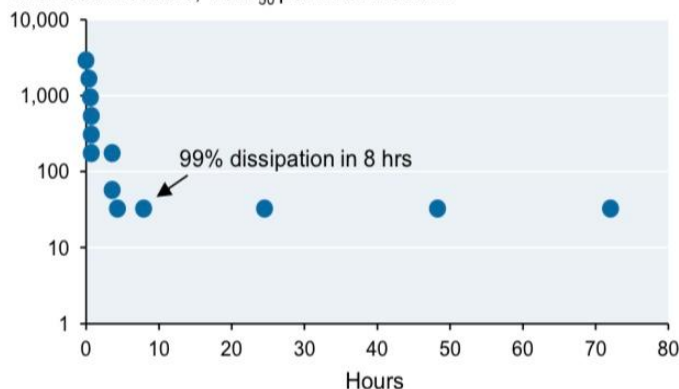
## The Virus and developing technologies

There is an old saying that a temporary shock is finding out that your mother in law is coming to dinner, a permanent shock is finding out that she is coming to stay.

My guess is she is coming to stay for a while, maybe not forever but for some time.

### Decay of SARS-CoV-2 on Copper

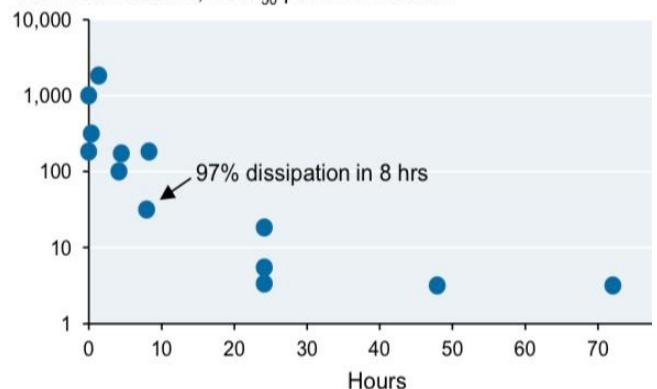
Viral load measure, TCID<sub>50</sub> per ml of medium



Source: van Doremalen et al, National Institutes of Health. 2020.

### Decay of SARS-CoV-2 on Cardboard

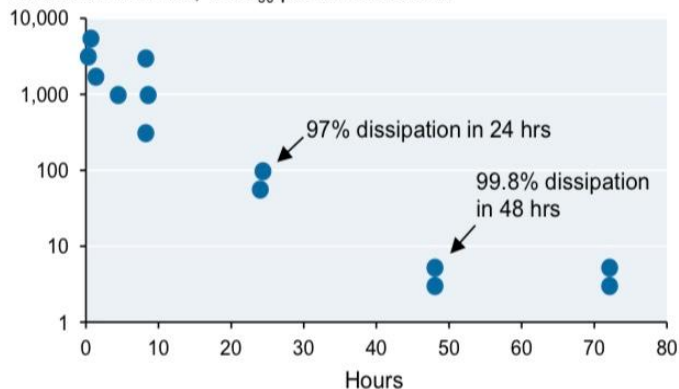
Viral load measure, TCID<sub>50</sub> per ml of medium



Source: van Doremalen et al, National Institutes of Health. 2020.

### Decay of SARS-CoV-2 on Stainless Steel

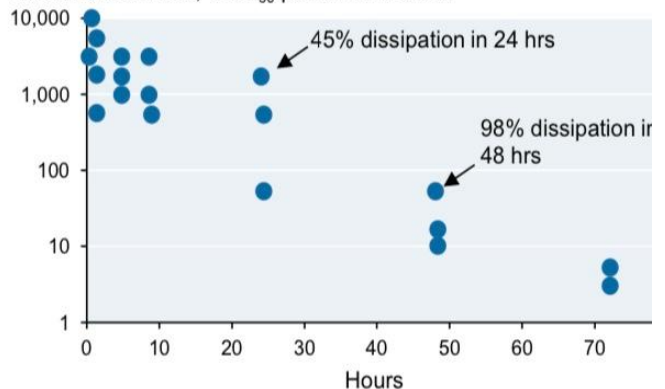
Viral load measure, TCID<sub>50</sub> per ml of medium



Source: van Doremalen et al, National Institutes of Health. 2020.

### Decay of SARS-CoV-2 on Plastic

Viral load measure, TCID<sub>50</sub> per ml of medium



Source: van Doremalen et al, National Institutes of Health. 2020.

Let me quickly comment on our current thinking and information on the virus itself, everyone is an expert these days:

With diseases medical professionals worry about contagion risk measured by its R0 and mortality risk. This chart shows diseases and their R0s and mortality. Covid19 currently sits somewhere in the bottom left, we simply do not know

enough about it at this stage and it is changing. On the face of it, not as scary as others, but it is developing. The latest analysis from Los Alamos in the US suggests that a deadlier dominant strain is emerging (Type D614G) and the reality is that it will keep changing, understanding its new host better and improving - this is what viruses do. It is constantly looking for better ways to bind itself to cell surface receptors like ACE-2 so that it can enter cells and replicate itself. If true it will take it upwards and rightwards on this chart.

To compound our challenge the virus can survive airborne - epidemiologists' worst fear and public health officials' nightmare. At 4C it seems to be able to survive a long time, at 25C about 5 days, 35C 1-2 days and at 56C about 30minutes. As you can see it can survive on surfaces - on plastic for 48hrs (98% dissipation), cardboard 8hrs (97% dissipation) and stainless steel 24hrs (97% dissipation).

While we hope for an effective vaccine, it is unlikely that it will be completely effective and may look like the Winter Flu vaccine that we have become accustomed to. Herd immunity is some way off.

### **So what can be done to help to normalise life with a focus on the Hospitality Sector and the Built Environment?**

Everyone is working on some form of bio-security system, technology or feature to recover their business models and make them resilient and more sustainable to these threats in the future.

Old technologies are being dusted down but a highly infectious, high--mortality rate, bacterial or viral, human-transmitted disease is the sum of all fears for human societies living in limited spaces. How we live, socialise, enjoy our down time is under threat.

Like you I have read plans for companies to move desks in offices or tables in restaurants further apart, or take out the middle seats on economy air travel, I see plans to use body heat scanners that will go off every time someone comes into a building from jogging or has been sitting in the sun. I have seen plans to build complex UV drones to clean your offices or hospital wards. The lists are endless.

Technology will help and I will talk to a few things that we are developing ourselves but I must stress that ultimately human behaviours will determine how quickly we can come to terms with living with continuous pandemic risks. Cleanliness, hygiene, personal fitness, and the very vulnerable will self isolate to a



smaller circle of family or friends. Not only will we as individuals worry about our own hygiene but we will scrutinise the hygiene of others.

On specific technologies we favour the following usual risk management approach: Prevention, Detection, Remediation

We are already working on a smart solution that has at its core a rapid pathogen-testing device. We are just putting the finishing touches on the ecosystem and will share with you in due course. When ready it will allow the hospitality business to get back to normality more safely, faster and without necessarily disrupting or even changing their business models. It will act as a new health transport with multiple applications.

We plan to use the already tested device at the core of this system to manage pathogen risks entering into the built space via people and to detect it if it comes in from the outside air.

Hand sanitiser fluid was the first thing we actually ran out of, not toilet paper! We see a world of hand sanitiser dispensers readily available everywhere. We are already working with a company in this field and have designed in a smart data system around it.

On the remediation front there are new technologies emerging and several older ones that will be effective. Coronaviruses are susceptible to heat and UV light they can also be destroyed by chemicals or even simple soap as we know, as the outer layer of the virus consists of (phospholipids) molecules that look very much like soap. Harsher chemicals obviously work but these have to be used with a full understanding of any residual or inconsequential risks.

So we can fight back and we are doing so.

### **So in summary:**

Be prepared for a long shallow U shaped return to normality. At times it will feel like an L shaped event but things will pick up. But it will take time.

For your own hospitality industry, understand a number of things:

- 1) International travel is going to be very slow to return to normal. Several airlines will not survive and existing business models may not be able to adapt quickly enough to stay profitable. They will all need to take on extra debt burden and the headwinds will be very challenging.

- 2) That this virus, like many others, has hit older people much harder, the baby boomers that up until last year had deep pockets, a willingness to spend on luxury travel, time to do it and a newfound desire to do exactly that. They are depleted in number, will be fearful or at the least cautious and will change their calculus when thinking about non-essential travel. Super luxury (private jets/transfers), more domestic vacations may grow.
- 3) Also understand that business leaders have seen a new way of working with less risk. Some of staff working from home, travelling less and using technology platforms to communicate. A chunk of airline business class revenues may have permanently flowed to teleconferencing platforms. Nearly every lost business trip is a lost stay at a hotel.

The full scale of the impact on human behaviours let alone the financial costs will remain uncertain. It is the complexity and concurrency of the crisis that is overcoming decision makers.

Perhaps the single biggest challenge that we will face is the psychological one; overcoming fear regaining confidence, bringing people together again and returning to some normality.

But let me end on a note of hope. Time heals. Economies will bounce back, the general forecasts for next year is for a healthy bounce, humans adapt, technologies will help and experience tells us we have short memories and forget. Wars, plagues, the Spanish flu have all come and gone and society adapted. Humans by nature are gregarious - I suspect that our will to return to normal will win in the end it will just take time.

So long as our political leaders are sensible and begin to work together instead of apportioning blame we will overcome this.

Thank you.