

INSURANCE
INVESTMENT
EXCHANGE

Covid-19:
Cutting through
the Noise

*Weekly Summary
and Update*

Dr Bob Swarup

As of 15 April 2020

www.insuranceinvestmentexchange.com

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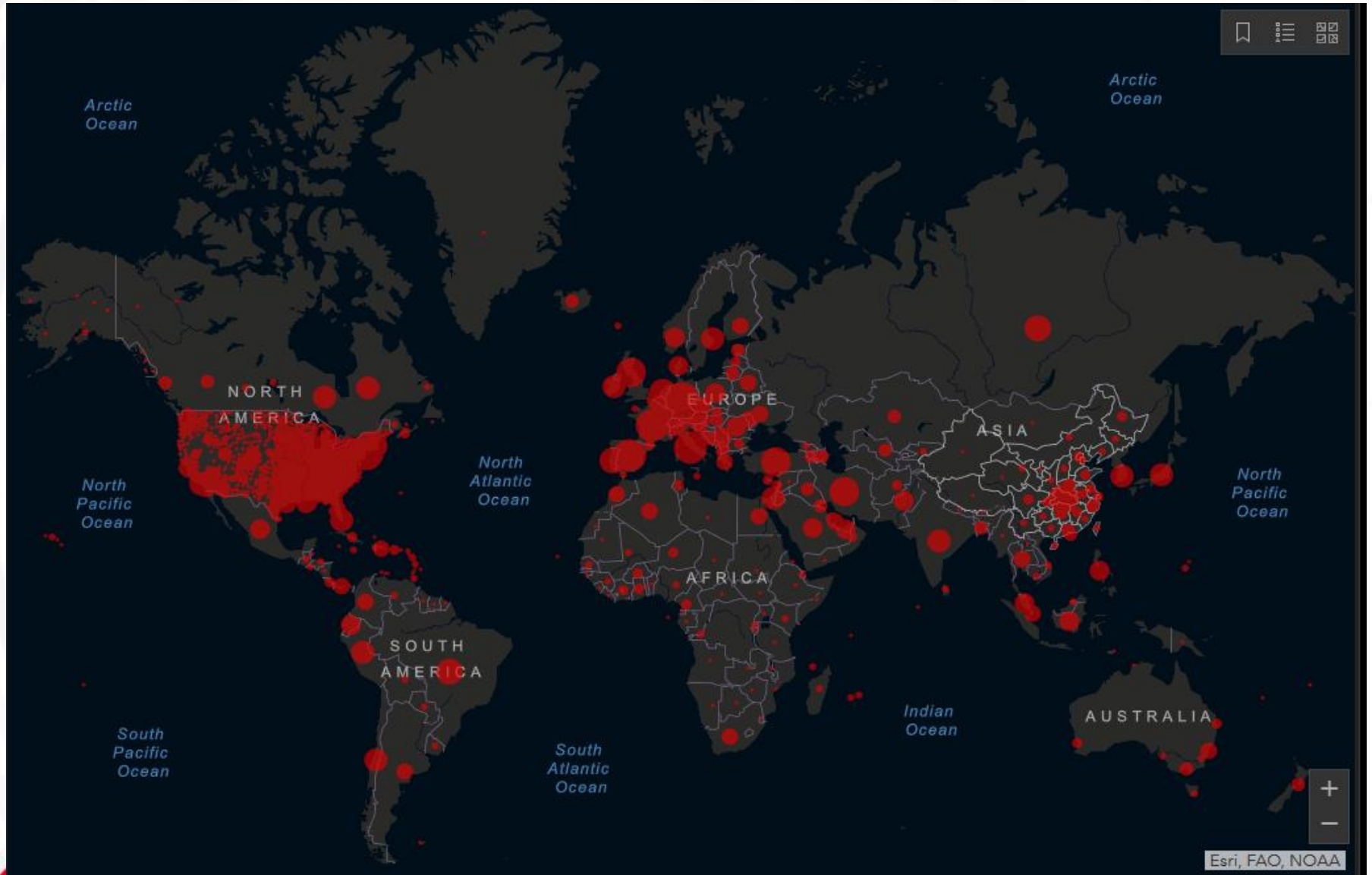
Slide 40



The background of the slide is a light gray color with a subtle, abstract graphic. It features a globe on the left side, partially obscured by several concentric, semi-transparent circles that radiate from the center. To the right of the globe, there is a network diagram consisting of several nodes (circles) connected by thin lines, suggesting a global or interconnected theme. The overall aesthetic is clean and modern, typical of a professional presentation.

COVID-19: KEY EPIDEMIOLOGICAL TRENDS

A global pandemic



Source: JHU CSSE

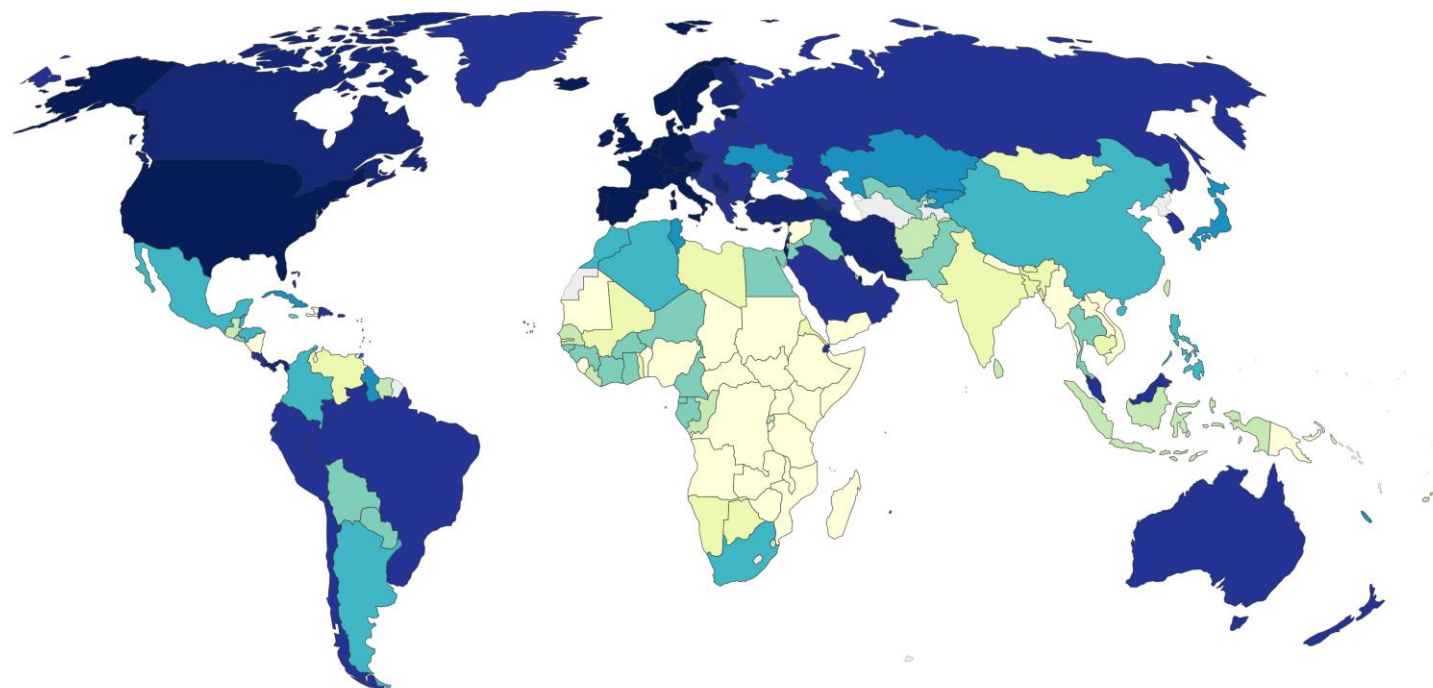
Concentrated in the developed world seemingly these days, but data is also very patchy...

Cases per million indicate more below the radar

Confirmed COVID-19 cases per million people, Apr 15, 2020

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.

Our World
in Data

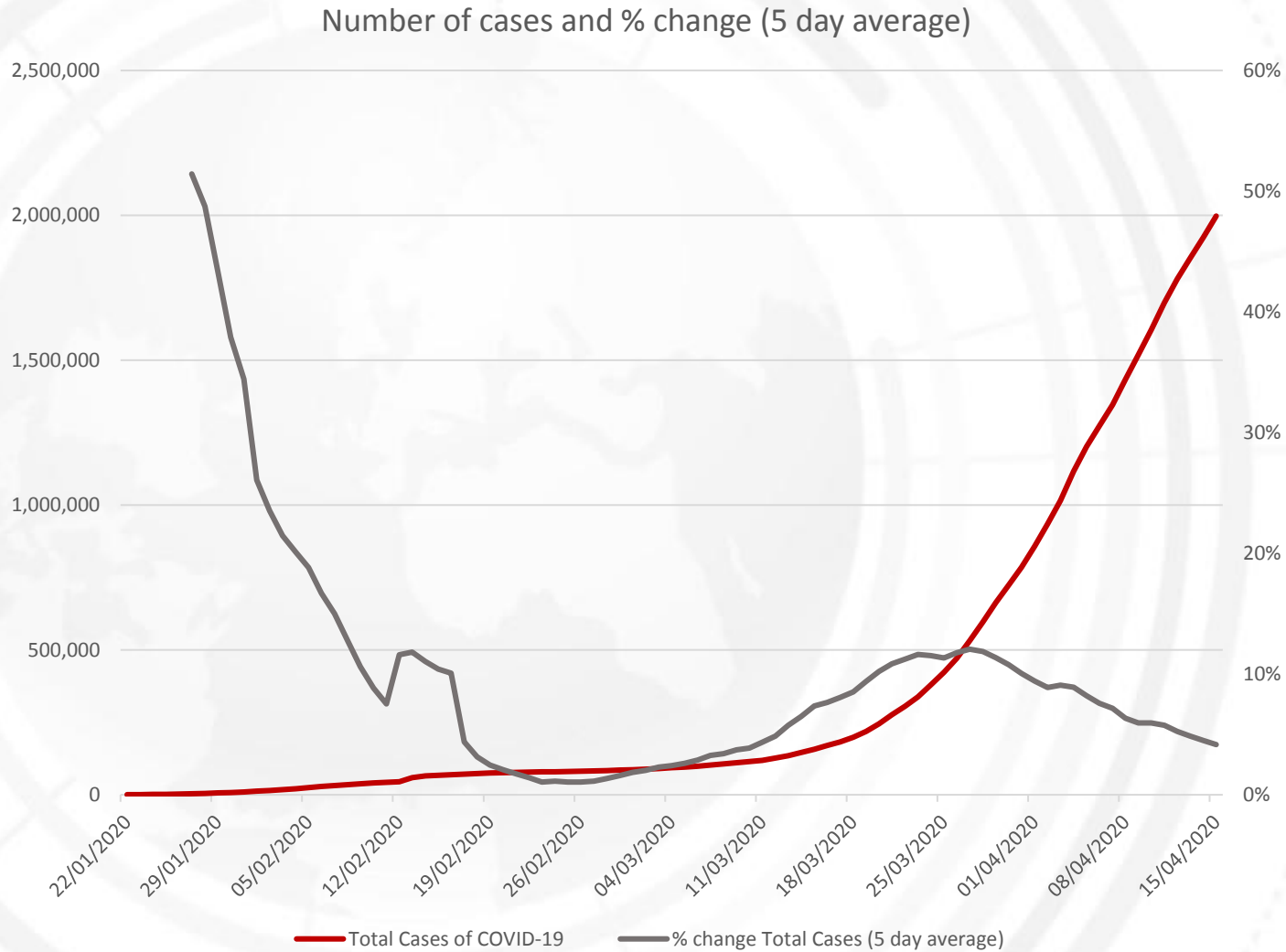


Source: European CDC - Situation Update Worldwide - Last updated 15th April, 11:15 (London time)

OurWorldInData.org/coronavirus • CC BY

South America, Russia and the Middle East are troubling, while others are emerging.

Cases are growing but the rate has slowed...

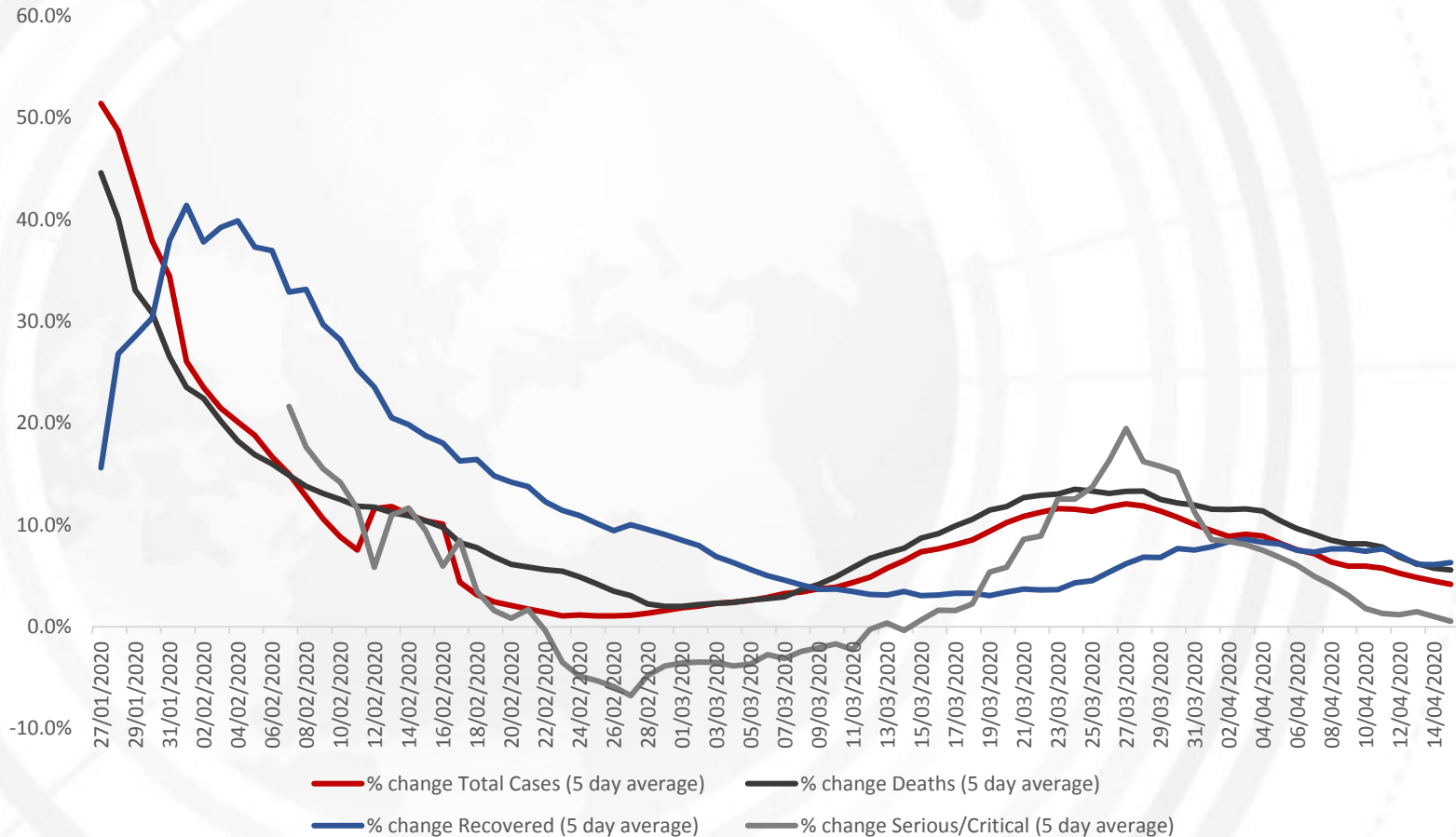


Source: WHO, Camdor Global

...with the 5 day moving average indicating peak growth 3 weeks ago

A deceleration trend is emerging

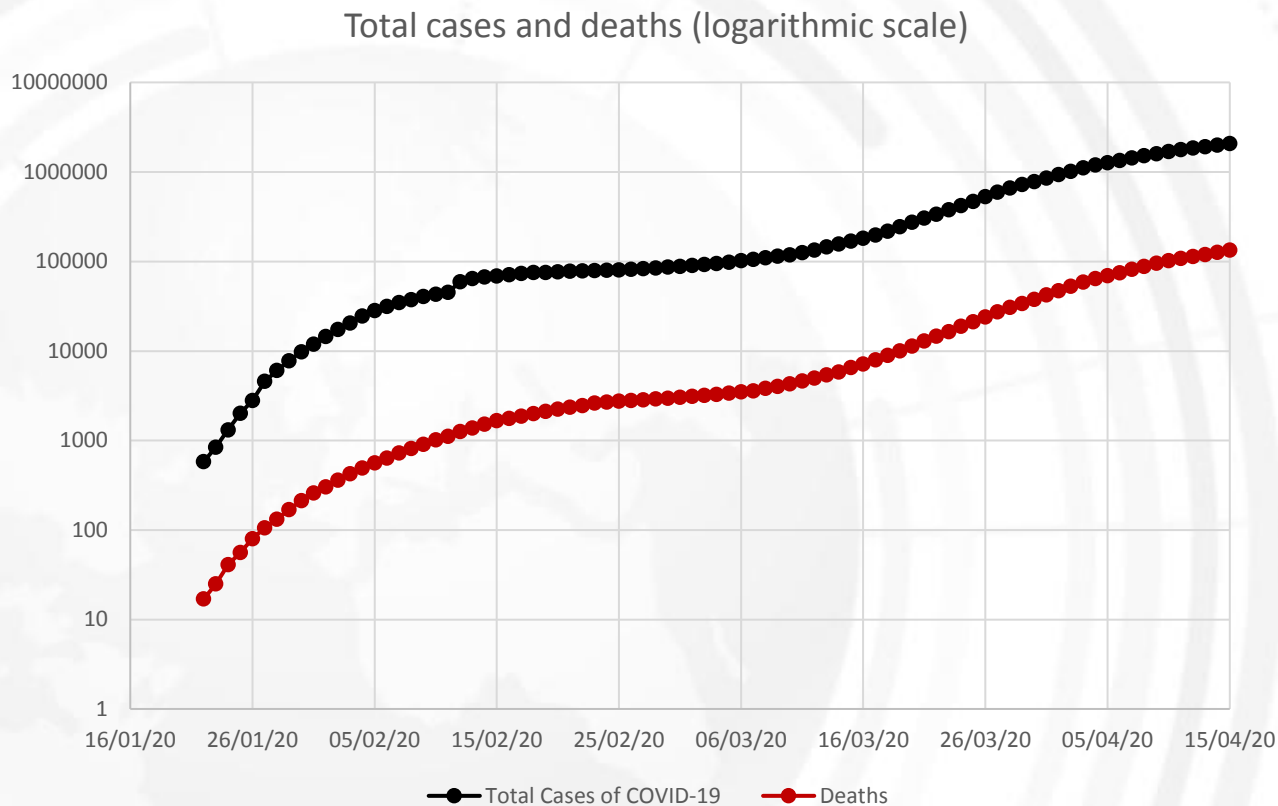
Moving Average for Covid-19 cases, deaths, serious / critical and recovered (% Change, 5 day Average)



Source: WHO, Camdor Global

Acceleration in serious cases appears to have peaked c. 27th March, with a tapering in the growth of deaths since

The overall trend, however, remains one of growth



Source: WHO, Camdor Global

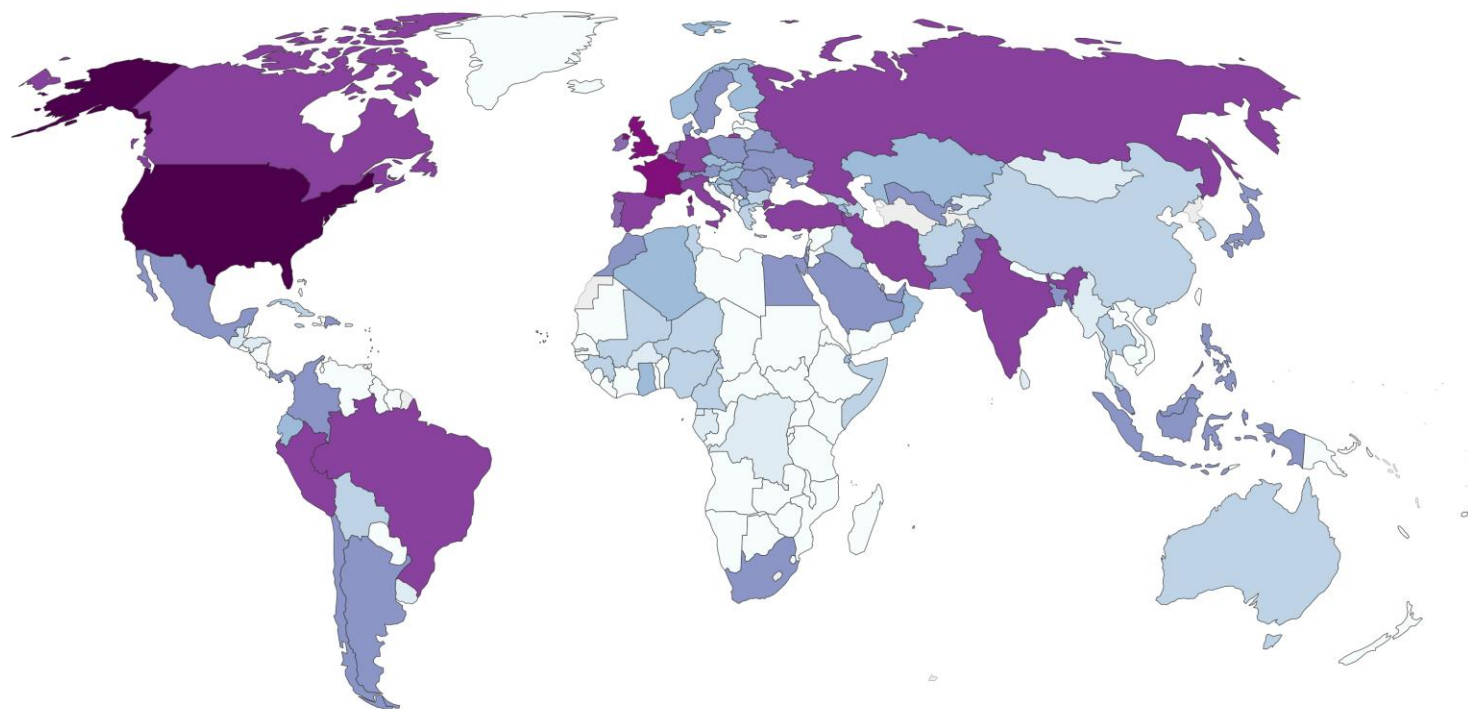
- Slope of logarithmic plot indicates only the beginning of the end
- More worryingly, the lull in the middle indicates that there was a second wave of new infections and deaths as new geographic clusters emerged.
- Significant underreporting of cases / deaths outside of hospitals coupled with a lag in scaling up testing and new emerging hotspots mean a new lease of life cannot be ruled out.
- Where are the next hotspots or are we truly getting a handle on this?

Growth in new cases no longer a Europe/US story

Daily new confirmed COVID-19 cases, Apr 15, 2020

The number of confirmed cases is lower than the number of total cases. The main reason for this is limited testing.

Our World
in Data



Source: European CDC - Situation Update Worldwide - Last updated 15th April, 11:15 (London time)

OurWorldInData.org/coronavirus • CC BY

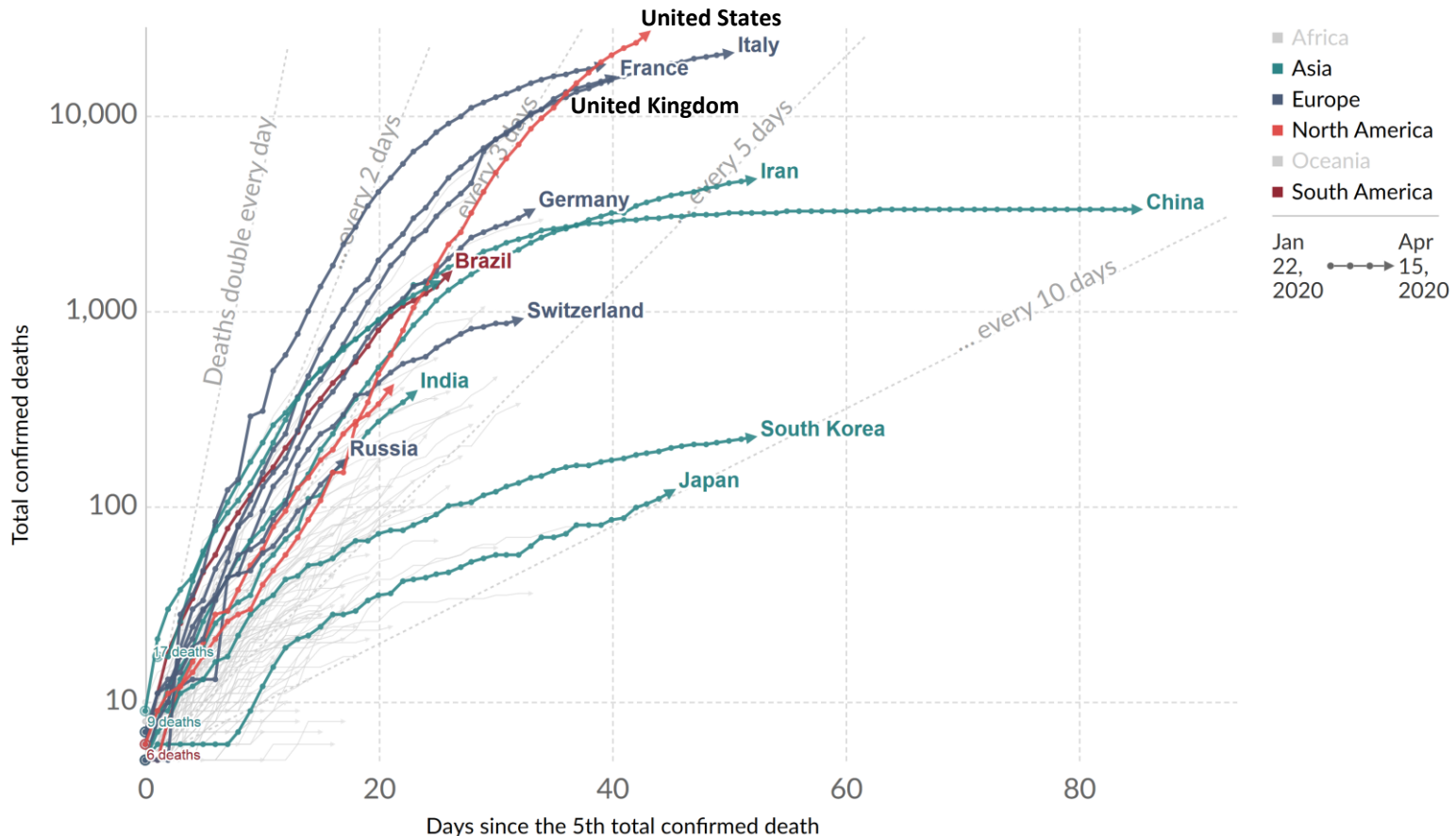
Brazil, Russia, India and Turkey are emerging as new potential hotspots.

Deaths are doubling c. 7-9 days currently

Confirmed COVID-19 deaths

Our World
in Data

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: European CDC – Situation Update Worldwide – Last updated 15th April, 11:15 (London time)

OurWorldInData.org/coronavirus • CC BY

- US has a steeper trajectory still, indicating it is about a week behind
- UK is hugging the same trajectory as Italy

The US is the epicentre now, with Europe tapering

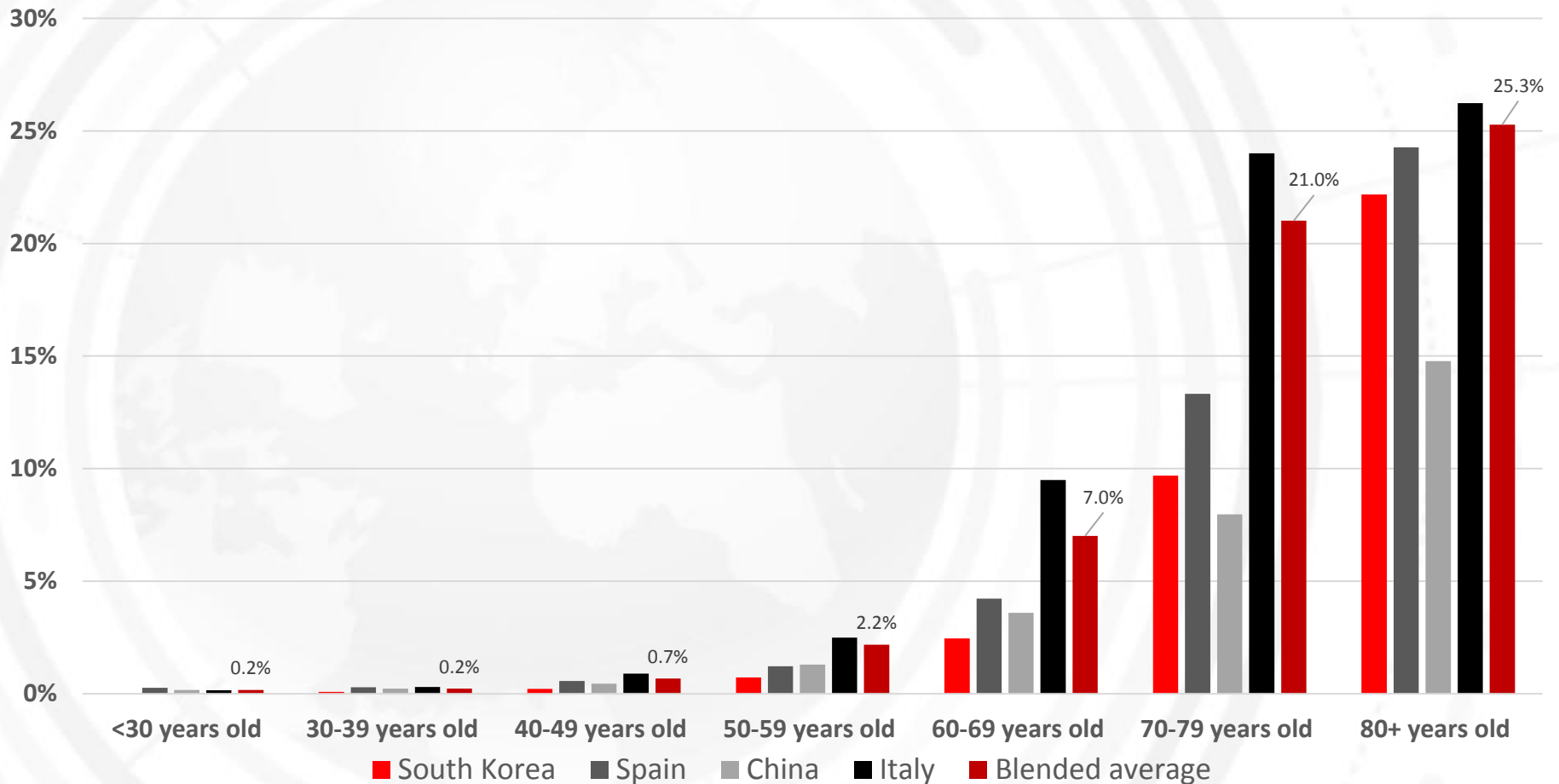
Country	Cases	Deaths	Region	Case per mn	Deaths per mn
USA	644,348	28,554	North America	1,947	86
Italy	165,155	21,645	Europe	2,732	358
Spain	180,659	18,812	Europe	3,864	402
France	147,863	17,167	Europe	2,265	263
UK	98,476	12,868	Europe	1,451	190
Iran	76,389	4,777	Asia	909	57
Belgium	33,573	4,440	Europe	2,897	383
Germany	134,753	3,804	Europe	1,608	45
China	82,341	3,342	Asia	57	2
Netherlands	28,153	3,134	Europe	1,643	183
Global	2,083,913	134,657		267	17.3

Source: Worldometers

... but cases and deaths per mn indicate there is still some way to go for the US and UK.

Death rates are bad for over 60s...

Fatality rate by age group for different geographies

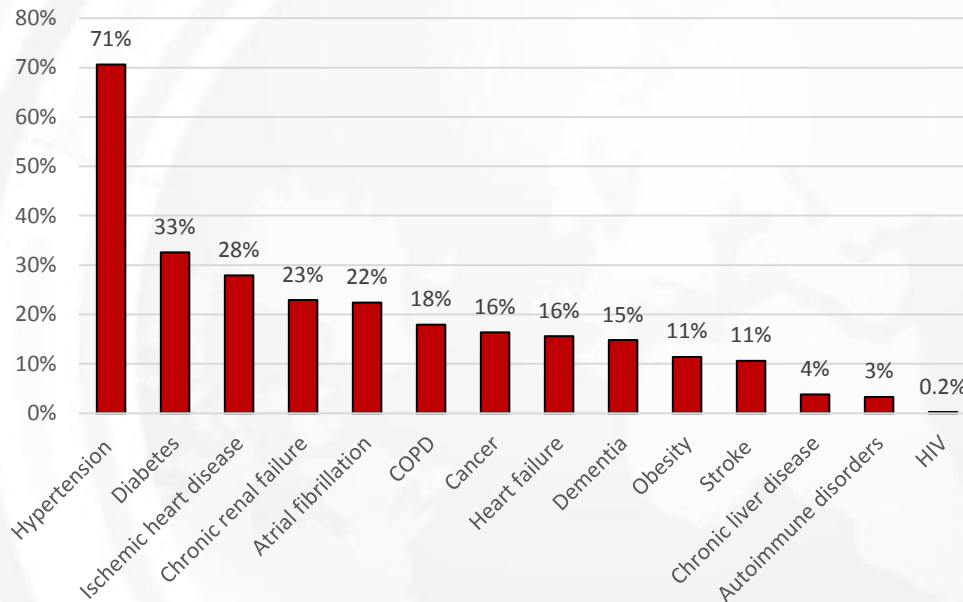


Source: Camdor Global (based on various government sources)

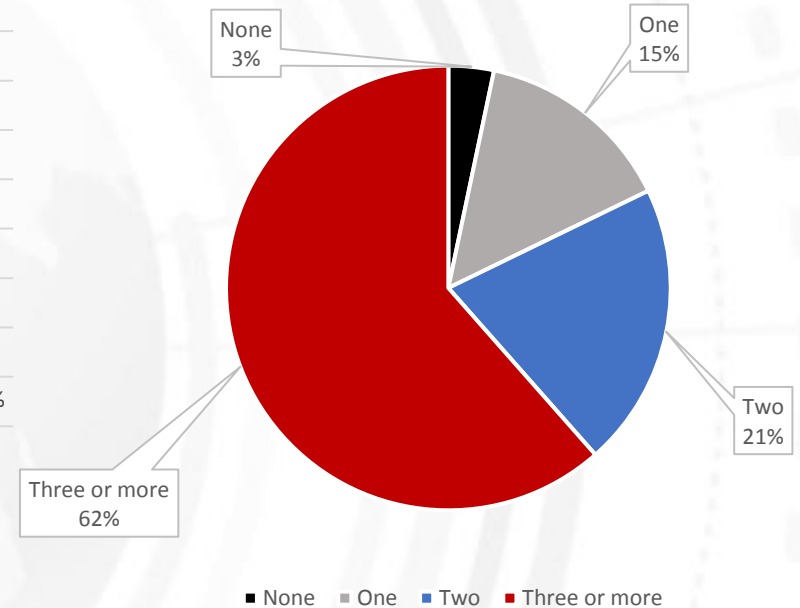
... implying countries with significant old age populations will be hard hit, viz. Italy. The Chinese data also appears to be an outlier.

Understanding the pattern of mortalities...

Most common underlying health conditions observed in diseased Covid patients (Italian sample of 1,596 hospitalisations, %)



Number of underlying health conditions in deceased Covid patients (Italian sample of 1,596 hospitalisations, %)



Source: Camdor Global based on Italian govt data

- We examine recent Italian analysis, which indicates that for hospitalised patients, cardiovascular diseases and diabetes in particular stand out as significant risk factors.
- Having multiple underlying conditions significantly increases risk as well.
- But 3% had no underlying conditions, which indicates an aggressive viral disease

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COVID-19: REAL ECONOMY IMPACT

The impact on global travel remains dramatic



Global Scheduled Flights Change year-over-year

Week compared with equivalent week in previous year i.e.
Monday 6 January 2020 vs. Monday 7 January 2019.

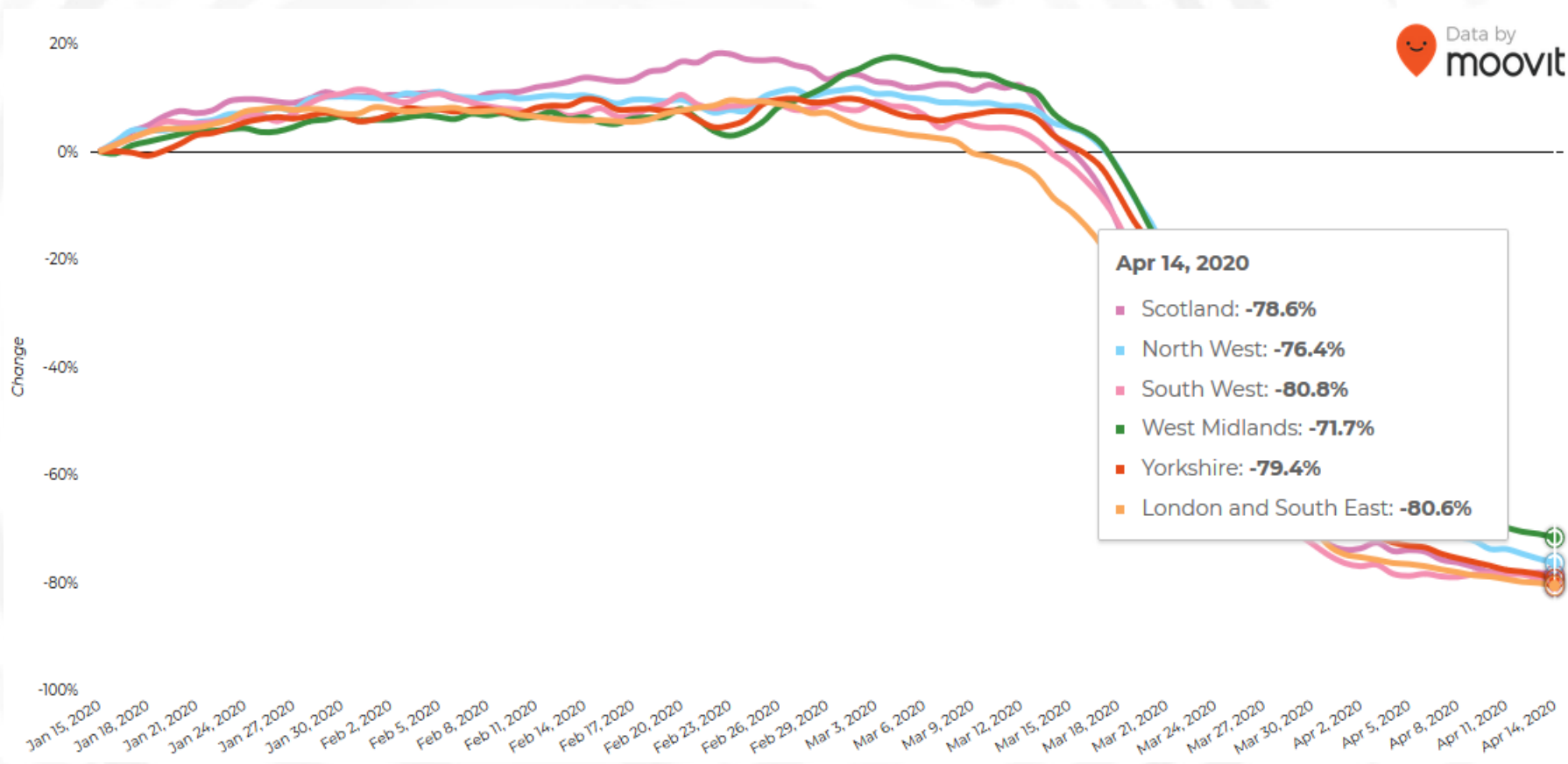
Region	6 Jan	13 Jan	20 Jan	27 Jan	3 Feb	10 Feb	17 Feb	24 Feb	2 Mar	9 Mar	16 Mar	23 Mar	30 Mar	6 Apr	13 Apr
ALL	1.5%	1.3%	0.5%	0.2%	-3.6%	-9.9%	-10.7%	-10.1%	-7.9%	-10.1%	-12.4%	-28.7%	-47.7%	-59.2%	-64.1%
Germany	-8.6%	-8.8%	-8.4%	-8.5%	-7.9%	-8.0%	-6.6%	-5.1%	-5.0%	-15.4%	-30.2%	-71.9%	-88.6%	-92.6%	-92.5%
Spain	-1.1%	-4.6%	-4.8%	-4.5%	-3.8%	-2.5%	0.6%	-1.6%	-1.4%	-2.9%	-13.7%	-74.3%	-88.5%	-92.6%	-94.2%
Hong Kong	-11.3%	-10.8%	-8.0%	-8.7%	-20.6%	-44.7%	-57.7%	-63.3%	-70.4%	-77.5%	-80.8%	-81.7%	-88.3%	-92.3%	-94.2%
UK	-1.8%	-4.1%	-4.2%	-5.1%	-4.3%	-4.0%	-3.0%	-1.9%	-2.7%	-15.5%	-19.3%	-53.5%	-75.6%	-90.7%	-92.0%
Singapore	-1.1%	-0.1%	1.2%	-0.3%	-8.2%	-15.4%	-18.5%	-22.4%	-25.4%	-35.7%	-35.5%	-76.9%	-90.8%	-89.9%	-92.5%
Italy	0.8%	-5.0%	-4.2%	-4.8%	-4.3%	-3.5%	-2.8%	-6.2%	-8.8%	-21.6%	-73.9%	-88.0%	-89.2%	-89.0%	-92.2%
France	1.4%	-1.5%	-1.9%	-1.3%	-0.3%	0.6%	1.7%	-0.5%	-2.0%	-3.8%	-13.7%	-41.3%	-81.4%	-87.0%	-92.1%
UAE	-2.4%	-1.4%	-1.8%	-2.1%	-1.9%	-3.3%	-3.5%	-3.3%	-2.9%	-8.3%	-24.4%	-57.6%	-85.8%	-84.4%	-78.2%
Sweden	-13.8%	-8.5%	-7.8%	-7.0%	-5.7%	-5.4%	-6.4%	-4.9%	-4.8%	-6.4%	-14.1%	-65.3%	-77.1%	-84.2%	-83.7%
Australia	-3.4%	-3.4%	-3.2%	-3.9%	-3.6%	-5.0%	-1.7%	-2.5%	-1.7%	-2.3%	-2.9%	-15.9%	-63.1%	-78.1%	-84.6%
India	2.9%	2.8%	1.6%	1.2%	1.9%	6.2%	10.8%	6.7%	9.9%	10.0%	8.3%	1.8%	-68.0%	-71.1%	-53.2%
South Korea	1.8%	2.1%	3.4%	1.4%	-3.4%	-9.3%	-15.7%	-17.9%	-34.1%	-52.1%	-56.1%	-55.7%	-56.6%	-59.3%	-60.4%
China	7.8%	8.8%	1.6%	-0.5%	-22.7%	-63.3%	-70.8%	-62.3%	-41.6%	-42.9%	-38.7%	-37.5%	-43.9%	-46.2%	-42.6%
USA	1.6%	1.3%	1.5%	2.2%	1.5%	1.3%	1.5%	0.6%	-2.1%	-1.3%	-0.5%	-4.8%	-23.0%	-45.2%	-58.0%
Japan	2.6%	2.3%	2.6%	2.1%	-0.8%	-3.2%	-4.6%	-5.6%	-7.6%	-15.0%	-19.2%	-24.3%	-27.9%	-32.0%	-40.1%

Source: Schedules Analyser

Source: OAG Aviation Worldwide

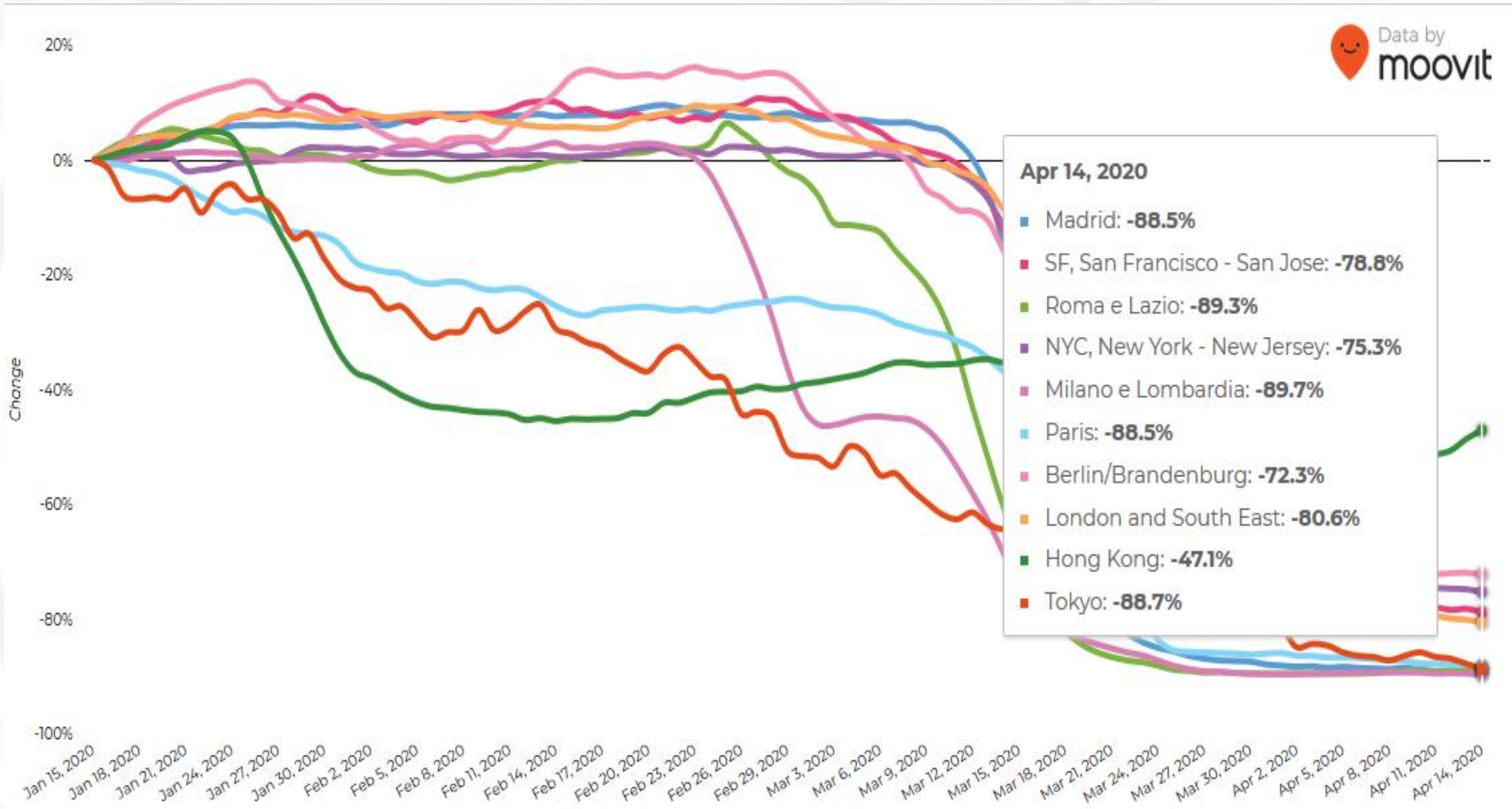
- Scheduled flights globally now down by 64% year on year, with the UK down 92% yoy.
- Lockdowns, restrictions and worries about imported infections continue to weigh.
- Worth noting in China, travel has been slow to resume and domestic airline seats are now being subsidised to encourage travel

Public transit usage down sharply but levelling



Source: Moovit – www.moovit.com

...but some gentle hints of reversion in Hong Kong



Source: Moovit – www.moovit.com

Global PMI shows significant deterioration...

Global PMI* output & economic growth



Sources: IHS Markit, JPMorgan.

* PMI shown above is a GDP-weighted average of the survey manufacturing and services indices.

Global PMI output indices



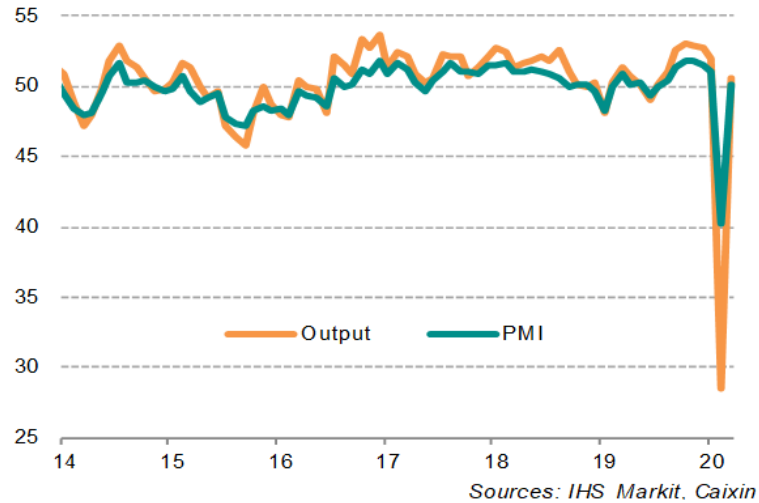
Sources: IHS Markit, JPMorgan.

- Second month of deterioration. Worst set of readings since the financial crisis, and indicating a worsening economic contraction, with GDP set to follow.
- Services decline worst ever in survey's history. China's experience implies no rapid rebound.
- But results also masked by delivery delays. Under PMI methodology, delays are a positive contributor as they imply increased demand and a backlog of orders.
- Instead, here delays indicate stress in the supply chain - factory closures, Covid related restrictions, input shortages etc.
- Worst reading for delivery times since 2004, but that was due to a boom, not a shutdown!

...But China's bouncing back?

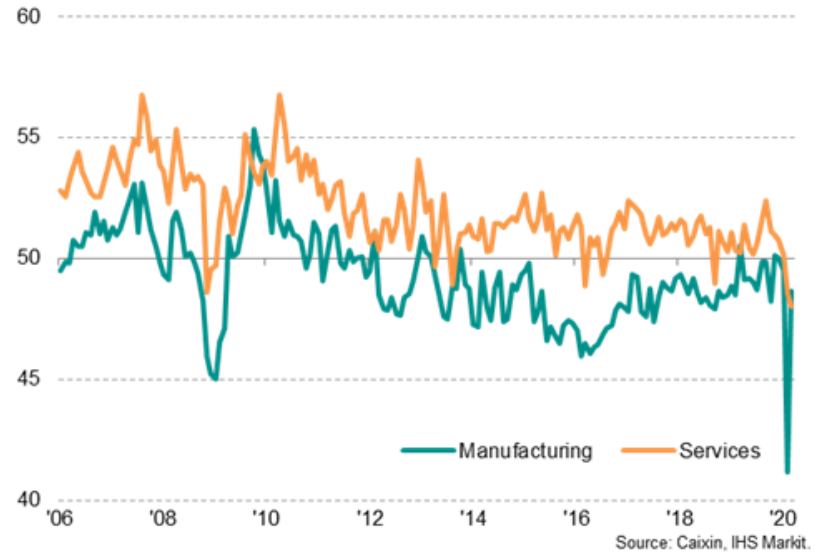
Caixin PMI signals output has stabilised as industrial firms start to resume work

Caixin China manufacturing PMI



Manufacturing and services employment

Caixin (IHS Markit) China PMI Employment

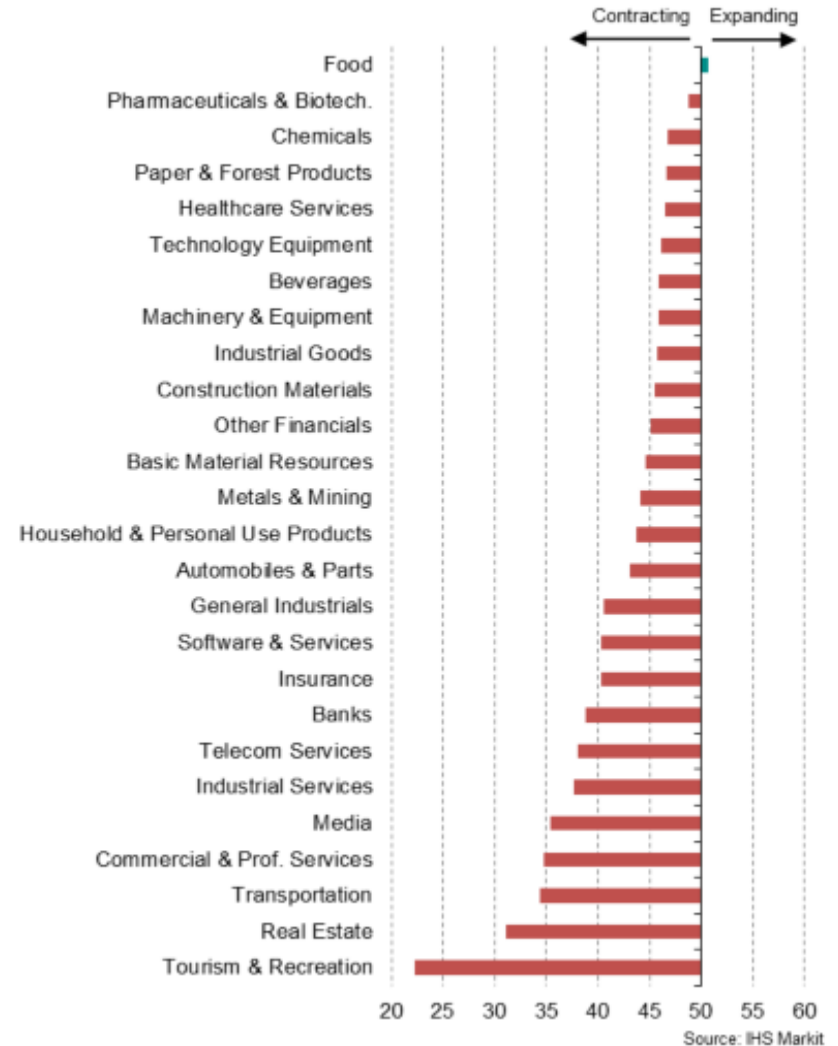


- China manufacturing PMI shows strong rebound after a record low in Feb. But this is not (yet) a recovery!
- Each PMI reading is relative to the previous, with 50 representing no change, so the rebound to 50.1 only means that they stabilised at the 'new' normal.
- Services show continued contraction, with orders shrinking and demand weakening. Price discounting has become the way for now to boost sales, coupled with lower employment to boost margins.

Where is the hit?

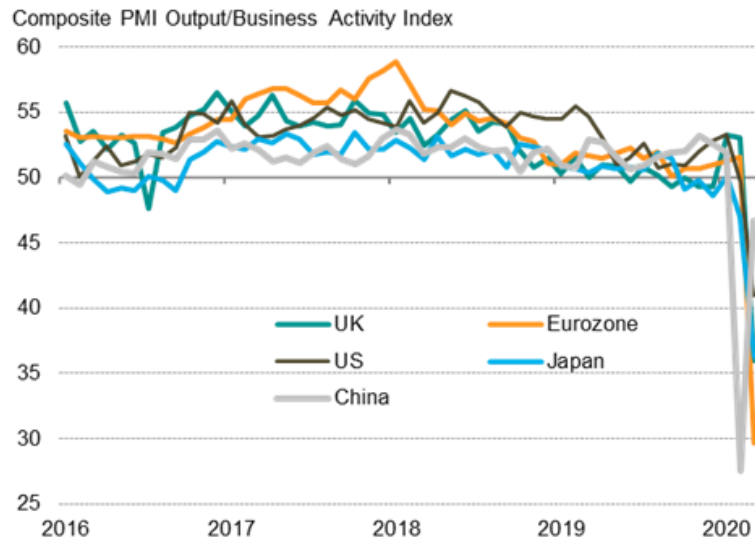
- Tourism, not surprisingly, but also real estate
- A broad based decline, implying a widespread shutdown. But also importantly some of the worst hit areas are not ones where you would expect to see a rapid recovery to pre-pandemic levels - particularly if behavioural confidence is impacted in the longer run, as people worry about re-infection and further waves.
- That does not bode well for the V-shaped recovery some are hoping for.
- It is also important to note that from the data, orders have collapsed and demand taken a cliff-edge plunge.
- The result has also been rapid cuts in employment (the largest fixed cost for most businesses) and discounting to salvage sales and margins.
- That implies lost demand and lost capacity, which will take time to rebuild, rather than instantly coming back on.

Global Sector PMI Output Index (Mar 2020)



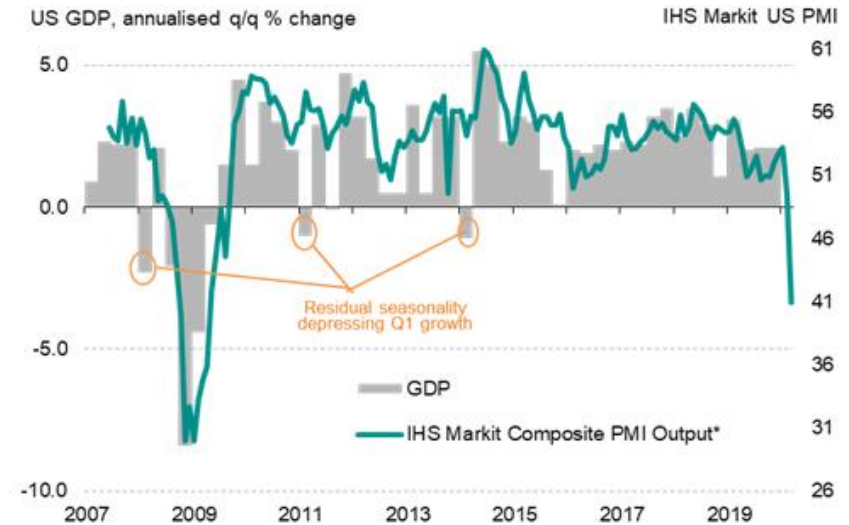
Major economies are suffering

Largest economies' output



Sources: IHS Markit, CIPS, Jibun Bank, Caixin.

US PMI and GDP



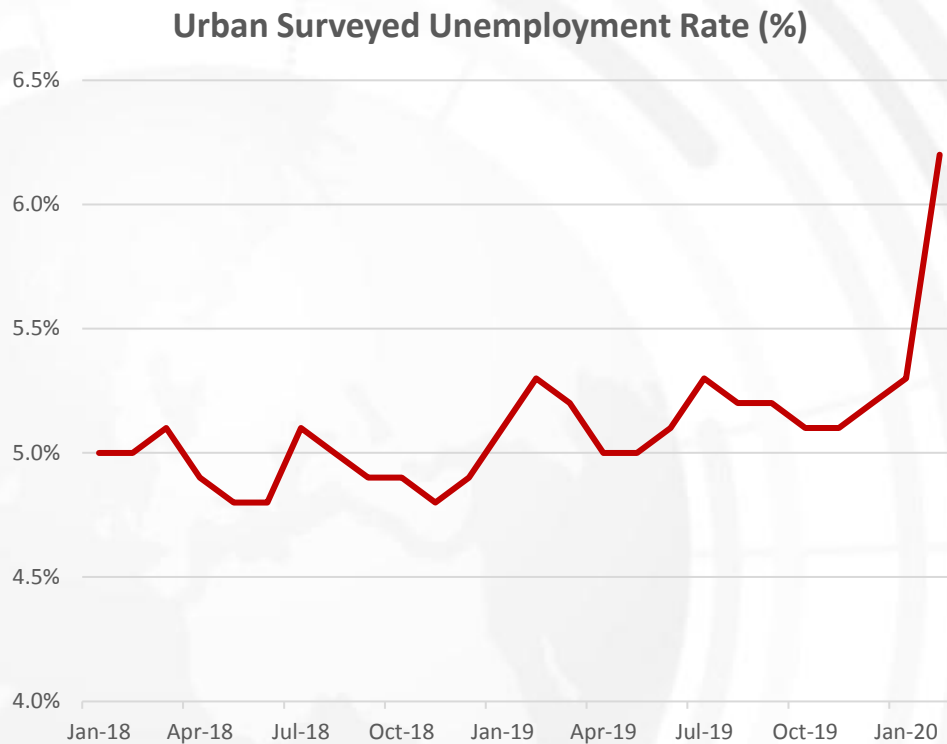
Source: IHS Markit, BEA

- The Eurozone is faring worse than the UK or US.
- But that is poor comfort – US data indicates an annualised of contraction approaching 5% in March, and may well surpass the downturn seen in 2008-09.
- Given that lockdowns began later in the UK and US, the rate of contraction has likely accelerated over April.
- Services faring worse than manufacturing is a common theme and will worsen over April. That also means a bigger problem for economies like the UK that are largely services dependent.

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COVID-19: WHAT ABOUT JOBS?

Reading Chinese tea leaves: How many job losses?

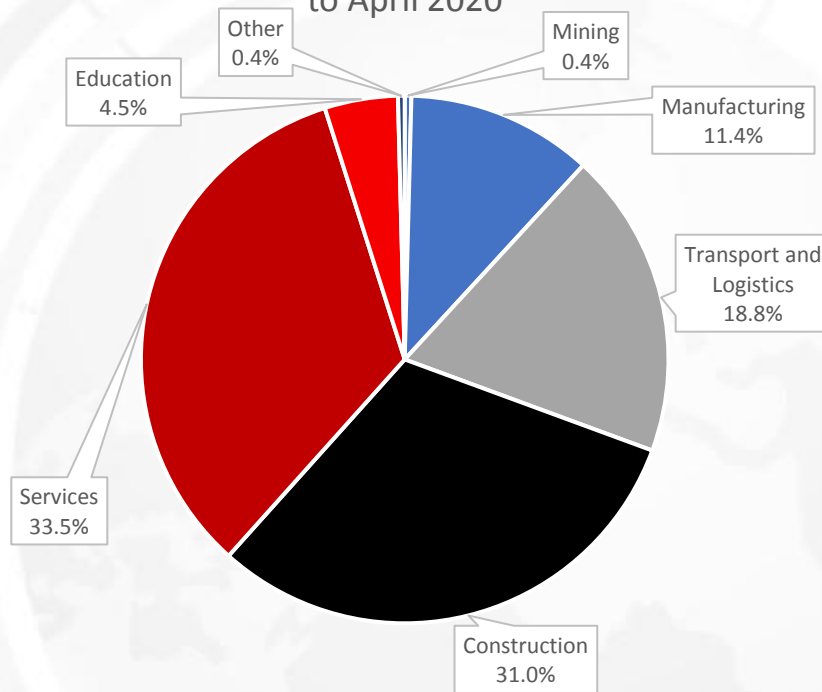


Source: NBS China

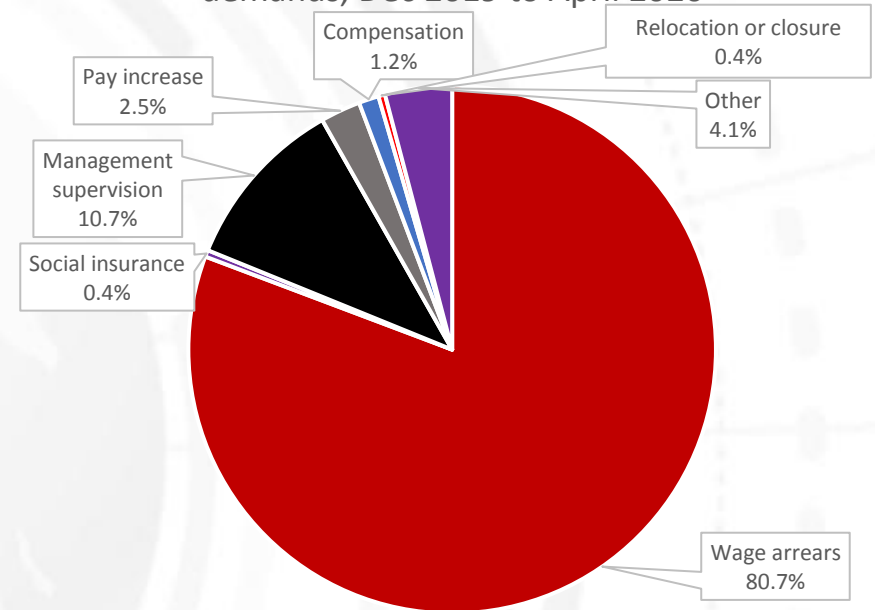
- Chinese urban unemployment was up sharply in Feb, but masks true unemployment, as it captures only circa 60% of labour force and does not include rural workers and workers in part-time or casual work.
- These are likely to be much more sensitive to the current uncertainty and impacted harder.
- Worth also noting that real Chinese unemployment in 2002-09 was estimated to be 10.9% vs an official average of only 4.2%.
- A similar spread today implies a real unemployment rate of 13% and given the shock, may even be north of 20%.

Reading Chinese tea leaves: Labour tensions

Reported Chinese strikes by industry, Dec 2019 to April 2020



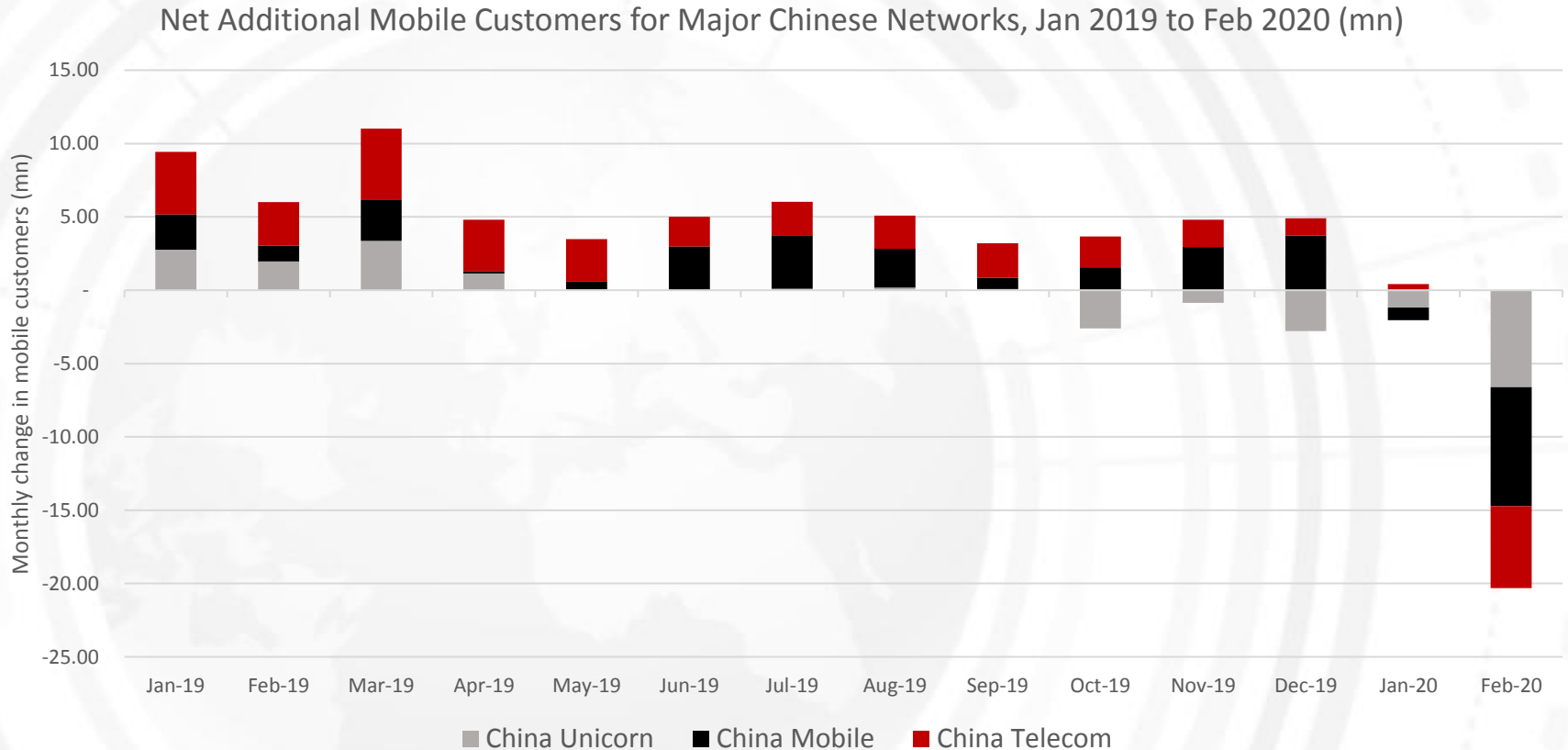
Reported Chinese strikes by employee demands, Dec 2019 to April 2020



Source: China Labour Bulletin

- Strikes have been muted in China in recent months, likely due to the lockdown, but data hints at emerging tensions.
- Strikes spread across industry, rather than focused in the construction sector as usual.
- Over 80% were focused on wage arrears, but more recently, emerging strikes demanding rent cuts and protesting fee increases (e.g. amongst taxi drivers).

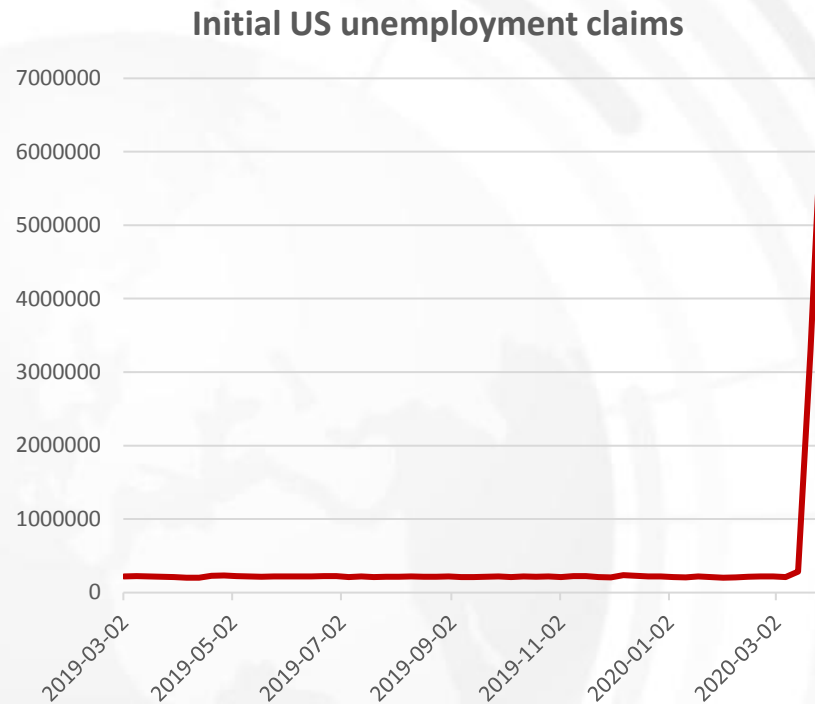
Reading Chinese tea leaves: Mobile phones



Source: Camdor Global, based on company data

- Mobile phones are essential items in China and fundamental to much economic activity.
- After sustained growth as per normal, customer numbers collapsed by almost 22mn in 2020.
- Not a business effect, but socio-economic. Across all networks, wiping out all H2 2019 growth.

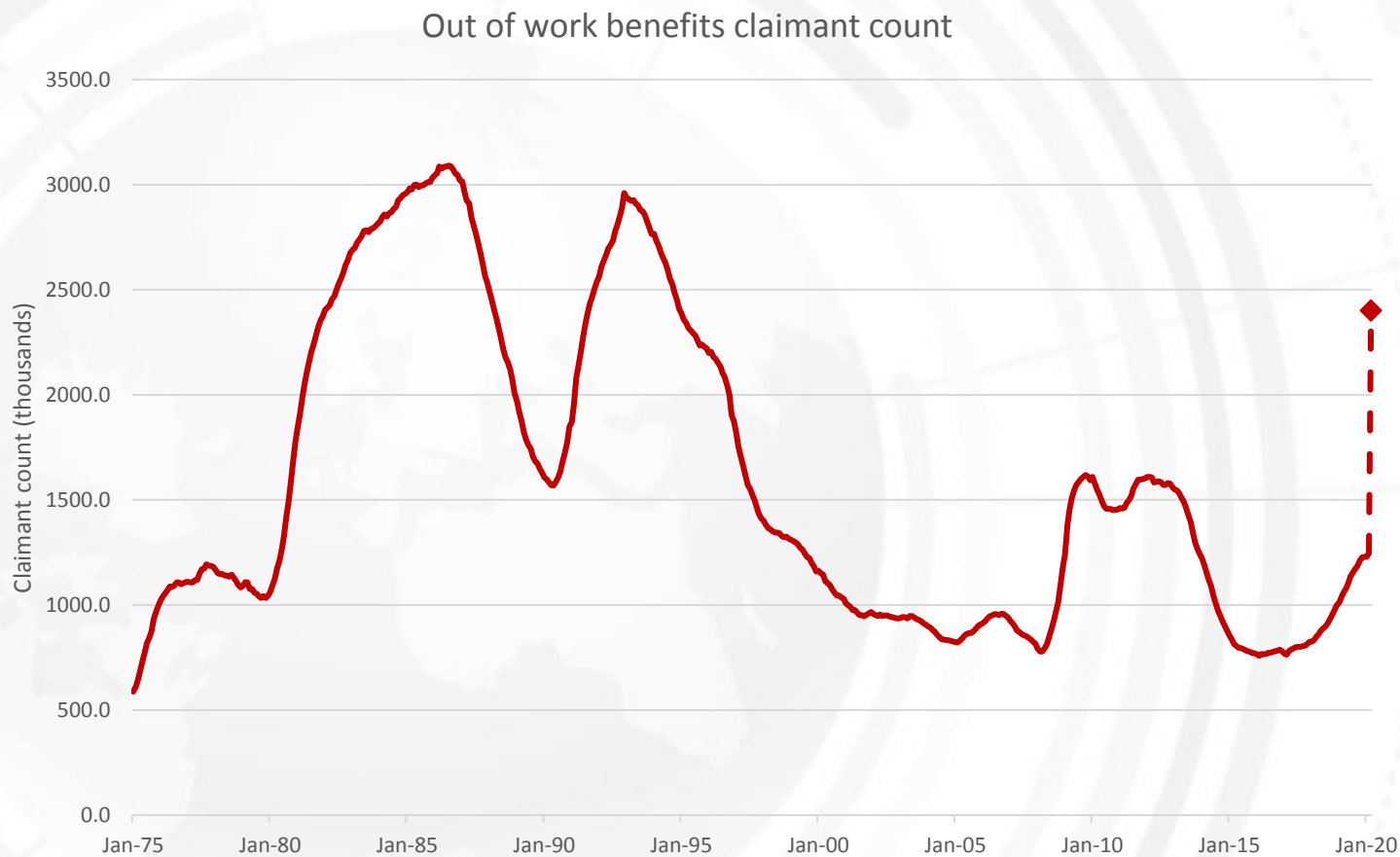
Post-Covid: Job losses are the new export



Source: U.S. Employment and Training Administration

- US initial claims spiked over March and early April from a baseline of circa 220,000 per month historically to 22 million for the 4 weeks ending 11th April – a rise of tenfold.
- Expansion of benefits through stimulus packages will have contributed to numbers, but also reflects significant labour market stress thanks to the contagion from demand collapse.

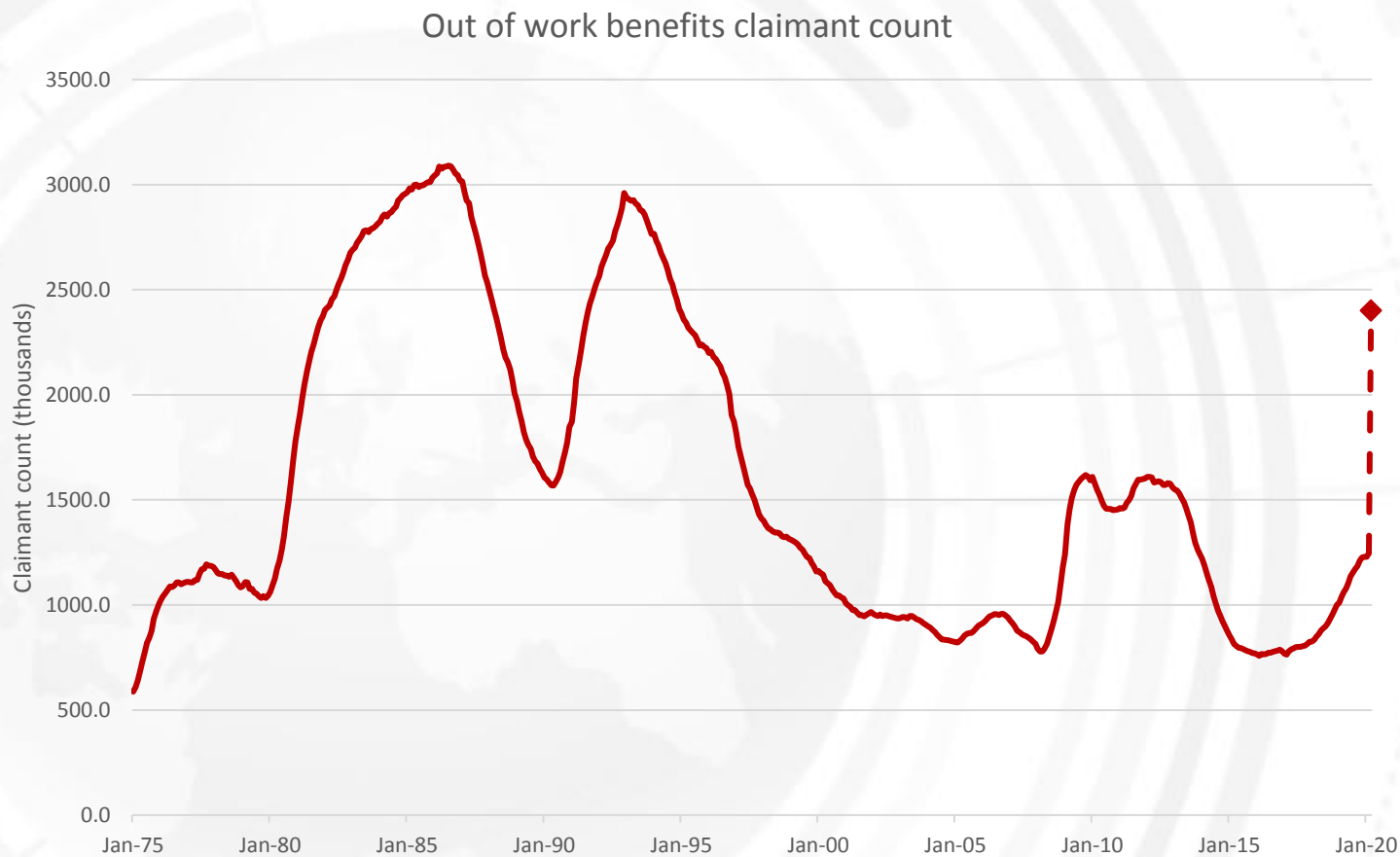
UK out of work claims reflect this global trend



Source: ONS, Camdor Global estimates

- UK claims were rising anyway, but reports talk of significant spikes in recent weeks.
- We estimate a sharp rise to 2.4mn – levels last seen in the 1990s and that still haunt parts of the UK 3 decades on. Even a rapid reduction is a question of 2-3 years, not months.

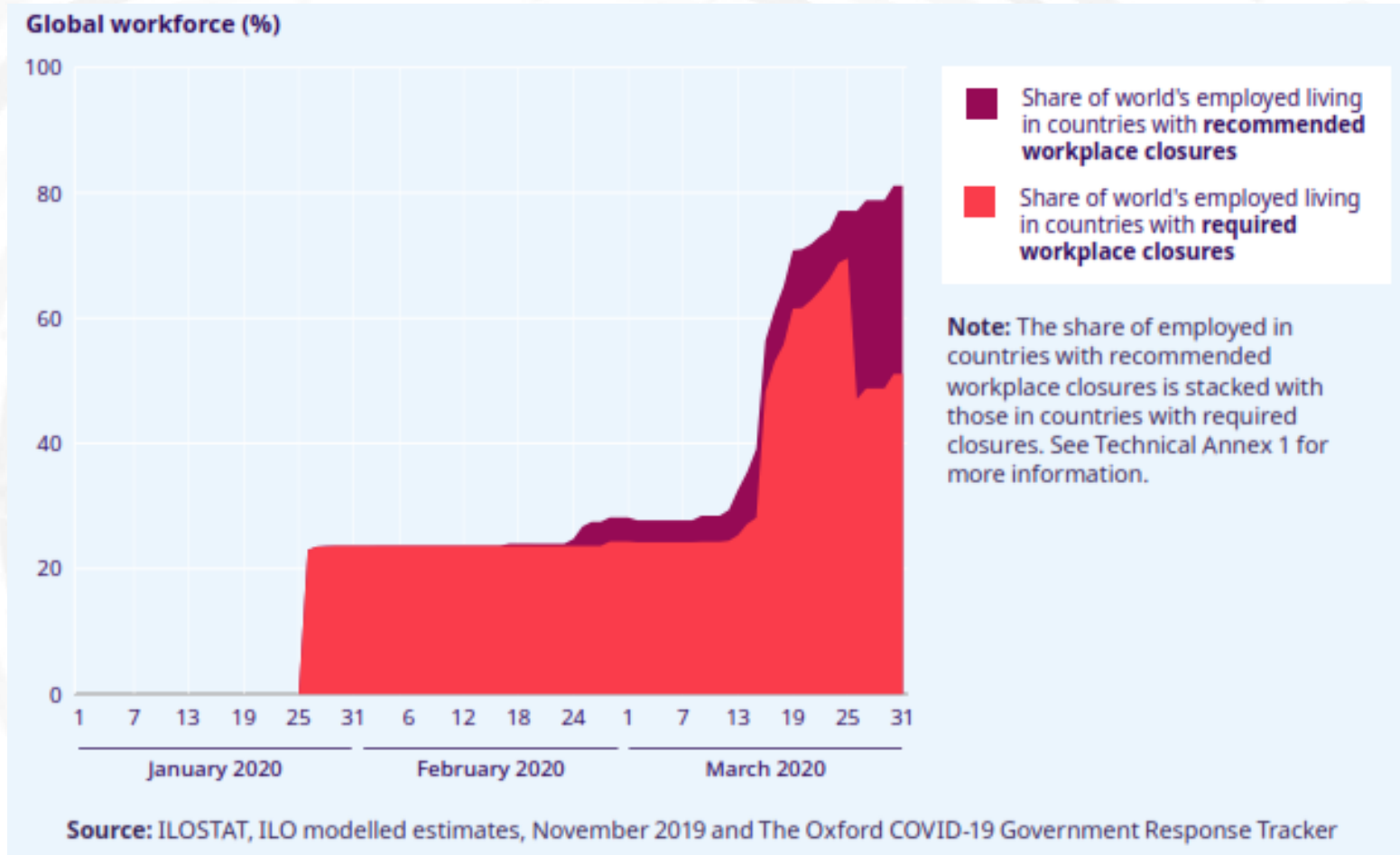
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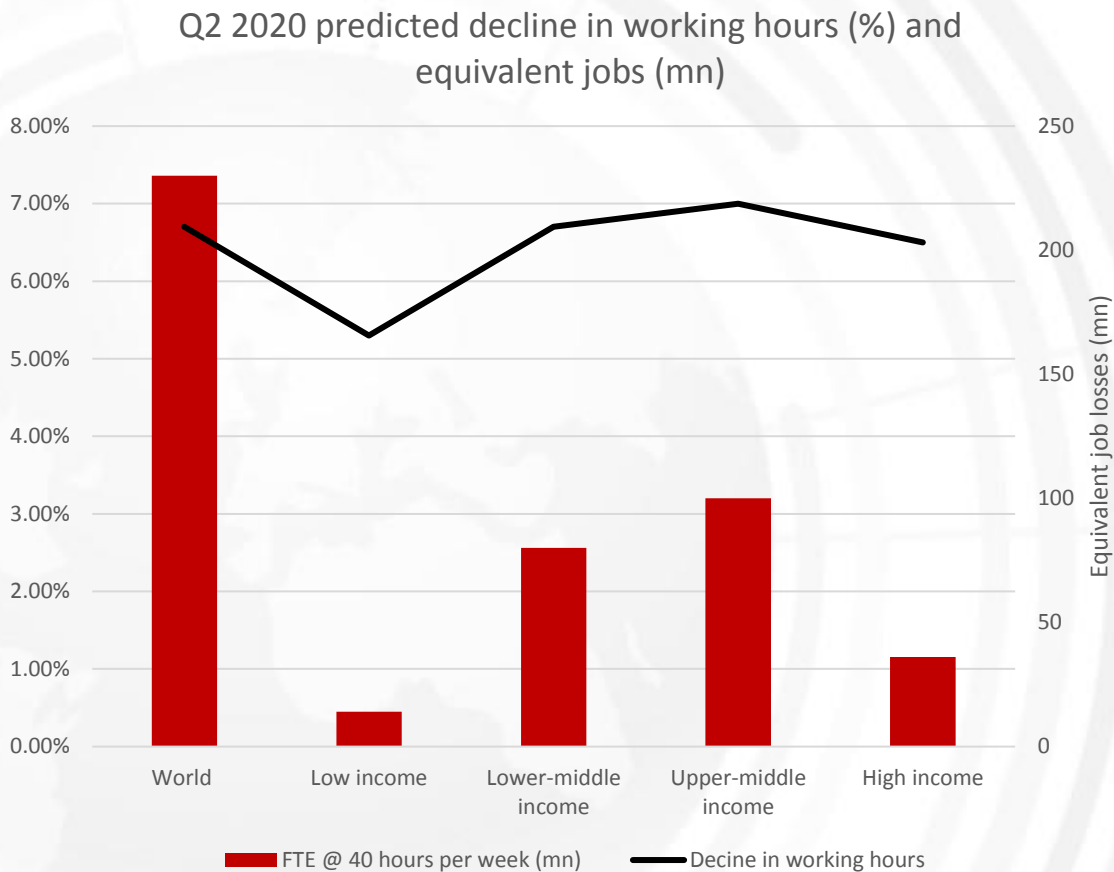
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Globally, the pressure remains relentless



- Over 80% of the world faces impediments to work as usual

The real pain is not in losses, but lower earnings



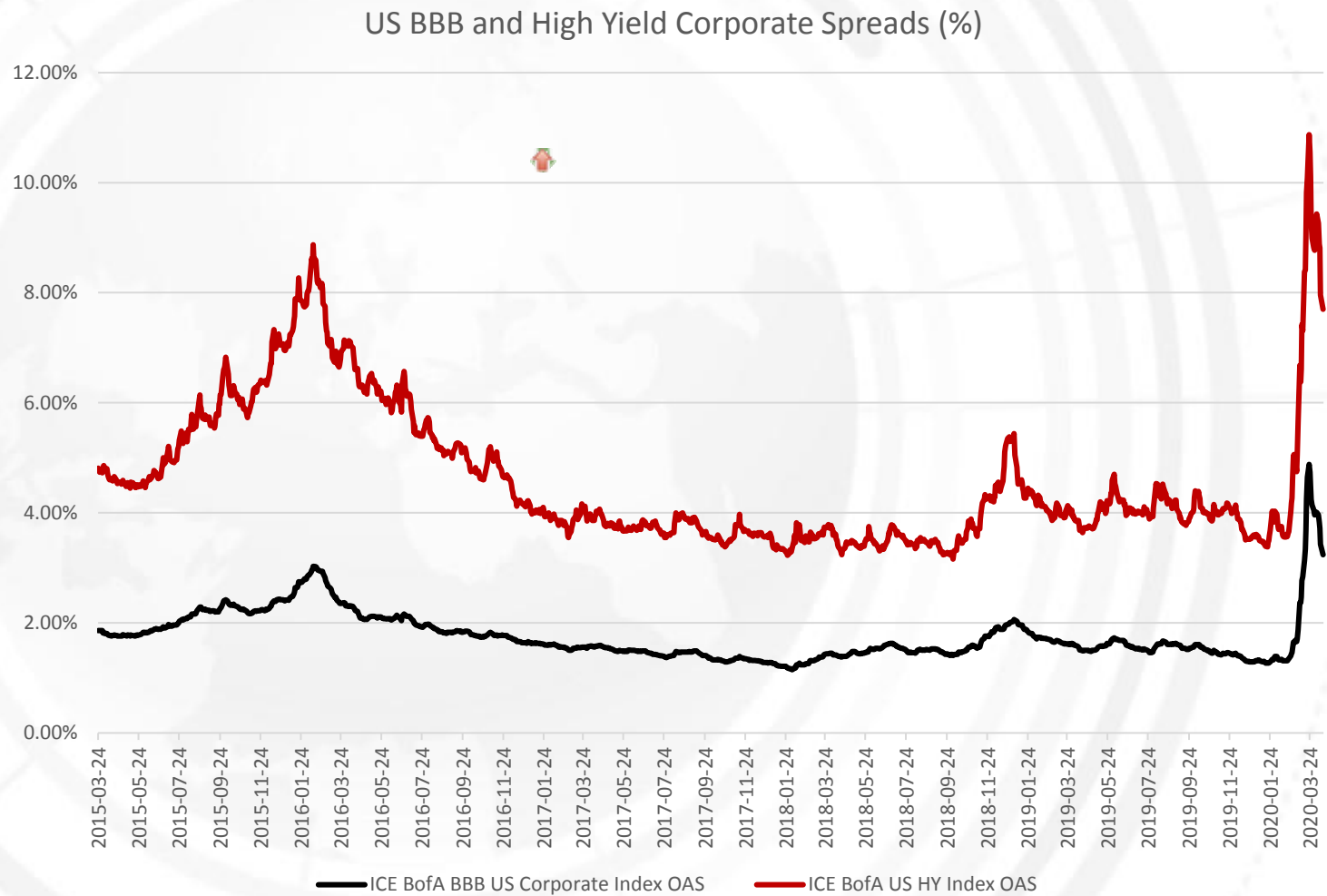
Source: ILO

- Broadly consistent decline in working hours across incomes – less lost jobs, more fewer hours.
- Equivalent to north of 200mn job losses, and more worryingly, concentrated in middle class, where discretionary demand sits.
- Asia is worst hit, accounting for two-thirds, but the Americas also make up over 12%.
- The consumer has gone into isolation.

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COVID-19: THE FINANCIAL FALLOUT

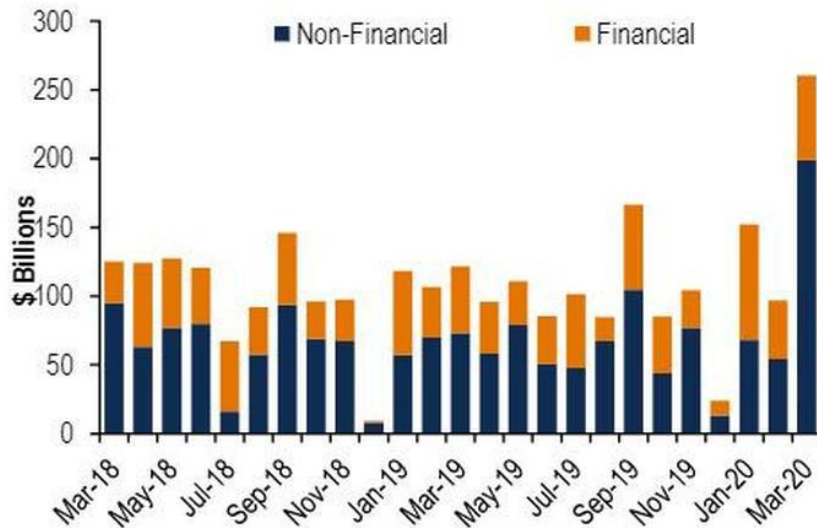
Corporate spreads are recovering...



...thanks to central bank support in the main.

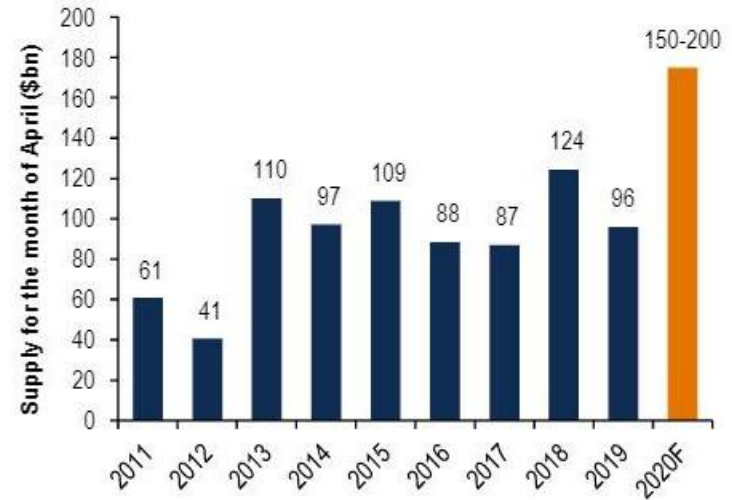
This is not a debt crisis (yet)

Figure 8: Monthly US IG supply volume



Source: BofA Global Research

Figure 2: US IG supply in April

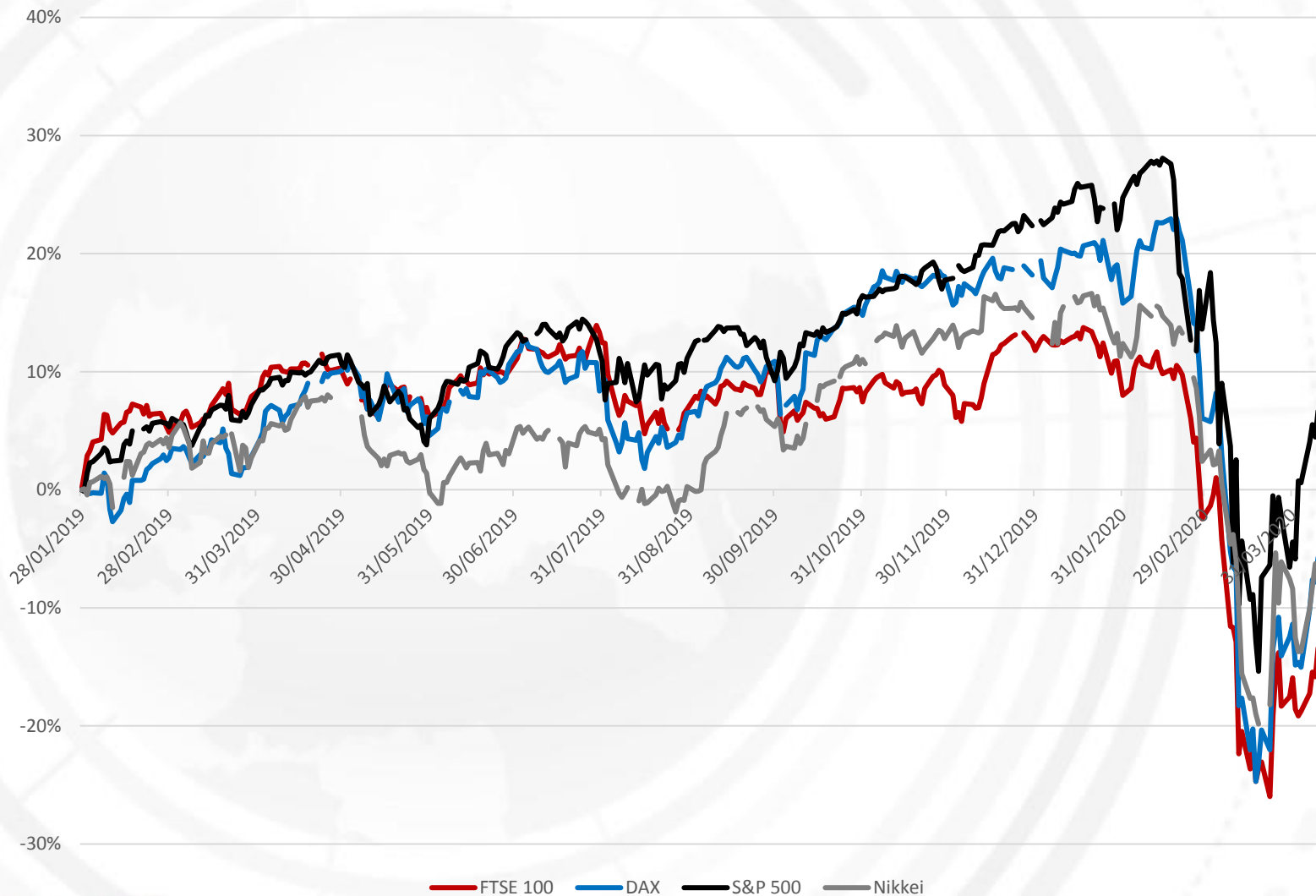


Source: BofA Global Research

- Bond issuance is hitting record highs, as markets take advantage of the Fed's guarantee
- Significant increase on 2019
- Importantly, completely opposite to what happened in 2007-09, when issuance dried up
- Currently corporates are looking to extend (and perhaps pretend) when it comes to refinancing
- Does not bode well for leverage or for longer-term debt outcomes

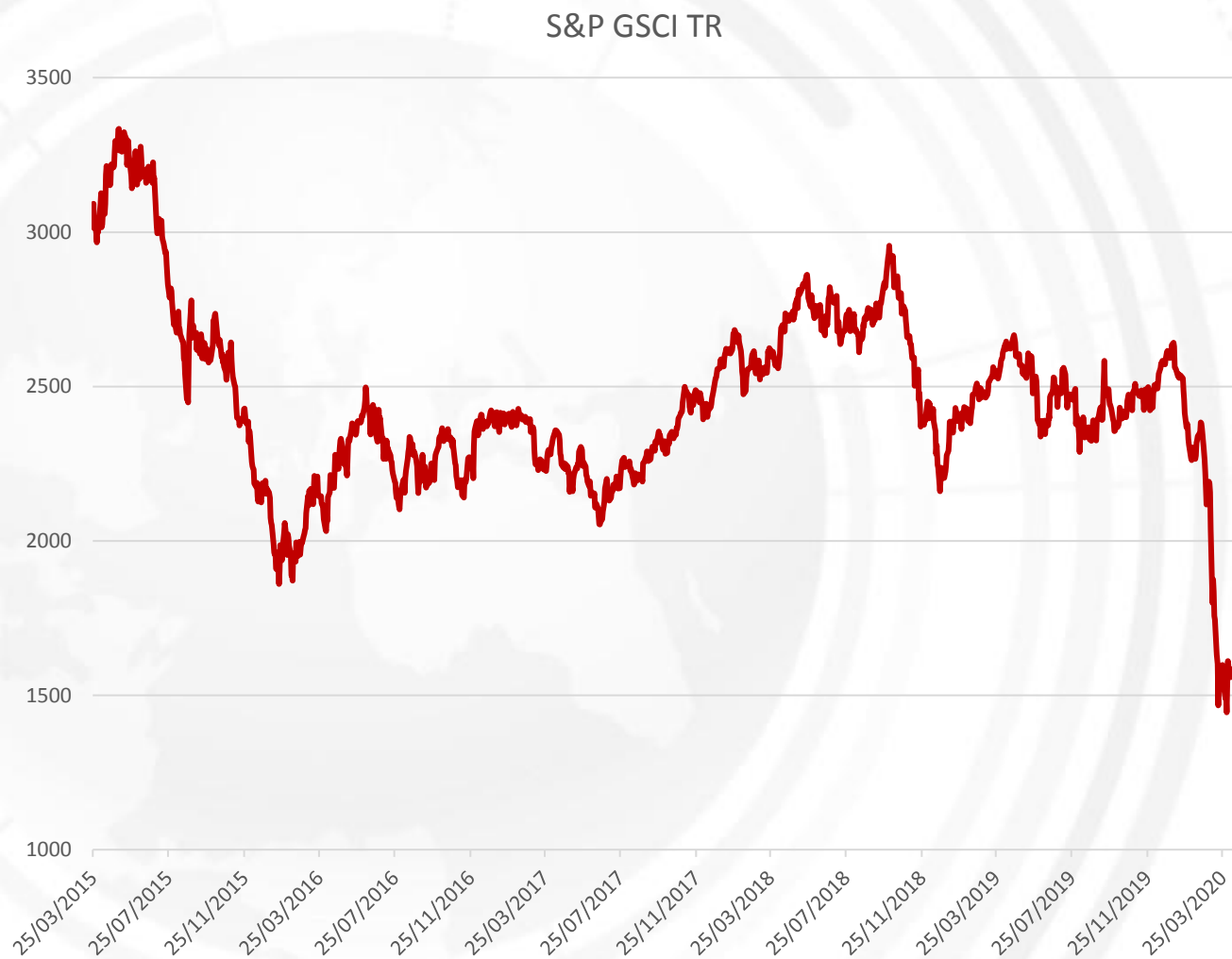
Stock markets were painful at first...

Major Stock indices since Jan 2019



...giving up all their 2019 gains, but have recovered ground sharply as people begin to price in government support and a short sharp recession

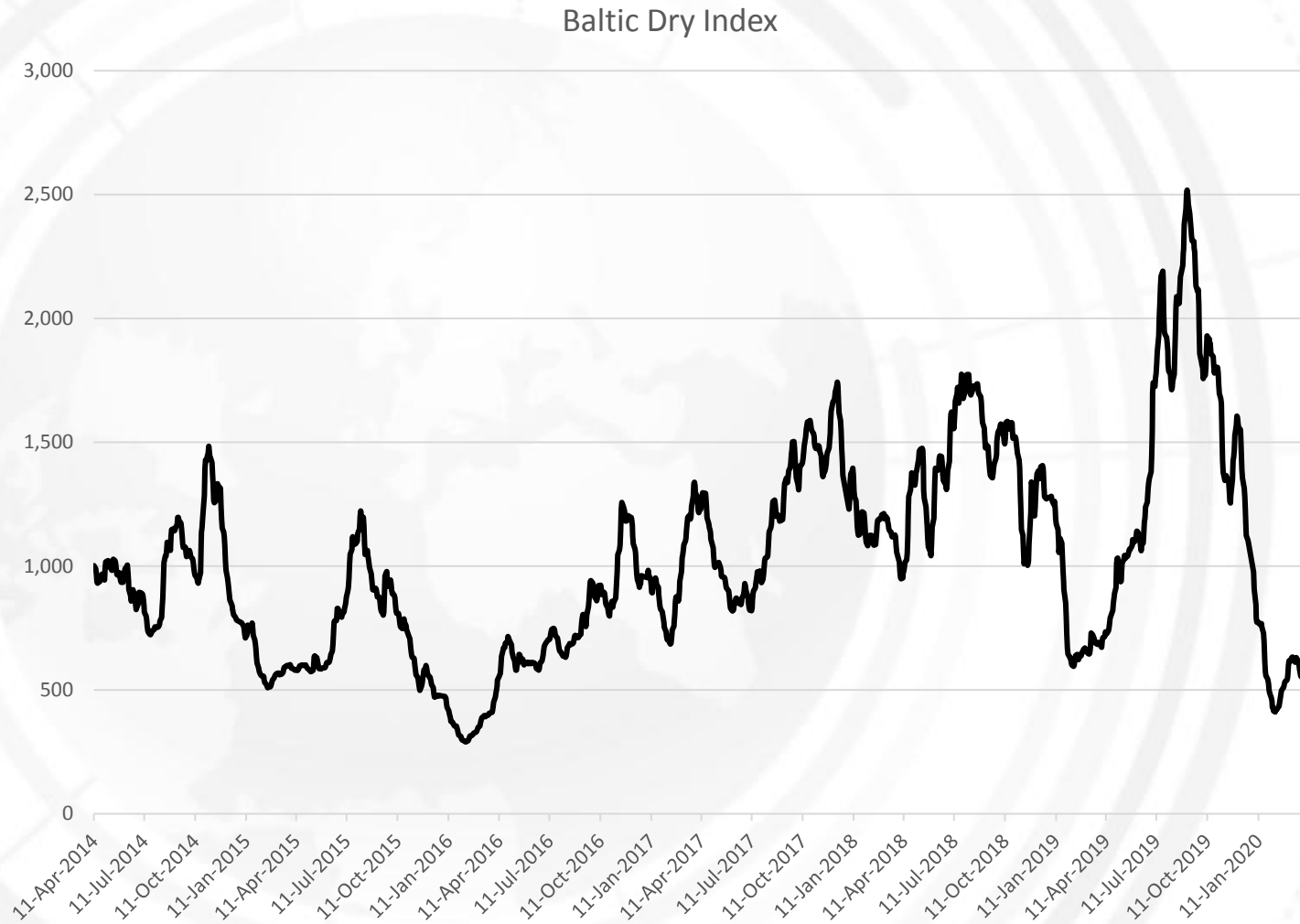
Commodities are down – after all, who's working?



Source: S&P Dow Jones Indices

A reflection of falling demand, but also leading to lower input costs and deflationary pressures

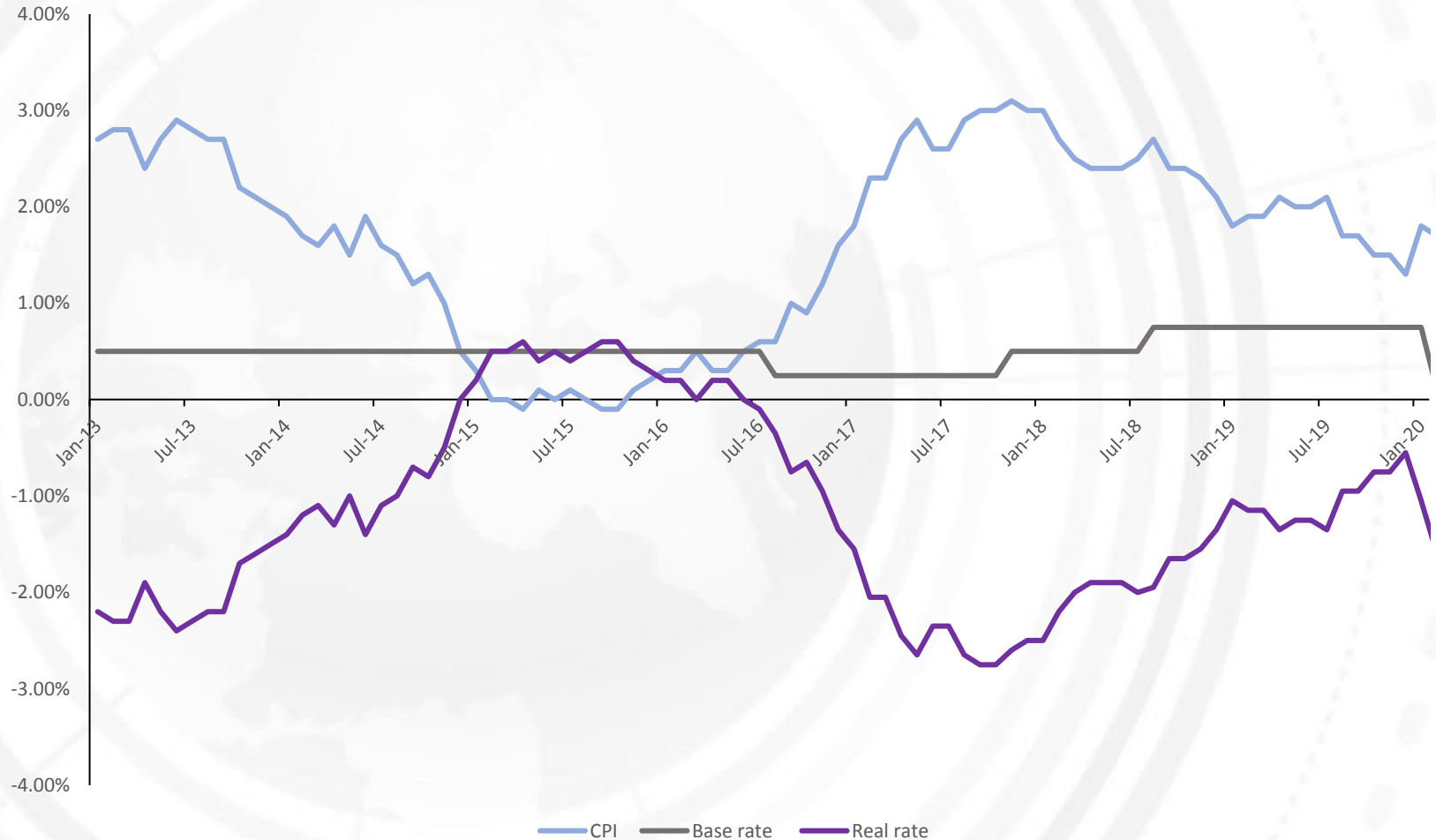
The Baltic Dry Index shows a decline in shipping



There is a small rebound due to a demand for oil storage, given the supply glut, so hardly a positive sign





Real rates have turned sharply negative again

CGA Real Rate Tracker



Source: Camdor Global, ONS

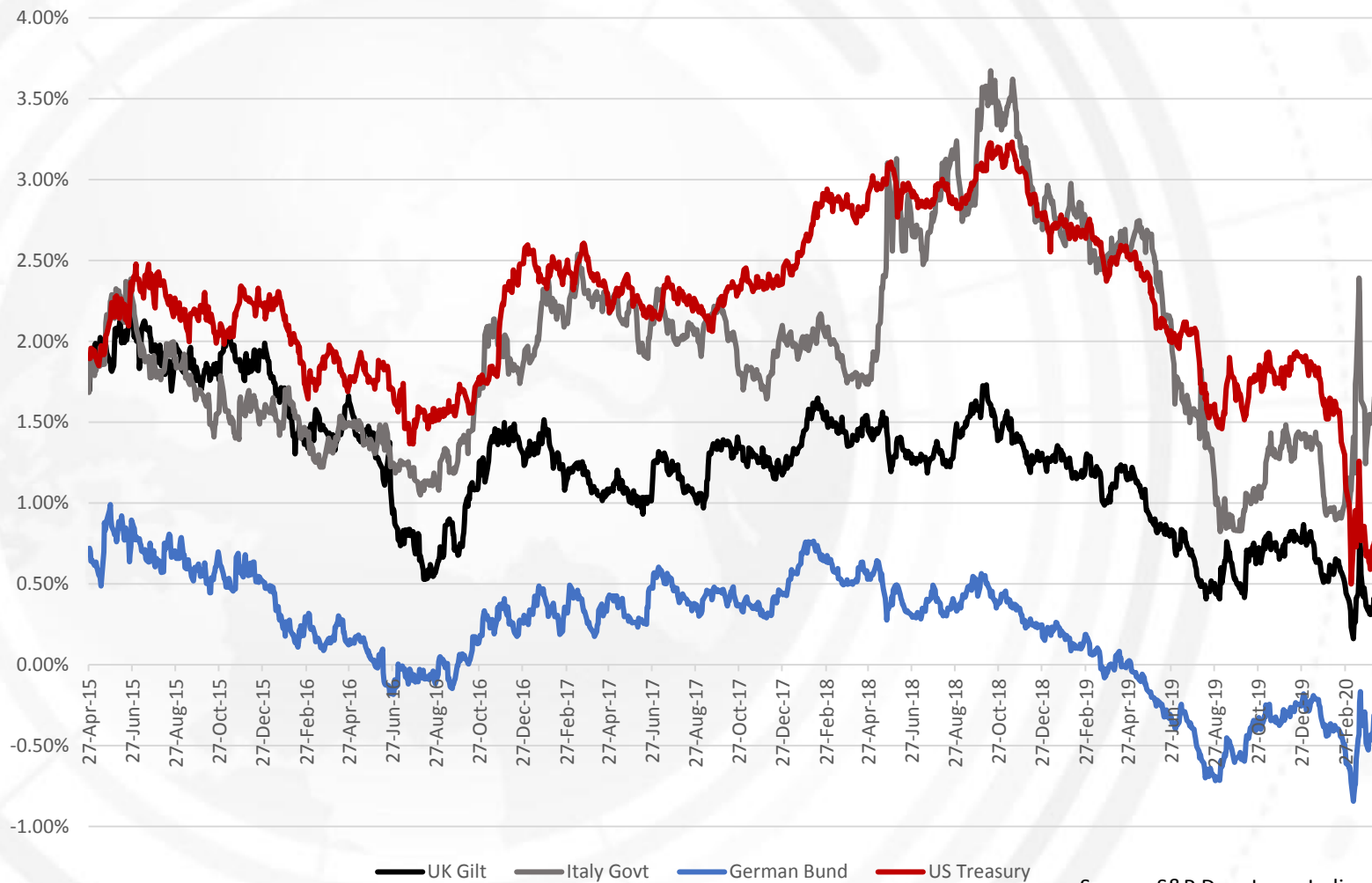
Central banks have responded with rate cuts

Name of interest rate	country/region	current rate	direction	previous rate	change
United States (Fed)	United States	0.00-0.25 %		1.250 %	03-15-2020
Australia (RBA)	Australia	0.25 %		0.500 %	03-19-2020
UK (BoE)	Great Britain	0.10 %		0.250 %	03-19-2020
China (PBC)	China	4.05 %		4.150 %	02-20-2020
Eurozone (ECB)	Europe	0.000 %		0.050 %	03-10-2016
Japan (BoJ)	Japan	-0.100 %		0.000 %	02-01-2016
Sweden (Riksbank)	Sweden	0.000 %		-0.250 %	12-19-2019
Switzerland (SNB)	Switzerland	-0.750 %		-0.500 %	01-15-2015

94 rate cuts in 2020 globally, only 4 rate rises (Kazakhstan, Kyrgyzstan, Tajikistan, Czech Republic repo rate)

A general flight to quality despite all the stimulus

10 year Govt Yields for a selection of developed economies



Source: S&P Dow Jones Indices

A re-emphasising of lower for longer, with bunds in negative territory and UK/US both below 1%.

The background of the slide is a light gray color. It features a large, faint globe on the left side, showing the continents. Overlaid on the globe and extending to the right are several concentric circles of varying thicknesses. On the right side, there is a network diagram consisting of a vertical dashed line with several small circles connected to it by horizontal lines. Two larger circles are also connected to this network, one above and one below the main vertical line.

APPENDIX

The Insurance Investment Exchange

INSURANCE
INVESTMENT
EXCHANGE

- An award winning independent and credible forum, driven by feedback from the industry
- Since 2013, providing thoughtful exchange and debate on key investment related issues and trends of relevance to the insurance industry
- Events throughout the year, including:
 - A series of quarterly half-day events, comprising panels and breakout sessions
 - Intimate breakfast and lunch roundtables to dive into and debate key topics of interest in detail
 - Our pioneering annual IIE Investment Awards, recognising talent across insurers, asset managers and service providers
 - CIO dinners to hear from key thought leaders and debate broader strategic and macro issues



Author Bio

Dr Bob Swarup is co-Founder of the Insurance Investment Exchange, the leading forum for knowledge sharing in the insurance industry. He is a respected international expert on macro, financial markets, investment strategy and regulation. He is also Director of the CIO Network for the Geneva Association, the leading international think tank of the insurance industry globally.

Bob was formerly a partner at Pension Corporation, a leading UK-based pension buyout firm, where he ran alternative investments, was Chief Risk Officer and oversaw thought leadership. He also served as Senior Investment Advisor to the Pensions Regulator, advising them on the development of the new regulatory framework for DB schemes from an investment, risk and governance perspective.

Bob has served on numerous industry, fund and fintech boards, including the Advisory Board of Adveq, a leading \$6bn Swiss PE firm; the Board of CatCo, a \$2bn reinsurance hedge fund that he helped seed in 2011; the CRO and Solvency II committees of the ABI; and the Exam Council of the Chartered Alternative Investment Analyst Association.

Bob is a Fellow of the Institute of Economic Affairs and on the Advisory Council of the Columbia Committee for Global Thought. He was previously a Senior Visiting Fellow at Cass Business School, Visiting Fellow at the London School of Economics and on the Editorial Board of the *Journal of Alternative Investments*. He holds a PhD in cosmology from Imperial College London and an MA (Hons) in Natural Sciences from the University of Cambridge.

Bob has written extensively on diverse topics, with his work being featured across major publications and media. He is also the author of the internationally acclaimed bestseller *Money Mania* on 25 centuries of financial crises and the lessons to learn (Bloomsbury, 2014).



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