

INSURANCE
INVESTMENT
EXCHANGE

Covid-19:
Cutting through
the Noise

*Weekly Summary
and Update*

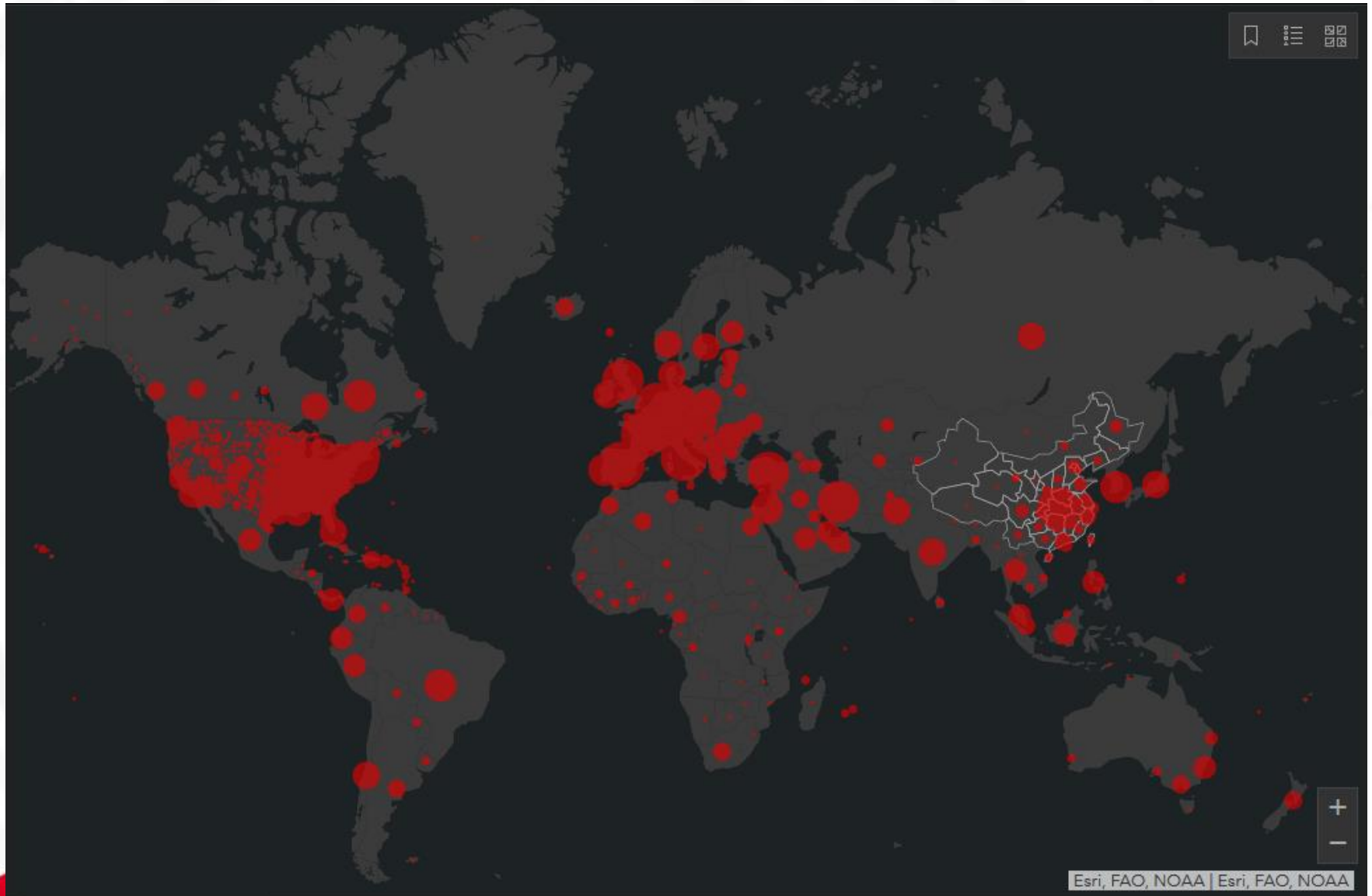
Dr Bob Swarup

As of 06 April 2020



COVID-19: KEY EPIDEMIOLOGICAL TRENDS

The pandemic continues to escalate



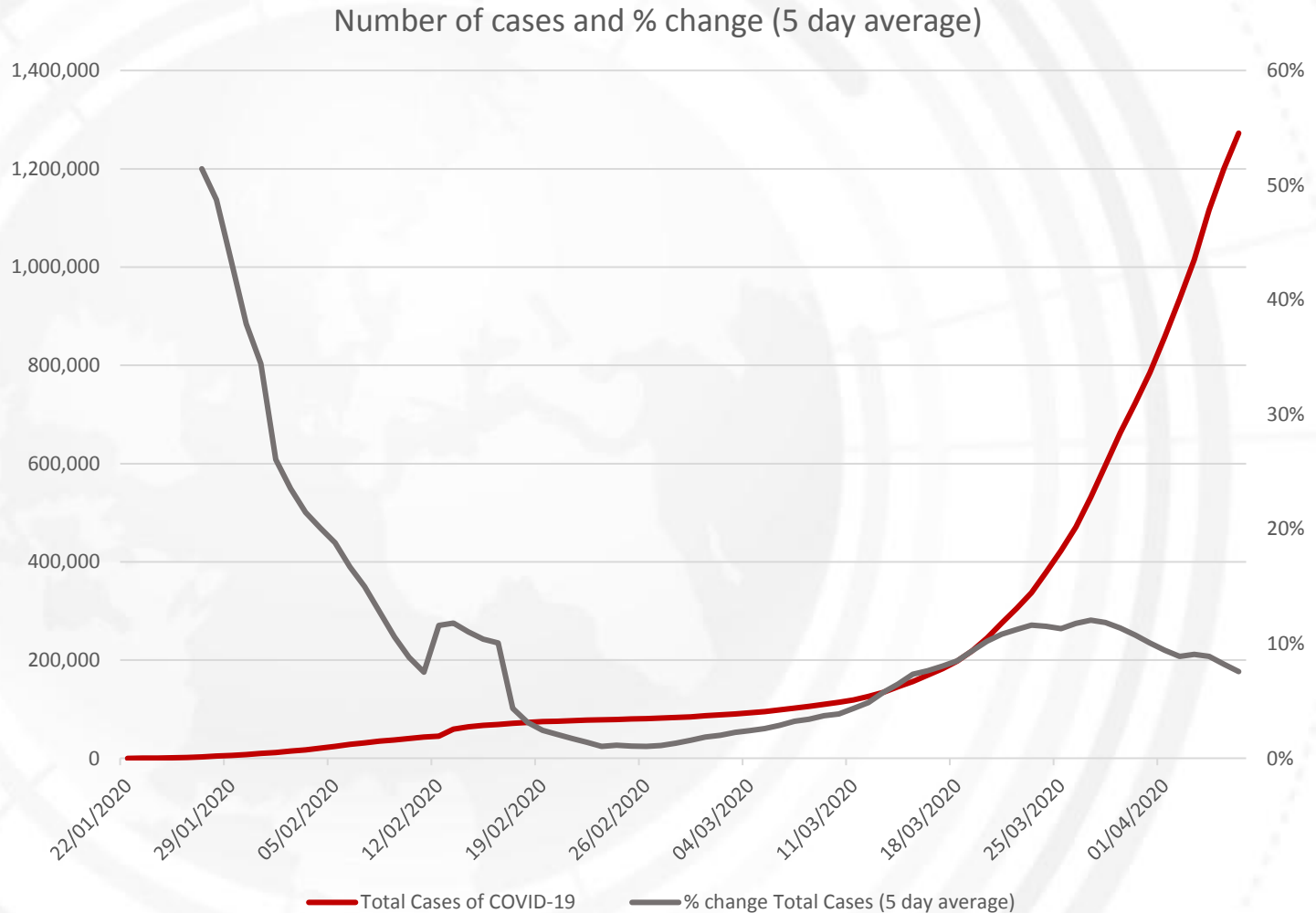
Source: JHU CSSE

Active cases are concentrated in developed world



Source: JHU CSSE

Cases are growing but the rate has slowed...

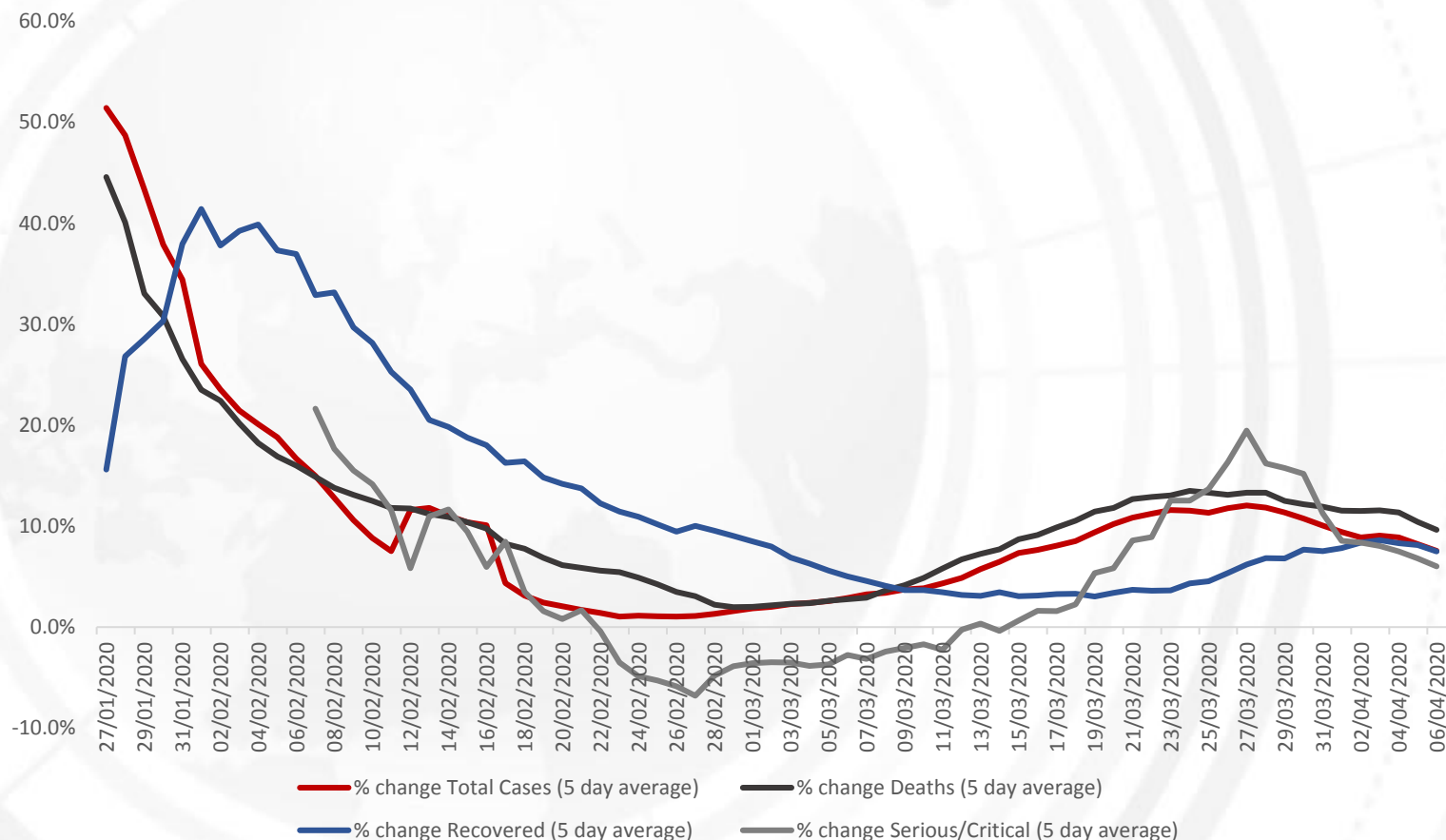


Source: JHU CSSE, Camdor Global

...with the moving average of new cases indicating a peak about a week ago

Growth continues to slow

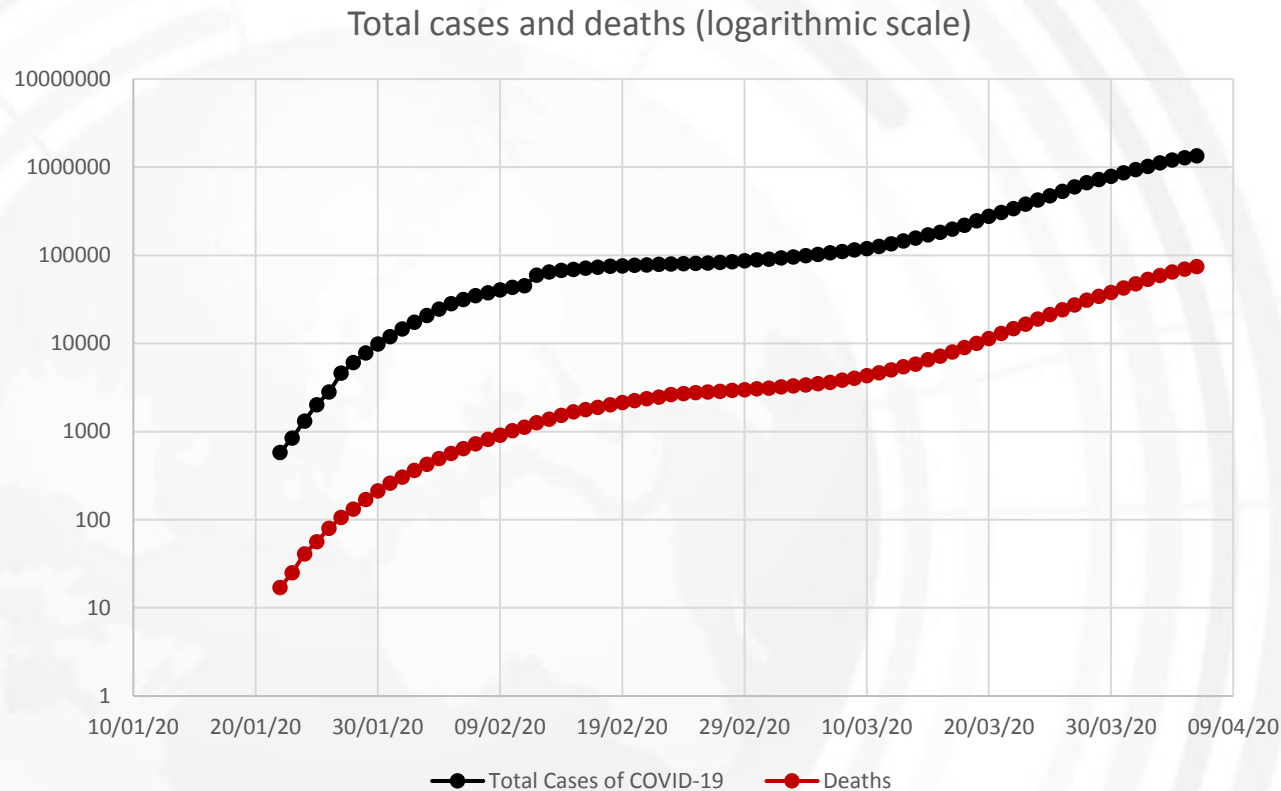
Average 5 day growth for Covid-19 cases, deaths, serious / critical and recovered
(% Change)



Source: JHU CSSE, 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 exponential



Source: JHU CSSE, Camdor Global

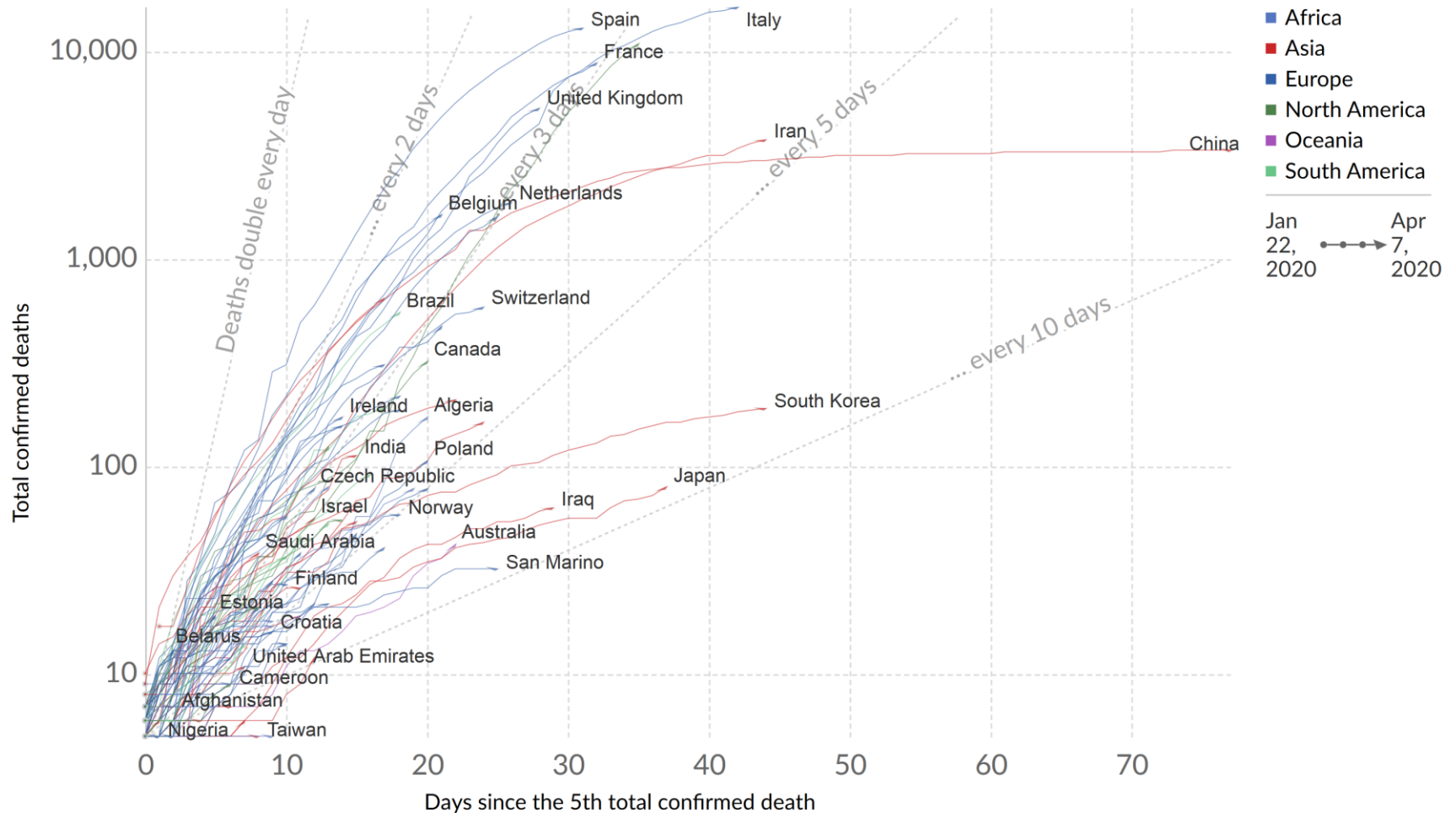
- Slope of logarithmic plot still indicates a power law – implies some way to go.
- It took c. 4 weeks to grow from 100k cases to 1 million cases.
- More worryingly, the lull in the middle indicates that there was a second wave of new infections and deaths as new geographic clusters emerged.
- **We believe underreporting of cases/deaths coupled with developed countries and emerging markets only now scaling up testing and establishing their extent means that we may have 10 million cases by end May globally.**

Deaths for most are doubling 3-4 days currently

Total confirmed deaths of COVID-19

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.

Our World
in Data



Source: European CDC - Situation Update Worldwide - Last updated 7th April, 12:15 (London time)

OurWorldInData.org/coronavirus • CC BY

Europe and US are the epicentres now...

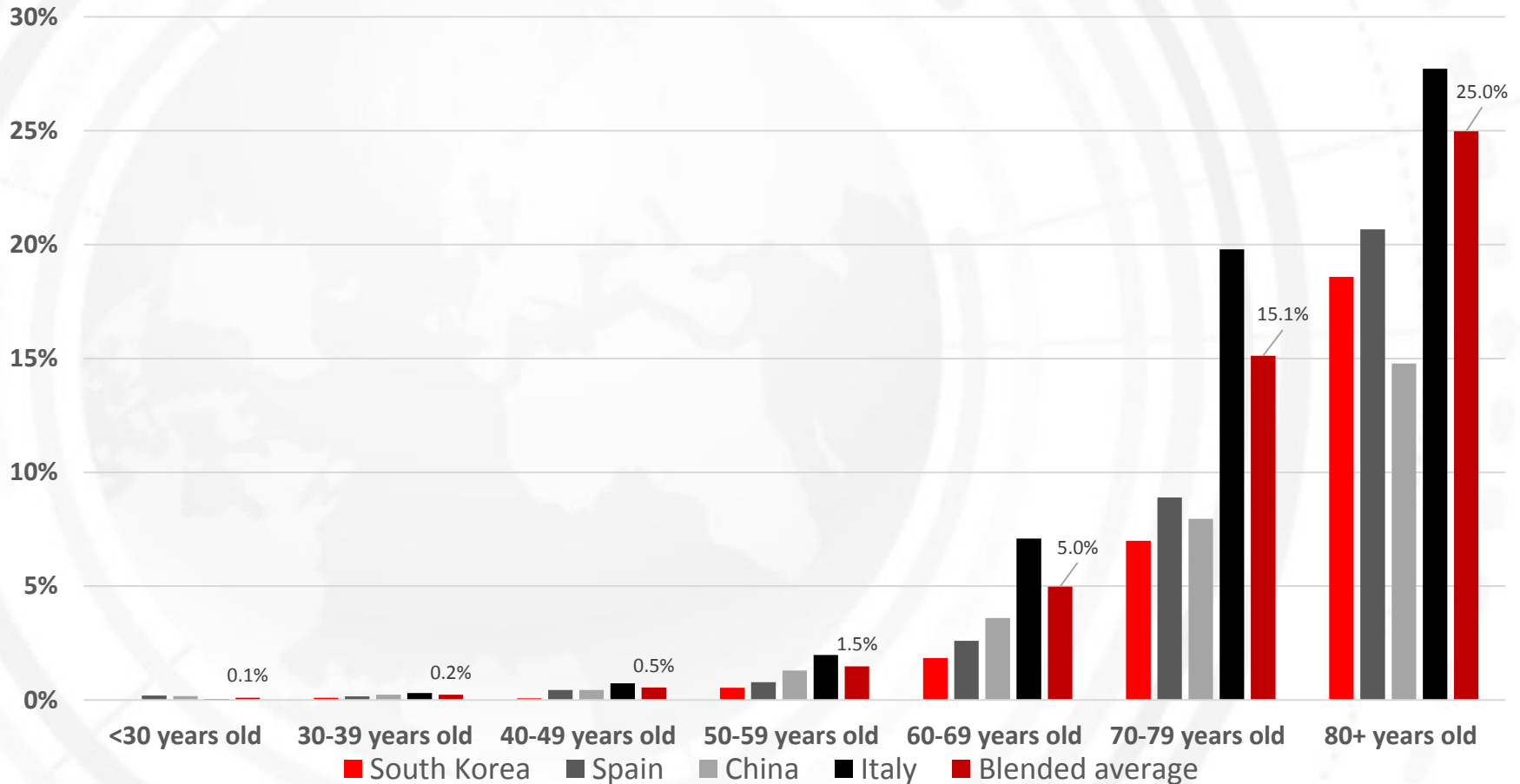
Country	Cases	Deaths	Region	Case per mn	Deaths per mn
Italy	135,586	17,127	Europe	2,243	283
Spain	141,942	14,045	Europe	3,036	300
US	400,540	12,857	North America	1,210	39
France	109,069	10,328	Europe	1,671	158
United Kingdom	55,242	6,159	Europe	814	91
Iran	62,589	3,872	Asia	745	46
China	81,802	3,333	Asia	57	2
Netherlands	19,580	2,101	Europe	1,143	123
Belgium	22,194	2,035	Europe	1,915	176
Germany	107,663	2,016	Europe	1,285	24
Global	1,431,944	82,085		184	10.5

Source: Worldometers

... but cases/deaths per mn indicate there is still some way to go for the US and UK. Turkey, Brazil and Russia are emerging hotspots.

Death rates are bad for over 60s...

Fatality rate by age group for different geographies

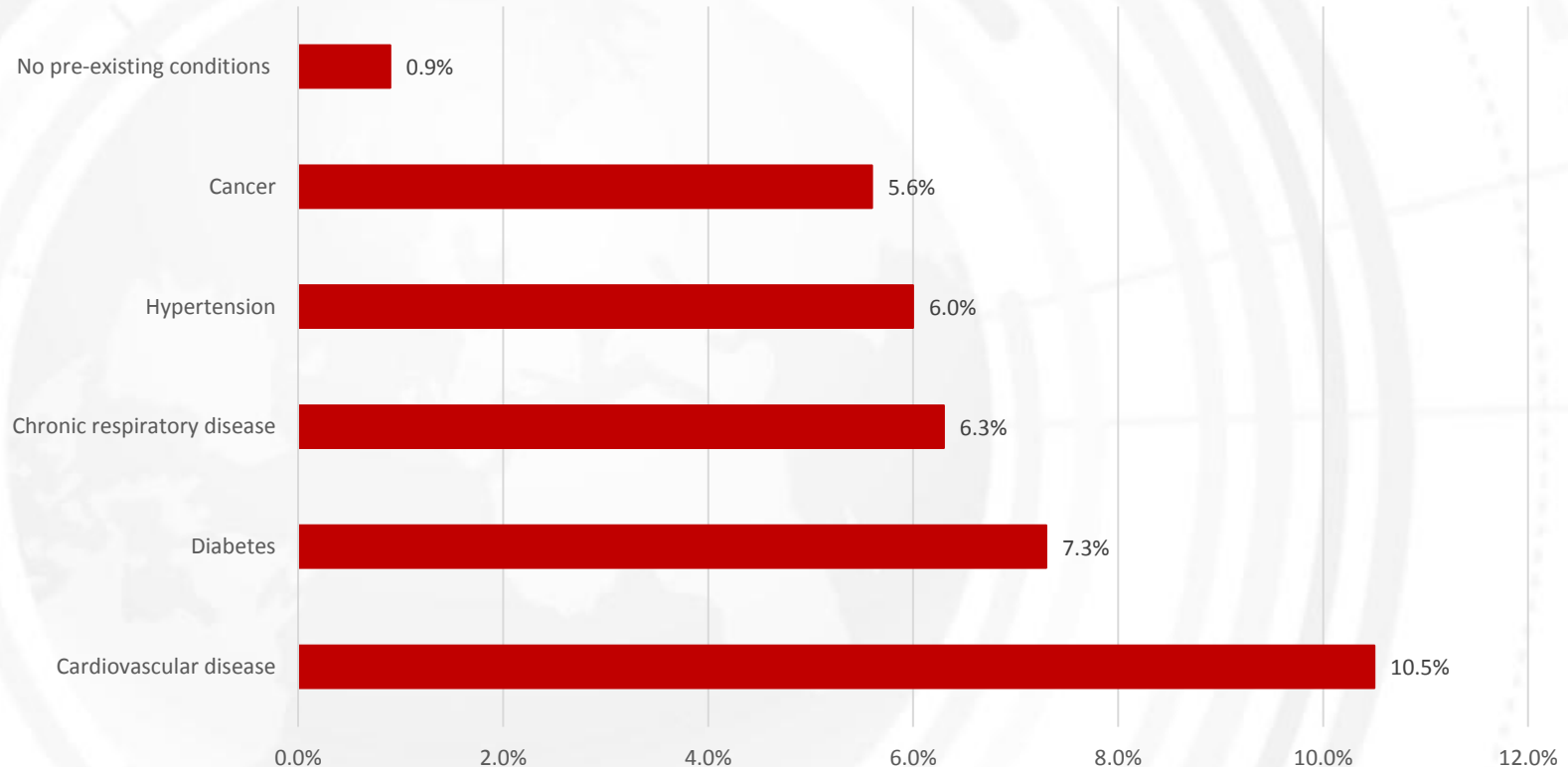


Source: Camdor Global (based on various government sources)

... differentiating rapidly for different countries and implying countries with significant old age populations will be hard hit, viz. Italy.

Mortality is much higher for pre-existing conditions

Death rate for confirmed cases



Source: China CDC

However, the current data is limited only to China and we would expect more changes as data from other countries begins to filter through



COVID-19: REAL ECONOMY IMPACT

The impact on global travel has been 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.

OAG[®]

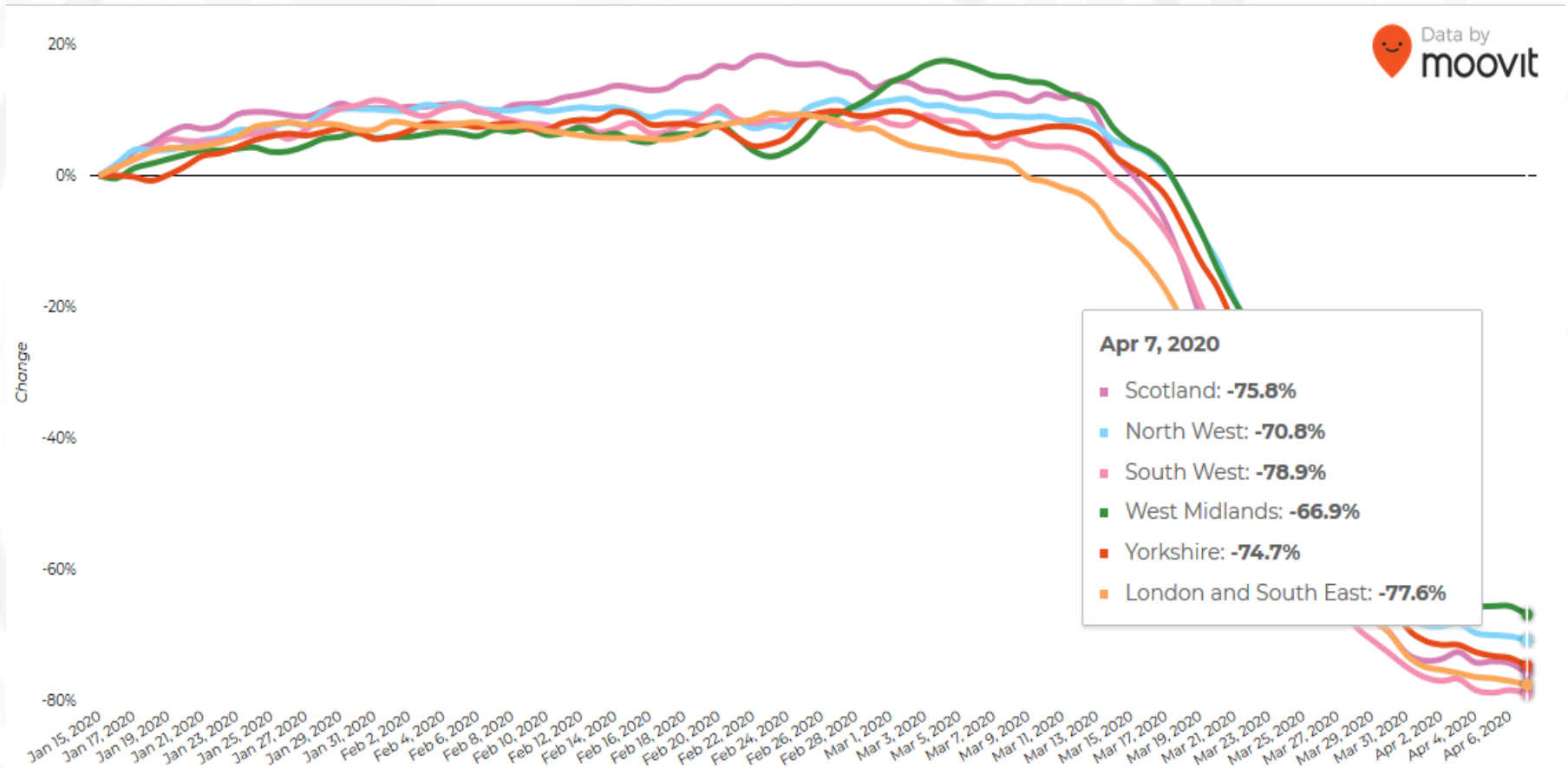
Region	6 Jan	13 Jan	20 Jan	27 Jan	3 Feb	10 Feb	17 Feb	24 Feb	2 Mar	9 Mar	16 Mar	23 Mar	30 Mar	6 Apr
ALL	1.5%	1.3%	0.5%	0.2%	-3.6%	-9.9%	-10.7%	-10.1%	-7.9%	-10.1%	-12.4%	-28.7%	-47.7%	-59.2%
Germany	-8.6%	-8.8%	-8.4%	-8.5%	-7.9%	-8.0%	-6.6%	-5.1%	-5.0%	-15.4%	-30.2%	-71.9%	-88.6%	-92.6%
Spain	-1.1%	-4.6%	-4.8%	-4.5%	-3.8%	-2.5%	0.6%	-1.6%	-1.4%	-2.9%	-13.7%	-74.3%	-88.5%	-92.6%
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%
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%
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%
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%
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%
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%
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%
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%
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%
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%
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%
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%
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%

Source: Schedules Analyser

Source: OAG Aviation Worldwide

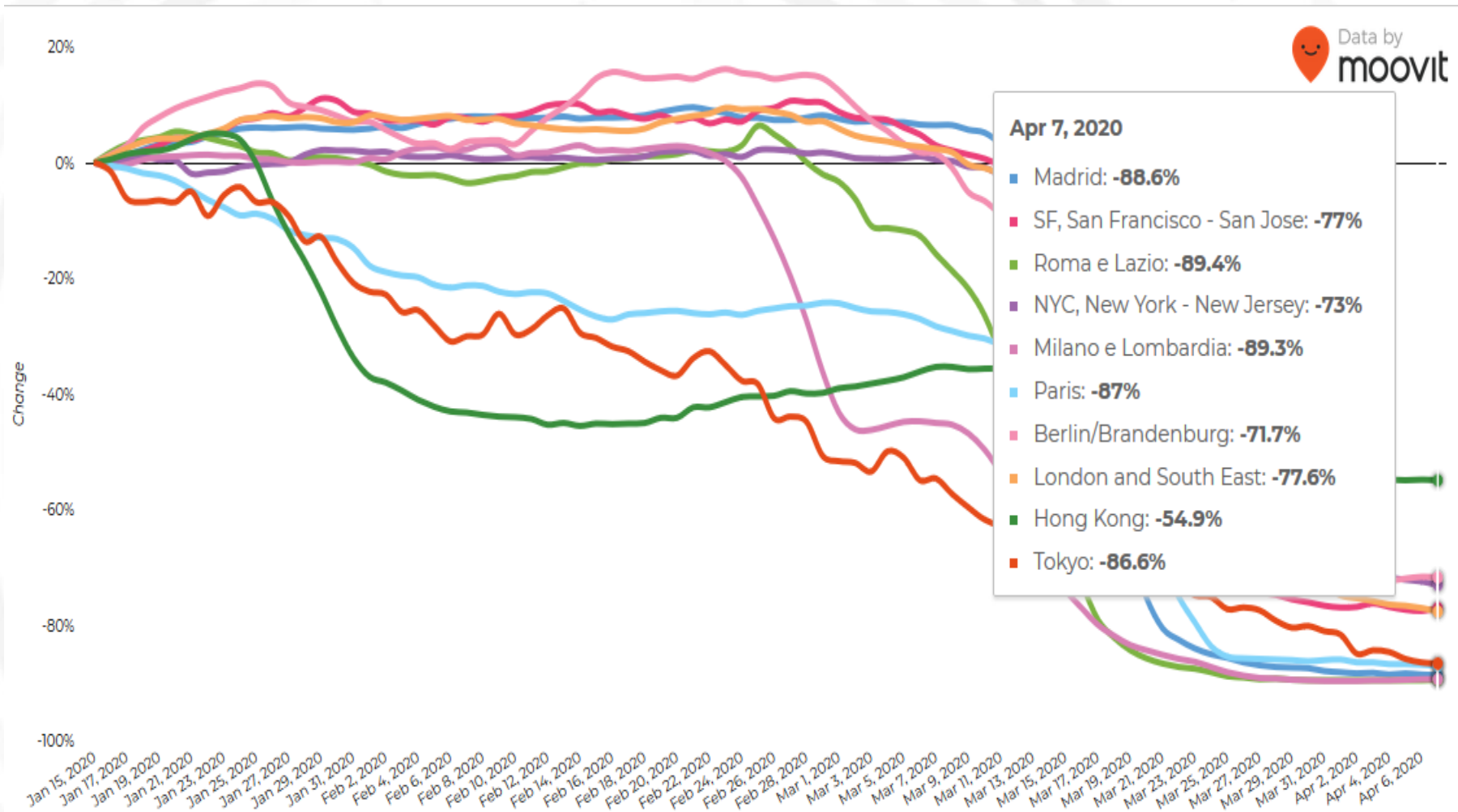
- Scheduled flights globally down by 59% year on year, with the UK down over 90% yoy.
- Lockdowns, restrictions and worries about imported infections likely to continue to impose downward pressure
- Worth noting in China, domestic airline seats are now being subsidised to encourage travel

Public transit usage down sharply...



Source: Moovit – www.moovit.com

...but also stabilizing globally



Source: Moovit – www.moovit.com

Global PMI shows significant deterioration...

Global PMI and GDP



Global manufacturing lead-times and inventories

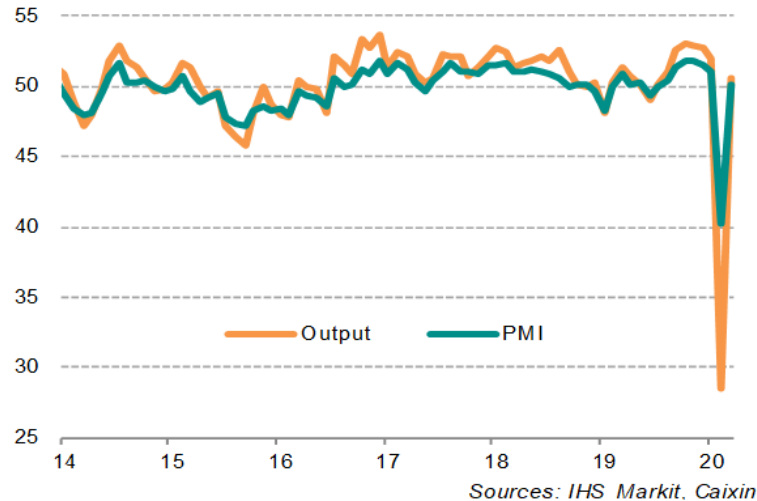


- Second month of deterioration. Worst set of readings since the financial crisis.
- GDP looks set to follow. Services sector decline worst ever in survey's history, and China's experience indicates no rapid rebound.
- But results also masked by delivery delays. Under PMI methodology, delays are a positive 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?

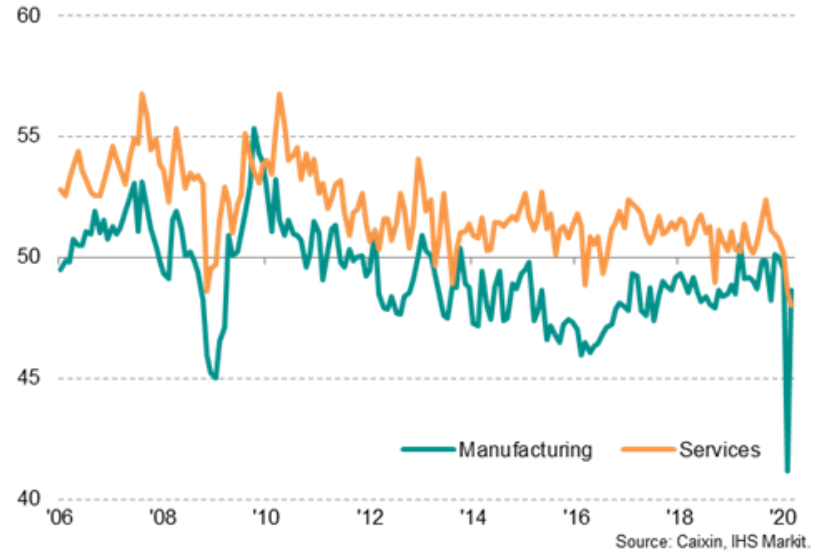
Caixin PMI signals output has stabilised as industrial firms start to resume work

Caixin China manufacturing PMI



Manufacturing and services employment

Caixin (IHS Markit) China PMI Employment

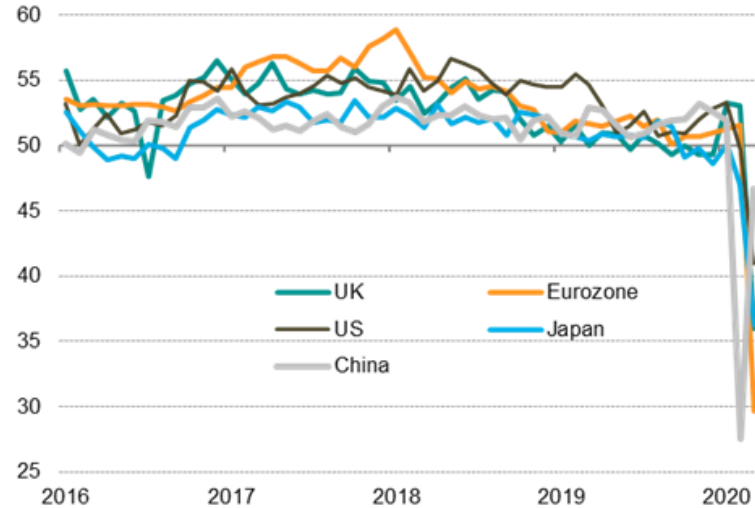


- China manufacturing PMI shows strong rebound after a record low in Feb. But this is not (yet) a recovery!
- Each PMI reading is relative to the previous, with 50 representing no change, so the rebound to 50.1 only means that they stabilised at the 'new' normal.
- Services show continued contraction,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

Major economies are suffering

Largest economies' output

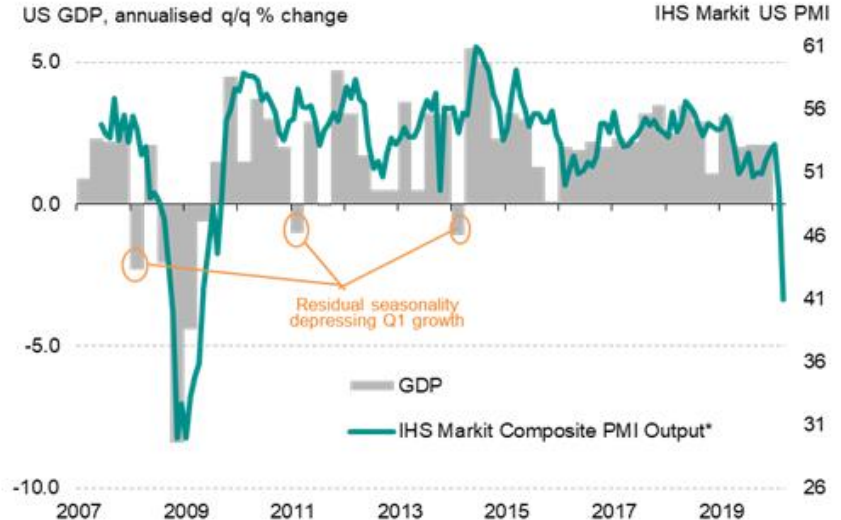
Composite PMI Output/Business Activity Index



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

US PMI and GDP

US GDP, annualised q/q % change

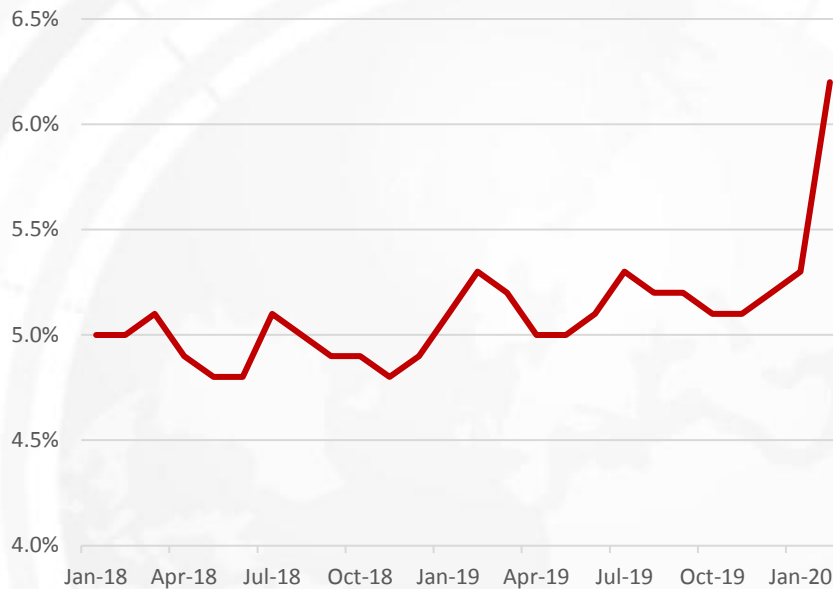


Source: IHS Markit, BEA

- 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.
- As elsewhere, services are faring worse than manufacturing and almost certainly will worsen dramatically over April. Recovery is likely to be slow too, given that demand will not rebound.
- There is also an acceleration in cost cutting and discounting, as businesses prioritise cashflow over longer-term considerations and profitability.

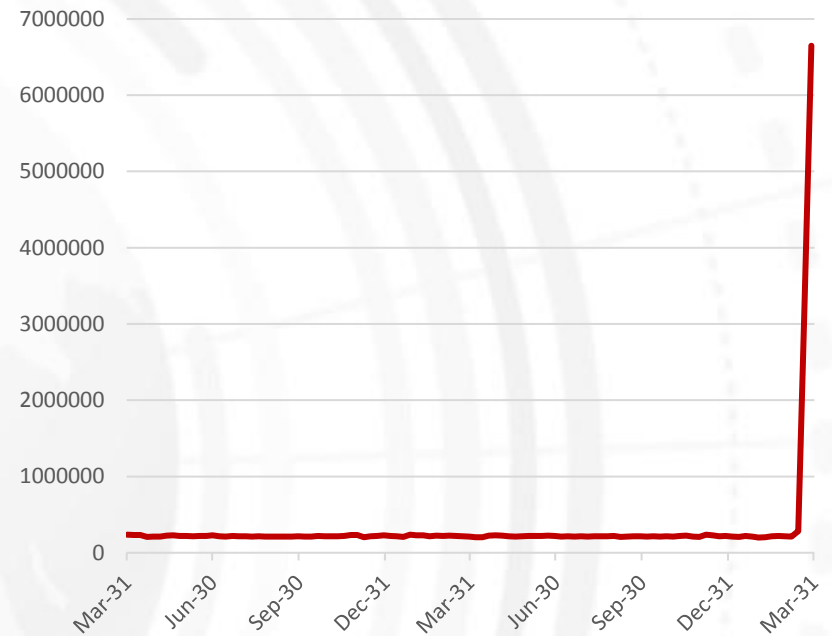
Job losses are the new export

Urban Surveyed Unemployment Rate (%)



Source: NBS China

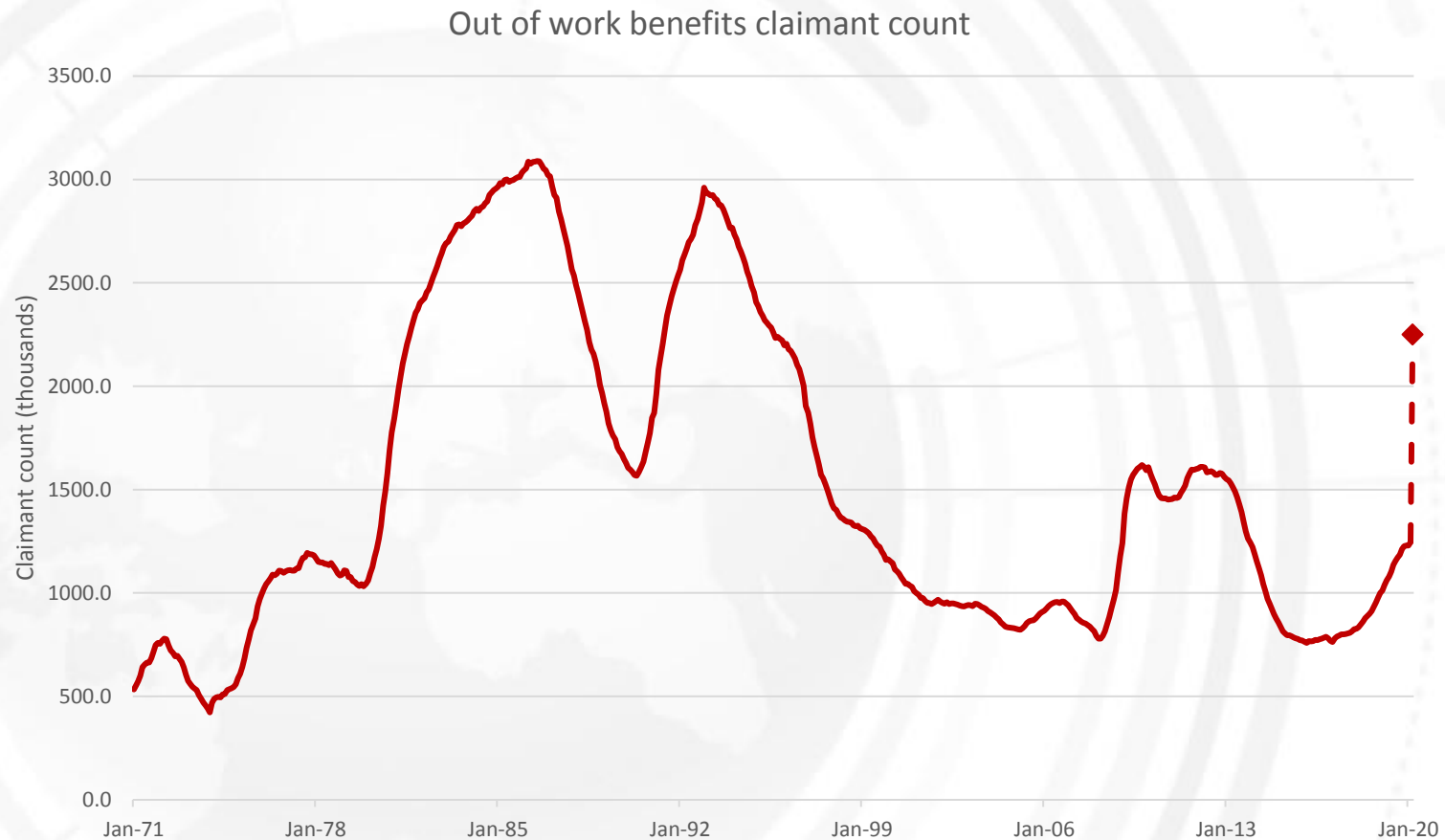
Initial unemployment claims - US



Source: U.S. Employment and Training Administration

- Chinese urban unemployment is up sharply in Feb, but likely masks true unemployment.
- Does not include rural workers and workers in insecure, part-time or casual work.
- US initial claims spiked over March from a baseline of circa 210,000 historically to 3.3 million for the week ending 21st March and 6.6 million for the week ending 28th March
- 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 the global trend



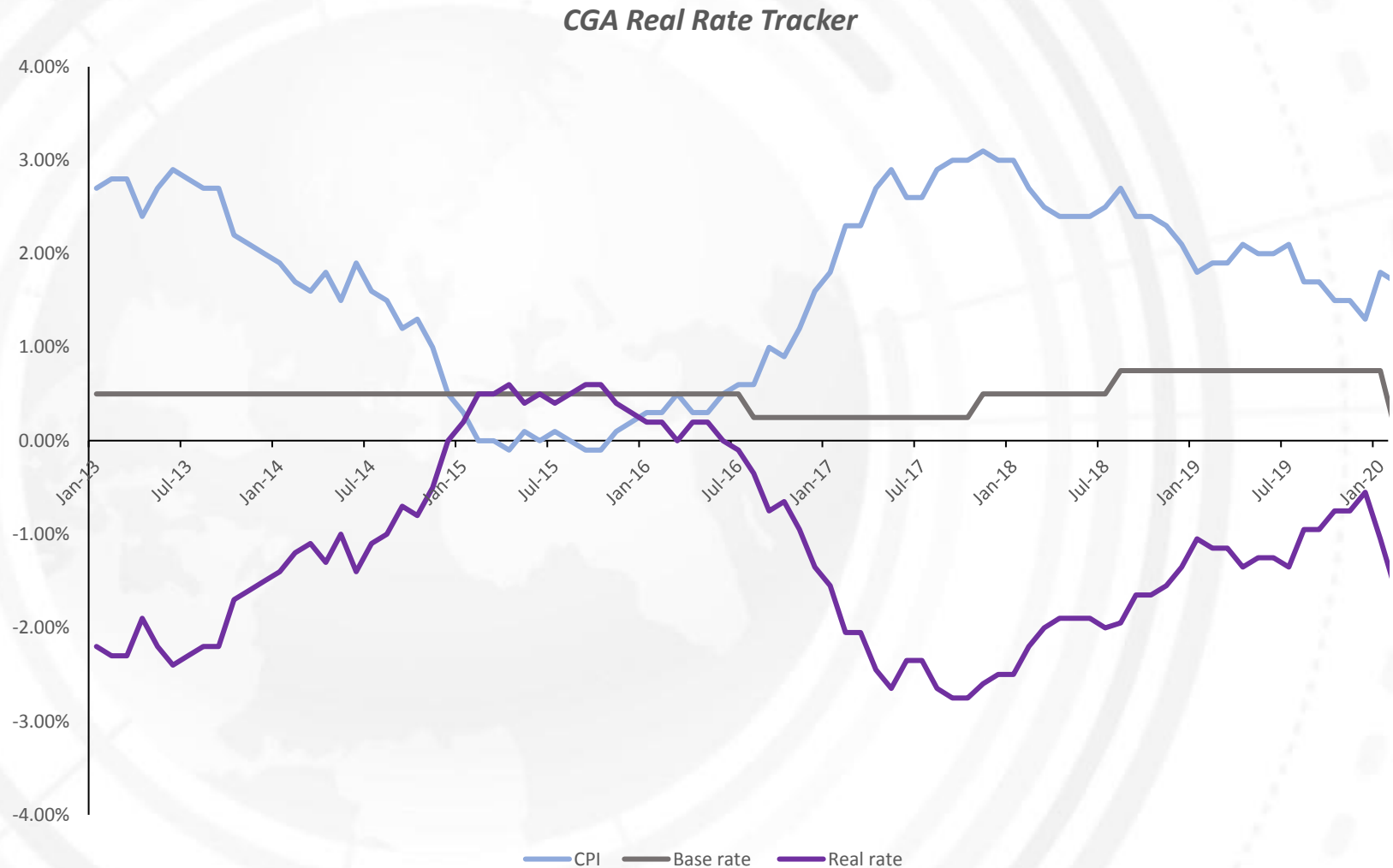
Source: ONS, Camdor Global estimates

- UK claims were rising anyway, but reports talk of significant spikes in recent weeks.
- We estimate a sharp rise to levels last seen in the 1990s – a period that still haunts parts of the UK 3 decades on.

The background features a light gray globe on the left, partially obscured by a series of concentric, slightly offset circles that create a sense of depth and movement. To the right, a network diagram is visible, consisting of several nodes (circles) connected by thin lines, suggesting global connectivity or data flow. The overall aesthetic is clean, modern, and technological.





COVID-19: THE FINANCIAL FALLOUT

Real rates have turned sharply negative again



Source: Camdor Global, ONS

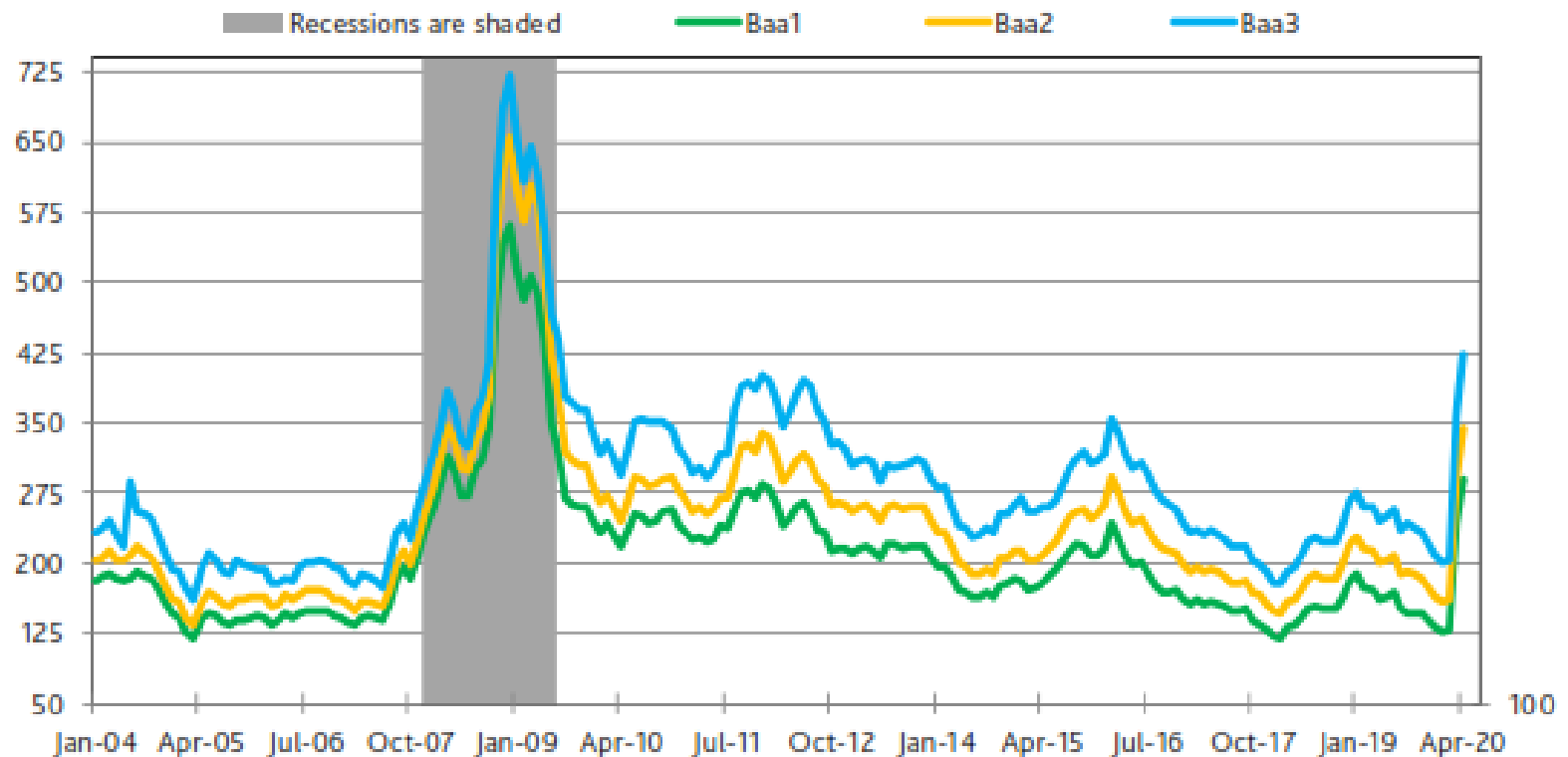
Central banks have responded with rate cuts

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)

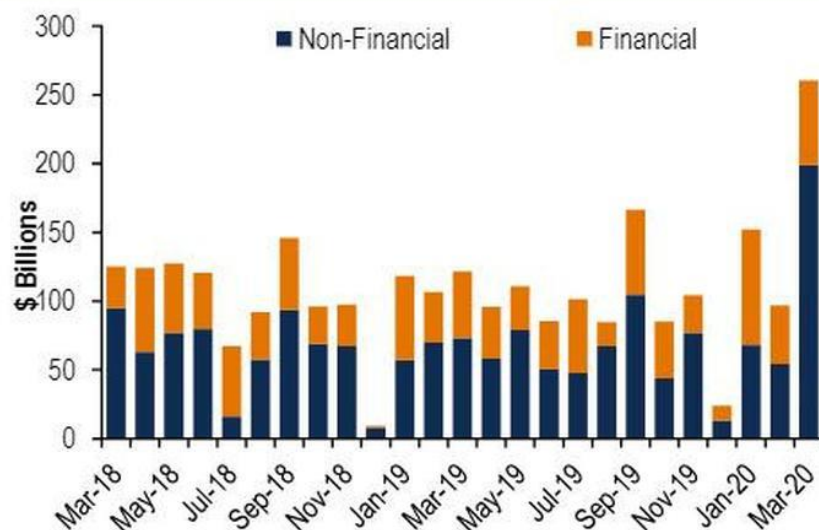
Corporate spreads have blown out...

**Figure 1: March 31's Median 423 Basis Points (bp) Spread for Baa3 Corporate Bonds
Lags 651 bp Average of October 2008 through March 2009**
estimated median bond yield spreads at the 7-year maturity in basis points
source: Moody's Analytics



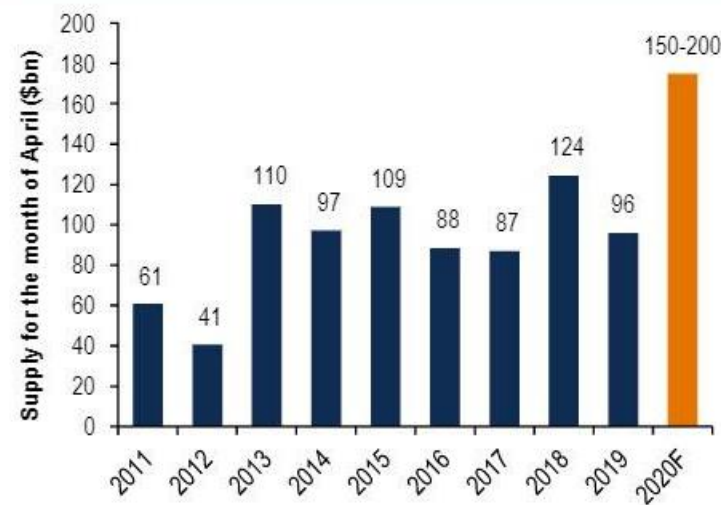
...but this is not (yet) a debt crisis

Figure 8: Monthly US IG supply volume



Source: BofA Global Research

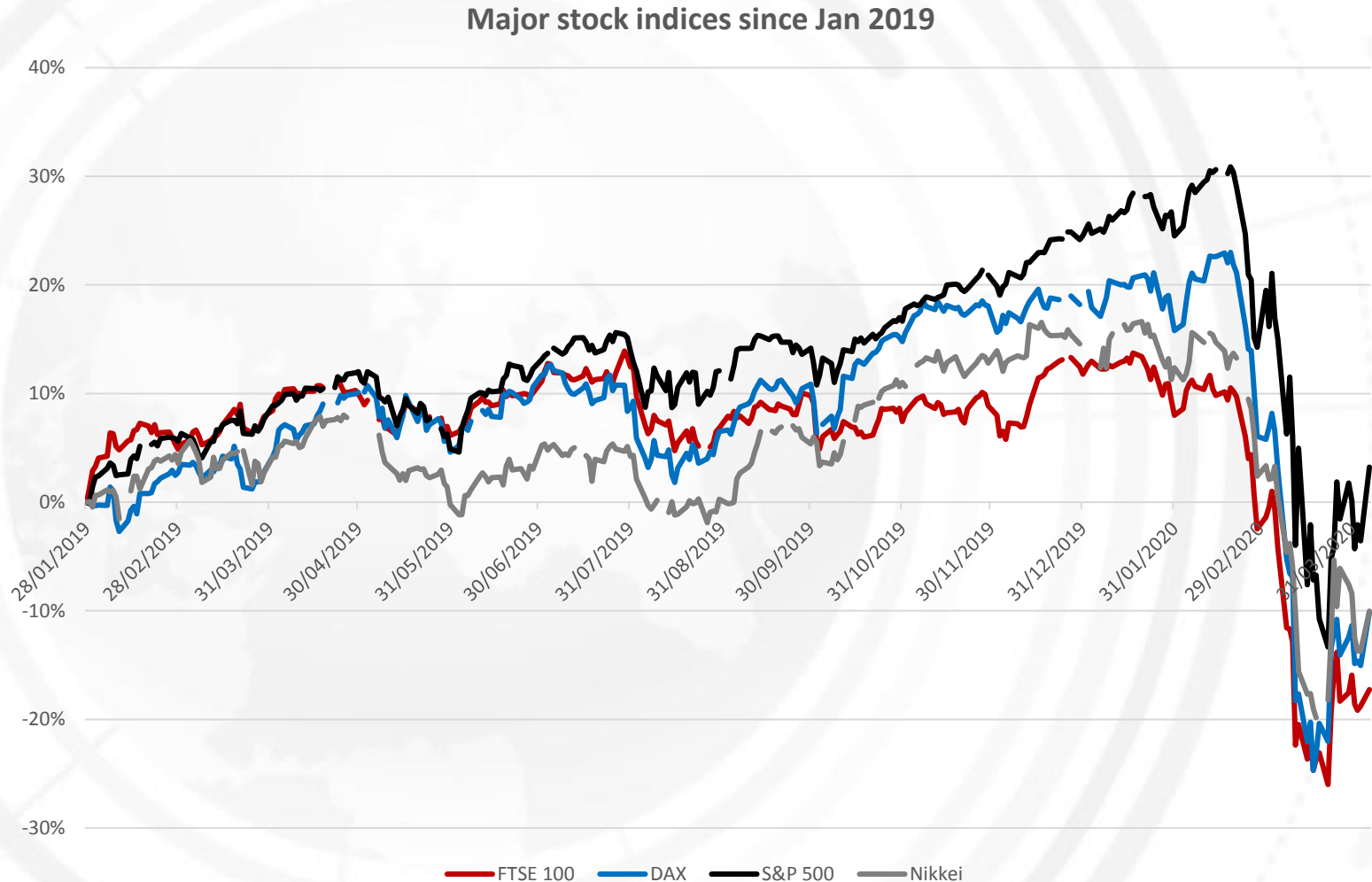
Figure 2: US IG supply in April



Source: BofA Global Research

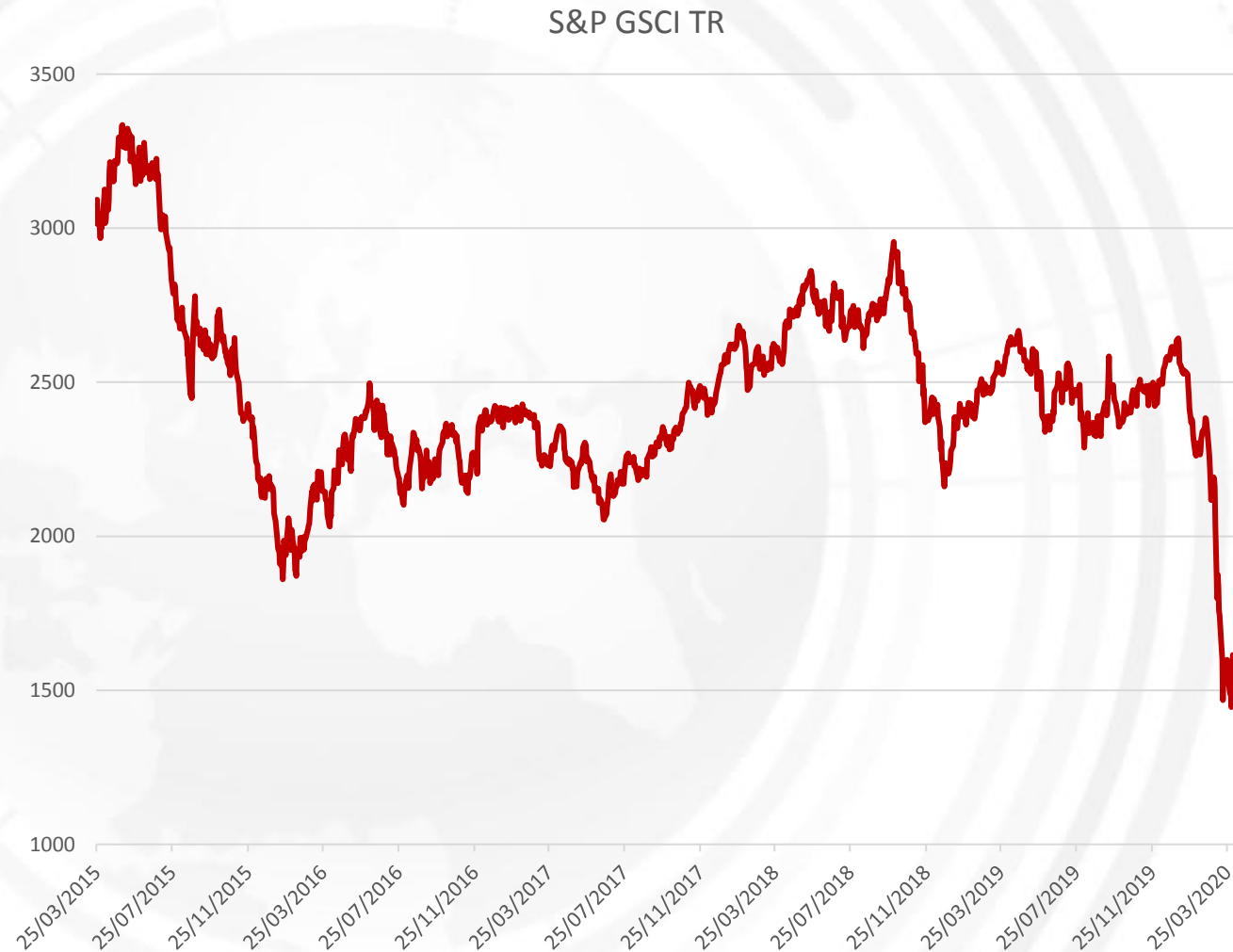
- Bond issuance is hitting record highs, as markets take advantage of the Fed's guarantee
- Significant increase on 2019
- Importantly, completely opposite to what happened in 2007-09, when issuance dried up
- Currently corporates are looking to extend (and perhaps pretend) when it comes to refinancing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

Stock markets were painful...



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

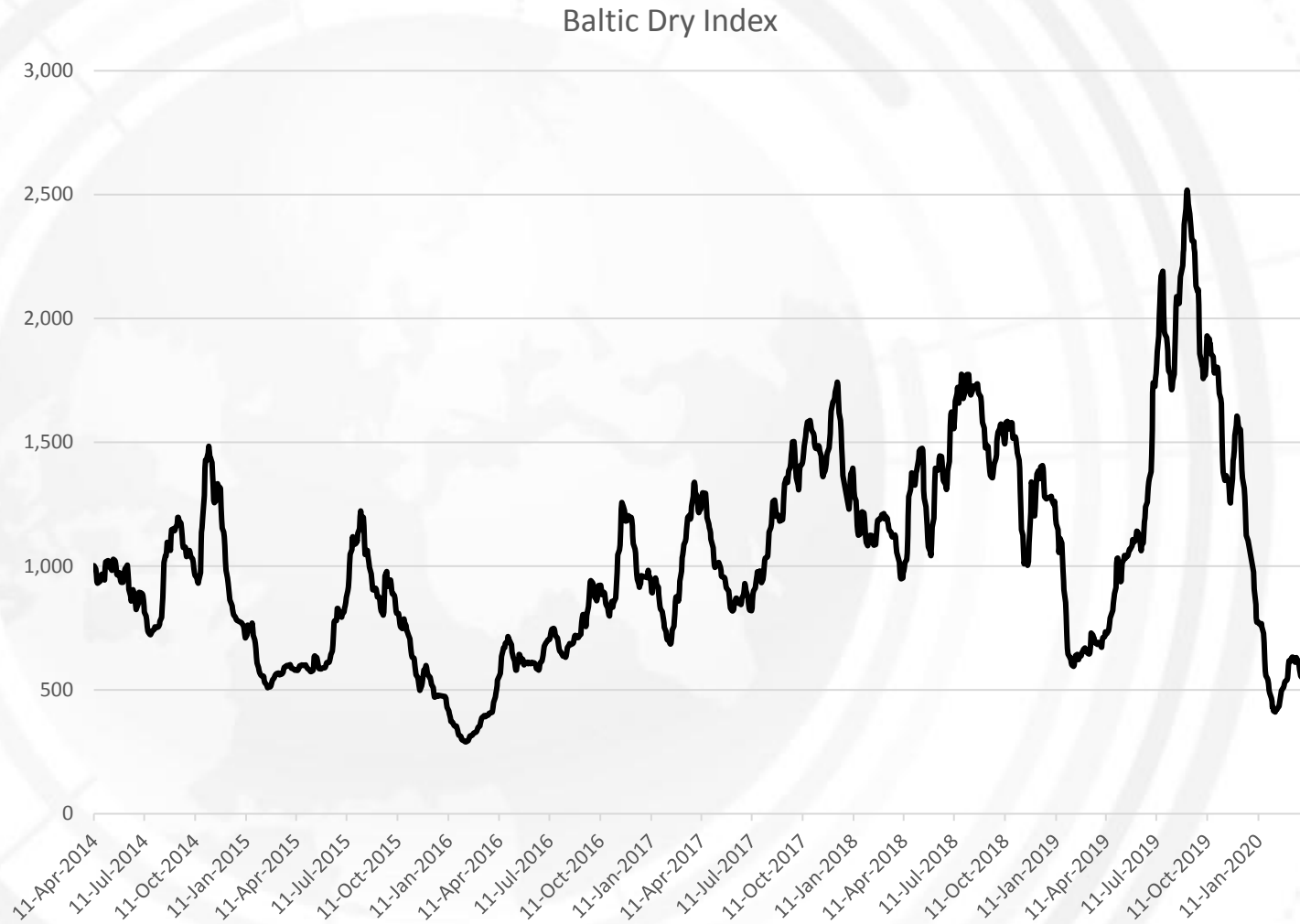
Commodities are down – after all, who's working?



Source: S&P Dow Jones Indices

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

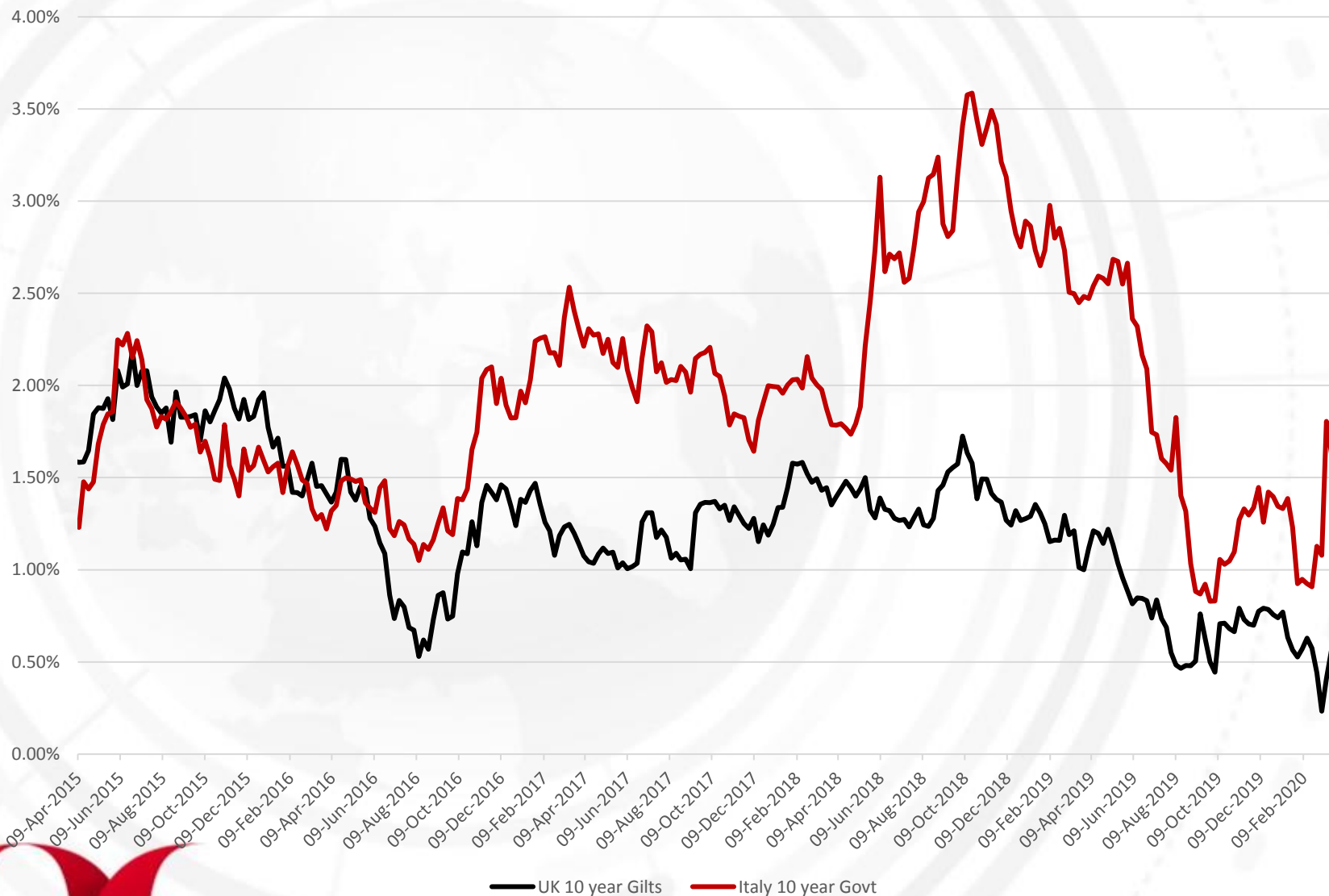
The Baltic Dry Index shows a decline in shipping



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

A general flight to quality despite all the stimulus

UK and Italy 10 year Government Yields



The background of the slide is a light gray with a subtle, abstract design. It features a faint globe on the left side, overlaid with several concentric circles that radiate from the center. To the right of the globe, there is a network diagram consisting of a central point connected to several smaller circles, with dashed lines indicating connections or paths. The overall aesthetic is clean and modern, suggesting a global or technological theme.

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).



Contact Us

Bob Swarup

T: +44 (0)7801 552755

E: Bob.swarup@insuranceinvestmentexchange.com

To join our mailing list and receive updates as well as register for our events, please email us at:

events@insuranceinvestmentexchange.com

Disclaimer and Additional Notes

All rights reserved. Any performance information contained herein may be unaudited and estimated. Past performance is not indicative of future results. Although all reasonable efforts have been made to ensure the accuracy of the information herein, neither the Insurance Investment Exchange, Camdor Global nor any other person or party involved with the research, compilation, editing or printing of this report gives any representation, warranty, indemnity or undertaking (whether express or implied) as to the truthfulness, accuracy or completeness of the information, statements, and opinions given, made or expressed herein, nor is any responsibility accepted for any act or omission made in reliance thereon. To the extent permitted by law, the Insurance Investment Exchange, Camdor Global and any other person or party involved with the research, compilation, editing or printing of this report does not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this report or for any decision based on it. All information herein is subject to change without notice.

The Insurance Investment Exchange is the trading name of IIECHANGE Limited, which is incorporated as a Private Limited Company in England and Wales No 09039920. Neither this document nor the information contained herein may be shared with any third party without the consent of the Insurance Investment Exchange or Camdor Global.