

### Impact of the COVID19 crisis on logistics and supply chains

KLU Q&A Sessions with Professor Alan McKinnon on 2<sup>nd</sup> and 30<sup>th</sup> April 2020

Introductory presentation <a href="https://bit.ly/2WaM8pU">https://bit.ly/2WaM8pU</a>

Issues arising during the sessions with lists of relevant information sources1.

1. How seriously have coronavirus and related regulations been affecting supply chains and logistics services around the world?

University of Turku: COVID-19 Supply Chain Impact Update by some of the World's Leading Supply Chain and Logistics Academics (Updated weekly)

https://sites.utu.fi/covid-supply-chains/

Lauri Ojala (University of Turku): The impact of COVID 19 on global supply chains and the transport sector

https://blogit.utu.fi/utu/wp-content/uploads/sites/73/2020/04/COVID-19 Supply Chain Impacts Ojala.pdf

Jean-Paul Rodrigue (Hofstra University): Coronavirus impacts on trade and supply chains.

https://sites.hofstra.edu/jean-paul-rodrigue/wp-content/uploads/sites/11/2020/04/Metrans Covid Trade JPR.pdf

Journal of Commerce: compendium of articles on 'Coronavirus effect on supply chains'

https://www.joc.com/special-topics/coronavirus-effect-supply-chains

Jan Fransoo (KLU): Coronavirus affects global supply chains in multiple dimensions

https://www.linkedin.com/pulse/coronacrisis-affects-global-supply-chains-multiple-jan-fransoo/

UNCTAD: Coronavirus outbreak has cost global value chains \$50 billion in exports

https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2297

European Shippers Council (April 2020): Overview of measures per country in response to COVID-19

https://europeanshippers.eu/download/overview-of-measures-per-country-in-response-to-covid-19/

Finbarr Bermingham (South China Morning Post 3-4-2020): Coronavirus: global trade braces for 'tidal wave' ahead, as shutdown batters supply chains

https://www.scmp.com/economy/china-economy/article/3078233/coronavirus-global-trade-braces-tidal-wave-ahead-shutdown

<sup>&</sup>lt;sup>1</sup> The inclusion of articles in this list does not necessarily mean that I agree with or endorse their content.

UK Freight Transport Association: FTA Coronavirus Logistics Impact Surveys

https://fta.co.uk/coronavirus/fta-coronavirus-logistics-impact-survey

Sam Whelan (The Loadstar 17-3-2020): More passenger aircraft become freighters as borders stay open for cargo

https://theloadstar.com/more-passenger-aircraft-become-freighters-as-borders-stay-open-for-cargo/

Brian Pearce (IATA): Updated impact assessment of the novel coronavirus (on aviation)

https://www.iata.org/en/iata-repository/publications/economic-reports/coronavirus-updated-impact-assessment/

John Manners-Bell (Transport Intelligence): The anatomy of the crisis and its short-term consequences for the logistics and supply chain sector

https://www.ti-insight.com/covid-19-monitor/

Bernard Hoekman et al (European University Institute): Export Restrictions - A Negative-Sum Policy Response to the COVID-19 Crisis

https://cadmus.eui.eu/bitstream/handle/1814/66828/RSCAS 2020 23.pdf?sequence=1&isAllowed=y

## 2. Will the coronavirus pandemic cause a reversal of globalization and a return to shorter and simpler supply chains?

Martin Sandbu (Financial Times 1-4-2020): Globalisation and national resilience can coexist despite Covid 19

https://www.ft.com/content/49a7c20a-72a2-11ea-95fe-fcd274e920ca

Jonty Bloom (BBC Business News 2-4-2020): Will coronavirus reverse globalisation

https://www.bbc.co.uk/news/business-52104978

Zachary Karrabel (Wall Street Journal 20-3-2020): Will the coronavirus bring the end of globalization? don't count on It

 $\frac{\text{https://www.wsj.com/articles/will-the-coronavirus-bring-the-end-of-globalization-dont-count-on-it-}{11584716305}$ 

Lizzie O'Leary (The Atlantic 19-3-2020) The Modern Supply Chain Is Snapping

https://www.theatlantic.com/ideas/archive/2020/03/supply-chains-and-coronavirus/608329/

Shannon K. O'Neil: How to Pandemic-Proof Globalization Redundancy, Not Reshoring, Is the Key to Supply Chain Security.

https://www.foreignaffairs.com/articles/2020-04-01/how-pandemic-proof-globalization

Andy Klump (PV-Tech): Lessons from the COVID-19 outbreak: Managing global supply chains amid uncertainty

https://www.pv-tech.org/guest-blog/lessons-from-the-covid-19-outbreak-managing-global-supply-chains-amid-uncer

3. How will the management of global supply chains be likely to change in response to the Covid19 crisis? How will companies try to improve supply chain resilience after the pandemic?

Rebecca Liao and Ziyang Fan (World Economic Forum): Supply chains have been upended. Here's how to make them more resilient

https://www.weforum.org/agenda/2020/04/supply-chains-resilient-covid-19/

Knut Alicke et al (McKinsey): Supply-chain recovery in coronavirus times – plan for now and the future

https://www.mckinsey.com/business-functions/operations/our-insights/supply-chain-recovery-in-coronavirus-times-plan-for-now-and-the-future

Francisco Betti and Jun Ni (World Economic Forum): *How China can rebuild global supply chain resilience after COVID-19* 

https://www.weforum.org/agenda/2020/03/coronavirus-and-global-supply-chains/

Deloittes: COVID-19 Managing supply chain risk and disruption

https://www2.deloitte.com/global/en/pages/risk/articles/covid-19-managing-supply-chain-risk-and-disruption.html

4. How is the coronavirus crisis affecting CO<sub>2</sub> emissions?

Carbon Brief: Analysis: Coronavirus set to cause largest ever annual fall in CO2 emissions

 $\underline{https://www.carbonbrief.org/analysis-coronavirus-set-to-cause-largest-ever-annual-fall-in-co2-emissions}$ 

International Energy Agency: The impacts of the COVID-19 crisis on global energy demand and CO<sub>2</sub> emissions

https://www.iea.org/reports/global-energy-review-2020/global-energy-and-co2-emissions-in-2020

Victor Mallet (Financial Times 8-4-2020): EU carbon emissions tumble during lockdowns (includes data on goods vehicles and shipping)

https://www.ft.com/content/4c59fd16-6020-4798-b8f1-5df686bbd97a

5. As supply chains and the economic system as a whole recover how can we 'build back better' in an environmental sense, improving the prospects of achieving carbon reduction targets?

Dickon Pinner et al (McKinsey): Addressing climate change in a post-pandemic world

 $\frac{https://www.mckinsey.com/business-functions/sustainability/our-insights/addressing-climate-change-in-a-post-pandemic-world?cid=other-eml-alt-mip-mck&hlkid=73962be94ab24b699b099f4a2af9e9e3&hctky=10211373&hdpid=50056e1f-1960-4ae3-b9a3-ff33b5ea692e$ 

Stéphane Hallegatte and Stephen Hammer (World Bank): *Thinking ahead: For a sustainable recovery from COVID-19 (Coronavirus)* 

https://blogs.worldbank.org/climatechange/thinking-ahead-sustainable-recovery-covid-19-coronavirus

João Roberto Ripper: COVID-19 is not a silver lining for the climate, says UN Environment chief. Will Covid19 help us to reach our climate change targets for logistics?

https://news.un.org/en/story/2020/04/1061082

World Economic Forum: How COVID-19 might help us win the fight against climate change

https://www.weforum.org/agenda/2020/03/covid-19-climate-change/

Friedel Sehlleier (GIZ): Will the Corona Crisis Help or Hurt the Freight Decarbonisation Agenda?

https://www.changing-transport.org/will-the-corona-crisis-help-or-hurt-the-freight-decarbonisation-agenda/

Harilaos Psaraftis (Danish Technical University): The impact of COVID-19 on the decarbonization of shipping: a blogger's perspective

https://thepsaraftisblog2.blogspot.com/2020/04/the-impact-of-covid-19-on.html

Harry Dempsey (Financial Times, 29-4-2020) Wind power boom under threat as coronavirus hits supply chains

https://www.ft.com/content/1205af7e-47dc-41fa-a9b4-ff6a03fe1cdc

# 6. To what extent will efforts to improve the resilience and sustainability of post-Covid19 supply chains be mutually-reinforcing?

Sophie Punte (Smart Freight Centre): Supply chains in the time of Corona

https://www.smartfreightcentre.org/en/news/supply-chains-in-the-time-of-corona/13050/

Alan McKinnon (KLU): Balancing resilience and efficiency in multi-modal supply chains (OECD-ITF 2019)

https://www.itf-oecd.org/sites/default/files/docs/efficiency-resilience-multimodal-supply-chains 0.pdf

# 7. What longer term lessons may be learned from the emergency reorientation of supply chains to meet the immediate logistical demands of the medical and food sectors?

Alan McKinnon (KLU): The emergency re-orientation of supply chains

https://www.the-klu.org/article/the-emergency-reorientation-of-supply-chains/

Jonathan Eley and Alice Hancock (Financial Times 31-3-2020) UK food industry fears waste explosion as coronavirus strains supply chain

https://www.ft.com/content/7b6bb903-7688-4520-84f5-9845b0f6bd50

Jakob Heinen and Kai Hoberg (KLU): How 3D printing is supporting the fight against Covid19

https://www.the-klu.org/fileadmin/the-

klu.org/media/klu experience/article/2020/20200330 corona-3D-print-Hoberg-Heinen.pdf

#### 8. How difficult will it be for supply chains to recover from the current level of disruption?

Sam Whelan (The Loadstar 25-3-2020): *New supply chain risks emerge as production lines restart in Chinese factories.* 

https://theloadstar.com/new-supply-chain-risks-emerge-as-production-lines-restart-in-chinas-factories/

Yossi Sheffi (MIT 16-3-2020): A Coronavirus Briefing with MIT.

https://www.youtube.com/watch?v=Br0FqIuWAHA&feature=youtu.be

# 9. How vulnerable has the road freight sector been to the coronavirus crisis and what measures have governments been taking to ensure the continuing flow of freight by road?

Autotrader: Coronavirus advice for truck owners

https://www.autotrader.co.uk/trucks/content/coronavirus-advice-for-truck-owners

Rachel Premack (Business Insider 11 March 2020): America's 1.8 million truck drivers can't work from home and often lack health insurance — and that may stymie the fight against coronavirus

https://www.businessinsider.com/coronavirus-america-most-common-job-title-work-from-home-2020-3?r=US&IR=T

American Transportation Research Institute: GPS Data Shows Critical Truck Deliveries Continue Despite COVID-19

https://truckingresearch.org/2020/03/24/gps-data-shows-critical-truck-deliveries-continue-despite-covid-19-analysis-of-data-finds-unprecedented-performance-year-over-year/

W.K.Sieber et al: Obesity and Other Risk Factors: The National Survey of U.S. Long-Haul Truck Driver Health and Injury (American Journal of Industrial Medicine 2014)

https://www.ncbi.nlm.nih.gov/pubmed/24390804

Alan McKinnon (KLU): Life without trucks: the impact of a temporary disruption of road freight transport on a national economy (Journal of Business Logistics, 2005)

https://www.alanmckinnon.co.uk/find.html?SearchField=life+without+trucks

## 10. To what extent is the Covid 19 pandemic likely to reinforce established logistics trends such as digitalization and the growth of home delivery?

UNCTAD: The Covid 19 Crisis: accentuating the need to bridge digital divides

https://unctad.org/en/PublicationsLibrary/dtlinf2020d1\_en.pdf

James Taylor and Langton McCombe (Smart Company 2-4-2020): This crisis is different: E-commerce, coronavirus and the looming recession

https://www.smartcompany.com.au/coronavirus/e-commerce-coronavirus-recession/

Mark Szakonyi (Journal of Commerce): *COVID-19 to accelerate logistics industry toward digital, low-growth reality* 

https://www.joc.com/maritime-news/covid-19-accelerate-logistics-industry-toward-digital-lower-growth-reality\_20200430.html

Lauren Indvik (Financial Times 31/3/2020): How coronavirus will change fashion's supply chains

https://www.ft.com/content/c95144cb-4caf-4a7f-8eea-b7f02291d3d8

Paul Skeldon (Internet Retailing): Surge in ecommerce will outlive corona across Europe, consumer research suggest

https://internetretailing.net/covid-19/covid-19/surge-in-ecommerce-will-outlive-corona-acrosseurope-consumer-research-suggest-21231

#### 11. How do we reduce the exposure of the logistics workforce to the risk of Covid 19 infection?

Dan McCrum et al (Financial Times 4-4-2020): The workers with no choice but to keep on with the job

https://www.ft.com/content/48e4a311-6a7c-4f80-b541-7893a5f97ea4?desktop=true&segmentId=d8d3e364-5197-20eb-17cf-2437841d178a

Business and Human Rights Resource Centre: UK Warehouse workers report social distancing concerns & COVID-19 infection risk; Unions call on retailers to prioritise worker safety

https://www.business-humanrights.org/en/uk-warehouse-workers-report-social-distancing-concerns-covid-19-infection-risk-unions-call-on-retailers-to-prioritise-worker-safety

Jan Fransoo (KLU): Making your (retail) distribution center Corona-resilient

https://www.linkedin.com/pulse/making-your-retail-distribution-center-jan-fransoo/

Gaby Hinsliff (Guardian 1-5-2020): The next wave of coronavirus disruption? Automation

https://www.theguardian.com/commentisfree/2020/apr/30/coronavirus-disruption-automation

### 12. How prevalent has panic buying been during the crisis and how seriously has it affected supply chains?

Kantar (24 March 2020): Accidental stockpilers driving shelf shortages in the UK

https://www.kantar.com/Inspiration/FMCG/Accidental-stockpilers-driving-shelf-shortages-in-the-UK

Alex Lee (Wired 30-3-2020): How the UK's just-in-time delivery model crumbled under coronavirus

https://www.wired.co.uk/article/stockpiling-supermarkets-coronavirus

Bee Wilson (Guardian 3-4-2020): Off our trolleys: what stockpiling in the coronavirus crisis reveals about us.

https://www.theguardian.com/news/2020/apr/03/off-our-trolleys-what-stockpiling-in-the-coronavirus-crisis-reveals-about-us

#### 13. How big an impact is the coronavirus crisis having on levels of freight traffic and trade?

Damian Carrington (Guardian): UK road travel falls to 1955 levels as Covid-19 lockdown takes hold

https://www.theguardian.com/uk-news/2020/apr/03/uk-road-travel-falls-to-1955-levels-as-covid-19-lockdown-takes-hold-coronavirus-traffic

Bob Pishue (Inrix): COVID-19's Impact on Freight: An Analysis of Long-Haul Freight Movement During a Pandemic

https://www.freightwaves.com/news/white-paper-covid-19s-impact-on-freight-an-analysis-of-long-haul-freight-movement-during-a-pandemic

Theo Notteboom and Thanos Pallis: IAPH-WPSP Port Economic Impact Barometer (1 May 2020)

 $\frac{https://sustainableworldports.org/wp-content/uploads/WPSP-Port-Economic-Impact-Barometer-1-May-2020.pdf}{}$ 

International Civil Aviation Organisation: *Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis* 

https://www.icao.int/sustainability/Documents/COVID-19/ICAO%20Coronavirus%202020%2004%2007%20Econ%20Impact.pdf

World Trade Organisation: Trade set to plunge as COVID-19 pandemic upends global economy

https://www.wto.org/english/news e/pres20 e/pr855 e.htm

UNCTAD: ten-point plan to bolster global transport, ease trade during COVID-19

https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=2344&Sitemap\_x0020\_Taxonomy=UNCTAD%20Home;#2311;#UNCTAD%20and%20the%20coronavirus;#1721;#Transport;#510;#Trade%20Facilitation

### 14. What has been the impact on the cross-border movement of freight in Europe?

James Shotter et al (Financial Times 17-3-2020) Flow of goods slows as Poland tightens it borders.

https://www.ft.com/content/0f6ee5e4-6854-11ea-a3c9-1fe6fedcca75

Kevin Koerner and Barbara Boettcher (DB): COVID-19 and the EU: A new Europe of borders

https://www.dbresearch.com/servlet/reweb2.ReWEB?rwsite=RPS\_EN-PROD&rwobj=ReDisplay.Start.class&document=PROD0000000000506615

European Commission: COVID19 - Guidelines for border management measures to protect health and ensure the availability of goods and essential services

https://ec.europa.eu/home-affairs/sites/homeaffairs/files/what-we-do/policies/european-agendamigration/20200316 covid-19-guidelines-for-border-management.pdf

Sixfold.com: COVID-19 impact on logistics — Sixfold publishes real-time information on border crossing times

https://sixfold.com/news/covid-19-impact-on-logistics-sixfold-publishes-real-time-information-on-border-delays

### 15. To what extent is the crisis threatening the financial viability of logistics businesses?

William Cassidy (Journal of Commerce): Truckers prepare for long, uneven recovery

https://www.joc.com/trucking-logistics/truckload-freight/swift-transportation/truckers-prepare-long-uneven-recovery 20200427.html

Andrew Curley et al (McKinsey): Airlines brace for severe turbulence

https://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/coronavirus-airlines-brace-for-severe-turbulence

Robert Plummer (BBC news website): Coronavirus: Six industries crying out for help

https://www.bbc.co.uk/news/business-52200386

Keiren Smith (Driver Require): The Impact of COVID-19 on the UK Haulage Sector

https://driverrequire.co.uk/report-covid

### 16. Is the coronavirus crisis influencing the freight modal split? Is it helping rail to strengthen its position in the freight market?

Andrew Corselli (Railway Age): AAR: "The impact of coronavirus on railroads is growing"

https://www.rtands.com/rail-news/aar-the-impact-of-coronavirus-on-railroads-is-growing/

Wade Shepard (Forbes): China-Europe Rail Set To Boom As COVID19 Chokes Air, Sea and Road Transport

https://www.forbes.com/sites/wadeshepard/2020/03/31/china-europe-rail-is-set-to-boom-as-covid-19-chokes-air-sea-and-road-transport/#359438e137db

#### 17. What are some of the main logistics bottlenecks caused by the coronavirus crisis?

Michael Pooler and David Keohane (Financial Times): European ports and warehouses brace for surge in containers

https://www.ft.com/content/ef13051e-9a18-40cd-a24d-45ceeee0a519

Gavin van Marle (Loadstar): UK could run out of warehouse space in two weeks as imports pile up

https://theloadstar.com/uk-could-run-out-of-warehouse-space-in-two-weeks-as-imports-pile-up/

Patricia Nilsson and Judith Evans (Financial Times): UK supply chains threatened by storage crunch

https://www.ft.com/content/6b6d08a6-7d02-432e-a944-efb8d6ffdf66

Tyler Durden: "We Are Moving Into The End-Game": 27 Tankers Anchored Off California, Hundreds off Singapore As Oil Industry Shuts Down'

https://www.zerohedge.com/markets/we-are-moving-end-game-27-tankers-anchored-california-hundreds-singapore-oil-industry-shuts

Jillian Ambrose: *Oil market faces storage crisis in a world awash with crude* <a href="https://www.theguardian.com/business/2020/apr/25/oil-market-storage-crisis-coronavirus-plummeting-demand">https://www.theguardian.com/business/2020/apr/25/oil-market-storage-crisis-coronavirus-plummeting-demand</a>

IATA: *Immediate and severe air cargo capacity crunch* <a href="https://www.iata.org/en/pressroom/pr/2020-04-28-01/">https://www.iata.org/en/pressroom/pr/2020-04-28-01/</a>

Joe Miller et al (Financial Times): Weakest link in supply chain threatens car industry revival

https://www.ft.com/content/9d3b2243-5e26-4890-918f-ec1daee33ffb

#### 18. To what extent has the crisis raised the public profile of freight transport / logistics?

Fiona Jenkins: Is COVID-19 a temporary or lasting remedy for our 'freight blindness'?

https://www.steergroup.com/insights/news/covid-19-temporary-or-lasting-remedy-our-freight-blindness

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