

Precision Convergence Webinar Series

How Do We Build Supply-Chain Resilience?

The Case of COVID-19 Medical Supplies

By Dr. Gary Gereffi

With High-Level Panel of Leaders in Science, Technology, On-the-Ground Action, and Policy

Wednesday, October 6, 2021 | 11 AM to 1 PM EST (2 hours in duration)

For Remote Participation, please register [HERE](#)

ABSTRACT: A series of recent global disruptions, including the 2008-2009 global economic recession, the rise of the digital economy (also known as the Fourth Industrial Revolution or Industry 4.0), the growing wave of economic nationalism, and the current COVID-19 global pandemic, have called into question the supply-chain vulnerabilities associated with numerous global industries. To build more robust cross-sectoral and international supply chains, we need a multidimensional conception of resilience that has different meanings for companies, global value chains (GVCs) that link lead firms and multiple tiers of suppliers, and countries. The interplay between these three levels is examined for four medical supply products of critical importance during the COVID-19 pandemic: rubber gloves, face masks, ventilators, and the vaccines developed specifically for COVID-19. Key strategies are highlighted that could guide managers and policymakers in building resilience for future supply-chain disruptions.



PRESENTER: Dr. Gary Gereffi is Emeritus Professor of Sociology and Director of the [Global Value Chains Center at Duke University](#). He received his B.A. degree from the University of Notre Dame and his M.Phil. and Ph.D. degrees from Yale University. Gereffi has published over a dozen books and numerous articles on globalization, industrial upgrading, and social and economic development, and he is one of the originators of the global value chains framework. Recent books include: *Global Value Chains, Governance and Globalization Strategy* (G. Gereffi, P. Pananond & T. Pedersen, co-editors), special issue of *Global Strategy Journal*, 10(3), 2020; *Handbook on Global Value Chains* (Stefano Ponte, Gary Gereffi and Gale Raj-Reichert, co-editors), Cheltenham, UK: Edward Elgar Publishing, 2019; *Global Value Chains and Development: Redefining the Contours of 21st Century Capitalism* (Cambridge University Press, 2018); and *Global Value Chains in a Postcrisis World: A Development Perspective* (The World Bank, 2010). Current projects include: (1) the impact of the COVID-19 pandemic on the resilience of global supply chains; (2) the impact of U.S. protectionism on jobs and regional trade agreements; (3) evaluating how the digital economy and Industry 4.0 are likely to affect international business strategies and economic, social and environmental upgrading; and (4) shifting regional interdependencies in East Asia and North America, with a focus on China, South Korea and Mexico vis-à-vis the United States. Gereffi was invited to testify at the US Senate Commerce Committee hearings on “Implementing Supply Chain Resiliency” in Washington, DC on July 15, 2021. The hearing details, including a list of speakers, their written statements, and the video recording (webcast) are presented [here](#).

About the series: The [precision convergence series](#) is launched to catalyze unique synergy between, on the one hand, novel partnerships across sciences, sectors and jurisdictions around targeted domains of real-world solutions, and on the other hand, a next generation convergence of AI with advanced research computing and other data and digital architectures such as [PSC's Bridges-2](#), and supporting data sharing frameworks such as [HuRMAT](#), informing in a real time as possible the design, deployment and monitoring of solutions for adaptive real-world behavior and context.

The McGill Centre for the Convergence of Health and Economics (MCCHE) is a virtual world network of scientist, action and policy leaders promoting the weaving of digital-powered interdisciplinary science into person-centered domain-specific solutions at scale to global challenges faced by traditional and modern economy and society worldwide. The MCCHE stimulates lasting collaborations that bridge the many divides in the market, economy, and society that are at the root of these most pressing modern challenges through collaborative of modular convergence innovation platforms.

The Pittsburgh Supercomputing Center is a joint computational research center between Carnegie Mellon University and the University of Pittsburgh. Established in 1986, PSC is supported by several federal agencies, the Commonwealth of Pennsylvania and private industry. PSC provides university, government, and industrial researchers with access to several of the most powerful systems for high-performance computing, communications, and data-handling available to scientists and engineers nationwide for unclassified research. PSC advances the state-of-the-art in high-performance computing, communications and informatics and offers a flexible environment for solving the largest and most challenging problems in computational science.

Co-Chairs:



Laurette Dubé, PhD is the founding Chair and Scientific Director of the McGill Centre for the Convergence of Health Economics. She holds the James McGill Chair of Consumer and Lifestyle Psychology and Marketing. Her work has been published in top disciplinary journals in Psychology, Management and Medicine as well as in multidisciplinary journals. She holds an MBA in finance, and a PhD in behavioural decision making and consumer psychology. During her 2020-2021 sabbatical, she is a visiting scholar at the National Research Council of Canada and at the Pittsburgh Supercomputing Center, Carnegie Mellon, USA. <https://thefutureeconomy.ca/interviews/laurette-dube>



Shawn Brown, PhD is Vice Chancellor for Research Computing at the University of Pittsburgh and the Director of Pittsburgh Supercomputing Center at the Carnegie Mellon University/University of Pittsburgh and. Prior to his appointment, Dr. Brown served as the Associate Director of Research Software Development at the McGill Centre of Integrative Neuroscience at the McGill Neurological Institute. Dr. Brown is an expert on high - performance computing and computational simulation. He has over 25 years of experience in developing software to support the use of high-performance computing for research in areas such as chemistry, bioinformatics, and public health. his research interests are ALSO in how agent-based modeling and other computational techniques can be used to provide decision support in public health and chronic disease.

Panelists:



Jim Spohrer serves on the International Society of Service Innovation Professionals (ISSIP.org) Board of Directors. At IBM, he led Open Source AI/Data, Global University Programs, Almaden Service Research, and CTO Venture Capital Relations Group. At Apple, he achieved Distinguished Engineer Scientist Technologist for authoring and learning platforms. After MIT (BS/Physics), he developed speech recognition systems at Verbex (Exxon), then Yale (PhD/Computer Science AI). With over ninety publications and nine patents, awards include AMA ServSIG Christopher Lovelock Career Contributions to the Service Discipline, Evert Gummesson Service Research, Vargo-Lusch Service-Dominant Logic, Daniel Berg Service Systems, and PICMET Fellow for advancing service science.



Roberta Rabellotti is Professor of Economics at the Department of Political and Social Science, University of Pavia (Italy). After graduating in Economics at Università Bocconi, she got a Master of Science in Development Economics at the University of Oxford (St. Antony's College) and a Doctor of Philosophy at the Institute of Development Studies, University of Sussex. Rabellotti has widely published in international outlets on issues related with innovation, clusters and value chains in developing countries, with a special focus on China and Asia. Throughout her career, Roberta participated in and led several research and consultancy projects. She has provided academic advice to, amongst others, the European Commission, the IADB, OECD; UNIDO; UN-CEPAL, UNCTAD, and various national and regional governments. More information is available at <https://robertarabellotti.it>



Ram Mudambi is the Frank M. Speakman Professor of Strategy at the Fox School of Business, Temple University, Philadelphia, USA. Previously he served on the faculties of Case Western Reserve University, the University of Reading in England, and the University of North Carolina – Chapel Hill. He received his M.Sc.(Econ) from the London School of Economics and his Ph.D. from Cornell University. He is a Fellow of the Academy of International Business (AIB) and of the European International Business Academy (EIBA). He is a co-editor of the *Global Strategy Journal* and an Area Editor at the *Journal of International Business Policy*. He is also a consulting editor at the *Journal of International Business Studies* where he previously served as an Area Editor. His current research focuses on the geography of innovation particularly in the context of emerging economies. He has published over 100 peer reviewed research papers. His work has appeared in the *Journal of Political Economy*, the *Journal of Economic Geography*, the *Strategic Management Journal* and the *Journal of International Business Studies* among many others. His practitioner pieces have appeared in the *Harvard Business Review*, the *Sloan Management Review*, and the *California Management Review*. His media appearances include the *New York Times*, *The Atlantic* magazine, National Public Radio and numerous local radio and TV programs. He writes fiction under the pen name R.M. Burgess, and has published seven novels, with that latest just out in 2021. He is currently working on his eighth and ninth novels.



John G. Keogh is a strategist, C-level advisor and academic researcher with 25 years of executive leadership roles as Director, VP and SVP in global Supply Chain Management, Information Technology, Technology Consulting and global Supply Chain Standards. He advises the public and private sectors world-wide and is a regular subject matter expert on TV and Radio. Mr. Keogh is managing principal at Toronto-based, niche advisory and research firm Shantalla Inc. Mr. Keogh holds a PG diploma and an MBA in Management and an MSc in Business and Management Research in transparency and trust. He is currently completing doctoral research on transparency and trust in food chains at Henley School of Business, University of Reading.



Dr. Carlo Pietrobelli is a professor and policy advisor on innovation and industrial development and policy. He is currently Professor of Economics and Dean of the Department of Economics at University Roma Tre, Italy, Professorial Fellow at UNU-MERIT, Maastricht, and Adjunct Professor at Georgetown University, Washington D.C.. During 2009-2016 he was a Lead Economist at the Inter-American Development Bank. His research interests range from development economics to innovation, trade, industry and natural resources in developing countries. He has published widely in international journals and his books were published by Harvard University Press, Edward Elgar, Palgrave and Routledge. He holds a PhD in Economics from Oxford University and has been a regular policy advisor to governments in Africa, Asia, Europe and Latin America.

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Frederick M. Abbott is Edward Ball Eminent Scholar Professor of Law at Florida State University College of Law, USA. He has served as expert consultant and legal representative for international and regional organizations, governments and nongovernmental organizations, mainly in the fields of intellectual property, public health, technology transfer, competition, trade and sustainable development. He has undertaken a number of studies for the World Health Organization and others regarding the legal, financial and policy frameworks conducive to establishing successful pharmaceutical production, including associated technology transfer. He is a member of the Technology Advisory Group to WHO C-TAP. He is consultant to the United Nations Development Program on competition, intellectual property and public health matters. Professor Abbott has authored many books and articles, including *International Intellectual Property in an Integrated World Economy*, 4th ed. 2019 (with T. Cottier and F. Gurry) and *Global Pharmaceutical Policy* (2009) (with G. Dukes). He is Co-Chair of the Committee on Global Health Law of the International Law Association having served as Rapporteur for the Committee on International Trade Law from the inception of its work in 1993 to its conclusion in 2014. He is on the editorial board of the *Journal of International Economic Law* (Oxford) and the *WIPO-WTO Colloquium Series*. Details at <frederickabbott.com>.