Draft: July 20, 2020

Effect of Multichannel COVID-19 Communications on Global Market Uncertainty

Principal Investigators

Mikhail Oet, Ph.D.[1], Xiaomu Zhou, Ph.D.[2], Tuomas Takko, MSc.[3], Federico Musciotto, Ph.D.[4]

Abstract

How we communicate, the extent of discourse polarization in our communities, and the level of public trust in our society can influence many aspects of our lives. It affects our general understanding of a novel disease, actions to take to protect ourselves and our families, economic vitality, and societal security. Since the outbreak of COVID-19, much of the international discourse regarding the role of government in resolving public health emergencies is to provide a clearer understanding of how epidemiology and public health information affect policy, public anxiety, and economic uncertainty (Van Bavel et al., 2020). We have not seen much research exploring whether government communications and public trust in government affects infectious disease spread and macroeconomic outcomes, and if so, how. We hypothesize that the clarity of government communication attenuates communication polarity and public anxiety, increases public trust and compliance, improves the control over the disease spread, and reduces economic uncertainty and financial market volatility. By contrast, unclear government communication amplifies communication polarity and public anxiety, lowers public trust and compliance, and increases disease spread, economic uncertainty, and financial market volatility.

The proposed study will collect observable and unobservable information from the COVID-19 pandemic in a sample of developed economies (Australia, Germany, South Korea, USA) and developing economies (Brazil, India, Iran, South Africa) to formulate and simulate effective public communication policy strategies and choices. We seek to understand how policy choices can amplify or attenuate the scale of the macroeconomic costs. We will simulate two broad government communication strategies: consistent communications where government messaging is aligned with scientific consensus and dynamic communications where government messaging can freely deviate from scientific consensus. We want to explore whether the benefits of dynamic messaging lead to the power to elicit strong public sentiment and a faster path to restoring economic normalcy at the costs of greater public uncertainty and mortality. We attempt to verify that benefits of consistent messaging leads to a reduction in public uncertainty, greater calm in the financial markets, and lesser mortality. We also want to discover whether the costs of consistent messaging include the loss of power to elicit strong public sentiment and a slower transition process to economic normalcy.

JEL classification: F68, I18, Z1

Keywords: Pandemic policy, Government communication, Media polarity, Trust in government, Public anxiety, Economic uncertainty

---

[1] Associate Teaching Professor and Lead Faculty, Master of Science in Commerce and Economic Development, Domain of Global and Social Enterprise, College of Professional Studies

[2] Assistant Teaching Professor and Lead Faculty, Master of Professional Studies in Informatics, Domain of Analytics and Enterprise Intelligence, College of Professional Studies

[3] Ph.D. Candidate in Complex Systems, Aalto University School of Science and Technology

[4] Assistant Professor, Dipartimento di Fisica e Chimica, Università di Palermo