## **Research Statement**

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My research lies at the intersection of Development Economics and Political Economy. Specifically, I explore how people's values, beliefs, and social norms are influenced by the state. In my future work, I aim to understand the other direction of causality. I employ causal inference techniques and leverage big data combined with machine learning methods to explore these questions from various perspectives. For instance, I employ deep learning-based topic models to categorize the content of governors' press releases. Furthermore, I've conducted web scraping on China's zero-COVID policy data at a daily level, covering over 2,000 counties, making this valuable dataset publicly accessible for future China's COVID research. My expertise also extends to the utilization of satellite and geographic data, enabling the extraction of vital information like PM2.5 levels, weather conditions, and nighttime light. Additionally, I possess experience in the analysis of social media data, particularly from platforms like Twitter.

In my Job Market Paper, "Formation and Evolution of Beliefs: Famine Experience and Trust in Neighbors", we examine how the impact of traumatic experiences on contemporary trust could vary across different initial social capital levels, in the context of one of the most notorious economic and social campaigns, the Great Leap Forward and the subsequent Great Chinese Famine. Trust, as a key component of social capital, plays a significant role in economic development, institutions, and state-building. Nevertheless, a puzzle persists in the literature: does trust evolve or diminish in response to negative shocks. The famine mortality data used in this paper is part of a unique dataset that we manually collected from thousands of county gazetteers. Our triple-differences analysis, event study, combined with an instrumental variable approach, allows us to approach this question quasi-experimentally. The results show that when individuals derive significant benefits from the initial conditions of social capital within a community in the face of negative shocks, it reinforces trust among community members. This finding of a self-enforcing equilibrium sheds light on the evolution of social norms under the influence of an all-powerful state.

In the field of public economics, a burgeoning question involves the utilization of micro-level big data-driven systems to enhance the monitoring of the economy, society, and crisis. During the COVID-19 pandemic, the Chinese government implemented a big data-driven system that could impose lockdowns and other restrictions on all individuals residing in the high-risk areas. In our paper titled "*Economic Impacts of China's Zero-COVID Policies*", we are the first to investigate the economic consequences of this big data-driven crisis management policy from 2020 to 2022. Using an original daily panel data on COVID-19 risk levels collected from the website of the State Council, we find that the zero-COVID policy resulted in a substantial reduction in mobility, PM2.5 levels, and nighttime light, leading to an estimated 3.9% decrease in GDP. Our difference-in-differences estimates remain robust to recent staggered DiD methods, synthetic control DiD analysis, and spatial spillover effects.

In a follow up research paper, we examine the compliance of local Chinese officials with the zero-Covid policy throughout the COVID-19 pandemic (Gong, Yan and Zhao, 2023). Our empirical analysis reveals that leaders with stronger promotion incentives tend to exhibit increased reactions to emerging

cases. Our research also suggests a natural tension between demands for crisis management during the pandemic and routine performance in economic development within the political framework of China.

A striking phenomenon that unfolded in the United States during the pandemic was the politicization of public health measures, which resulted in significant damage and continues to leave people bewildered about the causes of the chaotic and divisive response to the crisis. In my working paper, "Governor Press Release Effects on Public Beliefs and Behaviors During a Pandemic", I focus on examining how the opinions of politicians, as conveyed by local media, influence people's beliefs and behaviors related to COVID-19. More specifically, I investigate how state governors' press releases, and their subsequent coverage in local media impact individuals' responses to social distancing, conspiracy theories, and trust in COVID-19 vaccines. I've created a unique dataset by scraping press releases from the websites of 50 different governors. I then processed this text data with Natural Language Processing for analysis. To address our research question, I employ exogenous geographic variations.

My research also dive into the topics on health and labor economics. Gong, Guo and Shang (2023) use two instrument variables including thermal inversion and Clean Air Act to estimate the causal impact of pollution on sleep. Our use of Twitter data has the potential to provide valuable insights into sleep patterns, especially in regions where sleep surveys are not readily available. In another study, Gong, Yan, and Yu (2022) investigate the impact of China's 2020 lockdown policy on unemployment, delving into the heterogeneous effects across various demographic groups. Additionally, Su, Xia, Gong, et al. (2023) examine the effects of China's zero-COVID policy on the academic performance of children aged 6 to 15. Notably, we find that boys derive greater benefits from parental discipline than girls, particularly those with weaker noncognitive skills.

## **Future Research:**

In my future research, I would like to continue explore the interaction between the state and society, with a specific focus on values, beliefs, and social norms. The 1960s were a transformative decade marked by profound social, political, and cultural shifts. I am interested in investigating the impact of rock and roll music on individuals' pro-feminism and anti-war attitudes in 1960s. To achieve this, I plan to employ geographic regression discontinuity (RD) methods to identify the causal influence of popular culture on people's values and beliefs.

## References:

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