

# Research Statement

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I view myself as an applied macroeconomist using econometric techniques to investigate policy-relevant economic issues. My research typically follows a pattern that starts with a topic motivated by contemporary economic issues arising from the financial market or major social concerns. I then delve into relevant field knowledge and institutional details to deepen my understanding of the topic. Finally, I theorise my argument and collect data to quantify the research objects. In what follows I will describe my current research, which constitutes my PhD thesis, and conclude with my future research agenda.

My thesis studies several recent developments in the Chinese economy and financial system. The first chapter of my thesis, titled "The Macroeconomics of Shadow Banking: Financial Liberalisation and Structural Transformation," presents a comprehensive analysis of the shadow banking system in China, which is the most significant development in the country's financial sector over the past decade. My research explores the impact of shadow banking on the broader macroeconomy. This study is motivated by the fact that shadow banking in the developed world has systematically transformed our understanding of money and the mechanisms of financial crises. For instance, we have observed a decoupling between broad money and economic activities, as a substantial portion of household and enterprise wealth is held in the form of shadow money. It would be intriguing to study how shadow banking develops in China. The implications I have discovered in my research are straightforward. In a financially repressive environment like China, shadow banking is less about financial innovation or securitisation, but more about financial liberalisation. This liberalisation enhances liquidity provision to the private sector, which is typically underfunded under the state-owned banking system. Given China's long-term structural imbalances, characterised by an over-reliance on investment and a preference for state-owned enterprises, this shift towards shadow financing improves welfare by rebalancing the economy towards increased consumption and a more vibrant private sector. The chapter is divided into two parts. First, I analyse the shadow banking system from a money creation perspective, emphasising the "credit view" of monetary economics. I illustrate how shadow banking expands the balance sheet of the entire economy and increases liquidity provision beyond what would be possible otherwise.

The second part provides comprehensive evidence that supports the narrative of financial liberalisation. The evidence encompasses national-level time series analysis as well as sub-national panel data analysis.

The second chapter of my thesis, titled "Do Reformers' Words Matter? A Narrative Approach to China's Macroeconomic Management," investigates the effects of unconventional macroeconomic management policies in China. While empirical macroeconomic studies have extensively examined the impact of monetary and fiscal policy shocks, they often overlook other macro management policies, such as direct demand or supply interventions, which are rare in developed economies but more commonplace in China. Quantifying such unconventional policies is challenging, as they lack clear policy instruments and heavily rely on administrative orders. Drawing inspiration from market analysts who meticulously track high-level policy-making meetings and dissect meeting reports word by word to extract market-moving signals, I adopt a similar methodology to quantify marginal policy changes in critical economic meetings. I then employ various time series techniques to evaluate how these signals influence the economy. The remarkable finding of this study is that unconventional policies, such as direct demand or supply interventions, explain as much variance as conventional monetary and fiscal policies. This suggests that conventional studies, which solely focus on monetary and fiscal policies, overlook a significant portion of the policy landscape.

The third chapter of my thesis, titled "Nowcasting China's GDP," revolves around the idea of nowcasting, which involves monitoring timely economic data releases to provide updated economic assessments. Nowcasting is increasingly becoming a standard tool for central banks worldwide. However, credible nowcasting models for China are still lacking. Existing works have generally been unsatisfactory. My work is another attempt to provide improved nowcast for the Chinese economy. I adopt the widely used dynamic factor model and standardise the time series to ensure consistency with OECD standards. After standardising the data, I find that the nowcasting model produces similar accuracy for China compared to other advanced economies.

In future works, I aim to continue studying the most critical economic issues of the time. For instance, at present, the looming local government debt problem is particularly pressing in China. It would be helpful to quantitatively assess the extent to which local government debt burdens hinder economic growth and evaluate the sustainability of the debt-driven

infrastructure-led growth model. Additionally, I am intrigued by the history of other countries with high growth rates facilitated by high saving, high investment, and high debt levels and their transition to lower growth rate zones. Exploring how these transitions unfold and their implications warrants rich research agenda.

While my research to date has focused primarily on China, the country in which I have the most first-hand experience, I also aspire to contribute to research on the global economy. We are living in exceptional times, with a once-in-a-century pandemic, unprecedented stimulus, persistent inflation, geopolitical tensions, and rising protectionism and populism. These factors have led to persistent global macro imbalances, with an increasingly strong dollar cycle and an excessive concentration of global wealth in dollar-denominated assets at the expense of peripheral economies. These dynamics deserve to be studied in depth, and I hope to contribute to this area in the future.