

Impacts of COVID-19 on financial markets and effectiveness of policy responses

With the outbreak of the novel coronavirus COVID-19, the world is dealt with a global pandemic and public health crisis. Governments around the world have responded swiftly with uncharted monetary policy as well as fiscal stimulus to mitigate the adverse health and economic effects. Ease monetary policy have generated a flush of liquidity in the capital market, which comes with increased volatility. How should corporates strengthen their risk management capabilities in the midst of financial volatilities? How can government policies support small and mid-sized enterprises? This special issue presents academic research papers that shed light on the effects of the pandemic on financial markets around the world, as well as corporate and government sectors and on the policy responses to the crisis. This special issue has six papers.

Impact of COVID-19 on financial markets

- (1) *The COVID-19 pandemic and sovereign credit risk* – The authors show how sovereign CDS spreads have widened significantly in response to the COVID-19 pandemic. Based on the most conservative estimate, a 1% increase in COVID-19 infections leads to a 0.17% increase in sovereign CDS spreads. This effect is stronger for developing countries and countries with worse healthcare systems. Government policies partially offset the impact of the COVID-19 pandemic, although these same policies also lead to widening sovereign CDS spreads.
- (2) *Epidemics and Chinese firms' stock returns: is COVID-19 different?* This study investigates the Chinese stocks' returns during different epidemic periods to assess their effects on firms' market performance. The epidemics' impact is uneven across industries.
- (3) *Impact of COVID-19 pandemic on risk transmission between googling investor's sentiment, the Chinese stock and bond markets.* The Chinese googling investor's sentiment is considered as a prominent channel of shock spillovers during the coronavirus crisis, which confirms the behavioral contagion.

Effectiveness of policy responses

- (1) *Ex-ante risk management and financial stability during the COVID-19 pandemic: a study of Vietnamese firms.* The study highlights the need for *ex-ante* risk management for future pandemics. The authors investigate whether firms can ensure their financial stability during the coronavirus disease 2019 (COVID-19) pandemic by having *ex-ante* risk management. The authors also suggest that stakeholders can rely on the degree of risk management tool utilization to evaluate the financial stability of firms.
- (2) *How can an economic scenario generation model cope with abrupt changes in financial markets?* The paper shows that constructing models that can generate scenarios for major assets to cover abrupt changes in financial markets is thus essential for the financial institution's risk management; such modeling need to handle a large number



of risk factors involved, and how to incorporate relations among these factors. This paper attempts to generate long-term economic scenarios for a large-scale portfolio from its large dimensional covariance matrix estimated by the orthogonal ARMA–GARCH model.

- (3) *Government support for SMEs in response to COVID-19: theoretical model using Wang transform.* The paper studies various governments' measures in support of small and medium-sized enterprises (SMEs) to mitigate the economic impact of the COVID-19 outbreak. The paper presents a theoretical model for evaluating various government measures, including insurance for bank loans, interest rate subsidy, bridge loans and relief of tax burdens.

These six papers only represent a small sample of scholarly studies of the financial aspects of COVID-19. In the midst of COVID-19, we have witnessed an acceleration of digitization and technological innovation, growing impetus for bio-medical breakthroughs, as well as an increased attention by the corporates and the public on the long-term sustainability of the economy. Further studies are needed on how the financial markets and government policies better support technological innovation and development of the real economy.

The Co-Editors

Shaun Shuxun Wang

Finance, Southern University of Science and Technology, Shenzhen, China, and

Ming-hua Hsieh

Risk Management and Insurance, National Chengchi University, Taipei City, Taiwan