

Spillover Effects of Chinese Uncertainty Shocks

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Economic theory suggests that heightened policy uncertainty impacts the real economy by affecting the decisions making behaviour of consumers, firms and workers. Policy uncertainty measures have received a lot of attention from researchers since the global financial crisis (GFC) and becomes even a more topical issue during the recent trade conflict between USA and China, Covid-19 pandemic and Russia's invasion of Ukraine. These events have added more to global policy uncertainty. In considering the impact of the recent GFC, a large number of recent studies have highlighted that uncertainty negatively affects output growth, unemployment, private investment and consumption.¹ While examining international spillover effects of uncertainty shocks originating from a country, most studies focus on the United States² and suggest that US policy uncertainty shocks are transmitted to other economies such as the Euro area, emerging economies, China, Canada and South Korea.

With China's integration into global economy, the spotlight has recently shifted towards effects of Chinese policy uncertainty. China has been deeply integrated into global economy since its implementation of structural reforms in late 1970s. China has achieved an impressive growth to become the second largest economy in the world and a major player in international trade. The increasing uncertainty of future growth prospects in China and US-China trade conflict have added concern about the future development of the world economy, especially that of emerging economies.³ Given that the literature is mostly concentrated on US policy uncertainty, little is known about the international spillover effects of Chinese economic policy uncertainty. In this context, this paper investigates how Chinese Economic Policy Uncertainty (EPU) affects its major trading partners using a panel Vector Autoregressive model (panel VAR). Specifically, we use a panel of 23 China's major trading partners and monthly data from 2000 to 2020 for this study.⁴ The Chinese EPU index developed by Huang and Luk (2020) is used to capture the fluctuation in the Chinese policy uncertainty. Unlike other existing policy uncertainty index, this new monthly EPU index is constructed based on the information from 10 Chinese newspapers. We estimate a first-order panel VAR including six variables in the following order Chinese EPU index, global economic condition,⁵ domestic output growth, total exports (or exports to China), total imports (or imports from China), and real exchange rate. We impose a Cholesky identification strategy to recover the structural shocks. We find that; (1) a

¹ Bloom (2009), Denis and Kannan (2013), Jurado, Ludvigson et al. (2015), Caggiano, Castelnuovo et al. (2014), Baker, Bloom et al. (2016) Caggiano, Castelnuovo et al. (2017), Moore (2017), Mumtaz and Theodoridis (2018), Istiak and Serletis (2018), Christou, Gabauer et al. (2020)

² See, for instance, Colombo (2013), Netšunajev and Glass (2017), Cheng (2017) Caggiano, Castelnuovo et al. (2020), Bhattacharai, Chatterjee et al. (2020)

³ For instance, Zhang, Lei et al. (2019) show that Chinese economic policy uncertainty affects four main international markets: crude oil, stock, credit and commodity (non-energy) markets, with China's influence increasing overtime. Fontaine, Didier et al. (2017) and Huang, Tong et al. (2018) show that the Chinese macroeconomic uncertainty adversely impacts the US economy.

⁴ Japan, Korea, India, Indonesia, Philippines, Malaysia, Thailand, Vietnam, Singapore, South Africa, Russia, Brazil, Chile, Peru, Mexico, Colombia, the US, Canada, UK, German, France, Australia, and New Zealand

⁵ We use Global Economic Conditions Indicator (GEA) constructed by Baumeister, Korobilis et al. (2020)

shock to Chinese EPU significantly decreases China's major trading partner's output growth, exports and imports while depreciating exchange rate. On average, a one-standard deviation shock to Chinese EPU leads to a 2% fall in output growth, a 3% fall in total exports, a 5% decrease in total imports and a 3% depreciation of real exchange rate; (2) Chinese EPU reduces the bilateral trade between China and its major trading partners; (3) regional subgroup analysis shows heterogeneity in the spillover effects.⁶; and (4) negative effects on exports and imports are larger and more persistent in the emerging economies, Asia, Euro, Russia and South Africa compared to other regions.

The empirical findings highlight that the policy makers of China's major trading partners should consider important role played by the Chinese EPU in their business cycle and the increasing China's influence in the global economy.

Key Words

Economic Policy Uncertainty shock
China
Spillover effects
Panel VAR

⁶ We examine the effects of Chinese Economic Policy Uncertainty shocks by splitting the sample into eight groups: advanced economies, emerging economies, Asia, Australia and New Zealand, Euro, North America, South America and Russia and South Africa