



Article Title

Coronavirus pandemic and tourism: Dynamic stochastic general equilibrium modeling of infectious disease outbreak

Citation

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Abstract

Highlights

- We propose a DSGE model to examine the impact of the coronavirus outbreak on tourism.
- The model is generalizable to any epidemic.
- The model supports the policy of providing tourism consumption vouchers for residents.

Summary

Household welfare is determined by expected lifetime consumption and health status. As the coronavirus outbreak hinders tourism consumption and health status, welfare also declines, as . One possible policy to facilitate post-crisis tourism recovery is to subsidize tourism consumption. Such practices, like providing tourism consumption vouchers for residents, have been proved useful in China after the global financial crisis. From a general equilibrium perspective, tourism sector subsidies must be financed by resources redistributed from other sectors; therefore, higher tourism sector consumption would have a crowd-out effect. This article compares the baseline case to those involving a sectoral policy and comprehensive policy. A sectoral policy refers to one in which the tourism sector is subsidized two periods (quarters) after the outbreak, whereas a comprehensive policy includes simultaneous subsidies to the health sector as well. As indicated, the sectoral policy overcomes the tourism sector decline; however, such mitigation comes at the cost of a deeper recession in the generic sector. The rebuilding of health status is also weaker because resources are extracted from the health sector. Overall welfare declines accordingly. By contrast, the comprehensive policy improves tourism consumption and health rebuilding, albeit at the cost of regular consumption. Because health status plays a notable role in households' utility, general welfare improves.

