

# Domestic Economic Policy Uncertainty and propagation of shocks to trade and investment within the G20

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## Appendices

### Appendix A1: Spillover Index

$$SOI = 100 \times \frac{1}{N} \sum_{i=1}^N \frac{\sum_{i \neq j} \sum_{h=0}^{H-1} (A_h L)_{ij}^2}{\sum_{h=0}^{H-1} (A_h \Sigma \epsilon A_h')_{ii}}; \text{ country 'i' is recipient and 'j' is source of EPU.}$$

### Appendix A2: EPU index method

This study utilizes policy-related economic uncertainty based on newspaper coverage frequency. The EPU index for each of the fourteen countries is broadly built as follows:

1. Articles from ten leading newspapers of a given country are investigated for a trio of terms, “uncertainty” or “uncertain”; “economic” or “economy”; and one of the following policy terms: “Congress,” “deficit,” “Federal Reserve,” “legislation,” “regulation,” or “White House”.
2. The raw counts of the articles are scaled by the total number of articles in the same newspaper and month. Next, each monthly newspaper-level series is standardized to unit standard deviation.
3. The mean over all newspapers of the standardized series is calculated for each month. In turn, a mean of all means is used to normalize the series to obtain normalized EPU time-series index.

Table 1: EPU Index for select G20 countries

Authors	Countries	Newspapers	Keywords Used
2	Australia, Brazil, Canada, France, Germany, India, Italy, Mexico, South Korea, Russia, United Kingdom, United States	USA Today, Miami Herald, Chicago Tribune, Washington Post, Los Angeles Times, Boston Globe, San Francisco Chronicle, Dallas Morning News, New York Times, and Wall Street Journal	Trio of terms: “economic” or “economy”; “uncertain” or “uncertainty”; and one or more of “Congress,” “deficit,” “Federal Reserve,” “legislation,” “regulation,” or “White House.”

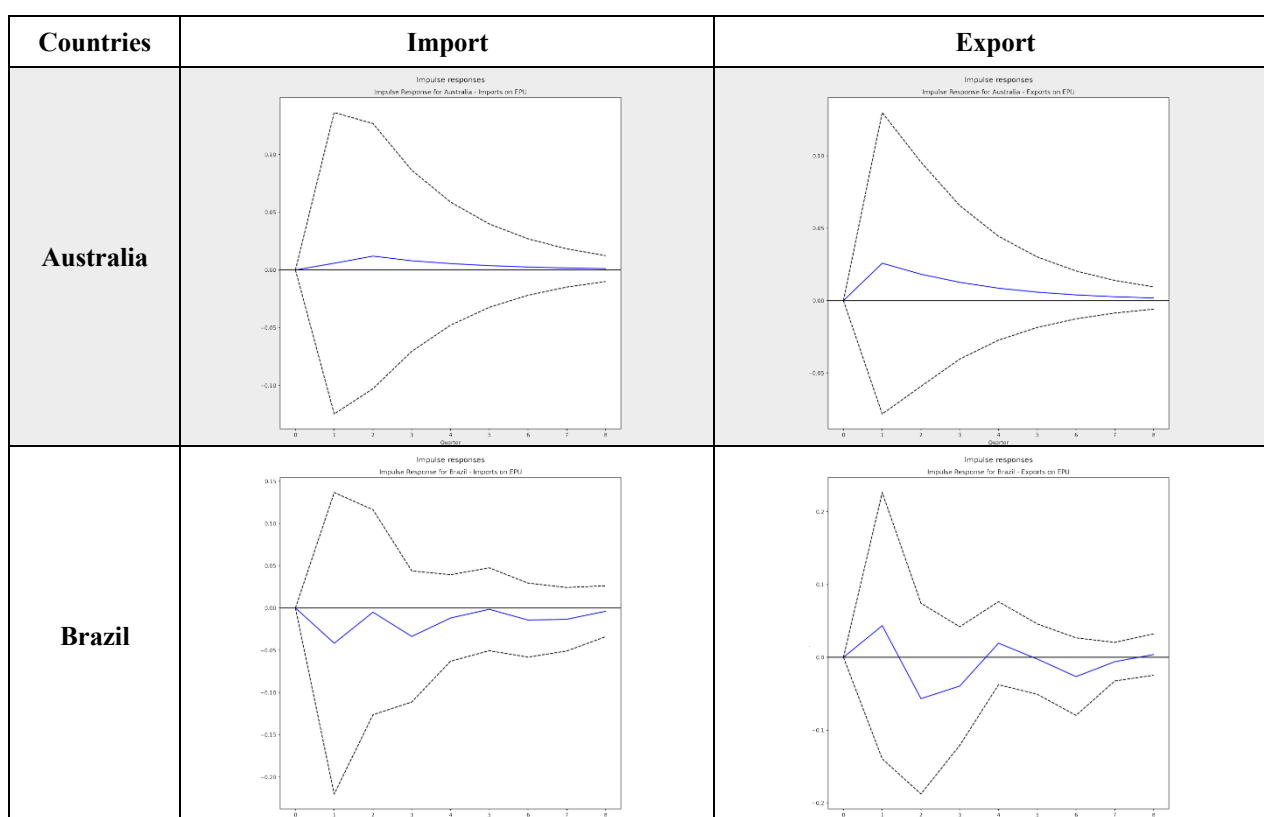
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<sup>2</sup> Baker, Bloom, and Davis (2016)

3	India	The Economic Times, Times of India, Hindustan Times, Hindu, The Statesman, Indian Express, and Financial Express	uncertain', 'uncertainty', 'worry', or fear', 'economic' or 'economy', "regulation," "central bank," "monetary policy," "policymakers," "deficit," "legislation," and "fiscal policy.
4	China	South China Morning Post. Also, newspapers of mainland China for robustness check Renmin Daily and the Guangming Daily.	Policy Uncertainty
5	Mainland China	Renmin Daily and the Guangming Daily	Economic, policy and uncertainty
6	Japan	Four major Japanese newspapers (Yomiuri, Asahi, Mainichi and Nikkei)	(E) 'economic' or 'economy'; (P) 'tax,' 'government spending', 'regulation,' 'central bank' or certain other policy-related terms; and (U) 'uncertain' or 'uncertainty

### Appendix A3: Impulse Response diagrams for VAR(2) model

Table 2: Impulse Response of Imports and Exports on EPU



<sup>3</sup> Bhagat, Ghosh, and Rangan (2016)

<sup>4</sup> Sha, Kang, and Wang (2020)

<sup>5</sup> Davis, Liu, and Sheng (2019)

<sup>6</sup> Saxegaard et al. (2022)

