

China-US Competition: Measuring Global Influence

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The Problem:

- Measuring power/influence in the international system is notoriously difficult
- Measures are often “monadic” or exist at the country level
- Material capabilities—a broad category for power—is often focused on the use of force, a rare outcome in international relations
- Issue areas like trade, foreign aid, and military trade can be used both to draw countries together, but that can be leveraged if imbalanced

Solving the Problem:

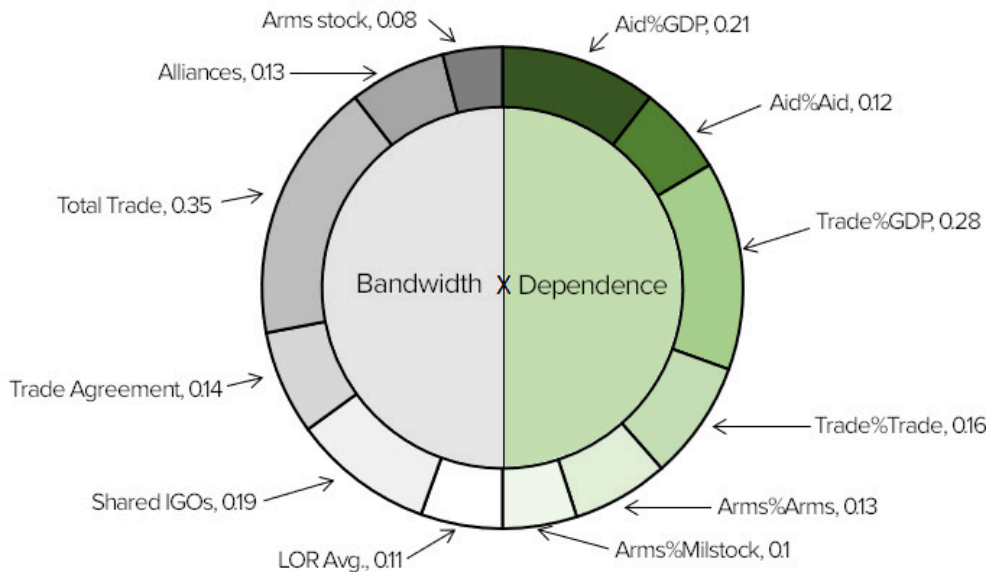
- Because direct measurement is impossible, *index based approaches* may help
- Instead of monadic, country-level measures, *use bilateral data* to build indices
- Focus on economic, political, and security interdependencies, measuring how *highly connected and imbalanced relationships* can be used to produce influence

Formal Bilateral Influence Capacity (FBIC)

The *Formal Bilateral Influence Capacity* Index:

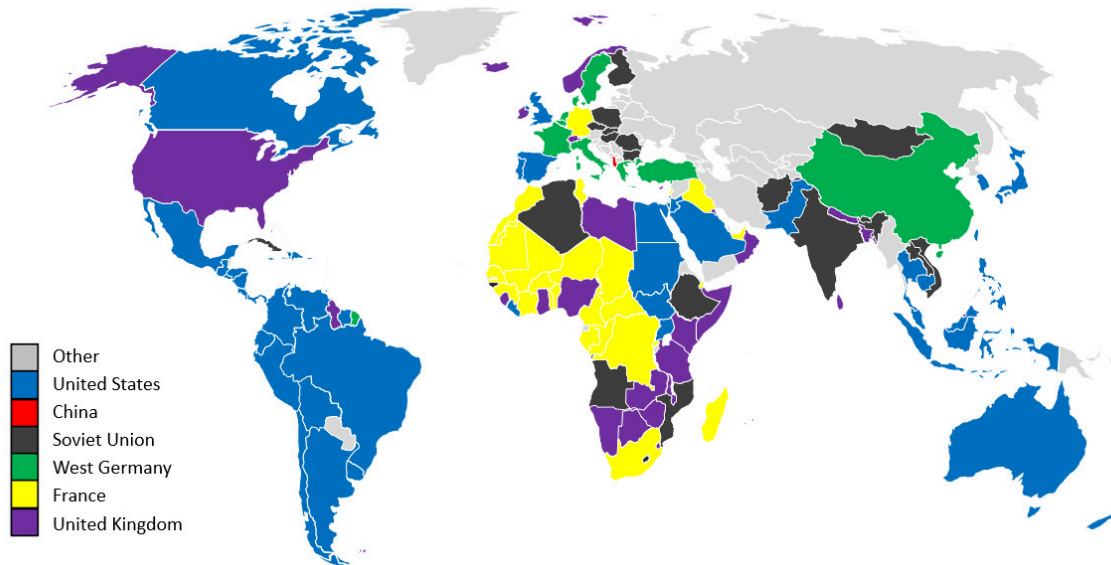
- *Formal*: doesn't not treat illicit influence
 - *Bilateral*: it is measured at the directed dyadic level
 - *Influence*: used to represent the ability of *a* to get *b* to do what it would not have otherwise done
 - *Capacity*: signaling that we are not measuring expressed influence or power, which requires understanding political will
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- Index measuring the economic, political, and security relationship characterized by:
 - *Bandwidth* (volume of activity across a dyad, a shared measure)
 - *Dependence* (reliance of one state on another for trade, aid and arms)

Formal Bilateral Influence Capacity

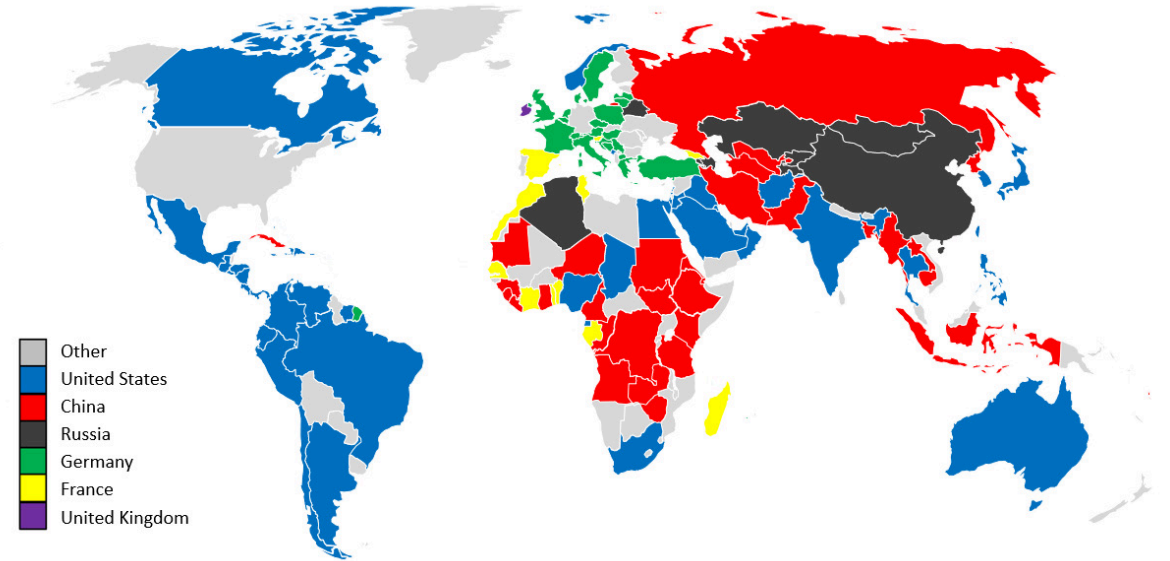


Rise of Chinese influence

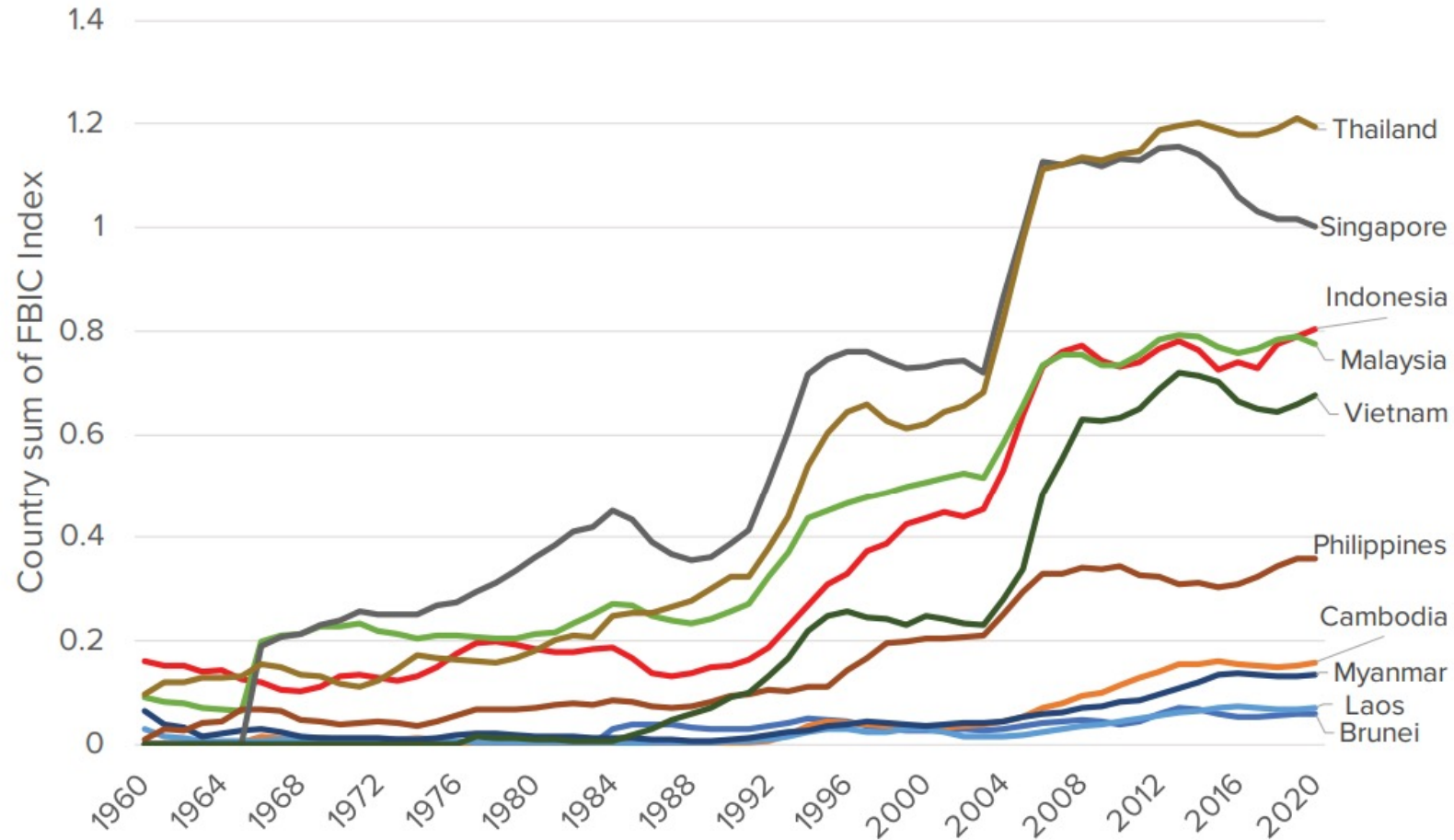
Top influencer in each country in 1980



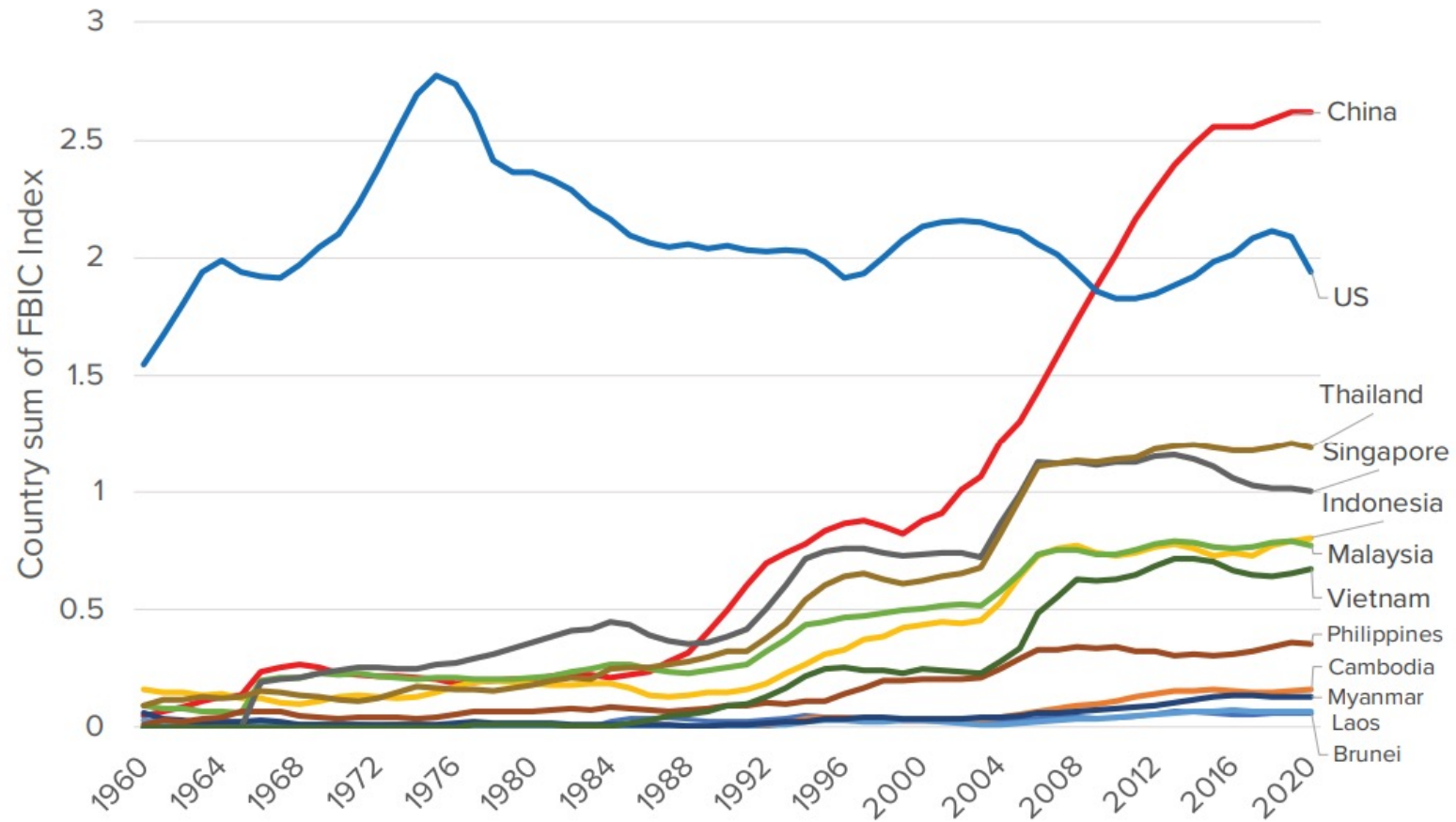
Top influencer in each country in 2020



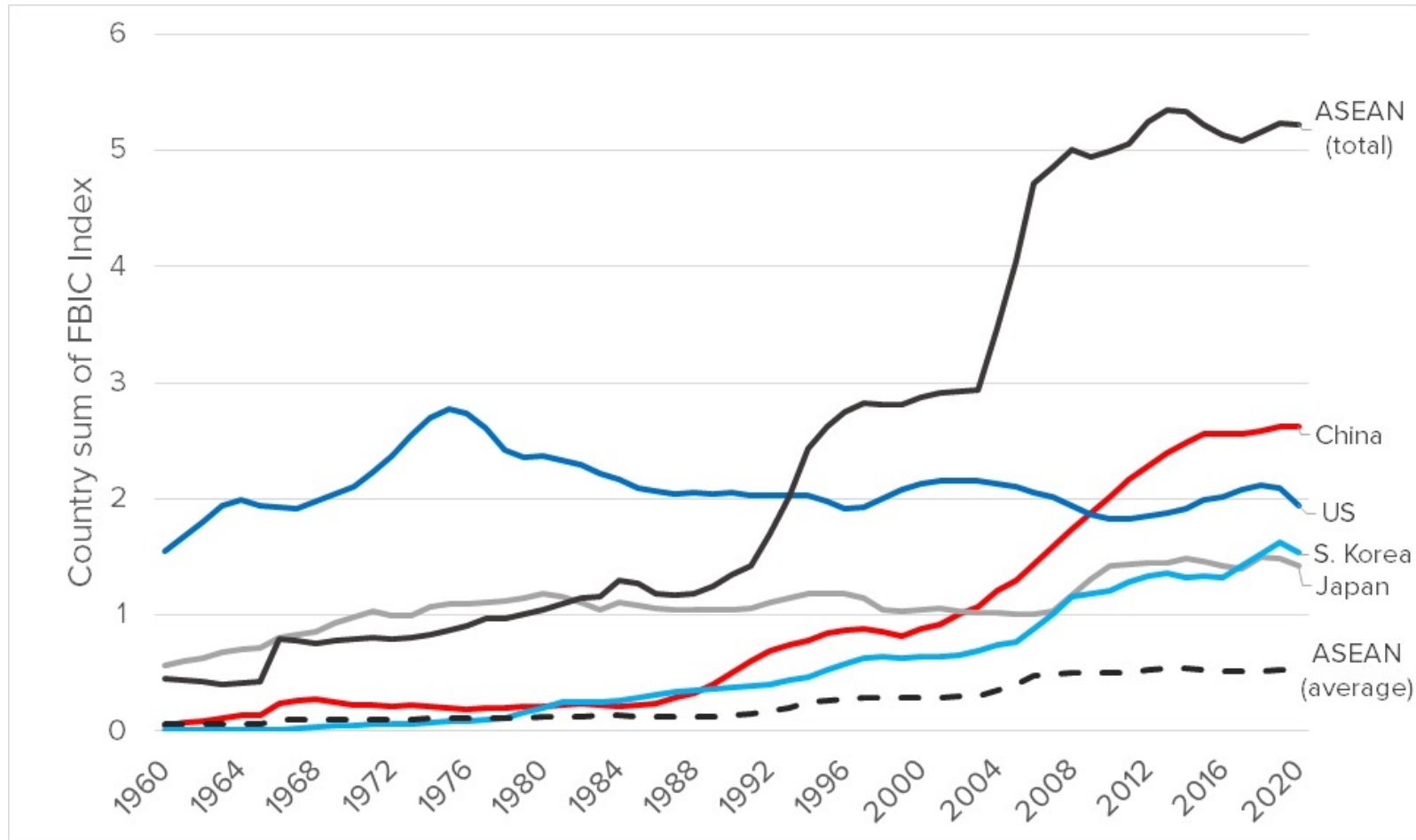
Growing Intra-ASEAN Influence



China and the US in Southeast Asia



Broadening the Landscape



Implications for U.S. policy

- Recognize that in general *US influence in the region has been eclipsed by China*, but that particular areas of influence remain.
- Prioritize multilateral strategies to influence countries predominately influenced by China, *working with traditional partners* that have high regional influence *like Japan and South Korea*.
- *Support intra-ASEAN interdependence* so the organization can respond as a bloc to Chinese influence.
- Engage in deepening economic, political, and security connections with strategic bilateral partners using data to guide decision-making.

Thank you!

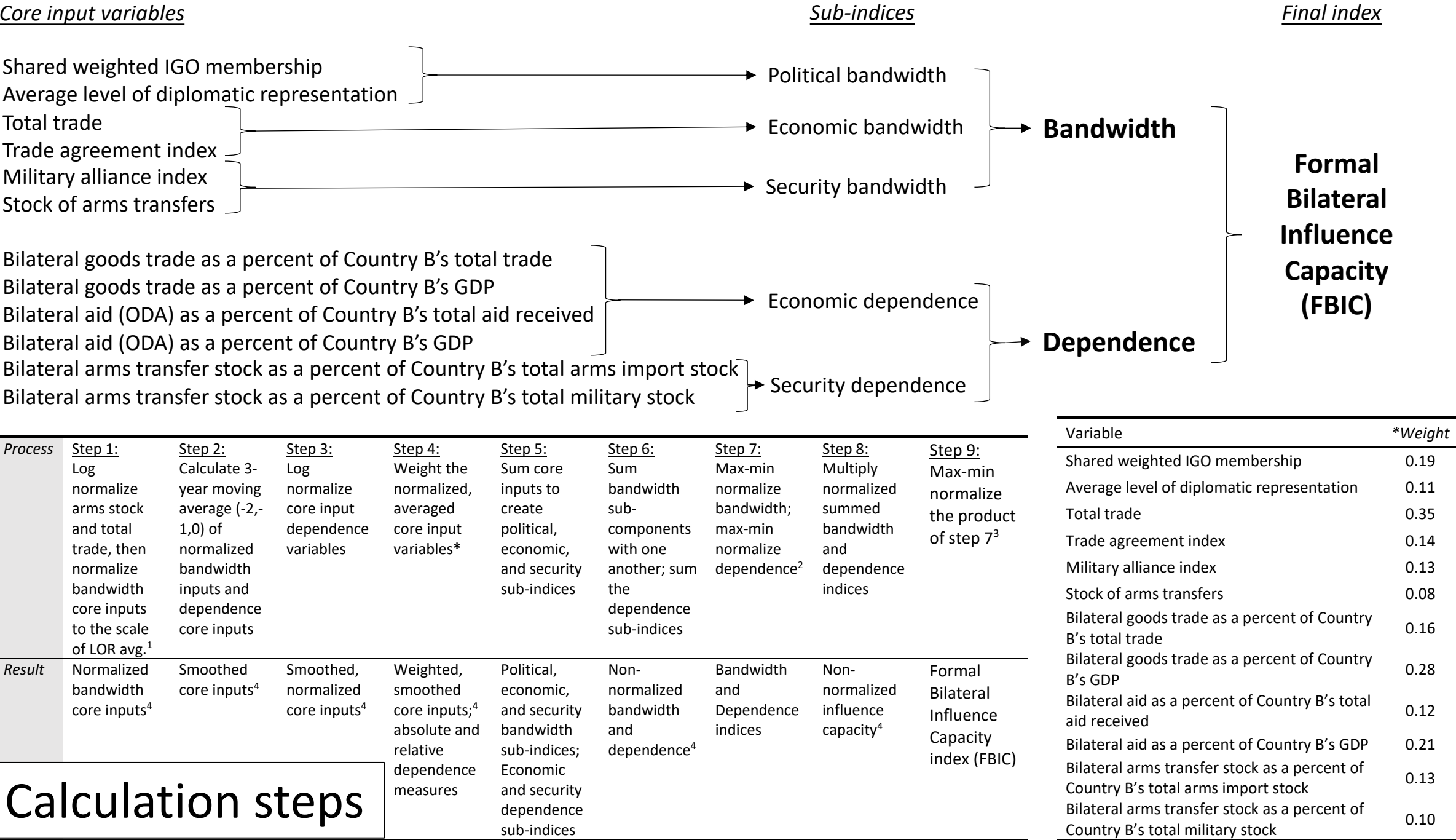


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APPENDIX



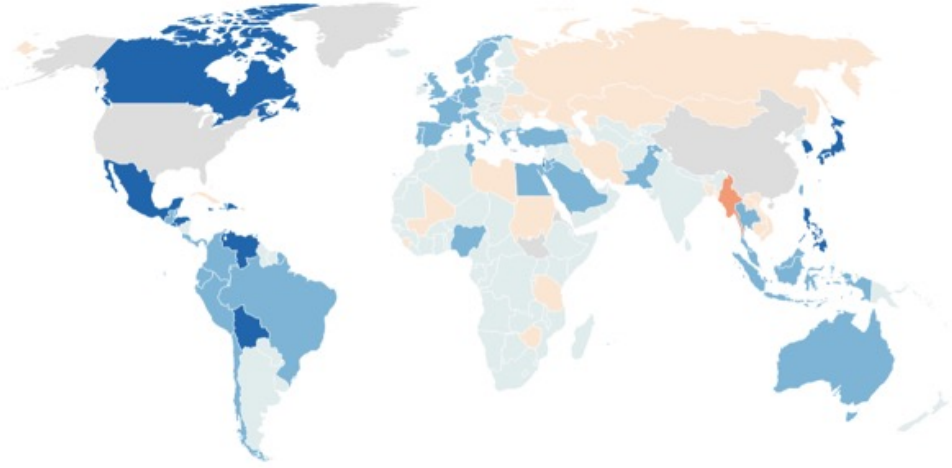
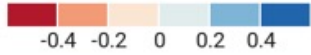
Technical details

Other notes
1. Bandwidth core input variable normalization is completed by scaling the pooled sum of a variable through the data from 1960-2018 (e.g., igo_total in the GIDE series) to the pooled sum of average level of representation (lor_avg_total). This is completed as follows: (lor_avg_total/variable_total)*variable
2. Maximum-minimum normalization of bandwidth and dependence scales the data to the maximum and minimum bandwidth and dependence scores calculated for any country-pair (dyad) between 1960-2018. If this normalization window is changed, all bandwidth and dependence scores will too.
3. Maximum-minimum normalization of FBIC scales the data to the maximum and minimum influence capacity scores calculated for any country-pair (dyad) between 1960-2018. If this normalization window is changed, all FBIC scores will too.
4. Intermediate variables (those created in the middle of the calculation process prior to sub-indices and indices) are a necessary byproduct of the FBIC calculation process but serve little use for analytical purposes (other than troubleshooting).

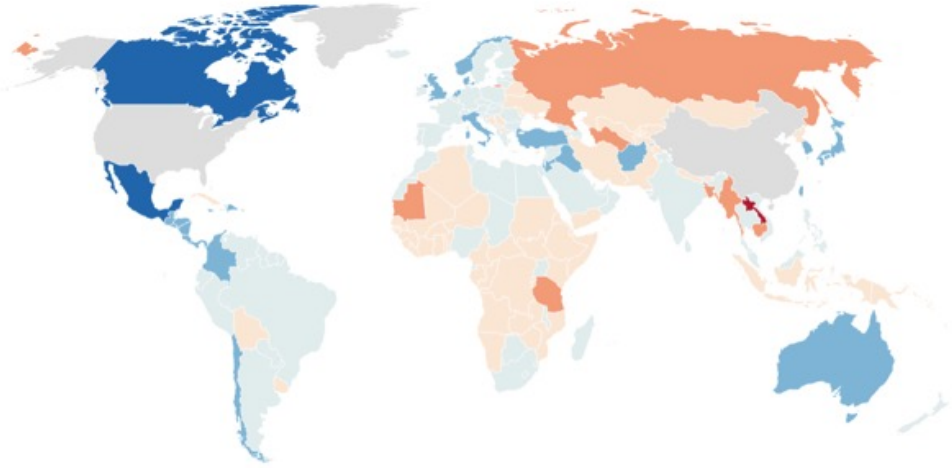
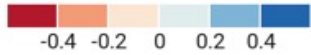
Variable	Shorthand name in GIDE	Description	Original data source
Formal Bilateral Influence Capacity	fbic	A measure of influence capacity (or relational power) held by one country (Country A) in another (Country B).	Frederick S. Pardee Center
Bandwidth	bandwidth	The size of the relationship between two countries (A and B) based on economic, military, and political indicators.	Frederick S. Pardee Center
Political bandwidth	politicalbandwidth	The size of the political relationship between two countries (A and B) based on core input variables.	Frederick S. Pardee Center
Shared weighted IGO membership	sharedigoweighted	A content-analysis-based weighted measure of two countries (A and B) shared membership in IGOs	Frederick S. Pardee Center
Average level of diplomatic representation	lor_avg	The mean index value of two countries (A and B) weighted level of representation (embassy exchange)	Frederick S. Pardee Center
Economic bandwidth	economicbandwidth	The size of the economic relationship between two countries (A and B) based on core input variables.	Frederick S. Pardee Center
Total trade	totaltradeawithb	Total goods trade (ex + im) between two countries (A and B).	Centre d'Études Prospectives et d'Informations Internationales (CEPII); Slavic-Eurasian Research Center
Trade agreement index	tradeagreementindex	A weighted index value of trade agreements between two countries (A and B), which equals: PSA*1 + EIA*1 + BTA*3 + BTAEIA*4 + RTA*5 + RTA *8 + CU*15 + CUEIA*20. See GIDE codebook for acronyms.	World Trade Organization Regional Trade Agreement database; Frederick S. Pardee Center
Security bandwidth	securitybandwidth	The size of the security relationship between two countries (A and B) based on core input variables.	Frederick S. Pardee Center
Military alliance index	allianceindex	A weighted index value of the military alliances between two countries, which equals: (nonagg*5)+(neutral*10)+(consul*20)+(defense*75). See GIDE codebook for abbreviation definitions.	Rice University's ATOP project; Frederick S. Pardee Center
Stock of arms transfers	armstotalstockab	The 10-year, 10%-point, straight-line annual depreciating sum of arms transfers (in trend indicator values [TIVs]) between Country A and Country B.	Stockholm International Peace Research Institute (SIPRI)
Dependence	dependence	The asymmetry of the relationship between two countries, or how dependent one country (B) is on another (A).	Frederick S. Pardee Center
Economic dependence	economicdependence	A measure of how dependent one country (B) is on another (A) for economic activity.	Frederick S. Pardee Center
Bilateral goods trade as a percent of Country B's total trade	totaltradeaballtradeb	Total goods trade (ex + im) between countries (A and B) as a percent of one's total trade (B) in a given year; a measure of relative trade dependence.	CEPII; Slavic-Eurasian Research Center (SERC; for some Soviet trade values)
Bilateral goods trade as a percent of Country B's GDP	totaltradeabgdpb	Total goods trade (ex + im) between countries (A and B) as a percent of one's GDP (B) in a given year; a measure of absolute trade dependence.	CEPII; SERC; World Bank (for GDP)
Bilateral aid as a percent of Country B's total aid received	aidaballaidb	Bilateral foreign aid (official development assistance; ODA) between countries (A and B) as a percent of one's (B's) total aid received; a measure of relative aid dependence.	Organisation for Economic Cooperation and Development (OECD); AidData; Morgan & Zheng (2019)
Bilateral aid as a percent of Country B's GDP	aidabgdpb	Bilateral foreign aid between countries (A and B) as a percent of one's (B's) GDP; a measure of absolute aid dependence.	OECD; AidData; Morgan & Zheng (2019); World Bank (for GDP)
Security dependence	securitydependence	A measure of how dependent one country (B) is on another (A) for its security.	Frederick S. Pardee Center
Bilateral arms transfer stock as a percent of Country B's total arms import stock	armsimportsstockaballimstockb	Bilateral arms import stock transferred from one country (A) to another (B) as a share of the other's (B's) total arms import stock (a 10-year sum of arms imports depreciating via a straight line annually by 10%-points); a measure of relative arms dependence.	SIPRI; Frederick S. Pardee Center
Bilateral arms transfer stock as a percent of Country B's total military stock	armimportstockabmilstockb	Bilateral arms import stock transferred from one country (A) to another (B) as a share of the other's (B's) total military stock; a measure of absolute arms dependence.	SIPRI; Frederick S. Pardee Center

Use cases

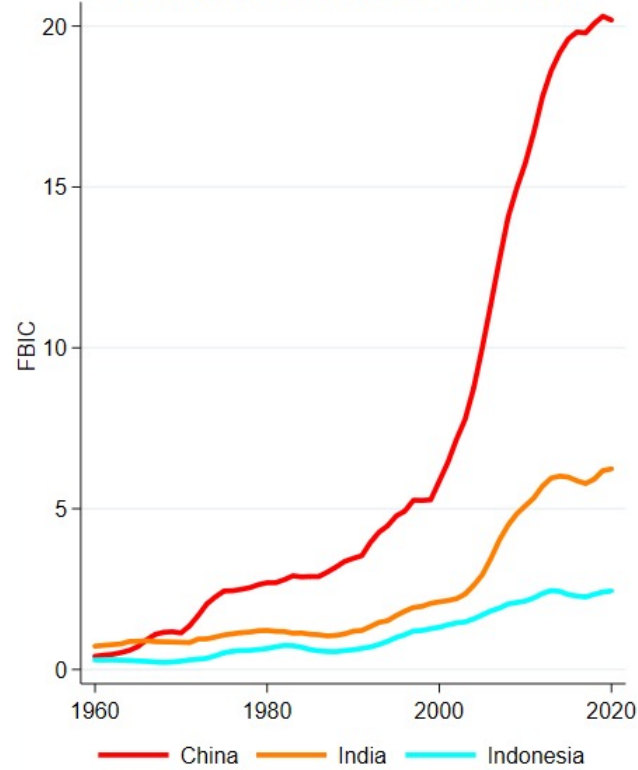
Net U.S. influence capacity relative to China in 1992



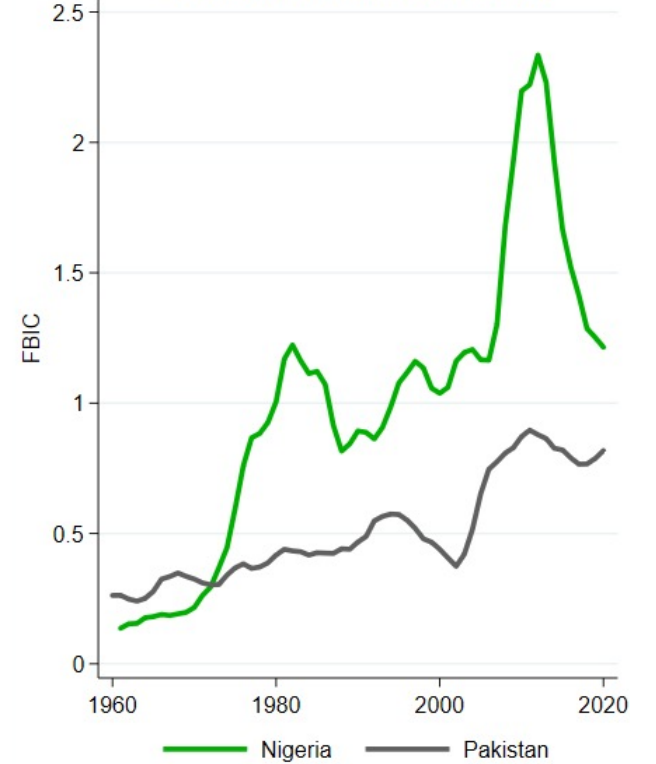
Net U.S. influence capacity relative to China in 2020



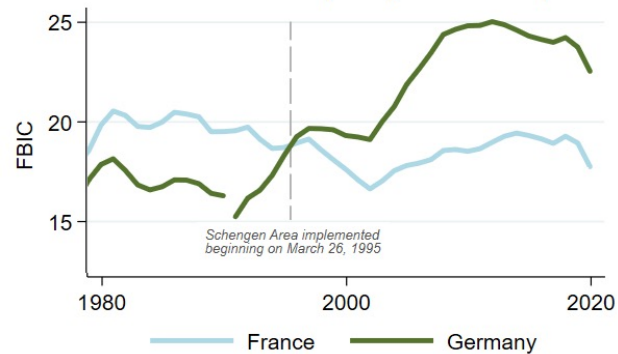
Rising powers, rising at different rates



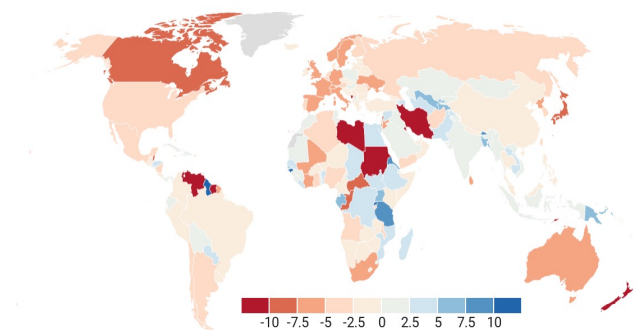
Gradually rising, but unsteady



Most influence capacity from Europe

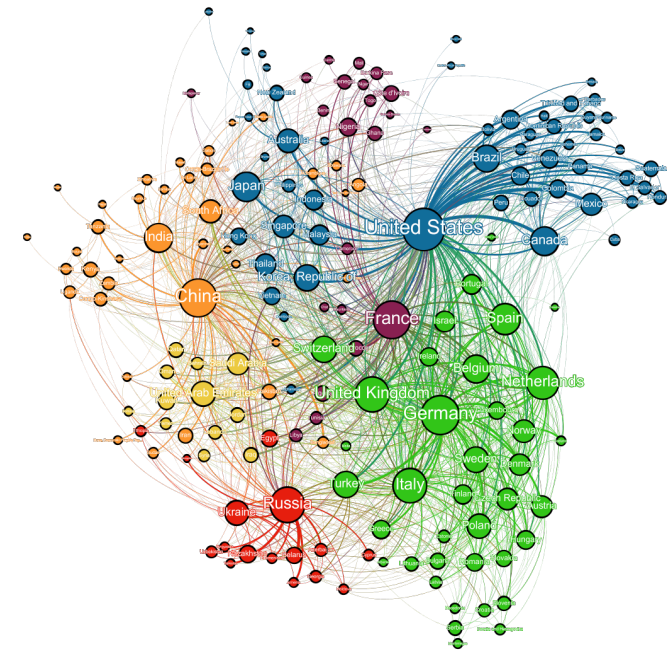
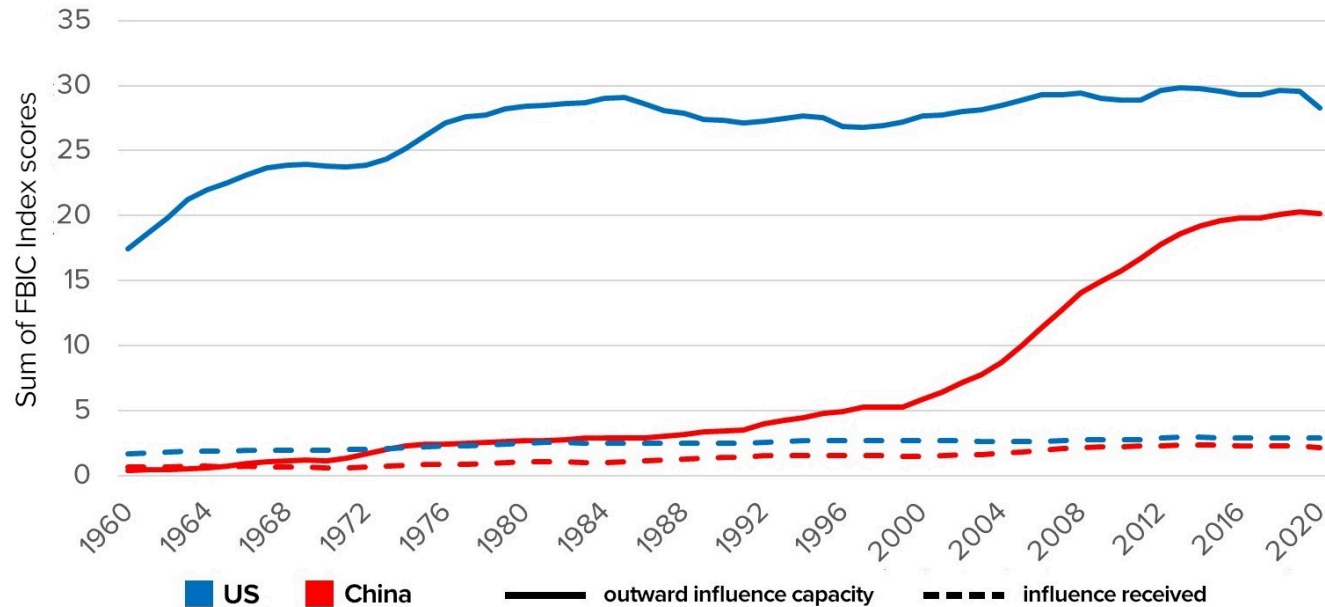
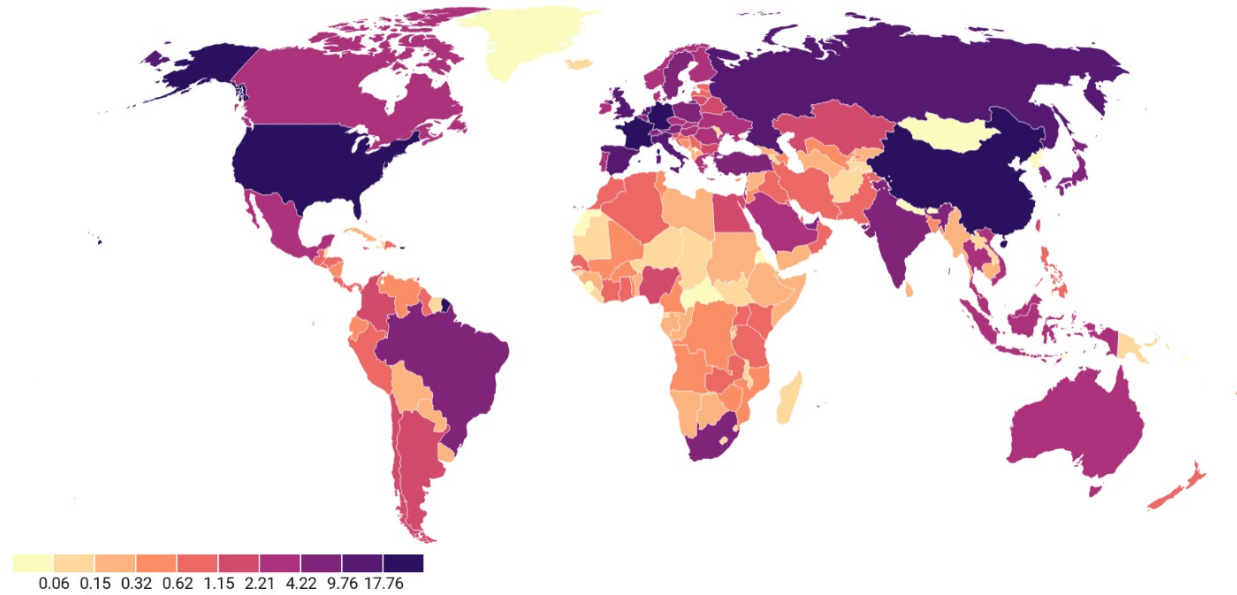


Percent change in global influence capacity, 2019-2020



Use cases

Global influence capacity in 2020



Influence capacity match-up and country leadership changes

