

EPPS 6356.501 – Relations Between Arms Transfers and Trade

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OVERVIEW

- Background and Motivation
- Research Question
- Literature Review
- Visual Exploration
- ARCs
- Conclusion and Limitations

MOTIVATION AND BACKGROUND

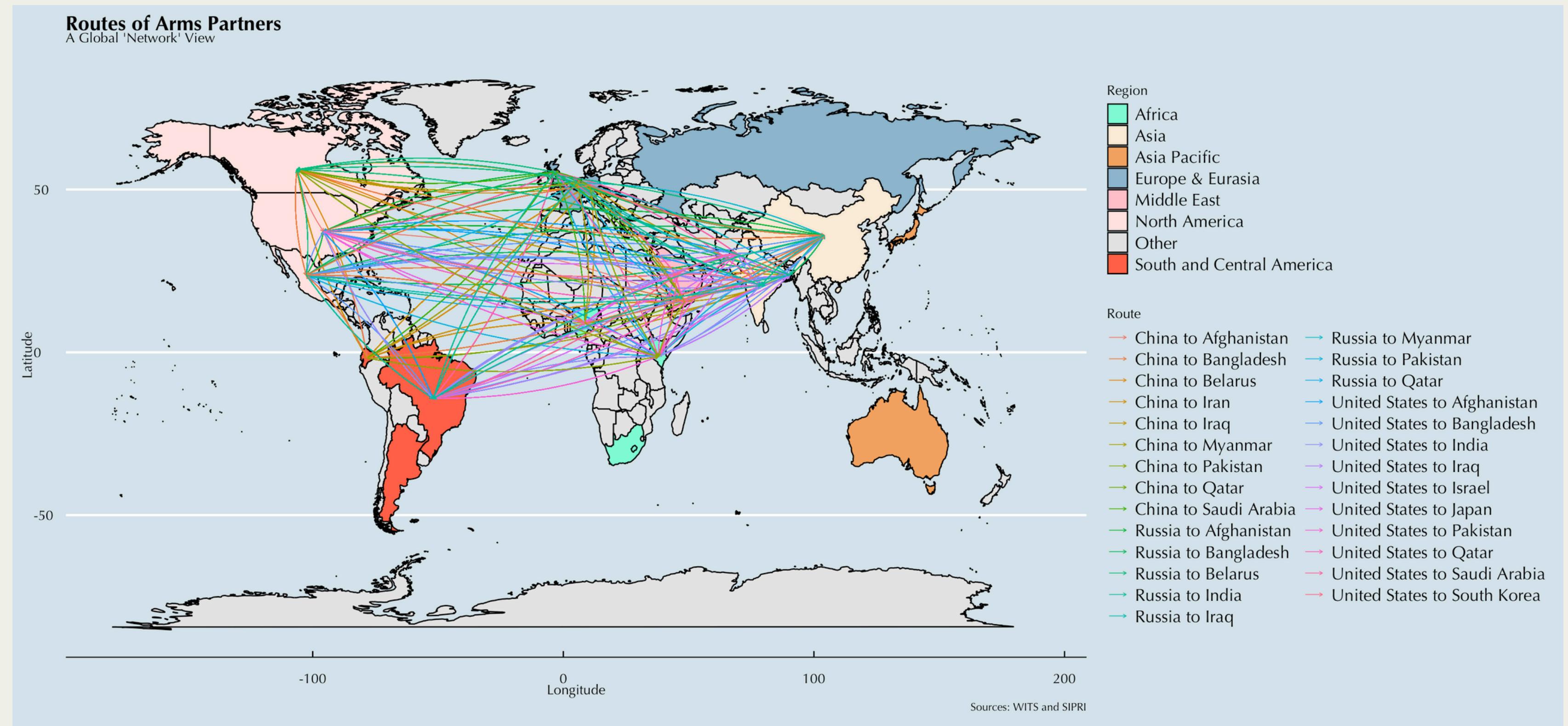
- Arms Relations from the Post-Cold-War until the COVID era (2021)
- Trade with Allies? How do we quantify and understand these relations?
- Wang and Tao (2024) - Trade Intensity Index (TII) - a ratio that measures how often a country trades. A value greater than 1 is indicative a frequent trade partnership and not necessarily high value partnership.
- Klare (1996) and SIPRI Trend-Indicator Values (TIV) - A value cost proxy for the value of money spent by both supplier and recipient country.

Research Question: Do Arms
Transfers Correlate with TIIs
(trade intensity indexes)?

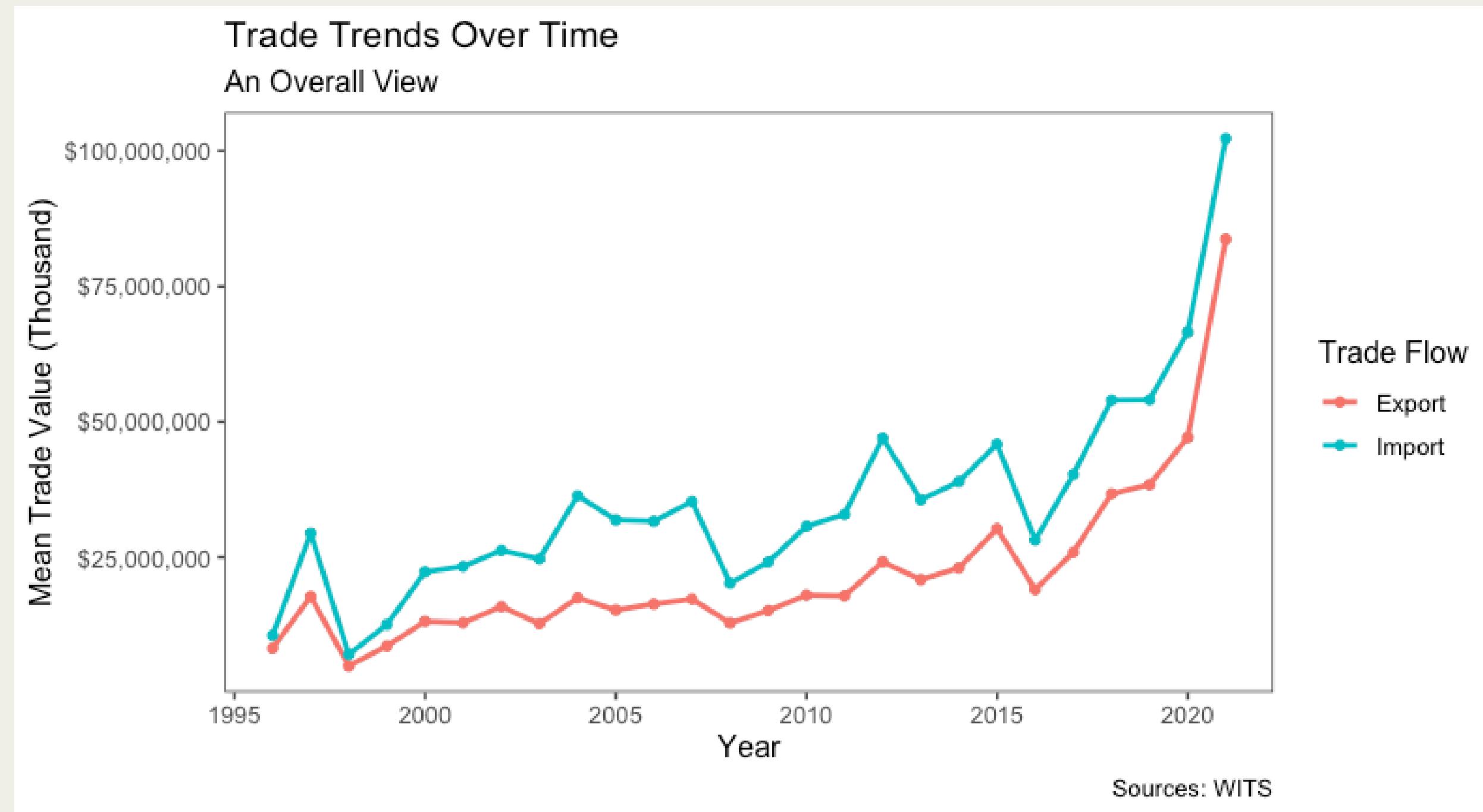
LITERATURE REVIEW

- Military Spending and Economic Growth: Military spending and arms trade impact economic growth, with military exports directly boosting growth (Munoz et al., 2023), while global security dynamics play a broader role (Klare, 1990).
- Public Spending and Political Stability: Public expenditure and political ties are crucial for economic growth, with military spending having a lesser negative effect than civilian spending (Malizard, 2016; Yuren & Tao, 2024).
- Interconnection of Politics, Military, and Economy: Military, political, and economic factors are deeply interconnected, influencing national and global economic outcomes.
- Arms Exports and Trade Intensity: Arms exports can offset negative economic effects of military spending and strengthen trade relations (Yakovlev, 2007).
- Arms Exports Strengthening Trade: Arms exports foster stronger trade relationships, particularly with countries involved in defense cooperation (Yakovlev, 2007; Anthony, 1998).

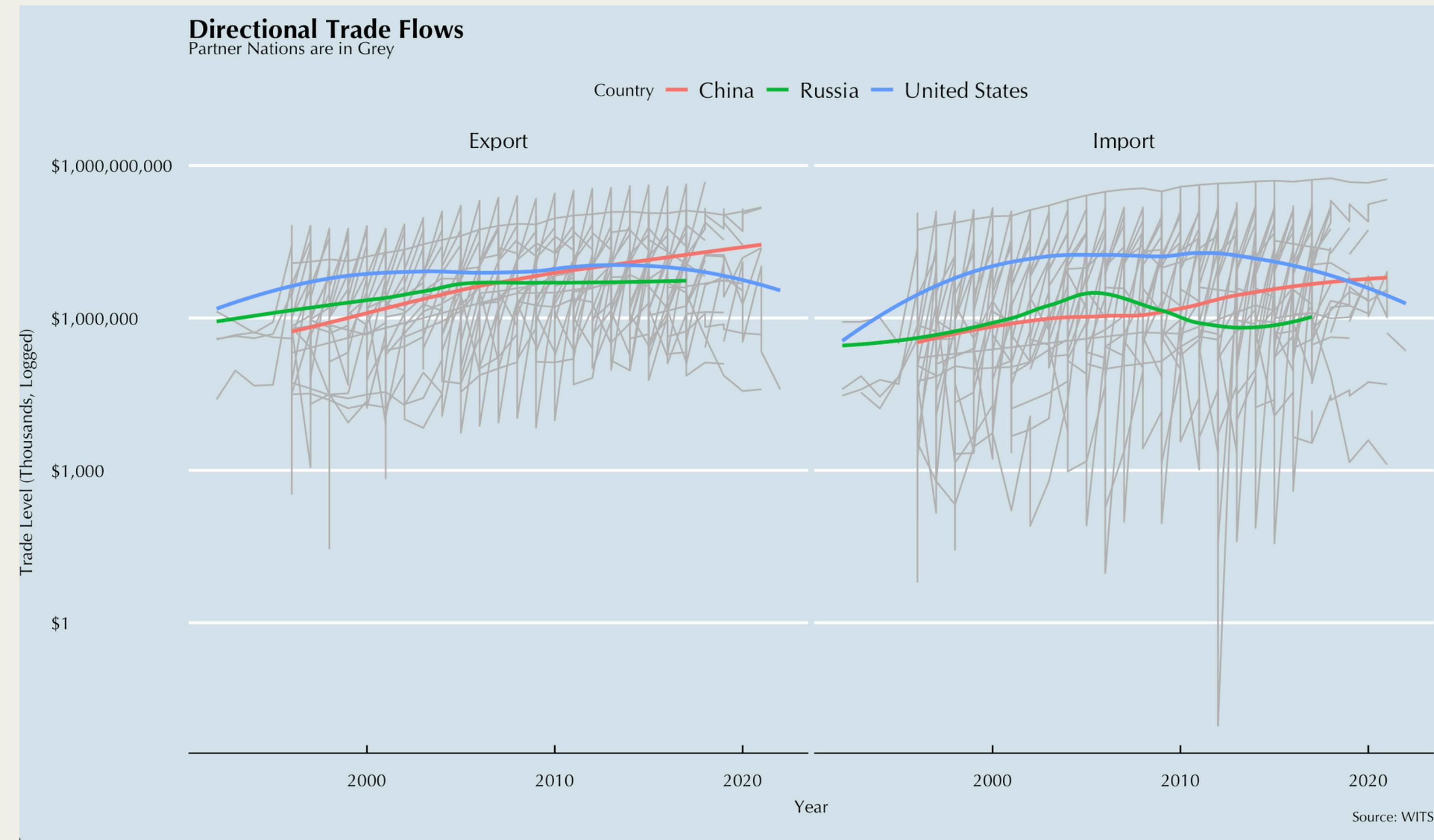
WHAT REALTIONS?



LET'S TAKE A LOOK...



TRADE FLOWS



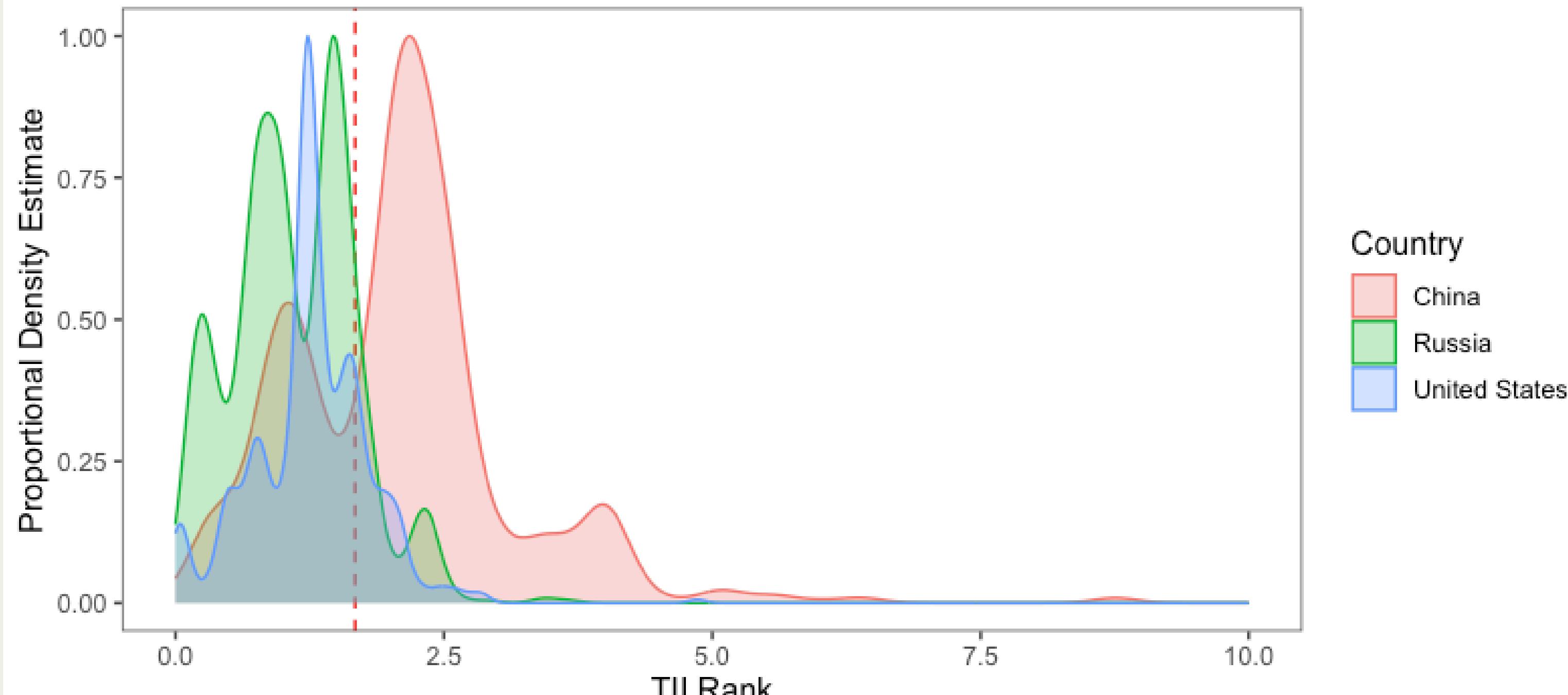
TRADING PARTNERS



TRADE INTENSITY INDEX - (TII)

Distro of TIIs

Getting an Sense of Composition (Upto ~ 10)

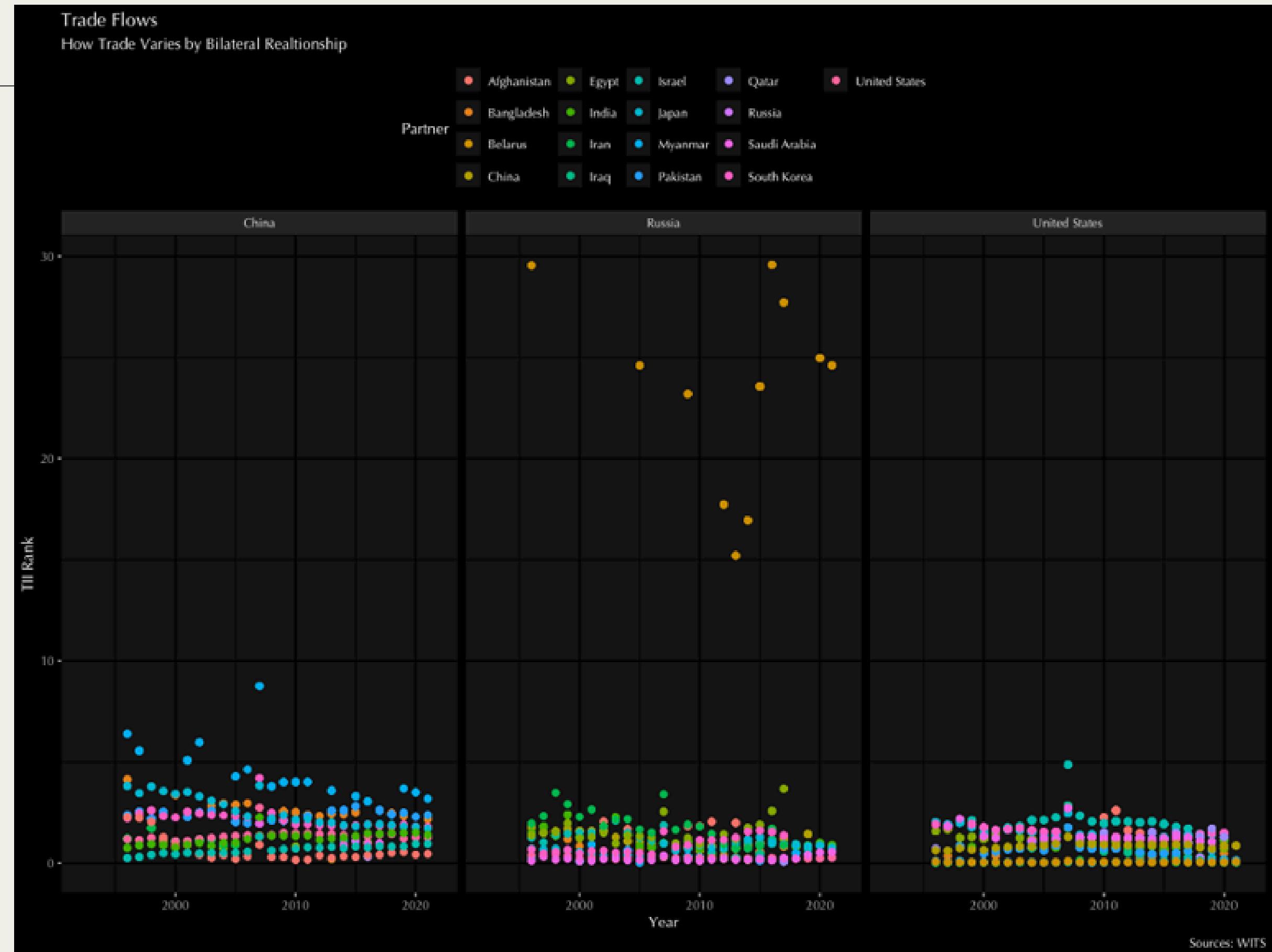


Sources: WITS

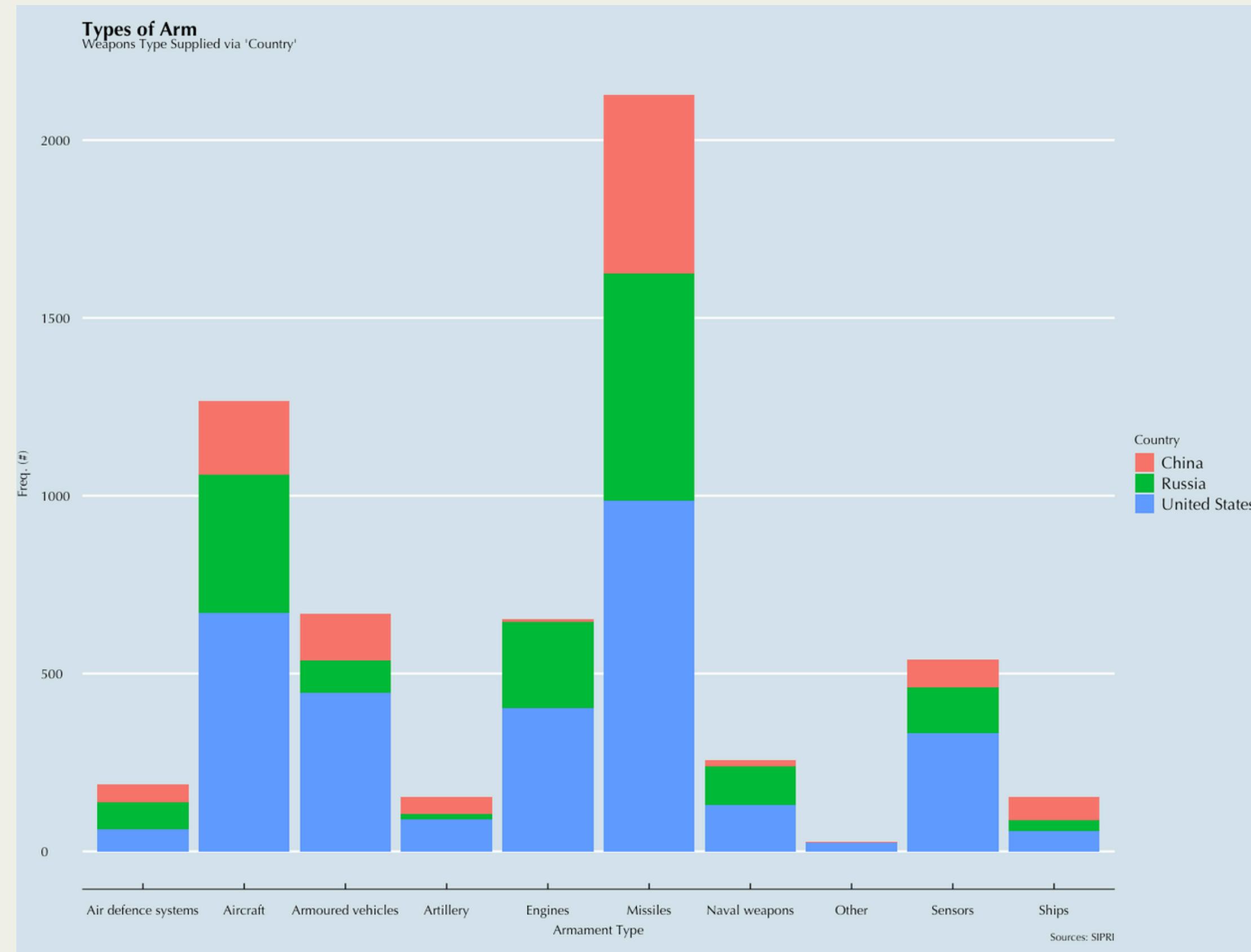
OBSERVATIONS

Most intense via ‘TII’:

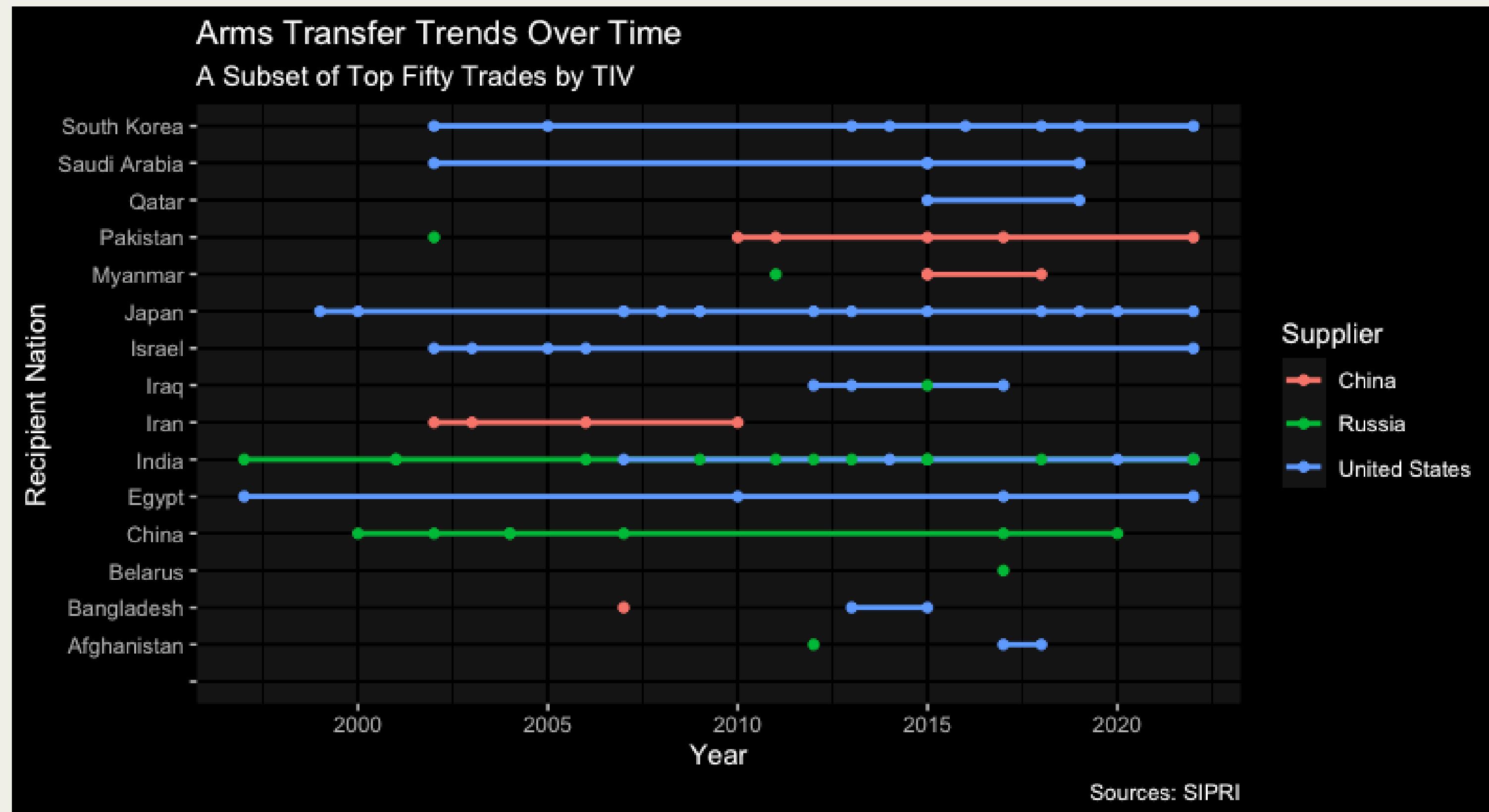
- U.S. with Isreal (not China!)
- China with Myanmar
- Russia with Belarus



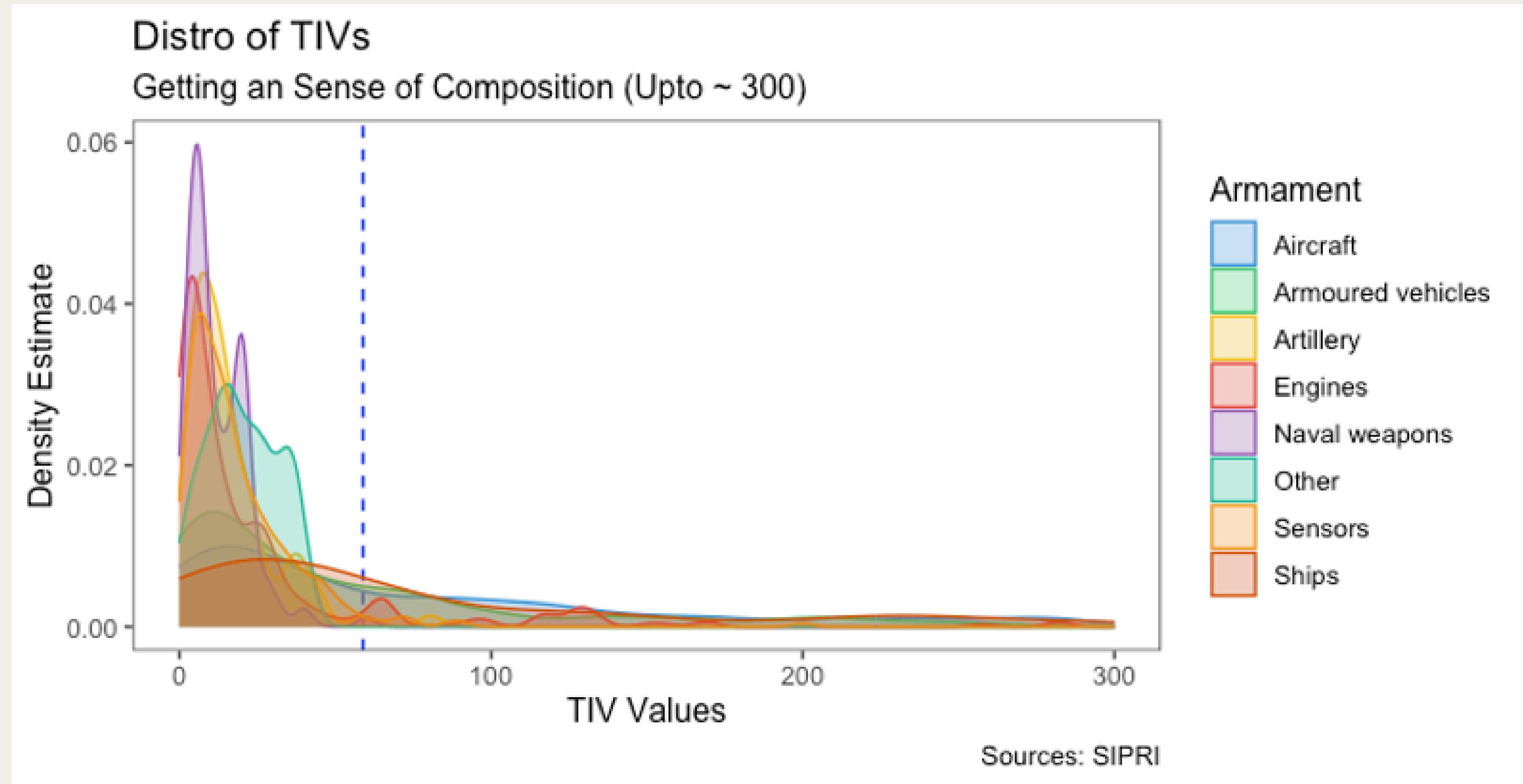
ARM TYPES



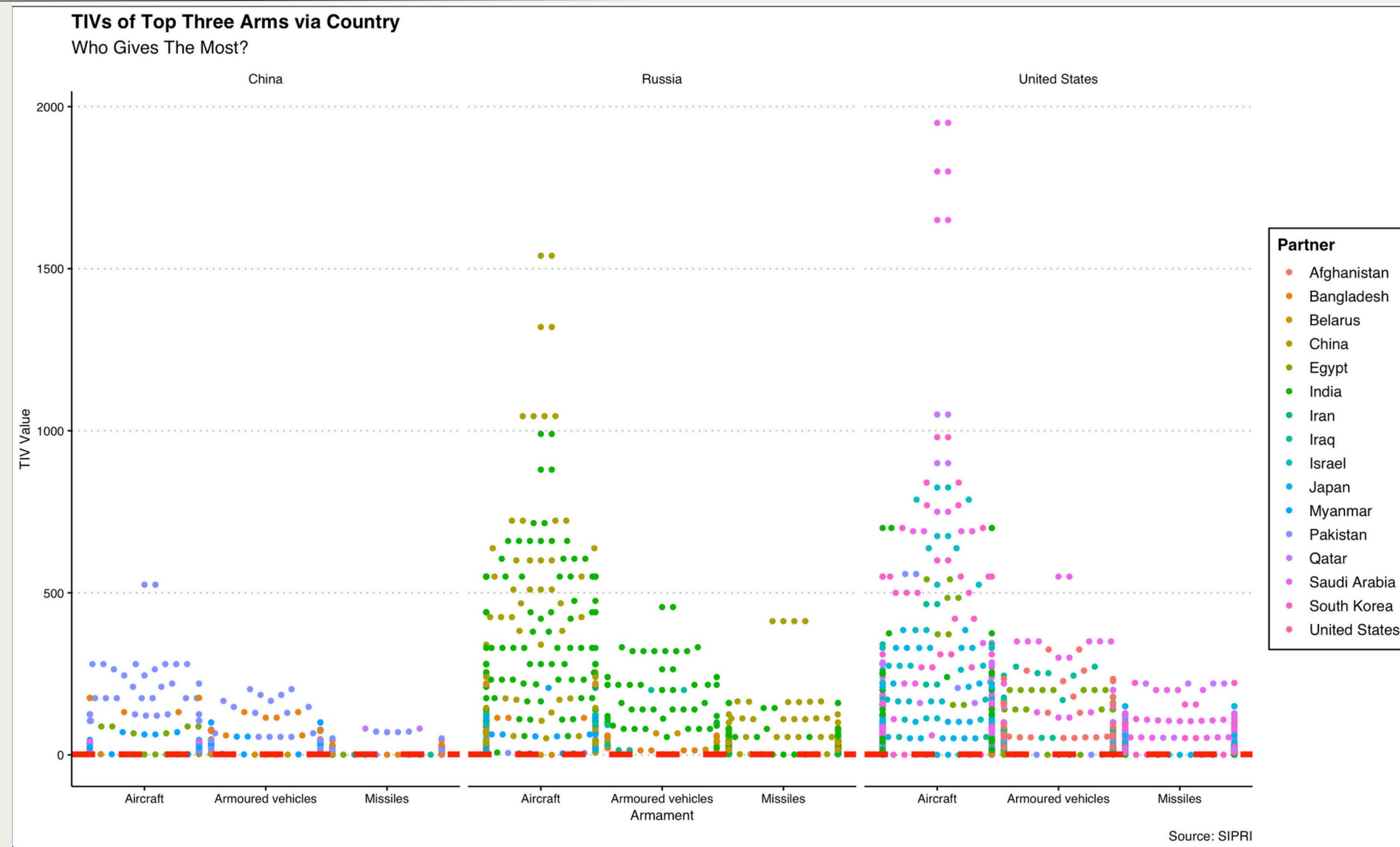
A (RANDOM) SNAPSHOT



TREND-INDICATOR VALUE (TIV)



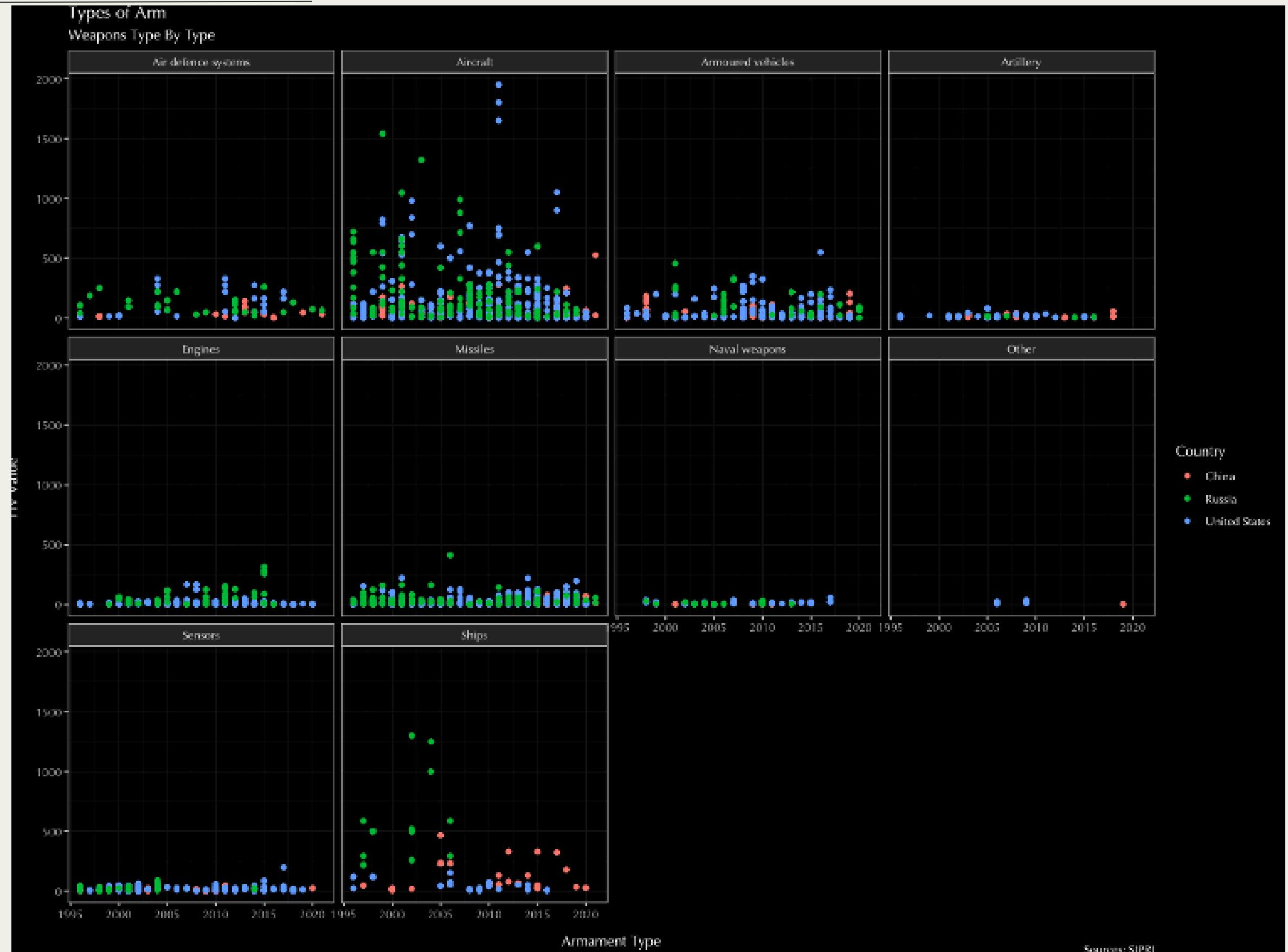
VIA TOP THREE ARMS



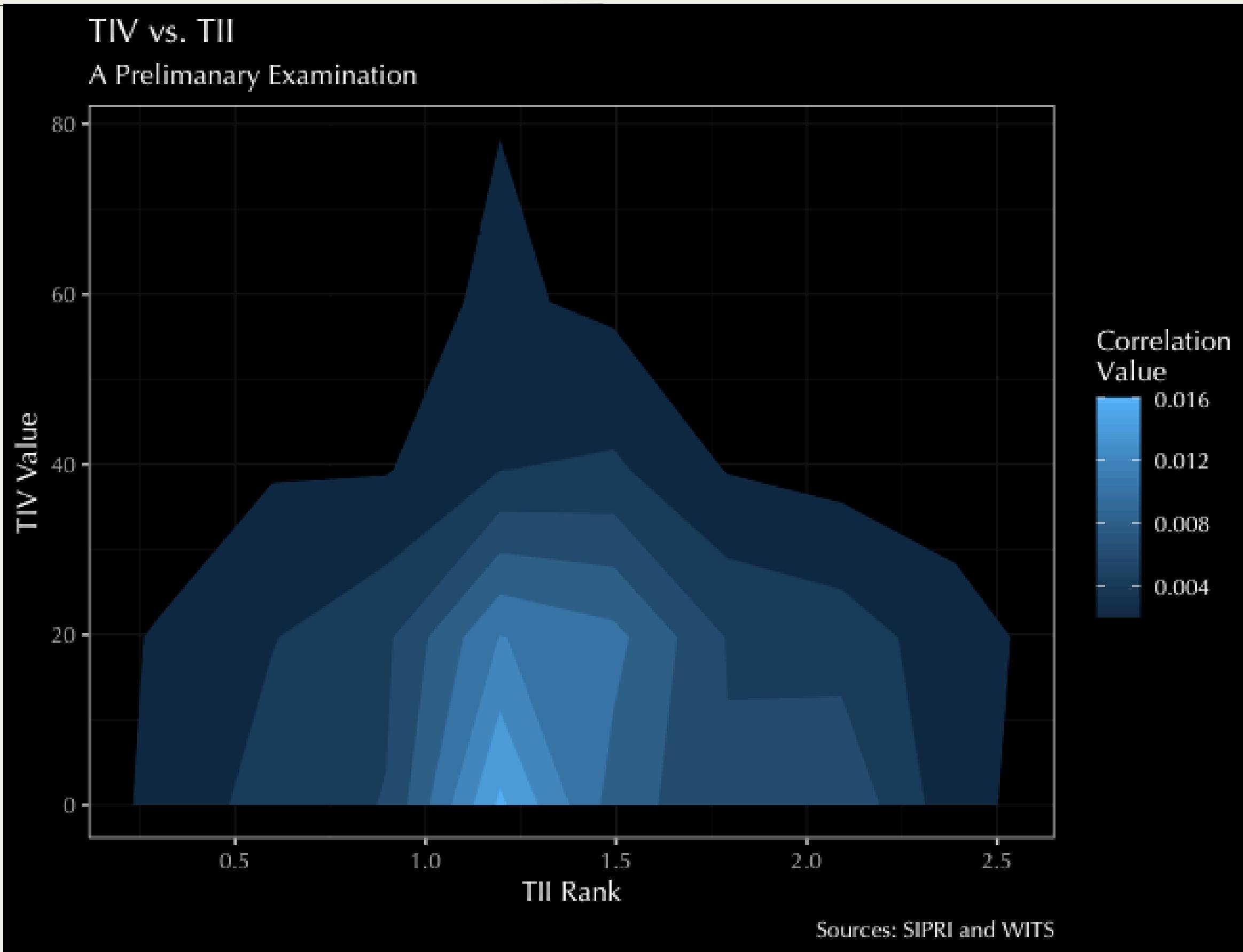
OBSERVATIONS

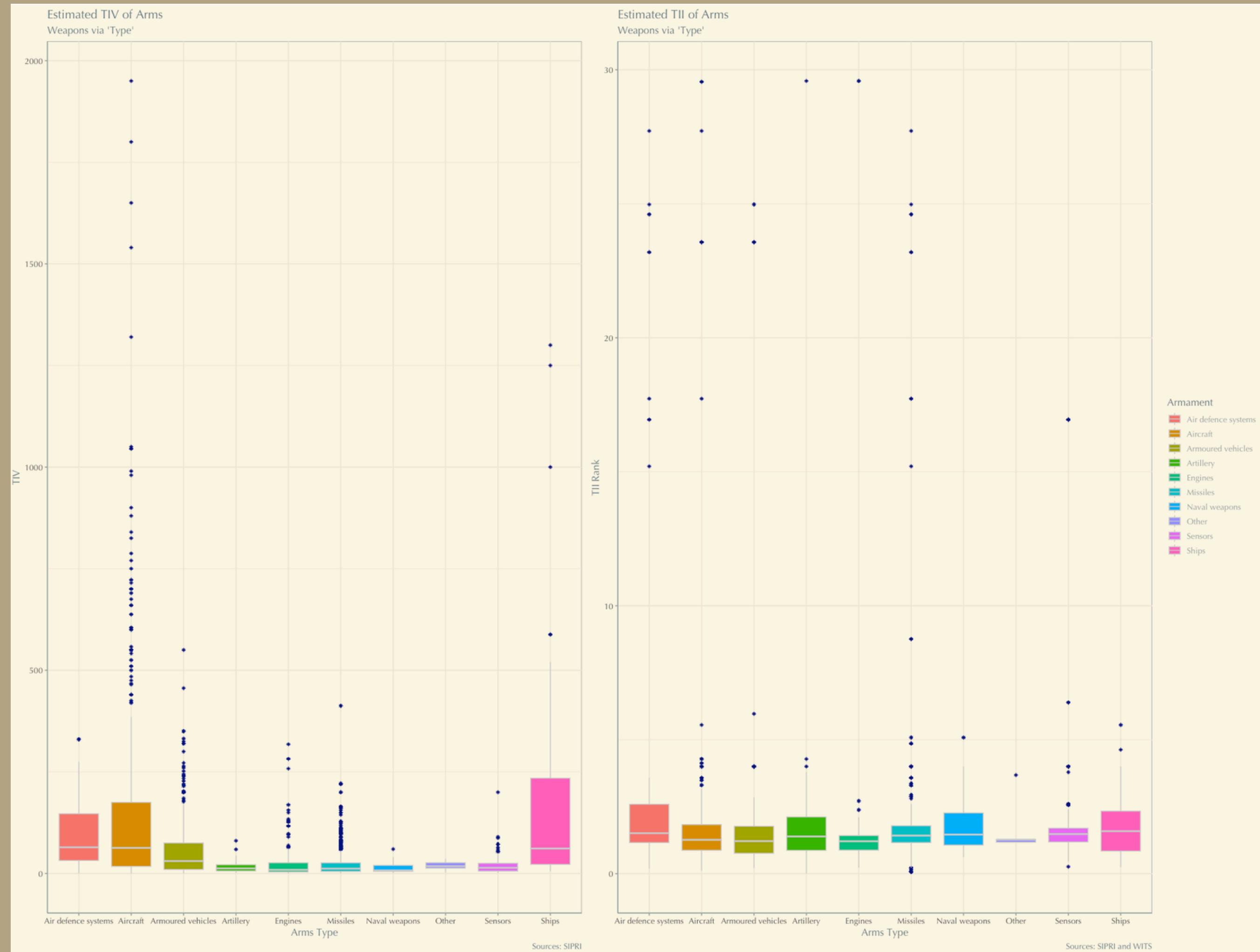
Highest via ‘TIV’:

- U.S. with Saudi Arabia
- China with Pakistan
- Russia with China

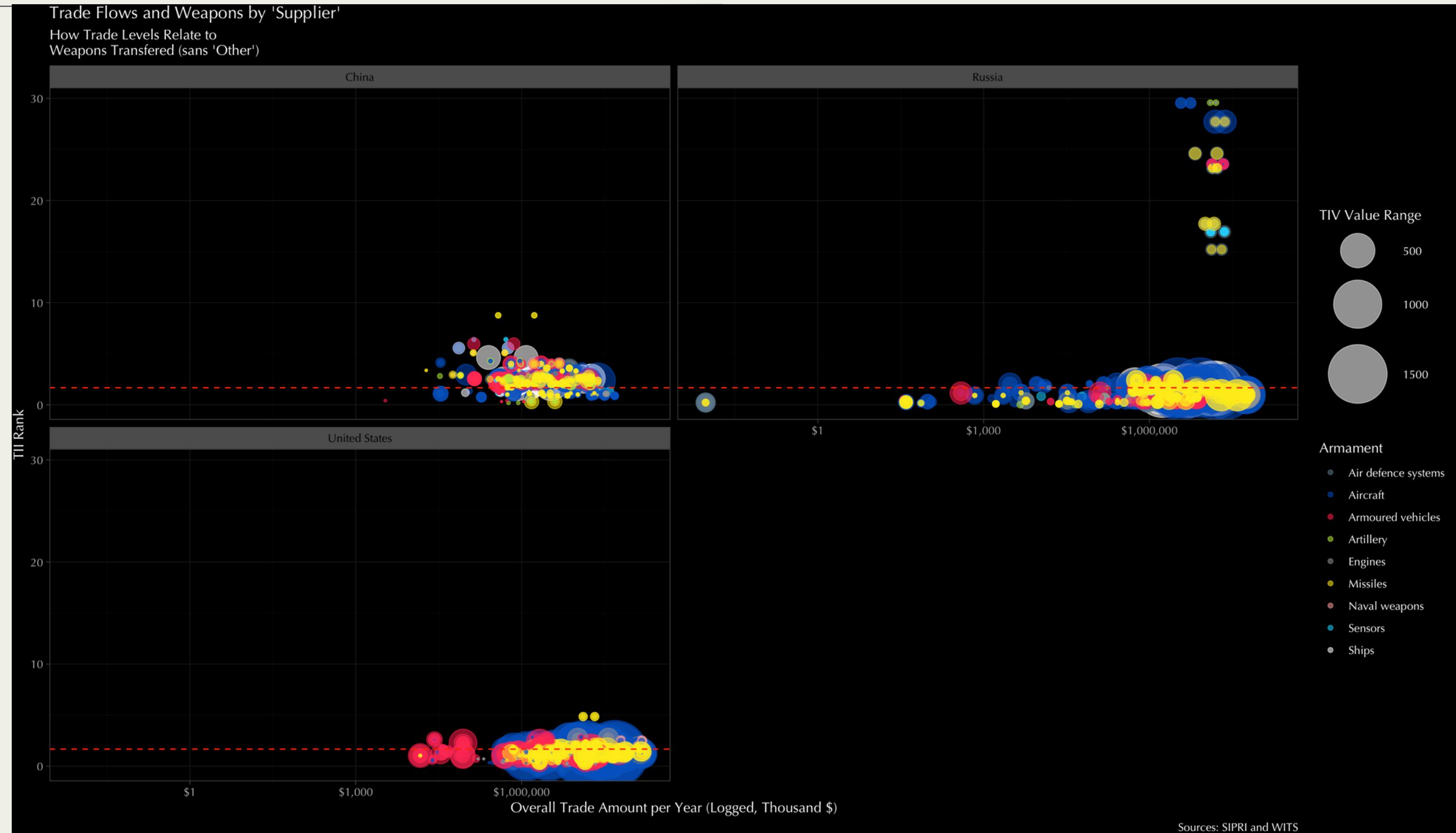


RELATION?

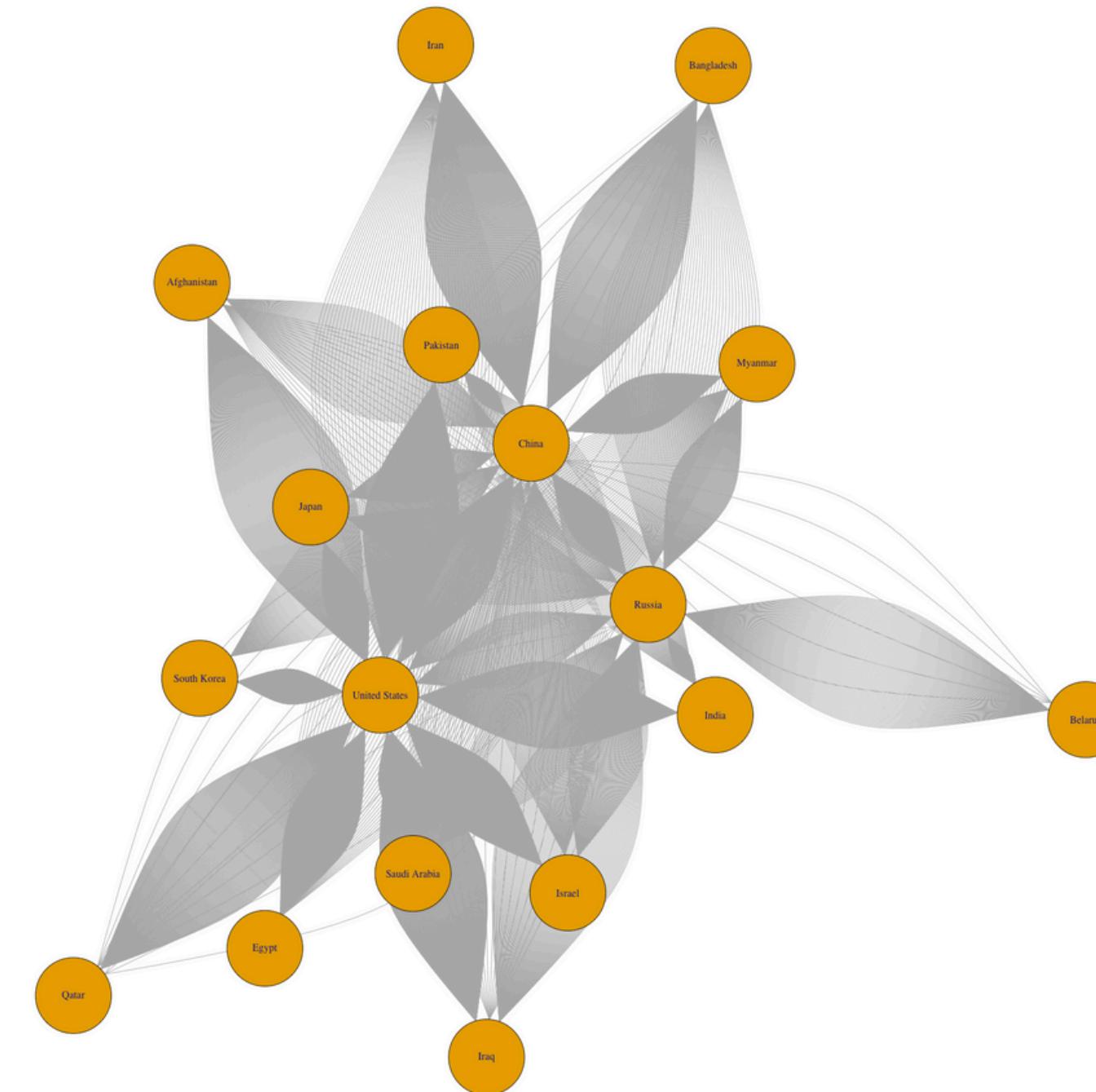
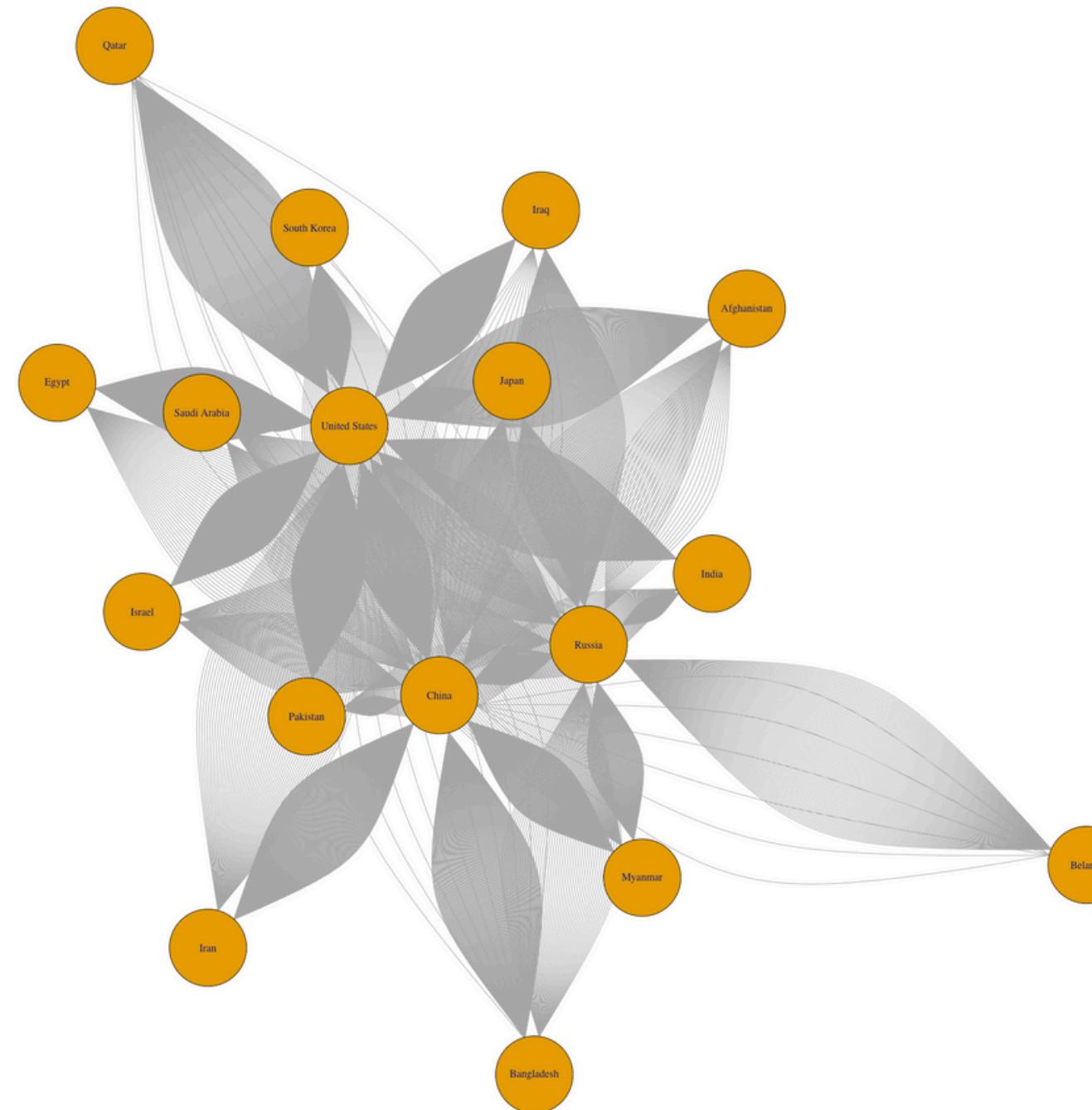




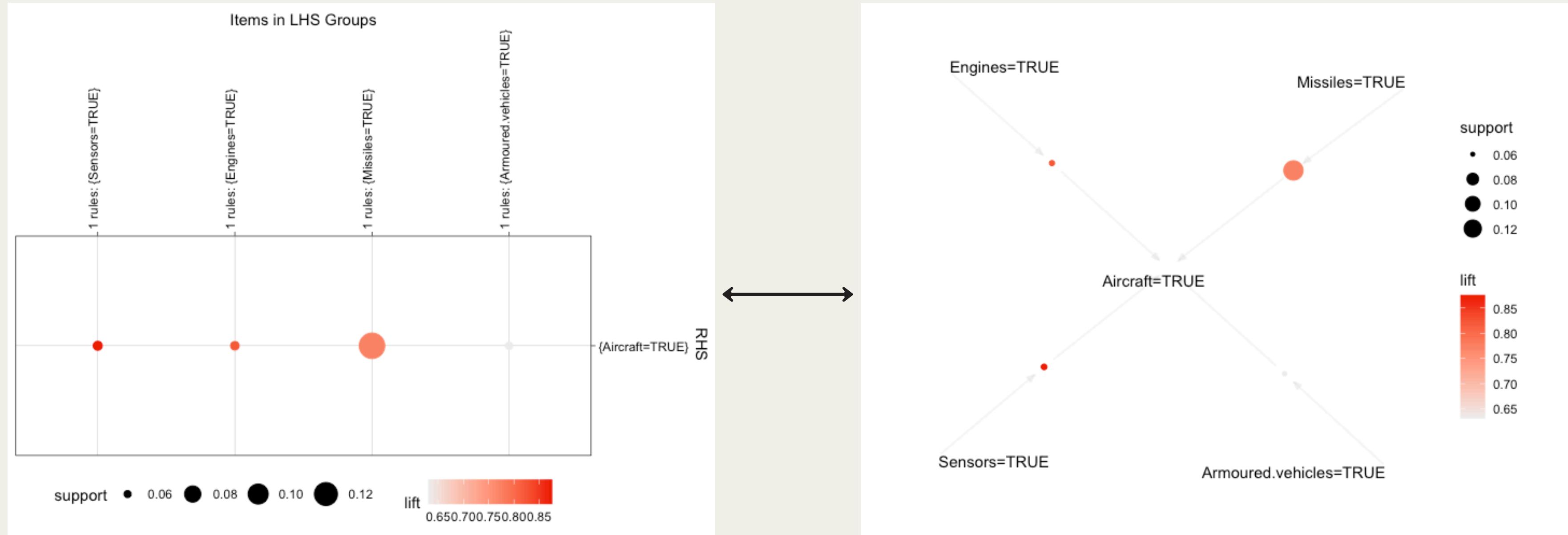
TII VS ARMS



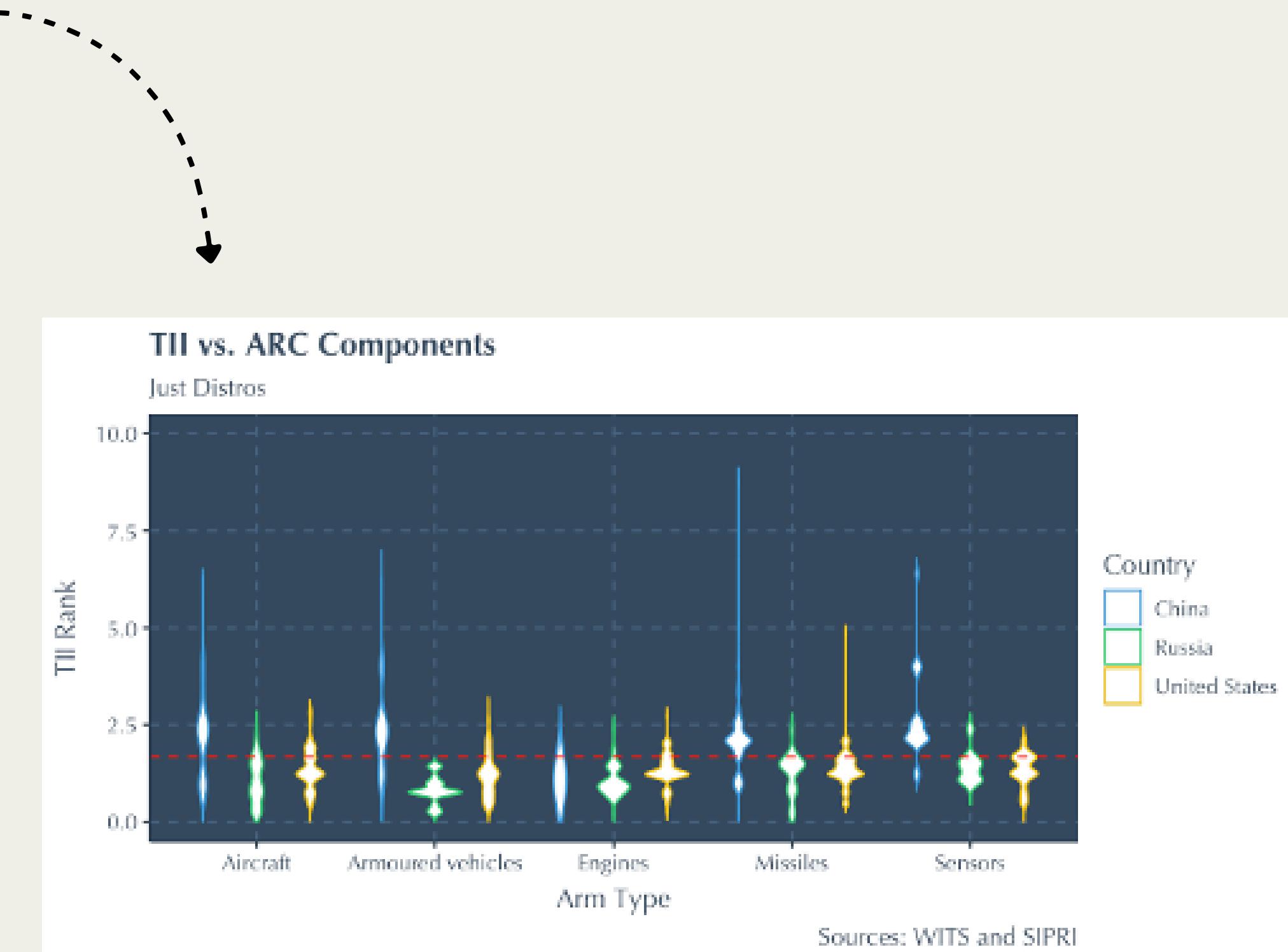
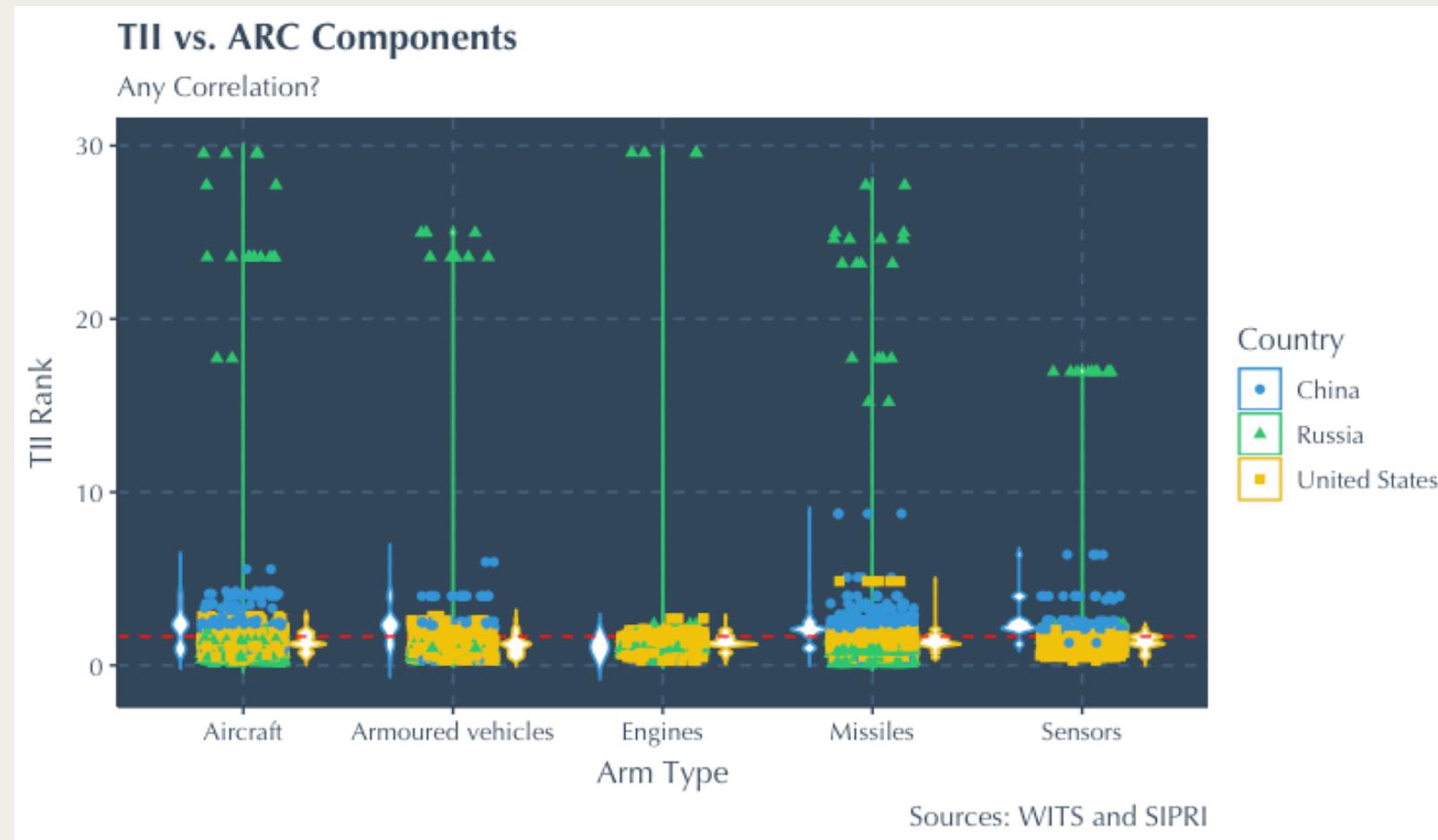
NETWORK VIEWS: TRADE (LEFT) & ARMS (RIGHT)



ASSOCIATION-RULE CLASS. (ARC)



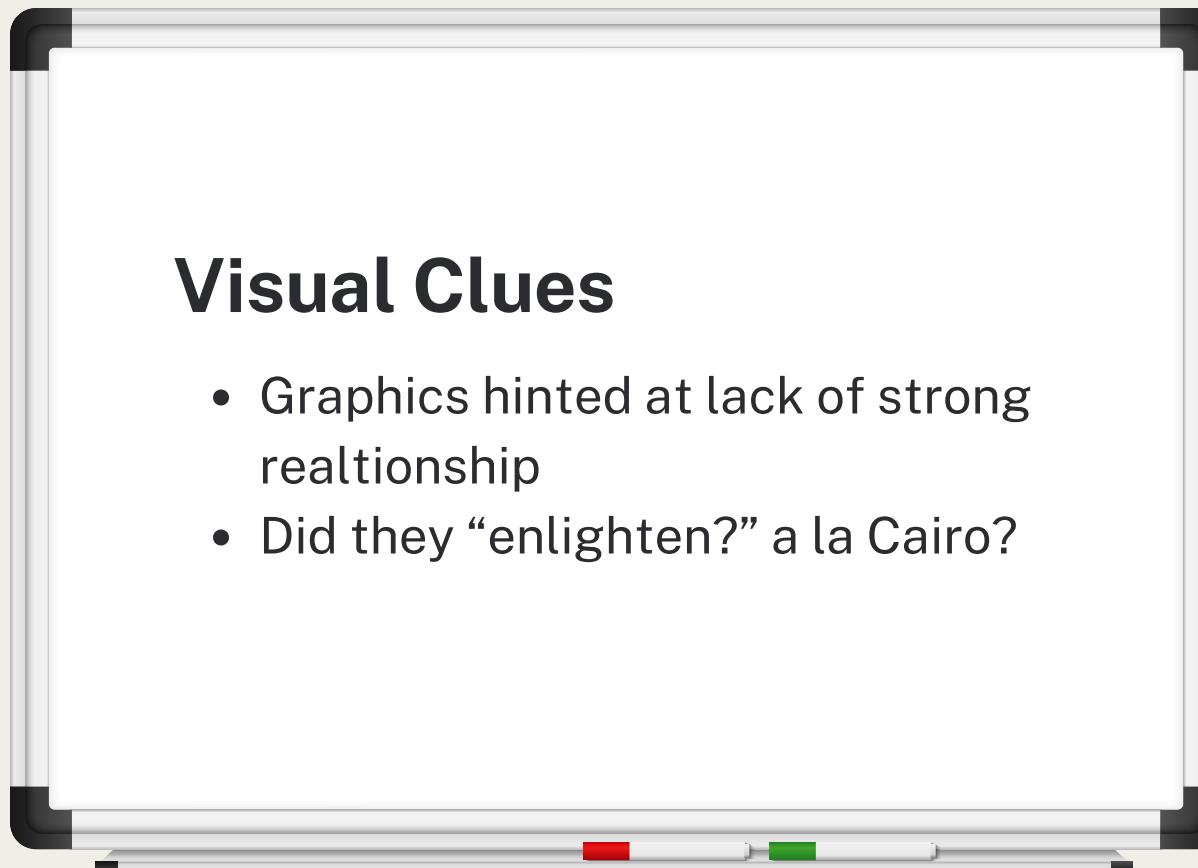
CONCLUSION



LIMITATIONS

Set-Up

- What if we included India?
- Other timespans?



Economic, Political
and Policy Sciences

Policy Reflections

- Another angle to predict global currents desired...



Thank you!

QUESTIONS?