

When Do States Say Uncle? Network Dependence and Sanction Compliance

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October 1, 2013

Motivating Question

- When and why do states comply with economic sanctions?
- In this presentation we have demonstrate the necessity of incorporating network dynamics into predictive models of sanction compliance.
- We show that the connectivity between target and sender states—in terms of cultural similarities, geographical proximity, and alliance patterns—plays an important and previously overlooked role on sanction outcomes.

Previous literature has suggested sanctions “work” by destabilizing leaders and other domestic factors

- Marinov 2005
- Lektzian and Souva 2003

In addition, such work has often utilized a duration modeling approach to capture the time dependent nature of sanction dynamics:

- Bolks Al-Sowayel 2000
- McGillivray and Stam 2004

While domestic conditions are important, another vein of literature suggests cross-cutting relationships and network dynamics should play a key role in understanding sanction outcomes

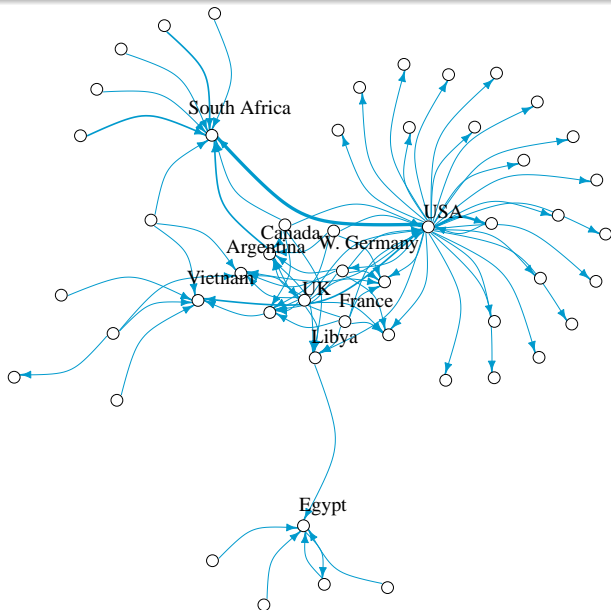
- Martin, 1993; Drezner, 2000; Bapat and Morgan, 2009, Cranmer and Heinrich 2013.

The importance of multilateral coordination and network dynamics are intuitive given the broader work on networks in international relationships

- Hoff and Ward 2004
- Cranmer and Desmarais 2012

Bridging the Gaps:

1984 Sanction Network



We suggest that present duration approaches fail to incorporate the network pressures intrinsic to international sanction processes.

- Target states face a network of sanctioners, not just an individual sender state. We present a duration model that incorporates the interdependent nature of the international system.
- In addition, we explore how network pressures inform sanction compliance, as well as interact with the domestic institutions of the target state.

Network Pressure Hypotheses

- **H1** Connectivity: The relationships between senders and receivers influences sanction compliance:
 - More proximate relationships translates to greater potential for pressure, which will lead to a shorter duration
- **H2** Network Members: Higher number of sender states leads to greater potential for pressure, which will shorten the duration of the sanction

Sanctions impose costs on groups within the country. Affected groups will try to lobby the government to reach an accommodation with sanctioning states, and the power of these groups will be stronger in democracies.

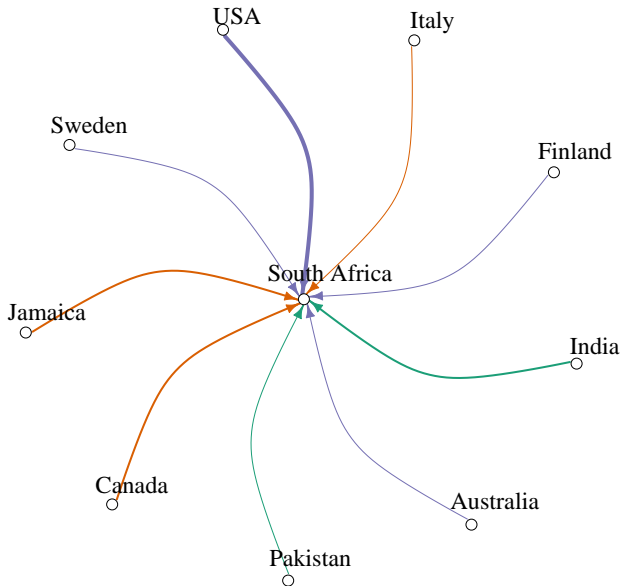
- **H3** Target states with stronger democratic institutions that are under the pressure of sanctions will more quickly comply than those with less democratic institutions.

Two types of network effects that we want to capture:

- Relationships between sender(s) of the sanction and a target state
 - Alliances
 - Distance
 - Trade
 - Religion
- Pressures from overall network structure
 - Number of senders
 - How many sanctions targetstate has received

Constructing Network Measures:

South Africa 1984 Network



Sanction data from Threat and Imposition of Sanctions developed by Morgan (2009), covers sanction cases from 1945 to 2005

The focus of this study is compliance to economic sanctions

We define compliance as:

- Complete/Partial Acquiescence by Target to threat
- Negotiated Settlement
- Total/Partial Acquiescence by the Target State following sanctions imposition
- Negotiated Settlement following sanctions imposition

$$\begin{aligned} \text{Compliance}_{i,t} = & \text{No. Senders}_j + \text{Constraints}_{i,t} + \text{Distance}_{j,t} + \\ & \text{GDP Capita}_{i,t-1} + \text{Internal Conflict}_{i,t} + \text{Trade}_{j,t} + \\ & \text{Ally}_{j,t} + \text{IGOs}_{j,t} + \text{Sanc. Rec'd}_{i,t} + \text{Religion}_{j,t} + \\ & \text{Constraints}_{i,t} * \text{No. Senders}_j + \epsilon_{i,t} \end{aligned}$$

where i represents the target state, j represents the relationship between the set of senders and i , and t the time period.

Table: Model 1: Network Effects

	coef	se(coef)	Pr(> z)
Number of senders	0.59	0.15	0.00
Constraints	0.02	0.04	0.69
Distance	-218.15	97.87	0.03
GDP per Capita (lagged)	-0.00	0.00	0.43
Internal Conflict	-0.03	0.08	0.74
Trade	0.65	0.85	0.44
Ally	1.12	0.49	0.02
IGO	-0.03	0.01	0.04
Rec'd Sanctions	-0.06	0.09	0.49
Religion	-0.90	0.40	0.02
N= 1001			
Number of events= 42			

Results:

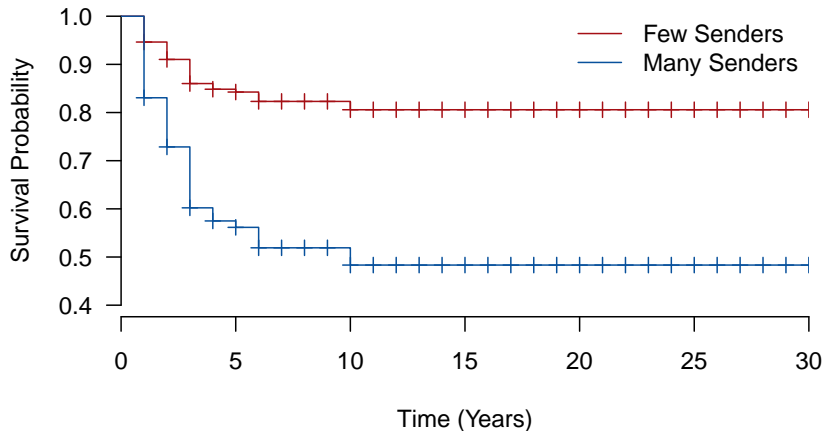
Duration Model Summary

Table: Model 2: Network Effects & Institutions

	coef	se(coef)	Pr(> z)
Number of senders	1.21	0.36	0.00
Constraints	-0.58	1.61	0.72
Distance	-253.00	102.73	0.01
GDP per Capita (lagged)	-0.00	0.00	0.38
Internal Conflict	0.03	0.09	0.71
Trade	0.50	0.84	0.55
Ally	1.44	0.54	0.01
IGO	-0.02	0.01	0.12
Rec'd Sanctions	-0.13	0.10	0.20
Religion	-1.33	0.45	0.00
Senders*Constraints	-1.66	0.92	0.07
N= 1027			
Number of events= 44			

Results:

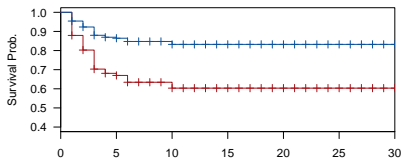
Survival Probability by Number of Senders



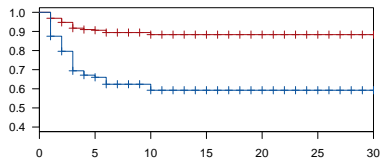
Results:

Survival Probability by Other Network Variables

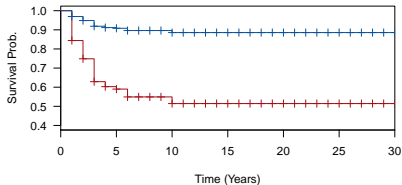
Distance



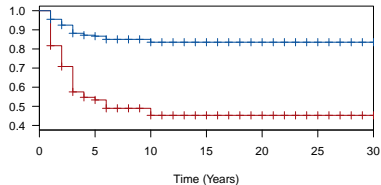
Ally



IGO



Religion



Next Steps

- This project shows the interaction between network and domestic factors in explaining sanction compliance.