

# Effect of Political Instability on Economic Development

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# Motivating Question

- When and why do states comply with economic sanctions?
- We demonstrate the necessity of incorporating network dynamics into understanding the time until 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

Such work has often utilized a duration modeling approach to capture the time until sanction compliance:

- Bolks Al-Sowayel 2000
- McGillivray and Stam 2004

Domestic conditions are important but cross-cutting relationships and network dynamics should play a key role in understanding sanction outcomes as well:

- Bapat and Morgan 2009
- Cranmer and Heinrich 2013

The importance of network dynamics are noted in other IR works:

- Ward, Siverson, and Xao 2007
- Cranmer and Desmarais 2012

# Understanding the Network:

1984 Sanction Spaghetti Bowl

# Untangling Spaghetti:

South Africa 1984 Sanction Case Network

# Untangling Spaghetti:

South Africa 1984 Aggregate Network

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

- Target states face sanctioners to whom they have a variety of relationships
- At any given point in time, target states may be faced with a multitude of sanction cases
- We present a duration model that incorporates these network dynamics
- We also explore the role domestic institutions play in conditioning network effects



# Network Pressure Hypotheses

## Sanction Case Network

### Hypothesis 1

Sanction Case Network: The relationship between sender(s) and the target matters for sanction compliance:

- Sanctions involving coalitions of sender(s) will be more quickly resolved than sanctions sent by just one state
- Sanction cases where relationships are more proximate will be more quickly resolved

# Network Pressure Hypotheses

## Aggregate Network

### Hypothesis 2

Aggregate Network: Targets of sanctions often face a multitude of sanction cases at any given point in time

- States under the pressure of a multitude of sanctions will more quickly resolve sanction cases than those facing only a few

## Hypothesis 3

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

- Sanctions are designed to impose costs on key groups within countries
- Affected groups will lobby the government to reach an accommodation with sanctioning states
- The ability to successfully lobby is dependent upon political institutions (Manin, Przeworski and Stokes 1999; Barro 1973; Ferejohn 1986)

# Conceptualizing Networks

Two types of network effects that we capture:

- Sanction Case Network
  - Number of senders associated with a sanction case
  - Distance: The average distance between sender(s) and the receiver
  - Trade: The share of total trade that the sender(s) make up for the receiver
  - Alliances: The proportion of sender(s) that are allied with the receiver
  - IGOs: The average number of common IGOs that the sender(s) and receiver belong to
  - Religion: Similarity of religious group makeup between sender(s) and the receiver
- Aggregate Network
  - Sanctions Received: Total number of sanctions to which the target state is currently exposed

- Threat and Imposition of Sanctions Database (Morgan 2009) provides information on 1,412 sanction case initiations and outcomes from 1945 to 2005
- Our focus is economic sanctions and the period of 1984 to 2005, providing us with 184 sanction cases
- Our unit of analysis is the sanction case-year, providing us with a total of 1,920 observations

# Dependent Variable

## Sanction Compliance

### Conceptualization of Dependent Variable

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

## Time-Varying Duration Model

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

- $i$  represents the target of the sanction
- $j$  represents the relationship between the set of sender(s) for a particular sanction case and  $i$
- $t$  the time period

# Results

## Duration Model Summary

	$\hat{\beta}$	$\hat{\sigma}$	$\Pr(> z )$
Case Network Measures			
Number of senders	0.59	0.15	0.00
Distance	-218.15	97.87	0.03
Trade	0.65	0.85	0.44
Ally	1.12	0.49	0.02
IGOs	-0.03	0.01	0.04
Religion	-0.90	0.40	0.02
Aggregate Network Measure			
Sanc. Recieved	-0.06	0.09	0.49
Controls			
Constraints	0.02	0.04	0.69
GDP per Capita (lagged)	-0.00	0.00	0.43
Internal Conflict	-0.03	0.08	0.74
Time at risk = 1,027			
Number of cases = 154			
Number of compliances = 44			



# Results:

## Duration Model with Interaction

	$\hat{\beta}$	$\hat{\sigma}$	$\Pr(> z )$
Case Network Measures			
Number of senders	1.21	0.36	0.00
Senders*Constraints	-1.66	0.92	0.07
Distance	-253.00	102.73	0.01
Trade	0.50	0.84	0.55
Ally	1.44	0.54	0.01
IGOs	-0.02	0.01	0.12
Religion	-1.33	0.45	0.00
Aggregate Network Measures			
Rec'd Sanctions	-0.13	0.10	0.20
Controls			
Constraints	-0.58	1.61	0.72
GDP per Capita (lagged)	-0.00	0.00	0.38
Internal Conflict	0.03	0.09	0.71
Time at risk = 1,027			
Number of cases = 154			
Number of compliances = 44			

# Results:

## Survival Probability by Number of Senders in a Sanction Case

# Results:

Survival Probability by Other Network Variables Relating to Sanction Case

- The relationships between sender(s) of a sanction and the target matter, and the specific facets of the relationship that matter extend beyond trade
- So far we have not found that the aggregate network structure faced by a state matters for compliance
  - There are other conceptualizations of aggregate network pressures that we can pursue
- We also did not find support for the institutions hypothesis
  - Greater specification of this hypothesis is likely necessary