

TROOPS OR CASH? ANALYZING THE INTERDEPENDENCIES BETWEEN MILITARY AND FINANCIAL COOPERATION

Jonas Bunte¹ Brandon Kinne²

¹The University of Texas at Dallas

²University of California, Davis

Prepared for the Annual Meeting of the International Political Economy Society, Nov 11 2016

RESEARCH QUESTION

- How are financial and military cooperation related?
 - Existing work: Commercial peace theory
 - Economic interdependence?
 - Decision to go to war is a government activity.
 - Replace trade (private activity) with bilateral lending (government activity)
 - Security cooperation?
 - Formal alliances are rarely activated; new alliances are uncommon
 - Defense cooperation agreements (DCAs) have proliferated.

OUR APPROACH

- Methodological challenges
 - Endogeneity across networks
 - loans \rightarrow DCAs
 - DCAs \rightarrow loans
 - Endogeneity within networks
 - Individual loans are not independent events: loans \rightarrow loans
 - Individual security agreements are not independent events: DCAs \rightarrow DCAs
- Our approach: Model co-evolution of these networks over time

STARTING POINT

- Direct effects
 - A. loans \rightarrow DCAs
 - B. DCAs \rightarrow loans
- Competition effects
 - C. Position in loan network \rightarrow DCAs
 - D. Position in DCA network \rightarrow loans
- Information effects
 - E. Loan relationships with third parties \rightarrow DCAs
 - F. DCA relationships with third parties \rightarrow loans

A. LOANS → DCAs

DIRECT EFFECT

- Issue linkage

“If the USG determines that Turkey is not “fully cooperating” with the USG on military matters, the USG would inform Turkey that it was suspending Turkey’s right to obtain disbursements.”
(Loan agreement between U.S. and Turkey)

- Side-Payments

“China believes it must foster economic development in Central Asia in order to create a more secure environment because economic backwardness contributes to instability”
(Cable from U.S. Embassy in China)

➤ H1: A bilateral loan between i and j increases the probability of a DCA between i and j

B. DCAs → LOANS

DIRECT EFFECT

- Issue linkage (again)

“Jiang said that China was not completely satisfied with its recent loan-for-oil agreement with Russia. [...] Yan noted that the military’s support for the deal had weighed heavily in the central government’s decision to move forward with it.”

(Cable from U.S. Embassy in China)

- Build up capacities of allies

“The two sides are also expected to discuss regional security, and strengthening cooperation in the fight against terrorism, extremism and separatism. [...] In addition, Chen Yuan, Chairman of China’s Development Bank arrived in Dushanbe to sign an agreement providing a USD 10 million loan.”

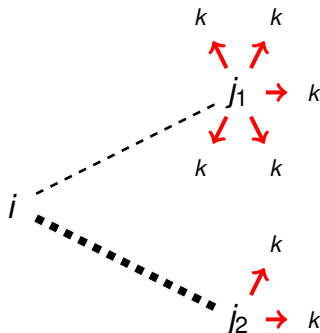
(Cable from U.S. Embassy in Tajikistan)

➤ H2: A bilateral DCA between i and j increases the probability of a loan from i to j

C. POSITION IN LOAN NETWORK \rightarrow DCAs

COMPETITION EFFECT

- Active creditors are unattractive security partners
 - Aristotle: “A friend to all is a friend to none”
 - Active creditors exhibit diffuse political commitments



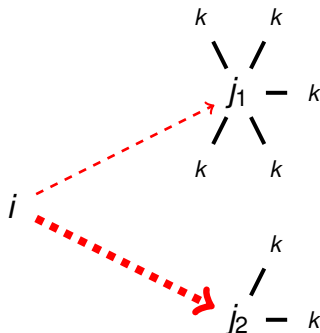
- » H3: Countries that are highly active creditors in the loan network are less attractive as DCA partners

D. POSITION IN DCA NETWORK → LOANS

COMPETITION EFFECT

- Loans only meaningful if they purchase influence

“Thailand remains a vital military ally, one of only five in the East Asian and Pacific region. [...] We face increasing competition in this regard from China, though, which is ramping up its military ties with other countries in the region. [...] I hope that you also will have the opportunity to press for deeper economic cooperation.”
 (Cable from U.S. Embassy in Thailand)

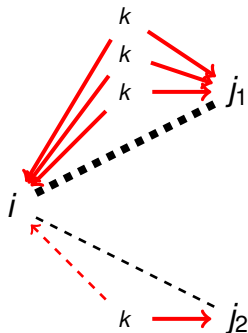


- » H4: Countries that are highly active in the DCA network are less attractive as potential loan recipients

E. LOANS WITH THIRD PARTIES \rightarrow DCAs

INFORMATION EFFECT

- Similar loan portfolio imply shared interests

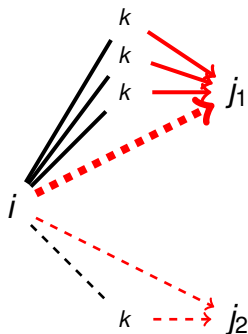


- H5: Countries with similar borrowing portfolios are more likely to sign DCAs

F. DCAs WITH THIRD PARTIES → LOANS

INFORMATION EFFECT

- Lending is risky, thus lending by trusted friends provides information

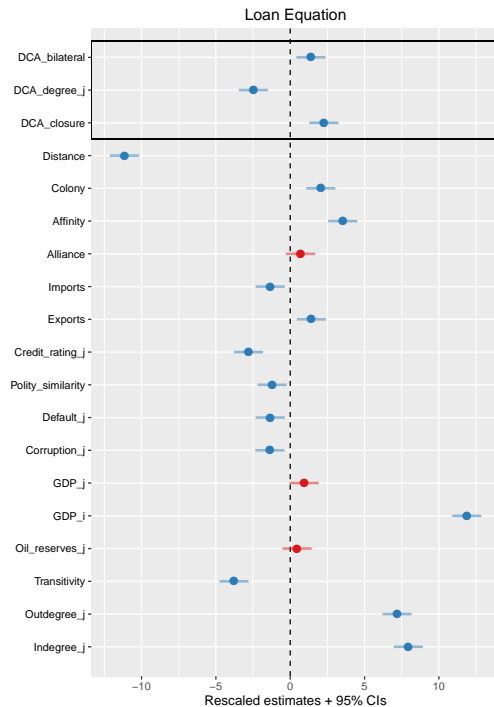
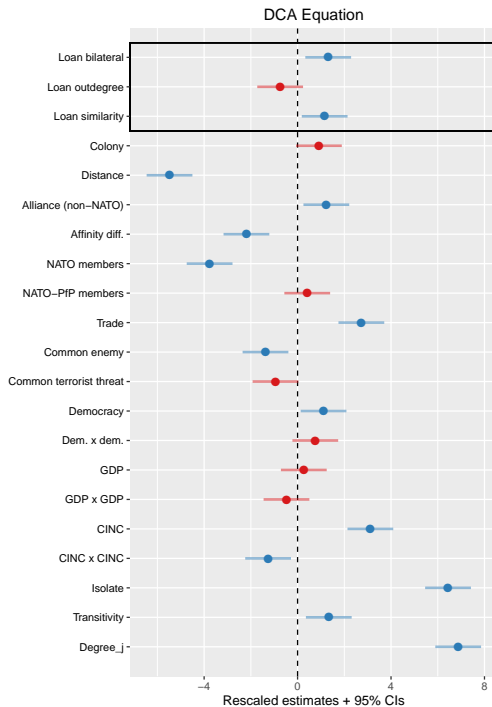


- » H6: Creditors prefer to lend to the same debtors as their DCA partners

CONTROL VARIABLES

- These effects should persist even after controlling for ...
 - DCA equation
 - GDP per capita
 - total bilateral trade
 - military power
 - formal military alliance
 - NATO member
 - common enemy
 - common terrorist threat
 - Regime type
 - colonial legacies
 - UN voting affinity
 - distance between capital cities
 - Loan equation
 - credit rating
 - currently in default
 - GDP per capita
 - exports and imports
 - oil reserves
 - corruption
 - formal military alliance
 - Polity similarity
 - colonial legacies
 - UN voting affinity
 - distance between capital cities

RESULTS



CONCLUDING REMARKS

- Significance
 - Rise of China and India as new creditors might not only have economic effects but also has implications for international security.
 - Changing flows of bilateral loans might predict changes in military alliances, and eventually, the potential for international war.

APPENDIX

- The challenge:
 - Endogeneity within networks: loans \rightarrow loans; DACs \rightarrow DACs
 - Endogeneity across networks: loans \rightarrow DACs; loans \rightarrow DACs
 - Dynamics: Co-evolution of these networks over time
- Stochastic actor-oriented models (SAOMs) (e.g., Snijders et al., 2013)
 - Specify separate DCA (\mathbf{x}) and loan (\mathbf{y}) network equations
 - Include (1) controls, (2) endogenous effects, and (3) cross-network effects
 - Simulate coevolution of \mathbf{x} and \mathbf{y} networks
 - Sample from parameter space
 - Minimize differences b/w simulated and observed networks

$$f_i^X(x, y) = \sum_{h=1} \beta_h^X s_{ih}^X(x, y)$$

$$f_i^Y(x, y) = \sum_{h=1} \beta_h^Y s_{ih}^Y(x, y)$$

APPENDIX

FIGURE: Goodness of Fit, with and without Network Effects

