## GV103: Introduction to International Relations

Dr. Philip Arena

**Trust Problems** 

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A Model of Trust 00

Empirical Evaluation

# Introduction

- Two goals for this lecture
  - Provide general understanding of trust problems
  - Discuss how they explain why there isn't more cooperation

A Model of Trust ●○

Empirical Evaluation

## A Model of Trust

	allow	block
allow	β, β	$\beta e_1, \tau_2$
block	$ au_1$ , $eta e_2$	0, 0

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Analysis

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Empirical Evaluation

#### • For blue type

- Allow iff  $\phi_j(\beta) + (1 \phi_j)(\beta e_i) \ge \phi_j(\underline{\tau_i}) + (1 \phi_j)(0)$
- Must be true if  $e_i \ge 0$
- If  $e_i < 0$ , true iff  $\phi_j \geq \hat{\phi}_j$

• Where 
$$\hat{\phi}_{j} \equiv rac{eta e_{i}}{rac{ au_{i}}{ au_{i}} - eta + eta e_{i}}$$

- For red type
  - Allow iff  $\phi_j(\beta) + (1 \phi_j)(\beta e_i) > \phi_j(\overline{\tau_i}) + (1 \phi_j)(0)$
  - Cannot be true if  $e_i < 0$
  - If  $e_i \geq 0$ , true iff  $\phi_j > \hat{\phi}_j$

• Where 
$$\hat{\phi}_j \equiv rac{eta e_i}{\overline{ au_i} - eta + eta e_i}$$

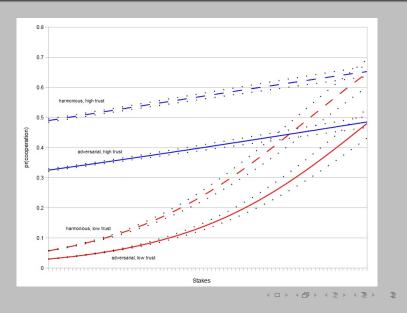
A Model of Trust 00



- Observations: all dyad-years from 1870 to 1913, 1950 to 2005
- y: cooperative trade relations
  - Equals 1 iff 3 conditions met ( $\approx$  35% of cases)
  - 1: Imports from 1 to 2 above modest threshold
  - 2: Imports from 2 to 1 above modest threshold
  - 3: Neither side importing too much more than other
- xs: trust ( $\phi$ ), harmonious (e), potential benefits ( $\beta$ )
  - Trust equals 1 iff 1 has embassy in 2 and 2 in 1
  - Harmonious based on diffs in energy consumption per capita
  - Potential benefits based on population, distance

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### Results



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