

Economic Origins of Autocratic Peace: Military Disputes and the Role of Tycoons

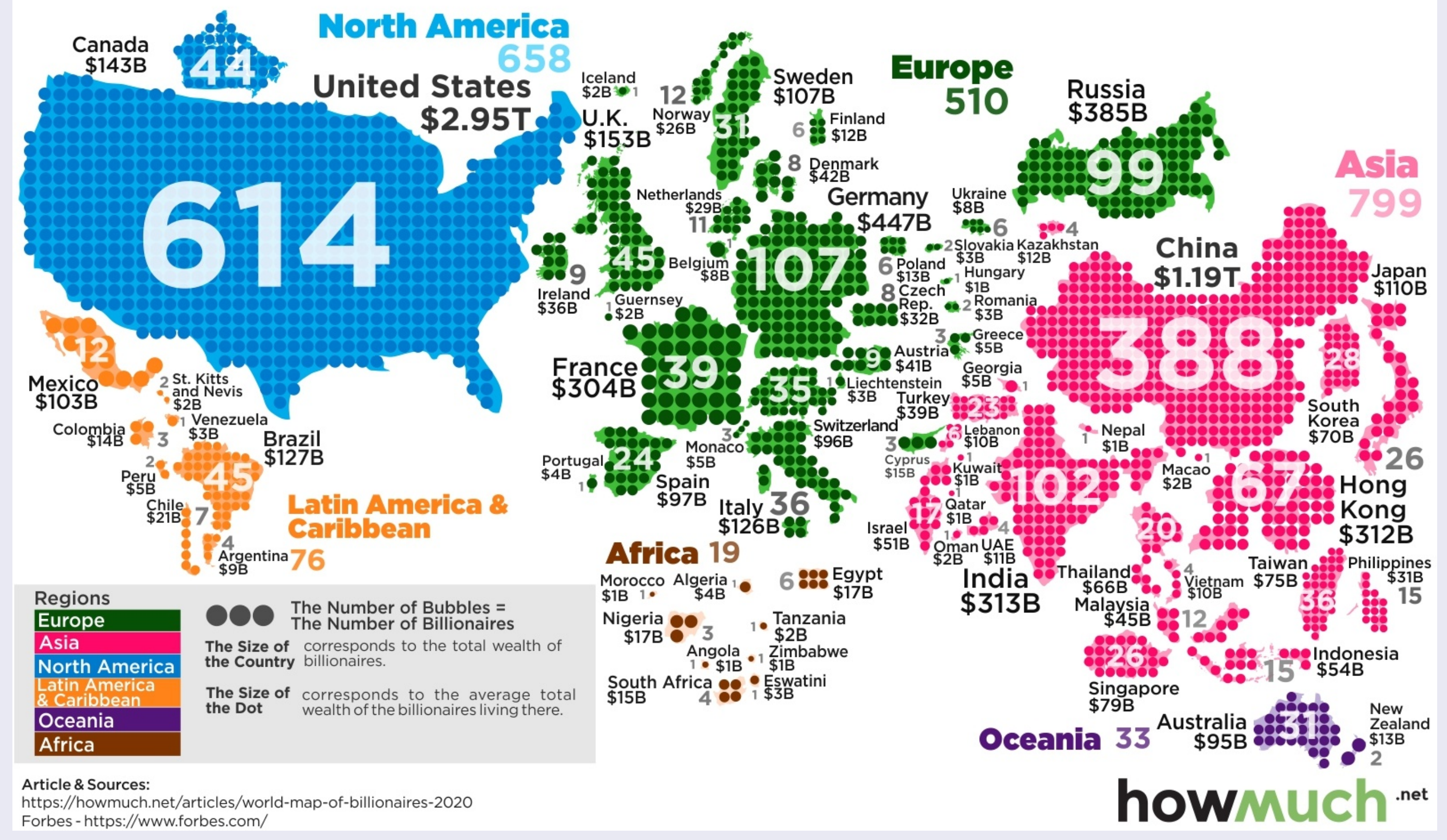
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Economic Origins of Autocratic Peace

World Map of Billionaires 2020 Number of Billionaires & Total Wealth Accumulated



Motivating Example: Russia's War in Ukraine

"While a solution seems frighteningly far off, I can only join those whose fervent desire is for the bloodshed to end."

- Mikhail Fridman, Chairman of Alfa Group (net worth: 11.8 billion USD)

"Peace is very important! Negotiations need to start as soon as possible!"

- Oleg Deripaska, Founder of the Rusal Aluminium (net worth: 2 billion USD)

"This war a tragedy that is hard to justify."

- Vladimir Lisin, Chairman of Novolipetsk Steel (net worth: 18.4 billion USD)

Question

What is the role of tycoons in a leader's decision to engage in a militarized dispute?

- In many countries across the world, a relatively small number of tycoons control a substantial share of the state's economy.
- These tycoons are also, in many instances, the only feasible counterweight to the bureaucracy.
- Tycoons' interests in war-making are different from bureaucrats' as it relates to economic development and business environment.

Theory

Literature suggests → There is a strong relationship between external war and domestic political survival of regimes and leaders.

- Democratic Peace Theory: regime type matters for external belligerence
- Selectorate Theory: size of governing coalition matters for war decisions
- Our theoretical approach: what matters for a leader's decision to engage in a militarized dispute is the composition of the ruling coalition:
 - the balance between bureaucrats and tycoons
 - the level of wealth inequality among tycoons

Bureaucrats vs. Tycoons

Whereas traditional models consider ruling autocratic elites as a uniform actor, we distinguish between two different groups that comprise the ruling coalition: the tycoons (business elites) and the bureaucrats (political elites).

Main Arguments

Domestic constraints and military disputes:

- Leaders' decisions to engage in a military dispute will be driven by their need for support among a pool of bureaucrats and tycoons in their support coalition.
- Their reliance on tycoons for support is increasing in the levels of wealth inequality among the tycoons.

Structural Model

Setup

- Leader decides to engage in a militarized dispute $w = 1$ or not $w = 0$
- Tycoon decides to support $s = 1$ or not $s = 0$

$$u(w, s, \varepsilon) = w(\mathbf{X}\boldsymbol{\beta} + s\alpha) + \varepsilon(w) \quad (\text{leader payoff})$$

$$v(w, s, \xi) = s(\mathbf{X}\boldsymbol{\zeta} + \mathbf{Z}\boldsymbol{\eta} + w\gamma) + \xi(s) \quad (\text{tycoon payoff})$$

where \mathbf{X} is a matrix of dyadic country characteristics (military, political, and trade indicators), \mathbf{Z} are tycoon characteristics (the level of wealth inequality among tycoons), ε and ξ are random leader and tycoon utility shocks, and $\theta = (\boldsymbol{\beta}, \boldsymbol{\zeta}, \boldsymbol{\eta}, \alpha, \gamma)$ are parameters of interest.

Our solution concept is Bayesian Nash. McKelvey and Palfrey (1995) show that leader and tycoon utilities can be characterized by a pair of probabilities:

$$p = \Pr(\mathbf{X}\boldsymbol{\beta} + q\alpha > \varepsilon(0) - \varepsilon(1))$$

$$q = \Pr(\mathbf{X}\boldsymbol{\zeta} + \mathbf{Z}\boldsymbol{\eta} + p\gamma > \xi(0) - \xi(1))$$

Then best response probabilities can be expressed:

$$\Psi(q; \mathbf{X}, \theta) = \int \mathbb{1}(\mathbf{X}\boldsymbol{\beta} + q\alpha > \varepsilon(0) - \varepsilon(1)) dF(\varepsilon)$$

$$\Phi(p; \mathbf{X}, \mathbf{Z}, \theta) = \int \mathbb{1}(\mathbf{X}\boldsymbol{\zeta} + \mathbf{Z}\boldsymbol{\eta} + p\gamma > \xi(0) - \xi(1)) dG(\xi)$$

We can obtain estimates for equilibrium beliefs \hat{p} and \hat{q} using Nadaraya-Watson kernel estimator and characteristics for each dyad and time period (see Gibilisco, Kenkel, and Rueda (2022) for a recent utilization of this approach in political science).

Then using Hotz and Miller (1993) we can write the likelihood

$$\mathcal{L}(\theta|\hat{p}, \hat{q}, \mathbf{X}, \mathbf{Z}) = \prod_t \prod_d \Psi(\hat{q}_{dt}; \mathbf{X}, \theta) \Phi(\hat{p}_{dt}; \mathbf{X}, \mathbf{Z}, \theta)$$

Conjectured Results

- 1 $\alpha < 0$. If leaders expect tycoons will not support, they will be more likely to engage in a militarized dispute.
- 2 $\gamma < 0$. If tycoons expect leaders will engage in a militarized dispute, they will not support the leader.
- 3 $\alpha' < \alpha$ if $Q' > Q$, where Q is an empirical measure of tycoon inequality. That is, strategic interdependence is stronger when the distribution of resources among tycoons is greater.
- 4 $\alpha' < \alpha$ if $H' > H$, where H is an empirical measure of tycoon coalition power. That is, strategic interdependence is larger when tycoons' power in the ruling coalition is greater.
- 5 $\gamma' < \gamma$ if $W' < W$, where W is an empirical measure of tycoon total wealth. That is, strategic interdependence is larger when tycoons' total wealth is greater.

Data

- ◇ **\mathbf{Z} - Tycoon characteristics:** *Forbes World's Billionaires* annual global data by country
 - Temporal coverage: 1990-2022
 - Spatial coverage: 75
 - Included: all individuals with a net worth over 1 billion USD in a given year
 - Features: name, rank, country of citizenship, company characteristics, industry type, net worth (estimated using shareholder information, company financial statements, and current exchange rates)
- ◇ **\mathbf{X}_m - Dyadic country (military) characteristics:** Dispute Outcome Expectations (DOE) data
 - Temporal coverage: 1816-2017
 - Spatial coverage: global
 - Included: 1.5 million directed dyad-years
 - Features: the probability of winning a war using military expenditure, military personnel, energy consumption, iron and steel production, urban population, and total population measures in each country
- ◇ **\mathbf{X}_p - Dyadic country (political) characteristics:** Polity V data
 - Temporal coverage: 1800-2018
 - Spatial coverage: 167 countries
 - Included: states with a total population of 500,000 or more in the most recent year
 - Features: regime authority spectrum on a 21 point scale ranging from -10 (hereditary monarchy) to +10 (consolidated democracy), with six component measures that record key qualities of executive recruitment, constraints on executive authority and political competition.
- ◇ **\mathbf{X}_t - Dyadic country (trade) characteristics:** The World Bank's World Integrated Trade Solution (WITS) data
 - Temporal coverage: 1962-2022
 - Spatial coverage: 170 countries
 - Included: all trade statistics covered by UNSD Commodity Trade, UNCTAD Trade Analysis Information System, and WTO's IDB
 - Features: international merchandise and commercial services trade data and overview of country's imports and exports, tariff and non-tariff measures.
- ◇ **w - Military dispute engagement decisions:** - Militarized Interstate Disputes (MID) data
 - Temporal coverage: 1816-2014
 - Spatial coverage: global
 - Included: all instances of when one state threatened, displayed, or used force against another

Potential Concerns

- **Model:** Does the requirement of simultaneity imposed by the current setting undermine interesting strategic dimensions?
- **Measurement:** We need to identify an appropriate measure of s (tycoon support for war)
- **Identification:** We need to find a variable to separately identify $\boldsymbol{\beta}$ from $\boldsymbol{\alpha}$ and $\boldsymbol{\zeta}$ from $\boldsymbol{\gamma}$ (without doing so, analysis would suffer from collinearity due to both tycoons and leaders caring about dyadic characteristics \mathbf{X}).

References

- 1 Gibilisco, Michael, Brenton Kenkel, and Miguel R Rueda. 2022. "Competition and Civilian Victimization." *Journal of Conflict Resolution* 66(4-5):809-835.
- 2 Hotz, V Joseph, and Robert A Miller. 1993. "Conditional choice probabilities and the estimation of dynamic models." *The Review of Economic Studies* 60(3):497-529.
- 3 McKelvey, Richard D, and Thomas R Palfrey. 1995. "Quantal response equilibria for normal form games." *Games and economic behavior* 10(1):6-38.