Political-Economy of Conflicts and Institutions

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- What are the relevant actors to analyze the problem?

Outline

1. Information cascades literature
2. Cooptation *vs* repression literature
3. The military as a separate actor
4. Some research ideas

Traditional approaches: Elites vs non-elites

- some powerful individuals control the government, repress the masses, and extract rents
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No village has ever revolted merely because it was hungry (De Nardo, 1985: 17)

XIXth century Russian revolutionary journal Narodnya Volya (Peoples Will)

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- Alternative approach, revolutions are detrimental with some probability: **Ellis and Fender 2010**

Ellis and Fender 2010

- Two states of the world: high and low destruction revolutions
- Agents receive individual signals on the true state of the world
- Sequentially and individually decide to rebel or not
- Rebelling carries no "effort" cost
- To deter rebellion, franchise extension (wealth transfer)
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Findings: Revolution more likely to occur if

1. revolution unlikely to be destructive
2. the tax system is inefficient $\Rightarrow$ more costly to deter rebellion
3. higher inequality

Information cascades literature: **limitations**

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- Revolutions are often followed by periods of civil unrest, even civil wars.

Information cascades literature: **future research**

- better understand the consequences of the new information technologies (Twitter, Blackberry,. . .)
    - helps overcoming coordination failures
    - if total replacement of previous technology, government can control the unique communication tool (Bohannon 2012)
- What are the factors *sparking* protests?
    - Education and absence of economic opportunities (Campante and Chor 2012)

2. Models of Cooptation vs Repression

First view: Elites vs Non-Elites

- Wintrobe (1998): Loyalty *vs* Repression
- Acemoglu and Robinson's (2005) theory (and their outsprings): extension of the franchise to overcome commitment problem
- Divide-and-Rule politics:
    - Acemoglu, Robinson and Verdier (2004)
    - Padro i Miquel (2007)
    - De Luca, Sekeris and Vargas (2011)

Second view: Elites vs Elites

- Bueno de Mesquita et al. (2003): Rights *vs* cooptation of 'politically relevant' players
- Egorov and Sonin (2011): Incentives to appoint incapable subordinates
- Debs (2007): The Big Shuffle
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Third view: Group conflicts

- Models of 'state capacity' of Besley and Persson (2008, 2010)
- Esteban, Morelli and Rohner (2012)

A Theory of Military Dictatorships.
Acemoglu, Ticchi, and Vindigni (2010)

- Previous class of games assume that one's army is perfectly controlled
- ATV explicitly model the decisions of the military
- Principal-Agent model:
  - government (elites or civilian): Principal
  - agent: military
- Existing literature on Civilian-Military relationships focuses on consequences of such relationships on international relations (Feaver 2003, Adam and Sekeris 2011)
- ATV focus on how they shape institutions

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  - Soldiers (military): $\bar{x}$

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- Look for Markov Perfect Equilibria

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⇒ non-absorbing states:

- Elites control
- Transitional democracy (leading to either D or M)

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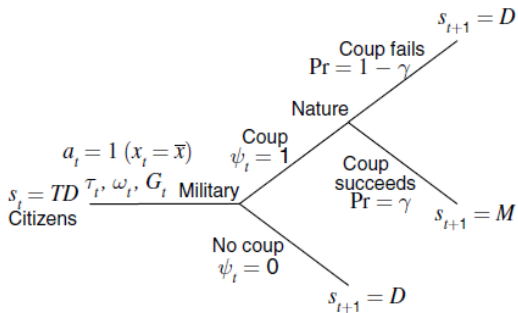
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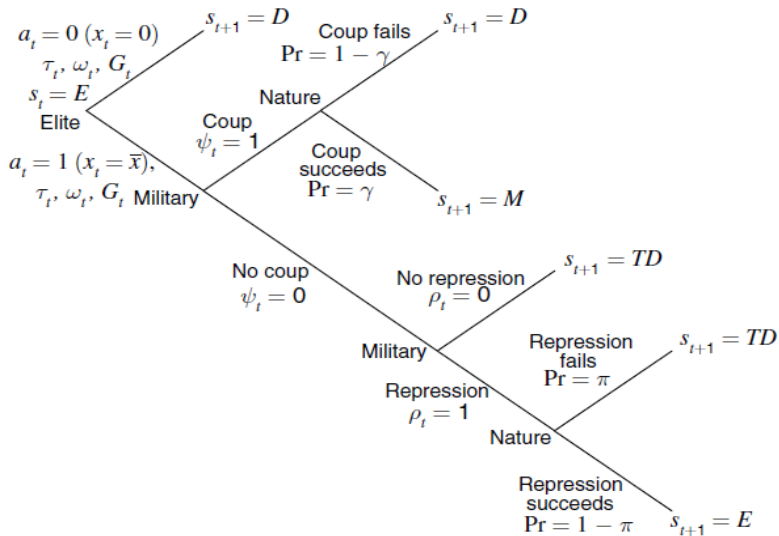- Repression succeeds with probability $(1 - \pi)$

$\Rightarrow$ Elite domination (non absorbing state) perpetuates *only if*

- military present
- do not attempt a coup
- decide to repress the citizens
- repression succeeds

Transitional Democracy

Elite control

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⇒ "**Efficiency wage**"

Analysis

1. First solve the game for the absorbing states
2. Then solve the game for the only non-absorbing state

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- The military maximize their wages (i.e. they do not benefit from the public good)

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It is shown that *if* this wage is feasible, *then* always attributed.

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    - Coup is destructive, hence inefficient, **yet** may be unavoidable because of commitment problem
    - More income inequality $\Rightarrow$ lower payoffs under democracy $\Rightarrow$ higher incentives for a coup

Elite control - Oligarchy

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- rebellion-deterring army and low wage to the military conducive to coups is a **strategy** which is **always** dominated by the democratization strategy since:
    - democratization saves the coup-related efficiency losses (destruction and foregone production) & the military wage
    - under the military rule, the taxation is higher than under democracy (because the median internalizes the consequences of taxing himself, while the military do not tax themselves)

Elite control - Oligarchy

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- Determination of the *efficiency wage* that secures
  - no coups
  - repression

$$V^{military}(E|repression) = V^{military}(E|coup)$$

$$\Rightarrow w^P = \beta\gamma w^M + \beta(1-\gamma)u^{poor}(D)$$

$$\Rightarrow w^P \left(\underbrace{\beta}_{+}, \underbrace{\gamma}_{+}, \underbrace{w^M}_{+}, \underbrace{u^{poor}(D)}_{-} \right)$$

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2. Higher **income inequality** most likely to favour **oppressive regimes**
   - The military are less willing to find themselves in a democracy $\Rightarrow$ lower efficiency wage
   - Greed effect $\Rightarrow$ the military are more attracted by a junta $\Rightarrow$ higher efficiency wage
   - Under democracy the elites get dispossessed more $\Rightarrow$ repression becomes more attractive

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- Assume an army is required because of external threat:
  - $x = \bar{x} \Rightarrow$ no invasion
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  - Threat disappears every period with probabililty λ

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1. Higher external threat in a transition to democracy $\Rightarrow$ democratization more likely
    - **credible commitment** of necessitating an army in the future

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Implications

1. Higher external threat in a transition to democracy $\Rightarrow$ democratization more likely
   - **credible commitment** of necessitating an army in the future
2. Democratic consolidation could be more likely with stronger military
   - A stronger military demands higher "efficiency wages" (under E)
   - If external threat is high, the citizens credibly commit to pay efficiency wages in the future
   - Stronger military have increased incentives not to wage a coup

Limitations of ATV

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2. Dichotomic variables
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3. Many exogenous and non-interelated variables:
   - exogenous probability of coup success
   - exogenous probability of repression success
   - exogenous threat (i.e. invasion by neighbour)

Follow-up of the AVT 2010

"Persistence of Civil Wars" AVT, 2011

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    - Citizens
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States of the world

- Democracy (no threat...)
- Military regime (no threat...)
- *Civil War*: when elites control the country, threat

AVT 2011

Elites (i.e. Civil War) choose the army size:

- low: some > 0 probability of civil war persisting, coup impossible
- intermediate: civil war stops, military can be 'reformed' in $t + 1$
- high: civil war stops, military cannot be 'reformed'

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Incentives

- low army is a trade-off between not having a (costly) army in the future, and facing a higher probability of civil war persistence
- high army is a trade-off between higher military expenditures, and lower probability of coup

AVT 2011 - Findings

1. **Small** army more likely under:
   - low probability of civil war persistence
2. **Intermediate** army (and thus coups) more likely under:
   - high probability of civil war persistence with low army
   - high efficiency wage
3. **Intermediate** army more likely under:
   - high probability of civil war persistence with low army
   - low efficiency wage

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- Civilian decides the size of the army given it increases power of government (continuous variable)
- Army can stage a coup
- **Results:**
    1. If the government cannot commit on future wages to the military, the equilibrium army will be inefficiently low
    2. Even if the government can commit, the first-best solution from the government's perspective (i.e. paying exit option to soldiers) is never implemented: too small army.

Adam and Sekeris, 2011: potential benefits of military and government being different actors

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- Typical model of (IR) conflicts using Contest Success Functions
- The military (privately) decides its fighting capacity
- the government decides whether or not to make use of the army
- imperfect (but almost perfect) communication between Government and Military
- **No possibility of military coup** (perfectly aligned incentives)

Interpretation of division of decisions

1. Presidents/Governments may not have perfect information about their (relative) military might

- Literature on civilian-military relations (Huntington, 1991; 1996, Desch, 1999; Feaver, 2003)
- Main messages conveyed:
  - separation of the 2 bodies
  - potential disagreements on success probability & cost of missions (Vietnam War)
  - intelligence not always relied upon (Saddam's alleged WMD - Jervis, 2010)
  - could even have shirking of the military in pricipal-agent framework (Feaver, 2003)

Interpretation of division of decisions

2. Citizens/voters have imperfect knowledge of their country (relative) military might

- When governments are accountable (democracies)
- Stock of **weapons, technology and army efficiency** however, are <u>**not**</u> chosen by public, and are not public knowledge (secrecy for national security)!
- Public opinion affects policy (Page and Shapiro, 1983)
  - whether the public opinion is "unstructured" - early literature
  - or if it is formed by rational judgment about foreign policy events
- Public opinion on foreign policy is formed on cues/observable information (Mueller, 1971; Nincic, 1997; Gelpi, 2010)

(benchmark) Model of Guns and Butter

Timing of the game:

1. Players simultaneously choose their individual amounts of guns (g^i, g^j), and of butter (x^i, x^j)
2. Players simultaneously decide whether or not to attack their foe. If either or both attack, we have war, otherwise we have peace

Not arming is unstable

Utility of player i under war: $U^{iw} = p(g^i, g^j) C\left(x^i, x^j\right)$

A situation where no-one arms cannot be stable

With "common" assumptions on the contest success function, marginal utility of arming for player i:

$$\frac{\partial U^{iw}}{\partial g^i} = \underbrace{\frac{\partial p(g^i, g^j)}{\partial g^i}}_{\lim_{g^i \to 0 | g^j = 0} = \infty} C\left(r^i - g^i, r^j\right) - \underbrace{p(g^i, 0)}_{=1} \frac{\partial C(r^i - g^i, r^j)}{\partial g^i} > 0$$

$\Rightarrow (0, 0)$ is not stable, **arms race logic**

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$\Rightarrow (0, 0)$ is not stable, **arms race logic**
With very inefficient fighting/very efficient production technologies $(0, 0)$ is stable

War is inevitable

If contestants armed, war ensues

Utility of player i under war: $U^{iw} = p(g^i, g^j) C\left(x^i, x^j\right)$

Utility of player i under peace: $U^{ip} = \lambda^i C\left(x^i, x^j\right)$

- where λ^i defines the property rights which are *not enforced*

Take any pair (x^{i*}, x^{j*}); if player i prefers peace:

$$p^* C\left(x^{i*}, x^{j*}\right) < \lambda C\left(x^{i*}, x^{j*}\right)$$

$\Rightarrow$ player j prefers going to war!

$$p^* < \lambda \Leftrightarrow (1 - p^*) > (1 - \lambda)$$

Proposition: *When two centralized states interact in a "Guns and Butter" model, the status quo is always contested and war is the unique Nash equilibrium.*

- Standard result in the literature (Skaperdas 1992):
  - Equilibrium exists
  - Equilibrium is unique
  - At equilibrium War

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How can peace emerge with non-centralized states? (i.e. when communication between Civilian and Military is imperfect)

This paper: hypotheses

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2. private information: Civilian does not observe Military's action
3. imperfect (but almost perfect) communication between Military and the Civilian

Imperfect information hypothesis not sufficient

- If we keep the benchmark setting, *nothing* changes!
- For the decision-maker who expects to be "stronger", in expectation he's always better off by attacking:
  1. if opponent armed and planning to attack, own decision does not make a difference
  2. if opponent armed and not planning to attack, better to attack than not since $p > \lambda$
  3. if opponent unarmed, always better attacking

$$\Rightarrow \text{War is the unique outcome}$$

Results

1. If two countries with Civilian government interact: Peace is always a (Nash) equilibrium

2. If a Civilian governement and a Military government interact: Peace can be a (Nash) equilibrium

3. If two Military governments interact: Peace is never an equilibrium

Implications

1. At equilibrium, arming levels are lower than with perfect information $\Rightarrow$ efficiency gain

2. Equilibrium with imperfect information Pareto dominates equilibrium with perfect information if endowments not too dissimilar

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Implications

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3. military regimes have **lower expected payoffs** to Elites or Democracy

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Apply the same logic to

1. patent races (R&D and marketing departments)

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Apply the same logic to

1. patent races (R&D and marketing departments)
2. legal contests (Lawyer and client)
3. any other contest

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- First approach takes external threat exogenous
- Second approach takes internal organization exogenous

⇒ Integrating the two approaches?

- under-sizing makes oneself a more attractive prey
- over-sizing makes oneself a more offensive predator
- the very size of the army is a function of the external threat

Ideas for further research

- Study the collusion of military and citizens:
  - Citizens are unable to depose leader if military intervenes
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- Existing models always deprive some player of strategic incentives (military or citizens): 3-player game
- Collective action inside the military:
  - strategic incentives of government of whom to assign in the army
  - consequences on risk of civil war (Libya vs Syria)

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- What is the socially optimal degree of independence of the army from the government?

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- What are the incentives of the government to reveal the real size of an external threat?
- Strategies of demonizing neighbours to justify the maintainance of an over-sized army:
  - military rent-seeking
  - better capacity to cope with potential uprisings