

Commitment Problems in Government

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What makes politics special

- ▶ Coercion
- ▶ Collective decision making
- ▶ Difficulty of committing, both in democracy and autocracy

Schelling on protestor



Literature

- ▶ Barro and Gordon on monetary policy
- ▶ Subgame perfection
- ▶ In game theory, often take players and opportunities as given.
But government can change both.

Homer on Ulysses and the sirens

Purim

Letters were sent with couriers to all the provinces of the king: to annihilate, murder and destroy all the Jews, young and old, children and women, on one day?the thirteenth day of the twelfth month, which is the month of Adar and to plunder their possessions. Copies of the edict were to be proclaimed as law in every province, clearly to all the nations, so that they should be ready for that day. The couriers hurried out with the order of the king and the law was proclaimed in Shushan the capital.

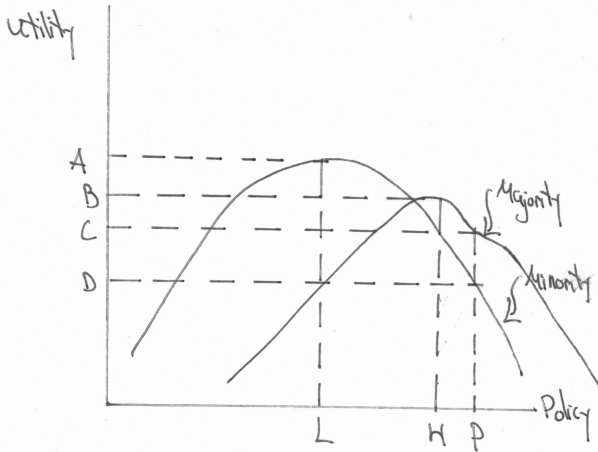
She said, "If it please the King, and if I have found favor before him, and the idea is proper to the King, and I am pleasing in his eyes, let [an order] be issued ordering the withdrawal of the letters containing the plot of Haman, son of Hamdata, the Agagite, in which he ordered the destruction of the Jews throughout the King's provinces.

King Achashverosh said "Now you can issue decrees concerning the Jews as you please, in the King's name and sealed with the King's signet ring. For an edict written in the King's name and sealed with the King's signet ring cannot be withdrawn."

He sent the letters by couriers on horseback, riding mules bred of mares from the king's stables [saying] that the king had allowed the Jews of every city to gather and stand up for their lives; to annihilate, kill and destroy every army of any nation or province that might attack them

Affecting future electorate

- ▶ Mayor Curley of Boston
- ▶ Extreme policies to make people move
- ▶ Same incentives may make majority in a political party favor extremism
- ▶ In 1965 Malaysia expelled Singapore



In move from H to P:

Minority member loses AD

Majority member loses BC

Alesina and Tabellini (1990) on budget deficit

Constraining future policy by durability

- ▶ Jerry Brown and highways
- ▶ Sulfur emissions
- ▶ Bias towards durability
- ▶ Appears if incumbent favors policy
- ▶ Appears if incumbent opposes policy but future politicians favor the policy
- ▶ But firms may avoid durable investments, fearing change of government policy

Evidence on durability

- ▶ Uppal and I (2015) looked at how legislator turnover (instrumented by term limits) affect capital spending, compared to current spending in the US states
- ▶ An increase in turnover by about 25 percentage points, which is the typical increase in term-limited states, results in a 0.2 percentage point increase in the share of capital spending, compared to the sample average share of about 1% of state income

- ▶ Crain and Oakley (1995) look at how institutional and political conditions affect capital spending in the states
- ▶ States with unlimited gubernatorial terms compared to states with more restricted gubernatorial terms spend about \$40 per capita more on public capital, which is 1.5 percent of the mean public capital stock
- ▶ A party stability variable 1 standard deviation above the mean is associated with a decline of capital spending in the state of \$22 per capita, a 0.8 percent decrease in relation to the mean
- ▶ If the volatility of the state electorate variable is 1 standard deviation above its mean, the estimated effect is a \$113 per capita increase in public capital (4.4 percent)

Problem ignored in some work

- ▶ Grossman-Helpman (1994) menu auction on policy for sale
- ▶ Downsian model vs. citizen-candidate model
- ▶ Logrolling when projects chosen sequentially

Commitment and regulation

- ▶ Many regulatory programs work only if firms make irreversible investments which reduce the cost of compliance
- ▶ A firm potentially subject to regulation may therefore behave strategically—not investing and thus forcing the regulator to void the proposed regulation
- ▶ Kremer and Willis (2016) show that if government cannot commit to increasing future subsidies, then firms or consumers may delay investment, making welfare smaller than what it would be with no subsidies

Time inconsistency of regulation

- ▶ Suppose firms did not invest and thus could not meet the standards
- ▶ Then enforcing the standards would effectively forbid the sale of new cars, close down factories, and throw hundreds of thousands of workers out of work
- ▶ The harshness of the threat makes it not credible
- ▶ But if the threat lacks credibility, then firms will not invest

Overcoming commitment problem

- ▶ Faced with concerns about pollution in southern California, the automobile companies responded that pollution was a tough problem requiring additional research. But they did little research
- ▶ Instead, in 1955 they signed a cross-licensing agreement giving each firm royalty-free rights to any patents on emissions equipment—no automobile manufacturer could profit from its research
- ▶ The breakthrough in emissions control came in 1963 when California enacted a law requiring the installation of emission controls one year after the state certified that two devices were practical and available at reasonable cost
- ▶ Equipment manufacturers took up the challenge, and in 1964 the automobile manufacturers announced that they would install emission controls in new cars

Sequential voting, when order is known

- ▶ Suppose each region can get only one project
- ▶ Cost is C , paid equally by all N regions. Benefit is $B > C$
- ▶ At most $(N + 1)/2$ projects will be adopted by majority vote
- ▶ But on voting for the $(N + 1)/2$ th project, say for region A , all those but A who had not gotten projects, and all who had already gotten projects, oppose the project for A
- ▶ Therefore, a majority of regions know they will not get a project, and so a majority oppose all projects

Sequential voting under uncertainty

- ▶ After $(N + 1)/2$ projects, a majority (those that already got a project) will oppose any further projects
- ▶ Let z regions have already gotten projects
- ▶ So a region which had not yet gotten a project will favor an additional one if $\frac{1}{N-z}B > \frac{C}{N}$
- ▶ This inequality is always satisfied if $B > C$. Thus, the first $(N + 1)/2$ projects will be adopted

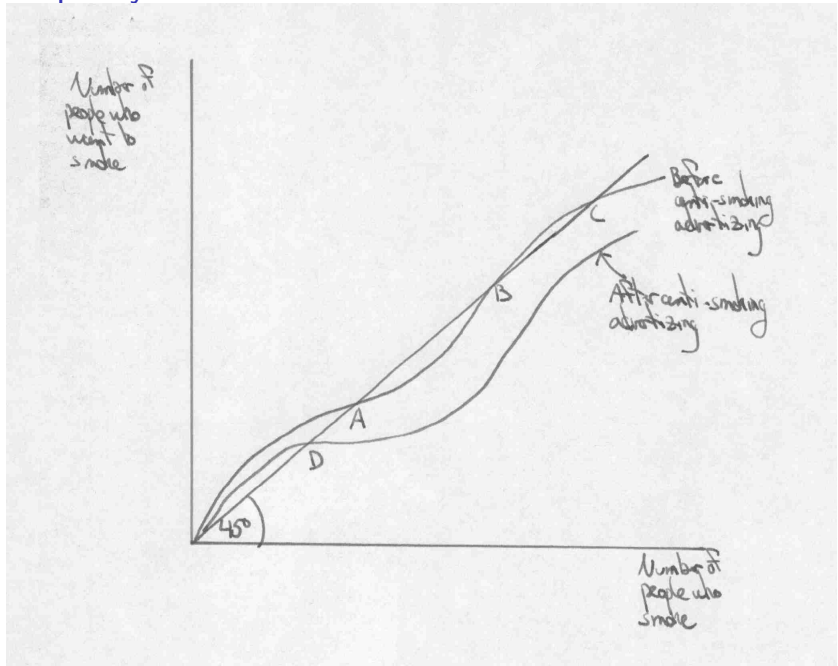
Excessive positive externalities

- ▶ We commonly think that there is insufficient spending on projects which generate externalities. Sequential voting may lead to the opposite result
- ▶ Consider three regions
- ▶ Region A moves first, proposing a project. The costs are divided equally among all three regions
- ▶ One project, L, is purely local, generating benefits minus costs of \$100 million to A
- ▶ The other possible project, E, generates smaller benefits minus costs, of only \$10 million to A, and 0 to everyone else

- ▶ But, for project E, if region B adopts a complementary one, then the benefits to region A of project E increase by \$5 million (more than its share of the cost)
- ▶ An E-type project could be an airport or an extension of an interstate highway to the region. A region benefits if another region has an airport or highway access. An L-type project could be local rail
- ▶ Region A can propose either project L or project E

- ▶ Now comes the turn of region B, in period 2
- ▶ It worries that region A may oppose a project in region B. To overcome that, region B proposes a project that complements project E in region A, and that also gives some benefit to region B. Region A will now support the project in region B
- ▶ Looking ahead, region A prefers project E over project L because by adopting project E it makes region B know that region A will support the complementary project in region B, and so region B supports project E
- ▶ In short, sequential voting induces region A to propose the less efficient project

When policy is effective



When policy is effective

- ▶ Multiple equilibria
- ▶ A small policy can have large effects
- ▶ A temporary policy can have long-term effects

Conclusion

- ▶ Policies which appear stupid may instead deal with commitment problems