Local Agency Costs of Political Centralization

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http://home.uchicago.edu/~rmyerson/research/localagency.pdf

"The major problem is that responding to the villagers is at the bottom of everyone‘s priorities, for the simple reason that no one is accountable to the villagers."

Related papers:
"Federalism and incentives for success of democracy" Quarterly J. Political Science 1:3-23 (2006).
Underappreciated benefits of democratic decentralization

National leaders have an interest in centralizing power, and so decentralization may be undersupplied in many nations. We need to understand better the potential benefits of political decentralization:

- Autonomous local governments reduce entry barriers in national politics, as successful local leaders can become strong competitive candidates for higher office (*QJPS* 2006).
- Decentralization gives local leaders a stake to defend the state (*Prism* 2011).
- Efficient local public investment requires local accountability (*this paper* 2015).

This paper considers a model of moral hazard in local public services which has an efficient solution which is feasible only when officials are accountable to local voters.
Local empowerment for economic development

Many have argued that political decentralization and community empowerment may be essential for successful development. (Banfield 1958, Fortmann 1983, Ostrom 1990, Mansuri Rao 2013, Faguet 2012, Martinez-Bravo Padro-i-Miquel Qian Yao 2014, Ponce-Rodriguez et al. 2012, ... UCLG GOLD 2007.)

But Triesman (2007) argued that a unitary state could apply different policies across regions, for regional differences or experimentation.

When the quality of local public services can be observed only by local residents, the responsible officials cannot be held accountable for this quality unless local residents have some effective power over these officials' careers.

**Political decentralization means constitutionally guaranteeing local residents' power to dismiss local government officials.**

Without such guarantees, local officials' careers may depend more on national political relationships than on local public services. Failure to ensure good public services deters private investments.
A simple model of moral hazard in local public services

Consider a remote town with \( n \) residents. Each resident initially invests \( K \) to start an enterprise in the town. Each year, each resident's enterprise may return \( S > 0 \) (success) or 0. Probability of success is \( \pi(g) \), independent across residents and years, in any year when \( ng \) is spent on local public services in the town. \( \pi(\bullet) \) is increasing concave differentiable, \( \pi(0)=0, 0\leq\pi(g)<1 \ \forall g\geq0 \).

All are risk neutral, discount future with annual discount factor \( 0<\beta<1 \).

The budget for local public services is managed by a local official who can divert any part to personal consumption, can flee abroad. The official prefers to retain office with annual salary \( nr \) rather than fleeing with annual budget \( ng \) iff \( nr/(1-\beta) \geq ng \).

So to manage a budget of \( g \) per resident, the official must expect salary \( r(g) = (1-\beta)g \) per resident per year (moral-hazard rents).

The only evidence of the official's actual spending is the Binomial \( (n,\pi(g)) \) number of successes among residents' enterprises.
Optimal solution for residents with local accountability

A resident's expected annual benefit is \( U(g) = \pi(g)S - (1 - \beta)K - g - r(g) \). With \( r(g) = (1 - \beta)g \), \( U(g) \) is maximized by \( g_1 \) so that \( \pi'(g_1) = (2 - \beta) / S \). To avoid a trivial solution, assume \( \pi(g_1)S > (1 - \beta)K + g_1 + (1 - \beta)g_1 \).

**Simple plan:** official gets budget \( b \), picks per-capita spending \( g \in [0, b] \), then is paid \( \rho \) and retained if \( \theta \) fraction of residents report success. Let \( Q(g, \theta, n) \) be the probability that Binomial-(n, \( \pi(g) \)) successes will be at least \( n\theta \): \( Q(g, \theta, n) = \sum_{s \geq n\theta} \pi(g)^s (1 - \pi(g))^{n-s} n! / ((n-s)!s!) \).

Official's optimal payoff \( \bar{W} \) and induced public investment \( \bar{g} \) satisfy
\[
\bar{W} = (b-g) + Q(\bar{g}, \theta, n)(\rho + \beta \bar{W}) = \max_{g \in [0, b]} (b-g) + Q(g, \theta, n)(\rho + \beta \bar{W}).
\]

**Proposition 1.** For any \( \varepsilon > 0 \), renewal thresholds \( \theta(n) \) and official salaries \( \rho(n) \) can be set as functions of local population \( n \) so that \( \lim_{n \to \infty} \rho(n) \leq r(g_1) + \varepsilon \) and, with the efficient budget \( b = g_1 \), the induced public investment levels \( \bar{g}(n) \) satisfy \( \lim_{n \to \infty} \bar{g}(n) = g_1 \) and \( \lim_{n \to \infty} Q(\bar{g}(n), \theta(n), n) = 1 \).

**Proof.** \( \theta(n) = \pi(g_1) - \log(n) / n^{0.5} \), \( \rho(n) = [1/Q(g_1, \theta(n), n) - \beta]g_1 + \varepsilon \).
Other equilibria, distrust and instability in local politics

Residents' preferences in Proposition 1 could become strict in a perturbed game:

*In each of many wards, per-capita public spending may with small probability deviate from the official's chosen $g$, but only the official sees the deviations.*

*Each voter may with small probability be a type voting randomly $P(\text{Yes}) = \pi(g_1)$.*

If Yes-fraction in a ward does not respond to a spending deviation, the official may expect more random voters there and so may spend less there.
Then rational voters would strictly prefer to vote Yes for success, No for failure.

(Could use majority voting even with $\theta \neq 1/2$, if voters on the expected long side randomly abstain, as in Feddersen-Pesendorfer '96.)

**Distrustful equilibrium:** Voters would prefer to replace the incumbent official if they expected her to steal budgeted funds in the future; and the official would prefer to steal the budget if she expected voters to replace her.

Alternative equilibria could have random public "scandals" switching to such distrust every period with some probability $q$.

Then official salary per resident would have to be at least $\hat{r}(g,q) = (1-\beta(1-q))g$.
The residents' net benefit $\hat{U}(g,q) = \pi(g)S - (1-\beta)K - g - \hat{r}(g,q)$ would be maximized by a $\hat{g}(q)$ such that $\pi'(\hat{g}(q)) = (2-\beta(1-q))/S$.

Then public investment $\hat{g}(q)$ and residents' benefits $\hat{U}(g,q)$ are decreasing functions of the political instability parameter $q$. 
Ruler's incentive to centralize moral-hazard rents

Suppose an autocratic national ruler has power over local government. *If the national ruler could commit to let a town elect an autonomous local government in exchange for a tax* to the national treasury, the n residents would pay annually up to $\max_{g \geq 0} U(g) = U(g_1)$.

Moral-hazard rents $nr(g)$ of local offices make them valuable prizes for which candidates would pay, in cash or in political support. Promising offices as patronage prizes can help raise vital support against challenges.

If the ruler appointed the first local official, the office could be sold to a supporter for political services worth $ng$, and residents could be taxed $U(g)$, yielding fiscal and political benefits worth up to $\max_{g \geq 0} U(g) + r(g)$ annually per resident.

(Note: $\arg\max_{g \geq 0} U(g) + r(g) > \arg\max_{g \geq 0} U(g) = g_1$.)
Ruler's incentive to centralize power over local officials

*If the national ruler could credibly commit to permit autonomous local government after appointing the first incumbent local official, the ruler's fiscal and political benefits could be worth up to \( \max_g U(g)+r(g) \) annually per resident.*

But these plans would require the ruler to make a credible commitment to a constitutional division of power, which would be against his interests ex post. With local accountability, the ruler cannot use local offices as rewards without making his reputation for rewarding supporters dependent on voters' approval, vulnerable to their distrust. With political autonomy, successful local leaders can build reputations for public service and patronage to become serious competitors for national leadership. So a fiscally beneficial **decentralization of power may be politically too costly for the incumbent national leader.**
Separation of information from influence in autocracy

Any leader needs a reputation for reliably rewarding loyal service. A leader can get more support when key supporters monitor how he treats others, so that not rewarding one would cause distrust of all. My *APSR* 2008: In a simple model, if any leaders can organize such a court, then challengers cannot recruit any supporters without instituting such constraints.

An autocratic ruler is politically accountable only to such courtiers. As he can profitably resell vacant offices with moral-hazard rents, courtiers must deter wrongful dismissals.

In centralized autocracy, local residents cannot communicate views on local officials' performance without the ruler's permission. The autocrat could privately poll residents' views, but he cannot commit to use such information or share it unselectively. Courtiers can impose political costs on the ruler, but these costs cannot depend on information that the ruler could manipulate.
Can an autocrat be a neutral judge of his officials?

Courtiers can observe the set $D$ of dismissed officials and can compel the ruler to pay a penalty $\Phi(D)$, depending on this set.

Let $\nu(j)$ be the net service value the ruler could get from replacing official $j$. ($\nu(j) \leq ng$ when $j$ spends $ng$.)

The ruler would choose $D$ to maximize $\sum_{j \in D} \nu(j) - \Phi(D)$.

Courtiers should choose $\Phi(\cdot)$ so that the optimal dismissal set $D$ is a small fraction of all offices. (E.g: $\Phi(D) = \max \{0, (|D| - 1)ng\}$.)

If $\nu(\cdot)$ and $\Phi(\cdot)$ treated officials symmetrically, ruler would be willing to pick $D$ based on his information about local public services. But might he prefer to dismiss those with best services, as potential popular rivals? Let us assume here that $\nu(j)$ are independent of $g(j)$.

The $\nu(j)$ replacement values may depend on political details that only the ruler observes (suggestions that $j$ might become disloyal, or a new supporter's special desire or suitability for $j$'s office).

*From the courtiers' perspective, the $\nu(j)$ are random variables.*
An autocrat cannot commit to judge officials' local service

Courtiers can choose $\Phi(\bullet)$ as a function of dismissed set $D$ only. The ruler should choose $D$ to maximize $\sum_{j \in D} \nu(j) - \Phi(D)$.

Suppose $\nu(j)$ are random variables which only the ruler observes, and, given other $\nu$'s, each $\nu(j)$ has a positive density on some interval. Then for any cost function $\Phi(\bullet)$ that the courtiers could impose, the probability of the ruler being indifferent among two or more dismissal sets would be 0.

Neutrality could also be subverted by influential courtiers raising slightly the ruler's cost of dismissing an official who has better connections with them (as patrons).

**Proposition 2.** In a nation where people have no protected independent channels for expressing political grievances, an autocrat who has unrestricted power to appoint and dismiss local officials cannot be credibly committed to hold them accountable for public services that are observed only by local residents.

**But ex ante, residents invest only if good public services are assured.**
Extensions to the case of centralized democracy

Democratic political leaders also need reputations for reliably distributing patronage, to motivate supporters in contests for power. Under democracy, local autonomy also threatens to increase competitive entry into national politics, against the interests of incumbent national officials. (Pakistan)

National democratic competition raises political risk (q) for retention of appointees.

Freedom of speech in democracy has advantages for communication of grievances against corrupt officials to the national political elite.

*If local accountability yields better public services, could democracy induce leaders to promise it?* (even if not constitutionally required)

With sequential bids (Kramer 1977) for local public spending, the challenger can win by offering slightly more than incumbent in a most districts, but offering 0 in one where incumbent spends most. Then offers will converge to small offers everywhere (Ferejohn 1986).
Endogenous decentralization in unitary democracy?

Suppose instead local public budgets are legally fixed (G) in every district, but candidates can compete on promises of local accountability for local officials.

Where a candidate does not promise local accountability, the candidate can instead sell the office for a campaign contribution (0.5G).

Of voters, a fraction $1 - \alpha$ are informed, vote for the best local promise. Other $\alpha$ fraction are uninformed (impressionable), vote for candidates in proportion to their campaign spending, which is financed by selling local offices.

Let $x_i$ denote the fraction of districts that candidate $i$ sells to a donor. Net difference of votes for candidate 1 minus votes for candidate 2, will be $V_1 - V_2 = \alpha(x_1 - x_2)/(x_1 + x_2) + (1-\alpha)[(1-x_1) - (1-x_2)]$. Candidate 1 chooses $x_1$ to maximize this, candidate 2 chooses $x_2$ to minimize it.
Inefficient centralization maintained in a unitary democracy

Let $x_i$ denote the fraction of districts that candidate $i$ sells to a donor. Net difference of votes for candidate 1 minus votes for candidate 2, will be $V_1 - V_2 = \alpha(x_1 - x_2)/(x_1 + x_2) + (1-\alpha)[(1-x_1) - (1-x_2)]$. Candidate 1 chooses $x_1$ to max, candidate 2 chooses $x_2$ to min.

First-order conditions: $0 = \partial(V_1-V_2)/\partial x_i = 2\alpha x_{-i}/(x_1+x_2)^2 - (1-\alpha).

Proposition 3. In equilibrium of a two-candidate election for national leadership of a unitary state, each candidate would maintain inefficient centralized management of local public services in $x_1 = x_2 = \min\{0.5\alpha/(1-\alpha), 1\}$ fraction of all districts.

The possibility of such politically neglected regions should be considered extremely dangerous for a nation's territorial integrity, if there is any outside option for disaffected regions to secede. (Ukraine)
Conclusions [1]
We analyzed a model of moral hazard in local public investments which can be efficiently managed with local accountability. When local public services can be observed only by local residents, officials can be held accountable only if their careers depend on local residents' approval.
Political decentralization means guaranteeing such local power.

A centralized nation's leader can use local offices as rewards, but then dismissals jeopardize his vital reputation for rewarding service. In a centralized autocracy, local residents cannot communicate complaints to the national elite who must approve decisions to dismiss responsible officials (*APSR* '08).
So an autocratic national government cannot make a credible commitment to sustain efficient local investments without some guarantee of local political rights.
Without political decentralization, local officials' positions depend on national political relationships instead of local public services.
Conclusions [2]
National leaders may have strong political reasons to prefer political centralization, even when it harms national economic development. In a unitary democratic state where voters would prefer a candidate who promises decentralized accountability, competitively elected national leaders may choose to keep inefficient centralized control of many local offices, as patronage rewards for contributors.

But federal democracy can become stable once it is established, as elected governors and mayors become vital local power-brokers in national coalition-building. Founders of USA had to accept substantial decentralization of power in their new nation, because autonomous local governments had been established first. Since then, democratic local governments in America have overseen local public investments that provided the basic framework for building the richest nation on earth.