

# **Policy Innovation in Firms and Local & National Governments**

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## **Note on this Version**

As the reader will quickly notice, this version is not complete, and even where text is in place it is occasionally closer to notes for a first draft than a proper first draft. My apologies for that. Still, much of the general sense of the argument is in place, and the reader can get a sense of what will be presented in the eventual Part IV from the introduction.

Also, the present version of Part I is in fact a placeholder; it simply repeats verbatim (but with citations omitted) the introduction to the earlier article in this series, Galle & Leahy (2008).

## **Introduction**

Experimentation is often presented as one of the key justifications for the autonomy of local governments. By granting localities some degree of independence from states, and states some degree of independence from the national government, nations can create “laboratories of democracy,” bubbling over with new ideas and new data. In contrast, it is said, a single central government, by virtue of being limited to a single policy at a time, cannot create that degree of experimental energy.

Rose-Ackerman (1980) and others have argued that this view is too generous to local government. Since government lacks property rights in its innovations, experiments generate positive externalities for others, leading to a dynamic in which there is likely to be substantial free riding. Critics of Rose-Ackerman respond that slack between public officials and their constituents, combined with self-serving aspiration of officials for higher office, may lead officials to internalize some of the extra-territorial gains from experiments. Galle & Leahy (2008) survey three decades of responses to Rose-Ackerman along with data that might inform the controversy, concluding that in most cases local innovation is likely to be suboptimal.

Galle & Leahy caution, however, that their story is only a partial one. For one thing, they note that sub-national governments can contract with private parties for policy innovation. If the private parties can retain some property interest in their inventions, then it is possible that local experimentation can escape the free-rider problem.

Even if contracting does not resolve the dilemma of experimentation at the local level, they also argued, it remains possible that experimentation by the central government would be even worse. Thus, without a comparative assessment of the two alternatives, one cannot conclude whether the opportunity for experimentation is a reason either for or against assigning any given policy at the national, state, or local level --- that is, whether a subnational government should have “autonomy” over any particular set of policy choices.

This Article takes up these two loose threads, and weaves in several others. I begin by examining what we know so far about contracting for policy innovation by states and local governments. Since the literature here is sparse, I supply much of the

basic theory, with the result that there is little in the way of direct empirical evidence to shed light on the questions raised. In general, my view is that contracting overcomes the free rider problem only at the cost of other problems, the most significant of which is that the benefits of any innovations will be more geographically limited, and also likely limited to locations with greater resources. It is also plausible that any contracting techniques localities employ could be employed more efficiently by a central government.

That tentative conclusion leaves innovation in decentralized governments at well below socially optimal levels, but tells us little about whether the performance of a centralized government would be superior in the absence of contracting. Thus, I next take up the question of the likely extent of innovation in unitary central governments. While in theory central government internalizes the benefits of any successful experiments, in fact internalization depends on the incentive structures of national officials. I discuss briefly how this plays out in the U.S., Chinese [and in future versions, the E.U. and perhaps Indian] contexts. Obviously, there is slack in any representative system, but some designs (such as the regional character of the U.S. Congress) introduce additional barriers to innovation with positive expected value for the nation as a whole.

Another key point of dispute in discussions of centralized innovation is whether a single national government can replicate internally the decentralized structure of states, such as through a set of “regional offices.” Absent the regional-office model, a central planner might be limited to a single experiment at a time, greatly disadvantaging it relative to state and local government.

In theory, there are few obvious reasons a central government could not subdivide itself in this way, but the problem then largely becomes one of information and incentives. The central government must encourage regional managers to reveal valuable information about local conditions, and utilize that information to parcel out additional incentives to reward successful implementation of new policies. That is challenging to do ex ante when the goal is to produce public goods, many of which inherently are difficult to define and measure. [ex ante def'n nec. to avoid corruption] In addition, any experiment guided by a single government is likely only able to pursue one set of ultimate goals at a time, limiting the universe of different policies that could be put in place.

To this point, then, the debate over innovation looks something like a stalemate. Both higher- and lower-level governments face barriers to optimal innovation, some of which are more or less acute depending on the nature of the policy at issue. The possibility of contracting, however, suggests a third way that might be superior to either alone, and which offers a new and important role for sub-national governments.

Contracting mitigates many of the thorniest problems of centralized innovation. For example, the literature on charter schools suggests that by contracting out to several competitors, a central government can allow the direct users of a public good to determine which competitor performed best; it is the separation of purchaser (e.g., taxpayer) from beneficiary that contributes a large measure of the difficulty of measuring the quality public goods. Customer choice also somewhat reduces the need to define an ex ante rewards structure.

Although the notion of contracting for innovation has its roots in the privatization movement, it offers surprisingly strong support for a place for local government within a national system. Many public goods cannot be safely entrusted to for-profit firms --- among other reasons, because of the danger that firms will cut quality in order to maximize profit. Non-profit firms have their own limitations, such as an organizational structure that is closed to outsiders, permitting the entity to ignore potential externalities from its decisions. Thus, state and local governments in many instances emerge as the most viable possible contractor for a central government interested in conducting a policy experiment. The fact that local officials are subject to their own electoral constraint also helps to diversify the set of goals towards which experimental policies might aspire or be judged against.

In short, my argument -- albeit tentative, and subject to revision as more evidence develops -- is that state government autonomy from the federal government contributes significantly to the experimental vitality of a federation, and local autonomy from the state contributes significantly to the innovativeness of states. But the source of this innovation is not self-guided efforts by the subsidiary government. Rather, it derives from the rivalry, in the form of migration and voting, among competing subsidiary governments for the approval of consumers of their services. And this competition, where managed and directed by a centralized government, allows for feedback in ongoing policy experiments.

This modified version of the “laboratories” thesis gives rise to a non-traditional set of rules governing inter-governmental relations. To the extent that arguments for the autonomy of subsidiaries depend the laboratories experiment, those arguments -- and the

legal rules they support -- may need reconsideration. For example, rules that limit the ability of the federal government to contract with states, as with the rule requiring courts to read narrowly any condition attached to a federal grant, may in fact undermine the mechanisms of experimentation.

### **I. States Alone Would Experiment at Suboptimal Levels**

The opportunity for greater experimentation in decentralized government has generally been presented in the legal literature as an unalloyed point in favor of federalism.<sup>10</sup> For courts, too, a key argument in favor of decentralized provision of government services, such as in the U.S. system of federalism, is that an array of local governments is more innovative than a single monolithic central authority.<sup>11</sup>

These claims persist despite what would seem a devastating critique, first raised by Susan Rose-Ackerman in 1980.<sup>12</sup> Professor Rose-Ackerman (hereinafter RA) pointed out not one but two serious flaws in the claim that local governments can be relied upon as engines of invention. First, as we noted at the outset, in the absence of property rights local innovation belongs to the world.<sup>13</sup> If innovation is at all costly, this suggests that each jurisdiction may (absent some countervailing factor) prefer to free ride on the experimental efforts of others—that is, to wait for someone else to invent a new government policy or method, and simply copy it. Unless some other government intervenes to resolve this collective action dilemma, the incentive of every jurisdiction is to wait. Second, even if a jurisdiction as a whole is well-served by experimentation, its

public officials might not be. Incumbents, safe in their offices, have little reason to engage in risky new policies for which they might be punished if things go wrong.<sup>14</sup>

With one or two exceptions, the American legal academy has minimized RA's arguments. As we noted, any number of scholars of federalism routinely argue that experimentation is a reason to favor decentralized government, generally acknowledging RA with a "but see" footnote and at most a few sentences of explanation.<sup>15</sup> A notable departure is the work of the corporate scholar Larry Ribstein, who has accepted RA's claims but offered a detailed analysis of at least one tool, lawyer licensing, with which the dynamic RA sketches might be overcome.<sup>16</sup> Ian Ayres has also applied RA's arguments to the debate over state regulation of corporate governance.<sup>17</sup> While these are both important contributions, the significance of the RA thesis is much broader.

In contrast, academics from other disciplines have spilled much ink debating the accuracy and implications of her thesis. In particular, there is a long tradition in both political science and economics that attempts to explain how policy diffuses from one jurisdiction to another.<sup>18</sup> Because RA's argument depends in part on how easily innovations may be transferred from one government to another, that scholarship has an obvious bearing on her conclusions. There have also been other, more direct efforts to analyze or measure aspects of RA's hypothesis, generally by economists.<sup>19</sup> As far as we are aware, however, there has never been any comprehensive effort to bring together all the disparate bits and pieces of evidence and analysis.

Accordingly, our aim in this Article is to synthesize RA's arguments with all that has come after her, and to offer a global assessment about the true extent of innovation among decentralized governments. At each step we attempt not only to summarize the

work of others but also to subject it to careful scrutiny. At many points we supplement gaps in the literature with our own conjecture. We hope this synthesis will be of interest to lawyers, economists, and political scientists alike. In addition, we note a number of points on which the available empirical data are thin, and suggest new research aimed at those uncertainties.

Our central conclusion is that, while much remains unknown, there is at least a large grain of truth to RA's assessment. State and local governments do innovate. But they are unlikely to innovate in all instances at the optimal social level, or in a way that captures the true benefits of experimentation. Accordingly, there is a case for federal intervention, either to correct some of the dysfunction of the market for state government, or to displace it with a topdown federal model. In a follow-up article, we will examine potential shortcomings in the top-down models, as well as the viability of cooperative efforts between local and national governments in which the key role of the national government is to provide local governments with the correct set of incentives.

The path to this end result is long. One secondary point we hope to make, even to those who would reject our ultimate conclusions, is that the question whether innovation adds to the allure of decentralized government is a highly nuanced one, not to be resolved in a footnote or an aside. For instance, we show that in order to assess the likelihood that states will free ride on the innovation of others, one first must answer a host of other questions, such as what kinds of information about the innovation are valuable to other jurisdictions, whether other jurisdictions are similar enough to make use of that information, who has access to the relevant information, and what the incentives of those individuals are for sharing it with outsiders. Even if there is a free-rider dynamic at play,

it might be overcome by potential benefits from being a first mover. There would be many subsidiary factors that go into that problem, such as whether jurisdictions are competing for outside capital, whether that capital is mobile and rationally allocated, whether there are risks attached to the innovation, and whether the jurisdiction's residents are averse to risks of the magnitude offered by the potential new policy or method.

The possibility of agency costs adds an additional layer of complication to our analysis. As RA points out, even if the inhabitants of a local jurisdiction are not risk averse, their public officials may be.<sup>20</sup> Again, then, we must be closely attuned to the likely incentives of officials. Critics of RA have argued that she underestimates the significance of officials' desire to win higher office, which might motivate them to innovate beyond the preferences of their constituents.<sup>21</sup> As we will show, these critics miss much important detail—for instance, whether voters in fact reward innovation per se or, if so, whether it is easy to mimic innovation, either of which could greatly reduce the incentive to take on the additional risks and costs of innovating. And unelected bureaucrats likely lack any high-powered incentive to risk losing their jobs. Yet other factors in play include possible psychological biases in favor of maintaining the status quo and avoiding uncertainty, agenda-setting by rivals for office, and pressure from political parties. Most of these factors, we argue, tend to make true experiments less likely.

## **II. States and Contractors**

Although states have strong incentives to free ride on one another's innovation efforts, it is possible that there are governance structures in which innovation is closer to optimal. Hart, Shleifer, and Vishny (1997) argue, for instance, that cost-saving innovations are more likely when governments can contract out the production of public goods to private firms. Galle and Leahy (2008) extended this point, observing that if it is the absence of property rights that slows state invention, contracting might increase innovation by granting contractors property rights in their new government programs and processes. They suggested some potential problems with this theory, which I elaborate on here. Another challenge for the contracting theory is that the federal government, too, can innovate through contractors. (Rose-Ackerman 1980, at 616.) I also consider that question in detail in this Part, concluding that state-level contracting may well replicate many of the problems that plague purely public state innovation.

#### A.

The basic theory of contracting for innovation is straightforward. Private firms, unlike government, may hold property rights in their innovations. For example, a firm might obtain a “business-method” patent in a cost-saving procedure for reviewing eligibility of benefits applicants.<sup>1</sup> The property right allows the firm to charge others for the use of its innovation, and in some cases to absolutely prevent others from using the invention without its consent. As a result, free riding is more difficult; free riders cannot

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<sup>1</sup> The ongoing viability of business-method patents is currently the subject of pending supreme court litigation. Even absent business-method patents, though, firms have other tools for converting intellectual capital into profits. In addition to the federal patent regime, many states offer protection for “trade secrets” and the like. Firms can also restrict the flow of information through contract. “Non-disclosure” agreements can restrict the firm’s business partners from sharing proprietary information, although they do not protect the firm against accidental disclosure. Similarly, non-compete agreements between the firm and its employees limit the extent to which the firm’s innovations can be transferred to rivals.

easily benefit from others' work without paying for a license.<sup>2</sup> There are still some returns to free-riding --- among others, by waiting, rivals can observe whether the innovator's experiment actually works. But the opportunity to foreclose others or charge them for a license creates a powerful incentive to move first. Thus, by offering contracting firms property rights in their new processes, states could overcome their own reticence to change.

However, contracting may also reduce the welfare value of any innovations that result by limiting their spread to other jurisdictions. Most straightforwardly, if the property right is absolute, and there are no ready substitutes for the new policy, then the innovating firm is a monopolist. Of course, monopoly rents produce deadweight loss triangles: willing purchasers of the monopolist's produce cannot obtain it. In other words, the contracting firm will sell its new policy or method only to the highest-demanding jurisdictions, so that new ideas will not spread as widely as they might under a centrally-planned government.<sup>3</sup>

This selective diffusion may exacerbate an existing distortion in interjurisdictional competition. As Briffault (1990) argues, competition among jurisdictions is rarely waged between locales of equal existing resources. Thus, bad ideas and bad management may out-compete skilled officials in poor jurisdictions. In Briffault's account, this is the story of brain drain from cities into suburbs in the 1970's and 80's. Propertizing good policy

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<sup>2</sup> The reader should understand that where I use the term "license," I have in mind two alternative sales methods. The rights owner can either sell the licensee the right to produce a good itself, or the owner can instead perform the service at a price above the market rate set by competitors who do not own the innovation. So, for example, a firm that invents a screening method for benefits applicants can either sell governments that method for their own use, or it can charge the governments to do that screening for them.

<sup>3</sup> Licensing innovations can also reduce social welfare by redistributing the benefits from new ideas from the public to the investors in the firm. But this is a smaller problem than the one discussed in the main text because it is easier to design around. For instance, contracts could be limited to non-profit firms in which monopoly rents must ultimately be used for public benefit. Or jurisdictions could simply impose redistributive taxes on firms.

would further exacerbate these resource advantages by allowing wealthier regions to lock in more successful policies, allowing residents and officials in those jurisdictions to shield themselves against competition from those with fewer initial endowments.

Contractor's decisions about where to license their ideas can also reduce welfare where there is slack between public officials and their constituents. Social welfare is maximized if the jurisdictions purchasing a license are those where the innovation has the highest value --- where consumer surplus is highest. But the purchase decision is made by officials, not the public. The official's perceived surplus may be very different than that of her constituents. Of course, this is true of any policy when there is agency slack, but the fact that the spread of innovation is restricted exacerbates the effect. If adopting another's innovation is relatively costless, mismatches between public and official evaluations are fairly unimportant, because officials adopt all expected-positive-value innovations. The public will be harmed only in the extreme situation that officials perceive positive value when the public value's is negative, or vice-versa. Mismatches are more likely between different estimates of positive value.

Selective diffusion of valuable new policies is also likely to itself create wedges between officials' and constituents' perceived surplus. Where officials compete with neighboring officials, as in Besley & Case ( ), local officials may be forced to bid against each other for scarce licenses. If this form of rivalry is intense, then the official's bids may greatly exceed the value of the value to the public. For example, although the costs of paying for the license is generally spread widely across all local taxpayers, the benefit may be concentrated in those deciding between the two sets of officials or two jurisdictions on the basis of the selected policy. These knife's-edge voters are particular

important to officials, not only for familiar public-choice reasons, but also because if they were to exit they would send a strong negative signal about the official's performance to other less-attentive voters.

Yet another implication of ceding the power to share innovations to contractors is that firms motivated by profit will concentrate only on innovations with large dollar values. New ideas that are highly abstract, offer very long-term benefits, or otherwise are difficult to measure may not command much of a license premium. Many public goods have this quality, with the result that states cannot easily contract for new policies to create or improve public goods. Contracting for innovation is more plausible in the limited Hart, Shelifer, Vishny scenario in which the private firm's innovation is limited to its ability to carry out a familiar task in a more cost-effective way. Relatedly, although of less importance, innovations whose dollar value is small compared to the transaction costs of contracting will also be unattractive to contractors, so that minor or incremental innovations will be hard to contract for.

States can overcome some of the public-goods problem by contracting with non-profit firms, but this approach presents its own difficulties. The governance structure of U.S. nonprofits helps to ensure that their managers are motivated by ideology or "warm glow," the feeling of personal satisfaction or social approbation from doing good. (Galle 2009a.) Thus, managers at these firms may be willing to contract to create innovative policies even where those policies will not result in significant profit for the firm. This is not to say that nonprofits are indifferent to revenues, or that they will turn away the opportunity for monopoly rents if they are available: those rents can be plowed back into other mission-related activities, increasing the manager's warm glow. (Galle 2009b.)

But it does suggest that states may still have potential contracting partners for projects that do not offer lucrative licensing opportunities.

The difficulty with nonprofits, from the innovation perspective, is that they can be fairly slow to spread the use of their innovation. By law, nonprofits lack access to capital markets, and as a practical matter are limited in their ability to borrow other than through borrowing against existing capital assets. (Galle 2009a; Silber 2009). Thus, a nonprofit firm cannot easily scale up to deliver its new product widely. To be sure, the firm can leverage government contracts to grow, but in that case expansion is limited to those goods where the innovation is readily monetizable --- just the situation where the nonprofit form is least useful. Alternatively, a highly altruistic or evangelical firm might give away its ideas. But the same is true of a local government. Contracting with nonprofits, then, would increase innovation only to the extent (currently uncertain in the empirical literature) that nonprofit managers are more evangelical than local officials.

[if license is incomplete, still incentives to free ride, esp. if you're risk averse]

[but contractors can more easily overcome risk aversion]

[lose non-monetary benefs. of innov, like warm glow or ideological mission → firm still gets them, but does gen'l public lose them?]

## **B.**

Even if contracting is an effective source of policy innovation, it isn't clear that it is a reason to favor state-level policy making. A centralized government, too, can

contract with firms, as well as with subnational governments or even subunits of itself. I consider the relative appeal of some of these institutional options in Part III. For now, the question is more simply whether the opportunity to contract with private firms offers states a relative advantage.

At a first cut, larger governments are likely to have cost advantages in contracting because of economies of scale. Drafting standard-form contracts and developing monitoring techniques for different forms of services are relatively fixed costs for governments, and hence produce substantial economies of scale.<sup>4</sup> Larger governments are also more likely to offer more opportunities for repeat contracting with firms (assuming firms are not specialized to only a single task), increasing the importance of reputation and fair play for both sides. These kinds of “relational contracts” reduce incentives for opportunism and hold-ups by the contracting parties, because (among other reasons) the gains from one hold up are unlikely to exceed the losses from future lost business.

On the other hand, smaller governments may have a relative advantage when it comes to economies of scope. Contracting with firms has the effect of compartmentalizing a government’s innovations. That is, if a government discovers a new cost-saving process, it can usually apply that process to all its operations. But if the cost-savings are discovered by a contractor, and the contractor has IP rights to the new process, the government cannot obtain those savings without paying some of them over to the contractor. In effect, contracting obliges governments to sacrifice some of the economies of scope they might otherwise obtain by carrying out multiple policies, and sharing innovations in any one policy area with others. Of course, the greater the

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<sup>4</sup> That is, fixed costs represent a larger proportional investment for small-scale projects.

economies of scope a government could have captured, the larger the size of this sacrifice. It follows, then, that the size of these economy-of-scope losses are smaller in the case of smaller governments with fewer policy responsibilities. This perhaps is a modest argument in favor of doing more contracting at the state and local level rather than federally.

### **III. Central Government Alone?**

One issue that so far has been only implicit in our discussion is whether a single central government would have any need (from a welfare-maximizing standpoint) to employ contractors at all, or even if so whether it would likely have incentives to do so. Another way of putting this is the more basic theoretical question: can and will the national government maximize nationwide experimentation through its own internal processes? If not, the need for outside assistance of some form becomes more pressing.

#### **A.**

It is a cliché of the federalism literature that the basic structure of a unitary national government typically gives rise to both strong advantages and strong disadvantages in the search for innovation. Since officials represent the entire nation, they internalize all the benefits of policy discovered in any one region. But, at the same time, since they make up only one government, they can enact only one policy at a time from a set of alternative approaches to a given problem, greatly reducing the speed of experimentation. (Strumpf 2002.) Both these assumptions actually are sensitive to

institutional design; the internal makeup of the national government can either undermine internalization, or permit multiple parallel policies.

On the internalization front, the degree to which national officials actually take account of nation-wide policy costs or benefits may depend on how officials are elected or appointed, the rules for their elections, the influence and structure of their political parties, their institutional role-norms, and similar factors. In the legal literature on U.S. federalism, for example, there is a debate over whether Congress or the Executive is more “national” in character. (*E.g.*, Logan 2010, Galle & Seidenfeld 2008, Nzelibe 2007, Mendelson 2006.)

In general, there is agreement that Congress is not especially national in its focus. Members of Congress are elected from their individual districts. Although evidence suggests that campaign contributions from outside interests can affect member votes, voting positions also are strongly correlated with the median preferences of the district. Because of the obviously unrepresentative nature of the Senate, and limits on the districting process in the House, it is very unlikely that the median vote in either chamber will approximate the median national interest. Even if there were perfect overlap between the median chamber voter and median national voter, logrolling and free riding would lead to regionalism. Proponents of a program with uniform, thinly-spread nationwide benefits will free ride on one another’s efforts at ensuring passage. If the program also incurs costs for one region, representatives of that region cannot free ride, so that only opponents will be politically active.<sup>5</sup>

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<sup>5</sup> This is a generalization with many important exceptions. For example, a legislative entrepreneur might attempt to “whip” together votes or effort from the majority in order to win a reputation or collect rents from the coalition members. I discuss the free rider problem and its solutions in more detail in III.C., *infra*.

Whether the Executive improves on congressional performance is controversial. The traditional view was that the President has a national constituency and controls the administrative bureaucracy, so that he or she will take account of all national costs and benefits. (E.g., McGinnis 2000) Others argue that in fact the President may be more focused on “swing” states or pivotal voting groups. (Nzelibe 2007.) Similarly, Cai & Treisman (2007) suggest that federal experimenters would not internalize the benefits of experiments for those outside their winning electoral coalition.

In my view these critiques are not fully persuasive. While the President might predictably favor “swing” states when those states’ interests conflict with the national interest, that is true only of some fraction of federalism decisions.<sup>6</sup> It is unclear why the President would ignore potential political gains in the absence of such conflict. Benefits even outside his current coalition can lead to potential future electoral gains, or to rents and campaign contributions from minority voters in states that are out of reach politically. [E.g., stats on Salt Lake City contributions to Obama].

Another problem with the traditional view is that the President’s control over federal agencies is highly imperfect. Congress exerts significant influence over budgets, goals, personnel, and many other aspects of agency form and behavior. (McCubbins, etc.) Depending on the degree of this influence, if Congress is regionalist, then so, too, might be the agencies. Data on the extent congressional control is mixed, however.

Administrative law itself likely plays a significant role in the national character of agency decisions. Galle & Seidenfeld (2008) argue that judicial review of more formal agency decisions obliges agency personnel to take into account competing views of the

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<sup>6</sup> The fact that some states are outside the President’s winning coalition can actually be beneficial to experimentation, as outlined more in III.C.

merits of a proposed policy, to weigh them, and to give reasoned explanations for the agency's ultimate choice. This review requirement mitigates regionalist influence by ensuring that any potential nationwide costs or benefits from a proposal are considered explicitly by the agency and made known to any close public observers. Unfortunately, an agency's decision not to act is typically not subject to judicial review, so that behind-the-scenes congressional efforts to *block* agency initiatives cannot easily be countered by this kind of mechanism.

[Would be neat to have a comparison with EU institutions here.]

Depending on their design, political parties might somewhat overcome any regionalist tendencies by individual officials. A nationwide party with internal governance unconstrained by the dictates of the constitutional convention and the Great Compromise could design its own internal incentives to encourage officials to maximize national welfare. It is unclear, though, whether this is a wise electoral strategy. Parties might be better off permitting each member to maximize regional interests, as that might well maximize electoral victories and total rents --- on the assumption, again, that there is rarely a vigorous coalition in favor of widely and thinly spread national benefits. Parties also do not always have access to meaningful incentives to affect officials' behavior. In some cases (e.g., the current Democratic Party) this appears to be because officials control the party, and each is uninterested in constraining his or her own autonomy in order to create the club good of greater party influence.

### **B. One at a Time?**

The other entrenched bit of received wisdom about the federal government --- that it can conduct only one experiment at a time --- also is more nuanced than has been

appreciated. As Kollman et al. (2000), Cai & Treisman (2007) and Rubin and Feeley (2008) argue, a central government can set up administrative sub-divisions, with or without a specialized geographical focus, each with authority to attempt variations on a policy theme. No one yet seems to have considered what the practical difficulties of such a system might be, examined closely whether central elected officials would have any incentive to carry it out. I discuss the first issue here, and the second in Part III.C. By way of brief overview, the three key practical problems seem likely to be the relative difficulty of enacting legislation in a large central government, incentivizing workers who possess needed information to use it for innovation, and the possible single-mindedness of a central planner.

Before beginning, however, it may be useful first to review why the ability to conduct more than one policy experiment at a time is valuable. Experiments, after all, can also be run sequentially, with a government trying first one, then another approach to policy, and ultimately retaining the most successful. The largest downside to this approach is that it increases the riskiness of experiments: the costs of a disastrous failure must be borne by the entire country, and cannot always easily be reversed. (See Listokin 2009 for a discussion of reversibility in policy experiments.) Taking large risks with small jurisdictions, on the other hand, allows a planner to scale up surprising successes, making the expected value even of bad bets a net positive. In addition, from a scientific standpoint, the sequential approach introduces “confounds”: as other factors change over time, it becomes more difficult to compare the success of the different approaches. Parallel experiments permit a “differences in differences” approach in which analysts can

observe differing results across otherwise similar jurisdictions. Finally, there is simply the time value of getting to the best results faster.

### 1.

Turning back, then, to the feasibility of running multiple experiments within one government, Halberstam and Hills (2001) claim that centralized governments cannot easily experiment because of the high threshold for national legislative action. [are they talking about veto gates and legislative structure, or do they just mean that where more is at stake we should expect officials to demand larger rents] [if latter, not clear that is borne out in reality: does sensitivity of leg voting to campaign contribs vary with size of j.?] [if simply veto gates, then problem is smaller, b/c many experiments would be run through agencies where threshold for action is less -- e.g., fed'l agencies are probably more active than state agencies] [prob. then becomes how much leg. authorization one needs to set up an experiment in the executive] [additionally, means you largely have to accept that it will be bureaucracy that will coordinate experiments and determine priorities as they evolve; if one is unhappy with non-legislative lawmaking then this becomes a cost of using a centralized experimenter]

### 2.

The next obstacle in the way of a multipart national experiment is likely to be designing an effective incentive structure for those who must conduct it. It will be helpful first to be more precise about what kinds of structures are likely. Cai & Treisman (2007) seem to envision a series of programs all planned and directed by a single central planner, who can delegate the work simply of administering the program to lower-level officials. In contrast, Rubin & Feeley (2008) imagine a sort of nationalized system of

states, in which local subunits of the national government compete with one another for rewards for successful innovations.

The Cai & Treisman model seems unlikely to succeed in a nation with any significant heterogeneity, or in a project of any substantial complexity. Where there is variation in local conditions, or where the implementation of a project contributes to its success or failure, there are likely to be important information asymmetries between local operational officials and top-level management. This is a familiar point in management theory; its significance for the policy world has been sketched by Dorf & Sabel (1998) and Garzarelli (2006). In short, line workers have information that is often vital for innovation. If this information is valuable to managers, the line worker has an incentive to hold out for compensation in exchange for the information. Other workers may not know which information is valuable, or may reflexively withhold what they think is bad news (but which might actually be valuable feedback on the effectiveness of a program). (Kettl 1993 at 187.)

The Rubin and Feeley model aims to overcome the information problem by shifting policy-making closer to the “shop floor.” If decisions are made by regional subdivisions, rather than the central planner, then there are fewer layers of management through which productive information must filter. And local management may themselves be aware of local conditions that could affect the success of any experiment. The problem, remains, however, how the central planner will incentivize these regional teams: the central planner can declare a competition, but what motivates the regions to compete?

Designing incentives in either situation is difficult, at least in western-style democracies, because of the traditional constraints on the use of high-powered compensation. Hart, Shleifer, and Vishny argue that the limitation to fixed salaries means that bureaucrats cannot capture any of the economic gains of innovation. This probably overstates the case somewhat: a larger economic pie means more resources available for the bureaucrat's mission, which is often a motivating factor. Similarly, a central planner can use budget authority to reward or punish subdivisions that perform well or poorly. But there is little evidence the budget tool motivates line employees, who also face a team-production problem if the size of the available rewards depends on the success of their group.

Using more effective rewards puts heavy pressure on the correct design of the incentive system. The quality of public goods is difficult to define and difficult to measure, especially for those who are not direct consumers of the good. Public goods also by definition involve externalities for the goods' producers. There now are numerous studies documenting how mis-measurement of public goods distorts the production of those goods. For example, paying managers based only the cost-effectiveness per prisoner of prisons increases the incidence of prison riots.

The example of the innovation system in China is instructive. The Chinese government, of course, is the quintessential central planner. It encourages experimentation by regional officials, and often nationalizes successful local experiments. Officials who supervised these programs are themselves promoted within the Communist party, often to a level that allows them to continue to supervise the program. Promotions grant not only greater authority and prestige but also opportunities

for bribes, a major source of income for party officials at all levels. Thus the promotion system offers fairly high-powered incentives for innovation. It is also rife with fraud. In recent studies, a number of Chinese programs that were “promoted” to the national level proved disastrous, often because the results at the local level were fabricated. Local concealment of failed projects is also commonplace.

[India?]

A final incentives problem derives from the fact that not all experiments have equal expected payoffs. Ideally, the central planner wants to see results from many different alternatives, not simply iterations of the same approach. The planner cannot simply assign an experiment to each jurisdiction, because in all likelihood the planner lacks enough information to design the experiments itself, and cannot attune the experiment to those local conditions that would make it most likely to succeed. Some incentives system is still required.

However, if all of the experiments will be judged according to success or failure, and by the same metric at that, then it becomes difficult to see why regional subunits would choose to run a second- or third-best experiment. Rose-Ackerman (1980) notes that jurisdictions sometimes might choose second-best experiments because citizens may sort themselves in ways that produce different perceptions of expected value, and Galle & Leahy (2008) add that local denizens are often differentiated by their degree of preference for risk-seeking. Bureaucrats within a unitary national government are unlikely to be so diverse, however; they are all trained and institutionalized within the same institution, and there is no obvious mechanism whereby like-minded bureaucrats

could select into a particular subunit. Thus the assumption that a central planner could itself run effectively many different experiments is somewhat problematic.

### 3.

A final damper on centralized government's capacity to experiment is that a single government usually will not simultaneously pursue inconsistent goals. This point may be intuitive, but it is worth emphasizing as one of the key differences between centralized and decentralized government. Avoiding inconsistency seems like a hallmark of good governance --- consistency is usually described as one of the virtues of the rule of law. But pursuing only one goal at a time places inherent limits on the number and diversity of experiments a single government can conduct. If the administration's plan is to reduce health-care costs, it is not likely to pursue or reward efforts that expand utilization of costly procedures. Information about the success or failure of efforts at alternative goals may still be useful, however, in the event that the current goal proves misguided. Or there may be some relationship between goals and means: if cost-containment is fruitless perhaps expanding quality becomes the goal of choice. And where there are multiple governments capable of pursuing similar projects, information about goals any one of them is not itself pursuing would be a beneficial spillover for the others.

While there are mechanisms that allow a central government to encourage experiments towards goals it does not share, those mechanisms are fraught with awkward tradeoffs. For instance, the U.S. indirectly encourages policy innovation towards non-majoritarian goals by subsidizing contributions to certain nonprofit firms. Firms qualify for the subsidy so long as they meet certain technical requirements (such as refraining

from distributing profits) and they produce public goods or private goods with large positive externalities. Rules governing the oversight of the firms strictly limit the government's ability to judge the worthiness or quality of the firm's product, on the assumption that unpopular or out-of-fashion goals would always fail to win approval under a more stringent regime. In this way, the government is able to encourage some experiments towards goals it and its officials do not currently share. The cost, however, is that the subsidy is almost laughably inefficient, allowing organizations whose social contributions are tenuous (Reich et al. 2009) or that might actually reduce social welfare (Galle 2009a) to receive public support.

### **C. Incentives to Innovate**

Even assuming central governments have the capacity to innovate at close to a socially optimal level, the question remains whether officials in such governments have incentives to do so. Innovation is risky, and incumbents are conventionally risk averse, a tendency that may be exaggerated by psychological factors and party pressures. (Galle & Leahy 2008.) Is there any reason to think this dynamic is different at the federal level?

One possibility, suggested by Cai & Treisman (2007) is that central officials might be willing to take risks with constituencies outside their winning coalition. For example, if an administration wants to test how to cut health care costs, a party that does not rely on poor beneficiaries or their providers might start with Medicaid. Alternatively, a Democratic President might run test programs in Utah and South Carolina, reasoning that failures there cannot hurt her reelection chances, while successes could be used to build support in contested states.

This theory seems dubious in light of public choice theory. Projects whose burdens --- here, the risk of failure --- are concentrated in one population while the benefits are spread more widely across the population are a recipe for overcoming the usual rational passivity of voters. Even if, say, dentists who offer Medicaid coverage do not regularly vote for or contribute to the regime in power, it is unlikely that the administration wants to energize that group and encourage it to make contributions to the opposition.

The geographic version of this story is particularly unlikely given the regional focus of members of Congress. Considering that the marginal gains from innovation are largely a public good, no member has a strong incentive to push strongly for them. But experiments that might take a toll on the member's own state, and no or few others, leave the member no choice but to undertake active opposition or face questions from her constituents. For example, Weissert and Weissert (2006) relate how members of Congress repeatedly blocked an HHS-authorized Medicaid experiment that would have taken effect only in the select states represented by the objecting members.

A possible exception is the scenario in which a given innovation seems likely to benefit one industry or constituency, and the downside risks of the experiment are borne by someone else or are not politically salient. In that case, legislators or other officials have an opportunity to become a policy entrepreneur, gathering latent support for the policy and advocating it in the expectation that they can garner rents from the beneficiaries in exchange for their support. This is not a universal but also not terribly rare situation; it might describe, for example, the 2006 reforms to personal bankruptcy

laws, which were led largely by members of the House and Senate committees with banking oversight (Warren).

At the state level, commentators have argued that another factor that can overcome risk aversion is the desire to win higher office. Galle & Leahy (2008) are skeptical of that story, on the grounds that the reputational mechanism it relies on lacks persuasive support, and seems to be contradicted by available empirical evidence on the behavior of term-limited state officials. The same theoretical objections could be raised at the federal level. Here, though, empirical evidence is lacking, and would be useful to the debate. For instance, do representatives in multiple-district states vote more closely with their own constituents' preferences, or are they closer to state-wide preferences? Does this behavior change when there is an expected Senate open seat? If so, that would be decent evidence that the higher-office hypothesis might have some impact on policy innovation.

One other potential source of incentives for innovation could be competition for rents. Roe (2003), Halberstam and Hills (2001), and Macey (1996), among others, have argued (following Madison) that there is policy competition in the United States between the states and the federal government for the right to regulate. Officials at each level want to retain the power to regulate in order to capture the rents that come with regulation or the threat to regulate (cf. Terry Moe). Voters may choose to allocate authority according to the relative quality of regulation at either level. Thus, Halberstam and Hills argue that federal officials would have incentives to innovate for quality or cost-effectiveness, but only when they face meaningful competition from states. By definition, that cannot happen in a unitary centralized government. A complication here

is that the efficiency of regulation is significantly path-dependent, due to large potential economies of scope with other tasks that either level may happen to be performing. (Carbonara et al. in press.) If these economies are large enough then meaningful competition may be impossible.

#### **IV. States as Contractors**

##### **A. Contracting and the Dilemmas of Centralized Innovation**

##### **B. Advantages of Public Entities as Contractors**

[for IV, contracting, which structure makes it more likely central officials will contract for innovation? e.g., which gives them more rewards? e.g., private contractors who lobby?]

[IV: competitive instrument different: relocation and voting, rather than evaluation by supervisors.