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Nudging Federalism towards Productive Experimentation

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ABSTRACT Formal constitutional amendment can be difficult to achieve and, without the confidence of experience, may introduce changes that too quickly and too rigidly alter the balance of authority between federal and state governments. Therefore, in federal systems it is preferable to experiment with alterations prior to formal adoption. In this article I address how federal systems encourage two types of policy experimentation that are either unlikely to be tried or unlikely to be accepted. To encourage costly state experimentation, the federal government can alter financial incentives, nudge states towards a new policy by shifting public attention, set a pre-emptive floor and offer party-based rewards. To smooth union acceptance of selfish experimentation, a set of safeguards encourages deliberation and experience with the policy that leads to public acceptance or rejection.

KEY WORDS: Constitutional evolution, safeguards, systems theory

Introduction

In order to remain relevant and effective, federations must adapt the distribution of authority between levels of government. Formal constitutional amendment can be impractical, where the constitution is difficult to amend, and unadvisable in federations where the constitution animates much of the national political culture. It may also lockin change with unforeseen and destabilizing consequences. Instead, federations should have a means to make adjustments to the relationship between the levels of government that relies on a pragmatic recognition of constitutional change, rather than one that is at first and primarily recognizable, or even defensible, in law. While formal adjustments are important, the federal union needs an accompanying method of controlling the alterations to embrace beneficial change while obstructing change that harms the essential nature of the federal union.

In this article I describe how federal unions can be structured to innovate yet accept predominantly productive changes. In constructing the operation of a federal system, two challenges emerge: how to encourage costly state governmental experimentation,

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and how to tolerate mildly selfish experimentation. Without sufficient experimentation the system will not be robust to changing circumstances, both on efficiency grounds and in the system's robustness to external shocks. I demonstrate how a robust federal system might enable both behaviours, to the benefit of the union.

Constitutional Evolution in Federations

In order to see the need for constitutional change let us consider the role of federalism's boundaries. The federation is engineered to generate governmental products desired by its citizens, including military security, an efficient, productive and robust economy, and quality representation (Bednar, 2009). These products are the result of governmental action—public policy—sometimes taken by the federal government alone, sometimes by the states alone, but most often by some co-ordinated action between them. The assignment of responsibility is important; even when overall responsibility is shared, each needs to understand its own power and responsibility within the shared domain. This distribution, known as the "boundaries of federalism", defines federalism's character and potential. Safeguards, including structural, political and judicial, defend these boundaries. They also define them.

For example, consider the governmental task of regulating arsenic levels in municipal drinking water. In the USA, although the federal legislation sets a national standard of the tolerable parts per million of arsenic in drinking water, the states must invest in monitors and the municipalities in improved filtration systems to come into compliance. The product—the quality of the environment—results from the joint activities (some co-ordinated, some not) of the different levels of government. The fact that responsibility is shared is not important, but the understanding of which government does what is important, particularly the capacity of that government to make its own decisions about its contribution to the joint product. The boundaries of responsibility are fairly crisp, but each level of government makes its own determination about how fully to pursue the policy goal, and responsibility for meeting the standards is hard to determine. Therefore, despite centralized policy provision (in the form of national standards), arsenic levels vary widely and the public does not know whom to hold responsible.

Suppose a world where there was a clear and fixed assignment of authority, and policies would clearly fit within these bounds. Violations could be detected and the safeguards could produce sufficient negative consequences to induce compliance. Would this be ideal? I will highlight two reasons why federations would not want to be forced into this static intergovernmental relationship: an imperfection in our science and an inability to cope with environmental changes.

First, most initial distributions of authority are rigged by political compromise. Perhaps the US legislature would have been more efficient and representation been more equitable had the Senate seats also been apportioned according to population, but the small states would hear none of it. Certainly the legality of slavery in the American founding is an unrecoverable blight on the American historical record, but the union would not have been formed without that concession to the southern cotton-producing states. All federal unions are initiated through bargaining (Riker, 1964; Rector, 2009), often because the members lack confidence that others will abide by

the terms of the agreement. Over time, as confidence in the union grows, the component governments may be able to abandon the more costly concessions and improve the functioning of the union.¹

Even in the unlikely case that the initial distribution of authority were written entirely by objective social scientists using their collective knowledge to bear on the problem of mapping the distribution of authority between governmental levels on to a predicted policy success, the likelihood that social science is so perfect that the distribution could not be improved upon requires a suspension of disbelief. The interconnections of federalism's complex system create internal feedbacks, nonlinear dynamics and other unanticipated consequences. Most theoretical social science is equilibrium-based, so at best it could locate an optimal current bargain. The social science of complex systems is in its infancy; we do not yet possess the means to map agent capacity to aggregate system properties perfectly. We need to adjust the distribution as our understanding improves, to recover from initial error.

Second, adjustments to the boundaries of federalism are necessary for exactly the reason why chaos theory did not adequately describe federalism: new circumstances call for new distributions. Trains speed the movement of goods; cars make people much more mobile; high-powered factories spew toxic pollutants in the air, drifting over boundaries; the people of one state want to expand the eligibility of more of its citizens to marry; while another state's people want to expand access to affordable health insurance. With citizen mobility comes faster spread of disease, with vaccine development comes improved health outcomes, as long as a sufficient portion of the population receives the vaccine. Fish farmers import Asian carp for aquaculture; the fish escape the confines of their ponds and threaten the native species of the Great Lakes. All of these changes may cause the union to want to adjust its boundaries, to expand or contract the federal government's authorities. A fixed authority boundary is vulnerable to changes in the environment or new demands from the citizens. A boundary that cannot adjust to accommodate these changes—a federation frozen in time—is a dying federation, whether it dies slowly, by growing unable to support its economy or defend its shores, or quickly, through domestic insurrection or foreign conquest.

One might argue that when the people of the federal union sense inefficiencies in the distribution of authority between levels of government, they could adjust the boundaries through formal mechanisms, such as constitutional amendment. Often, however, constitutional amendments have high barriers, requiring a considerable supermajority (often slicing the population several ways), and so small improvements that benefit a majority of the population may still be perceived as costly to some, and support will be insufficient to clear the amendment hurdle. The hurdle is even higher if we include political apathy; for many, a minor improvement does not merit the symbolic cost of altering the national constitution.

There is another problem with amendments: how do we know what to do? That is, even if we suspect that the existing rules are inefficient, we do not necessarily know how to change them. I have already conceded that social scientists are not perfect, and the general public—although possessing many skills—is also unable to articulate a single and optimal conception for constitutional change. This lack of universal knowledge is typical of a complex system, where the component parts or participating

agents may be locally knowledgeable, but no one individual knows all of the information available.

Given the lack of a perfectly-informed decision maker who could make ideal constitutional alterations, it is preferable to have a method that allows us to try changes, to experiment, as a way to collect together this diffuse knowledge base. Policy experimentation, the kind that involves some pressing against the boundaries of federalism (and sometimes stepping across them), allows us to learn about the efficacy of the federal adjustment even as we learn about the usefulness of the new policy. Ideally, formal change will be preceded by experimentation, which means that change in practice comes first. Where feasible, state experimentation offers the advantage highlighted by Justice Brandeis: failures might be contained within state borders² and will be the focus of the remainder of this article.³

March (1991) modelled a similar problem for firms hiring new personnel. Firms develop routines of best practices based upon the accumulation of learning through experience. When hiring, the firm can choose between applicants who are fast learners—those who can be expected to quickly adopt and implement the firm's operating procedures—and slow learners. Slow learners need a longer period of initiation before conforming to the firm's standard behaviours. If the firm's best practices were optimal, and its needs never changed, then the firm would want to hire only fast learners. But if the environment changed, creating a need for the firm to adapt its policies, it would want to hire a distribution of fast and slow learners. By failing to conform to company practice, the slow learners experiment with new routines. Some deviances may turn out to be improvements, and the firm can adapt its operating code.

The federal constitution is analogous. Successful federations must balance exploration with exploitation. The state and federal governments choose between adhering to the constitutional code, implementing policy that falls within their authority's boundaries (exploiting) or deviating from it to accept policy experimentation that crosses the understood boundaries of authority (exploring). Too much exploitation and the federation stagnates; too much exploration and the federation falls vulnerable to counterproductive opportunism, where governments exploit one another. A federation with rubbery authority boundaries permits the experimentation needed to learn about beneficial new policies. Eskridge and Ferejohn (2010) argue that statutes alter the constitutional baseline and can lead to the entrenchment of new constitutional norms; Watts (1999a) and Simeon (2001) point out that it is possible that most constitutional change in federations is accomplished through informal political mechanisms.

Legal ambiguity makes experimentation possible, but not all experimentation is productive for the union. Aimless boundary mutation can just as easily be counterproductive (and perhaps is more likely). Some alterations will be detrimental to the union because they destroy the power of another level of government. Therefore, some boundary mutations ought to be rejected. In biological terms, our system requires a selection mechanism, one that accepts beneficial mutations while rejecting the policy variants that make the union weaker or less able to meet the needs and wishes of its citizens.

The selection mechanism is the system of safeguards in the federation, the same that patrol the boundaries: the judiciary; the structure of the federal government, including fragmentation and incorporation of states into federal-level decision making; the party system; intergovernmental retaliation; and the public. These safe-guards weigh constitutional change, often implicitly, and sometimes work sequentially, sometimes simultaneously. It is not a perfect system, and this imperfection is what opens the window for policy experimentation. Different safeguards may have varying senses of what is advisable and allowable federal practice. As each of the formal institutions wrestles with the appropriateness of new policies, the public forms an opinion; sometimes accepting new policy implies that the constitutional threshold separating tolerable experimentation from intolerable opportunism has changed. It is the system of safeguards, and not any one of them in particular, that is the selection mechanism.

To recap, we see that the essential properties of a federal system include the distinct levels of government and some concept of the boundaries of federalism, the allocation of authority—generally, a weighted distribution between the governments—and a method that maintains that distribution of authority, or the system of safeguards. The federal system also needs an engine for experimentation, and a selection mechanism that will discern worthwhile adjustments from detrimental ones, at least reasonably often.

It is important to understand federalism as a system because adaptation's engine and selection mechanism both are products of this system. That is, we cannot find the source of mutation or the method of discerning advantageous change from studying any of the components in isolation. So as we develop a theory of adaptation, we need two components: sufficient experimentation—in biology, mutation—and a selection mechanism, for discerning which innovations are beneficial for the union writ large. At this point it will be useful to go into more detail about the kinds of innovations likely to emerge from governmental policy experimentation.

Adaptation through Experimentation

We will consider two dimensions of the effects of a state's policy adjustment: internal effects and external effects. When a state passes a new law or modifies an existing one, the effect is felt by the state itself, either positively or negatively. One might think that any policy that a state adopts must benefit it, but some policies do not turn out as planned, or the state may be forced, perhaps by the courts, perhaps by the federal government, to adopt a law that the majority of its citizens view as harmful. We will refer to the policy-making government as the experimenting government.

A second dimension is the effect, if any, of the experimenting government's policy on the other governments—state and federal—within the union. We will consider three types of effects: externalities, diffusion potential and the effect on the distribution of authority. First, public policies can have effects that spill across borders: these externalities can be positive or negative. Classic—and intuitive—externalities are related to state-based environmental regulation. States with permissive regulatory environments, tolerating air and water pollution, affect not only the air and water quality of the residents of their own state, but also of residents of states down river or down wind. The internal calculus that made the permissive regulatory regime attractive, perhaps because it boosted local industry—is not the same for those living outside of the state. These out-of-state residents are harmed by the policy's downside, pollution,

and receive none of the economic upsides of these negative externality-generating policies.

Not all externalities harm residents of other states. The reverse is also possible: if a state adopts tighter environmental standards, the policy generates positive externalities, benefitting those living in the draft of the policy. Ditto for investments in education. The population migration to the American west and south-east includes many people educated in the north-east and midwest at locally funded public schools and state-subsidized public universities.

Sometimes the external effects create feedback that alters the utility of the policy for the experimenting state. For example, if a state alters the income eligibility requirements for a resident to qualify for Medicaid (government subsidies of health care costs for the very poor), say, from an income of 150% of the federal poverty level (FPL) to 185% of FPL, one might think that the effect on other states and the federal government would be negligible. But as the policy modification creates an expansion of coverage, the poor from other states may move to that state, seeking its more generous coverage plan. The policy generates positive externalities by marginally reducing the number of poor in other states. The new poorer in-migrants add to the program's load, for a net negative effect for the experimenting state.

Note that some policies may seem innocuous to other states, but create externalities, however subtle. These include term limitations on state politicians (because politicians who are term-limited out may seek federal-level office) or transferring authority for the construction of electoral boundaries from the state legislature, as is conventionally practised in US states, to a judicial panel or non-partisan citizen committee (because the district boundaries affect the slate representing the state in the national government, which could shift the national party control). It is still likely that the ramifications would be so small that the other governmental actors would feel no consequence.⁴

Many policy changes will have little to no immediate welfare effect on the rest of the union, but may have a *diffusion* effect, the second type we will include. For example, setting a common calendar for all state school districts, privatizing the management of state prisons, or the expansion of online access to governmental services, perhaps all policies important to many state residents, do not affect the residents of other states. But the residents of other states may be faced with some of the same challenges, and can learn from the policy experiments of neighbouring or similar states, particularly if the two states share similar circumstances and political ideologies (Case *et al.*, 1993; Volden, 2006). State-sponsored pilot programmes to co-ordinate local and tribal policing efforts offer no learning opportunities for states without tribal lands, and increasing the amount of lottery money intake that is dedicated to school funding cannot teach anything to states without a lottery, particularly if the lottery is morally resisted in another state because it legitimizes gambling (Berry and Berry, 1990; Pierce and Miller, 1999).

Finally, the third effect of the policy on the remainder of the union is whether it alters the distribution of authority between federal and state governments. Of the three, this effect is fundamental to the success of the union, because it is the one that has the potential to make one level of government inconsequential, thereby destroying the federation. South Carolina's 1830 attempt to nullify Congressional

legislation would have severely curtailed the federal government's power; some argue that the federal government's increasing use of its spending powers emasculates the states, rendering them pawns of the federal government.

Bearing in mind that our interest is to preserve a robust union, it is useful to rank the consequences of one state's policy for the other members of the union in terms of its threat to the union. Of least likelihood to affect the union is the potential of any policy diffusion. The experiential qualities of a policy—the potential for other states (or the federal government) to draw lessons from one state's experiment—can only be positive. Given that the policy experimentation that only affects learning is not harmful to the union, safeguards should never trigger. For example, the judiciary need never concern itself with these policies. However, because of the positive spillovers, these policies may need to be encouraged.⁶ Next, in order of importance, is the utility effects of policy spillovers. When policy spillovers are negative, these policies are likely to stir an immediate public and political outcry, and the popular and political safeguards, as well as the structural safeguards within the federal government, are likely to handle them. And of most danger to the federation are those that affect the distribution of authority. These are also necessary in order for the federation to adapt to environmental pressures, introducing a delicate balancing act in selecting positive experimentation from destabilizing opportunism.

Policy making in federations is described routinely as a collective action problem. While I agree with Bednar (2006, 2009), to describe federalism as having a collective action problem is to oversimplify the problem. In the discussion that follows, I parse policies according to who is helped or harmed so we can focus on different remedies for different kinds of collective problems. Figure 1 will help the reader to follow my argument. The horizontal axis captures the cost or benefit to the experimenting government and the vertical axis the cost or benefit to the remainder of the union, whether it be a direct welfare effect, any learning opportunity or in a power gain or loss. The figure includes a third line, the 'break-even' line, to acknowledge the trade-off that is so

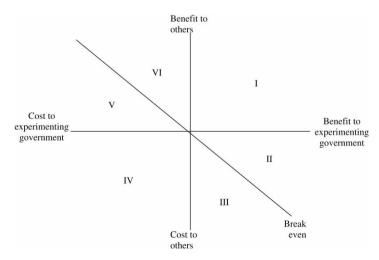


Figure 1. Individual and collective effects of governmental experiments

natural to a federation. Any policy that falls to the north-east of the break-even line is desirable to the union, even if it comes at some cost to some portion of the union. All policy lying to the south-west of this break-even line is socially undesirable (in the sense of diminishing overall social welfare). In the figure's Regions I, V and VI, a government's experimental policies generate positive net effects, while in Regions II, III and IV, they generate negative net effects to the experimenting government.

Experiments with outcomes in Region I benefit majorities both within the state and outside of the state. These new policies are universally popular. They are likely to be accepted unless they result in too large a shift in the distribution of authority. One example is the Massachusetts health care plan. The state initially set out with a goal to expand the number of citizens with access to affordable health insurance, and now the programme is working on cost containment. Other states and the federal government are developing plans to learn from (and improve upon) the Massachusetts plan. Massachusetts' experimentation did not affect the utility of the residents of other states directly, and it did not violate any authority boundary. The policy is purely beneficial to the federal union.

Experiments with effects in Region II benefit the individual government but have undesirable consequences for other members in the collective. Region II, lying below the horizontal axis, is in the set of policies that generate negative externalities; the experimenting government's policy has effects that spill across boundaries, harming other governments (either by reducing their authority, in the case of federal to state policies, or harming the utility of that state's citizens). From a pure utilitarian perspective these actions should be accepted, but whether or not they are depends on the union's ability to implement transfers. That is, if the individual government can share some of the benefit—perhaps through taxation, or acceptance of loss in other realms (see Region VI), or future compensation—then the experimental policy will not diminish the union. A successful federation will have a selection mechanism to distinguish between policies in Section II and Section III, accepting the former and rejecting the latter.

Experiments that fall in Region IV are mistakes. Both the individual government and the collective suffer losses. Punishment may not even be necessary, as the transgressor has no incentive to continue.

The most interesting regions in this chart are V and VI, where the actor suffers a loss, but the other members of the federation benefit. In Region V, the costs to the experimenting actor are greater than the benefit to the collective, and the collective's profits cannot compensate for the individual's loss. These experimental endeavours should be abandoned. However, in Region VI the benefits to the collective outstrip the loss to the actor, creating a collective action problem; continuing the action is not in the actor's individual interest but in the collective interest of the federation. In Region VI, the collective must compensate the individual government for engaging in the action. Through creative redistribution, the federation can make the beneficial action compatible with an individual government's incentives. The following section is dedicated to this problem.

I have sketched Figure 1 to provide a visual intuition of federalism's collective action problem. Absent institutional safeguards, governments would adopt policies falling in Regions I, II or III and reject those in Regions IV, V and VI. Optimally, the federation would adopt the policies or actions in I, II and VI, the points above

the break-even line. A robust federation needs to shift experimentation from that which is individually selected for—anything to the right of centre—to experimentation above the break-even line. Specifically, it needs to discourage experimentation in Region III and encourage experimentation—and policy adoption—in Region VI. Doing so shifts self-interested distributional priorities to collectively productive aims. Designing transfers to compensate for individual or collective losses in Regions II and VI requires the long-term confidence and credibility of commitment to promised exchanges. A well-designed federation may make this legitimacy feasible.

Nudging Costly Experimentation

This section will consider the policies in Region VI of Figure 1. For shorthand, we will call these 'sacrificing' policies: they are desired by the union, but viewed as costly, for one reason or another, by the state government. The challenge to federalism is to encourage experimentation in this area—to motivate states to adopt policies that generate positive externalities, even if the policy is in some measure costly to the state. The federal system has four methods to encourage this costly experimentation: federal incentives, federal pre-emptive floors, non-economic 'nudges' and the party system, which enables politicians to put union goals (somewhat) ahead of constituent goals.

Federal Incentives

The most common method for stimulating costly state experimentation is to incentivize it. If the state's initial assessment is that a policy fails to provide projected returns sufficient to offset programme costs, then it will not adopt the policy. But given that the policy is believed to produce net benefits for other states, or for the union as a whole, the federal union can offer to offset some of the state's loss by transferring to the state some of the projected benefit. This transfer generally is co-ordinated most efficiently through the federal government, which can distribute intergovernmental block grants to motivate state activity. In federations with a formal institution that co-ordinates state policy directly, such as the European Council of the European Union, the 'federal' action can result from a collective decision by the states.

The current US system of welfare provision is a good example of incentivizing state experimentation. After an initial period of improvement following the instigation of the Great Society programmes of the Johnson administration, reductions in the percentage of Americans living in poverty had stagnated. By the early 1990s, there was a sense that the federal government had run out of ideas, and that the country needed much more diverse experimentation in order to discover policy improvement. In 1996 the new Republican Congress introduced welfare reform legislation, Temporary Aid to Needy Families (TANF) to replace the Roosevelt-era programme, Aid to Families with Dependent Children (AFDC). To motivate the states to experiment, the new legislation would replace the federal–state cost-sharing with federal block grants to the states. Under cost-sharing, a state would keep only a percentage of any amount saved by programme improvement while bearing the full cost of experimentation. By contrast, under TANF states keep the full amount of programme savings. State governments are motivated to reduce the welfare rolls because they do not

refund any portion of the federal block grant to the federal government; any cost improvement remains in the states' coffers.⁸

Only a fine line separates incentivizing policy experimentation from a federal mandate. With federal mandates the federal government puts the state in a position of being unable to refuse adoption of a federally desired, federally designed policy. Sometimes the federal government generates new transfers for these mandates, but often it attaches new conditions to transfers that formerly had no strings. The mandate provides little or no room for experimentation by the state; it makes the state an administrative unit of the federal government, in strict opposition to Grodzins' (1966) ideal. There is evidence that use of the federal spending power is expanding globally (Watts, 1999b), although in no country is it used as frequently to coerce state action as in the USA. An important recent example is the No Child Left Behind Act to reform primary and secondary education, which attached new conditions to federal educational funds, most of which pre-existed the Act. The new requirements caused most states to reorganize their accountability practices, alter student testing procedures and support interschool student transfers.

Federal 'Nudges'

The federal government—particularly the federal executive—enjoys the lion's share of media attention, enabling it to broadcast its ideas. With the media focus, the federal government can motivate state action by spotlight rather than prod. It does not alter the economic incentives, but creates energy, even citizen demand, around a federally desired policy. In a Thaler and Sunstein (2008) sense, the federal government has the power to *nudge* state policy by making one policy more salient than another. ¹⁰ The federal government can hold congressional hearings (Baumgartner *et al.*, 2009; Clouser McCann *et al.*, 2010), the President can describe policy in his speeches (Karch, forthcoming), and politically sensitive Supreme Court judgments can focus attention on state public policy.

Again the US welfare system offers an example. In addition to altering the financial incentives to encourage states to develop innovative welfare policies, TANF's passage was accompanied by significant rhetoric from the federal government to convert welfare to 'workfare', encouraging recipients to end their dependence on aid and seek permanent employment income. While some of the federal funds required recipients to seek employment, states were free to spend their funds as they like. Nevertheless, the 'workfare' philosophy permeated the national imagination and employment-seeking criteria were broadly adopted in state welfare plans, with public support.

Nudging is an imperfect tool. Sometimes the federal government shines a spotlight on policy, creating citizen demand and state policy alteration when the policy might have been better left alone. One recent example is the Supreme Court's 2005 decision, *Kelo* v. *New London*, ¹¹ upholding a local government's use of its powers of eminent domain to condemn middle class residences for private development. In the two years following the *Kelo* decision, 39 states adopted legislation to limit the use of eminent domain powers, for example by requiring overcompensation, in some states requiring payments to property owners of 150% of market value. These self-imposed limitations, a reaction to the political pressure resulting from federal judicial action, make it much

more expensive for the state to use eminent domain powers to engage in public works projects, such as infrastructure development, and constrain their ability to promote economic growth through property condemnation and redevelopment.

Federal Pre-emptive Floors

States sometimes fail to act, even when they have unrestricted authority to set policy and their preferences are distinct from the national status quo. One cause of this reluctance is externalities: in-migration of dependent populations, or out-migration of valued industry or low-demanding citizens. When a state experiments with policy its product may attract those from out of state. A classic example is a generous policy to relieve poverty: out of fear of becoming welfare magnets, states resist setting policy that conforms to their citizens' true preferences, fearing that a more generous outlay will cause demand to swell. In another example, if a state sets more stringent occupational safety or environmental standards than neighbouring states, industry may move to avoid the regulation.

One solution that protects these outlying states is the provision of a federal preemptive floor; the federal government sets a base that all states must enact, although states are free to regulate or provide benefits beyond that point. In most areas of health and safety regulation, including privacy law, where the federal government legislates it sets a floor, but states may enact more restrictive regulation. Although the state may still act as an attractor or repellent, depending on the circumstance, the effect is mitigated when the differences between its own policy and that of neighbouring states is reduced. This form of federal intervention is not technically a 'nudge' in a Thaler and Sunstein sense, nor does it motivate voluntary experimentation by subsidizing costs; states do not have a choice about following the federal government's base policy. But it may open an opportunity for states to experiment when otherwise the systemic forces would make it prohibitively costly.

However, increasingly the US Congress has passed legislation to set pre-emptive ceilings to 'occupy the field', squashing state opportunity to experiment. The federal government through law dictates the outer reach of state regulatory policy; states may not create stricter requirements. This practice, increasing in the past four years, has the effect of not just wiping out the states' incentives to experiment, but of obliterating the importance of the states' existence entirely in the pre-empted domains (Zimmerman, 2005; Buzbee, 2007; 2009). For example, Arizona's tough anti-immigration legislation, SB1070, 12 may be challenged by the federal government, claiming a field pre-emption for all policy related to immigration. Field pre-emption is not confined to intuitive federal assignments: Congress may occupy the field in medical device and drug regulation, for example (Epstein, 2009). Some legal scholars have argued forcefully against field pre-emption (Mendelson, 2008; Young, 2007) for the damage to state sovereignty generally and because of the loss of policy experimentation (Hills, 2007).

Party-Based Rewards

If federalism requires from time to time that states undertake costly initiatives, a fortunate alignment of the party system may enable this behaviour. Accountability is

almost universally invoked in democratic theory as an unequivocally desirable property; the more the system is accountable, the better off are the voters. Sometimes federalism is supposed to augment accountability; by decentralizing authority, policy provision and outcomes are more localized, so voters personally witness policy and connect it to the responsible politician (Downs, 1999; Frey and Stutzer, 2004). However, this theory assumes a clear assignment of authority. With overlapping governments and overlapping responsibilities, accountability is blurred. While scholars have pointed out the problems of blurred accountability (e.g. Grodzins, 1966; Bednar, 2007), when constituent accountability is weakened, politicians may exercise their relative electoral freedom by pursuing policy that is in the long-range interest of their constituents even if it appears to counter their short-term priorities.¹³

Filippov *et al.* (2004) argue that an *integrated party system*, where the political fortunes of politicians at all levels are interdependent, can create an opportunity for the politician to behave as a beneficially imperfect agent to his constituents. The theory is congruent with a Burkean notion of the politician as a trustee, rather than a delegate. As a delegate, she would keep an ear to the district and faithfully represent every opinion; as a trustee, the politician is entrusted to represent the interests of the district, with the goal of seeing the long-term interests rather than short-term whims. In Filippov *et al.* (2004), the politician is able to resist the opposition (particularly when only mildly asserted) of her constituents and support policy that betters the federal union. For example, the 2010 revision of the US health care system created new financial burdens for states that, while limited, worried constituents in the many states facing budget shortfalls that year. Nevertheless, support for the bill among state governors split not based on the fiscal health of the state budget, but instead along party lines: Democratic governors were more likely to describe the need for reform and be supportive of the programme, while Republican governors were strongly against it.

In practice, many federal 'encouragements' mix the four approaches. The 2010 overhaul of health care funding, the *Patient Protection and Affordable Care Act*, is a notable example because of the effect it has on the states through alterations to the Medicaid programme. Medicaid is a jointly administered federal—state programme to alleviate the health costs of the very poor and, although the states pay only a portion of the programme's costs (at most 50%), it is one of the most significant portions of state budgets, averaging 16% of own-revenue spending. States set some eligibility criteria, including, at present, income maxima that disqualify a person from the programme. These income maxima vary significantly from state to state, with some states setting income maxima well above the federal poverty level (FPL), while in other states, eligibility is cut off for those earning as little as 20% of FPL, or about \$US4000 for a family of four. The health care reform creates a national income standard for eligibility of 133% of FPL; in some states, particularly in the American south, the number of eligible persons will increase substantially, further burdening state budgets.

State participation in Medicaid is voluntary; a state may terminate its participation at will. A state also can tailor the policy, within certain parameters, to fit its own needs. In this sense, although Medicaid is often associated with the federal government, it would not exist within a state without a state's consent. Currently all states choose to participate and, in the new health reform bill, the federal government uses all four of the methods described here to encourage continued state participation in the

programme. First, the federal government offers a financial incentive: it promises to cover the increase in costs associated with augmented enrollment numbers during a transition period. The states will assume their ordinary share of the costs incrementally, phased in over a decade. Second, while some states may be tempted to discontinue the programme, the federal government has nudged the issue with their voters: the national dialogue now includes a presumption of health insurance access. Even in states where the federally initiated health reform is unpopular, state governments are seeking legal means to overturn the health reform rather than simply drop the Medicaid programme within the state. Third, by creating a common floor for income eligibility, states are free to experiment with higher levels of eligibility with lower risk of becoming a Medicaid magnet. Finally, both support and opposition for the bill rallied around their respective political parties; Republicans at both state and federal levels of government universally condemned the bill, finding a way to unify a fractured party, while nearly all federal Democrats supported the bill, and most Democratic Governors expressed tepid enthusiasm, seeking financial redress but praising the health reform initiative.

These four methods—incentives, nudges, pre-emptive floors and party-based rewards—are ways that a federation can encourage the states to experiment in policy domains where the states project a cost, but the union stands to benefit. Without writing expectations into the constitution of formal responsibility or obligation on the part of states to engage in the union-desired policy, the state retains discretion to reject the union's appeal. This authority retention is crucial for the maintenance of the union's harmony, for its balance.

The policy nudges and incentives in this category create political controversy. States are often put in situations where they are offered a deal too good to refuse, but which none the less causes them to sacrifice policy authority. It is important that the states have a means to resist, that they have sufficient own-source revenue, for example. The more strings that are attached to federal intergovernmental transfers the less states act independently, and the more federalism is put at risk. As states modify their revenue sources, often for short-term political reasons, they undermine their own sovereignty.

Tolerating Selfish Experimentation

This section will consider Region II policies, cases when the experimenting government projects a benefit and is, therefore, eager to implement the new policy, but its experimentation comes at a cost for at least some portion of the remainder of the union. (As always, either projection could prove wrong once the policy is tried.) In this case, there is no problem with encouraging policy experimentation; these policies are very attractive to the state government. For shorthand, we will call these policies 'selfish'. The problem lies with convincing the remainder of the union to tolerate these selfish policies; while they may be costly to the union in the short run, the lessons learned from one state's experimentation could benefit other states in the longer view.

One example of a policy in this region is California's stricter environmental regulations. Under a compromise when the Clean Air Act was signed, and out of deference to it to acknowledge its significant air quality challenges, California is allowed to

impose stricter auto emissions standards as long as it obtains a waiver from the Environmental Protection Agency (EPA). Apart from a recent controversy, ¹⁵ the EPA routinely grants California's requests. Given its geographical position, with the bulk of its population separated from the rest of the country by mountains and a desert, its efforts are unlikely to generate positive utility spill-overs to neighbouring states. Other states may, however, learn from California's regulations.

California's air quality laws are not without external costs, however. Given the contribution of automobiles to Californian smog, California has been at the forefront of mandating lower automobile emissions and clean fuel vehicles. The Californian market is too large for car manufacturers to ignore and so the price of cars nation-wide increases as the automobile suppliers develop cars to comply with Californian standards. At the margin, states with car manufacturing facilities take a direct hit, as demand for labour slackens and consumers nation-wide must absorb pecuniary externalities in the price of their cars. (They also benefit from the cleaner air from their own cars.) This policy experimentation, although costly for the remainder of the union, is tolerated, deemed on balance to be good for the union.

Another public policy that is interesting to consider is the recent recognition of the right of same-sex couples to be married legally. Currently, Connecticut, Iowa, Massachusetts, New Hampshire, Vermont and Washington DC all issue marriage licences to same-sex couples, and some other states, such as Maryland, recognize the legality of same-sex marriages licensed elsewhere. In the majority of the remaining states, same-sex marriage is repugnant to the majority of the population, as measured by the passage of state bans on same-sex marriage, whether through the legislature or direct democracy. Opponents of same-sex marriage question whether these states have exceeded their authority by redefining marriage. One might ask, then, is this a case of policy experimentation lying within Region II or III? That is, how severe is the cost to the other states?

The harm imposed is a social harm, which makes it so difficult to assess (Herzog, 2000). There is no evidence that same-sex marriage affects the rate or longevity of heterosexual marriages. Economic effects so far appear to be positive: same-sex couples, once married, would be subject to heavier income tax tolls, and weddings have a positive effect on the local hospitality industry. But if morality-based preferences are significantly strong that the same-sex marriages, although only recognized elsewhere, create significant disutility, the policy shifts to Region III, where policy obstruction is necessary. Here, whether intentional or not, lies destructive opportunism. The actor benefits, but at a price to the collective which is greater than the value to the individual. The phenomenon is the same as the former racist electoral policies in the southern states. Although through the first half of the twentieth century these policies were tolerated by the remainder of the union, a transformation in the moral preferences of the remainder of the union created a drive to intervene to halt these policies by overriding the southern states' authority.

A necessary condition for these policies to be tolerated is the public acceptance, or at least indifference, to their existence. So we need to think about how the safeguards insulate the public from acting against these policies, and how the debate within the institutions might lead to public support. The system of safeguards, when it works well, will allow mildly costly experimentation but stop significant deviations. The mechanism must do two things: discern Region II from Region III and successfully obstruct Region III policies.

The key is to take advantage of the inherent imperfection and diversity of federalism's safeguards, both of which open up the opportunity to experiment as well as give the public an opportunity to develop an opinion about the alteration of the federal boundaries. While some policy experimentation clearly crosses the federalism's authority boundaries—in the US federation, state nullification of federal law is one example—in functioning federations almost all boundary violations are more ambiguous. The vagueness is attributable to the multiplicity of the safeguards. Each safeguard may have its own threshold demarcating acceptable from punishable policy.

Even if the meaning of the law is unambiguous, the federal system of safeguards cannot sustain full compliance.¹⁷ The slippage is due to the imperfection of the safeguard's observations: if a safeguard responded to every perceived violation, the weight of its punishments would so burden the member states in the union that the union would not be sustainable. The safeguard could weaken its punishment, but in so doing it loses its deterrence capacity. Instead, each safeguard tolerates some window of violation, with those safeguards armed with dire consequences having much larger windows of tolerance, since their mistakes are so much more costly to the members of the union. For this reason it is routine to see safeguards, such as the courts and the political parties, objecting to policies, but more severe reactions, such as threatened interstate retaliation or even civil war, are rare and require significant provocation. The natural slippage, inherent to all federal systems, permits a window of exploration in Region II.

The second source of different thresholds is the diversity of the safeguards themselves. The safeguards sense distinct but related stimuli, have different perceptions and interpretations of those stimuli, and their capacity to intervene is structured institutionally to stagger their involvement. A constitutional court hears testimony, is motivated at least partially by a desire to preserve its legacy and, in the USA, can render a judgment in an instance where only one party can claim harm—that is, only after a policy has been implemented and had an effect. Legislators, part of the structural safeguards, listen to lobbyists and constituent appeals, consider this information in terms of what is best for their re-election chances, or for the needs of their political party, or within the context of their house of Congress; they express their views as the policy is being drafted and debated. The more closely related the safeguards' data sources and perspectives, the less robust the system. Ideally, the system will have uncorrelated errors.¹⁸

The public is a safeguard unto itself. The public cares much more about the distributive consequences of policy than the productive effects (that is, the benefit to the union on net). Fortunately, the public rarely concerns itself with federalism questions, at least not when policy is presented initially. Its appreciation for the importance of federalism's boundaries can grow as the other safeguards intervene, as say, in the recent health care reform debate, when the opposition described the negative consequences for state budgets, rekindling a states' rights sentiment in much of the nation. And, as the public sense of the appropriate boundaries grows, the other safeguards generally fall in line and respect the public's opinion. Even the court, as Friedman (2009) meticulously details, responds to the public's opinion. When the safeguards begin to align around a new threshold, the constitution, in effect, changes.

During this period while the safeguards are debating and pondering, the union gains experience with the new policy, the new alignment of authority. If it were harmful, the

union has time to recover. By embracing the chaotic mess that Grodzins (1966) so loved, the federation can discern good—productive—policies from the bad, that is, those in Region II from Region III. Now it is the diversity of the safeguards that provides multiple perspectives, that enables the people to recognize and embrace change that is helpful overall. This is a nudge of a different sort; the institutional safeguards rearrange the presentation of the policy so that the public might see it differently.

Conclusion

In this article I have argued that policy experimentation should precede formal alteration of the distribution of authority between federal and state governments. Not all experimentation is productive, so the federation needs a selection mechanism that accepts the useful experimentation but rejects that which destabilizes the union. Also, not all useful experimentation comes naturally. In particular, the federal union would like to encourage two types of policy experimentation that are either unlikely to be tried or unlikely to be accepted. The federal components can press the states to engage in costly innovation, and they can also act as palliative, soothing concerns from the larger union when one state's innovations cost others.

What I have laid out in this paper is a marriage of two schools of thought. On the one hand, I have argued from a big picture standpoint: federalism is a complex system, characterized by diverse components, experimentation and adaptation, selection mechanisms and interconnectedness. It can both be robust and undergo rapid, unpredicted phase transitions. Cross a threshold and the federation can fall apart. Given this hidden fragility, ¹⁹ it is best to try out adjustments before locking in to them. That is, informal constitutional adjustment through policy experimentation is preferable to formal constitutional amendment, at least initially.

I have also relied on an old-school cost-benefit analysis to break down federalism's collective action problem into different regions. I identified the two that are desirable but especially problematic, and relied on results established in standard equilibrium analysis to analyse the activities of the different safeguards as they respond to policies and, therefore, understand the way that this system of safeguards affects the behaviour of state governments.

A flexible federal constitution can be advantageous to a federal union, but only if it produces beneficial adaptation. A robust federation will have a constitutional adjustment selection mechanism comprised of multiple imperfect safeguards. Federations, as complex systems, are vulnerable to rapid collapse, which may be triggered by formal constitutional change. Informal constitutional amendment through experimentation and slow acceptance is a more secure way to alter federalism's boundaries because it allows the system to back up, to recover from accidentally crossing that threshold.

Notes

¹In formal terms, the discount parameter grows; the member governments value future benefits more as they grow more confident that the other member governments will also make the sacrifices necessary to sustain a productive union.

²See New State Ice Co. v. Liebmann (285 U.S. 262, 1932).

³Kollman *et al.* (2000) demonstrate that state experimentation is most efficient for moderate levels of policy complexity.

⁴While the positive effect for other states would be minimal, in *U.S. Term Limits* v. *Thornton* (514 U.S. 779, 1995), where the Supreme Court struck Arkansas' attempt to impose term limitations on its federal legislators, one unmentioned consideration is that by limiting the terms of their federal representatives, the citizens of Arkansas put themselves at a disadvantage, given the importance of the seniority norm in committee assignments.

⁵I offer one caveat: failed experiments may generate policy spillovers that affect the utility of other governments, particularly in federations with an expectation of intergovernmental bailout.

⁶I will return to this point in the following section.

⁷Because authority shifts can have broad implications, the success of larger shifts in authority depends upon framing. The way that an experimental policy is linked to other policies often determines its acceptability as much as its net benefit.

⁸The programme itself has mixed results. While the number of welfare recipients has been reduced drastically—the US Census Bureau reports a 75% reduction over ten years—the percentage of the population living in poverty is essentially unchanged. This inconsistency suggests that the federal government incentivized the wrong outcome, leading to state restrictions on eligibility without leading to a solution to the problem of chronic poverty.

⁹However, concern over it is most sustained in Canada; for a recent analysis see Bird (2009).

¹⁰Nicholson-Crotty (2009) shows that policy salience speeds state policy adoption.

11545 U.S. 469 (2005).

¹²One provision requires state law enforcement, during a legal stop or detention, to determine the immigration status of any person suspected of illegal status. Critics oppose the measure for encouraging racial profiling.

¹³Naturally, when accountability is suspect, politicians can use their freedom for more nefarious ends as well.

¹⁴One week following the President's signing of the bill, attorneys general of 14 states have challenged the bill in federal courts, in two separate suits. The main one, filed by 13 attorneys general—all but one Republicans—contends that the federal government has no power to compel citizens to purchase health insurance. (The other, challenging the bill on the same grounds, would nullify the act in Virginia—a symbolic protest without a chance of success passing constitutional muster.) As this article goes to press the suit is still pending.

¹⁵In 2008 the EPA denied California's right to mandate emissions. The EPA reversed its decision in 2009 when a new administrator was appointed to head the EPA.

¹⁶This theory is developed in more detail in Bednar (2009, chs 6 and 7).

¹⁷This problem is general to almost all problems that require collective action with individual self-sacrifice (see Bednar, 2006).

¹⁸See Bednar (2009, ch. 7) and Page (2010) for detailed discussions of independence and robustness.

¹⁹Crutchfield (2009) uses this phrase to describe the underlying vulnerability of many complex systems; he motivates his thesis with reference to the collapse of the financial markets in the fall of 2008. See also Fergusson (2010), arguing that the general tendency of empires to suffer rapid decline can be understood better if one conceives of them as a complex system, because proximate causes are often only symptoms of a deeper underlying decay.

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