
21 The law and economics of regulatory competition

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Introduction

Regulations¹ exist for many reasons. They may exist to correct for market failures arising from externalities. They may exist to reduce transactions costs or informational asymmetries. They may also exist to constrain behavior to bring it into accord with the normative preferences of the median voter or some other politically powerful entity in the jurisdiction. However, regulations may also serve as rent-seeking vehicles for politicians and other actors in the jurisdiction.

Regulatory competition, whereby different jurisdictions compete for residents or other mobile resources on the basis of the regulations they offer, is often characterized as leading to a race to the top or a race to the bottom. That is, depending on who is doing the characterizing and what the regulatory status quo is, increasing the amount of inter-jurisdictional competition is predicted to lead to systematically better or worse regulatory outcomes.

For example, environmentalists predict that state competition on environmental standards will lead to a race to the bottom as jurisdictions compete for the

¹ For the purposes of this chapter, regulations are viewed as being separate from laws that are enforced primarily through litigation. Of course, at a high enough level of abstraction, all laws serve to regulate behavior to some degree or to create a starting point for contractual bargaining. While some of the law and economics literature distinguishes the two by suggesting that regulation constrains behavior *ex ante*, while litigation operates *ex post*, this distinction does not matter analytically since regulations will be enforced via fines or some other penalty after the action takes place, and the expectation of litigation and a resulting judgment will surely impact behavior *ex ante*. Perhaps a more useful distinction arises from the notion that litigation, at least in traditional common law systems, can only result in a judgment if actual harm occurs, while many regulations can lead to a punishment once the prohibited action occurs, even if it results in no harm. If individuals make decisions probabilistically, this makes no analytical difference in most contexts, except with respect to those regulations that proscribe activities that do not lead to harm. Further, under the plausible assumption that many regulatory infractions will go undiscovered or unpunished in cases where no harm occurs, or as legal systems consider liability for activities that merely increase risk or allow for punitive damages, the small distinction becomes even smaller. With that in mind, it is not surprising that much of what is contained in this chapter also applies to jurisdictional competition based on laws that are enforced through litigation or even through private arbitration (see, for example, Benson 1990).

tax base that comes with industrial development. In their eyes, regulatory harmonization (at least at a high enough level of environmental protection) or federalization, a kind of mandatory harmonization, is to be preferred to regulatory competition.

Others might counter that regulatory competition has the potential to improve environmental quality even in the case where states are primarily motivated by the tax bases that come with businesses. That is, firms wish to maximize profits of which regulatory compliance costs are only one element. Another element is labor costs. If employees or potential employees value environmental amenities, a firm located in a high pollution area will need to pay compensating wage differentials that may be larger than regulatory compliance costs, inducing firms to gravitate to jurisdictions with more rigorous environmental regulations. Further, compared to a federalized system, under these assumptions, jurisdictions might even choose a higher environmental standard than is possible under harmonization, and the potential for experimentation that is available in a non-harmonized system may lead to innovations that both improve environmental conditions and lower compliance costs. Such innovation may be retarded in a federalized system that provides little incentive for experimentation, if it allows it at all.

Beyond simplistic discussions of race to the top/bottom, which are generally framed by commentators or activists who view policy success or failure in single dimensional terms, different jurisdictions may simply value trade-offs differently. Residents of California may be willing to sacrifice most other values for marginal improvements in environmental quality, while residents of New Jersey are not. In this context, increasingly rigorous environmental standards are not necessarily a good thing; much depends on the preferences of the individuals in the jurisdiction. Given the potential for preference heterogeneity, harmonization has the potential to lower welfare, even if it raises regulatory strictness on average, relative to a system of jurisdictional competition.

On the other hand, if there are regulatory spillovers, such as air pollution impacting neighboring jurisdictions, the desirability of regulatory competition declines.² Trading off the gains to customizing regulation in line with the

² While virtually all analysts would include so-called “real” externalities as a problem with regulatory competition (with jurisdiction-specific regulations limiting activities that generate negative inter-jurisdictional externalities being set too low, while leaving them set too high in instances where the inter-jurisdictional externality is positive), it is not clear how pecuniary and fiscal externalities should be treated. While standard public finance analysis suggests that these should be ignored (see, for example, Holcombe and Sobel 2001 and Browning 1999), it is not at all clear that this is generally true, depending on whether normative principles beyond efficiency affect the decision rule. Even if efficiency is the only relevant criterion, however, which individuals’ utilities “matter” or how they should be weighted will often affect whether pecuniary or fiscal externalities are relevant. For

preferences of the residents of a jurisdiction against inter-jurisdictional externalities is of central importance in evaluating the choice between regulatory harmonization and competition. On top of this analysis, questions of administrative costs arise, since a given regulatory area may exhibit economies or diseconomies of scale in theory. The total cost of processing evidence regarding best practices and scientific knowledge could be reduced by centralization, particularly if there is a relatively low level of human capital available in most jurisdictions. However, centralized decision makers may face a high cost of determining individual preferences, may be harder to incentivize, and may be less likely to innovate than their counterparts in a decentralized, competitive system. Along similar lines, political economy forces may affect the optimal degree of regulatory centralization.

This chapter provides an analytical framework for the optimal degree of regulatory competition, including discussions of the relevant factors considered, drawn from the law and economics literature on regulation and the public finance literature on fiscal federalism. Special problems that arise when multiple regulatory decision makers share regulatory competence are discussed, including vertical (and hierarchical) state and federal interactions and co-equal horizontal interactions among multiple state or local regulatory decision makers. The chapter then includes a brief section on the scholarly value of decentralization in the new empirical law and economics/legal studies movement which relies on policy variation to draw causal inferences about the effects of various regulatory provisions.

Analytical Framework

A useful starting point is Shavell's (1984a, 1984b) model of the choice between using *ex post* litigation or *ex ante* regulation to induce individuals undertaking risky activities to internalize the expected external costs those activities create.³

example, imagine two contiguous jurisdictions that exist in the same nation, A and B, both of which border the foreign jurisdiction C. While existing law allows free movement of citizens between A and B, it does not allow free movement between C and any jurisdiction in the nation. However, for various reasons, enforcement of the national law depends on the regulatory enforcement of individual jurisdictions. If A prefers to allocate its scarce budget to activities other than immigration enforcement, while B focuses its budget on enforcement, (illegal) immigration of C's residents into A may induce A's residents to relocate to B for a host of reasons, including increasing home prices due to increased demand and declining wages due to increased labor supply in A, leading to price effects in B as well. The respective policy decisions of A and B generate pecuniary (and likely fiscal) externalities for each other. If the welfare of C's residents is considered in the decision rule, optimality may require B to reduce its enforcement, while if only A's and B's residents are counted, optimality may require A to increase its regulatory enforcement.

³ Interestingly, Helland and Klick (2007) show empirically that, *contra* Shavell's model, regulation and litigation tend not to be substitutes on the margin. Instead, they show that states with higher levels of regulation tend to have higher levels of litigation

As suggested above, this distinction is somewhat illusory analytically since regulations are enforced through ex post punishments such as fines while the expectation of facing litigation and a potential judgment will affect behavior ex ante. Perhaps a better way to state the distinction involves whether or not the cost imposed on the individual undertaking the risk is or is not conditioned on actual harm occurring. In the regulatory context, as it is generally conceived, the punishment is conditioned on the regulated act. That is, if I pollute beyond the regulated threshold, I pay a fine even if the pollution does not harm anyone, whereas under common law systems, damages will almost always be a necessary element of a successful civil claim.

With this distinction in mind, Shavell suggests that the optimal system will generally be a mixture of regulation and litigation. The relative weights on each mechanism will depend on a number of factors. For our purposes, the most important of these factors is heterogeneity in terms of both the cost of the expected harm arising from the activity and in terms of the cost of precaution, which may include the opportunity cost involved in refraining from the activity as well as the costs of any available additional safety measure that either the risk taker or the potential victim can invest in.

Heterogeneity matters in this context because the greater the heterogeneity, the greater the social cost generated by the “one size fits all” regulation. If the cost of harm and precaution were uniform, it would be socially wasteful to engage in the process involved in litigation, saving both parties and the state administrative costs and opportunity costs. In fact, there would be savings because human capital could be re-allocated away from litigation altogether since a regulation could be announced, dictating which activities are prohibited and what precautions are required, and violators would be penalized accordingly,⁴ significantly reducing the need for lawyers and judges.⁵

In addition to the administrative and opportunity cost savings of regulation, Shavell points out that regulation will mitigate the problem of judgment-proof defendants who will not be deterred by litigation.⁶ It seems likely that the

too. Of course, Shavell’s model is a normative one, so Helland and Klick’s empirical results do nothing to invalidate it, but they do suggest that the current systems in place in the US diverge from the theoretically optimal system in important ways.

⁴ This abstracts away the possibility that enforcement costs might be higher than the costs of litigation. It also ignores the reality that regulatory enforcement, in many cases, involves something that approximates litigation anyway.

⁵ In fact, some fields of litigation have been turned into essentially regulatory or administrative practices in many states, such as the field of workers’ compensation.

⁶ Shavell asserts that regulatory authorities could stop individuals from taking risks if they had insufficient funds to cover the required precautions or could stop the individual from the activity altogether if the expected harm was very high, by incarcerating the individual. Presumably there are many cases where the regulatory authority does not detect individuals engaging in the prohibited activity before the fact, as well as instances

costs associated with harms and precautions will be geographically clustered, implying that relative to a national regime of regulation, regulation at lower jurisdictions might have a larger domain where it dominates litigation. That is, if things like wages and property values (i.e. the sorts of things that generate the cost of damages or precautions) exhibit lower variance at the state (or local) level than they do at the national level, federalized regulations, taking the costs of harm and precaution at their national average, will generate more losses in the Shavell framework than a system that tailors the regulations to state or local means. This implies that the optimal federalized system will rely more heavily on litigation, with its attendant higher costs, than a system that is able to set different regulatory standards in each jurisdiction. On the margin, the preference for multi-jurisdictional regulations will be affected by the presence of inter-jurisdictional externalities and any economies of scale that might exist, but the insight about heterogeneity provides a basis for favoring regulatory competition.

In terms of integrating this heterogeneity issue with concerns about inter-jurisdictional externalities, the field of fiscal federalism in public finance economics provides a number of insights. Although fiscal federalism is an under-appreciated topic in the law and economics literature, its framework for analyzing the provision of public goods can easily be adapted to the question of regulatory harmonization versus competition.

Tiebout's (1956) famous model for the provision of public goods provides a point of departure. Tiebout's article responds to Samuelson's (1954) model of public good provision, which suggests that the free-rider problem leads individuals to understate their preference for public goods in the hope that others will pay for the public good, and since public goods exhibit a lack of excludability, the free rider will get the benefit of the public good without paying for it. However, since everyone has the same incentive, Samuelson and others suggested, public goods will be under-supplied by the market, requiring government intervention to achieve efficient provision. Tiebout points out that if local governments provide public goods, individuals can sort themselves into communities based on their favored level of public good provision and tax bill. Individuals effectively reveal their true preference for the public good by voting with their feet. Oates (1969) provides evidence that the public good and tax mix is capitalized into local home prices, with high public good, low tax communities exhibiting systematically higher values, all other things equal. Fischel (2002) suggests that Oates' empirical support provided significantly higher visibility for the Tiebout hypothesis as it suggested that individuals do indeed vote with their feet, generating competitive pressures across local communities.

where the regulatory authority is not permitted to use police powers, in which case this benefit of regulation is reduced, as Shavell admits (Shavell 1984a, fn. 7).

Buchanan and Goetz (1972) were among the first to point out that Tiebout's model fails to limit the free-rider problem on its own, since individuals can still move into jurisdictions providing high levels of public goods without paying for them due to the excludability problem. If property rights allow a mechanism of exclusion from the local jurisdiction, Buchanan's (1965) earlier theory of club goods would seemingly be applicable, and Hamilton (1976) suggested that this exclusion occurs through local land use or zoning regulations. This insight somewhat resolves the puzzle as to why Oates' (1969) results hold despite Buchanan and Goetz's critique which otherwise suggests that free riders should cause instability in the Tiebout sorting mechanism, dissipating any value arising from popular public good mixes.

This literature suggests that competition among jurisdictions is not merely theoretical speculation among economists. Subsequent empirical testing (see, for example, Dee 2000) continues to provide support for the proposition that migration patterns respond to the bundle of services offered by local jurisdictions. In principle, there is no reason why regulatory offerings do not constitute part of that bundle. Indeed, Fischel (1978, 1985) among others suggests that regulations are a necessary condition for stability in the Tiebout sorting mechanism.

While jurisdictional competition allows individuals to sort according to their heterogeneous preferences, whether this sorting is efficient requires an accounting of inter-jurisdictional externalities. Tiebout ruled out the possibility of such spillovers in his model, but real life is not so well behaved.

Fiscal federalism, an area of public finance finding its origins in Musgrave (1959) and Oates (1972), provides a decentralization theorem which is described by Oates (1999) as suggesting that, in the absence of economies of scale or inter-jurisdictional externalities, localized public good provision can always provide at least as high, and typically higher, welfare levels than if a uniform level of public goods is provided across jurisdictions. Oates suggests that, while in theory, a unified government could provide different levels of public goods to different sub-national locations, information problems and political constraints limit the feasibility of moving beyond one size fits all national public good provision. Nothing in these models precludes applying them to the provision of regulations as well.

Given this presumption in favor of the efficiency of local provision of regulations, any attempt to harmonize or federalize must rely on arguments regarding economies of scale, inter-jurisdictional externalities, or some political economy problem that makes it more likely that higher-level government decision makers face better incentives than do local decision makers.

Economies of scale might arise for a number of reasons. In instances where scientific or expert knowledge, as opposed to local preference, is determinative on a regulatory issue, having a single decision maker may be preferable to having multiple jurisdictions discover and process the relevant information.

This may be especially true if there is relatively little human capital available, making it difficult for local decision makers to draw relevant conclusions. However, in practice, this factor is probably not as important as it would otherwise appear.

First, in such a situation, the federal government could serve merely as a clearinghouse of such information, providing guidance and advice to local jurisdictions without mandating any particular approach. This advisory role would allow the benefits of centralization without creating the potential for mistakes in categorizing an issue as one where local preference does not matter when, in fact, it does. Second, there are relatively few areas where scientific certainty is high enough to offset the loss of policy experimentation that is likely to accompany centralization. While there are some theoretical arguments that sub-national jurisdictions will experiment too little (see, for example, Strumpf 2002, which argues that since innovation is itself a public good, local jurisdictions will engage in too little experimentation relative to a national government with a more encompassing interest), there are relatively few examples, at least in the US context, where the federal government has in fact engaged in experimentation whereby different regulatory regimes are operated simultaneously. States and local governments, on the other hand, regularly try different regulatory approaches when allowed to do so.

Inter-jurisdictional externalities, however, do represent a serious and frequent source of concern with respect to regulatory decentralization. Local residents and decision makers have no incentive to consider the costs or benefits their regulations impose on other jurisdictions. Further, because inter-jurisdictional bargaining is likely to be difficult, it is unlikely that Coasian bargaining will undo the effects of even very inefficient policy choices.⁷

Klick and Sitkoff (2008) provide a salient example of the potential for local regulation to lead to very large efficiency losses. Because of a peculiar corporate structure, the Hershey Company (makers of Hershey's Chocolate and Reese's Peanut Butter Cups) is controlled by a charitable trust run for the benefit of the Milton Hershey School in Central Pennsylvania. Under Pennsylvania law (as in most states), charitable trusts are monitored by the state attorney general. For diversification purposes, the trust was interested in selling its control interest

⁷ In addition to the usual transaction costs arguments for why bargaining does not occur (which are presumably more acute in the inter-governmental context given the political economy and agency cost problems that plague public decision makers, if for no other reason than that public decisions will involve more individuals, each with his own interests that may not line up with efficiency concerns), in the US context at least, states are not permitted to enter into agreements under Article I, Section 10, Clause 3 of the US Constitution (the so-called compact clause) without the approval of the federal government.

in the firm, and this move would have had the salutary effect of improving the performance of the firm.⁸ However, there was a strong possibility that a new owner would have moved most of Hershey's operations out of Pennsylvania due to its relatively high costs of operation. The state attorney general, who happened to be running for governor at the time, opposed the sale despite the fact that it was necessary to diversify the trust's investment portfolio,⁹ and the sale would have generated a very large premium over the market value of the stock holding. Although the attorney general did the "right" (or at least the politically expedient) thing with respect to the interests of the town of Hershey, and Pennsylvania residents more generally, his actions leading the trust to drop the sale, generated a loss in wealth of the order of \$3 billion.¹⁰ Fundamentally, because most of these losses accrued to individuals living outside of Pennsylvania (or to non-voting future trust beneficiaries), the attorney general externalized the costs of his regulatory decision in this case. Although not as colorful as the Hershey example, instances of cost externalization via local regulation abound across virtually every substantive area of law.¹¹

This concern over inter-jurisdictional externalities motivates federal pre-emption doctrine. Epstein and Greve (2007), relying on traditional legal analysis as well as the data collected in Greve and Klick (2006), suggest that there is no other way to make sense of the constitutional law cases examining pre-emption. For example, if pre-emption doctrine were simply an issue of federal power versus states' rights, it is difficult to square the voting patterns observed in recent Supreme Court terms on preemption cases with the patterns observed in other states' rights issues.

⁸ Essentially, because the trust controlled the firm but the trustees had no incentive to ensure that the firm was run efficiently, the market for corporate control was non-functional with respect to Hershey, leading to significant agency costs within the firm. Evidence of this was provided when the sale was announced, at which time the class of firm shares that would not have been involved in any sale (i.e. the publicly traded shares that had effectively zero voting rights) appreciated significantly. Further evidence was provided when the sale was dropped, leading to a corresponding decline in the value of the publicly traded shares.

⁹ Of a corpus exceeding \$8 billion, more than half was held in Hershey stock.

¹⁰ Although Klick and Sitkoff (2008) cannot directly judge the loss that would have accrued to Hershey (or Pennsylvania) residents if the sale had occurred, they present calculations suggesting that the loss in firm value represented more than \$60,000 for each resident of Hershey. While it is impossible to know for sure, it seems unlikely that this amount is less than the value the average resident places on living in Hershey with the company still there as compared to living in Hershey after the company departs (adjusted for the probability of relocation) or as compared to living somewhere else.

¹¹ Moncrieff (2009) even suggests inter-jurisdictional externalities arise in medical malpractice law, which has traditionally been viewed as a very local area of substantive law.

The extent of these externalities is a central concern in determining the value of regulatory competition. However, while it is generally assumed that local decision makers respond to the preferences of their constituents, leading to generally good outcomes except in the case of cost externalization, Glaeser and Shleifer (2005) provide a model and some historical evidence suggesting this assumption need not hold. Specifically, they show how sometimes it may be in a decision maker's best interests to undertake policies which actually drive residents away, leaving behind the core supporters of the decision makers currently in power. By doing so, these decision makers may be able to consolidate their power and remove the possibility of political challenges. Such a view stands in contrast to the sentiment expressed in Fischel (2000) which suggests that by chasing votes, residents, and tax base, local regulatory authorities will generally reach locally desirable outcomes. While certainly not the dominant model of the political economy of local regulatory decisions, the Glaeser and Shleifer argument does underscore the need to examine the incentives decision makers face before blindly assuming that local regulatory decisions will at least benefit local residents.

The analytical framework for judging the value of regulatory competition then is relatively straightforward. Heterogeneity in preferences and costs lead to a presumption in favor of local determination of regulatory standards even judged solely on efficiency grounds. This presumption could be overturned, however, if there are economies of scale in regulatory analyses or enforcement, inter-jurisdictional externalities, or if local decision makers face relatively bad incentives as compared to national decision makers.

Other Structural Issues

Although public finance scholars have investigated the peculiar analytical issues that arise from the interplay of various levels of government making decisions about public good provision and the taxes required to pay for that provision, relatively little of this work has made its way into the field of law and economics. Further, virtually none of it has been extrapolated to cover regulatory decisions *per se*.

Parisi, Schulz and Klick (2006) represents an exception to this dearth of analytical work on structural problems involved in the interaction of regulatory authorities. Specifically, they consider situations where multiple jurisdictions share regulatory authority. Such a situation could arise when multiple states all regulate access to a resource or when multiple regulatory agencies have jurisdiction over some activity.¹² While they model these situations as being

¹² Examples of these overlapping jurisdictions abound. One illustration is the authority the National Park Service and the Fish and Wildlife Service share over fish and animal herds that move across federal lands and waterways and, if the relevant fauna

pure rent-seeking games, nothing changes if this assumption is relaxed such that regulatory authorities balance both socially valuable objectives with some non-trivial rent-seeking aspect, such as expanding the bureau’s budget either to gain financially or to reduce the effort each regulatory employee must expend.

The model differentiates regulatory activities along two dimensions. First is the question of whether the authorities have the power to stop an activity, leaving the individual undertaking the activity free to proceed unless the regulator(s) intervenes, or whether the regulation is set up to require approval such that the individual cannot proceed without first securing approval. They refer to these as negative and positive authority respectively. Second, they distinguish between situations where the multiple regulatory actions serve as substitutes or complements. In a substitute arrangement, any regulatory act is sufficient such that, in the case of positive authority, an individual need only secure approval from a single regulator, whereas in negative authority, every regulator holds veto power over the activity. Complementary regulatory powers, on the other hand, require an individual to secure approval from all relevant regulators in the case of positive authority, whereas complements in the negative authority context imply that all regulators must restrict the activity for the individual to be prohibited from proceeding.

They solve for a game wherein all of the regulators act simultaneously. Relative to a unified (federalized or harmonized) regulator, they show the following:

Table 21.1 Interaction of regulatory authorities

	Regulatory Substitutes	Regulatory Complements
Positive Authority	Activity over-permitted	Activity under-permitted
Negative Authority	Activity over-restricted	Activity under-restricted

The welfare implications of these results depend on the assumption about the desirability of the underlying activity,¹³ but the conclusions relative to a unified regulator have a fairly simple intuition. When regulators’ interests are

also moves across non-federal lands, state authorities will claim jurisdiction as well. Authority over building projects is often shared too, with some projects falling under the jurisdiction of the Environmental Protection Agency, state-level counterparts, as well as local building commissions.

¹³ Parisi et al. (2006, Table 2) provide welfare implications in the various arrangements of regulatory substitutes and complements and positive and negative authority for cases where the regulators are assumed to be rent seekers, shirkers, and where regulatory benevolence is assumed.

not unified, they ignore the effect their actions have on the ability of the other regulators to extract rents.

Klick and Parisi (2005) also provide analysis of a similar situation when regulators act sequentially in the case of regulatory complements.¹⁴ Specifically, they investigate a situation where a single higher level of the government (e.g. federal) makes regulatory decisions and then lower levels (e.g. states) subsequently make decisions. In the sequential Stackelberg game, Klick and Parisi show that the joint level of restriction in the positive authority complementary competence exceeds the level that would be chosen by a unified regulator. Once again, the intuition is that each rent-seeking regulator ignores part of the deadweight loss created by its rent seeking, effectively externalizing some of this cost onto the other regulators. However, in the sequential game modification, an interesting insight arises. Namely, while the first mover, say the federal government, would benefit from some coordination among the lower-level regulators (e.g. the states) since that coordination would lower overall rent seeking (leaving more rents for the federal regulator), the first-mover regulator would be worse off if that coordination changed the game into a simultaneous game where the unified lower regulators no longer need to act as a second mover. Thus, Klick and Parisi argue that this provides some insight into how the compact clause of the US Constitution has been interpreted.¹⁵

On the whole, however, the structural questions regarding how different regulators interact, both positively and normatively, have been largely uninvestigated in the law and economics literature, at least in a formal systematic way. Adapting the theoretical public finance literature on this topic in the tax context to the regulation context probably represents some low hanging fruit since these structural issues come up repeatedly in more traditional legal scholarship without much analytical structure.

Learning from Regulatory Competition

It has already been suggested that an additional value of regulatory competition arises from the experimentation that is more likely to occur in a decentralized system as opposed to a system with forced harmonization or federalization. The value of this innovation should not be discounted.

¹⁴ Technically, Klick and Parisi (2005) frame their discussion in terms of multiple authorities sharing a tax base, but it is trivial to adapt the model to any regulatory setting in which the regulators have some rent-seeking objective.

¹⁵ Specifically, although the clause itself disallows compacts without prior federal approval, the courts have interpreted the clause to allow compacts unless the federal government intervenes or unless the compact would constitute a threat to the supremacy of federal power. This is consistent with the federal regulator benefiting from some, but not too much, coordination among the states.

From a scholarship perspective, regulatory competition also offers greater opportunities to engage in empirical research as compared to a system that is federalized. Since regulations change the implicit relative prices of activities, they can be used to identify the effect of these price changes on behavior. This is important from a policy evaluation perspective, but also from a more basic inquiry about the determinants of behavior.

In order to isolate causal effects in this context, however, it is necessary to have policy variation that is separate from idiosyncratic effects peculiar to a jurisdiction and separate from general, potentially non-linear, temporal trends. While a regulatory change has the potential to identify effects separate from jurisdictional idiosyncratic effects, if the change occurs everywhere at once, it will not be possible to net out the temporal effects. That is, while state and local regulatory changes leave open the possibility of using non-changing jurisdictions as a counterfactual comparison, federal-level changes do not leave a counterfactual.¹⁶

It is interesting to note that, while there has been an explosion of empirical work across most areas of law in the past decade, including torts, property, contracts, health, insurance, crime and a host of other topics, areas of purely federal law have seen very little inferential work.¹⁷ Areas like intellectual property¹⁸ and immigration law have been notable during the past decade because the empirical revolution has left them mostly untouched.

Conclusion

While discussions of regulatory competition are often reduced to predictions of races to the top or races to the bottom, detailed welfare analyses are more useful than position papers. More or more stringent regulation is not necessarily a good thing, just as less stringent regulation is not unconditionally good either.

Careful analysis of the value of regulatory competition starts with a recognition of the benefits of jurisdictional customization and its ability to incorporate heterogeneous preferences and costs. This flexibility is almost certainly lost in

¹⁶ While, in theory, researchers could use other countries as the counterfactual comparison, this approach will not generate much confidence given the other dissimilarities that exist across countries (e.g. different macroeconomic conditions, different languages and cultures, etc.). While New York and New Jersey are relatively comparable, the US and Mexico are not. This is a general empirical problem.

¹⁷ While some descriptive work exists in the purely federal areas, much of it involves describing and categorizing case law, which, while valuable, is not very helpful for understanding the effects of law on behavior, much less for understanding deeper questions about how people respond to incentives.

¹⁸ Abrams (2009) is a notable exception here. Instead of using legal differences across jurisdictions, he uses differential effects of intellectual property law on types of innovations treated differently by the law but that are otherwise comparable.

a harmonized or federalized system of regulation. Thus, all other things equal, regulatory decentralization is a good thing.

However, all other things are not necessarily equal. Federalization, in some circumstances, offers the potential for economies of scale in information collection and processing. Further, and perhaps more important, federalization may be necessary to constrain the tendency of local decision makers to externalize the costs of their activities to other jurisdictions. These inter-jurisdictional externalities represent the strongest argument against jurisdictional competition. Additionally, while we generally assume that local decision makers have an incentive to maximize the welfare of their constituents, this need not always be the case, so it is important to consider the actual incentives these decision makers face.¹⁹

Lastly, it is important to consider the value of experimentation and innovation. Using the states (or local jurisdictions) as regulatory laboratories holds out the hope of generating information in terms of the effectiveness of various regulatory provisions and the costs of implementation. We learn significantly less about regulatory efficacy and efficiency in federalized systems. Further, in the right institutional context, state and local decision makers will have not only the opportunity but also the incentive to innovate as they compete over voters, residents and tax bases.

Although the law and economics literature could benefit from additional systematic study of the theoretical underpinnings of regulatory competition, the basic framework is fairly straightforward and easily applied across legal areas. What is less well understood are the empirical parameters regarding the size of inter-jurisdictional externalities in different legal contexts, the rate of regulatory innovation in different legal areas, and the potential for regulatory economies of scale. This is where the focus of research should be going forward in the area of regulatory competition.

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¹⁹ This goes for the incentives faced by the federal decision makers too. While the incentives may be poorly aligned at both levels of government, the relevant question has to do with which level has the relatively better incentives to improve welfare, and which level of government has better incentives to fix a regulatory mistake made in the past.