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Predictability and Adaptation in Law and other Markets
(chapter in a coming book: *Research Handbook on Law and Time*)

Saul Levmore
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Introduction

People and enterprises that are subject to the law find it useful to know what the law is at present, but then also to anticipate future rules. If laws are stable this is easily done. Stability is more common where the judicial branch is concerned, because precedents are often valued, and for good reason. They are more often followed by judges than by those involved in other methods of lawmaking. But in all of lawmaking, and even in the private sphere, there is value to consistency and certainty. And yet, surprises can be attractive if they are not confronted on a regular basis. In extreme cases, expectations can be usefully upended, as is intentionally the case with much retroactive lawmaking. As times change, and new circumstances and information become known, there is often reason for law, and certainly for private decisions and apparent preferences, to change and presumably to improve. This Chapter considers the optimal level of certainty over time. One conclusion is trivial: people would prefer a world in which law changes only when the value of change is greater than the value of certainty. Efficiency and utility are features of an endgame, and these goals are more important than is the process of decision-making, where predictability is often a means to the end, and simply a short-term instruction. At the other end of the spectrum from predictability, or reversals in the case of new information, is the possibility of introducing a random element in law, so that neither the lawmaker, the governed parties, nor interest groups eager to get friendly laws enacted, know what to expect. Randomization is rare and would often suggest that lawmakers have no idea what they are doing. At the same time, both certainty and change can be costly in many ways. If predictability is treated as a goal or as a firm rule, new information and circumstances are ignored. And yet, a subtle objection to mistaking the goal of utility with the process of achieving it, or background rule of certainty, is that if people know that a rule will change, there is nearly inevitable discrimination between parties who entered a system of lawmaking at different times. This discrimination is normally objectionable on both moral and public-choice grounds. The tradeoff between predictability and a willingness to change, or simply to surprise people, is complicated, but some examination of this tradeoff in different settings is illuminating. This Chapter begins with the tradeoff between predictability and change over time. It then turns to the connection between change and uneven treatment, and competition among organizations that can serve and exploit this inequality, or simply different preferences.

Predictability or Uncertainty

True certainty over time is more valuable to some people than to others, as well as to investors more generally. This can be because it is costly to adjust to new rules and conditions, but also because people have different preferences for risk. In particular, they have different expectations about the likelihood that legal change brings on improvements rather than a need to form interest groups and exert political pressure for or against change.

It is not the case that one is always paid to absorb risk, though that is normally true in financial markets. Most of us would pay less for a house that could never be modified (setting aside its historic value) or for stock in a company that promised never to change its prices or other strategies. In any event, true certainty with respect to law is almost impossible to achieve even if the risk-averse person is willing to pay for it. This is especially the case once enforcement costs and expectations are taken into account. Law cannot help but be influenced by random elements and enforcement costs. For example, a speed limit might be fixed and well known, but the driver cannot know when an officer will observe excessive speed. Famously, this can be efficient – if unpopular. Transaction costs are saved if drivers are infrequently monitored but then more severely penalized when caught. The drivers' ex ante calculations can lead to the same, safe driving, while the costs of government enforcement are decreased. These savings can be passed on to drivers, or to citizens who might be injured, so that everyone benefits. Even speeding drivers gain because they are infrequently stopped, ticketed, and delayed. This element of time is not, however, the aspect of time that is emphasized in this Chapter. The possibility of capturing some benefits from the relationship between the severity of penalties and the cost and probability is an insight developed long ago by Gary Becker. (Becker 1968) Extreme applications of this insight are appealing to most people, perhaps because it seems unfair to attach a colossal penalty to a minor misstep. There is also the danger that unpredictable enforcement will not be random but will be selectively applied by the government. But again, this is not the kind of inequality emphasized here. Still, modest applications of the Becker idea are found everywhere that law and other reward and penalty systems are found. The Internal Revenue Service does not audit all taxpayers every year. Drivers are not constantly monitored. Cameras do catch more speeding drivers than in the past, and the penalties for these drivers are usually lower than those attached to speeding drivers identified by human police officers, but even here drivers do not often know where the cameras are located. In essence, the law may be certain, but because its enforcement is normally unpredictable, it is roughly the same as saying that law is uncertain.

At the same time, as another Chapter in this volume emphasizes, there is value to certainty, or at least to predictability. (Franzoni 2024) An investor in a factory needs to assess future taxes and other regulations. Only in special cases is surprise so extreme that the government's actions are considered a Takings of private property for which compensation is required by law. Normally, the factory owners must be part of an interest group that convinces lawmakers not to change the rules of the game in ways that hurts them. Correspondingly, lawmakers have some incentive not to surprise investors because the fact that a government changes the rules of the game after substantial investments are made, will discourage future investors from coming to the jurisdiction in question. It is difficult for a government to surprise past investors while promising, in a way that is convincing, not to do the same to the future investors it seeks to attract. To be sure, lawmakers might have an incentive to make or threaten occasional changes in order to extract rents, or profit from parties that seek to gain their favor, but this is probably a secondary consideration in a well-functioning society.

Even if the government could be bound to keep promises it makes to investors in factories, the government can change the quality of roads leading to the factory, much as it can change environment rules that can make the factory less profitable in ways that are unpredictable to investors. Uncertainty cannot be entirely eliminated.

At the same time, investors, like most citizens, want some changes. Circumstances can change in ways that makes most businesses and individuals welcome some unpredictability over time. Parties do not really want certainty about taxes and regulation so much as they want some confidence that the government will do things that are efficient. A government must take a sensible approach to enforcing contracts or fighting crime, and it must therefore change strategies and expenditures as crime rates and locations change. It certainly must protect against foreign enemies and climate risks, even those these functions might require increased taxes and different strategies over time. Parties only want certainty to a degree. Even if certainty is described as a conviction that the government will adapt and act in the public interest, citizens will have different views on how to define that goal.

Predictability in the Private Sphere

It is useful to compare the value of legal change over time with that observed in the private sector. One can think about product changes as well as financial investments. In the former case, consider a consumer who buys an automobile. The buyer wants some certainty about quality, and the likelihood of necessary repairs, if only to predict resale value. In turn, the seller can provide some certainty with warranties. The buyer also wants to know that repairs and fuel will be available at reasonable cost. The seller has no control over future fuel prices – no manufacturer seems to have found it worthwhile to offer some protection against the risk of higher gas prices and even higher tire prices – but the seller can offer warranties of various length, and at specific prices, in order to signal quality and also to practice a kind of price discrimination among buyers with different preferences for risk. The seller has an incentive to make these things available, or at least likely, because it wants to sell future output to repeat customers as well as to new consumers who will extrapolate from information about the past reliability and costs associated with the manufacturer or with specific models of cars.

But consumers might also want to know more about innovations planned for future models. If there are significant changes and improvements in the next several years, consumers who purchased in Year 1 will be disappointed about their investments when they see what is available in Year 3. Consumers who are fearful of change in this way can rent or lease cars, but most will purchase or enter into long leases because they trust the market to account for this risk of change in the price of the vehicle, and in the demand for used cars in the future. The product changes over time just as law changes over time, with things like new information about the environment or risks from enemies. The optimal rate of change in law (not to mention in automobiles) is clearly not zero. Parties do not want to be fooled unnecessarily, or strategically, but they want some amount of change over time. This is true for law as it is in private markets. Similarly, most employees do not really want to know their future wages, or even their future responsibilities, with certainty. Most employees are better off if future wages depend to a degree on individual performance, industry success, competition from other employers, and so forth. Some degree of change is healthy. Even when wages do not much depend on individual performance, for fear that employers will play favorites or that workers will bear various risks, some change is desirable. No union bargains for a contract that will last for twenty years.

Much the same is true for financial investors. Roughly speaking, they can invest on fixed or fluid terms. In the long run, buying shares in a company, and absorbing various risks over time,

generates a higher rate of return than does investing in fixed securities like conventional bonds. Many governments offer bonds that protect against inflation (though inflation is a source of unpredictability that is at least partly in the government's control) and a subset of investors pay a price for such certainty. Most investors want some level of risk, at least in segments of their portfolios. They are rewarded for taking risk, and their choices are not very different from the claim here that some uncertainty about future laws is desirable for most people, whether we think of them as private actors or as citizens who "own" the government. Complete predictability in the private and public spheres is probably undesirable. Risk-averse people can usually pay for more predictability, but it is nearly impossible nor desirable to obtain complete predictability.

Voters as Investors who can Choose Levels of Risk

Voters, and residents who are subject to taxation, can also be thought of as investors. Some might distrust the content of future laws, and this opposition to change can often be overcome by various kinds of "grandfathering." This technique often promises people that they can rely on the rules in place when they make significant decisions. At the same time, there is a political-economy aspect to this kind of promise. Those who know that law will change only for new entrants, are inclined to favor things like higher taxes or other changes that apply only to later or recent arrivals. Current residents will vote for higher property taxes if these taxes do not apply to most existing homeowners. The more one expects to sell property in the near future, the more one might vote against the tax increase because property values are likely to decrease, as potential buyers see that they carry the burden of higher taxes. This is the case even if voters think that higher taxes are good because they enable increased services. People would rather someone else paid the taxes while everyone enjoyed the improved services. One important solution to this problem is a set of user fees, rather than taxes that loosely fund government programs. But user fees can be difficult to administer, even as it introduces reductions in utility because of unequal abilities to pay.

At times the reverse is true. A government might want to attract new businesses by promising lower taxes, but it cannot afford to lower taxes for those already locked into the jurisdiction. All these changes in law over time can be good or bad depending on the quality of the lawmakers, and their interest in imposing socially efficient laws as well as socially efficient payments, often in the form of grandfather clauses or promises about the future.

Finally, political parties offer voters some certainty. A party can change positions over time, usually responding to polls or the changes supported by other parties eager to gain support, but a party label provides information about what voters can expect even, or especially, in the event of changed circumstances. In some countries new parties can be formed rather easily and this allows a party to imitate one that is familiar, and then to offer variation with respect to a single issue.

Predictability and Inequality

Taken to something of an extreme, many such strategies involve forms of inequality. There is often a tradeoff between predictability and discrimination. Imagine a law that announced that in two years' time, property taxes on new houses worth more than x , on annual incomes greater than y , or on new business establishments will be double than what they are at present. Imagine also that these promises will be kept, and that people have every reason to think that the government keeps

its promises. Lawmakers might also indicate how these tax revenues will be spent. These kinds of promises make law quite predictable – a feature favored by those who think law should offer certainty – but they also raise problems of discrimination as well as public-choice concerns.

The discrimination problem, or promise, is obvious. For example, most retired workers need not fear increased income taxes, but young workers will pay for increased government services, or they will subsidize services enjoyed by retirees. Imagine, for instance, that Social Security benefits are suddenly tripled at the expense of the national treasury (and eventually the proceeds of increased Social Security taxes) or the prospect of government borrowing. The beneficiaries of such a change are identifiable and are relatively easy to organize and bring about such changes.

Forgiving student loans is another example of discrimination of this kind, though it favors younger rather than older citizens. There are numerous examples and prospects of this kind, and they show the relationship between predictability (or in this case unpredictability) and discrimination.

By and large, such large-scale discriminatory changes are not regularly observed, even though beneficiaries can be organized, because there are also identifiable losers who exert political pressure against these changes. A discriminatory benefit is more likely to come into being when the losers are hard to identify as might be the case when the cost is passed to a future generation through government borrowing. In that case, the source of revenue to pay future interest rates is presently unknown. But in some of the cases described here, the winners as well as the losers are relatively identifiable, and resources will be spent lobbying the government or electing the reliable officials who position themselves to be in favor of, or against, these kinds of discriminatory proposals.

Interest-group expenditures can be reduced if a legal system reduces the opportunity for change by requiring various forms of equality. Thus, a country might respond to internal disagreement about the rate at which immigration should occur (not to mention the characteristics of immigrants to be favored) by offering win-win, Coasian, bargains. If more immigrants were accepted only if they promised, or could be required, to live in certain states, where residents favor immigration perhaps because they need more laborers, or to pay 15% higher federal (or state) income taxes for the next decade or two, many more voters would likely favor increased immigration. But it is likely that constitutional or other law would ban these “bargains,” and require more predictability and even-handedness in law. There are many reasons for these egalitarian norms (though they are ex post rather than ex ante, for no country offers complete equality between citizens and prospective immigrants) and they go far beyond the scope of this Chapter, but the idea here is to emphasize again that predictable future law is related in a variety of ways to concepts of non-discrimination.

The larger point is that change is certainly not always bad or undesired by those subject to it, but instead that it is predictability itself that is often, and perhaps more often, undesirable. Predictability attracts interest groups in favor of proposed changes, but in many cases it also identifies losers who will try to block the proposed changes in law. The important thing is that the government’s plans should be efficient, or otherwise widely welcomed, and that is far more important than predictability.

Competition Among Jurisdictions

The idea of some positive rate of change is found in many other markets and organizations. First, there is the famous idea, associated with Charles Tiebout, of efficient sorting by way of competition among jurisdictions, and especially local governments. (Tiebout 1956) This is especially convincing and attractive when it concerns residents who have the means of relocating from one jurisdiction to another. Citizens who want more parks and higher salaries for teachers might live in Town A, while those who do not want public parks can live in Town B. Meanwhile, jurisdiction C might provide very few public goods, while offering lower taxes. Town D may rely on user fees, though these come with transaction costs. Residents can choose among these four jurisdictions much as they can choose different makers of automobiles or different restaurants. If some residents no longer want the mix of goods and charges offered by a town, but they are sufficiently small in number that they cannot vote for a different mix, these residents can leave – and they can do so at a profit if they can find buyers who want to pay higher prices for houses in the town from which some wish to depart. The new buyers might also leave towns and homes at no cost or even at a profit, because other buyers like the mix of goods found in their earlier locations. Competition and a kind of stability can be good for everyone.

Returning to predictability and optimal legal change, in this happy model it is sensible for each town to offer a fairly predictable mix of goods and taxes. Again, some change will be good, as tastes and demographic details change. But for the most part, just as Lexus offers a certain kind of automobile, a town has reason to become reliable for offering a certain mix of services. Residents can be expected to oppose change after buying into a given mix.

This perspective suggests an interesting relationship between jurisdictional competition and legal certainty. The more people can shop among jurisdictions, the more we should expect variety in their laws so as to appeal to different “buyers” who are sorting themselves. In contrast, the more difficult it is to relocate, the more the advantages of sorting are increased if a legal system is reliable and maintains features that people can observe when first locating. It is easier to relocate across towns when one can commute to the same job; it is far more costly for most people to relocate across nations both because of restrictions on immigrations as well as language, family, and cultural differences. The law of a nation should be expected to be more stable and predictable than the relevant laws of nearby towns within the nation. It is easy to provide examples in support of this assertion, but a serious empirical test is difficult to design and beyond the scope of this Chapter. In the private sector this intuition is easy to see. Investors can move easily from one stock to another and, within limits, corporations feel free to undertake changes in direction. If stability is required of them, it is because lenders who are promised fixed returns must guard against the corporation’s taking on increased risk at their expense.

Stability with Respect to other, Non-Legal Rules: Religions and Universities

This Tieboutian idea applies not just to law and conventional markets but also, in unexpected ways, to other organizations.

Consider the structure and reputation of most religions. They too can be understood as operating in a kind of market. A person can move (with some costs) from one religion to another, and each

offers things that attract people to churches and to value systems. The leaders might gain adherents with good messages, like salvation and good music, and at the risk of offending readers, this might not be so different from how new and used cars are sold. There are, to be sure, differences between religions and automobiles. One can buy a used car, can rent a car, and buy and then sell two cars. In contrast, an adherent to a religion is normally precluded from adhering to multiple denominations, and one cannot sell one's spot or retrieve contributions that in retrospect are regarded as regrettable. To the extent that one is limited to a single religion, belonging to a religion is unlike automobile ownership, and more like the Tiebout model of residence in a given jurisdiction. Once again, over time each religion, and indeed each pastor or other religious official, has a "market" reason to adopt a brand and to avoid rapid and unexpected change. If the religion welcomes same-sex couples or allows women to become pastors, it will normally do this at a slow pace, perhaps observing responses to its altered brand, and once it makes such a change, it is very difficult to return to previous dogma, if only because frequent change is inconsistent with the sense that the leader knows what is moral or what is the will of a higher power. Indeed, serious change might require the formation of a new sect. It is unsurprising that many religions have divided and sub-divided over time, just as new towns offer slightly different packages of services than adjacent towns.

The same is the case for many aspects of universities. They also develop brands. MIT might be known for science, mathematics, and economics, and of course the branding is especially reliable because of its investment in tenured faculty, single-purpose laboratories, and restricted contributions to its endowment. Donors tend to like the university to which they went, so that MIT, as well as most liberal arts colleges, is disinclined to change much and risk losing its loyal donors. In recent times, a similar story can be told about university speech rules. Some universities are known for free speech, though perhaps within limits, while others are known as very progressive along other dimensions. This is an argument in favor of some responsiveness to students and donors. They too choose. If a university surprises them by changing its rules, as the University of Pennsylvania seems to have done in 2023, with respect to students adhering to one religion, speech codes, and admissions, it is unsurprising that some donors took their gift-giving elsewhere.

Finally, some products and practices remain quite stable over time, at least compared to automobiles. Some corporations attract investors by specializing in a product. At a more abstract level, some restaurants and even countries maintain their foods over time and become known for continuity. Some legal systems provide predictable dates for elections, even though there are costs as well as benefits to such certainty. At a scale larger than a single business or chain, pasta is consumed every day in some countries, and rice is the predictable food in others. National anthems take hold, and are often legally enshrined, in large part because they are predictable and easily shared. The branding, or predictability has several explanations, including history and climate, but it is noteworthy that it is useful even though many consumers prefer variety rather than predictability. Some people take the same vacation year after year, while others like variety. These examples point to the development of individual preferences, and that is distant from most arguments for predictability in law.

Conclusion

The story here has been one about the tradeoff between predictability and the value of change. Within this tradeoff is the likelihood that sub-groups will be treated unequally unless law steps in to prevent this kind of discrimination. Complete predictability is both impossible and surely unattractive. The value of predictability in law, as well as occasional change, might be loosely related to personal preferences, but the argument in this Chapter has stressed the efficiency of various rates of change.

References

Becker, G.S. (1968). "Crime and Punishment: An Economic Approach," *Journal of Political Economy* 76: 169-217.

Franzoni, L.A. (2024). " _____ "

Tiebout, C.M. (1956). "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64: 416-424.