

**From Helmets to Savings and Inheritance Taxes:
Regulatory Intensity, Information Revelation, and Internalities**

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I. Introduction

It seems obvious that regulation requires the revelation of private information, because legal interventions can do harm when they are designed with insufficient information about individuals' preferences and other variables. Nevertheless, academic observers and lawmakers often identify a market failure or constituent need, and then proceed to favor a specific legal intervention as if its intensity were of little significance. The right intensity, or even a level that does more good than harm, can be difficult to determine. It is apparent that regulation is more likely to improve social welfare when its intensity reflects accurate information about the costs and benefits it generates. At the same time, if revelation imposes emotional or other costs, then welfare can be improved if law camouflages true preferences.

One aim of this paper is to add self-revelation to the calculus surrounding government intervention. Consequently, the focus is on internalities—that is, the class of problems where intervention might be sought to deal with problems of self-control, broadly defined. Internality-driven interventions expose the need for one kind of information revelation because the essence of the interventionist claim is that the present self seeks to constrain the future self. But how do we evaluate the costs imposed on the future self and how do we assess the benefits to either self? Aspiring nonsmokers, for example, might seek help in the form of taxes or bans on cigarettes, but how do we know how high or extensive those restrictions should be?

Part II begins by comparing the revelation problems inherent in government spending on public goods with those attached to interventions in the presence of negative externalities, and collective action problems more generally.¹ The idea is to establish a

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¹ I do not mean to exhaust the list of government interventions that would benefit from information revelation. I have previously tackled the problem of valuing assets, for tax and other purposes, and also the extraction of information about preferences with respect to government spending and local information where taxpayers might have better information than central planners. See Saul Levmore, *Self-Assessed Valuation Systems for Tort and Other Law*, 68 *Virginia Law Review* 771 (1982) (information revelation through self-assessment for property taxes, tort damages, and appraisal in corporate law); Saul Levmore, *Taxes as Ballots*, 65 *University of Chicago Law Review* 387 (1998) (information revelation mechanisms for campaign finance, foreign aid, and nonprofit organizations). Indeed, my more recent work on plea bargaining, stipulated damages, information markets, voting, and jury aggregation all contain elements of information revelation – as is true for many other authors – suggesting ubiquity, as well skepticism that any one approach to mechanism design will be useful throughout law. The mechanism design literature normally frames the issue in principal-agent terms, so it may be useful to note that the present essay focuses

framework for evaluating the likelihood that internality-driven interventions will be superior. Part III focuses on internality problems and suggests that, with information revelation in the picture, the case for helmet laws is stronger than that for more intensive smoking regulation or more forced savings. Part IV detours to make a novel argument for inheritance taxes. In all these examples the strategy is to begin with a plausible case for legal intervention and then focus on mechanisms for extracting enough information about preferences to support some particular regulatory intensity. I suggest that while the literature on mechanism design has succeeded in adding incentive compatibility questions to assessments of efficient resource allocation,² there is a third leg on which interventions must stand. It is often important to think also about interest compatibility, which is to say feasibility in a world of transaction costs and competing interest groups. As Part V concludes, regulatory aspirations must be incentive compatible, but they must also take into account the political coalitions necessary for the enactment of intensity-determining rules. This political, or interest compatibility, factor is what makes the foundational elements of mechanism design difficult to cut and paste on to concrete legal problems.

II. Legal Intervention, Weak Revelation, and Cost-Benefit

A. Public Goods and Externalities

It is hard to generalize about public goods and information revelation because both labels include disparate problems.³ There is agreement that non-rivalrous and non-excludable goods can be efficiently provided, but not by standard markets. In principle, the government (itself a public good of size to be determined) should produce or contract for the good in question up to the point where the marginal cost of the last unit is equal to the sum of the prices that all consumers would pay for it. If one additional unit of clean air or one more navy vessel can be produced for 100 and there are enough persons who value additional clean air or national defense at 1 or 2 each so that the sum of their reservation prices exceeds 100, then the government should go ahead and supply this marginal unit.

Many of the embedded analytic problems will be apparent even to readers unfamiliar with the considerable literature. The government has no ready access to information about citizens' true valuations, and the latter will probably have incentives to overstate or understate their demands. Moreover, true responses depend on after-tax

on information a principal (or the government on behalf of a set of its principals) seeks about the future self.

² For an accessible overview, see Roger Myerson's Nobel Lecture at http://www.nobelprize.org/nobel_prizes/economics/laureates/2007/myerson_lecture.pdf

³ Even Wikipedia, attributing a remark to Steve Shavell, notes that the public goods label applies not to many things amenable to similar corrective solutions, but to "an infinite series of particular problems (some of overproduction, some of underproduction, and so on), each with a particular solution that cannot be deduced from the theory," but that depend on facts and circumstances. See http://en.wikipedia.org/wiki/Public_good

income, but the government needs to know the size of its public goods investment before it announces tax burdens. Those tax burdens will then impose inefficiencies that ought to be taken into account in determining the optimal level of public goods. In addition, there are few if any pure public goods; expenditures on clean air and national defense do not provide equal benefits to every part of a country (and, as a further complication, individuals will migrate to capture benefits); even lighthouses and television broadcasts can exclude those who do not pay; and transaction costs may be low enough to create groups and then markets for some non-rivalrous goods.

If we simply ask individuals to describe their demand for national defense (hoping to aggregate and, at the margin, compare with marginal costs), we know that many will over-report, much as they would overcrowd a commons. Others will strategically under-report in order to influence the aggregation. If we control for the over-reporting problem by setting individual tax rates as a function of this individually reported demand, under-reporting will be yet more of a problem. In some contexts, information can be deduced by prices in other markets. A person with an expensive air filtration system at home has revealed something about the value she attaches to clean air. But good clues are uncommon, and they tell us more about market prices than the individual's true valuation. Simple tricks do not help much. For example, randomly alternating the two preceding strategies, and announcing that a different tax base will be used to execute the first strategy, is surely better than either strategy alone, but it is likely to leave respondents over or under-reporting. Another strategy is to ask many people about demand, and then randomly select one response as law. Individuals might honestly report (even though there is a tiny chance that any one response will be selected) but then we need to extrapolate from that one response to the community's aggregate demand. If we simply multiply by the population, we will be far off the mark unless we are remarkably lucky with our random choice. If we borrow from game theory and offer a mixed strategy of aggregation and individual selection, we get less honest revelation and inadequate aggregation. We might also offer an assurance contract for a set of assets, encouraging each respondent to pledge according to his preferences (with money returned if the goal is unmet), but this works better when we are sure of the overall investment (or intensity of the intervention, as I have been calling it) in the first place.⁴

By default, perhaps, we normally ask the median elected representative, with reasonably full knowledge of tax methods and burdens, to decide on the aggregate expenditure. The system is responsive to interest groups and thus perhaps to intense

⁴ See Alexander Tabarrok, *The Private Provision of Public Goods Via Dominant Assurance Contracts*, 96 *Public Choice* 345-62 (1998) (describing scheme in which beneficiaries make voluntary contributions to a public good and receive money back plus a premium if the stated goal required for the good is unmet).

preferences, and it is fairly path dependent; expenditures and commitments have impact well beyond election cycles.

In other settings, the legal system faces comparable information problems and reacts by delegating authority to agencies, subject to some democratic oversight. The problem is framed as one of cost-benefit analysis but it is not much different from the national defense scenario. One can gather cost information about various methods (and intensities) of pollution abatement, for example, but then we wish we knew the tradeoffs or preferences of the population with respect to costs and benefits. Again, individuals who do not expect to pay for abatement have reason to exaggerate the value of a cleaner environment. Here cost-benefit analysis camouflages the role of the median voter. When an agency values lives saved or hours expended, it uses an average valuation, or derives the values from market data such that an average or marginal participant's behavior is the lodestar.⁵ It must then multiply that lodestar by the number of people benefited or burdened. Again, therefore, it seems too difficult to aggregate across heterogeneous individuals in order to provide the right level of the public good. Put differently, law reflects an assumption that the distribution of valuations is completely unremarkable or even symmetrical around the lodestar. Note in passing that it may be just as well if this lodestar is the median person; if not, the political solution in terms of the median voter will always be at odds with the agency determination, and there will be pressure to relocate decisionmaking. On the other hand, the agency is likely to be better than the median voter-representative, or veto-equipped President, when it comes to taking future generations' interests into account. None is free of the temptation to burden future generations with debt.

It becomes apparent that one can be fairly sure that the government should be in the business of national defense or clean air without having any confidence in recommending the intensity of this intervention. There is no reason to think that nonintervention would be superior, although a superficial interest-group analysis might suggest that there is too much military spending and too little environmental law (because of the preferences advanced by easily organized interest groups). For present purposes, the point is simply to see that it is difficult to get the intensity of a legal intervention right. This difficulty provides a perspective with which to evaluate proposed interventions in other settings.

III. Internalities and Revelation

⁵ An interesting problem is that the use of market information about such things as wage premiums in high-risk jobs, used to assess value of life for cost-benefit analyses, reveals information about the marginal worker. It would seem that the average worker should produce the number to be multiplied. For an emphasis on average risk tolerance, see W. Kip Viscusi & Joseph E. Aldy, *The Value of a Statistical Life: A Critical Review of Market Estimates Throughout the World*, *The Journal of Risk and Uncertainty*. 27:1, 5-76 (2003).

A. Helmet Laws and Collective Action

If helmet laws were legislated to control externalities, a lawmaker would, ideally, induce information revelation in order to determine the activities or conditions requiring helmets, as well as the quality (expense) of helmets required. The conscientious regulator would want to know individuals' preferences, including discomfort or other costs of wearing helmets, as well as benefits expected from increased safety. Individuals are likely to be heterogeneous with respect to benefits and costs.

But consider the possibility that helmet laws (or contractual requirements) are driven by internalities. A skier, for example, may recognize the safety value of a helmet but decline to acquire one because it will look uncool. Perhaps it will signal a lack of daring, or disrupt a desired après ski hairstyle. If many skiers feel this way, they can be made better off if a third party, or law effected by secret ballot, requires helmets. So long as a critical mass dons protection, the negative signal will disappear. In turn, the third party might be an entrepreneur (the ski area) or the government, aiming to satisfy these constituents.⁶ This government intervention in the face of a collective action problem is relatively easy to bring about, because no interest group will oppose the regulation sought by, or on behalf of, the aspiring helmet wearers.

The helmet example, which might just as well have been about bicyclists, motorcyclists, or hockey players,⁷ is especially interesting because the government must decide very little in the way of regulatory intensity. If, for example, a jurisdiction requires helmets for motorbikes, it can allow riders to decide whether to buy and wear inexpensive helmets, offering little protection, or more substantial helmets. There is a cost imposed on those who really do not want to wear any helmet, and who know their future selves well, but who lose out to the interest group in favor of helmets. It is thus noteworthy that with a low level of enforcement, the government can accommodate this group reasonably well. It needs just enough enforcement to overcome the collective action or externality problem faced by many skiers or riders; indeed, once helmet wearing becomes common, the law can tolerate people who really prefer not to wear a helmet. It is plausible that this describes the state of affairs in most jurisdictions that mandate helmets.

In sum, if we think of helmet laws as imposed not because of paternalism or externalities, but rather as examples of self-help, then it is a small leap to the conclusion

⁶ It is an externality because the skier wants help with self-control. There is also an externality involved in the sense that the skier wants to subsidize or otherwise encourage others to wear helmets, because their behavior casts an external benefit on the skier.

⁷ Thomas C. Schelling, *Hockey Helmets, Concealed Weapons, and Daylight Saving: A Study of Binary Choices with Externalities*, *The Journal of Conflict Resolution*, Vol. 17, No. 3, p. 381 (Sept., 1973) ("One player summed up the feelings of many: 'It's foolish not to wear a helmet. But I don't—because the other guys don't. I know that's silly, but most of the players feel the same way. If the league made us do it, though, we'd all wear them and nobody would mind.'")

that legal intervention in the form of a modest mandate enables revelation, which is to say self-revelation. Some helmet wearers might have known all along that they preferred helmets (though not enough to overcome the collective action problem of unfashionability or peer pressure) while others might only learn about their own preferences when the collective action problem is cleared away. In turn, the government does not need to decide on a single kind of helmet in the face of heterogeneity. By setting a minimum requirement it can free individuals to determine the sort of helmet they wish to wear. In turn, the difficult problems associated with deciding the current intensity of regulation, discussed in Part II, largely disappear because individuals self-regulate in part and the government does not seek to assess the proper intensity for the median voter.

B. Smoking and Regulatory Intensity

I have argued elsewhere that cigarette taxes can be understood as enacted on behalf of aspiring nonsmokers in search of internality control.⁸ These aspirants likely require an alliance with other groups, including perhaps persons who expect to benefit from cigarette taxes, who fear that they will bear a disproportionate share of future health care costs imposed by smokers, or who have a disproportionate interest in selective smoking bans in addition to taxes. A political entrepreneur might facilitate the unstated alliance. For the purposes of the present paper the question is whether either part of this theory—internality or public choice—casts positive or normative light on the intensity, or extent, of smoking bans or taxes. Plausible ex post (perhaps even just-so) stories are easy to construct. For example, if cigarette taxes developed as described, then we might “explain” increases in intensity of regulation from the perspective of two critical interest groups. Aspiring nonsmokers themselves will have started with low taxes and limited bans in order not to arouse more opposition than necessary. When the restrictions that are enacted cause some but not all to cease smoking, continuing but still aspiring nonsmokers might work harder for more dramatic incentives. Meanwhile, some commercial interests which opposed smoking bans but lost in the earlier round, will now be more likely to favor the extension of bans to their competitors in order to eliminate any competitive disadvantage. The argument assumes that taxes and bans are difficult to withdraw once enacted. For example, if smoking was first banned in restaurants, restaurateurs might join with aspiring nonsmokers to extend the ban to bars. The smokers have, perhaps, revealed to themselves and to the government that the first-level tax did not do the job. They might now work harder or trade something else for a higher tax. Meanwhile, restaurateurs, the commercial interest injured by the first round tax, will be eager to extend the ban to competing businesses that are not yet burdened by law.⁹ The process can be expected to

⁸ Saul Levmore, Internality Regulation Through Public Choice, 15 *Theoretical Inquiries in Law* ___ (2013).

⁹ The process is explored in Saul Levmore, Interest Groups and the Problem with Incrementalism, 158 *University of Pennsylvania Law Review* 815 (2010).

continue until opposition from non-aspiring smokers and commercial interests is too strong for the next level of intensity. In the case of smoking bans, the divide-and-conquer, or incremental, strategy, alongside that of self-revelation, may not stop until smoking is banned in all commercial establishments, in transportation facilities where smokers could be effectively segregated, and even in many outdoor locations. The intensity of regulation fits much better with the internality perspective than it does with an externality-driven view.

Note that even if (as assumed here) many an aspirant knows best the intensity of the tax that would cause him or her to quit, aggregating or averaging these pieces of information accomplishes little. Moreover, the higher the tax the more it will be opposed by continuing nonsmokers and other interests. Aspiring nonsmokers will not therefore start out pushing for an intense set of taxes and bans because this will arouse more opposition than necessary. Moreover, other aspirants do not know what intensity they require and they might look to discover information about themselves. Similarly, the information does not permit tax differentials, whether linked to individualized information or age groups (higher taxes on young smokers than elderly smokers seems right), because arbitrage is too easy. This perspective on anti-smoking regulation says a great deal about interest group formation and internality control, but only a modest amount about information revelation. This is because it is most plausible to think of aspiring nonsmokers as wishing to quit but being uncertain, or even heterogeneous, about the incentives required to bring this about, and with what probability. Unlike pollution or saving for the future, where there is likely heterogeneity about tradeoffs and therefore desired outcomes, we imagine most aspirants as simply wishing to quit smoking entirely. They explore the power of interest group opposition, but neither they nor any regulators need to obtain much information about themselves. At most, we might add some paternalism to the picture, and say that regulators wish to take into account health effects of smoking but also its utility to the smokers themselves. The regulators do not know how much smokers wish to quit and how painful it is for continuing smokers to bear the cost of smoking outside of buildings and other nonsmoking havens. In turn, the regulators ratchet up the taxes and bans in order to learn about these benefits and costs, and they do so by observing interest group support and opposition. Either way, little would have been gained by knowing the equilibrium point at the outset.

If we focus only on those aspirants who think they know the size of the tax or other regulation that would cause them to quit, there is again no obvious regulatory strategy to pursue on behalf of these smokers. Imagine that in their strong moments these smokers would reveal their quitting prices. If each smoker could then employ a regulator to monitor the future self, and to prevent arbitrage, it would be obvious how to proceed;

there would be individualized taxes on cigarettes or rewards for quitting. But inasmuch as, in reality, the future self is capable of evading detection, the best the aspirant can do is encourage taxes and other incentives that will fall on all smokers equally.¹⁰ The single input makes these taxes easy to administer, but the detection problem makes customization—and therefore information revelation—of theoretical rather than practical interest.

In contrast, I turn now to an example of internality control that presents more pragmatic information problems, similar to those associated with many public goods and negative externalities, as sketched in Part II, but again without the need to determine the median voter's costs and benefits.

C. Saving for the Future Self

1. Private savings

Behavioral economics has stressed default rules and other means of nudging people to save more.¹¹ But how do we know that more savings is really what people want and, if they do, how will we know how much more? Framing surely matters in evaluating both words and actions, but we do not know which frame reveals "true" preferences. It is in high-income savers' interest to force or encourage others to save because impoverished elderly persons are likely to have political power or to generate sympathy, and then to bring about higher taxes on others and redistribution in favor of this group. Several generations of increasing social security benefits are testament to this perspective, though current earners might well receive less in benefits than they paid in taxes (plus interest). Savers are often stunned by the failure of others, and even similarly situated others, to save, but it is possible that the failure to save is like the decision to live in a flood zone without insurance; as long as enough people partake in the moral hazard, it is likely that they will elicit sympathy and develop sufficient political power to induce relief when things go wrong. If so, social security and tax preferences for savings (up to some level) are easily understood as attempts by one group to control the moral hazard practiced by another. Ex ante, we can describe citizens as looking to solve an internality problem, but once they have sorted into savers and nonsavers, the former group tries to influence the latter, while the latter might resist in order to benefit from redistribution later on.

Either way, the puzzle is that the encouragement and the mandate are not stronger. It is projected that millions of people will be "forced" into a lower standard of

¹⁰ It is interesting that bans, as opposed to taxes, can be tailored to subgroup preferences, as they sometimes were in workplaces before the incrementalism process rolled along.

¹¹ John Beshars et al., *The Importance of Default Options for Retirement Saving Outcomes*, National Bureau of Economic Research (University of Chicago Press, 2009). Evidence of savings behavior also provides clues. Thus, married couples save considerably more than cohabiting couples, and much more than people who live alone. On diversification and other grounds this may seem surprising. It is tempting to ascribe this behavior to teamwork, in accord with the discussion of weight loss programs, and in both cases the driving force may simply be the likelihood that there is open discussion about the aspiration. The discussion in the text sets these design issues aside in order to develop ideas about information revelation.

living after retirement (even where it is voluntary, as under U.S. law). Savings can therefore be understood or at least entertained as an internality problem. One problem, if not solution to the puzzle, is that nonsavers do not know how much they have in common with one another. The intensity of regulation to undertake on their behalf is not obvious. Many smokers want to quit entirely, but aspiring savers are more heterogeneous.

The most obvious strategy is to ask people how much they wish to save, and perhaps even to extract contracts or votes at their strong moments. One small problem is that respondents may differ in their treatment of home equity and their assessments of future social security and health care benefits. A more serious problem with this approach is that an overwhelming majority of respondents say they ought to save more,¹² and yet their contemporaneous actions are at odds with their responses. It is conventional, at least for economists, to insist that people's actions speak louder than their words, though this of course assumes away the internality problem. In any event, there is an obvious information revelation issue; a large majority says it wishes to increase savings, but neither that majority nor any government acting as its intermediary knows how much more individuals wish to save. Regulatory intensity depends on unrevealed information.

It is possible to collect information from people who resemble the future selves, or beneficiaries. We might ask retired people in their seventies how much, in absolute or percentage terms, they wish they had saved in their thirties and forties. The responses might be too high, inasmuch as the consumption enjoyed earlier in life will now seem distant and abstract.¹³ We might try to ask more specifically about the tradeoff engaged in many years earlier between savings and home buying, for example. If a great majority of seventy-year-olds say they wish they had lived in smaller houses and had saved more, that might seem relevant to the decisions made by, or on behalf of, current thirty-year-olds. The strategy is weakly analogous to an internality-driven view of speed limits or driving ages, or even personal bankruptcy. Few drivers are pleased when caught speeding, and it is the rare fourteen year-old who agrees that she or he should be denied the right to drive, even though these regulatory interventions likely reduce danger to future selves. But many drivers would want speed limits and minimum-age requirements to control their own children, even though they value their children's time and pleasure. We can think of these restrictions as internality as well as externality controls, and where the former are concerned it might be more useful to rely on parents as proxies for future

¹² Douglas B. Bernheim, *Do Households Appreciate their Financial Vulnerabilities? An Analysis of Actions, perceptions, and Public Policy*, (Mimeo, Princeton University, 1994). See also George-Marios Angeletos et al., *The Hyperbolic Consumption Model: Calibration, Simulation, and Empirical Evaluation*, *Journal of Economic Perspectives*, Vol. 15, No. 3, p. 47 (Summer 2001) ("A 1997 survey found that 76 percent of respondents believe they should be saving more for retirement.") (citing Steve Farkas and Jean Johnson, *Miles to GO: A Status Report on Americans' Plans for Retirement*, (New York: Public Agenda, 1997).

¹³ If responses are biased by ex-post justification, then we will hear little regret.

selves and as a check on over-optimism or other self-control issues. Speed limits and bankruptcy laws (like cigarette taxes) cannot easily be customized, even though one's proxy has particular information, but forced savings can be individualized.¹⁴ One can barely imagine a primitive information revelation scheme, in which parents determine the forced savings (and conditions of withdrawal) applicable to their children. We might disallow withdrawals for the benefit of these fiduciaries.

There are obvious drawbacks to asking an older generation to decide the intensity of regulations applied to the next generation. There may be hindsight bias depending on one's circumstances. These circumstances are in turn the product of government programs that might themselves have evolved differently if people had saved more (or behaved differently along other dimensions). External factors, including technological change, may depreciate the value of information obtained from an earlier generation. Indeed, there may be settings where Generation II's future selves are best revealed and regulated not by the preferences or judgment of their elders in Generation I, but by the predictions of their tech-savvy offspring in Generation III.

For some nonsavers, there may be a collective action problem of the helmet kind. People may consume rather than save in order to keep up with their peer group. The problem may be one of appearances, of group pressure, or of interdependent utility. X spends on food, drink, and hobbies because Y and Z do so; if all saved more and consumed less, X would enjoy low-cost activities with these friends, and might later on enjoy traveling with them during their retirement years. Again, government intervention might elicit X's true preferences, with the added idea that the regulation might enable X, Y, and Z to reveal their preferences to one another.

Intervention might therefore aim to force (or encourage) individuals to learn about their future selves, as well as the preferences of their peers. Imagine that the government required, or made irresistible, a higher savings rate for all persons between ages thirty and thirty-two. At that point the rate would rise, and after another two years increase again. During these experimental years, the forced saver would receive information showing how the forced rates would accumulate savings over the next thirty years if they were voluntarily continued. At the end of the entire experimental period each person could choose a future savings rate, ranging from the level associated with social security (or perhaps lower) to the highest level experienced during the last period of experimentation. The idea is that people might discover that savings reduces stress, that they can indeed live without constantly consuming more than they earn, or simply that friendship need

¹⁴ In the case of bankruptcy law, there is an externality on one's intimates and business associates but also an internality related to savings, risk taking, and the future self. In any event, different individuals in their strong moments would want different discharge (and other) rules.

not be an arms race.¹⁵ We might prefer to call this “learning” rather than information revelation, but inasmuch as one is likely to learn about interdependent utility and the preferences of others, the two labels seem jointly appropriate.

Forced self-revelation with respect to savings raises two questions, constituting threats to any internality-driven savings plan. The first is that the future self can undo the precommitting, or forced, earlier self’s decisions by borrowing. Someone who agrees in a strong moment—or following the experimental periods suggested here—to save more can, in weak moments, use credit cards and other devices to undo this savings. We might expect more substitution of this kind when the savings is forced than when it is merely nudged, though there is scant evidence for this intuition.¹⁶ Fortunately, most lenders require collateral to make substantial loans, and then make other loans only for relatively short periods of time. Education loans are exceptional, but these are not normally forgiven in personal bankruptcy.¹⁷ A more complete and dramatic experiment would teach individuals and peer groups about their contingent preferences by putting them through experimental periods with different ceilings on uncollateralized debt. Two years without credit cards might provide valuable information about one’s alternative, future selves. Credit card issuers would need to require evidence of an applicant’s age and would then know to check a data bank in order to prevent borrowing beyond the specified ceiling. There are reasons to coordinate this self-revelation regarding borrowing with that regarding savings, but some mixing and matching is possible. Individuals who learned that they wanted restrictions on future borrowing would need the government’s help in enforcing these restrictions on their future selves, and thus on lenders. It is somehow easier to imagine self-revealing individuals committing to future savings than to future

¹⁵ Conventional wisdom is that people who expect to live longer save more. Allowance is made for the confounding factor of illness on both savings and mortality. Unrecognized, apparently, is that the causation can go in the opposite direction. Savings might reduce stress, and stress might cause health problems and contribute to mortality. This is the driving force behind controversial and contested claims about inequality and good social outcomes for all. Richard G. Wilkinson & Kate Pickett, *The Spirit Level: Why More Equal Societies Almost Always Do Better* (2009). In turn, forced savings might extend lives.

Note that the experiment is truer to the preceding discussion if friends are of the same age; ideally X, Y, and Z will experience forced savings and reduced consumption at the same time. This is a reason to force savings at a younger age.

¹⁶ Compare Shlomo Bernartzi & Richard H. Thaler, *Behavioral Economics and the Retirement Savings Crisis*, *Science Magazine*, March 8, 2013 at 1152-1153 (stating that employees who participated in the “Save More Tomorrow” retirement savings plan boosted annual savings by \$7.4 billion) with Raj Chetty et al., *Active vs. Passive Decisions and Crowdout in Retirement Savings Accounts: Evidence from Denmark* (Nat’l Bureau of Econ. Research, Working Paper No. 18,565, 2012), <http://www.nber.org/papers/w18565> (pointing to a study showing that when employees are automatically enrolled into a retirement savings plan, 85% of that savings is new, rather than shifted).

¹⁷ See John A.E. Pottow, *The Nondischargeability of Student Loans in Personal Bankruptcy Proceedings: The Search for a Theory*, Public Law and Legal Theory Working Paper Series, Working Paper No. 72 (March 2007) (citing 11 U.S.C. § 523(a)(8) (2005)); see also the US Department of Education’s description of the limited cases in which education loans may be discharged in bankruptcy, online at <http://studentaid.ed.gov/repay-loans/forgiveness-cancellation#discharge-in>.

restrictions on borrowing; savings plans may be for thirty years, but borrowing restrictions will likely be politically palatable only if they are of shorter duration. In any event, internality-driven borrowing restrictions require significantly more law than do forced savings plans, though they are only necessary to the extent that forced savers will indeed borrow to offset their savings.

Internality control with respect to borrowing, rather than net savings more generally, might be driven by the familiar collective action problem of positional goods, which might not be limited to keeping up with one's friends.¹⁸ Everyone cannot have the nicest car on the block, and the quest for position is wasteful. One way to slow the arms race is to tax luxury goods, and another is to restrict borrowing. These interventions risk imposing severe inefficiencies, but the point is that they might do far more good than harm. Again, law might be seen as prepared to intervene on behalf of those who fear the arms race, though the proper intensity of such an intervention is difficult to discern. Periods of forced experimentation, once one has the means to spend, might be a good way to get at the collective action problem without imposing enormous efficiency costs. The positional goods perspective must not be oversold; those who save might simply spend more in the future on positional goods, so that forced savings simply encourages a tradeoff between an arms race now and another, equally wasteful one, in the future.

The second point returns us to the potential collective action problem among nonsavers, who may plan on being rescued by savers or by a younger generation, perhaps through increased social security benefits. From an *ex ante* perspective this, too, is an internality problem, as the obvious but elusive solution is a credible commitment by the government not to raise social security benefits in the future. Of course, the more citizens sign on to forced savings plans, the more formidable the interest group that will likely oppose rescuing nonsavers in the future.¹⁹ As such, internality-driven savings plans have some promise—even if they are weakened by the ability of the future self to borrow as well as to extract payments from those who have saved and are in a position to redistribute.

2. Public deficits

From a public choice perspective, the notion that individual savings and borrowing reflect a problem of self-control will seem of minor significance compared to the political failures associated with public spending and borrowing decisions. Organized interest groups are understood to push for expenditures that benefit them and to do so at the expense of widely dispersed taxpayers who are less likely to organize in opposition.

¹⁸ Albert O. Hirschman, *Shifting Involvements: Private Interest and Public Action* (1977); Robert H. Frank, *Falling Behind: How Income Inequality Harms the Middle Class* (2007).

¹⁹ Similarly, if the number of people allowed to live uninsured in flood zones can be decreased, it becomes more likely that flood relief will be denied later on to those who overbuilt and were uninsured, simply because their interest group will be smaller, and those who paid for insurance will resent payments to the uninsured. In turn, yet fewer people will risk the moral hazard.

The best strategy for a group that wants a particular public expenditure is to see that it is financed with borrowing; the losers are then not only dispersed but also unidentifiable, inasmuch as it is unclear who will bear the future tax burden associated with deficit spending.

There is much more that could be said about this phenomenon, but inasmuch as the aim here is to explore the interaction between information revelation and internalities—and there is little reason to think that the central problem is missing information about how citizens view deficit spending—I simply note that deficit financing can also be understood as an externality and collective action problem. If taxpayers could all cease forming interest groups that pushed costs onto the vulnerable future, they might all be better off. At the state and local levels, there are forces that bring on balanced budget requirements, but these strategies for self-control and interest-rate reductions are easily circumvented. The problem is not so different from that faced by the individual contemplating his or her future self with inadequate savings, and the problem of intensity seems less critical. There is less need to know each taxpayer's preference about the tradeoff between current spending and future repayment.

3. Supermajority requirements for externality controls

The legislated reactions to many of these externality problems have a common anti-libertarian feature. If, for example, young citizens are forced to save more, even for an experimental period, some citizens will be unambiguously worse off. If helmets are required, there will be some riders and skiers who really do not want to wear them, and for reasons unrelated to the collective action problem affecting others. A majority or organized group may bring about self-help legislation, but it is also likely to impose burdens on similarly situated persons who do not share in the aspirations of the influential group. Nor are the burdens simply wealth transfers. Cigarette taxes may force out smokers who do not wish to quit; helmet requirements may impose on the liberty of those who want to feel the wind blow; and forced savings will restrict the freedom of persons who really want to spend now and be frugal or work harder later. Whenever law favors assisted self-control, the winners impose costs on the losers. This episodic tyranny of the majority can also be thought of as a collective action problem.

A partial remedy, or compromise, is to require a supermajority vote for an intervention that is more about an externality than a public good or externality. For example, a forced-savings plan that was voluntary (but then binding on the future self) would require a simple majority vote, but one that was imposed on an entire group might require a three-fifths vote in the enacting legislature. Such a supermajority vote guarantees nothing, but makes it more likely that aggregate benefits exceed aggregate costs. More important, the requirement would encourage the majority to work harder at developing voluntary rather than coercive plans.

Something of this kind is at work in local government law where borrowing sometimes required a referendum with a supermajority requirement; a more effective brake seems to be a debt limit framed as a percent of the local property tax base.²⁰ Sixteen states require a supermajority to increase taxes.²¹ At the federal level, there is a modern history of supermajority votes starting with the House's adopting a rule requiring a three-fifths vote for tax rate increases.²² The similarity highlights the relationship between deficit spending at the governmental level and inadequate saving, as well as other internality problems, at the individual level. In all these cases, the proffered solution is suggestive rather than convincing because categories are malleable and avoidance techniques by a determined, simply majority are numerous. As before, I do not dwell on this proposed solution because the focus here is on the relationship between internality control and information revelation.

IV. Inheritance Taxes

Warren Buffet is not the only wealthy person who claims that he should be taxed at a higher rate, whether in life or at death or both. But most people, perhaps Buffet included, try to reduce their taxes, because they prefer to leave money to heirs, to allocate resources to other beneficiaries including tax-preferred organizations, or to consume more in their lifetimes. With the right deductions, exemptions, and rates, we might expect most wealthy persons to be indifferent between income taxes and death taxes. Once limitations or progressive taxes on consumption are included, and there is integration of bequests and inter vivos gifts for tax purposes, income taxes and death taxes become substitutes; they can be seen as different forms of wealth taxation. Indeed, with sufficient polishing, a consumption-centered tax can also be interchangeable with forms of income and death taxes.

It is plausible that there are people who seek the government's help in declining to leave fortunes to their offspring. They prefer, within limits, to encourage their descendants to make their way on their own, but they face pressure from family members, or perhaps from their future selves, not to give their wealth to outsiders. The problem for these people is that their preferences or behavior depends on that of others. Here, as with helmets and savings, law can help people reveal and act upon their true preferences. A high inheritance tax might cause family members to be less averse to the testator's transfers outside the family. If W wants to control his wealth, and wishes, even if only at strong moments, to give much of it away to selected causes, then W will incur

²⁰ Paul G. Farnham, Re-examining Local Debt Limits: A Disaggregated Analysis, 51 Southern Economic Journal 1186-1201 (1985).

²¹ See Council of State Governments, at http://www.csgmidwest.org/member_services/March2011qom.aspx

²² House Rule XXI(5)(c), H.R. Doc. No. 103-342, at 652-58 (1995), as amended by H.R. Res. 5, 105th Cong. (1997).

lower costs (with his future self and) within his own family if transfers to them would be taxed heavily. People like W might therefore openly or quietly prefer higher inheritance taxes, especially if their income or consumption tax rates will drop as a result.²³

W's likely heirs might, correspondingly, prefer lower death taxes, unless they expect the concomitant higher income taxes to decrease W's work effort enough to offset the direct benefit to them from lower death taxes. High exemptions in the estate tax can be seen as devices to buy off the voters, or heirs, who would otherwise choose a balance unlike that preferred by their elders. The volatility we experience as between income and estate tax rates might reflect the difficulty of building a stable coalition among subsets of donors and heirs—not to mention charitable organizations with their own preferences regarding the two taxes' rates. In some cases, heirs might perceive that they too should be indifferent between the two taxes, with revenue held neutral. A higher income tax will leave less wealth subject to the lower death tax, and so forth. But in other cases, the heirs are likely to know more about the testator's habits, work, and charitable impulses, and it is easy to think that a subgroup, or majority, of heirs will much prefer a lower inheritance tax. At the very least, a risk-averse testator who is uncertain about his or her longevity, and skeptical of annuity markets, will prefer to preserve assets, and will only be dissuaded from doing so by a high death tax.

A fanciful idea in the spirit of optimal taxation is to allow every wealthy individual, at age sixty for example, to choose among revenue-neutral combinations of income and estate tax rates. The goal is to capture not only more work effort from those who know they will work more if marginal income tax rates are lower, but also more gifts to charitable organizations from those less inclined to leave fortunes to their heirs. The idea is that while heirs might prefer lower estate taxes (and therefore higher income taxes), some of their elders might prefer a higher price on transmitting wealth to heirs. These donors want a higher estate tax (and lower income tax) even though others in their position, as well as their heirs, do not. The government can be understood as an indifferent intermediary, but it is more interesting to think of it as preferring charitable gifts inasmuch as these can serve as efficient means of allocating resources among organizations, or agents, that the government wishes to support.²⁴ I leave for another day the question of whether it is possible to structure a workable check-the-box system, and

²³ Inasmuch as the focus here is on the collective action problem, I set aside the mystery of people caring (or not caring) about what happens after death. See Ariel Porat & Avraham Tabbach, *Willingness to Pay, Death, Wealth and Damages*, 13 *American Law and Economics Review* 45 (2011). I do, however, imagine that a low income tax–high inheritance tax regime would do something to keep people from consuming everything in their lifetimes in order to avoid taxation. For most people, the need to forego consumption should be seen as a kind of tax. Note also that the idea in the text can be useful, because of its opt-in character, even if the estate tax more generally has a small impact on charitable giving. See David Joulfaian, *Estate Taxes and Charitable Bequests: Evidence from Two Tax Regimes* (Office of Tax Analysis 2005) (<http://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/ota92.pdf>)

²⁴ *Taxes as Ballots*, supra note 1.

whether the payoff is worth the effort of doing so. For now it is useful to see that law might again, as with helmets, allow persons to act upon, and in a sense reveal, their true preferences. The relatively high inheritance tax preferred by people like W may survive the opposition of contrary interests because it is not designed around a median voter but rather for those who opt in to it. Interest group opposition is avoided, and welfare likely enhanced, if law can be customized in this way. Note that the choice must be irreversible, or perhaps costly to reverse, or heirs will have many opportunities to get their way.

It is possible that lobbying effort by charities is something of a proxy for the preferences and expected behavior of donors. The intensity of universities or museums' reactions to the prospect of changes in income and inheritance taxes might be a useful way of judging the likely reactions of donors to different tax rates. The interest group is self-serving, of course, but if we think of donations to charities as undertaken by relatively well-informed persons, whose tax-influenced behavior is like a ballot, then we might welcome the tax laws that charities favor, at least with respect to the balance between income and inheritance taxes. The not-for-profits' perspective can be understood as a subtle product of information revelation, though not one that leads to customization of law.

V. Conclusion

It is easy to overstate the link between information revelation and government intervention. I began by emphasizing that decisions about regulatory intensity require the extraction of private information, and advanced the idea that some regulatory schemes can enable individuals to self-reveal and customize their (self-) regulation.

Even when the scope of inquiry is narrowed to laws that can be understood as driven by internalities, information revelation problems seem more disparate than alike. Self-assessment strategies work where there is little coercion and moral hazard. In most cases, however, it is hard enough to discover the preferences of one's own future self, and so much more difficult to discover another's. I have suggested that there may be some areas, like savings, where moderately coercive experiments could reveal useful information about oneself and one's peers. But such experiments, and mechanism design more generally, need to be sensitive to the political coalitions that make regulatory intervention possible.