

## Regulatory Design, Trust, and Voluntary Compliance

### INTRODUCTION

Chapter 3 explored how different regulatory approaches affect compliance motivation, particularly examining the potential for regulations to crowd out intrinsic motivation. This chapter shifts focus to examine how regulatory changes can build trust between the public and government, with particular attention to citizens' subjective experiences and perceptions of government trustworthiness.

While considerable research exists on the interaction between trust and regulation, a significant gap remains in our understanding of their causal relationship. Most existing research examines how trust influences regulatory development and implementation, or how regulations can be designed to build upon existing trust. However, there is notably less examination of the reverse relationship – how regulatory implementation affects societal trust levels. Key questions remain unexplored: Do stricter regulations increase or decrease public trust in institutions? How do different regulatory approaches distinctly impact trust? What are the long-term effects of regulatory policies on societal trust?

This research gap is particularly challenging given the lack of theoretical and empirical frameworks for predicting which regulatory interventions will effectively build trust. The challenge is further complicated by the difficulty of identifying and measuring the broader, lasting effects of regulatory choices on public response. These limitations underscore the need for more targeted research into how regulations shape trust, rather than solely examining how trust shapes regulation.

### THE EFFECTIVE VOLUNTARY COMPLIANCE PARADIGM: A REGULATORY DILEMMA

1. The effective *voluntary* compliance paradigm presents a complex regulatory challenge with multiple interrelated considerations:
2. **Population Effectiveness:** Policymakers must evaluate which regulatory tools best achieve “effective voluntary compliance” both immediately and across

different domains. This evaluation should examine not only average effects but also how regulatory interventions reshape the distribution of compliance behavior across the population. This distributional analysis is particularly crucial in voluntary compliance frameworks, where we expect to see significant gaps between intrinsically motivated “true believers” and instrumentally motivated compliers.

3. **Sustainability:** The long-term impact of these tools on voluntary compliance requires careful evaluation and is currently missing from most types of studies. This includes considering whether the chosen approach will foster or hinder a culture of self-regulation over time. Additionally, potential spillover effects into other regulatory domains should be examined to understand the broader implications of these strategies.
4. **Broader Societal Carry-Over Implications:** It’s crucial to examine how the selected regulatory strategy might affect public behavior and trust in institutions beyond the immediate target area. This holistic view helps anticipate unintended consequences and ensures that efforts to improve compliance in one area don’t inadvertently undermine other societal goals.
5. **Adaptability:** Regulatory approaches should be flexible enough to maintain effectiveness as societal attitudes and behaviors evolve. This involves considering how different strategies – from trust-based regulation to more traditional command-and-control methods involving monitoring and coercion – can be adjusted or combined. The goal is to create a regulatory framework that can respond to changing circumstances while consistently promoting voluntary compliance.

By addressing these interconnected aspects, policymakers can develop a more comprehensive and nuanced approach to promoting effective voluntary compliance. This multifaceted strategy recognizes that successful regulation isn’t just about short-term results, but also about fostering a sustainable culture of compliance that adapts to societal changes and maintains public trust.

This chapter is an important part of the book’s broader agenda. It emphasizes the importance of understanding the theory behind regulatory dilemmas, rather than relying solely on extensive data collection. While undoubtedly important, such empirical evidence only indicates regulation’s immediate impact on behavior, while neglecting the long-term response. This gap highlights the critical need for a robust theoretical framework in regulatory interventions. While empirical studies yield valuable data, they often lack the predictive power that a well-developed theory could provide. Enhancing our understanding of when voluntary compliance is most effective could contribute significantly to the development of a theoretical framework, thereby improving our ability to predict the outcomes of various interventions. While empirical studies often focus on short-term behavioral changes, theoretical approaches can better account for long-term adaptations and complex

interactions within regulatory systems. Theory allows us to model and predict outcomes beyond the immediate observable effects, providing a more comprehensive understanding of regulatory dynamics.

Building on this understanding of the limitations of purely empirical approaches, it's important to consider the multifaceted nature of regulatory dilemmas. Although there are many dimensions to the dilemma of regulatory dichotomy, current research usually treats it as one-dimensional. For example, the important work of Erich Kirchler on the legitimate versus coercive dimension largely assumes that regulatory styles are dichotomous and that voluntary compliance is more likely when approaches are balanced along this single dimension.<sup>1</sup> There are many dimensions to consider when designing regulatory tools and it is not entirely clear how each of them contributes to the level of trust they might generate.

The interaction of trust-based regulatory approaches with these domains of voluntary compliance is not cohesive. Traditionally, coercion and sanction-based regulation can be considered antidotes to voluntary compliance. However, there are many open questions with regard to these relationships; for example, it is not entirely clear whether noninstrumental motivations, such as guilt, could be considered voluntary?

One aim of this book is to create a better connection between research on regulation and research on compliance. This more comprehensive approach can enhance our understanding of the different regulatory tools and how they affect the *likelihood of voluntary compliance* (see Table 4.1).

Table 4.1 provides a comparative analysis across five policy domains to guide the decision between trust-based and coercion-based regulatory approaches. The domains examined include environmental compliance, tax compliance, commercial ethics, COVID-19 mask wearing, and COVID-19 vaccination. For each domain, various factors are evaluated, such as quality and proportion of compliance, cost of mistakes, time frame, population heterogeneity, need for social support, possibility for nudges, feasibility of sequential approaches, alignment with intrinsic motivation, and feasibility of monitoring. This comprehensive assessment aims to determine the suitability of trust-based regulation in each context. For instance, in areas like commercial ethics and COVID-19 mask wearing, where intrinsic motivation alignment is highly important and the quality of compliance is high, trust-based approaches might be more effective. Conversely, in domains like tax compliance, where monitoring feasibility is very high and alignment with intrinsic motivation is least important, coercion-based methods might be more appropriate. This nuanced approach recognizes that the effectiveness of trust-based regulation varies significantly across different policy areas and depends on a complex interplay of factors.

<sup>1</sup> Kirchler, Erich, Erik Hoelzl, and Ingrid Wahl. "Enforced versus voluntary tax compliance: The 'slippery slope' framework." *Journal of Economic Psychology* 29.2 (2008): 210–225.

TABLE 4.1 *How to decide between trust and coercion in five policy domains*

Legal doctrine	Environmental compliance	Tax compliance	Commercial ethics	COVID (mask)	COVID (vaccine)
Quality of compliance	High	Moderate	High	High	Low relevance
Proportion of compliance	The more the merrier	The more the merrier	High	Very high	High
Cost of mistakes	Moderate	Low	Moderate	High	Moderate
Long/short term	Long	Moderate	Long	Long	Short
Heterogeneity of regulated population	Very high	Very high	Very high	High	High
Need for social support	Very high	Moderate	High	High	Moderate
Possibility for nudges	High	Moderate	Moderate	High	High
Feasibly of sequential approach	Moderate	High	Moderate	Moderate	High
Alignment with intrinsic motivation	Moderately important	Least important	Highly important	Highly important	High
Feasibility of monitoring	Usually high	Very high	Moderate	Low	High

#### CAN WE PREDICT WHICH REGULATORY APPROACH WILL ENHANCE VOLUNTARY COMPLIANCE?

Predicting the effect of each regulatory approach on broader aspects of society, such as the creation of trust between the state and the public, remains a daunting task. In the next few paragraphs, we examine an even more fundamental problem arising from the limitations of predicting the results of regulatory choices. One of the best, albeit most frustrating, examples of the need for a trial-and-error approach is the work of Katherine Milkman, who compares the impact of dozens of interventions on various behaviors. Behavioral science studies, such as the one examining flu vaccination reminders, reveal valuable insights into effective intervention strategies. Her recent mega study involving 689,693 Walmart Pharmacy customers found that text-based reminders can encourage pharmacy flu vaccinations.<sup>2</sup> In this case, sending two reminder texts, spaced three days apart and emphasizing that a vaccine was “waiting for you,” proved most effective in increasing vaccination rates. However,

<sup>2</sup> Milkman, Katherine L., et al. “A 680,000-person mega study of nudges to encourage vaccination in pharmacies.” *Proceedings of the National Academy of Sciences* 119.6 (2022): e2115126119.

the fact that experts failed to predict this outcome highlights a significant gap in our understanding of behavioral interventions.

We argue that the best way to understand what makes regulation work is to look at how much pressure is needed to get people to follow the rules. Different situations call for different approaches – sometimes people willingly comply, while other times strict enforcement is necessary. The key is finding the right balance for each specific situation, considering how resistant people are to changing their behavior. By analyzing the relationship between the level of coercion and behavioral outcomes across different regulatory contexts, we can begin to construct a more nuanced and predictive theoretical model. This model would not only help in selecting the most appropriate regulatory tools for given situations but also in anticipating potential challenges and resistances to various interventions.

The need for such a theoretical framework becomes even more apparent when considering the complexities of human behavior in response to regulations. Understanding voluntary compliance, for instance, requires a nuanced approach that goes beyond simple cause-and-effect relationships. A comprehensive theory would need to account for various factors, including psychological, social, and contextual elements that influence decision-making and behavior.

In conclusion, while empirical studies like the flu vaccination reminder experiment provide valuable insights, they also highlight the limitations of a purely data-driven approach. To truly advance our understanding of regulatory interventions and their impact on behavior, we need to develop a theoretical paradigm that can explain the mechanisms behind successful interventions, predict the effectiveness of new strategies, guide the design of more targeted and efficient regulatory approaches, and facilitate the transfer of knowledge across different regulatory domains.

By investing in the development of such a theoretical framework, we can move beyond trial-and-error approaches and toward a more systematic and effective method of designing and implementing regulatory interventions. This would not only improve the success rate of these interventions but also enhance our overall understanding of human behavior in response to regulatory efforts.

#### COERCIVE POWER VS. LEGITIMATE POWER

The most crucial dimension in distinguishing between various regulatory interventions appears to be the focus of the approach: whether it emphasizes the ability to impose costs on noncooperators or aims to induce positive willingness to cooperate through factors such as fairness, trust, and legitimacy.

Studies suggest that trust and legitimacy can positively affect not only voluntary compliance, but also the effectiveness of enforced regulation. For example, Eva Hoffman and others found that legitimate power increases science and reason-based

trust, voluntary cooperation, and success in enforcing compliance.<sup>3</sup> These results challenge the assumption of other researchers that trust and coercion are competing and are mutually exclusive.<sup>4</sup>

The primary paradigm we are examining is the approach that best achieves compliance, in line with the research of Kirchler and colleagues.<sup>5</sup> The distinction between coercive and legitimate powers does not suffice to fully explain the relationship between regulatory approaches and people's motivation to comply. Parallel to this examination is one regarding *voluntary* vs. *nonvoluntary* compliance that seeks to determine through which of these powers – coercive or legitimate – regulators can increase public compliance.

It should be noted that there is a gap between extrinsic–intrinsic and coercive vs. legitimate compliance methods. While the coercive method is clearly an extrinsic force, legitimate power is not necessarily exercised to create intrinsic motivation. This distinction highlights the complexity of motivational factors in compliance scenarios. Some of the knowledge gap in this topic is due to conceptual confusion in the literature differentiating between extrinsic and instrumental motivations and intrinsic and non-instrumental motivations (e.g., moral motivation could be seen as intrinsic or extrinsic motivation). The thinking is that people might comply with a legitimate power because they believe others might comply and not because they have intrinsic motivations within the action. This perspective underscores the nuanced nature of human motivation and compliance behaviors. It shows that the relationships between these concepts are not always straightforward, creating areas where our understanding is incomplete.

#### VOLUNTARY COMPLIANCE AND “ORDER WITHOUT LAW” LITERATURE

Another important paradigm to consider when examining regulatory approaches that allow for voluntary compliance is the approach taken by scholars such as Lisa Bernstein in her study of the diamond industry.<sup>6</sup> Bernstein found that social norms can serve as a substitute for formal laws in achieving compliance. The diamond industry is unique in that it can use reputation and social bonds at a low cost, creating a system that enables most transactions to be completed entirely outside the legal system. It has been suggested that, historically, Jewish merchants controlled

- <sup>3</sup> Hofmann, Eva, et al. “Enhancing tax compliance through coercive and legitimate power of tax authorities by concurrently diminishing or facilitating trust in tax authorities.” *Law & Policy* 36.3 (2014): 290–313.
- <sup>4</sup> Rousseau, Denise M., et al. “Not so different after all: A cross-discipline view of trust.” *Academy of Management Review* 23.3 (1998): 393–404; discussing, among other things, the concept of deterrence-based trust.
- <sup>5</sup> Muehlbacher, Stephan, Erich Kirchler, and Herbert Schwarzenberger. “Voluntary versus enforced tax compliance: Empirical evidence for the ‘slippery slope’ framework.” *European Journal of Law and Economics* 32 (2011): 89–97.
- <sup>6</sup> Bernstein, Lisa. “Opting out of the legal system: Extralegal contractual relations in the diamond industry.” *Journal of Legal Studies* 21.1 (1992): 115–157.

this industry due to their ability to form an effective external reputation mechanism. This means that within the Jewish merchant community there was a strong system of trust and accountability based on shared cultural and religious values, as well as close-knit family and community ties. Thus, contracts were thought to be enforced primarily through trust-based relationships and the fear of reputational damage within the community, rather than by legally based coercive measures. This reputation mechanism was supported by a distinctive set of industry, family, and community institutions that facilitated information sharing and collective enforcement of norms.<sup>7</sup> An alternative explanation can be found in a study on the diamond exchange economy, where there is an ethnically homogeneous middleman group that provides alternatives to contract law. Perceived as a club-like structure, this unique arrangement is based on mutual trust and reputation.<sup>8</sup> In a subsequent study on the cotton industry, Bernstein argued that the industry's reliance on an alternative legal system, rather than a market-driven trust system, was the primary reason for minimal use of formal courts.<sup>9</sup> Very similar findings on extralegal functioning, came from Robert Ellickson has shown how considerations of efficiency caused neighbors in Shasta County in northern California to cooperate beyond what was required by law.<sup>10</sup> In Shasta County, research reveals that, in accordance with the Coase theorem,<sup>11</sup> law plays a lesser role than expected in neighborly relationships. People largely govern themselves using informal rules and social norms that develop without the aid of a state or other central coordinators.<sup>12</sup>

Another study has demonstrated that individuals' concern for their reputation can facilitate the formation of contracts between trading partners, even when one or both parties are committed to or dependent on the trading relationship.<sup>13</sup> In a similar vein, Mark Suchman's sociological study of lawyers in Silicon Valley presents an alternative view of the legal profession, describing it as engaging in the venture capital financing of "new technology-based corporations." In this context, lawyers are viewed favorably by their clients and are perceived as adding value to a transaction rather than arguing over how to divide the transactional pie.<sup>14</sup>

<sup>7</sup> Richman, Barak D. "How community institutions create economic advantage: Jewish diamond merchants in New York." *Law & Social Inquiry* 31.2 (2006): 383–420.

<sup>8</sup> Landa, Janet T. "A theory of the ethnically homogeneous middleman group: An institutional alternative to contract law." *Journal of Legal Studies* 10.2 (1981): 349–362.

<sup>9</sup> Bernstein, Lisa. "Private commercial law in the cotton industry: Creating cooperation through rules, norms, and institutions." *Michigan Law Review* 99.7 (2001): 1724–1790.

<sup>10</sup> Ellickson, Robert C. *Order without law: How neighbors settle disputes*. Harvard University Press, 1991.

<sup>11</sup> Cooter, Robert D. "Coase theorem." In *The world of economics*, edited by John Eatwell, Murray Milgate and Peter Newman, Palgrave Macmillan, 1991: 51–57.

<sup>12</sup> Ellickson. *Order without law*.

<sup>13</sup> McMillan, John, and Christopher Woodruff. "Private order under dysfunctional public order." *Michigan Law Review* 98.8 (2000): 2421–2458.

<sup>14</sup> Suchman, Mark C., and Mia L. Cahill. "The hired gun as facilitator: Lawyers and the suppression of business disputes in Silicon Valley." *Law & Social Inquiry* 21.3 (1996): 679–712. See also Bernstein, Lisa. "The Silicon Valley lawyer as transaction cost engineer." *Oregon Law Review* 74 (1995): 239–256.

While many consider this order without law paradigm not easily translated to other spheres where reputation systems are not as effective, it does suggest the importance of accounting for community governance as a potential alternative to state command and control. As we will demonstrate in Chapters 8 and 10 on COVID-19 and environmental behavior, community governance can be used as an important alternative tool to state regulation. It could help achieve voluntary compliance more effectively.

#### DO SANCTIONS KILL VOLUNTARY COMPLIANCE?

One of the most important regulatory dilemmas is related to sanctions and their possible effect on people's ability to develop an autonomous feeling of choosing to comply voluntarily with regulations. What characterizes the type of regulatory instruments that are likely to lead to voluntary compliance both in the short term and in the long term? What can we learn from current research about which types of regulatory instruments, such as reminders, pledges, technological interventions, and others are likely to harm voluntary compliance in both the short and long term? Does compliance become nonvoluntary every time sanctions are used? In the next few paragraphs, we will explore some aspects of these dilemmas.

#### CAN WE CREATE COERCION-FREE REGULATION?

The short answer to the question on sanctions is no. Although alternative regulatory strategies exist, they are not as effective as responsive law approaches in influencing behavior.<sup>15</sup> The larger question, which existing empirical research has not yet answered, is what is the optimal way to locate deterrence in a place where it can be effective?

When discussing whether governments can trust the public, it is important to consider whether coercion is effective. While some may argue that coercion is the safest and best choice for regulators, there is ample research on the negative effects of deterrence on people's intrinsic motivation and moral commitment.<sup>16</sup> However, another perspective demanding discussion is whether deterrence is effective. In their recent book, *The Behavioral Code*, Adam Fine and Benjamin van Rooij dedicate two chapters to discussing recent statistical studies of the deterrent effect of policies such as "three strikes and you are out" and capital punishment. Their findings reveal mixed results, with the majority of studies failing to establish a significant deterrence impact of severe punishment.<sup>17</sup> The book focuses on the argument that

<sup>15</sup> Braithwaite, John. "The essence of responsive regulation." *UBC Law Review* 44 (2011): 475–520.

<sup>16</sup> Atiq, Emad H. "Why motives matter: Reframing the crowding out effect of legal incentives." *Yale Law Journal* 123 (2013): 1070–1116.

<sup>17</sup> Van Rooij, Benjamin, and Adam Fine. *The behavioral code: The hidden ways the law makes us better or worse*. Beacon Press, 2021.



deterrence-based approaches have negative effects and that their long-term drawbacks outweigh any short-term benefits of immediate compliance.

When the need for punishment arises, we should focus on various factors such as the harm caused and the immediacy of the response needed. For example, when the regulated activity carries significant potential for immediate harm to others, sanctioning might be the safest approach and focusing on deterrence might be more justifiable. On the other hand, if the desired behavior requires the goodwill of the people and their behavior beyond compliance, relying on deterrence is not desirable. Instead, greater focus should be placed on reaching people through regulatory measures that support their dominant motivation. Additionally, we should consider whether the targeted behavior is enforceable. When compliance is relatively easy to measure and assess in terms of quality, and the cost of enforcement is low, there is less needed to focus on voluntary compliance. In such cases, enforcement costs are naturally reduced.

Furthermore, some behaviors are less likely to be crowded out by any type of regulation because they depend on knowledge and motivation that comes from wanting to behave according to the knowledge communicated through the regulation and knowledge is less likely to be crowded out. In other words, when the regulation does not provide an additional motivation to comply, it is simply offering instruction as to what behavior would be viewed as the right thing to do. For example, imagine that someone is interested in driving safely. Without enforcement, both that individual and other drivers will likely drive faster. The first step is to determine the safest driving speed for each context. The second step is to acknowledge that speeding may result in a penalty, which motivates the driver to ensure compliance with the speed limit. People are less likely to be intrinsically motivated to drive at a certain arbitrary speed.

Finally, given the differences between individuals suggested, a preliminary analysis of the attitudes of the target populations could shed light on the likely effect of each model on the aggregated compliance behavior.<sup>18</sup>

#### ENFORCEMENT EFFORTS AND VOLUNTARY COMPLIANCE

A potential obstacle to achieving voluntary compliance could come not from regulation, but from the way enforcement bodies work. In collaboration with Yotam Kaplan, we have identified ethical blind spots and regulatory traps, highlighting the potential disparity between enforced and intrinsic motivation.<sup>19</sup> This observation

<sup>18</sup> Feldman, Yuval. "Five models of regulatory compliance motivation: Empirical findings and normative implications." In *Handbook on the politics of regulation*, Vol. 1, edited by David Levi-Faur, Elgar, 2011: 335–346; Feldman, Yuval. "The complexity of disentangling intrinsic and extrinsic compliance motivations: Theoretical and empirical insights from the behavioral analysis of law." *Washington University Journal of Law and Policy* 35 (2011): 11–52.

<sup>19</sup> Feldman, Yuval, and Yotam Kaplan. "Ethical blind spots and regulatory traps: On distorted regulatory incentives, behavioral ethics and legal design." In *Law and economics of regulation*, edited by Klaus Mathis Avishalom Tor, Springer International Publishing, 2021: 37–54.

presents a nuanced perspective on regulatory enforcement. While there's often an emphasis on strictly enforcing legal standards across the board, this approach may not always be the most effective. In some cases, it may be more beneficial to focus enforcement efforts on those who are already intrinsically motivated to comply with regulations. Revisiting the example of speeding, people who are focused only on extrinsic measures may be less likely to get caught. Regulators will find it easier to enforce regulations and catch those who want to drive safely but might misunderstand the speed limit because of a gap between reality and the law.

To reduce such wrongdoings, regulators should aim to eliminate ethical blind spots in their work; ethical blind spots are scenarios and situations in which ordinary law-abiding people find it difficult to identify the harmfulness of their actions. This can be done by removing ambiguity and changing the conditions that contribute to unethical behavior.

However, policymakers may be incentivized to conserve these ethical blind spots and build regulatory traps around them in order to increase the perception of their effectiveness by demonstrating intense and rapid enforcement activity.<sup>20</sup> By ignoring the underlying cognitive causes of unethical behavior, we are allowing wrongdoing to continue. We should not simply sanction those who repeatedly fall into this trap. Instead, we should be identifying the root causes of these ethical blind spots and addressing them.

For example, consider speeding tickets. Speed limits are usually intuitive and easy to follow if people care to comply with the law. However, in some situations, such as when the speed limit drops for a small section of a highway, speed limits can be confusing or unintuitive. This is an ethical blind spot in the sense that, in such a location, many law-abiding people will find the law difficult to understand because the ethical mechanism behind it will be less clear. These ethical blind spots will likely lead to an increase in wrongdoing, as more people will struggle to recognize the intrinsic problems with disobeying the law. In such cases, regulators should ideally act to reduce ambiguity and address these ethical blind spots. For instance, one way to improve safety in these areas is to ensure that road signs are highly visible and easy to understand. However, in many cases, police officers may exploit drivers' ethical blind spots by creating traps for wrongdoers and issuing multiple tickets. This approach can transform what was initially an ethical blind spot into a regulatory trap.

Kaplan and I argue in our paper that technological advancements in law enforcement can exacerbate these distortions between intrinsic motivation to comply and likelihood of enforcement. Automated law enforcement technologies, such as speed cameras or automated auditing tools, are particularly effective at easily identifying and sanctioning recurring violations. The use of these mechanisms makes it easier

<sup>20</sup> Feldman and Kaplan. "Ethical blind spots and regulatory traps."

for law enforcement to create situations where people unknowingly break the law and then are punished for it, especially when those violations are reoccurring and follow known patterns. In other words, speed cameras are most effective when installed at locations where people frequently violate the speed limit. These locations are often overlooked and difficult to monitor, making them ethical blind spots. Violations in these areas are common and, with the availability of speed cameras, sanctions are inexpensive. These can make regulatory traps an even more dominant and profitable strategy for police and other law enforcers. Therefore, when speed cameras are available, regulators are often reluctant to diffuse ethical blind spots on the road because they are too profitable. Similarly, tax authorities might use technological resources to focus on the most ambiguous clauses, where more people are likely to underreport, rather than on the places where intentional and malicious tax evasion is likely to happen.

In our paper, Kaplan and I showed that similar issues are relevant in many areas of law, from financial regulation to tax compliance, consumer protection, and regulation. To combat these disturbing trends regarding regulatory traps, we must be more aware of regulatory incentive structures and the way regulators and enforcement agencies are affected by the introduction of new law enforcement technologies.

### *Auditing-Based Corporate Voluntary Compliance Program*

Another important regulatory approach is auditing-based voluntary compliance, where corporations opt into programs offering enhanced guidance in exchange for a more cooperative compliance approach. Several examples of such programs exist among US administrative agencies. For instance, the Environmental Protection Agency's Audit Policy Program, which allows companies to voluntarily disclose violations in exchange for reduced penalties, has led to the discovery and correction of violations at thousands of facilities since its inception.<sup>21</sup> Another example is the Inland Revenue Service's Compliance Assurance Process, where corporate taxpayers pledge to maintain transparency in exchange for real-time tax guidance, the process has shown a decrease in tax uncertainty (measured through the money reserves they've put for challenges by tax authority).<sup>22</sup> Similarly, the Food and Drug Administration's Voluntary Qualified Importer Program uses trust-based certification to expedite food imports to the US for international companies with strong safety records.<sup>23</sup> Similarly, the Securities and Exchange Commission's 2010

<sup>21</sup> Short, Jodi L., and Michael W. Toffel. "Coerced confessions: Self-policing in the shadow of the regulator." *Journal of Law, Economics, & Organization* 24.1 (2008): 45–71.

<sup>22</sup> Beck, Paul J., and Petro Lisowsky. "Tax uncertainty and voluntary real-time tax audits." *The Accounting Review* 89.3 (2014): 867–901.

<sup>23</sup> Fortin, Neal. "The US Food Safety Modernization Act: Implications in transnational governance of food safety, food system sustainability, and the tension with free trade." *Duke Environmental Law & Policy Forum* 25 (2014): 313–338.

Cooperation Program, offering leniency for self-reporting securities violations, has improved the effectiveness of securities enforcement.<sup>24</sup> This evidence suggests that when properly structured, corporate-based trust-based regulatory tools can achieve both instrumental goals (reducing enforcement costs) and normative ones (fostering cooperation and compliance culture).<sup>25</sup> While this book primarily examines individual compliance, trust-based regulatory programs show greater promise when applied to corporations. This increased potential stems from two key factors: corporations are repeat players who are more sensitive to reputational consequences, and they generally cannot claim violations of personal autonomy or dignity when their compliance history influences regulatory treatment (for a detailed discussion of technology-based differentiated enforcement using past behavior, see Chapter 7).

#### PREVENTIVE APPROACH TO VOLUNTARY COMPLIANCE

Preventative regulatory approaches have been used to make noncompliance a remote possibility. This practice may undermine voluntary compliance, either in the short or long term. In the short run, if one cannot comply because noncompliance is not possible, then no voluntary act is present. This raises the question: Does long-term exclusion of choice have a negative effect on people's choice about whether to comply? For example, many people whose main income comes from wages cannot avoid paying taxes. Is such a practice good or bad for their future tax morale?

Indeed, a possible solution is to take a preventative approach that focuses on intrinsic motivation rather than extrinsic motivation.<sup>26</sup> This approach aligns with the instrumental perspective on compliance motivation while being less prone to disrupting other factors that drive compliance. In a preventive approach, regulators use technological tools and structural design to eliminate opportunities for lawbreaking before they occur. Edward Cheng's structural law approach illustrates this strategy by making socially undesirable behavior more difficult through design rather than relying on after-the-fact enforcement.<sup>27</sup> For example, rather than imposing fines for mail theft, this approach focuses on designing mailboxes that prevent unauthorized access. Similar preventive strategies include tax withholding to prevent tax evasion and technological barriers to prevent illegal file sharing.

This approach, while still treating individuals as rational actors who might violate laws when costs are low, differs from traditional enforcement models. By removing the possibility of noncompliance through design, it may be less likely to trigger the

<sup>24</sup> Leone, Andrew J., Edward Xuejun Li, and Michelle Liu. "On the SEC's 2010 enforcement cooperation program." *Journal of Accounting and Economics* 71.1 (2021): 1–22.

<sup>25</sup> Short, Jodi L. "The paranoid style in regulatory reform." *Hastings Law Journal* 63 (2011): 633–694.

<sup>26</sup> Katyal, Neal Kumar. "Digital architecture as crime control." *Yale Law Journal* 112 (2002): 2261–2290.

<sup>27</sup> Cheng, Edward K. "Structural laws and the puzzle of regulating behavior." *Northwestern University Law Review* 100 (2006): 655–718.

negative psychological effects associated with explicit enforcement, such as crowding out intrinsic motivation. When compliance becomes the only viable option, individuals quickly adapt their behavior accordingly.

Importantly, despite its highly restrictive nature, this preventive approach often feels less coercive than traditional enforcement methods. This is because when alternative actions are structurally impossible, individuals don't experience the psychological burden of being forced to make a choice. The effectiveness of this approach lies in its ability to prevent both opportunistic noncompliance by ordinary citizens and deliberate violations by those more inclined to break rules.

### *Incentives and Voluntary Compliance*

While Chapter 3 examined the relationship between incentives and crowding out, this chapter will explore whether incentives that give people choice in cooperation can help maintain voluntary compliance long term, even in areas where incentives aren't available. When considering behaviors like vaccination or recycling, we need to examine several critical issues: how offering rewards affects participation, whether these rewards might discourage unpaid cooperation in the future, and whether using market-like incentives could be seen as weakening government authority. We'll explore how this market-based approach to compliance might affect public perception of state legitimacy and regulatory effectiveness. Research by scholars such as Michael Sandel and Dagan and Fisher could lead us to believe that incentives can have a negative effect both on the specific behavior and, more importantly, on how participants treat the system that offers them rewards for their participation.<sup>28</sup>

Although many people have argued that deterrence is not effective, moving away from using it as the sole regulatory approach doesn't necessarily mean that policymakers and researchers have abandoned the idea that individuals make decisions based on cost-benefit calculations. Even when other regulatory tools are introduced, there's still an underlying assumption that people weigh pros and cons in their decision-making process. For example, assuming that human motivation is the same, various modern methods of governance have been created, including environmental taxation and different forms of self-governance programs that do not always carry direct sanctions.<sup>29</sup> Other scholars have suggested revisiting the concept of deterrence from a broader perspective and taking into account various social

<sup>28</sup> Sandel, M. *What money can't buy: The moral limits of markets*. Farrar, Straus and Giroux (2012): 1–36; Dagan, Tsilly, and Talia Fisher. "Rights for sale." *Minnesota Law Review* 96 (2011): 90–140.

<sup>29</sup> Revesz, Richard L., and Robert N. Stavins. "Environmental law and public policy." In *Handbook of law and economics*, rev. ed., edited by A. Mitchell Polinsky and Steven Shavell, Elsevier Science, 2004: 499–589; King, Andrew A., and Michael J. Lenox. "Industry self-regulation without sanctions: The chemical industry's responsible care program." *Academy of Management Journal* 43.4 (2000): 698–716.

factors and sanctions that might make deterrence more effective.<sup>30</sup> In this context, the environmental field has been especially interesting, as deterrence has been used in particularly sophisticated ways through various regulations that force organizations to publicize their emission levels and face sanctions from the public.<sup>31</sup>

In this book, incentives are viewed as interesting tools that allow people to choose and cooperate, even when coercion is involved. However, if our goal is to foster internalized voluntary compliance rather than coerced behavior, we need to carefully consider the role of incentives. Traditional incentives may not always lead to internalized compliance. External rewards can shift motivation from intrinsic to extrinsic, potentially undermining long-term commitment to the behavior. People might view incentivized actions as transactional rather than moral or civic duties. Moreover, once incentives are removed, the motivation to continue the behavior may decrease. As discussed in Chapter 3, there are instances where incentives can crowd out cooperative behavior. This phenomenon occurs when external motivations replace or diminish intrinsic ones.

However, we will demonstrate that there are ways to design and implement incentives that can increase the likelihood of internalized voluntary compliance. These methods involve aligning incentives with existing values and norms, using nonmonetary rewards that reinforce social recognition and gradually phasing out incentives as behaviors become habitual.<sup>32</sup> By addressing these factors, it's possible to use incentives as a tool to foster genuine, internalized voluntary compliance rather than mere temporary behavioral change.<sup>33</sup>

#### THE POTENTIAL RISK TO COMPLIANCE OF MORALITY AND FAIRNESS

This book reviews several models and it is important to focus on those that are less likely to interfere with other models that have unintended effects. For example, the concept of procedural justice, which has been widely studied by scholars such as Tom Tyler and Margaret Levi, is likely to increase legitimacy and compliance, with

<sup>30</sup> Kahan, Dan M. "Social influence, social meaning, and deterrence." In *Criminal law*, edited by Thomas Morawetz, Routledge, 2019: 429–476; McAdams, Richard H. "An attitudinal theory of expressive law." *Oregon Law Review* 79 (2000): 339–390.

<sup>31</sup> Peterson, Sonja. "Monitoring, accounting and enforcement in emissions trading regimes." In *Greenhouse gas emissions trading and project-based mechanisms*. OECD, 2003: 189–205; Feldman, Yuval, and Oren Perez. "How law changes the environmental mind: An experimental study of the effect of legal norms on moral perceptions and civic enforcement." *Journal of Law and Society* 36.4 (2009): 501–535.

<sup>32</sup> See, for example, Carrera, Mariana, et al. "The structure of health incentives: Evidence from a field experiment." *Management Science* 66.5 (2020): 1890–1908. See also John, Leslie K., et al. *The role of incentive salience in habit formation*. Harvard Business School, 2016.

<sup>33</sup> Frey, Bruno S., and Felix Oberholzer-Gee. "The cost of price incentives: An empirical analysis of motivation crowding-out." *American Economic Review* 87.4 (1997): 746–755.

less likelihood of interfering with the effective functioning of deterrence.<sup>34</sup> Similarly, informing people of the harm associated with their behavior may be effective for some, without inducing resentment toward the law. Despite these approaches, some scholars suggest that emphasizing morality could give people the impression that the state is unable to enforce the law, which could have potentially unintended consequences.<sup>35</sup> Therefore, regulators should aim to identify policies that target as many motivations as possible while recognizing the challenge of achieving complete success in this mission.

### TRUST-BASED REGULATION

It is acknowledged that there is no one regulatory solution that fits all situations and that there is a need for initial data collection. When collecting data, we must consider the quality of cooperation, the cost of enforcement, and the contribution to the regulator's legitimacy. How well does the tool interact with population heterogeneity? Is trust necessary for trust-based regulation to work? To what extent is trust-based regulation likely to work better in the long run? Do we know if it is indeed stable enough over time? To what extent we can rely on the "trust but verify" approach and still call it trust? In what situations we can say that can use multiple methods at the same time?

### NUDGES AND VOLUNTARY COMPLIANCE

In Chapter 2, we differentiated between two types of voluntary compliance: noncoerced and internalized. Nudges are an excellent example of a regulatory approach that doesn't involve coercion, but also doesn't require intrinsic motivation to comply.<sup>36</sup> However, is there a difference between the various types of nudges regarding both the meaning of coercion and the meaning of intrinsic motivation? For example, people may end up choosing a certain option without much thought, simply because it's presented as the default. This choice isn't necessarily forced upon them; theoretically, they could have selected a different option. However, the key question is how much effort would be required to deviate from this default option.

Think of the mechanism on Netflix that automatically offers the next episode. According to their results, this mindlessness dramatically increases the number of people who watch the next episode. Many people could easily stop their Netflix from running, but they choose not to. Is this behavior voluntary or not? In other

<sup>34</sup> Grimes, Marcia. "Organizing consent: The role of procedural fairness in political trust and compliance." *European Journal of Political Research* 45.2 (2006): 285–315.

<sup>35</sup> Bardach, Eugene. "Moral suasion and taxpayer compliance." *Law & Policy* 11.1 (1989): 49–69.

<sup>36</sup> The interaction between nudges and deliberation is more complex; see, for example, Jung, Janice Y., and Barbara A. Mellers. "American attitudes toward nudges." *Judgment and Decision Making* 11.1 (2016): 62–74.

words, are nudges that encourage people to do the right thing using a mindless approach (in the context of Netflix, watching more is the right thing) perceived as reducing the voluntariness of people's compliance?

Another way to look at nudges is through the lens of Milkman's research on habit formation and examining whether nudges can mindlessly cause people to behave in a certain way.<sup>37</sup> Over time, repeated behavior may cause individuals to internalize their actions. Through processes such as cognitive dissonance, they may change their attitudes toward the act. Thus, nudges can indirectly cause this internalization process.

Researchers have long been debating whether nudges are indeed cost-effective. For the most part, the main questions have involved how to measure and compare the cost-effectiveness of nudges in relation to traditional interventions.<sup>38</sup> What is missing from the current discussion is an exploration of the long-term effects of nudges on people's attitudes toward the state and on their behaviors in contexts where nudges are less likely to be effective.

What is the cost of blindly complying with a law that relies mostly on nudges? For example, when we use auditory signals to remind and alert people to wear seat belts, what effect does this have on road behaviors that do not and cannot use signals to influence conduct? This may be concerning, as people will learn to expect nudges that help them understand what they are expected to do. However, this argument does not suggest that intrinsic motivation is the only way to create sustainable compliance. Rather, it challenges the idea that other types of regulatory interventions might undermine it.

When trying to understand the relationship between nudges and voluntary compliance, it is impossible to ignore a more fundamental question about the effect of nudges on behavior. As discussed, one way that nudges could enhance the likelihood of voluntary compliance is by changing behavior. This can later lead to an internal change in attitudes. For such a change to occur, nudges must have a significant impact on the desired change in behavior. However, it seems that the fact itself is questionable. In the following paragraphs, we will examine this aspect.

Shlomo Benartzi and colleagues argued for a "save more tomorrow" nudge, which has often been presented as one of the most effective and simple ways to understand nudges that increase the amount of long-term savings by people.<sup>39</sup> According

<sup>37</sup> Duckworth, Angela L., Katherine L. Milkman, and David Laibson. "Beyond willpower: Strategies for reducing failures of self-control." *Psychological Science in the Public Interest* 19.3 (2018): 102–129. Wood, Wendy, and David T. Neal. "Healthy through habit: Interventions for initiating and maintaining health behavior change." *Behavioral Science & Policy* 2.1 (2016): 71–83.

<sup>38</sup> Benartzi, Shlomo, et al. "Should governments invest more in nudging?" *Psychological Science* 28.8 (2017): 1041–1055. Also see Tor, Avishalom, and Jonathan Klick. "When should governments invest more in nudging? Revisiting Benartzi et al. (2017)." *Review of Law & Economics* 18.3 (2022): 347–376.

<sup>39</sup> Thaler, Richard H., and Shlomo Benartzi. "Save more tomorrow™: Using behavioral economics to increase employee saving." *Journal of Political Economy* 112.S1 (2004): S164–S187.



to them, nudging is a cost-effective approach that should be used more often in conjunction with traditional policies. However, further calculations are required to determine the relative effectiveness of nudging.

It should be noted that not only is this claim being challenged by Tor and Klick, but they argue that the problems in the methods being used to measure cost-effectiveness are misguided from a theoretical economic approach.<sup>40</sup>

#### SYSTEM 1 VERSUS SYSTEM 2 NUDGES

It is possible to distinguish between nudges that change your attitudes and nudges that attempt to change your behavior. Some nudges seek to change your behavior without awareness, while others attempt to do so by influencing people's awareness.<sup>41</sup> The literature on nudges and behavioral public policy reveals a distinction between two main approaches. The first focuses on changing behaviors through small adaptations to the environment, often referred to as "choice architecture." The second approach, in contrast, aims to enhance individuals' reasoning skills and self-awareness. This latter strategy, sometimes called "boosting," seeks to empower people to make better decisions by improving their cognitive abilities and understanding of their own thought processes. In Chapter 1, we focused on different approaches to the definition of voluntary compliance. Now, we need to understand to what extent the different approaches to voluntary compliance could help us understand the different types of nudges.

#### NUDGE PLUS AND SELF-REFLECTION

Due to the ethical problems associated with lack of awareness to nudges, Sanchayan Banerjee and Peter John have outlined a modified version of behavior change called nudge plus,<sup>42</sup> which incorporates an element of reflection as part of the delivery of a nudge. Nudge plus builds on recent work advocating for educative nudges and boosts.<sup>43</sup> The argument is based on Evans' seminal work on dual systems.<sup>44</sup> That presents a more nuanced relationship between fast and slow thinking than what is commonly portrayed in the classic literature on behavioral public policy. Banerjee and John's argument advocates for a combination of System 1 nudges and techniques that promote deliberation and reasoning.

<sup>40</sup> See Tor and Klick "When should governments invest more in nudging?"

<sup>41</sup> Hausman, Daniel M., and Brynn Welch. "Debate: To nudge or not to nudge." *Journal of Political Philosophy* 18.1 (2010): 123–136.

<sup>42</sup> Banerjee, Sanchayan, and Peter John. "Nudge plus: Incorporating reflection into behavioral public policy." *Behavioural Public Policy* 8.1 (2021): 69–84.

<sup>43</sup> Grüne-Yanoff, Till, and Ralph Hertwig. "Nudge versus boost: How coherent are policy and theory?" *Minds and Machines* 26.1 (2016): 149–183.

<sup>44</sup> Evans, Jonathan St B. T. "Dual-processing accounts of reasoning, judgment, and social cognition." *Annual Review of Psychology* 59.1 (2008): 255–278.

*Pledges and Trust-Enhancing Nudges*

In a series of collaborative papers with Eyal Pe'er and colleagues,<sup>45</sup> we researched the effectiveness of honesty nudges, particularly in contexts where the temptation to cheat is high. The challenge is to determine the appropriate level of trust to place in people's self-reports. When faced with this challenge, regulators are often risk-averse and impose stringent requirements when granting permits and licenses. While ex ante commitments to ethical behavior have been suggested to combat dishonesty and noncompliance, some have raised concerns that these commitments might undermine trust.<sup>46</sup>

Our research aims to investigate the effectiveness of ethical pledges. We examined the impact of these ex ante commitments on ethical behavior. One of our studies consists of two separate experiments we conducted to comprehensively analyze the relationship between pledges and ethical behavior over time.<sup>47</sup> The first study involved two phases of data collection. The second study introduced a time delay between making a pledge and the opportunity to cheat.

The results were promising. Pledges not only reduced dishonesty in one-time decisions but also in sequential ones. Their effectiveness was notable even over long periods of time and when individuals were exposed to multiple pledges. Moreover, introducing a time delay after pledging did not diminish its impact. This suggests that pledges primarily discourage dishonesty by reducing ambiguity, rather than merely serving as moral reminders.

It is important to ensure that pledges and sanctions are used together in a coordinated way. Their role is vital in ensuring regulatory practices complement pledges effectively. Since sanctions might not work well with pledges, it will be very hard to use them in real-life settings. In our studies, the effect of nudges was not diminished by fines.<sup>48</sup> Pledges were also effective for people who are less inclined to follow rules and norms. Therefore, pledges can be a valuable tool for regulating dishonesty and reducing regulatory burdens. They can also foster trust between the government and the public, even in situations with high incentives and opportunities for cheating.

In a more recent paper on pledges, conducted with Eyal Pe'er, Nina Mazar, and Dan Ariely, we present findings from four preregistered experiments with a collective sample size exceeding 5,000 participants.<sup>49</sup> Our research systematically

<sup>45</sup> Pe'er, Eyal, et al. "How pledges reduce dishonesty: The role of involvement and identification," *Journal of Experimental Social Psychology* 113 (2024): 104614.

<sup>46</sup> For the most recent and extensive review of contexts where this might happen, see Zickfeld, Janis H., et al. "Effectiveness of ex ante honesty oaths in reducing dishonesty depends on content." *Nature Human Behaviour* 9.1 (2025): 169–187.

<sup>47</sup> Pe'er, Eyal, and Yuval Feldman. "Honesty pledges for the behaviorally based regulation of dishonesty." *Journal of European Public Policy* 28.5 (2021): 761–781.

<sup>48</sup> Pe'er and Feldman. "Honesty pledges for the behaviorally based regulation of dishonesty."

<sup>49</sup> Pe'er et al. "How pledges reduce dishonesty," 104614.

examines the impact of pledges with varying levels of identification and involvement on participants' self-reports about a cheating task. Our results demonstrate that pledges that require a transcribed pledge text and personal identification are more effective than those that only require individuals to acknowledge the text's content. Notably, the effects of high-involvement pledges endured over time, even after a short delay between taking the pledge and the initiation of the cheating task. The study's results provide valuable guidance to managers and policymakers on how to effectively mitigate dishonesty in self-reports.

Our research investigates the effectiveness and durability of *ex ante* pledges in preventing dishonest behavior. We specifically address a critical yet understudied aspect of ethical nudges: the longevity of their impact. The potential for ethical nudges to serve as a viable alternative to traditional command-and-control regulations depends fundamentally on their ability to produce lasting effects, which is the central focus of our study.

While existing research on pledges has largely focused on one-time decisions, there has been limited exploration of their long-term consequences, particularly regarding potential "ethical decay."<sup>50</sup> To address this research gap, we conducted two experiments using a matrices task where participants either had to provide exact solutions for rewards or simply report finding solutions, with a 10 percent chance of being audited.

Our findings revealed that participants in the self-report condition claimed to solve approximately twice as many problems compared to the control group. However, implementing a pre-task honesty pledge reduced this cheating gap by half. Notably, the pledge's effectiveness remained stable across all ten problems, demonstrating no decay in its impact over time.

#### BEHAVIORAL CHANGE VS. PREFERENCE CHANGE

The previous discussion explored the idea that nudges should allow for some reflection on one's behavior to change one's intrinsic motivation. This perspective suggests that nudges can ultimately influence individuals' attitudes and preferences by altering their behavior through defaults or other mechanisms.<sup>51</sup>

An alternative perspective suggests that changes in behavior may precede shifts in intrinsic motivation. This idea aligns with cognitive dissonance theory, which posits that when our actions don't match our beliefs, we often adjust our beliefs to match our actions.<sup>52</sup> In this context, behavior can change first and preferences may follow suit. Daphna Lewinsohn-Zamir, in her paper on law and preference change,

<sup>50</sup> E.g., Zickfeld, et al. "Effectiveness of *ex ante* honesty oaths in reducing dishonesty depends on content."

<sup>51</sup> Lewinsohn-Zamir, Daphna. "The importance of being earnest: Two notions of internalization." *University of Toronto Law Journal* 65.2 (2015): 37–84.

<sup>52</sup> Aronson, Elliot. "The theory of cognitive dissonance: A current perspective." In *Advances in experimental social psychology*, Vol. 4, edited by Leonard Berkowitz, Academic Press, 1969. 1–34.

suggests that people change their behavior when they feel they have a choice to do so.<sup>53</sup> In such cases, cognitive dissonance often comes into play, potentially leading to behavioral change.

In our collaborative work with Yotam Kaplan, we presented a different perspective.<sup>54</sup> We questioned the value of trying to alter people's preferences when they can reinterpret their actions in a way that benefits themselves. In that paper, we relied on research in behavioral ethics, which showed that wrongdoing often originates from semi-deliberative or nondeliberative cognitive processes.<sup>55</sup> These findings suggest that the process of changing preferences through the law is more complex and nuanced than previously thought. For example, even if an employer's explicit discriminatory stance was changed, discriminatory behavior might still occur if it originated from semiconscious, habitual, or nondeliberative decision-making mechanisms.<sup>56</sup> Therefore, changing behavior may require close engagement with people's level of moral awareness. We also explored how these insights impact institutions and norms and assessed their relevance to using various legal mechanisms to shape preferences.

#### REGULATION AND TRUST

This section explores the complex relationship between trust and regulation. We'll examine two key questions: Does a lack of trust in society or institutions drive a greater demand for regulatory measures? Conversely, does the implementation of regulations tend to erode trust? By investigating these interconnected issues, we aim to shed light on how trust and regulation influence each other.

Many studies have examined the relationship between regulation and trust, but most rely on correlations, which limits the ability to understand causality. However, much of the most recent research does provide some insight.<sup>57</sup> Not only is the state's ability to create trust uncertain, but many studies have argued that trust has eroded for several reasons beyond the state's limitations.<sup>58</sup> As a result, regulation has been introduced to compensate for this lack of trust and to, in effect, create a demand for trust. Essentially, it can be argued that there is an inverse relationship between the amount of trust in a society and the amount of regulation that is needed: the less trust that is present, the

<sup>53</sup> Lewinsohn-Zamir. "The importance of being earnest."

<sup>54</sup> Feldman, Yuval, and Yotam Kaplan. "Preference change and behavioral ethics: Can states create ethical people?" *Theoretical Inquiries in Law* 22.2 (2021): 85–110.

<sup>55</sup> Sezer, Ovul, Francesca Gino, and Max H. Bazerman. "Ethical blind spots: Explaining unintentional unethical behavior." *Current Opinion in Psychology* 6 (2015): 77–81.

<sup>56</sup> E.g., Jackson, Sarah M., Amy L. Hillard, and Tamera R. Schneider. "Using implicit bias training to improve attitudes toward women in STEM." *Social Psychology of Education* 17 (2014): 419–438.

<sup>57</sup> Six, Frédérique. "Trust in regulatory relations: How new insights from trust research improve regulation theory." *Public Management Review* 15.2 (2013): 163–185.

<sup>58</sup> Twenge, Jean M., W. Keith Campbell, and Nathan T. Carter. "Declines in trust in others and confidence in institutions among American adults and late adolescents, 1972–2012." *Psychological Science* 25.10 (2014): 1914–1923.

more regulation is called for.<sup>59</sup> We also see that interpersonal trust is highly related to regulation and punishment.<sup>60</sup> This observation is consistent with a theme that is developed throughout this book – that social norms and what we think others will do constitute the main driving forces behind the public’s willingness to cooperate.

#### REGULATORS’ PUNITIVENESS AND INSTITUTIONAL TRUST

As will be discussed also in Chapter 6 in the context of culture, the research of Daniel Balliet and Paul Van Lange is important for understanding the relationship between regulation and trust.<sup>61</sup> It also important for understanding the “no one policy fits all” approach to regulation is more likely to enhance voluntary compliance. After examining the efficacy of punishment across high- and low-trust societies, they concluded that high trust in government is needed for punishment to be effective. After analyzing eighty-three studies on public good experiments across eighteen societies, researchers found that, contrary to expectations, punishment is more effective in promoting cooperation in societies with high trust than in societies with low trust. The explanation is probably that if there is high trust, individuals also trust that they will be punished because they have faith in the efficacy of the government, while if there is low trust, the public may think that they have a higher chance with getting away with illegal behavior.

Taking a slightly different approach, we collaborated with Libby Maman and David Levi-Faur to find that people are more inclined to trust market actors when self-regulation is in place and they trust the regulators.<sup>62</sup> However, under a regulatory regime with sanctions, the level of trust in the regulator is irrelevant. Although our study did not focus on the regulators, it was centered on the people who are supposed to be protected by market regulations. The study demonstrates the interdependency between regulatory style and the level of trust. Both lines of research emphasize the critical role of trust in shaping the effects of regulatory factors, such as sanctions. This is even more the case with softer approaches, such as self-regulation.

#### TYPES OF TRUST AND RELATIONSHIPS WITH VOLUNTARY COMPLIANCE

In this book, we focus on research examining governments’ ability to trust the public. However, it’s crucial to understand the interrelationship between various types

<sup>59</sup> Six, Frédérique, and Koen Verhoest. *Trust in regulatory regimes: Scoping the field*. Edward Elgar Publishing, 2017.

<sup>60</sup> Spadaro, Giuliana, et al. “Enhancing feelings of security: How institutional trust promotes interpersonal trust.” *PLOS One* 15.9 (2020): e0237934.

<sup>61</sup> Balliet, Daniel, and Paul A. M. Van Lange. “Trust, punishment, and cooperation across 18 societies: A meta-analysis.” *Perspectives on Psychological Science* 8.4 (2013): 363–379.

<sup>62</sup> Maman, Libby, Yuval Feldman, and David Levi-Faur. “Varieties of regulatory regimes and their effect on citizens’ trust in firms.” *Journal of European Public Policy* 30.12 (2023): 2807–2831.

of trust and explore how a country's trust levels influence the government's choice of regulatory tools. Research has shown that trust in state institutions has a causal effect on social trust.<sup>63</sup> Specifically, when the public trusts their government and its institutions, this fosters greater trust among people within the same society. While there is limited evidence supporting a reverse relationship (i.e., lower trust in government leading to less trust among people in society), the primary direction of influence appears to be from institutional trust to social trust. In this study conducted in Denmark, it was found that an increase in trust in the country was one of the factors that caused an increase in the public's trust in institutions. It also found that institutions, rather than culture, matter more for social trust.<sup>64</sup> According to the study, trust can serve as a key mechanism in ensuring the accountability of the state to the citizen and, as a result, improve the latter's cooperation.<sup>65</sup>

In another study, six leading theories regarding the determinants of social trust were tested against survey data from seven societies in 1999–2001.<sup>66</sup> Among the six theories of trust examined in this research, three demonstrated stronger explanatory power while three showed weaker performance. The findings indicate that social trust is predominantly high among individuals who perceive less severe societal divisions and experience greater personal security. Moreover, participation in informal social networks correlates positively with trust levels, and individuals who have achieved success in life typically display higher trust levels, presumably due to their positive life experiences.

A notable finding from the study is that the explanatory power of different trust theories varies according to the society's overall trust levels. In high-trust societies, theories focusing on individual factors tend to be more effective, while, in low-trust environments, theories emphasizing societal factors demonstrate greater explanatory power. This pattern may be understood through the lens of recent historical developments. These broad societal changes appear to have more significantly influenced individual circumstances and trust perceptions in these countries compared to more stable, high-trust societies.

#### THE MALLEABILITY OF SOCIAL AND INSTITUTIONAL TRUST

The development of trust, as discussed in more detail in Chapter 6, is inextricably linked to research on culture and its malleability – a core focus of that chapter. For our current discussion on the relationship between trust and regulation, we must

<sup>63</sup> Sønderskov, Kim Mannemar, and Peter Thisted Dinesen. "Trusting the state, trusting each other? The effect of institutional trust on social trust." *Political Behavior* 38 (2016): 179–202.

<sup>64</sup> Nannestad, Peter, et al. "Do institutions or culture determine the level of social trust? The natural experiment of migration from non-Western to Western countries." *Journal of Ethnic and Migration Studies* 40.4 (2014): 544–565.

<sup>65</sup> See also Brown, Rob. "The citizen and trust in the (trustworthy) state." *Public Policy and Administration* 35.4 (2020): 384–402.

<sup>66</sup> Delhey, Jan, and Kenneth Newton. "Who trusts? The origins of social trust in seven societies." *European Societies* 5.2 (2003): 93–137.

also consider the dynamic interaction between these two elements.<sup>67</sup> Sønderskov and Dinesen have examined the relationship between social and interpersonal trust and the level of trust in institutions. Their research contributes to the broader study of trust mechanism typology. Using a panel data approach spanning eighteen years, they investigated the relationship between social trust and institutional trust.

Their findings indicate that trust in people does not necessarily predict trust in the state. However, trust in state institutions tends to predict an individual's ability to trust other people. This suggests that government policymakers could play a significant role in increasing interpersonal trust by improving institutional design.

In contrast, scholars like Geert Hofstede have argued that the culture of trust in certain countries can be traced back to ancient history, potentially limiting the impact of institutional design.<sup>68</sup> This presents an important regulatory dilemma: States must not only adapt their regulatory interventions to their existing culture but also shape these interventions to influence societal trust levels.

Regarding the high levels of trust in Nordic countries, long-term data analysis at both individual and collective levels reveals several contributing factors.<sup>69</sup> These include high levels of education, better state institutions, increased trust in these institutions, and generational replacement. For example, these factors have played a crucial role in the increased trust observed in Denmark over the past century.

Other research has suggested that trust eroded and was replaced by regulation in the second half of the twentieth century, indicating that lack of trust invites regulation rather than preventing it.<sup>70</sup> Another argument is that governments shift away from cooperative regulatory styles because of the lack of trust between the relevant stakeholders.<sup>71</sup> This view is reflected in a twenty-year case study of the mines inspectorate conducted by Neil Gunningham and Darren Sinclair. Addressing the issue of whether the lack of trust between regulators and the regulated can lead to changes in regulatory styles, they demonstrated the centrality of trust in regulatory effectiveness, how it can be lost, and how it can best be regained.<sup>72</sup> A study conducted by Niklas Haring across multiple countries suggests that a reward-based regulatory approach is more popular when citizens have greater trust in their government's

<sup>67</sup> Sønderskov, Kim Mannemar, and Peter Thisted Dinesen. "Trusting the state, trusting each other? The effect of institutional trust on social trust." *Political Behavior* 38 (2016): 179–202.

<sup>68</sup> Hofstede, Geert. *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. SAGE Publications, 2001.

<sup>69</sup> Martela, Frank, et al. "The Nordic exceptionalism: What explains why the Nordic countries are constantly among the happiest in the world." *World Happiness Report 2020* (2020): 129–146.

<sup>70</sup> Capie, Forrest. "Trust, financial regulation, and growth." *Australian Economic History Review* 56.1 (2016): 100–112.

<sup>71</sup> Gouldson, Andy. "Cooperation and the capacity for control: Regulatory styles and the evolving influence of environmental regulations in the UK." *Environment and Planning C: Government and Policy* 22.4 (2004): 583–603.

<sup>72</sup> Gunningham, Neil, and Darren Sinclair. "Regulation and the role of trust: Reflections from the mining industry." *Journal of Law and Society* 36.2 (2009): 167–194.

ability to execute it.<sup>73</sup> Moreover, Marc Hetherington demonstrated that low trust levels can create significant barriers to government action in certain policy areas. This creates a political environment in which it is more difficult for leaders to succeed.<sup>74</sup> Peter Huang has argued that imposing duties on security professionals can cause them to behave in accordance with regulatory goals without the need to use penalties.<sup>75</sup> He argues that it is vital to analyze the emotional, moral, and psychological consequences of broker-dealers' fiduciary duties. Along these lines, Bettina Lange and Andy Gouldson have argued that trust-based regulation is important not only because it fosters trust between regulators and the regulated but also because it encourages the regulated to engage in various collective efforts to achieve the goals, particularly in the context of environmental protection.<sup>76</sup> Several other studies have also demonstrated the benefits of trust in the interaction between inspectors and regulates.<sup>77</sup>

In another study using data from the World Values Survey/European Values Study for approximately 130,000 individuals in 40 OECD (Organisation for Economic Co-operation and Development) and EU countries to determine the causal relationship between social and institutional trust,<sup>78</sup> evidence was found that social trust depends upon institutional trust. Moreover, this study's experimental evidence, presented using a sophisticated behavioral game theory involving a buyer and seller who must trust each other in a setting with and without regulation, demonstrates that regulation is not just negatively correlated with trust. This supports the argument of many other studies that have claimed the existence of causal effects on the level of trust.<sup>79</sup>

#### TRUST IN INSTITUTIONS AND LEGITIMACY

Among other studies, that of John Braithwaite and Toni Makkai focusing on nursing homes is notable for having argued that being treated as trustworthy will increase

<sup>73</sup> Haring, Niklas. "Reward or punish? Understanding preferences toward economic or regulatory instruments in a cross-national perspective." *Political Studies* 64.3 (2016): 573–592.

<sup>74</sup> Hetherington, Marc J. "The political relevance of political trust." *American Political Science Review* 92.4 (1998): 791–808.

<sup>75</sup> Huang, Peter H. "Trust, guilt, and securities regulation." *University of Pennsylvania Law Review* 151.3 (2003): 1059–1095.

<sup>76</sup> Lange, Bettina, and Andy Gouldson. "Trust-based environmental regulation." *Science of the Total Environment* 408.22 (2010): 5235–5243.

<sup>77</sup> Pautz, Michelle C., and Carolyn Slott Wamsley. "Pursuing trust in environmental regulatory interactions: The significance of inspectors' interactions with the regulated community." *Administration & Society* 44.7 (2012): 853–884; De Boer, Noortje. "How do citizens assess street-level bureaucrats' warmth and competence? A typology and test." *Public Administration Review* 80.4 (2020): 532–542.

<sup>78</sup> Pitlik, Hans, and Ludek Kouba. "Does social distrust always lead to a stronger support for government intervention?" *Public Choice* 163 (2015): 355–377.

<sup>79</sup> Six and Verhoest. *Trust in regulatory regimes*: 1–36; Van Swol, Lyn M. "The effects of regulation on trust." *Basic and Applied Social Psychology* 25.3 (2003): 221–233.



the likelihood of voluntary compliance among individuals.<sup>80</sup> Margaret Levi and colleagues have argued that two interrelated factors influence the likelihood of voluntary compliance.<sup>81</sup> The first factor is the individual's perception of the government's legitimacy. The second factor is the individual's conception of the government's trustworthiness, which significantly affects their view of the legitimacy of the regulation.

Similarly, Frédérique Six demonstrates how trust in the regulator and control may complement each other in their effect on regulating compliance.<sup>82</sup> Along those lines, in collaboration with David Levi-Faur and Libby Maman,<sup>83</sup> we examined various regulatory regimes that could be used to enhance trust. It is important to note that, in our studies, the public expressed a preference for the government to engage in some form of active oversight, rather than relying solely on firms to cooperate voluntarily. In that study, we began by distinguishing between regulatory designs, which are usually conceptualized as a dichotomous choice between state and self-regulation. The theory of regulatory capitalism proposes regulatory controls, which often conflate state regulation with private forms of regulation.<sup>84</sup> Various mechanisms can be employed to enhance self-regulation. This enhanced approach to self-regulation involves organizations leveraging intermediaries and stakeholders. These external parties help monitor and sanction the behavior of regulated entities, improve policy implementation and compliance, and reduce agency drift.<sup>85</sup>

#### SELF-REGULATION: TRUST IN INSTITUTIONS VS. TRUST IN MARKETS

While the role of regulatory design in shaping behavior has been extensively studied, its impact on public trust remains largely unexplored. This gap in scholarship is significant because trust plays a crucial role in facilitating market relationships and transactions.<sup>86</sup> Thus, the Maman, Feldman, and Levi-Faur study, mentioned before, sought to analyze the extent to which public trust is affected by various forms of regulation, examining an advanced framework of enhanced self-regulation. In

<sup>80</sup> Braithwaite, John, and Toni Makkai. "Trust and compliance." *Policing and Society: An International Journal* 4.1 (1994): 1–12.

<sup>81</sup> Levi, Margaret, Tom R. Tyler, and Audrey Sacks. "The reasons for compliance with law." In *Understanding social action, promoting human rights*, edited by Ryan Goodman, Derek Jinks, and Andrew K. Woods, Oxford University Press, 2012: 70–99.

<sup>82</sup> Six. "Trust in regulatory relations."

<sup>83</sup> Maman, Feldman, and Levi-Faur. "Varieties of regulatory regimes and their effect on citizens' trust in firms."

<sup>84</sup> Levi-Faur, David. "The global diffusion of regulatory capitalism." *Annals of the American Academy of Political and Social Science* 598.1 (2005): 12–32; Braithwaite, John. *Regulatory capitalism: How it works, ideas for making it work better*. Edward Elgar Publishing, 2008.

<sup>85</sup> Levi-Faur, David, Yael Kariv-Teitelbaum, and Rotem Medzini. "Regulatory governance: History, theories, strategies, and challenges." In *Oxford research encyclopedia of politics*. Oxford University Press, 2021: 1–58.

<sup>86</sup> Warren, Mark E. *Democracy and trust*. Cambridge University Press, 1999.

that study, we used two web-based experimental surveys on a representative sample of Israeli society (approximately 1,200 subjects in two studies) to investigate public trust in a fictitious fintech company operating under different regulatory designs.

The findings of the first study revealed several key insights into the relationship between market trust and different types of regulation. First, we observed that knowledge about any form of regulation positively impacts trust in the market. Second, our examination of state regulations with varying levels of monitoring revealed that higher levels of monitoring are associated with increased trust in the market. Low levels of monitoring in state regulation rely on the regulatees' commitments and do not foster the same level of trust. Finally, we observed a significant interaction effect between trust in the regulator and the level of monitoring state regulation. This was particularly true for situations with low monitoring. This suggests that state regulators can effectively maintain public trust in regulated firms by utilizing self-regulatory tools when the public has a high level of trust in the regulator. The study highlights the importance of considering the interaction between different regulatory approaches and their impact on market trust.

In the second study, we sought to further test the possibility that enhanced self-regulation can provide a similar level of trust in state regulation. We examined six different potential enhancements of self-regulation and tested the effect on trust using a combination of between and within subject analysis, with state regulation used as a control group. Our results show that all forms of self-regulation are less trusted by the public than a state regulatory regime. However, within self-regulatory designs, we find that a self-regulatory constellation includes the possibility of sanctioning that increases trust.

The results of the second study reinforced those of the first, showing that public trust in regulated firms increases when state regulation exists, while self-regulation (even if enhanced) leads to lower levels of public trust. The interaction effects we found suggest that governments play an important role in ensuring public trust in the market. This is true not only with governments as regulators, but also when combining self-regulatory instruments such as pledges. Our paper demonstrated that more government regulation leads to more trust. Additionally, trust in self-regulation and perhaps deregulation depends on the public's trust in the government.

The rise of self-regulation suggests that there is potential for voluntary compliance for those who are willing to adopt greater transparency and accountability.

Adapting the type of regulatory supervision is one of the most complex challenges. The regulator needs to protect the public while also helping businesses thrive. The concept of responsive regulation allows for a more customized and targeted approach. A pyramid approach is based on the idea that you should start with softer means. Ideally, most people will cooperate with these approaches. We argue that when attempting to find the best regulatory tool, we usually focus on three aspects: the extent to which the regulated knows and understands the actions

expected of them; the extent to which they are capable of cooperating with the rules; and the extent of their willingness to do so. Christine Parker's study found that spontaneous compliance can occur without enforcement and can be broken down into three main dimensions: two control dimensions focusing on how enforcement might affect compliance and a third punitive approach dimension in which the effect of sanctions on compliance is expected to work.<sup>87</sup> In another study, Ian Bartle and Peter Vass propose a "new regulatory paradigm" based on the concept of regulatory "subsidiarity." This approach advocates for delegating regulatory outcomes to regulated organizations and self-regulatory bodies, while simultaneously strengthening public regulatory oversight through enhanced accountability and transparency measures.<sup>88</sup>

Many scholars have argued that states play a central role in enhancing trust toward market actors in cases when regulators are perceived as third-party providers.<sup>89</sup> Bart Nooteboom has argued that regulatory intervention is needed to help boost the ability of the public to trust market actors.<sup>90</sup> Other scholars have demonstrated that the public's trust in regulators is important in increasing trust.<sup>91</sup> According to Piotr Sztompka,<sup>92</sup> trust in regulators depends upon factors such as transparency, accountability, protection of private autonomy, and regulatees' rights. Other scholars have argued that it is important for regulators to be seen as not being too close to the industry in order to maintain public trust.<sup>93</sup>

Overall, when endeavoring to understand the factors that predict public trust in institutions, some have argued that such trust is dependent on the personal experience with the institutions and on the public's perception of the institutions as being objective and representative.<sup>94</sup> Other scholars have focused on demographic and family-related factors as being the main predictors of institutional trust.<sup>95</sup>

<sup>87</sup> Parker, Christine. *The open corporation: Effective self-regulation and democracy*. Cambridge University Press, 2002.

<sup>88</sup> Bartle, Ian, and Peter Vass. "Self-regulation within the regulatory state: Towards a new regulatory paradigm?" *Public Administration* 85.4 (2007): 885–905.

<sup>89</sup> Six and Verhoest. *Trust in regulatory regimes*.

<sup>90</sup> Nooteboom, Bart. "The dynamics of trust: Communication, action and third parties." In *Trust: Comparative Perspectives*, edited by Masamichi Sasaki & Robert M. Marsch, Brill, 2012: 9–30.

<sup>91</sup> Braithwaite and Makkai. "Trust and compliance."

<sup>92</sup> Sztompka, Piotr. *Trust: A sociological theory*. Cambridge University Press, 1999.

<sup>93</sup> Van der Meer, T. W. G. "Economic performance and political trust." In *The Oxford handbook of social and political trust*, edited by E. M. Uslaner, Oxford University Press, 2018: 599–615; Six and Verhoest. *Trust in regulatory regimes*.

<sup>94</sup> Bradford, Ben, Jonathan Jackson, and Mike Hough. "Trust in justice." *The Oxford Handbook of Social and Political Trust, Oxford Legal Studies Research Paper* 43, edited by Eric M. Uslaner, Oxford University Press, 2016: 633–654.

<sup>95</sup> Dinesen, Peter Thisted, and Kim Mannemar Sønderskov. "Ethnic diversity and social trust: A critical review of the literature and suggestions for a research agenda." In *The Oxford handbook of social and political trust*, edited by E. M. Uslaner, Oxford University Press, 2018: 175–204; Ermisch, John, and Diego Gambetta. "Do strong family ties inhibit trust?" *Journal of Economic Behavior & Organization* 75.3 (2010): 365–376.

## RULES, STANDARDS, AND VOLUNTARY COMPLIANCE

Another angle of the trust between regulators and regulates is related to optimal level of discretion. Is it good to give people discretion? Is it likely to increase voluntary compliance? When giving people regulatory instruction, should vague terminology be used to give people greater flexibility?

In a joint paper with Henry Smith and Constantine Boussalis, we experimentally examined the effect of vagueness and good faith on how participants react to instructions.<sup>96</sup> To test these hypotheses, we used a factorial experimental design. Participants were instructed to edit a document with either general or detailed instructions. The instructions either included a reference to good faith or did not have such a reference. Participants could engage in different levels and types of editing, enabling us to measure compliance and performance separately. When participants needed information and guidance, such as when editing, we found that being specific improved performance compared to the vague standard condition. In our work, we discussed the characteristics of the regulatory frameworks, such as good faith in contract performance, to which our findings are especially relevant.

In a similar vein, Laetitia Mulder, Jennifer Jordan, and Floor Rink have argued that specific rules have a stronger effect on ethical decisions than general rules.<sup>97</sup> Their conclusion is based on a series of five studies that demonstrated that specifically framed rules elicited more ethical decisions compared to generally framed rules. This research contributes to a broader understanding of how rule framing impacts ethical behavior in organizations. In a related line of inquiry, Ann Tenbrunsel and David Messick examined the effects of surveillance and sanctioning systems on cooperative behavior in dilemma situations. Their work, while focusing on different aspects of organizational control, complements the findings on rule specificity by exploring how external monitoring mechanisms influence ethical decision-making. Their studies demonstrated that a weak sanctioning system results in less cooperation than a no-sanctioning system.<sup>98</sup> Results from the second study suggest that sanctions affect the type of decision people perceive they are making. Sanctions can lead them to perceive their decision as being driven by financial rather than ethical considerations.

## CONCLUSION

This chapter has explored a wide range of topics related to regulatory approaches and their impact on voluntary compliance. We began by examining the interplay

<sup>96</sup> Boussalis, Constantine, Yuval Feldman, and Henry E. Smith. "Experimental analysis of the effect of standards on compliance and performance." *Regulation & Governance* 12.2 (2018): 277–298.

<sup>97</sup> Mulder, Laetitia B., Jennifer Jordan, and Floor Rink. "The effect of specific and general rules on ethical decisions." *Organizational Behavior and Human Decision Processes* 126 (2015): 115–129.

<sup>98</sup> Tenbrunsel, Ann E., and David M. Messick. "Sanctioning systems, decision frames, and cooperation." *Administrative Science Quarterly* 44.4 (1999): 684–707.

between trust and coercion in regulatory strategies, discussing the effectiveness of various approaches such as deterrence, incentives, and trust-based regulation. The chapter delved into the concept of “order without law” and its implications for voluntary compliance, as well as the potential risks and benefits of sanction-free regulation. We explored the role of nudges in shaping behavior, distinguishing between different types of nudges and their effects on intrinsic motivation. The chapter also examined the complex relationship between trust and regulation, considering how different forms of trust – interpersonal, social, and institutional – interact with regulatory approaches. Finally, we discussed the impact of rules versus standards on compliance behavior and the potential for ethical blind spots in regulatory enforcement.

Looking forward, this exploration reveals several key areas for future research and policy development. There is a clear need for more robust theoretical frameworks that can predict the outcomes of different regulatory approaches across various contexts and cultures. Longitudinal studies are crucial to assess the long-term impacts of regulatory strategies on trust and consequently on voluntary compliance. Future research should also focus on developing more sophisticated methods for balancing coercive and trust-based approaches in regulatory design.

By addressing these research gaps and continuously refining our understanding of the complex dynamics between regulation, trust, and compliance, we can work toward more effective, efficient, and trust-enhancing regulatory systems that serve the public interest while respecting individual autonomy. Along these lines, as technology continues to evolve, in Chapter 7 we will investigate the role of digital tools in fostering voluntary compliance while maintaining privacy and autonomy will be essential. Policymakers and researchers alike should work toward creating technologically based adaptive regulatory systems that can respond to changing societal norms and behaviors while promoting sustainable voluntary compliance.