



Clearing the Smoke: Regulations, Moral Legitimacy, and Performance in the U.S. Tobacco Industry

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Abstract

Considering recent theoretical discussions about the concept of moral legitimacy, this study advances our understanding of its performance consequences. Specifically, it uncovers the mediating role of moral legitimacy in the relationship between regulations and industry performance. Our analysis of the U.S. state-level data on regulations in a controversial industry between 1994 and 2010 yields four significant findings. The results show that regulations not only decrease performance but also negatively impact moral legitimacy. Moreover, this study provides empirical evidence that moral legitimacy is positively related to industry performance, providing much-needed direct support for this premise. Importantly, the results indicate that moral legitimacy mediates the effect of regulations on performance, but only when regulations are aligned with moral values. Overall, this study extends our understanding of how regulations influence moral legitimacy, and in turn impact industry performance.

Keywords Moral legitimacy · Regulations · Industry performance · Tobacco industry

Introduction

Following the accumulation of several reports from the U.S. Surgeon General on the negative effects of smoking on health, major regulatory changes were implemented in the institutional environment of tobacco companies (hereafter TCs) during the late 1990s and 2000s. These regulatory changes, sparked by awareness of the adverse health consequences of smoking and knowledge of the addictive nature of cigarettes, threatened TCs' moral legitimacy. Due to these changes, TCs not only had to operate in an increasingly hostile institutional environment as a significant number of states enacted tobacco control regulations, but also saw cigarette sales plummet (Jones, 1997). More recently, similar dynamics have unfolded in other controversial industries, such as soft drinks, the energy sector, and genetically

modified organisms (GMOs); increasing regulations and changing evaluations of what is morally acceptable are profoundly affecting the performance of companies in these industries. Hence, we consider the tobacco industry to be an ideal context for exploring the following question: How do regulations affect moral legitimacy, and in turn influence industry performance?

To answer this question, we draw on two core claims of the institutional theory literature: (a) regulations profoundly influence moral legitimacy (Tost, 2011), and (b) organizations require moral legitimacy to thrive (Suddaby et al., 2016). These claims suggest that moral legitimacy mediates the relationship between regulations and performance (Scott, 2008). Despite a growing body of research on moral legitimacy, to the best of our knowledge, its relationship with financial performance remains unclear, as prior studies either yielded inconsistent results (Heugens & Lander, 2009) or had a conceptual focus (Deephouse et al., 2017). We attempt to shed light on the role of moral legitimacy in mediating the relationship between regulations and performance by theoretically distinguishing each of these concepts and empirically disentangling their mediating effects in the context of a controversial industry.

We define controversial industries as those with highly variable social acceptability or with fluctuations in societal

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approval, leading to societal disagreements over their right to exist (Galvin et al., 2004). Controversial industries like tobacco (Aranda & Simons, 2018; Hsu & Grodal, 2015, 2020; Simons et al., 2016), gambling (Leung & Snell, 2017, 2021; Reast et al., 2013), marijuana (Dioun, 2018), and guns (Durand & Vergne, 2015; Vergne, 2012) are particularly interesting research contexts, as they are subject to increasing regulations and face recurring challenges and questions regarding their moral legitimacy (Galvin et al., 2004). According to Anteby (2010), threats to the moral legitimacy of a practice endanger the entire industry that supports that practice. This is particularly salient in controversial industries, where legitimacy threats affect core practices (e.g., smoking cigarettes) supported by firms' business activities, thereby affecting all industry members (e.g., TCs) equally. Hence, controversial industries are a suitable context for our purposes, given that they are "settings characterized by social contestation and targeted scrutiny by hostile audiences" (Durand & Vergne, 2015, p. 1218). Despite the central importance of controversial industries to business ethics, not much research has focused on traditionally controversial industries like tobacco. Nevertheless, we argue that recognizing the interplay between regulations and moral legitimacy is essential to advance research in business ethics. Indeed, as controversial industries are ever-present, the insights gained from research on this topic can be used to understand a variety of contexts.

Empirically, we study the U.S. tobacco industry, which we argue is controversial for three reasons (Wilson & West, 1981). First, the strategies used by TCs to persuade people to smoke have been openly and recurrently questioned (Proctor, 2011). Second, tobacco control regulations are attracting increasing societal support, which has "helped transform the idea of regulation from controversial to common sense" (Layton, 2009, p. 1). Third, the enactment of tobacco control regulations, along with the fact that "most smokers want to quit" and "are extremely ambivalent about their habit" (Spinney, 2007, p. 1508), has led to a downward trend in smoking prevalence. Nevertheless, even though smoking is less acceptable than it used to be in many segments of society, some consider smoking to be a right and a matter of personal freedom (Nathanson, 1999). Hence, the tobacco industry is of interest because, during the study period, it was constantly challenged by the coexistence of multiple evaluations of morality, yet continued to operate as an established profitable industry despite its history of deception, lies, and manipulation (Proctor, 2011). The tobacco industry, thus, provides an appropriate setting to empirically test how the increasing enactment of tobacco control regulations that portray smoking as a risky or undesirable activity questioned or challenged the industry's moral legitimacy, thereby endangering TCs' performance.

Our study makes two important contributions. First, we revisit the concept of regulations and suggest that its undifferentiated usage limits both its theoretical and empirical usefulness. We contribute to the literature by presenting a fine-grained examination of regulations and their differential effects conditional on their alignment with widely held evaluations of morality. Second, we provide direct empirical evidence of moral legitimacy's controlling and constraining influence on performance. In summary, we advance scholarly understandings of moral legitimacy by explicitly recognizing its conceptual complexity and providing empirical evidence of its role in mediating the relationship between regulations and performance in the context of an important, yet under-studied controversial industry.

Theory and Hypotheses

Regulations

Regulations structure the behavior of organizations and their interactions within a given industry by "setting rules, monitoring compliance, and sanctioning behavior" (Heugens & Lander, 2009, p. 63). According to North (1990), regulations have mixed effects on performance. They can either enable or constrain the actions of organizations in a given industry by limiting the realm or scope of their practices and defining a range of available strategies. Although the vast majority of industries face enabling and constraining regulations, a greater proportion of regulations in controversial industries constrain behaviors rather than enable them (Galvin et al., 2004). Therefore, we focus on the effect of regulations on controversial industries to understand how they cumulatively affect performance, both *directly* and *indirectly* (i.e., via mediation). Below we discuss direct effects, before turning our attention to indirect effects.

Cumulatively, regulations *directly* affect performance by defining how an industry should function. In non-controversial industries, regulations can be beneficial for performance, as they create barriers to competition or maintain the industry's stability. However, in controversial industries, regulations restrict resource availability and limit the range of strategies available to industry members so that their accumulation negatively affects performance (Oliver, 1991). For example, in this study, the direct effect is characterized by the accumulation of tobacco control regulations that threatened TCs' performance by making the health risks associated with cigarettes salient to encourage smoking cessation or to discourage potential smokers from engaging in the practice (Miles, 1982). Thus, regulations *directly* influence performance by providing the "stimulus, guidelines, and resources for acting as well as prohibitions and constraints on action" (Scott, 2008, p. 58).

Regulations are only one of the pillars of institutions, the others being moral and cultural (Scott, 2008). To fully understand the extent to which regulations affect performance, it is, thus, important to consider their alignment with broad moral values (Hiatt et al., 2009). In cases of alignment between regulations and broad evaluations of morality, we expect the endorsement and enforcement of regulations to be stronger so that they are more consequential for performance. Prior work has shown that when regulations refer to moral values, members of society find them to be more appropriate, enhancing their motivation to comply (Burby & Paterson, 1993; Murphy et al., 2009). In contrast, when regulations are misaligned with widely held moral values, societal endorsement is reduced (Chuang et al., 2011). Thus, the extent to which regulations affect performance is determined by the extent to which they are (mis)aligned with widely held moral values (Khessina et al., 2020; Webb et al., 2009).

Overall, regulations can severely influence performance in controversial industries because they restrict the range of strategies available (Dowling & Pfeffer, 1975), which interferes with their ability to operate effectively (Deephouse & Carter, 2005). This effect is stronger when regulations are aligned with broad evaluations of morality, because they are likely to be endorsed by society and enforced (Bonaventura, 2011). This leads to the first hypothesis:

Hypothesis 1 Regulations are negatively related to performance in a controversial industry.

Moral Legitimacy

The concept of moral legitimacy has undergone important theoretical development. Suchman (1995, p. 579) defined moral legitimacy as entailing an evaluation based on broad ethical and moral values about what is *the right thing to do*. Similarly, Scott (2008) identified moral/normative legitimacy as being governed and associated with societal norms and values. Recently, Deephouse et al., (2017, p. 19) recognized that moral legitimacy “results when certain criteria (moral values) are generally agreed upon within the social system.” Lastly, Suddaby et al., (2016) propose an understanding of moral legitimacy as: a property that rests on norms, values, beliefs, and morals; as a process that occurs through moralization (see Vaara et al., 2006); and as a perception resulting from multi-level judgments.

Moral legitimacy, thus, is granted to industries involved in practices that uphold “collectively valued purposes, means, goals, etc.” (Deephouse et al., 2017, p. 6) or based on “their contribution to the common good” (Melé & Armengou, 2016, p. 731). Since moral legitimacy rests on the moral evaluations by societal members defining “the right thing to do” (Suchman, 1995, p. 579), it is socially

constructed (Palazzo & Scherer, 2006). Once bestowed, moral legitimacy reinforces the social acceptance of industry practices. Importantly, moral legitimacy is a continuous concept, with broad moral evaluations arrayed along a moral spectrum (Ashforth, 2018). In an industry that is beneficial for society, such as electric vehicles, these evaluations result in societal approval and moral legitimacy. In a controversial industry, such as the nuclear industry, these evaluations tend to be negative, so the industry is deemed illegitimate (Hampel & Tracey, 2019).

Although it is well established that one way organizations gain moral legitimacy is by complying with regulations (Scott, 2008), simply abiding by the law is not sufficient in controversial industries because the introduction of highly constraining regulations (Reast et al., 2013) is a strong and visible signal of the lack of consonance between industry practices and societal welfare (Greenwood et al., 2011). Such misalignment creates a “presumption of guilt,” which threatens an industry’s moral legitimacy (Durand & Vergne, 2015). In this sense, regulations are important moral influences (Edelman, 1990), meaning they codify widely shared beliefs about what is (not) deemed morally legitimate. This is in line with Edelman (1990, p. 1402), who posited that regulations shape societal expectations, since the “law creates, and helps to constitute” a moral environment.

Hence, we posit that regulations profoundly impact the moral legitimacy of controversial industries by shaping societal expectations about which practices are deemed morally appropriate or acceptable, and by making the misalignment between an industry’s strategies and collective interests visible and salient (Bowen, 2019). For example, in the tobacco industry, tobacco control regulations have been enacted across U.S. states to “express the government’s public policy concern that tobacco use is dangerous to health, contribute to a social climate that discourages smoking in public places, and legitimize attempts to bring additional public pressure to reduce cigarette consumption” (Jacobson & Zapawa, 2001). Regulations can, thus, “be interpreted as a way of asserting social control: the intention is to prevent the spread of undesired practices” (Hampel & Tracey, 2017, p. 2200).

Thus, we posit that a controversial industry’s moral legitimacy is threatened by the accumulation of regulations that shape societal perceptions of appropriateness, as such regulations provide moral guidance (Edelman & Suchman, 1997). Since regulations comprise intertwined regulative and moral elements, they not only directly control what organizations in controversial industries do, but more importantly, *indirectly* shape societal expectations. This leads to the second hypothesis:

Hypothesis 2 Regulations are negatively related to the moral legitimacy of controversial industries.

Performance

Although scholars have attempted to theoretically disentangle the performance consequences of legitimacy (Heugens & Lander, 2009), empirical evidence remains inconclusive. Some researchers have found that moral legitimacy has no impact on performance (Guo et al., 2014; Lo et al., 2011; Staw & Epstein, 2000), in line with Meyer and Rowan's (1977) original argument that performance considerations are independent of the quest for moral legitimacy. However, most studies have shown either a negative or a positive effect. On the one hand, striving for and obtaining legitimacy may limit performance because it might lead to isomorphism, which results in greater industry rivalry, increases competition for scarce resources, and decreases differentiation among industry players, thereby constraining the industry's profit potential (Barreto & Baden-Fuller, 2006; David et al., 2007; Esteban-Lloret et al., 2014; Westphal et al., 1997). On the other hand, legitimacy may positively affect performance (Scott, 2008), because it enhances access to scarce resources and capabilities (Deephouse, 1999), increases a firm's ability to attract the best partners (Cohen & Dean, 2005; Pollock & Rindova, 2003), and neutralizes opposition or contestation (Bansal & Clelland, 2004; Doh et al., 2009). Overall, there is substantial but inconclusive evidence from prior research on the performance of industries that command (or lack) legitimacy. This results in conflicting perspectives on whether legitimacy can be translated into a performance advantage.

Notwithstanding the conflicting empirical evidence, we posit that maintaining moral legitimacy in controversial industries is fundamental to sustaining their performance (Beck et al., 2017; Zhang et al., 2013). This is because controversial industries are constantly on the verge of delegitimation, which has the potential to severely limit access to crucial resources (Galvin et al., 2004). Hence, by maintaining some threshold level of moral legitimacy, controversial industries can avoid particularly negative societal evaluations, gain public endorsement from some relevant audiences, and acquire support from resource providers (Reast et al., 2013). To illustrate, in the specific case of TCs, "it has been clear for many years that tobacco companies, which monitor factors that are known to affect their sales, rate the public acceptability of the smoking habit as the most crucial factor affecting sales in the long term" (Simpson & Lee, 2003, p. 238). In short, moral legitimacy has a positive effect on controversial industries' performance because it supports the flow of crucial resources. This leads to the third hypothesis:

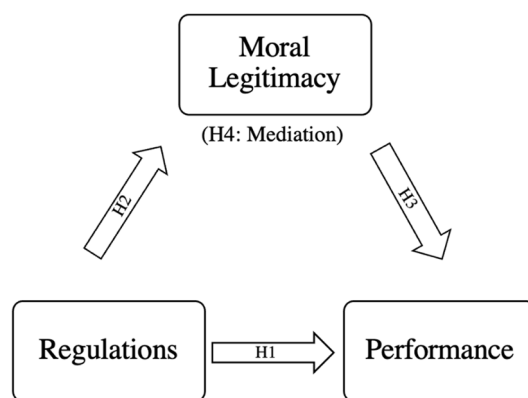


Fig. 1 Conceptual model and hypotheses

Hypothesis 3 Moral legitimacy is positively related to the performance of controversial industries.

Mediation

The previous discussion highlights that regulations impact the moral legitimacy and performance of controversial industries, and that moral legitimacy also *directly* affects performance.¹ Together these predictions provide a solid basis for testing the mediating role of moral legitimacy—that is, its *indirect* effect on the relationship between regulations and performance (e.g., Ahn & Park, 2018). Regulations indirectly affect performance by changing the extent to which an industry has moral legitimacy, reflecting the idea that regulations “consist not only of law and the sanctions that are built into the law but also of societal norms and culture associated with the law” (Edelman, 1992, p. 1534). For instance, through tobacco control regulations, state governments aim to control current smokers' behavior, protect non-smokers, and discourage potential new users of cigarettes. As the increasing enactment of these regulations decreases the moral acceptability of tobacco by highlighting the dangers of smoking for smokers and non-smokers alike, the accumulation of these regulations can potentially reduce TCs' performance. Hence, as depicted in Fig. 1, regulations pose a significant threat to performance in controversial industries (Galvin et al., 2004) by shaping their moral legitimacy (Dhalla & Oliver, 2013; Oliver, 1991). Building on this, we propose:

¹ In the context of our paper, we are interested in the causality path going from regulations to moral legitimacy. In principle, though, what is deemed legal might affect and be affected by what is deemed moral (an issue we return to in the methods and results).

Hypothesis 4 Moral legitimacy mediates the relationship between regulations and performance in controversial industries.

Methods

Data Sources and Measures

To test our hypotheses we collected annual data on tobacco regulations implemented by U.S. states between 1994 and 2010. Although the public first learned about the negative consequences of smoking from the 1964 U.S. Surgeon General's report on smoking and health, tobacco control regulations only gained traction toward the end of the twentieth century. Our study period begins in 1994 because, in May of that year, Mississippi became the first state to sue TCs in an attempt to hold them accountable for the health-related costs of smoking. This lawsuit marked a watershed event for TCs, as 45 states followed suit and commenced litigation, culminating in the Master Settlement Agreement of 1998. We chose 2010 as the end of our study period for three reasons. The first is data availability for our dependent variable, which we could only access until 2010. The second relates to the industry's evolution; after 2010, important tobacco replacements were introduced (smokeless tobacco products after 2011 and e-cigarettes after 2012) and exhibited strong growth. Significant expansion in the use of these products could have affected our model estimates. Third, after 2010, "attitudes shifted from a majority of Americans being *against* making smoking in public places illegal to a majority being in *favor* of making it illegal" (Riffkin, 2014). Our dataset consists of a balanced panel with 850 state-level observations, each representing a given state in a specific year.

Dependent Variable

We measured TCs' performance using state cigarette sales based on the number of cigarette packages taxed and sold per state each year. This is the best available measure of tobacco industry performance, because states require cigarette distributors to pay tobacco taxes before cigarettes are sold by purchasing tax stamps that are affixed to each pack. We obtained state cigarette sales data directly from the Tax Burden on Tobacco dataset published by the Centers for Disease Control (Orzechowski and Walter 2014). Tax-paid cigarette sales were adjusted by population per state to eliminate the confounding effect of size.

Independent Variables

WE examined the effects of regulations aligned with widely held moral values versus those that diverge from them. Our research setting enabled us to empirically test counterfactual scenarios because tobacco control regulations varied widely across different states, such that some were aligned (e.g., youth access laws) whereas others were misaligned (e.g., smoking bans) with broad moral values. Thus, we included a fine-grained characterization of regulations in our models by using two variables representing different states' efforts to control tobacco.

The first variable is *youth access laws*. These laws represent the government's obligation to protect children's health from the dangers caused by smoking. Youth access laws restrict TCs from reaching potential new smokers at a vulnerable age, as "more than 80% of adult smokers begin smoking before 18 years of age" (CDC, 2015), and from starting young people on the path of nicotine addiction, since people who start smoking in their youth are less likely to quit later in life (Parsons et al., 2010). We measured this variable using the Alciati index, which captures the comprehensiveness of state youth access laws (Alciati et al., 1998). The index evaluates the extensiveness of laws restricting youth access to tobacco by assigning ratings on nine items: six related to tobacco control objectives, and three addressing enforcement provisions (see Table 1). To construct the youth access laws variable, we coded items included in the score for each state-year according to the definition given by Alciati et al. (1998): 0 for a lack of provisions, 1 for minimal requirements, 2 for fair provisions, 3 for good provisions, 4 for excellent provisions, and 5 for exceeding target provisions. We calculated cumulative yearly score for each state as the sum of the annual individual codes for each item.

The second variable, *smoking bans*, is a cumulative measure of the enactment of smoking bans in government buildings, private workplaces, childcare centers, health care facilities, restaurants, bars, schools, recreational and cultural facilities, public transit, malls, and hotels. To construct this variable, we coded the enactment of a smoking ban pertaining to a particular location in a state following the ImpacTeen (2009) coding scheme, which considers the increasing adoption of new regulations and their strength. For a given state, we coded a year in which there were no smoking bans enacted as 0, and a year in which a smoking ban was enacted as either 1, 2, or 3 depending on the number of exemptions or exceptions,² or 4 if it was a total ban.

² Restrict smoking to: (1) "designated smoking areas or require separate ventilation with exemptions for locations of a certain size;" (2) "separately ventilated areas or a ban with exemptions for certain locations where only a restriction applies;" or (3) "areas accessible to the general public, but smoking is allowed in separately ventilated or designated areas where the public is not allowed" (ImpacTeen, 2009, p. 16).

Table 1 Youth access laws—Alciati Score

Item	Target
Minimum age	Prohibits the sale or distribution of any tobacco products to persons under 18 years of age
Packaging	Prohibits all cigarette sales other than in a sealed package conforming to federal labeling requirements
Clerk intervention	Prohibits access to or purchase of tobacco products without the intervention of a salesclerk
Photo identification	Requires merchants to request photographic identification for customers who appear to be under 21 years of age
Vending machines	Total ban on sale of all tobacco products through vending machines in all locations
Free distribution	Total ban on distribution of free tobacco samples, coupons for free samples, or rebates
Graduated penalties	Establishes a system of graduated penalties or fines applicable to all youth access laws, to be levied within three years, plus possibility of suspension or revocation of a required tobacco retail license for repeated sales to minors
Random inspections	Establishes random, unannounced inspections of retailers as part of the enforcement mechanism, using underage buyers for the purpose of identifying violators, and does not prohibit other use of minors to test compliance
Statewide enforcement	Establishes a clearly designated statewide enforcement authority for sales

Source Alciati et al., (1998: 346)

Following the ImpacTeen (2009) guidelines, we summed the individual yearly scores assigned to each state location to obtain the smoking ban value for each state.

Overall, these two independent variables are essential for the analysis because they represent two different types of regulations: smoking bans restrict when/where people can smoke, whereas youth access laws limit children's access to tobacco. More importantly, both variables shape the social acceptability of smoking by highlighting dangers for smokers and non-smokers alike. However, these variables reflect different moral values: smoking bans have been publicly challenged and questioned based on arguments about personal liberty, whereas youth access laws have received widespread support (Jacobson & Zapawa, 2001). For instance, in 1994, support for proposals to restrict youth access to tobacco products was already high, as "more than 94% of respondents believed cigarette smoking by children and adolescents to be a 'very serious' or 'somewhat serious' problem" (Bailey & Crowe, 1994, p. 314). In contrast, in the same year, support for smoking bans was significantly lower, with only around 30% of Americans favoring smoking bans, partly because "only 36% considered second-hand smoke 'very harmful,' 42% said 'somewhat harmful,' and 18% believed it was 'not too harmful'" (Saad, 1997).

State-level data for 1994–2007 were obtained from the State Level Tobacco Control Policy and Prevalence Database for both independent variables. State-level tobacco control regulations for 2008–2010 were retrieved from the State Cancer Legislative Database Program and were coded by one of the authors using the coding schemes described above (Alciati et al., 1998; ImpacTeen, 2009). To assess intercoder reliability, a second coder coded both variables per scheme for the six states that enacted regulations between 2008 and 2010. Coding agreement was nearly perfect (93.2%).

Mediator Variable

Following previous research, we included a media-based measure of moral legitimacy in the models (Vergne, 2011). We identified media coverage as a relevant measure of moral legitimacy because it reflects moral evaluations of the industry by presenting it as being (mis)aligned with widely held moral values (Giorgi & Weber, 2015). Moreover, media outlets provide extensive coverage of the enactment of regulations, which implicitly recognize these regulations as worthy of attention (McDonnell & King, 2013). Indeed, Greening and Gray (1994, p. 475) argued that the media not only "play a major role in assigning importance to issues," but more importantly, "expose gaps between business practices and society's expectations." In sum, media coverage is relevant in the diffusion of moral legitimacy threats, given the media's ability not only to portray industries as "the antithesis of everything" (Devers et al., 2009) that society members value, but also to reach and influence a critical mass in society (Lamin & Zaheer, 2012).

In contrast to previous studies in which researchers measured moral legitimacy based on a purposive sample of (primarily national) newspapers, we included multiple national, state, and local newspapers. Including various newspapers enabled us to assign weights to different sources when evaluating moral legitimacy, contributing to our ability to measure incompatible perceptions of moral legitimacy more precisely while capturing diverse moral legitimacy assessments across states (Vergne, 2011). State newspaper articles were retrieved from LexisNexis using a combination of the terms *smok!*, *cigarette*, *tobacco compan!*, *ban*, *law*, *regulation*, *legislation*, and *US*. Exclamation points (!) were included to find multiple variations of a term (e.g., *smok!* returned articles with the terms *smoker*, *smoking*, and *smoke*). Initially, our search yielded 4,018 articles. After eliminating

duplicates, the final sample included 3976 articles. We read and assigned each article to one of three categories: positive (1), neutral (0), or negative (−1). A positive article endorsed or adopted a favorable stance toward TCs. For example, an article that praised TCs' actions by emphasizing the positive aspects of TCs' activities (e.g., CSR). A negative article challenged or adopted an unfavorable stance toward TCs by criticizing or questioning their actions (e.g., stating that TCs' lied about the dangers of smoking). A neutral article had either no impact on TCs (e.g., a report or description of the companies' activities) or a balanced number of endorsing and challenging statements (Deephouse, 1996). To assess intercoder reliability, a research assistant coded a random sample of 1057 articles (26% of the total sample). Interrater agreement was high (87.4%).

Given that the final codes were mainly negative, we used the raw moral legitimacy vector (RLV) to measure moral legitimacy (Vergne, 2011). Although the Janis–Fadner coefficient of imbalance has been used extensively in prior work, the RLV is a better measure in our empirical setting, as it corrects for media visibility patterns related to the fact that most articles are negative. Moreover, the RLV “accounts for the heterogeneity of perceptions across space and time” (Vergne, 2011, p. 484), allowing us to better capture changes in moral legitimacy over time and across different states. Finally, the RLV is designed to be used with data from a diverse array of local and state-level media publications instead of a few high-circulation national publications. The RLV is based on the three-step methodology developed by Vergne (2011). The first step is to select the relevant dimensions of legitimacy; in our case, we focus on *moral legitimacy*, which captures congruence with broad moral values (Elsbach, 1994; Ruef et al., 1998; Suddaby & Greenwood, 2005). The second is the selection of relevant press outlets, which, to control for spatial bias, include national authoritative high-circulation newspapers as well as local and state-level publications. The third and final step is to compute, in our case, the one-dimensional RLV. We used our coding of the newspaper articles to focus only on the challenging articles in our sample. The continuous RLV score for each state-year is obtained by aggregating the number of negative articles for each state over time.

Control Variables

First, to control for the prospect of tobacco-growing states being friendlier toward tobacco, we included a variable indicating the number of tobacco acres harvested per state. We gathered data for the *crops* variable from the Department of Agriculture. Second, due to the expectation that Democrats are more inclined than Republicans to support the enactment of tobacco control regulations, we measured the percentage of *Democrats* in the upper and lower houses of state

legislatures based on data from the U.S. Census Bureau. Third, we measured cigarette *taxes* to control for a state's economic dependence on tobacco sales using annual Tax Burden on Tobacco data for each state. Fourth, we controlled for time-variant state-specific characteristics by including data on *GDP* per capita and percentage of *adults* per state from the U.S. Census Bureau. Lastly, we controlled for *state-level media coverage* by including a count variable of the number of tobacco and smoking-related articles published by state newspapers each year. As before, we retrieved articles from LexisNexis and read all of them, excluding irrelevant articles.

Model and Analyses

There are two main approaches to test for mediation. The standard approach by Baron and Kenny (1986) used in most previous studies (Aguinis et al., 2016) suggests using three OLS regressions. However, the OLS estimator may lead to incorrect results when the mediator is endogenous. Another approach, proposed by Shaver (2005), allows testing for mediation in the presence of endogeneity by using an instrumental variable estimation which replaces the endogenous variable with an instrument that is uncorrelated with the dependent variable (i.e., exogenous) but correlated with the endogenous variable (i.e., relevant).

The method proposed by Shaver (2005) is similar to Baron and Kenny's (1986) method in that it consists of three regressions. The first regression tests whether the independent variable predicts the dependent variable (i.e., first condition). The second regression tests the impact of the independent variable on the mediator (i.e., second condition). The third regression tests for mediation by evaluating whether the effect of the mediator on the dependent variable is statistically significant when controlling for the independent variable (i.e., third condition). The strength of the mediation effect whenever the mediator is significant in this regression depends on the coefficient of the independent variable: if it is statistically significant, there is partial mediation; if not, there is full mediation.

The instrumental variable method proposed by Shaver (2005) differs from Baron and Kenny's (1986) method in that the third regression is estimated using the 2SLS estimation procedure, which consists of two stages. The first stage regresses the endogenous variable on the instrument and the exogenous variables to obtain the predicted values for the endogenous variable. The second stage regresses the dependent variable on the predicted values of the endogenous variable and the other regressors. In contrast to most prior work, we use Shaver's (2005) method to avoid potential endogeneity due to the possible simultaneous dynamics of regulations and moral legitimacy, as well as moral legitimacy and performance.

In the first case (i.e., regulations and moral legitimacy), one can think of a feedback loop where moral legitimacy concerns compel regulators to enact laws that ban smoking and limit youth access to cigarettes, further reinforcing moral legitimacy concerns. However, in our empirical setting, the moral legitimacy measure is more reflective than formative, as newspaper articles covering tobacco control regulations were more prevalent around the times when bans were enacted. Moreover, from a theoretical perspective, the notion that moral legitimacy leads to regulations is less appealing, because early work states that institutions provide a basis for moral legitimacy, a condition that reflects consonance with the regulatory environment rather than being a determinant of institutions (Scott, 2008). Nevertheless, to address this potential issue, in the second regression, we used two instruments for regulations such that the results do not suffer from endogeneity. The first instrument is the tendency of the state to enact interventional bans, meaning those that “directly affect population health by limiting exposure to potentially harmful materials, discouraging unhealthy behaviors, encouraging healthy behaviors, or engaging in a combination of such approaches” (Macinko et al., 2013, p. 1697). We selected this instrument because it directly captures a state’s inclination to adopt public health laws, which could also affect its likelihood of enacting tobacco control regulations. However, a state’s tendency to enact such laws should not impact the moral legitimacy of the tobacco industry. We measured *contested bans* with a count of state intervention policies in the form of seatbelt laws, alcohol and drunk driving laws, and helmet laws. We obtained data for this variable from the State Health Policy Research Dataset. The second instrument is the existence of preemptive legislation that prohibits municipalities (i.e., counties, cities) from enacting laws that vary from or are more stringent than state laws. This instrument enabled us to capture the fact that preemptive legislation can halt the enactment of tobacco control regulations but should not threaten TCs’ moral legitimacy, as preemption removes the tobacco issue from any discussion. We measured *preemption* with a dummy indicator that takes a value of 1 for states with a preemption clause, and 0 otherwise based on Tobacco Control Policy and Prevalence Data.

In the second case (i.e., moral legitimacy and performance), the consideration may be that performance leads to moral legitimacy. To the best of our knowledge, there is no theoretical support for the proposition that organizations must meet financial performance expectations to obtain moral legitimacy (Deephouse & Carter, 2005). The notion that organizations need to be profitable to be legitimate also is not supported by empirical evidence. For example, legal but contested businesses such as mining or cryptocurrencies and unlawful activities such as drugs or arms trafficking are

Table 2 Descriptive statistics

Variable	Obs	Mean	Std. Dev	Min	Max
(1) Youth access laws	850	15.769	6.203	3	31
(2) Smoking bans	850	18.741	14.406	0	51
(3) Legitimacy	564	3.537	5.921	0	61
(4) Crops	850	0.386	0.487	0	1
(5) Democrats	850	0.506	0.167	0	0.9
(6) Taxes	850	29.741	9.162	10.5	57.8
(7) GDP per capita	850	0.036	0.009	0.019	0.072
(8) Adults	850	0.749	0.022	0.65	0.81
(9) Media coverage	850	0.608	1.687	0	16

incredibly lucrative.³ Similarly, organizations that report low profitability are not necessarily viewed as less legitimate (e.g., NGOs). However, to control for potential endogeneity concerns, we estimated the third regression using a variation of the approach suggested by Shaver (2005) based on lagged predicted values of the mediator, which have good explanatory power as they are correlated with the endogenous variable by construction and are known to be uncorrelated with the error term. Moreover, as a second instrumental variable, we included a dummy variable that takes a value of 1 for all observations starting in 2009 to represent the passing of the Family Smoking Prevention and Tobacco Control Act, which gives the FDA authority to regulate the manufacturing, distribution, and marketing of tobacco products. All instrumental variables were lagged for model identification purposes.

Results

Tables 2 and 3 present descriptive statistics and correlations between variables, and Table 4 reports the results of the analyses. Note that all reported models include state and time fixed effects. Model 1 only includes results for control variables, which are broadly consistent across models. As expected, the results show that TCs perform better in tobacco-growing states and support prior evidence regarding the effectiveness of tobacco taxes for preventing and reducing smoking, which means that tobacco taxes are detrimental to TCs’ performance (Boonn, 2017). Moreover, the results confirm the negative relationship between smoking and income (Humphreys, 2015). The other control variables are mostly insignificant across models.

³ While we propose that regulations are how moral legitimacy threats unfold, it is essential to clarify that legality does not imply moral legitimacy (Anteby, 2010; Khessina et al., 2020). We chose an industry faced with constant moral legitimacy threats as our research context. Nonetheless, the industry does not manufacture illegal products; from the industry’s inception, tobacco products have been legal.

Table 3 Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Youth access laws	1.000								
(2) Smoking bans	0.175	1.000							
(3) Legitimacy	0.057	0.103	1.000						
(4) Crops	- 0.342	- 0.243	0.050	1.000					
(5) Democrats	0.017	0.095	0.095	0.119	1.000				
(6) Taxes	0.164	0.467	0.046	- 0.317	0.245	1.000			
(7) GDP per capita	0.255	0.495	- 0.024	- 0.126	0.063	0.357	1.000		
(8) Adults	0.051	0.136	- 0.032	0.197	0.235	0.187	0.199	1.000	
(9) Media coverage	0.075	0.057	0.786	0.050	0.059	0.032	- 0.033	- 0.037	1.000

Table 4 Results

Dependent variable	Model 1 controls	Model 2 first regression	Model 3: second regression			Model 4: third regression		
			1st stage		2nd stage	1st stage	2nd stage	
			Performance	Performance	Youth laws	Smoking bans	Legitimacy	Legitimacy
Youth access laws		- 7.106*** (1.628)				-0.857* (0.495)	0.077 (0.082)	- 7.545*** (1.773)
Smoking bans		- 1.026 (0.732)				- 0.079 (0.163)	0.026 (0.022)	- 1.272** (0.532)
Legitimacy								11.971** (5.516)
Crops	65.125*** (22.690)	78.986*** (24.731)	1.892*** (0.469)	0.474 (2.449)	1.475 (2.068)	- 0.105 (2.257)		40.145 (27.399)
Democrats	- 0.867 (105.413)	10.997 (103.322)	- 3.766 (2.507)	16.262** (7.571)	7.971* (4.701)	9.328** (3.981)		- 62.968 (99.800)
Taxes	- 6.979*** (0.861)	- 6.968*** (1.022)	0.030 (0.024)	0.256** (0.076)	0.048 (0.058)	0.066* (0.036)		- 7.156*** (0.839)
GDP per capita	- 13,788.602*** (2106.992)	- 10,665.051*** (2040.936)	282.131*** (30.836)	874.297*** (78.554)	252.886 (271.463)	- 102.548** (50.265)		- 12,521.315*** (1267.376)
Adults	- 23.720 (626.990)	18.043 (563.082)	- 4.628 (11.473)	- 27.974 (42.008)	- 5.588 (21.702)	9.805 (19.191)		1436.146*** (366.609)
Media coverage	3.592 (2.838)	4.289 (2.922)	0.107 (0.079)	- 0.072 (0.248)	2.131*** (0.308)	1.971*** (0.256)		- 20.692* (11.457)
Contested bans			0.231*** (0.046)	- 0.473** (0.146)				
Preemption			- 0.028 (1.279)	- 7.636*** (2.059)				
Legitimacy predicted						0.154** (0.073)		
FDA						- 1.204** (0.583)		
Constant	1481.715*** (430.120)	1455.963*** (398.640)						
Fixed effects	Included	Included	Included	Included	Included	Included	Included	Included
Observations	850	850	538	538	538	414	414	

Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Models 2, 3, and 4 present the results of the mediation analyses. Model 2 is estimated as a panel data fixed-effects model, and Models 3 and 4 are calculated using a panel extension of the instrumental variable estimation with fixed effects.

The first regression results are presented in Model 2, which shows the main effect of regulations represented by different tobacco control regulations on TCs' performance. The results provide strong support for Hypothesis 1 only in the case of youth access laws (i.e., regulations aimed at protecting children and young people), which are broadly accepted by American citizens due to "widespread public agreement that youth should not smoke" (Brainard, 2007, p. 2) and "general agreement that these products [cigarettes] and activities [smoking] are not for children" (Davidson, 2003, p. 4). Hence, the results suggest that these regulations effectively harm TCs' performance by limiting the number of potential smokers they can attract. Moreover, according to the U.S. Surgeon General, youth access laws are not openly questioned by members of society, but instead show exemplary implementation and compliance rates, suggesting that these laws can effectively reduce cigarette consumption. In contrast, the results indicate that smoking bans do not affect TCs' performance. The average U.S. state has mild smoking bans, meaning that most states restrict smoking to designated or separate areas. Hence, while the acceptance of smoking bans has increased, it is not universal, mainly because personal freedom concerns make it difficult to balance the rights of smokers to use legal products with the government's mandate to limit the use of hazardous products. Given the disputes surrounding the enactment of smoking bans, many states have implemented accommodations or tolerance measures that reduce incentives for smokers to quit, with few negative effects on TCs' performance. Philip Morris recognized this in an internal report: "Total prohibition of smoking in the workplace strongly affects industry volume. ... Milder workplace restrictions, such as smoking only in designated areas, have much less impact on quitting rates and very little effect on consumption" (WHO, 2009, p. 38). Thus, the results presented in Model 2 satisfy the first condition for mediation to hold, but only for youth access laws.

Estimates for the second regression are reported in Model 3. The first stage of Model 3 presents the estimates of regressing the regulations on the identified instruments (i.e., interventional bans and preemptive laws) and controls. The coefficient estimates lead to intuitive conclusions. The first stage results indicate that states with more standard interventional policies are more likely to enact youth access laws, but are less likely to enact smoking bans. Moreover, the coefficients suggest that preemptive legislation is a solid deterrent to enacting smoking bans, which explains why TCs'

"priority has always been to preempt the field" (Wolfson, 2001, p. 155).

The second stage results are based on regressing the predicted values of the regulations on moral legitimacy. These results support Hypothesis 2 for youth access laws, but not for smoking bans, indicating that the enactment of youth access laws threatens TCs' moral legitimacy insofar as they make the social risks associated with and the unacceptability of youth smoking visible and salient. Essentially, youth access laws protect children from the actions of TCs to entice youths to smoke, and simultaneously uncover the strategies used by TCs to target them, both of which harm TCs' moral legitimacy. In contrast, smoking bans have no impact on TCs' moral legitimacy. This seems to be the case as attitudes about individual freedom—a deeply held value in America—limit the government's capacity to control cigarette consumption. Therefore, personal freedom and the right to choose protect TCs' moral legitimacy from being undermined by the enactment of smoking bans. The second stage results in Model 3 satisfy the second condition for mediation, but only in the case of youth access laws.

Model 4 presents the estimates for the third regression. The first stage estimates are based on regressing the endogenous variable (i.e., moral legitimacy) on the instruments and controls. The coefficient of the predicted moral legitimacy variable illustrates that moral legitimacy is taken-for-granted and changes slowly through a lengthy process, displaying signs of path dependence. As expected, the results show that FDA oversight has hurt the industry's moral legitimacy.

The second stage results are based on regressing youth access laws, smoking bans, and the predicted values of moral legitimacy on performance. Interestingly, the results show that both youth access laws and smoking bans hurt performance when accounting for moral legitimacy. This model also provides evidence of the positive impact of moral legitimacy on performance, which supports Hypothesis 3. Overall, Model 4 suggests that TCs must protect their moral legitimacy to maintain cigarette consumption, since the practice of smoking depends on cigarettes being considered acceptable and appealing. Therefore, the results provide the first direct support for moral legitimacy as a necessary condition for firm performance in controversial industries. The results from the second stage in Model 4 satisfy the third condition for mediation in the case of youth access laws.

Given that the three conditions for mediation are satisfied for youth access laws, Hypothesis 4 is supported for this variable. Hypothesis 4 suggests that moral legitimacy mediates the relationship between regulations and performance, such that regulations predict the moral legitimacy of a controversial industry, which in turn affects the industry's performance. The study illustrates that moral legitimacy is a partial mediator only when tobacco control regulations are accepted and operate as a moral influence. Specifically, the results

show that youth access laws influence TCs' moral legitimacy by portraying TCs' actions as undesirable, improper, or inappropriate, and cigarettes as offensive, harmful, or addictive; this, in turn, lowers the social acceptability of smoking, which negatively affects TCs' performance. Simultaneously, the results indicate that by being misaligned with broad moral values, smoking bans have no mediated impact on TCs' performance, as they mainly focus on regulating the use of tobacco products. In short, we can conclude that part of the effect of regulations on performance is not *direct*, but *indirect* through moral legitimacy changes, and depends on the alignment between regulations and moral values. Our models empirically demonstrate that moral legitimacy differently protects industry performance in the face of regulations that represent a moral influence (e.g., youth access laws) compared to those that fix a set of incentives or sanctions (e.g., smoking bans).

Robustness checks

Table 5 assesses whether our results are robust to different model specifications.

First, we include a variable controlling for national moral legitimacy to account for the notion that moral values can flow across geographical boundaries (Hannan et al., 1995). To measure moral legitimacy at the national level, we retrieved national newspaper articles from LexisNexis using a combination of the terms *smok!*, *cigarette*, *tobacco company!*, *ban*, *law*, *regulation*, *legislation*, and *US*. As before, we included exclamation points (!) to find multiple variations of a term (e.g., *smok!* yielded articles with the terms *smoker*, *smoking*, *smoke*). After eliminating duplicates, the final sample included 890 articles. For consistency purposes, we used the raw moral legitimacy vector (RLV) to measure national moral legitimacy (Vergne, 2011). Model 5 confirms the negative influence of youth access laws on state-level moral legitimacy even when controlling for national-level moral legitimacy. Model 6 also demonstrates the harmful effect of youth access laws on performance and suggests that national moral legitimacy does not directly affect state-level industry performance. Interestingly, the results for national moral legitimacy validate our decision to study moral legitimacy at the state level since they suggest that moral legitimacy assessments differ at different levels of analysis.

Next, to better assess the validity of our moral legitimacy measure, we used the number of articles published in each state as an alternative measure of moral legitimacy. This measure is less prone to coding bias, as it is an objective count of the number of articles published in a given state in our initial sample. A downside, though, is that it cannot capture differences in the tones of the articles. Model 7 shows that the negative effect of youth access laws on performance persists even when using an alternative measure of moral

legitimacy. Model 8 further confirms our previous results: moral legitimacy has a positive (even if more negligible) effect on performance, and youth access laws have a negative (and stronger) impact on performance. Thus, the results differ only slightly from those obtained using the RLV, suggesting that our findings are not sensitive to the measure used.

As an additional check, we assessed whether our results are also robust to the use of dynamic panel data models which account for a potential reciprocal influence between concepts since the association with moral legitimacy threats derived from the enactment of regulations can lead to avoiding transactions with an industry once seen as conventional. Simultaneously, a good performance record can provide guidelines for members of society to evaluate the moral legitimacy of a given industry. Model 9 estimates the full model using the two-step Arellano and Bond (1991) estimator with robust standard errors, including further lagged dependent variable levels and first-differenced errors to create moment conditions. Control variables are modeled as exogenous, and endogenous variables as GMM-type moment conditions in the estimation.

Because we could not use the lagged values of the endogenous variable as an instrument in these models, we used the number of lung cancer deaths per 100,000 people. Several reasons support the selection of the *lung cancer rate* as an instrument. First, in the U.S., approximately 90% of lung cancer cases are attributed to cigarette smoking. However, the effect of smoking on lung cancer is not instantaneous; the disease develops over time, so lung cancer deaths in t are a consequence of cigarettes smoked in the distant past, not in the present (WHO, 2013). Second, about half of the smokers diagnosed with lung cancer stop smoking because quitting reduces the risk of dying (Parsons et al., 2010). Therefore, the number of deaths in t is not significantly correlated with decreased cigarette sales, as "there is a lag of several years between when people start using tobacco and when their health suffers" (WHO, 2013, p. 1). The previous two arguments suggest that the number of lung cancer deaths in t should not be correlated with cigarette sales in t , as the lost sales resulting from lung cancer deaths occur at some point before the smoker dies from lung cancer and are counterbalanced by the thousands of people who start smoking daily (CDC, 2015). Therefore, lung cancer deaths are exogenous to performance and should only affect it through TCs' moral legitimacy. We obtained data on lung cancer deaths from the National Cancer Institute.

The results reported in Model 9 further confirm the positive influence of moral legitimacy on performance and the negative impact of youth access laws. In Model 10, we used the Arellano-Bover/Blundell-Bond (1995) estimator to correct for the possibility that the lagged variables are weak instruments. The results are substantially confirmed: moral legitimacy positively impacts performance, and youth access

Table 5 Robustness checks

Dependent variable	Model 5 Legitimacy	Model 6 Performance	Model 7 Legitimacy	Model 8 Performance	Model 9 Performance	Model 10 Performance	Model 11 Performance
Youth access laws	- 0.876* (0.487)	- 7.553*** (1.751)	- 1.335** (0.542)	- 9.923*** (1.724)	- 4.615*** (0.645)	- 3.978*** (1.444)	- 5.342*** (1.691)
Smoking bans	- 0.052 (0.153)	- 1.251** (0.530)	- 0.213 (0.254)	- 1.062** (0.421)	- 0.165 (0.324)	- 0.127 (0.226)	0.764 (0.820)
Legitimacy		11.362** (5.430)		4.099*** (1.515)	3.705*** (0.382)	2.219*** (0.439)	1.666** (0.843)
Crops	1.634 (2.050)	39.912 (27.139)	2.836 (2.732)	57.162*** (19.446)	- 36.398* (19.454)	25.181 (21.734)	- 15.312 (20.604)
Democrats	7.522 (4.615)	- 53.894 (100.431)	12.140* (6.823)	- 21.498 (75.265)	- 74.726 (45.909)	- 85.383 (60.008)	61.744 (109.595)
Taxes	0.062 (0.057)	- 7.105*** (0.855)	0.054 (0.094)	- 7.296*** (0.763)	- 4.323*** (0.256)	- 2.857*** (0.262)	- 2.357*** (0.871)
GDP per capita	267.954 (262.811)	- 12,485.515*** (1224.674)	400.282 (346.102)	- 9668.955*** (1487.308)	- 7229.986*** (785.784)	- 1345.851** (661.775)	- 234.660 (1289.105)
Adults	- 13.253 (21.851)	1,420.674*** (370.909)	24.859 (27.247)	769.336** (383.313)	627.928*** (229.453)	471.386*** (158.356)	496.249** (220.887)
Media coverage	2.084*** (0.302)	- 19.520* (11.217)	4.326*** (0.537)	- 11.615* (6.670)	- 5.480*** (1.205)	- 4.556*** (1.588)	- 1.082 (1.693)
National legitimacy	- 7.016*** (2.194)	- 16.068 (46.002)					
Performance _{t-1}					0.489*** (0.020)	0.851*** (0.012)	0.956*** (0.050)
Constant					428.375*** (162.017)	- 28.612 (106.737)	- 244.430 (173.998)
Fixed effects	Included	Included	Included	Included	Included	Included	Included
Observations	538	414	800	534	393	526	538
Dependent variable	Model 12 Performance		Model 13 Youth		Model 14 Smoking bans		Model 15 Performance
Youth access laws							- 48.266** (18.833)
Smoking bans							0.822 (7.705)
Legitimacy	3.524*** (1.036)		0.146 (0.148)		0.491 (0.486)		6.763** (2.626)
Crops	61.700*** (21.306)		1.105 (0.783)		- 2.041 (2.993)		130.759*** (48.055)
Democrats	36.277 (111.023)		- 3.768 (3.258)		8.032 (9.907)		- 179.038 (150.810)
Taxes	- 7.950*** (1.097)		0.024 (0.027)		0.231*** (0.075)		- 8.995*** (2.709)
GDP per capita	- 15,246.518*** (1,625.211)		244.909*** (38.069)		881.264*** (99.818)		- 1549.278 (11,833.268)
Adults	1152.324** (518.738)		- 12.002 (12.736)		- 30.777 (49.054)		765.994 (710.264)
Media coverage	- 4.377 (3.158)		- 0.251 (0.309)		- 1.201 (1.040)		- 6.065 (5.905)
Constant	660.710* (364.171)						

Table 5 (continued)

Dependent variable	Model 12 Performance	Model 13 Youth	Model 14 Smoking bans	Model 15 Performance
Fixed effects	Included	Included	Included	Included
Observations	564	414	414	538

Robust standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

laws negatively influence performance. Finally, in Model 11, we used a more flexible linear dynamic panel data estimation which further supports our results. Overall, these models confirm our results and provide empirical support for our conceptual arguments.

A last potential concern is the existence of an inverse model in which regulations moderate the relationship between moral legitimacy and performance. Although we have provided thorough theoretical and empirical evidence of the causal direction of these processes, we acknowledge that legitimation is a dynamic social process that also influences the enactment of regulations. In the context of this study, for instance, the scientific community played a crucial role in establishing the negative consequences of smoking on health, which planted the seed for further questioning the taken-for-grantedness of the industry. In a way, the accumulation of scientific research paved the way for enacting regulations, but scientific evidence in and of itself did not negatively alter societal attitudes toward tobacco. Instead, regulations prompted a critical mass in society to question the industry's moral legitimacy (Ling & Glantz, 2005). In other words, focusing on the effects of regulations enabled us to capture how their enactment represented broad and tangible threats to the industry's legitimacy. Hence, starting from the premise that regulations are sources of moral guidance, we expected regulations and moral legitimacy threats to have significant effects on industry performance (Dhalla & Oliver, 2013; Oliver, 1991). Therefore, the concern of an inverse effect is unlikely to impact our results.

Nevertheless, to ease this concern, we tested an alternative model in which moral legitimacy threats are an antecedent of regulations affecting performance. The results are presented in Models 12 to 15. Model 12 supports the first mediation condition, illustrating a positive effect of moral legitimacy on performance. Models 13 and 14 do not support the second mediation condition, as the results do not show a significant impact of moral legitimacy on youth access laws or smoking bans. Finally, Model 15 supports the third condition for mediation, showing that youth access laws harm performance when controlling for moral legitimacy, which positively affects performance. Nevertheless, given that not all conditions were supported, the mediating role of regulations cannot be established. These results provide further evidence to support the initial direction of our model,

since our main results consistently uncover the impact of moral legitimacy and regulations on industry performance (and not the other way around). In sum, these results provide further support to our reasoning that tobacco control regulations affected TCs' performance via moral legitimacy threats because they made the health risks of smoking visible and salient and framed smoking as a social problem due to its negative externalities (e.g., second-hand smoke).

Discussion

This study extends our understanding of how regulations influence a controversial industry's moral legitimacy, and in turn, affect industry performance. Using data from a controversial industry yielded important findings that support the mediating role of moral legitimacy. First, the results show that regulations affect performance by influencing attitudes toward risk and moral acceptance, in the sense that by enacting smoking bans (instead of outlawing tobacco), regulators transmit the message that under certain circumstances smoking may be considered an accepted risk (such that the moral responsibility lies with the smoker's voluntary decision to smoke). In contrast, based on the widely held moral values that support youth access laws, regulators constrain children from smoking because of the associated high and long-term risks. Second, the results indicate that regulations negatively affect moral legitimacy, suggesting that, in controversial industries, regulations are an essential precursor of contests or struggles over societal evaluations of appropriateness, especially when members of society subscribe to their underlying moral values. Third, the results provide empirical evidence to support the direct effect of moral legitimacy on performance, suggesting that the mediating role of moral legitimacy is present only when regulations operate as a moral influence (e.g., youth access laws). Hence, this study points to the need to utilize a fine-grained approach when studying regulations, seeing that a simplified characterization of such pressures may be misleading, especially in the case of controversial industries.

Our study makes two main contributions to the legitimacy literature. The first contribution builds on Deephouse et al., (2017, p. 23) insight that moral legitimacy is *challenged* by multiple points of view in society: "challenges

based on norms or values may take distinctly different forms and involve unique processes compared to challenges based on performance or pragmatic utility.” We have complemented their articulation of moral legitimacy threats by representing them through the proxy of two different types of regulations with different targets: children and youth on the one hand, and the adult population on the other. Deephouse et al., (2017) further argued that performance challenges are linked to regulations, and value challenges are linked to moral legitimacy. Our study contributes to their conceptualization by showing that the distinction is less clear-cut than they proposed, as challenges emanating from regulatory action have the power to shift widely held moral values. Thus, regulations manifest a more complex role in moral legitimacy than depicted. That is, we have shown that although regulations build on moral values (e.g., protecting societal members’ health), responses differ due to the presence of additional complementary and reinforcing societal values (as in the case of youth), or incompatible and undermining societal values (as in the case of adults). Our study is thus unique in how it tackles both “the multiplicity inherent in moral legitimacy challenges” (Deephouse et al., 2017, p. 23) and the understanding that moral legitimacy criteria “are analytic concepts, not fully separable empirical phenomena” (Deephouse et al., 2017, p. 20).

Second, our study engages with some prominent critiques of moral legitimacy research. Suddaby et al., (2016) predominantly criticized the approach they labeled “legitimacy as property” while highlighting some potential weaknesses of the other two approaches they distilled from the literature—namely, “legitimacy as a process” and “legitimacy as perception.” They concluded that “the three perspectives provide fundamentally different yet complementary conceptions of legitimacy from the point of view of different actors” (Suddaby et al., 2016, p. 469). We fully concur with this observation; we suggest that our study combines characteristics of the three configurations, since “legitimacy is a complex phenomenon, constituted simultaneously as property, process and perception” (Suddaby et al., 2016, p. 469). We have considered that moral legitimacy is evaluated (as a perception) differently by diverse societal audiences (as a process) but that this evaluation is predicated on the alignment (as property) between widely held moral values and the implications of a social audience’s decrees. Specifically, we have considered the complex dynamics concerning the assessment of a particular industry (i.e., tobacco) resulting from the actions taken by regulators, which in turn pose varying levels of threat to the industry’s moral legitimacy due to divergent moral evaluations. As such, our study explicitly recognizes the complexity of moral legitimacy as a concept and how it relates to essential constructs such as performance and regulations. We have attempted to advance scholarly understanding of this complexity, both conceptually and empirically.

Overall, our study is one of the very few providing direct empirical evidence of the performance consequences of moral legitimacy. Our results support a recurring and central argument in institutional theory—namely, that legitimacy has a positive effect on performance because it facilitates the flow of resources to an industry (Dowling & Pfeffer, 1975). Our study empirically establishes moral legitimacy as a catalyst for superior industry performance. Importantly, this effect is not specific to the case of controversial industries; it can be generalized to other industries because moral legitimacy reflects social acceptance and support (Deephouse et al., 2017; Suddaby et al., 2016). Moreover, in line with prior research in controversial industries populated by firms that target consumers who have been “shunned” or provide products or services associated with “sin” (Oh et al., 2017; Zuckerman, 1999), our study provides further evidence of the negative effect of legitimacy threats on performance. This is in line with practical observations whereby controversial industries are often excluded from financial indexes, such as the Dow Jones or the MSCI Global Socially Responsible Indices, because they exclude firms engaged in undesirable business activities that investors may wish to avoid.

Limitations and Future Research

As is always the case, this study has some limitations that represent opportunities for future research. First, the generalizability of the results is most relevant to other controversial industries that face moral legitimacy disputes because of conflicting evaluations by different societal audiences. Second, we did not consider TCs’ actions to create or influence institutions proactively even though TCs are known for employing various strategies to shape societal perceptions of smoking. Moreover, given the limited availability of organization-level data about TCs, we could not further explore the implications of the mediated effect for individual organizations. For example, are larger and more visible organizations in the tobacco industry penalized differently? Scholars can overcome these limitations by studying how organizations actively shape their institutional environments to avoid being deemed illegitimate, thereby contributing to research on how in the face of threats, organizations defend themselves (Lamin & Zaheer, 2012; Wang & Jensen, 2018) to restore (Pfarrer et al., 2008) or maintain (Desai, 2011) their legitimacy.

Third, we have focused on state-level regulations that may differ from county regulations in states without preemptive legislation. State-level dynamics are incredibly relevant, as that is where TCs’ influence on the policymaking process is considered to be greatest, as evidenced by greater resource commitments to fight state versus county regulations (ANR, 2004). However, it could be beneficial to study tobacco control regulations at the county or city level, as these bans closely reflect local citizens’ moral values. Indeed, our study

indicates that although moral legitimacy has been theorized to operate broadly, taking a micro-perspective when assessing moral legitimacy evaluations provides a more nuanced view of these processes. Therefore, comparing the micro and macrolevels of analysis could lead to a better understanding of the relationships among the concepts examined in this study and possibly highlight the relative potency of mechanisms operating at different levels.

Despite these limitations, our study is relevant from a business ethics perspective because it recognizes how social audiences influence moral evaluations. Our results uncover the interplay between regulations and morality in an intriguing context where social audiences decide how harshly to judge smoking. Based on their evaluations, industry sales change. Our results, thus, indicate that these moral expectations do not objectively determine what is “right” or “wrong,” but lead to a range of evaluations, even when there is broad moral consensus (e.g., smoking is dangerous for health). In short, we show that industry performance is partially determined by the moral assessments of members of society. We, thus, conclude that the enactment of tobacco control regulations has influenced the moral legitimacy of the industry by helping to create a nascent collective identity (Wry et al., 2011) where smokers must accommodate the preferences of non-smokers, thereby negatively affecting TCs’ performance.

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Declarations

Conflict of interest The authors have no conflicts of interest to declare.

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