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ARE THERE ANY NEGATIVE CAREER CONSEQUENCES FOR EXECUTIVES AND DIRECTORS WORKING IN STIGMATIZED INDUSTRIES?

This study found no evidence of the adverse effects for executives and board members employed by firms operating in 'stigmatized' industries such as tobacco, alcohol, and gambling. The records disclosed by public companies from 21 EU countries suggest that executive and director remuneration in 'sin' industries is not significantly different from that in other industries. The composition of the supervisory boards in terms of directors' independence, industry-specific skills and average tenure is not dissimilar from other industries, suggesting the lack of negative consequences for career and networking opportunities related to working for firms with a perceived negative public image. Board members enjoy a similar number of external affiliations and outside directorships. Tobacco industry companies are found to be more likely to offer golden parachutes to their executives, enforce limitations on director removal and mandatory limits to board memberships. No other industry-specific corporate governance settings were documented. From the financial standpoint, working for firms in stigmatized industries is not associated with increased reputational risks, as neither accounting controversies nor earnings restatements are more probable in these firms than in other industries.

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1. INTRODUCTION

Prior empirical studies suggest that executives employed in stigmatized industries – i.e. those which face negative publicity due to a perceived societal harm – may demand a remuneration premium to compensate for reputational damage, inferior career opportunities and possibly negative psychological ramifications (Liu et al., 2014; Novak and Bilinski, 2018). Operating in the so-called 'sin industries', which comprise tobacco, alcohol, gambling among others (Leventis et al., 2013) may cause a business to suffer a number of possible repercussions starting from labour shortages due to the perceived unattractiveness of sin employers, to fiercer scrutiny on the part

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of different stakeholders. Societal norms and, as a result, the regulatory framework, which pre-determine the attitude of the general public towards sin industries, may exercise a durable impact on those companies' finances and long-term shareholder value generating potential (Fauver and McDonald, 2014).

Conventional wisdom postulates that the negative perception of sin industries may cause investors and talented executives to avoid being connected or employed by such firms. Large institutional shareholders, which face stringent disclosure requirements, may be willing to avoid long-term capital allocation towards firms facing negative publicity and persistent regulatory pressure (Colonnello et al., 2019; Luo and Balvers, 2017). Moreover, managers seeking career opportunities may regard such employers as less attractive due to the possible reputational losses and poorer long-term employment prospects. Counteracting the consequences of stigmatization of sin industries may engender a number of empirically observable patterns in corporate remuneration mechanisms, employment practices, corporate governance policies and social responsibility activities aimed at improving firms' public image (Grougiou et al., 2016; Van Laar et al., 2019).

Since the overwhelming majority of empirical papers exploring the nexus between social norms and business practices concern the US market, the goal of this study is to investigate the possible impact of the stigmatization of sin industries on corporate compensation mechanisms and corporate governance policies within European companies. The author postulates the existence of two complementary transmission mechanisms, which may underlie such impact: 1) executives' and directors' reputational and career concerns resulting from perceived negative publicity; 2) increased compliance risks stemming from sin industries' perceived association with reporting irregularities.

The possible career consequences of working in sin industries for directors and executives were analysed in line with the following four dimensions: 1) further career opportunities and mobility; 2) networking and external affiliations; 3) liability protection and workplace security; 4) remuneration and compensation enhancement mechanisms. The study applied a number of experimental variables to operationalize the aforementioned evaluation dimensions and test for the presence of a statistically significant nexus between employment in sin industries and career outcomes for senior management.

The results of the conducted econometric analysis of a sample of public companies operating across 21 EU countries reveal a lack of any persistently observable consequences of being employed by a sin-industry firm (defined as one operating in gambling or manufacturing and the distribution of alcohol and tobacco). The author found no statistically significant differential between sin and non-sin firms in terms of total executive pay, CEO salary, and supervisory board compensation. Neither executive nor non-executive directors appear to demand a premium for being employed by a firm operating in a stigmatized industry, and there is no evidence of any persistent impact of social stigma on directors' employment opportunities,

career mobility, reputation, networking possibilities or external affiliations. The findings reported in the paper are in stark contrast with those documented for the US market (Novak and Bilinski, 2018).

This paper contributes to the broad strand of empirical literature analysing the determinants of executive compensation by focusing on the intermediating impact of social attitudes towards stigmatized industries on remuneration mechanisms and corporate governance settings (Madsen and Bingham, 2014). While negative publicity may cause companies to adopt a more proactive approach towards corporate social responsibility and strive to ameliorate the otherwise negative public opinions of their operating activities, it appears to bear no persistent ramifications from the standpoint of employer-employee relationships at senior executive level.

Further sections of the paper present the theoretical background, research design and dataset as well as a discussion of the principal empirical findings.

2. LITERATURE REVIEW AND RESEARCH QUESTIONS

Social norms defined as a set of beliefs and values pre-determining the framework for decision making maximizing the welfare of the community (Blowfield and Murray, 2008), can play an important role in shaping consumption preferences, investment decisions and career choices. The sin industries, which conventionally comprise alcohol, gambling and tobacco, have long been subject to negative publicity due to the perceived harm their activities impose upon society in the form of direct health costs and damage to the social fabric. The long-lasting public campaigns aimed at curbing the reach of sin industries may have resulted in persistent aversion towards the firms operating in those industries. The negative perception, coupled with tightening regulatory pressure, have inflicted a number of pecuniary and non-monetary adversities on those companies. Most notably, empirical research demonstrates that institutional investors, bound by transparent disclosure, and which try to invest in line with corporate social responsibility and ethics guidelines – e.g. retirement funds, large open-ended mutual funds – are likely to stay away from stigmatized stocks. Hong and Kacperczyk (2009) documented persistently higher returns generated by sin stocks, which may be indicative of a premium the market attaches to holding instruments avoided by large socially-minded institutional investors. Similar results were reported by Kim and Venkatachalam (2011), who found that excess returns exhibited by sin stocks are not attributable to any factors other than investors' relative aversion towards companies which carry a negative image and therefore, higher reputational risks for investors willing to follow the social norms.

Despite being compliant with all applicable regulations, tobacco, alcohol and gambling companies appear to bear the consequences of social stigma, which may translate into a number of decision-making patterns not observable across other companies which comply with the prevailing social norms. In particular, these

businesses may be more inclined to use non-organic growth in order to engage in activities which attract better publicity and therefore, allow the sin firms to improve their image (Vergne, 2012). Their expansion also allows them to have a stronger impact on the legislative process, which lies at the root of negative publicity. Acquisitions allow sin companies to dispose of spare cash reserves, which could otherwise be at risk of regulatory capture through litigation and restrictive legislative action. To avoid resource extraction through restrictive policy guidelines, stigmatized firms try to mask their earnings, which may have repercussion for their stock performance, investors' portfolio allocation decisions and public image (Bello, 2005; Beneish et al., 2008).

In addition to influencing firm-level tactical and strategic decisions, social stigma may exercise a substantial impact on executive compensation mechanisms and hiring practices of sin firms. Novak and Bilinski (2018) demonstrated that sin industries pay higher remuneration to their executives with the premium not being explained by any factors other than these industries' violation of prevailing societal norms. Executives and directors who decide to pursue a career within a sin industry, may bear the negative ramifications in terms of long-term career prospects such as the lower likelihood of being invited to prestigious directorship and executive positions in other companies, or being re-employed following termination with a previous sin-associated employer. Socially beneficial corporate governance practices at firm level may partially attenuate the negative repercussions entailing a concomitant reduction in sin-associated compensation premium. Deng and Gao (2013) confirmed that non-financial and non-performance-related factors such as individual career considerations and preferences of executives, can play a role in determining the level of remuneration. The attractiveness of the employers' location may also play a role with firms situated in regions with inferior living conditions (crime, pollution) offering higher pay to their executives. The possibility to engage in activities perceived as socially beneficial may bring non-pecuniary rewards for executives thereby increasing the attractiveness of employment and therefore allowing for a reduction of purely monetary incentives (Jones, 2015). Overall, empirical literature demonstrates that social norms, perceptions and a company's public image play an important role in shaping executives' career choices, and therefore should be taken into consideration at the stage of planning of company corporate social responsibility policies – especially if they are subject to social stigma.

Subjective perceptions of company image and compliance with societal norms are at the core of the psychological framework motivating individual decisions to join a particular company whether as an employee, investor or customer (Hong and Kostovetsky, 2012). Similarly to executives seeking a premium for joining a firm suffering from negative publicity, directors planning to join the board of a particular company pay attention to the possible long-term repercussions of such decisions for their reputations. Board members are particularly concerned about further opportunities to join boards of other companies, and therefore are likely to take

decisions directed at boosting their long-term career prospects. Well-connected directors have been shown to shun businesses likely to be involved in accounting controversies, which exhibit inferior reporting quality and suffer from operational underperformance (Denis et al., 2014). While sin industries have been shown to exhibit superior reporting quality (Kim and Venkatachalam, 2011), they may nevertheless be perceived as carrying higher compliance and litigation risks, and thus may suffer from shortages of managerial talent available for recruitment.

As informal social networks and ties with executives and directors in other companies play a major role in shaping individuals' long-term career prospects (Engelberg et al., 2013), one may reasonably expect reputation-concerned directors to stay away from companies, which are stigmatized in view of the public's negative perception of the societal consequences of their activities. Reputational concerns can impact directors' incentives to exercise proper supervision and diligent oversight, with empirical studies demonstrating increasing directors' proclivity to put the most effort into their functional duties on the boards of companies enjoying prestige, and therefore carrying larger potential reputational benefits (Masulis and Mobbs, 2013).

As external executives and directors may be reluctant to join a sin company in view of the possible reputational risks, a company may be constrained to rely on internal promotions rather than source managerial talent from outside (DeVaro and Morita, 2013). An inherently limited pool of managers working for sin industries may self--isolate from the remainder of the market causing the relative share of managers with industry-specific experience to rise, a phenomenon accompanied with a decline in the number of outsiders employed by stigmatized industries. Cross-industry pooling of managers may be restricted as executives may exhibit unwillingness to associate themselves with a stigmatized industry. Higher recompense may partially alleviate the problem by providing an additional incentive for bearing the reputational and litigation risks stemming from involvement with a sin company. Additional financial incentives such as golden parachutes and clauses limiting the possibility of executive and director termination may constitute supplementary mechanisms to encourage hesitant managers to join firms suffering from bad publicity (Cadman et al., 2011). The empirical literature remains largely quiet in regard to these conjectures.

The study of the impact of societal norms on corporate decision-making and executive remuneration mechanisms have been largely constrained to the US market. The regulatory framework enforced by the European Union in the domain of public health, in particular regarding the restrictions on advertising and distribution of products which carry potentially harmful or addictive effects for consumers, is geared towards facilitation of within-block trade, even though important changes were introduced in order to curb the spread of excessive consumption of those products (Cnossen, 2007). In particular, most EU countries enforce bans of some sort on advertising tobacco, alcohol and gambling, with Nordic countries taking the lead (Baumberg and Anderson, 2008). At the same time, taxation mechanisms, which appear to be the most suited to align economic incentives with public health

policy concerns, demonstrate marked differences across EU member states with a great diversity in effective levies on products of sin industries (Angus et al., 2019). The cross-jurisdiction divergences may stem from the differences in the design of regulatory mechanisms, but seem to be primarily determined by the dominating consumption preferences. Studies (e.g. Riley et al., 2017) demonstrate that public campaigns aimed at curbing the scale of activities of sin industries may entail a growing stigmatization of companies, and the consumers who face the negative health effects of substance abuse. The regulators should take this effect into account when designing effective public health policies.

The lobbying efforts of sin industries have also been shown to play an important role in framing the long-term development of the EU's regulatory framework. Interestingly, the content analysis of projects of regulatory documents targeting sin industries, e.g. tobacco, demonstrates that the consultative processes with the involvement of industry representatives may result in important shifts in the wording of preliminary drafts, and as a result, in applicable policy guidelines. Costa et al. (2014) showed that the lobbying effort on the part of the tobacco industry resulted in a substantial dilution of the EU Tobacco Products Directive, with the emphasis shifting from public health concerns towards the economic implications and business guidelines. Such changes of focus may be indicative of the industry's effort to deal with the stigmatization of its operating activities, and to reduce the negative publicity resulting from the social consequences of their operations.

Opinion polls suggest that there is no overwhelming societal aversion towards sin industries (Lagerweij et al., 2019), with the majority of European population encountering demonstrative consumption of these industries' products on a daily basis, which may contribute to the increased tolerance towards their use. Public spaces in most EU countries appear to remain hospitable towards sin industries (Alves et al., 2016) with the media, older generations and the lack of strict enforcement of public health guidelines contributing to the persistence of harmful habits in the adult population. Most studies fail to identify persistent signs of stigmatization of sin industries. Whereas the popular support for introduction and enforcement of effective policies aimed at curbing the negative externalities of sin industries remains persistently high (Kastaun et al., 2019), the visibility and wide availability of their products make them an inalienable part of everyday life with most consumers tolerating/enduring their presence.

In view of the contradictory predictions and lack of conclusive empirical evidence, this study aimed to verify the possible ramifications of the social stigma surrounding sin industries for the remuneration mechanisms and corporate governance settings within the affected companies in the EU. Thereby, the author tried to elucidate the possible role of non-performance-related and non-financial factors in shaping managerial remuneration, a problem which remains not covered by data from European markets. The study examined the mechanisms which may explain the possibly existing cross-industry compensation disparities such as the

career prospects of directors working for stigmatized industries, board composition and clauses framing the settings in which directors and executives work for sin firms. Thus, the study aimed to answer the following key research questions:

RQ1. Do senior staff (executives and directors) employed by sin companies receive higher remuneration and better employment terms than those working for non-sin firms?

RQ2. Does employment in sin industries harm the career prospects of executives and supervisory board members?

RQ3. Is working for sin companies associated with higher reputational risks?

The answers to these questions were obtained through the verification of a number of testable conjectures.

If directors working for sin industries faced inferior employment or networking opportunities, several patterns could be observed, which were expressed in the following empirical predictions.

a) Prevalence of insiders on the boards

If social stigma limited the career mobility of managers, boards of sin companies would be dominated by industry insiders, i.e., incumbent or former executives, who have industry-specific experience and skills. Struggling to find employment opportunities outside of the industry, directors would be reluctant to leave causing the average directors' tenure to increase. Concomitantly, the share of independent directors would decline compared to the average for public companies. A combination of a higher share of directors with prior industry experience (entailing a higher likelihood of informal social connections as well as loyalty towards the incumbent executives), and longer director tenures, can result in the impairment of the boards' ability to exercise impartial corporate oversight (Nili, 2017).

b) Lower external connectedness of directors

Due to the perceived negative image of sin firms, their directors can face a lower probability of being invited to join the boards of other companies. This could result in lower external connectedness of sin companies' directors, measured by the average number of their external affiliations. Working for a stigmatized industry would effectively isolate a manager/director/executive from the overall market for managerial skills.

c) Higher compensation and adoption of corporate governance mechanisms designed to increase executive and director retention

If social stigma was found to bear negative ramifications for executives and directors in sin industries, the need would arise to implement adaptive mechanisms to alleviate them. The primary purpose of such mechanisms would be to increase the attractiveness of employment within a sin industry by offering risk-mitigating contracting conditions. Among the plethora of such clauses, listed in shareholder agreements, executives' employment contracts and corporate governance codes, the following three were analysed: 1) golden parachute for top executives; 2) limitations on director removal; 3) mandatory term limits for directors.

Golden parachutes are primarily intended as a remuneration-enhancing tool designed to insulate top executives from the risk of job termination. As negative publicity may cause former executives from stigmatized industries to encounter challenges when looking for further employment opportunities, golden parachutes can help mitigate these concerns by providing effective pecuniary insurance against employment risks. In the presence of social stigma, sin industries may exhibit a greater likelihood of the recurrence to golden parachute clauses in senior executives' contracts.

In order to mitigate the reputation and employment-related concerns of board members, some firms may adopt specific clauses introducing limitations to the statutory procedures of director termination. Normally, the removal of directors follows a strictly drafted path involving shareholders' resolution preceded by the filing of a formal notice within a pre-specified time frame. A pending termination allows directors to file a case against removal and present it to the shareholders and the board. Additional safeguards may be implemented to protect directors against removal. For example, the vote may need to be approved by the shareholder who was previously granted a disproportionate/exclusive vote on the appointment of a given director. The potential causes for removal may be restricted to those explicitly listed in the bylaws. When facing the negative repercussions of social stigma, sin firms may be more likely to enforce extra-procedural limitations on director removal in order to attract and retain external board members.

The growing concern over board independence in light of increasing average director tenures (Nili, 2017) pushed many firms to adopt mandatory board term limits. The implementation of this mechanism allows to increase turnover of directors and preclude the possibility of board capture through strengthening social ties between executives and formally independent board members. The consequences of social stigma could make firms less likely to adopt term limits in order to reduce career-related risks for directors, and make their board positions more secure by allowing for multiple successive re-elections. The author checked whether the likelihood of implementation of mandatory-term limits differs depending on whether a firm belongs to a sin industry.

Overall, the study identified several corporate governance mechanisms whose specific implementation may be indicative of the companies' struggle with the consequences of negative publicity ensuing from the prevailing social norms.

In order to answer *RQ3*, the author applied econometric tests to check whether reporting irregularities, accounting misstatements and controversies are more prevalent within sin industries than elsewhere. The detailed model specification is described in the following section.

3. DATABASE AND RESEARCH DESIGN

For the purposes of this study, the author assembled a firm-level panel dataset covering public companies domiciled in EU countries. The principal experimental

variables comprised executive and board compensation (total remuneration including a variable component in the form of options), CEO's total pay, and the composition of the board in terms of skills, experience, and expertise. The disclosure of all these measures remains sparse with some jurisdictions not requiring mandatory reporting and others allowing substantial managerial discretion in this aspect. Only companies for which it was possible to assemble all experimental data and control variables were included in the final database. The author also applied a number of filters on the universe of quoted EU-based companies. In particular, the study eliminated all financial companies from the sample, and those for which there were gaps in data availability over the selected observation span. The resulting unbalanced panel database comprised1391 companies observed over the period of 2005-2020 (10139 unique firm-year observations). The research sample is broadly representative in terms of industry structure comprising 342 sub-industries (European Commission, 2010). On average, each sub-industry takes up 0.28% of firm-year observations in the sample; the maximum share is recorded for the "Construction and Engineering" sub-industry – 3.17%. The choice of such a granular industry classification was caused by the need to properly label sin companies, which would not be possible at higher levels of industry classification.

The companies are domiciled across 21 EU member states. The geographical heterogeneity of the sample is controlled for through the inclusion of country-level fixed effects into all econometric models. The data were retrieved from Thomson Reuters Database. The nominal variables were scaled/standardized in order to normalize their distributions. The study applied winsorization at 1st and 99th percentiles to reduce the distortionary impact of outliers on the econometric results. The definitions of variables used in the study are presented in Table 1, while the descriptive statistics are presented in Table 2.

Table 1

Definitions of variables

Variable	Definition
1	2
Industry-Specific Skills	The percentage of board members who disclose prior industry experience and possess the relevant industry-specific skills/background
Average Tenure	Average tenure of board members with the firm (years)
Independent Directors	The percentage of board members identified as independent (having no material pecuniary relationship with the company outside of sitting fees and additional remuneration for committee memberships)
Strictly Independent Directors	The percentage of board members identified as strictly independent (having no material pecuniary relationship with the company outside of sitting fees and additional remuneration for committee memberships; never formerly employed or related to current or former employees; not receiving any consulting fees from the company; not related to any other business or charitable institutions cooperating or being supported by the firm)
External Affiliations	The average number of directors' board memberships outside of a given firm

Table 1, cont.

1	2
Senior Executive Remuneration	Total remuneration of firm's senior executives (USD) including both fixed and variable components
Highest Remuneration	The highest remuneration package (USD) usually paid to CEO within a given company (including both fixed and variable components)
Board Remuneration	Total remuneration of board members (USD)
CEO Board Member	Dummy variable equal to 1 if the company's CEO is simultaneously a member of the board
CEO-Chair Separation	Dummy variable equal to 1 if the functions of CEO and chairman of the board are separated within a given company
Staggered Board	Dummy variable equal to 1 if the company has a staggered board structure
Golden Parachute	Dummy variable equal to 1 if the company disclosed a golden parachute clause promising a payout to senior executives in the event of takeover or under other contractually stipulated occurrences
Limited Director Liability	Dummy variable equal to 1 if the company's directors enjoy limited liability
Limitations on Director Removal	Dummy variable equal to 1 if the company's discloses clauses imposing limitations on director removal
Accounting Controversy	Dummy variable equal to 1 if during a given year the company faced accounting controversies
Earnings Restatement	Dummy variable equal to 1 if during a given year the company issued an earnings restatement
Remuneration Committee Independence	Dummy variable equal to 1 if the company enforces a policy protecting the independence of remuneration committee
Term Limits	Dummy variable equal to 1 if the company enforces mandatory term limits on directors' board memberships
Firm Size	Natural logarithm of firm's total assets
EBIT Margin	EBIT margin calculated as a relationship between normalized EBIT and contemporaneous revenues
Investments	Total capital expenditures scaled by contemporaneous total assets
Cash Dividend	Total cash dividends paid to shareholders scaled by contemporaneous total assets
Asset Tangibility	Property/plant and equipment scaled by contemporaneous total assets
Cash Reserves	Cash and cash equivalents scaled by contemporaneous total assets
Indebtedness	Total interest bearing debt scaled by contemporaneous total assets
Stigma	Dummy variable equal to 1 if a company operates in one of the following industries: tobacco, alcohol, gambling
Tobacco	Dummy variable equal to 1 if a company operates in one of the following industries: tobacco, cigars and cigarette manufacturing
Alcohol	Dummy variable equal to 1 if a company operates in one of the following industries: wineries; distilleries and wineries; brewers; beer, wine and liquor stores; pubs, bars and nightclubs
Gambling	Dummy variable equal to 1 if a company's primary industry of operation is casinos and gaming

Source: data retrieved from the Thomson Reuters Database.

Table 2

Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Industry Specific Skills	46.338	24.084	0	100
Average Board Tenure	6.034	2.732	0	38.938
Independent Board Members	57.001	23.168	0	100
Strictly Independent Directors	47.909	19.617	0	100
External Director Affiliations	1.201	1.075	0	18.400
Senior Executive Remuneration	2.29e+07	2.96e+08	0	2.00e+10
Highest Remuneration	5470000	9.23e+07	0	8.41e+09
Board Remuneration	1640000	2.50e+07	41.422	2.43e+09
CEO Board Member	.637	.481	0	1
CEO-Chair Separation	.203	.403	0	1
Staggered Board	.352	.478	0	1
Golden Parachute	.26	.438	0	1
Limited Director Liability	.587	.492	0	1
Limitations on Director Removal	.09	.287	0	1
Accounting Controversy	.006	.076	0	1
Earnings Restatement	.013	.111	0	1
Remuneration Committee Independence	.853	.354	0	1
Term Limits	.096	.295	0	1
EBIT Margin	.164	.188	-.304	.883
Investments	.036	.038	0	.191
Cash Dividend	.027	.036	0	.224
Asset Tangibility	.214	.218	0	.878
Cash Reserves	.051	.074	0	.399
Indebtedness	.24	.17	0	.753

Source: own elaboration.

Stigmatized/sin industries are defined as those whose primary operational activities are alcohol, tobacco manufacturing/distribution and gambling. They include wineries, distilleries, breweries, beer, wine and liquor stores, pubs, bars and nightclubs, tobacco, cigars and cigarette manufacturing, casinos and gaming in the general industry classification. The author created a dummy variable Stigma, which encodes all companies from the above-mentioned industries to distinguish them from the remainder of the research sample, which is broadly representative of the universe of public companies domiciled in the EU. Separate binary variables (Tobacco, Alcohol and Gambling) were created for each of the sin industries separately to examine possible intra-sample heterogeneity of the studied empirical relations.

The empirical study was divided into three consecutive parts. The first compared the remuneration in the stigmatized industries against the average for the entire research sample in order to verify whether a quantifiable financial premium was attached to being employed by a sin company. Three different sets of remunerations were analysed separately: 1) total executive recompense comprising both fixed and variable (stock options, any additional performance-tracking compensation tools) remuneration components of the entire C-suite within a given company; 2) total CEO recompense (converted into USD) inclusive of performance-based pay; 3) total board recompense defined as the total pay of all directors in the form of meeting fees, committee fees, and fixed director pay, as well as any variable components of the recompense (inclusive of share-based compensation). All the nominal variables were log-transformed. The author relied on three different compensation measures in order to make the inference more robust, as well as to check whether the premium frequently attributable to social stigma inflicted upon sin industries was observable at all levels of senior management. The baseline regression model tested at this stage of analysis is as follows:

$$COMP_{it}=f\left(Stigma_{it};\ Corp.\ Gov_{it};\ CONTROLS_{it};\ i.Year;\ i.Country;\ \varepsilon_{it}\right), \quad (1)$$

where $COMP_{it}$ – a set of variables measuring total recompense (either total executive remuneration, CEO pay or total board recompense); $Corp.Gov_{it}$ – a vector of variables controlling for the impact of corporate governance settings on the experimental variables; $CONTROLS_{it}$ – firm-level control variables including primarily contemporaneous financials, $i.Year,i.Country$ – time and country fixed effects included for the purposes of controlling for time-contingent effects and geographical heterogeneity, ε_{it} – error term. The baseline models rely on linear approximation function.

The set of corporate governance controls comprises several proxies for the degree of managerial capture of the board, agency conflict and stringency of corporate oversight. The author controlled for the board structure by binary-coding firms with staggered boards, i.e. those which have different classes of directors with varying terms on the board subject to separate re-election. The empirical literature demonstrates that staggered boards may have an ambiguous impact on company value creating potential by indirectly influencing managerial incentives. On one hand, staggered boards may allow managers to plan and implement longer-term investment strategies by insulating them from the risk of a sudden hostile takeover (Bebchuk et al., 2002). By the same token, this feature of corporate governance mechanism may contribute to managerial entrenchment, and therefore serve to exacerbate agency conflicts (Amihud et al., 2018). Depending on which of the two effects prevails, one may expect staggered boards to be associated with lower (if the insulation effect dominates in making managers' positions less risky) or higher (if the agency effect prevails) executive remuneration. The classified structure may also

have an indirect impact on board composition, a conjecture subjected to empirical verification at further stages of the study.

Additionally, the author controlled for independence of the remuneration committee by including a separate dummy variable, which encodes companies enforcing explicit corporate governance policies aimed at ensuring an adequate representation of independent directors on the committee. Directors' independence is defined as disclosing no material pecuniary relation with the company aside from the directorship-related fees (e.g. consulting, charitable donations or related party transactions). Independent remuneration committees have been shown to be associated with lower executive pay and higher managerial accountability in the form of a stronger pay-performance link (Kuo and Yu, 2014).

In order to account for the possible effect of a board's capture by executives on recompense outcomes, the study binary-coded the presence of the CEO on the board (the respective dummy variable CEO Board Member encodes companies where the CEO is either a member of the board or the chair of the board performing dual role). While CEOs' participation in corporate oversight may play an important role in alleviating information asymmetry and enhancing the board's monitoring capacity (Li and Roberts, 2018), it may also result in less stringent corporate oversight due to the informal ties between directors and management, which may result in acute agency conflict. Boards aligned with CEOs may be a source of less stringent control, which can lead to substantial distortions of pay mechanisms.

The models also feature a number of firm-level variables reflecting the overall financial health of the sampled companies, which may bear consequences for remuneration policies. These variables include company size approximated by log-transformed contemporaneous total assets, indebtedness, which controls for the disciplining impact of debt and monitoring by credit holders (Grinstein, 2006), cash reserves scaled by total assets, which control for the availability of deployable liquid resources threatened by rent extraction on the part of major stakeholders and asset tangibility estimated as a the relation of property/plant/equipment to contemporaneous total assets and reflecting the opacity of firms' business operations. The inclusion of financial and corporate governance controls into econometric models allows to disentangle the impact of any material non-industry-specific factors from the experimental relations subject to empirical verification in this study.

The second stage of the conducted empirical analysis addressed the mechanisms which can have an intermediating impact on the compensation mechanisms in sin industries. The factors behind the pay differential observed within stigmatized firms may originate from multiple sources. The author examined two possible hypotheses, previously explored in the empirical literature. The first one states that remuneration premium in the sin industries, if observed, could be explained by reputational damage, deteriorating career opportunities and the stagnant professional network of executives and board members of firms operating in stigmatized industries (Novak and Bilinski, 2018). The second explanation suggests that stigmatized industries

are associated with higher compliance risks resulting from the higher probability of those industries being involved in financial/accounting irregularities, exhibiting inferior quality of financial information and reporting transparency (Kim and Venkatachalam, 2011). Tackling the first explanation for salary wedges, the study tested the empirical predictions (a), (b) and (c) formulated in the preceding section. To that end, the model specification was modified (1) by substituting relevant corporate governance proxies (board independence, average number of directors' external affiliations, average board tenure, percentage of board members with board-specific skills) for the dependent variable. In the case of the binary variables (limitation on director removal, limited director liability, golden parachute clause etc.), the author ran binary logit regressions with the same set of regressors and controls as in model specification (1).

The second possible transmission mechanism which could underlie the impact of stigma on executive/director compensation originates from the perceived compliance risks. Negative publicity and legislative pressure can cause sin companies to bear the image of non-compliant actors not only in light of societal values but also regarding the existing business regulations (Leventis et al., 2013). Market participants and the general public may consider those businesses to be more likely to engage in unfair business practices, misrepresentation of relevant information, and material misstatements. While these perceptions can originate from subjective value judgement, they may carry substantial monetary consequences. Prospective employees may require a compensation premium to account for additional compliance-related risks, while business contractors and other stakeholders may offer less advantageous conditions of cooperation. Thereby, public perceptions may skew recompense mechanisms and corporate governance settings within stigmatized industries.

While it appears to be impossible to operationalize and quantify the mentioned distortionary effects, it is possible to check whether sin companies exhibit a higher likelihood of reporting and accounting irregularities. To that aim, at the third stage of the empirical study, the author binary coded firm-years in which the sampled companies were reported to be involved in accounting controversies defined as a violation of existing financial reporting framework as flagged by the firms' auditors, regulatory bodies and whistleblowers. It is worth noting that the study did not distinguish between the types of irregularities nor the scale/seriousness thereof. Secondly, it identified firm-year observations in which a company announced an earnings restatement, i.e. changed the disclosed bottom line due to identification of ex-ante mistakes in financial reports. While earnings restatements may have multiple origins, they always introduce an additional element of uncertainty from the standpoint of investors, employees and other stakeholders. Binary logit models were run to check whether the likelihood of being involved in an accounting controversy or announcing an earnings restatement is contingent upon a firm belonging to a stigmatized industry. A cross-industry divergence in the probability of such events

may constitute a valid reason for altered executive remuneration mechanisms and corporate governance settings. When testing the econometric models, the author controlled for country and time fixed effects, firms' financials and quality of corporate oversight. The model specification is as follows:

$$\text{logit}(Irregularities)_{it} = f\left(Stigma_{it};\ Corp.\ Gov_{it};\ CONTROLS_{it};\ i.Year;\ i.Country;\ \varepsilon_{it}\right), \tag{2}$$

where $Irregularities_{it}$ – two alternating binary variables encoding the occurrence of either an accounting controversy or earnings restatement during year t in company i; other variables are defined above or in Table 1.

4. EMPIRICAL FINDINGS

Table 3 summarizes the results of econometric tests of model specification (1) inquiring into cross-industry compensation differentials. The study found no evidence of remuneration premium in stigmatized industries compared to the overall research sample. The respective regression coefficients at binary variables encoding each of the sin industries separately and all of them together (Stigma) were persistently insignificant. The lack of the said industry-specific effects was observed across all the explained variables: 1) total executive remuneration; 2) CEO remuneration; 3) total directors' remuneration. The findings suggest that unlike in the US market (Novak and Bilinski, 2018), the sin status appears to have no measurable consequences for executive remuneration mechanisms in EU-domiciled public companies. While the EU market has a number of idiosyncratic features in terms of executive remuneration with a notably weaker 'say in pay' on the part of senior management, these findings suggest that executives do not require a remuneration premium for being involved in the activities of firms carrying negative publicity. In line with prior empirical studies, the author found that larger, cash-richer, better performing companies provide higher executive remuneration. Staggered boards are found to be associated with lower pay for both executives (ca. –16.5% compared to the sample average; statistically significant at 1% level) and non-executive board members (ca. –7.5%; statistically significant at 1% level). The degree of board capture by CEOs was found to be positively associated with executive remuneration, hinting at the probably existing agency conflicts.

The study further explored the differences in board composition of stigmatized companies. Table 4 presents the outcomes of regressions in which the share of independent board members is used as a dependent variable. The mean values for the analysed sin industries are found to be not different from the overall sample average. None of the industries was found to have a significantly lower share of strictly independent board members, which would otherwise point to the prevalence of insiders on the board.

Table 3

Executive and supervisory board remunerations in stigmatized industries

	(1)	(2)	(3)	(4)	(5)	(6)
	Senior executive remuneration	**Highest remune-ration**	**Board remune-ration**	**Senior executive remuneration**	**Highest remune-ration**	**Board remune-ration**
Firm Size	0.330***	0.271***	0.289***	0.329***	0.271***	0.288***
	(28.00)	(23.56)	(27.91)	(27.92)	(23.49)	(27.81)
Cash Dividend	0.718***	0.654***	0.424**	0.723***	0.658***	0.424**
	(4.10)	(4.67)	(3.13)	(4.13)	(4.70)	(3.13)
Asset Tangibility	0.306***	0.118	0.154*	0.307***	0.118	0.155*
	(3.37)	(1.48)	(2.14)	(3.38)	(1.48)	(2.16)
Cash Reserves	0.646***	0.375**	–0.010	0.646***	0.375**	–0.010
	(4.13)	(2.89)	(–0.08)	(4.12)	(2.89)	(–0.08)
Indebtedness	–0.180*	–0.104	–0.054	–0.180*	–0.104	–0.055
	(–2.15)	(–1.47)	(–0.82)	(–2.15)	(–1.46)	(–0.84)
CEO Board Member	0.146***	0.107**	0.056	0.145***	0.106**	0.055
	(3.37)	(2.92)	(1.66)	(3.34)	(2.89)	(1.64)
Staggered Board	–0.121***	–0.166***	–0.075***	–0.121***	–0.165***	–0.075***
	(–4.38)	(–7.20)	(–3.51)	(–4.37)	(–7.19)	(–3.50)
Remuneration Committee Independence	0.025	–0.014	0.095***	0.025	–0.015	0.095***
	(0.77)	(–0.54)	(3.80)	(0.76)	(–0.54)	(3.79)
EBIT Margin		–0.008*	–0.006		–0.008*	–0.006
		(–2.06)	(–1.83)		(–2.05)	(–1.82)
Stigma	**0.200**	**0.154**	**0.151**			
	(1.23)	**(1.06)**	**(1.17)**			
Tobacco				**0.360**	**0.215**	**0.429**
				(0.90)	**(0.59)**	**(1.35)**
Constant	6.565***	8.084***	5.819***	6.577***	8.092***	5.832***
	(6.72)	(27.43)	(21.81)	(6.73)	(27.42)	(21.84)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Wald chi2	2217***	1527***	1879***	2216***	1525***	1880***
Rho	0.417	0.495	0.465	0.417	0.496	0.465
N	10139	9449	9300	10139	9449	9300

	(7)	(8)	(9)	(10)	(11)	(12)
	Senior executive remuneration	**Highest remune-ration**	**Board remune-ration**	**Senior executive remuneration**	**Highest remune-ration**	**Board remune-ration**
Firm Size	0.329***	0.271***	0.289***	0.330***	0.272***	0.290***
	(27.96)	(23.52)	(27.91)	(27.94)	(23.52)	(28.00)
Cash Dividend	0.726***	0.659***	0.427**	0.722***	0.657***	0.422**
	(4.14)	(4.71)	(3.15)	(4.12)	(4.69)	(3.11)
Asset Tangibility	0.303***	0.116	0.153*	0.306***	0.117	0.155*
	(3.34)	(1.45)	(2.13)	(3.37)	(1.47)	(2.16)
Cash Reserves	0.647***	0.375**	–0.009	0.647***	0.376**	–0.010
	(4.13)	(2.89)	(–0.07)	(4.13)	(2.89)	(–0.08)
Indebtedness	–0.178*	–0.103	–0.051	–0.177*	–0.102	–0.052
	(–2.12)	(–1.45)	(–0.78)	(–2.11)	(–1.44)	(–0.79)
CEO Board Member	0.145***	0.106**	0.054	0.145***	0.106**	0.056
	(3.35)	(2.90)	(1.61)	(3.34)	(2.89)	(1.67)
Staggered Board	–0.121***	–0.166***	–0.075***	–0.121***	–0.165***	–0.075***
	(–4.37)	(–7.20)	(–3.49)	(–4.37)	(–7.19)	(–3.50)
Remuneration Committee Independence	0.025	–0.014	0.095***	0.025	–0.015	0.094***
	(0.78)	(–0.53)	(3.79)	(0.77)	(–0.54)	(3.78)
EBIT Margin		–0.008*	–0.006		–0.008*	–0.006
		(–2.06)	(–1.82)		(–2.06)	(–1.84)
Alcohol	**0.194**	**0.171**	**–0.113**			
	(0.84)	**(0.83)**	**(–0.62)**			
Gambling				**0.129**	**0.098**	**0.404**
				(0.47)	**(0.41)**	**(1.82)**
Constant	6.573***	8.091***	5.812***	6.559***	8.077***	5.791***
	(6.73)	(27.44)	(21.77)	(6.71)	(27.35)	(21.69)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Wald chi2	2216***	1526***	1877***	2214***	1525***	1883***
Rho	0.417	0.495	0.466	0.417	0.496	0.465
N	10139	9449	9300	10139	9449	9300

Note: the table reports the results of static panel regression models featuring three different explained variables: total senior executive remuneration; highest remuneration package; total board remuneration (all variables are log-transformed). All models include firm-level controls, year and country fixed effects (the respective coefficients are not reported for brevity). The models include heteroscedasticity-robust standard errors. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (t-values are reported in parentheses). Only records for which a complete set of variables is available are included in regression analysis.

Source: own elaboration.

Table 4

Insider vs independent directors

	(1)	(2)	(3)	(4)
	Independent directors	**Independent directors**	**Independent directors**	**Independent directors**
Stigma	**–2.265**			
	(–0.61)			
Tobacco		**3.497**		
		(0.37)		
Alcohol			**–9.939**	
			(–1.88)	
Gambling				**5.981**
				(0.95)
Constant	23.520***	23.580***	23.297***	23.223***
	(3.59)	(3.60)	(3.56)	(3.54)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Wald chi2	1458.295***	1457.866***	1462.429***	1458.834***
Rho	0.689	0.689	0.688	0.689
N	9653	9653	9653	9653

Note: the table reports the results of static panel regressions. The explained variable is the share of independent directors on the board of sampled companies. All models include firm-level controls (financials and corporate governance proxies), year and country fixed effects (the respective coefficients are not reported for brevity). The models include heteroscedasticity-robust standard errors. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (t-values are reported in parentheses). Only records for which a complete set of variables is available are included in regression analysis.

Source: own elaboration.

The directors employed by companies in stigmatized industries were found to enjoy the same average number of external affiliations as those working for other industries. Table 5 summarizes the relevant econometric findings. Therefore it can be postulated that prior experience with sin companies does not impair directors' career prospects or social ties. Had it been otherwise, prospective candidates for board positions would be dissuaded from applying and would therefore mandate the use of premia for reputational damage.

Table 5

Director external affiliations in stigmatized industries

	(1)	(2)	(3)	(4)
	External affiliations	**External affiliations**	**External affiliations**	**External affiliations**
Stigma	**0.049**			
	(0.54)			
Tobacco		**–0.021**		
		(–0.10)		
Alcohol			**0.188**	
			(1.51)	
Gambling				**–0.150**
				(–0.92)
Constant	–0.775***	–0.777***	–0.771***	–0.770***
	(–3.82)	(–3.83)	(–3.80)	(–3.80)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Wald chi2	5574.581***	5574.117***	5578.177***	5576.401***
Rho	0.180	0.180	0.180	0.179
N	9739	9739	9739	9739

Note: the table reports the results of static panel regressions. The explained variable is the average number of directors' external affiliations. All models include firm-level controls (financials and corporate governance proxies), year and country fixed effects (the respective coefficients are not reported for brevity). The models include heteroscedasticity-robust standard errors. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (t-values are reported in parentheses). Only records for which a complete set of variables is available are included in regression analysis.

Source: own elaboration.

The study found no difference in average board tenure between sin and non-sin industries (Table 6). Once again, these findings suggest that experience in a stigmatized industry does not impair directors' career mobility. Had this been the case, directors would have been likelier to stay longer on the board of the same company for the lack or scarcity of alternative employment opportunities. It may also be the case that sin companies may also attach greater attention to ensuring directors' turnover in order to project the image of independent and impartial corporate oversight.

Table 6

Average board tenure

	(1)	(2)	(3)	(4)
	Average tenure	**Average tenure**	**Average tenure**	**Average tenure**
Stigma	**0.379**			
	(0.79)			
Tobacco		**–0.095**		
		(–0.08)		
Alcohol			**1.318**	
			(1.93)	
Gambling				**–0.720**
				(–0.90)
Constant	5.581***	5.582***	5.611***	5.618***
	(6.80)	(6.80)	(6.84)	(6.84)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Wald chi2	351.807***	351.100***	355.244***	351.969***
Rho	0.737	0.737	0.736	0.737
N	9593	9593	9593	9593

Note: the table reports the results of static panel regressions. The explained variable is the average board tenure. All models include firm-level controls (financials and corporate governance proxies), year and country fixed effects (the respective coefficients are not reported for brevity). The models include heteroscedasticity-robust standard errors. Significance of respective variables is denoted with asterisks: * p<0.1, ** p<0.05, *** p<0.01 (t-values are reported in parentheses). Only records for which a complete set of variables is available are included in regression analysis.

Source: own elaboration.

Further corroborating the study's prior findings, the results presented in Table 7 suggest that the preponderance of directors with industry-specific background on the boards of sin companies was not significantly different from that disclosed by non-sin firms. An overrepresentation of board members with prior industry experience would suggest the relative isolation of the industry-specific pool of employable directors and a lack of cross-industry spillovers. One can observe the opposite pattern, suggesting a lack of any significant hindrances to directors' career mobility.

As part of the analysis of corporate governance settings in the stigmatized industries, the author checked for cross-industry differences in the proclivity to implement mechanisms aimed at reducing executives' and directors' career risks. In

particular, Table 8 reports the findings with regard to the likelihood of inclusion of the golden parachute clause into executives' employment contracts. A substantially higher prevalence of such clauses is found in the tobacco industry (OR: 2,88; $p < 0,01$). Similar patterns were reported for the US market (Novak and Bilinski, 2018), where exuberant executive pay in the tobacco industry attracted public attention. In contrast, the frequency of applying golden parachutes is below the sample average in the alcohol industry (OR: 0.23; $p < 001$).

Table 7

The prevalence of board-specific skills

	(1)	(2)	(3)	(4)
	Industry-specific skills	**Industry-specific skills**	**Industry-specific skills**	**Industry-specific skills**
Stigma	**–3.739**			
	(–1.38)			
Tobacco		**–2.482**		
		(–0.38)		
Alcohol			**–0.844**	
			(–0.22)	
Gambling				**–8.810**
				(–1.86)
Constant	47.360***	47.327***	47.387***	47.836***
	(8.33)	(8.32)	(8.33)	(8.42)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Wald chi2	2080.973***	2078.021***	2077.957***	2084.965***
Rho	0.355	0.355	0.355	0.355
N	9456	9456	9456	9456

Note: the table reports the results of static panel regressions. The explained variable is the percentage of directors having industry-specific skills and experience. All models include firm-level controls (financials and corporate governance proxies), year and country fixed effects (the respective coefficients are not reported for brevity). The models include heteroscedasticity-robust standard errors. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$ (t-values are reported in parentheses). Only records for which a complete set of variables is available are included in regression analysis.

Source: own elaboration.

Table 8

The availability of golden parachute agreement

	(1)	(2)	(3)	(4)
	Golden parachute	**Golden parachute**	**Golden parachute**	**Golden parachute**
Stigma	**–0.246**			
	(–1.421)			
Tobacco		**1.058*** **		
		(3.326)		
Alcohol			**–1.452*** **	
			(–4.553)	
Gambling				**0.439**
				(1.359)
Constant	–6.295***	–6.175***	–6.307***	–6.292***
	(–12.075)	(–11.831)	(–12.094)	(–12.071)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Log Likelihood	–5116.747	–5112.554	–5103.684	–5116.883
chi2	1204.284***	1212.669***	1230.408***	1204.010***
r2_p	0.105	0.106	0.108	0.105
N	9951	9951	9951	9951

Note: the table presents maximum likelihood estimates of binary logit models with the explained variable being the availability of golden parachute agreement promising executive payout in the event of termination due to takeover or other reasons stipulated in the agreement. All models include control variables, year and country fixed effects, which are not reported for reasons of brevity. Z-coefficients are reported in parentheses beneath coefficients. Significance of respective variables is denoted with asterisks: * p <0.1, ** p < 0.05, *** p < 0.01.

Source: own elaboration.

The prevalence of special clauses limiting the application of the statutory procedure of director removal was found to exhibit no unique pattern across the analysed sin industries. While the presence of such clauses is much more likely in the tobacco industry (OR: 2.78; $p < 0.1$), other industries (alcohol and gambling) were no different from the overall sample. The relevant results are reported in Table 9.

While being more likely to impose extra-procedural limitations on director removal, tobacco companies are also much more likely to enforce mandatory board term limits after which directors are subject to re-election (Table 10, model (2); OR: 9.47; $p < 0.01$). The enforcement of such clauses is usually the result of pressure

on the part of large institutional investors as regulators are rightfully refraining from imposition of such limits through legislative action. A broader industry-wide adoption of such a mechanism may be indicative of a more stringent market scrutiny and an effort to enhance the transparency and effectiveness of corporate oversight through regular board renewal. The opposite pattern was observed in the alcohol industry, thereby precluding the possibility of generalisation across all the analysed sin industries. The frequency of the adoption of mandatory term limits in the gambling industry was no different from the sample average.

Table 9

The presence of special clauses limiting the possibilities of director removal

	(1)	(2)	(3)	(4)
	Limitations on director removal	**Limitations on director removal**	**Limitations on director removal**	**Limitations on director removal**
Stigma	**0.177**			
	(0.763)			
Tobacco		**1.022***		
		(2.349)		
Alcohol			**0.282**	
			(0.909)	
Gambling				**0.311**
				(1.165)
Constant	–7.004***	–6.890***	–7.014***	–6.991***
	(–10.496)	(–10.288)	(–10.518)	(–10.477)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Log Likelihood	–2321.511	–2319.140	–2321.394	–2316.692
chi2	783.110***	787.851***	783.343***	783.014***
r2_p	0.144	0.145	0.144	0.145
N	7159	7159	7159	7123

Note: the table presents maximum likelihood estimates of binary logit models with the explained variable being the availability of special clauses limiting the possibility of director removal. All models include control variables, year and country fixed effects, which are not reported for reasons of brevity. Z-coefficients are reported in parentheses beneath coefficients. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: own elaboration.

Table 10

Enforcement of mandatory term limits for directors

	(1)	(2)	(3)	(4)
	Term limits	**Term limits**	**Term limits**	**Term limits**
Stigma	**0.024**			
	(0.090)			
Tobacco		**2.248*** **		
		(6.187)		
Alcohol			**–1.168****	
			(–3.145)	
Gambling				**0.925**
				(1.134)
Constant	–7.432***	–7.162***	–7.559***	–7.397***
	(–7.712)	(–7.412)	(–7.836)	(–7.681)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Log Likelihood	–2343.172	–2327.439	–2337.912	–2340.692
chi2	1619.939	1651.404	1630.458	1615.342
r2_p	0.257	0.262	0.259	0.257
N	9804	9804	9804	9758

Note: the table presents maximum likelihood estimates of binary logit models with the explained variable being the enforcement of mandatory term limits for directors sitting on the company's board. All models include control variables, year and country fixed effects, which are not reported for reasons of brevity. Z-coefficients are reported in parentheses beneath coefficients. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: own elaboration.

Finally, the study investigated the cross-industry differences in the likelihood of compliance irregularities, which could partially explain the origins of social stigma inflicted upon sin companies. As evidenced in Table 11, none of the studied sin industries were found to exhibit a higher likelihood of being involved in accounting controversies, whether reported by audit firms or whistleblowers. Having controlled for contemporaneous financials (operating performance, indebtedness, liquidity) and the quality of corporate oversight (board structure, CEOs' presence on the board), the author also found no evidence of the increased likelihood of earnings restatement by sin companies (Table 12). The results remain unaltered across all the analysed stigma-afflicted industries.

Table 11

The likelihood of accounting controversies

	(1)	(2)	(3)	(4)
	Accounting controversy	**Accounting controversy**	**Accounting controversy**	**Accounting controversy**
Stigma	**0.026**			
	(0.025)			
Tobacco		**0.378**		
		(0.469)		
Alcohol			**0.706**	
			(0.679)	
Gambling				**0.742**
				(1.017)
Constant	–11.746***	–11.817***	–11.765***	–11.712***
	(–5.284)	(–5.319)	(–5.280)	(–5.269)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Log Likelihood	–316.758	–316.405	–316.569	–316.639
chi2	66.211***	66.323***	66.589***	65.826***
r2_p	0.095	0.095	0.095	0.094
N	8193	8152	8193	8150

Note: the table presents maximum likelihood estimates of binary logit models with the explained variable being the occurrence of accounting controversies within a given company. All models include control variables, year and country fixed effects, which are not reported for reasons of brevity. Z-coefficients are reported in parentheses beneath coefficients. Significance of respective variables is denoted with asterisks: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: own elaboration.

Table 12

The likelihood of earnings restatement

	(1)	(2)	(3)	(4)
	Earnings restatement	**Earnings restatement**	**Earnings restatement**	**Earnings restatement**
1	2	3	4	5
Stigma	**–0.210**			
	(–0.285)			
Tobacco		**0.491**		
		(0.464)		
Alcohol			**–0.316**	
			(–0.306)	

Table 12, cont.

1	2	3	4	5
Gambling				**0.756**
				(0.201)
Constant	–6.836***	–6.800***	–6.836***	–6.784***
	(–4.512)	(–4.476)	(–4.511)	(–4.480)
Year Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
Firm-Level Controls	Yes	Yes	Yes	Yes
Corporate Governance Controls	Yes	Yes	Yes	Yes
Log Likelihood	–528.651	–528.599	–528.642	–528.238
chi2	194.014***	194.117***	194.030***	193.695***
r2_p	0.155	0.155	0.155	0.155
N	7385	7385	7385	7351

Note: the table presents maximum likelihood estimates of binary logit models with the explained variable being the likelihood of earnings restatement within a given company. All models include control variables, year and country fixed effects, which are not reported for reasons of brevity. Z-coefficients are reported in parentheses beneath coefficients. Significance of respective variables is denoted with asterisks: * p <0.1, ** p < 0.05, *** p < 0.01.

Source: own elaboration.

CONCLUDING REMARKS

The study's empirical findings demonstrated that the negative publicity and social stigma accompanying firms in the tobacco, alcohol and gambling industries do not seem to bear any negative consequences for executives and directors mandating remedial action through the alteration of remuneration or corporate governance mechanisms. Executive and board recompense in sin industries was found to be not different from those disclosed by non-sin firms. The analysis controlled for firms' finances, corporate governance settings and director-level characteristics.

While one would expect the boards of stigmatized firms to be dominated by insiders, due to the unwillingness of reputation-concerned external directors to join the boards of such firms, the author found no evidence of this being the case. The representation of independent and strictly independent board members in sin companies was no different from that disclosed by non-sin industries. Likewise, the boards of such companies were not dominated by directors with industry-specific background and expertise. The opposite findings could suggest the relative isolation of the pool of directors and executives employed by stigmatized industries from the rest of the market for managerial talent.

The study found that being employed by a sin company did not reduce the further employment opportunities of its executives or directors. The average director tenure

on the boards of such companies was not statistically different from the average for the entire analysed sample of public companies in the EU. There appears to be no need to stay on the board of a sin company for longer periods of time to compensate for a lack of further employment prospects. In fact, directors on the boards of sin companies enjoy a similar number of external affiliations and board memberships as those employed by non-sin industries. Being previously employed by a sin company seems therefore to carry no negative ramifications for executives or board members of such companies in terms of career growth, promotion or social/professional networking.

Further exploring the specificity of corporate governance mechanisms adopted by firms in stigmatized industries, the study found no persistent patterns which would be indicative of the need to remedy the negative consequences of social stigma. The author found that tobacco manufacturing companies were more likely to offer golden parachutes to their executives and enforce separate clauses imposing limitations on the extra-procedural removal of directors. These businesses were also found to be more likely than average to impose mandatory term limits on board memberships. The opposite was found to be true of alcohol manufacturers and distributors. Overall, the study found no evidence suggesting that sin companies were trying to use corporate governance and remuneration mechanisms to alleviate the consequences of industry stigmatization and negative publicity. Working for these companies, therefore, appears to carry no negative financial or reputational consequences for executives and board members.

Finally, while the stigmatized sin industries are associated with social problems in the eyes of the general public, they carry no excess risks from the regulatory or financial compliance perspective, which may play an important role in shaping the perception of such businesses by prospective employees. Having analysed the compliance and financial disclosure records of the sampled public companies, the study found that companies from sin industries have a similar likelihood of being involved in accounting controversies as any other average business in the sample. The probability of an earnings restatement by a sin company during a given year was also no different from the sample mean.

These findings remain in stark contrast with those reported by Novak and Bilinski (2018) for the US market. Several possible explanations may shed light on this divergence. Firstly, executives in the US have a much stronger influence over the pay-setting process and a stronger bargaining position vis-à-vis shareholders (Iliev and Vitanova, 2019), which may allow for the accommodation of non-performance related factors (e.g. those resulting from the impact of social norms) in executive remuneration. Secondly, cultural differences may also play a role, which is however difficult to ascertain or verify empirically.

These empirical results may be of interest to experts in the area of executive search and remuneration as the study investigated one of the frequently ignored determinants of managerial remuneration, i.e. reputation-related concerns ensuing

from public image and the public perception of the employer in light of prevailing societal values. It was demonstrated that the impact of such non-performance-related factors may be minor.

The research design of the study has a number of shortcomings. Firstly, the research sample comprises only listed companies, whereas the studied relations could be substantially different within the private sector. The sample is also geographically heterogeneous, with the results possibly diverging across jurisdictions. The sample size, however, precluded a more detailed country-level analysis. Secondly, the study employed indirect proxies to operationalize the career outcomes of senior executives and directors. This approach allows for the objective quantitative verification of the posited empirical predictions. However, it does not account for the highly subjective nature of social norms, whose impact on the public perception of sin industries may only be assessed relying on qualitative methodology.

Further qualitative studies can verify whether senior managers employed by sin industries are subject to social stigmatization relying on interviews and self-reporting. Additionally, further research is necessary to explore the institutional determinants of divergent societal perception of sin industries across macro-regions. This could help in explaining the divergence of the findings reported for the EU and US markets.

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