Rule violations by SMEs: The influence of conduct within the industry, company culture and personal motives

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Abstract
The literature suggests many different variables that may explain rule violations by companies. These can be categorized into variables at the industry level, such as the degree of rule violations, at the company level, such as the organizational culture, and at the individual level, such as personal or social norms. From the Dutch Tax Administration’s (2009) registration data, industries were selected with relatively low and relatively high tax correction rates. Within these industries, small and medium-sized enterprises (SMEs) with 20–150 employees were selected that either had received no (or negative) corrections or had received large positive corrections, resulting in a population of 1558 companies. In 194 of these SMEs, both the director and an employee were interviewed about violations of administrative, environmental and tax obligations, about their personal motives and about the ethical organizational culture. The results of the study show that all three levels of variables explain intentions to comply or to violate the rules. Ethical culture contributes to explaining the compliance intentions of both directors and employees. However, in contrast to previous research, about half of the SMEs cannot be characterized by a coherent ethical culture.

Keywords
Corporate crime, company culture, regulatory compliance, SMEs, white-collar crime

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Introduction

During the past decade, societal and scientific attention to offences committed within and by companies has taken off. A large number of cases of malpractice with huge economic and societal consequences seem to have contributed to this growing awareness. The media, politicians and law enforcement agencies call upon companies to be more socially responsible, and businesses do seem to respond to this request. More and more ethical codes and risk and compliance departments are arising, and employees are trained in order to allow companies to conduct their business in a more ethical manner, or at least to be able to market themselves as ethical, environmentally aware or socially responsible.

All of this attention seems to focus on the conduct of large corporations, such as banks, energy suppliers, big accountancy firms and insurance companies. However, the majority of firms are small to medium sized. In the Netherlands, these smaller companies employ 70 percent of the work force (CBS, 2015). Surprisingly, society and the scientific community seem to lack attention to compliance or malpractice within or by such smaller companies. This is particularly remarkable since relatively small companies often play a crucial and dubious role in big scandals. For instance, Dutch companies were implicated in both the horse meat (2013) and the Fipronil in eggs (2017) affairs. In both cases, that is, the repacking and selling of horse meat as beef and the use of an illegal and harmful pesticide in poultry farms, relatively small fraudulent companies caused international outrage and concerns about public health (Van Amstel, 2014; Zaalberg, 2017).

Knowledge is needed about the drivers that either commit small and medium-sized enterprises (SMEs) to comply or stimulate them to violate the rules. This could further the development of measures that enable the smaller and medium-sized companies of good will to stimulate compliance and counter rule violations within their organization in a cost-effective manner. Also, such knowledge could aid policy makers and law enforcers in their endeavours to stimulate compliance and mitigate rule violations.

Theories for explaining corporate crime stress the importance of a multi-level approach of integrating explanatory variables at micro, meso and macro levels (Braithwaite, 1989; Vaughan, 2007). Previous research shows that industry, company and individual characteristics are related to compliance within or by companies and interact with each other (Rorie, 2015; Trevino et al., 1998). This confirms the importance of taking multiple levels into account when studying corporate crime.

However, empirical studies incorporating multiple levels are scarce (for example, Petts et al., 1999). This holds especially for studies on the influence of characteristics at multiple levels on compliance or rule violation within SMEs. Further, as the size of the company gets smaller, the relevance of organizational characteristics in understanding compliance may decrease. For instance, whereas ‘tone at the top’ has been found to be of influence in large organizations (Huisman, 2016), the smaller the organization gets, the more a culture is the reflection of the personal norms of the director of the company or the perception of those norms by individual employees. When using existing instruments to measure ethical company culture in SMEs, we wonder whether we are actually measuring corporate characteristics or the personal perceptions of individual managers or employees of that culture, which might be a reflection of their personal norms (see also
Peeters et al. (Gorsira et al., 2018: 14). Perceptions may not always reflect the reality that would be observed by outsiders or captured through more objective measures (Martin et al., 2014).

This research studies the relative importance of all three types of explanations for compliance or rule violation by SMEs. The research question is how industry conduct, ethical organizational culture and personal norms are related to regulatory compliance within SMEs.

From the literature discussed in the next section of this article, we deduce three hypotheses. We hypothesize that, within SMEs:

1. Both directors’ and employees’ compliance intentions are negatively related to industry conduct, or the degree to which rule violations are prevalent within the industry.
2. Both directors’ and employees’ compliance intentions are positively related to the ethical organizational culture.
3. Both directors’ and employees’ compliance intentions are positively related to individual motives, that is, to strong personal and social norms, perceived opportunities to comply, and perceived deterrence.

By answering the research question and testing the hypotheses, this article contributes to the knowledge on the contribution of these three factors to the explanation of regulatory compliance and violation by SMEs. By studying SMEs, this article tests the validity of previous studies focusing (mostly) on large corporations and theoretical models that do not distinguish for company size.

This not only is important from a scientific empirical point of view, but also has important practical implications. For instance, should a law enforcement agency focus on specific industries; should it, regardless of the industry, pay specific attention to certain companies that are prone to rule violation; or should it disregard both the industries and the companies and throw all its eggs into the individual differences basket?

**Previous research**

**Industry conduct.** Regulatory and law enforcement agencies tend to organize their work around specific industries. For example, financial services authorities (such as the UK’s Financial Conduct Authority and the Netherlands Authority for the Financial Markets) regulate the banking industry, and environmental protection agencies in EU member states have to organize their work around major hazard corporations to comply with the EU’s Seveso guidelines for this industry.1 One reason for this organizational choice is that specific industries tend to be involved in specific types of rule violation and not in other types. A second reason for the organization of law enforcement along the lines of industries is the presumption that the prevalence of rule violation differs between industries. Criminologists generally tend to agree with this presumption. Since the earliest studies by Sutherland (1949) and Clinard and Yeager (1980), research on corporate crime has consistently shown that some industries are more criminogenic than others and that structural characteristics are critical factors associated with corporate law-breaking (for example, Wang and Holtfreter, 2012). For instance, in a study on corporate crime in the 500 largest corporations in...
the USA, law-breaking was found to be most prevalent in the oil industry, the pharmaceutical industry and the automobile industry (Clinard and Yeager, 1980, 119–22).

Although such differences might be explained by incentives and opportunities due to the political and economic environment of the market, corporate crime scholars refer to the relevance of learning within the industry where the corporation operates (Wang and Holtfreter, 2012). Industry may influence corporate crime by promoting a subculture of corporate illegality that provides learning opportunities for corporations operating within them (Baucus, 1994; Farberman, 1975). Corporations within an industry may ‘learn the necessary values, motives, rationalizations, and techniques favourable to particular kinds of crimes’ (Clinard and Yeager, 2006: 61). Sutherland (1949) has also suggested that criminal behaviour by the corporation and its executives often results from the diffusion of illegal practices within an industry. Cohn, Fehr and Maréchal (2014: 86) suggest, based on their finding that bankers uniquely appear to exhibit dishonest experimental behaviour when rendered salient with their work, that ‘the prevailing business culture in the banking industry favours dishonest behaviour’.

Empirical evidence on the influence of industries’ criminogenic culture on small companies’ compliance or engagement in rule-violating behaviour is scarce. One may reason that the influence of this culture should be larger for smaller than for larger companies. Large corporations can be seen as a world in itself, in which managers and employees tend to focus inwardly. Also, large corporations are subject to a multitude of external forces and cultures, because they generally operate within multiple industries and countries simultaneously (Huisman, 2016). By contrast, smaller companies are forced to focus on the external world and generally operate within one specific area and industry. Also, large corporations themselves might be influencing industry cultures, whereas SMEs are merely mimicking what they see. Therefore, due to the external focus and the lack of other ‘disturbing’ influences, one may assume that smaller companies are more likely than large corporations to be influenced by the industry culture.

**Company culture.** Although the industry’s culture may influence companies’ choices between compliance and rule violation, compliance also appears to differ between companies within industries. Social scientists tend to explain such differences by organizational characteristics, among which ethical culture is prominent (Huisman, 2016).

Since the 1980s, companies and other organizations have been perceived as communities having their own, distinctive culture. Schein (1992: 12) defined corporate culture as: ‘A pattern of shared basic assumptions that the group learned as it solves its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.’

Organizational ethical culture is a specific dimension of organizational culture that describes organizational ethics and predicts organizational ethical behaviour (Key, 1999). This assumed relation between ethical culture and ethical conduct has been tested using the Corporate Ethical Virtues Model (Kaptein, 2010, 2011). Most dimensions of this model are strongly related to self-reported unethical conduct and rule-breaking. This suggests a continuum, with on the one side companies with highly ethical cultures and on the other side companies with unethical cultures. Previous research shows that,
especially on the latter side, rule violation could be expected (Kaptein, 2010, 2011; Peterson, 2002). In contrast, a strong ethical culture would create a moral threshold for managers and employees, preventing them from getting involved in law violation and other unethical conduct. Research shows that a company culture that promotes integrity increases the chance of a successful anti-corruption programme (Bussmann et al., 2016) and effective ethics management reduces illegal behaviour (Trevino et al., 1999).

Most of the research on the influence of the ethical organizational culture on rule violations focuses on large corporations. Empirical research on ethical organizational culture tends to measure the ethical culture of organizations by surveys of or interviews with individual managers. The outcomes of these surveys or interviews are assumed to be indicative of companies’ ethical culture, and not presumed to be the specific managers’ individual perception of the culture (Parker and Nielsen, 2011). Some research has involved multiple participants within companies (for example, Ardichvili et al., 2012; Campbell and Göritz, 2014; Kaptein, 2008b, 2011). However, the results of such research at times show that, within organizations, one can hardly speak of a single dominant culture. Distinct cultures have been found to exist among different teams within organizations. Also, some empirical evidence reveals distinct ethical cultures between the hierarchical levels (Ardichvili et al., 2012; Campbell and Göritz, 2014).

These findings raise questions about the meaning of company culture within SMEs, which lack the various teams and levels of large corporations. Choueke and Armstrong (2000: 230) address such questions: ‘In an SME context, if culture is a meaningful phenomenon, where does it begin, and how does it permeate?’ The majority of the managers felt that the culture within the organization emanated from the founders rather than as a result of some organic process. In the family business context, Gersick et al. (1997: 149) allege that the start-up stage of a company is a time when the foundation is laid for the three core aspects of the family business: company culture, structure, strategy and management values. When a company grows, the development of a corporate culture can itself become an organic organizational process, as more people within the organization buy into, learn about or adapt to the owner’s or founder’s view of the internal and external worlds of the business, while at the same time combining their previous life and work experience with the evolving informal and more formal culture within the company (Choueke and Armstrong, 2000: 230). These findings suggest that the smaller the company, the more the perceived company culture reflects the personal norms of the manager and founder of the company.

Research that focuses on the influence of the ethical organizational culture on rule violations in small or medium-sized companies is limited (Petts et al., 1999), but shows that ethics in small firms are influenced more by informal contact with friends and employees (Spence and Lozano, 2000). Also, the personal values of the management seem to have a large influence on compliance (Cambra-Fierro et al., 2008). One could argue that smaller companies are generally not organized in many subunits and into different hierarchical levels and might therefore have a stronger singular ethical culture than large corporations do. Along this line of reasoning, the influence of the organization’s culture on managers’ and employees’ conduct may be greater in smaller companies.

Individual motives. Despite the possible strong influence of industries’ and ethical organizational culture on managers’ and employees’ conduct, it remains an individual’s choice
to comply with or transgress the boundaries set by rules. The literature suggests several individual motives that may drive managers and employees to comply or violate rules.

Traditional and repressive law enforcement is based on the assumption that the outcome of the individual’s cost–benefit analysis determines whether managers or employees abide by the rules. In line with rational choice theory (Becker, 1968), individuals are more likely to comply if they conclude that following the rules is more profitable than violating them. Law enforcers can, according to this theory, increase compliance rates and diminish rule violation by increasing the chances of detection and sanctioning, thus altering the outcome of the cost–benefit analysis. Experimental research generally supports this assumption (Balliet et al., 2011). However, a recent and first systemic review on the effects of corporate deterrence found that law enforcement and sanctioning have ‘minimal-to-no deterrent impact at the individual and company levels’ (Schell-Busey et al., 2016: 389).

In response to the rational choice approach, scholars have suggested looking at the elements of morality in compliance decision-making and the norms by which corporate decision-makers evaluate compliance alternatives (Smith et al., 2007). Such studies find strong correlations between personal and social norms and compliance (Gorsira et al., 2016).

Personal norms refer to feelings of a ‘moral obligation to perform or refrain from specific actions’ (Schwartz and Howard, 1981: 191). Personal norms are an individual’s deeply rooted and relatively stable moral convictions, which are used as personal standards to evaluate behaviour (Onwezen et al., 2013; Schwartz, 1977). People with strong personal norms focused on complying with the rules will be more inclined to comply with the rules than those lacking such strong personal norms.

Social norms refer to an individual’s perception about the beliefs and behaviour of relevant others (Cialdini et al., 1990). This concerns the impression of an individual of the attitude of others concerning compliance and about the perception about others. Individuals who believe that others endorse and follow the rules are expected to be more inclined to comply than those who do not believe that.

Although perceived costs and benefits and personal and social norms are motivational factors explaining compliance, managers and employees do not only need to want to comply. They also need to believe they are able to do so. Perceived opportunities for both violation and compliance have been found to be important in explaining differences in compliance (Gorsira et al., 2016; Parker and Nielsen, 2011). Surprisingly for criminologists, who mainly focus on opportunities to violate the rules, recent research suggests that the perceived opportunities to comply appear to have a larger influence on compliance (Denkers and Jellema, 2016; Gorsira et al., 2016).

Individual motives are thought to be important drivers for compliance or rule violation, regardless of the size of the company. However, smaller companies generally have less institutionalized checks and balances installed, designed to stimulate compliance among managers and employees. Therefore, the individual’s compliance motives – especially the motives of the director-shareholder – may be assumed to play a more important role in explaining rule-violating behaviour within smaller companies than within the more internally regulated large corporations.

**Integrated models.** As mentioned in the introduction, previous models for the explanation of corporate crime have stressed the need to include the varying aggregate levels at
which explanatory variables are found (Finney and Lesieur, 1982; Shover and Bryant, 1993). Vaughan emphasizes that, in order to properly understand corporate crime, it is essential to gain insights into the interplay between explanatory variables at macro, meso and micro levels (Vaughan, 2007).

Building upon previous authors’ work, Rorie (2015) developed a cross-level integrated theory of corporate environmental compliance behaviour, including external pressures (legal, social and economic) and internal corporate policies and culture. Using an environmental vignette survey of individuals, Rorie (2015: 94) found only one of the measures of corporate culture predicted offending. On the other hand, corporate culture seems to be more important in explaining overcompliance decisions. It thus appears that offending and overcompliance behaviours are driven by different firm-level factors. Further, Rorie found that firm-level factors are correlated with or predict individual-level calculations about the costs and benefits of engaging in the behaviour, as predicted. In turn, multiple individual-level factors influence the likelihood of offending and of overcomplying.

This shows the need to look at the three levels to see how the mores within a branch of industry, the company culture and individual managers’ motives interact and influence the motivation towards rule-breaking by SMEs.

Methods

Computer assisted telephone interviews (CATI) were conducted within small to medium-sized companies in different industries. In each company, a director and an employee answered survey questions on conduct within the industry, company culture and individual motives.

For the selection of companies, Tax Administration data were used. The Dutch Tax Administration can make three types of correction: a negative correction, where the taxable company paid more than necessary and will get a reimbursement; a zero correction, where there is no reimbursement because there is no correction or it is negligible; or a positive correction, where the taxable company did not pay enough taxes and should pay this anyway.

From the Dutch Tax Administration’s registration data (2009), the Tax Administration provided an anonymized and encrypted file of all 336,988 companies with between 20 and 150 employees. Information on the type of industry, revenues, tax reports, controls by the Tax Administration and the level of corrections was available for these companies. In line with previous studies, the correction by the Tax Administration is used as a proxy for non-compliance (see, for instance, Torgler, 2013).

Based on corrections at company level, for each industry the chance of a correction per company is calculated. First, the chance that a company will receive no or a negligible correction is calculated. Second, the chance of a substantial positive correction is calculated. Industries in which companies stand a small chance of substantial positive corrections and a large chance of no or small corrections are selected as ‘industries with a small chance of corrections’. Industries in which companies have a large chance of positive corrections and a small chance of no or negligible corrections are selected as ‘industries with a large chance of corrections’. However, although the
chance of correction is used as a proxy for non-compliance in the industry, it must be noted that this chance of corrections does not rely merely on the level of compliance; mistakes, enforcement choices, strategies and biases are more than likely to influence corrections too.

The selection of industries with a high or a low correction chance resulted in a population of 1862 companies, of which 969 are from industries with a large chance of corrections and 896 from industries with a small chance of corrections. The encrypted list of these 1862 companies was sent back to the Tax Administration. They determined that 1748 of these companies were still active. Of these companies, name and address data were provided to a hired interview company, Stratus Marketing, without information about which group the company belonged to. After the surveys, Stratus Marketing sent the survey data to the Tax Administration, which removed the name and address information and added the company details described previously. The anonymized data were made available to the researchers. In this way, no company name could be linked to the results or the extent of rule violations.

**Respondents**

For this study, Stratus Marketing conducted CATI on the companies provided by the Tax Administration. Stratus Marketing retrieved a phone number for 1558 companies. Of these companies, 33 percent were not reached, 40 percent refused to cooperate and 5 percent stopped the interview prematurely. A small group of 0.4 percent of the companies could not cooperate owing to a language barrier.

In each company, the interviewers set out to ask questions of two people: a member of the management board and an employee. First, the member of the management was interviewed. He or she was asked to suggest an employee who was ‘familiar with the company’s culture’ for a second interview. Every respondent answered questions concerning company culture, individual motives for compliance and their intention to comply with the rules. For 321 of the companies (21 percent), at least one respondent completed an interview. For 194 of the companies, both the director and an employee were interviewed. Of the participating companies, 60 percent operate in an industry with a small chance of corrections.

Out of the participating members of the management board, 90 percent were either the owner or the director of the company, 1 percent were a vice-director and 7 percent were managers. All of these respondents will be referred to as directors. Of the employees, 26 percent worked as an administrator, 12 percent as an accountant, 5 percent as a financial director and 57 percent had another function. These will be referred to as employees.

**Instrument**

The surveys contained questions about violations of administrative, environmental and tax obligations, personal motives concerning compliance and the ethical organizational culture. The questions were answered on a seven-point Likert scale. The scales and the items are described below.
**Intention to comply with the rules.** Both the directors’ and the employees’ answers to these questions suggest that, on average, members of neither group seem inclined to violate the rules; on all items both groups of participants generally score well below the midpoint of the scale. Participants appear to be more inclined to break administrative \((M = 2.40, SD = 1.83)\) or environmental \((M = 2.24, SD = 1.53)\) rules than other rules. For both directors and employees, a compliance intentions scale was constructed by taking the mean of six items (reversed). To reduce skewness and the influence of high scores, the inverse \((x_{inv} = 1/x)\) of each item was computed first, before constructing the scale. Because a large proportion of the population (34 percent of directors and 22 percent of employees) indicated that they had no intention whatsoever of violating rules in relation to all six items, this procedure – as expected – does not result in a normal distribution. The six inverted items – compliance intentions – do form a reliable scale among both directors and employees (respectively, \(\alpha = .94\) and \(\alpha = .90\)). Unexpectedly, the compliance intention scales of directors and employees were not significantly correlated, suggesting that the tendency towards rule violation is not linked between the two groups. This finding makes it impossible to construct a company-level compliance intentions scale that includes both directors’ and employees’ tendencies.

**Ethical culture.** A selection of 22 items from Kaptein’s (2008a, 2008b) corporate ethical virtues (CEV) scale was used to measure both directors’ and employees’ perceptions of the organization’s ethical culture. The original CEV model consists of 58 questions covering eight sub-scales: clarity, congruence of supervisors, congruence of management, feasibility, supportability, transparency, discussability, and sanctionability. From each sub-scale, items with the strongest item-total correlation were used in this study. For an overview of the original sub-scales, see Kaptein (2008b).

The reliability analysis shows that internal consistency of the 22 ethical culture items is high for both directors \((\alpha = .90)\) and employees \((\alpha = .92)\). A scale was constructed for directors and for employees by taking the means of the 22 items.

**Personal motives.** Questions about four personal motives were included in the study: personal norms, social norms, opportunities to comply and deterrence. To measure personal norms, four statements were used, such as ‘I always and in every situation comply with the rules’. Internal consistency of the personal norms scale is acceptable for both the directors and the employees \((\alpha = .73\) and \(\alpha = .60\), respectively). A scale was constructed by computing the means of these items, for both directors and employees.

Six items concerned social norms. Three reference groups were used: ‘employees in this company’, ‘employees in this industry’ and ‘the Dutch population’. For each group, questions are asked about the prescribed norm (‘... find it important that the rules are strictly complied with’) and the observed norm (‘... always comply with the rules strictly’). The social norms scale is reliable for both directors and employees \((\alpha = .77\) and \(\alpha = .78\), respectively). A scale was constructed by computing the means of the six items, for both directors and employees.

‘Opportunities to comply with the rules’ was measured using six items. The respondents were asked: ‘To what extent is it difficult or easy for a company like yours to ...’, followed by six different rules, such as: ‘... meet all administrative obligations’. This
scale appeared to be reliable for directors and almost reliable for employees ($\alpha = 0.62$ and $\alpha = 0.57$, respectively).

Two scales were utilized to measure perceived deterrence: the chance of getting caught (six items) and negative consequences (four items). The items concerning the chance of getting caught were preceded by: ‘How great do you estimate the chance that the authorities will find out if your business were to be involved in . . .’, followed by the six violations also used to determine the opportunities to comply with the rules. Internal consistency for both directors and employees is high ($\alpha = 0.94$ and $\alpha = 0.90$, respectively). Deterrence is constructed by multiplying the scale of the chance of getting caught by the consequences.

The perceived negative consequences questions included questions about how seriously the respondent estimates the consequences for him/herself or the company, if the authorities find out that their company has violated any of the above rules. Internal consistency for this scale is high for both directors and employees ($\alpha = 0.88$ and $\alpha = 0.73$, respectively).

**Analytic strategy.** First, we analyse the differences ($t$-tests) and correlations between directors’ and employees’ scores on ethical culture, personal norms, social norms, opportunity to comply, detection risk, negative consequences of detection and compliance intentions. The focal point of these analyses is the difference and the correlation between directors’ and employees’ perceptions of the ethical culture within their organization. Secondly, OLS regression analyses are conducted to test the relative influence of the industry culture, the perceived ethical organizational culture, and individual differences in directors’ and employees’ compliance intentions. To check for possible violations of the assumptions of normality of the residuals and absence of multicollinearity, the P–P plot and Durbin–Watson scores are inspected. To provide a more robust estimate of the effects, bootstrap confidence intervals are reported ($n = 1000$, 95% CI).

The correlations between the concepts tend to be very strong among both directors and employees. However, there is one notable difference. Among employees, the correlation between the experienced opportunities to comply and the culture scale is almost insignificant. Among directors, this correlation is very strong.

**Results**

Table 1 shows the means and standard deviations of directors and employees on the different scales, and the differences (pairwise $t$-tests) and correlations between them. The results suggest that directors report a stronger ethical culture and weaker personal norms than employees do. Directors and employees appear to report similar levels of opportunities to comply, deterrence and compliance intentions.

Although the mean scores of directors and employees are generally comparable, within companies, directors’ and employees’ ratings of most of these variables seem to be unrelated. For instance, on average the directors’ personal norms are similar to their employees’ personal norms, but within a company their personal norms are unrelated.

This may not be completely unexpected with regard to most personal motives, or even with regard to compliance intentions. Directors and employees are separate individuals and, because of their own specific situation within the company, they may perceive such measures in a completely dissimilar manner.
However, the ethical culture scale is a different matter. These results imply that the ethical culture, as operationalized in this study, not only differs on average between directors and employees, but is also unrelated between directors and employees within companies. As was noted in the introduction, this raises questions about the degree to which this measure is indicative of an ethical culture. A culture is supposed to be a shared set of beliefs between the members of a group. Apparently, the ethical culture, as we measured it, cannot be regarded as a shared set of beliefs, at least not between directors and employees within small companies. Therefore, it might rather be regarded as another individual difference: the individual’s perception of the ethical culture of the company. Alternatively, the results may be due to a proportion of the companies lacking a single ethical culture that is shared by directors and employees alike, whereas within other companies such a shared culture does exist.

In order to test the plausibility of these explanations, a new variable was constructed by taking the absolute difference between the director’s and the employee’s rating of the ethical culture. This variable ($M = 0.64, \text{SD} = 0.54$) shows that, on average, the director’s and employee’s ratings of the ethical culture lie more than 1 standard deviation apart. In 51.5 percent of the dyads the difference is within 1 standard deviation, in 30.9 percent of the dyads the difference is 1 standard deviation or more, and in 16.5 percent of the companies the dyads differ by more than 2 standard deviations. The correlations between the director’s and the employee’s ethical culture within these groups is, respectively, $.71 (p < .001), .16$ (n.s.) and $-.19 (p < .05)$, suggesting a common coherent ethical culture within about half of the companies and a non-coherent ethical culture within the other half. In about one out of six companies we find a conflicting ethical culture between directors and employees; perceptions about the ethical organizational culture within these companies are found to be negatively related between directors and employees.

To test the relative influence of the different scales, a series of regression analyses were performed. The industry culture, perceived ethical culture and individual differences were simultaneously entered. Tables 2 and 3 show the results after entering all of these variables for, respectively, directors and employees.\(^5\)

### Table 1. Directors’ and employees’ ethical culture, individual differences and compliance intentions: Means, t-test and correlations ($N = 195$).

|                          | Directors | Employees | t        | r       |
|--------------------------|-----------|-----------|----------|---------|
| Ethical culture          | 6.04 (0.55) | 5.86 (0.68) | 3.08***  | .10     |
| Individual differences   |           |           |          |         |
| Personal norms           | 5.18 (1.21) | 5.59 (1.02) | $-3.75$*** | .09     |
| Social norms             | 4.91 (1.10) | 4.95 (1.01) | $-0.36$  | .17*    |
| Opportunities to comply  | 5.31 (1.06) | 5.30 (0.97) | 0.13     | .12     |
| Deterrence               | 5.17 (1.74) | 5.28 (1.45) | $-0.67$  | .08     |
| Negative consequences    | 5.76 (1.41) | 5.75 (1.14) | 0.11     | $-.00$  |
| Compliance intentions    | 0.74 (0.29) | 0.69 (0.28) | 1.62     | .13     |

*p < .05; ***p < .01; ****p < .001.
Table 2. Regression analyses: Directors’ compliance intentions explained by industry culture, ethical organizational culture and individual differences.

|                      | \( r \) | \( \text{Beta} \) | \( t \) | 95\% interval | \( F(9,172) = 7.67^{***} \) | Durbin–Watson = 2.12 |
|----------------------|---------|-------------------|-------|--------------|----------------|-----------------|
| Industry culture     | -.18**  | -.19              | -2.54*| -.189 -.029  |                |                 |
| Ethical culture      | .36***  | .25               | 3.10**| .035 .239    |                |                 |
| Personal norms       | .21**   | .07               | 0.82  | -.026 .055   |                |                 |
| Social norms         | .16*    | -.10              | -1.31 | -.084 .023   |                |                 |
| Opportunities to comply | .29*** | .13               | 1.69  | -.002 .076   |                |                 |
| Detection risk       | .25**   | .13               | 1.78  | -.014 .056   |                |                 |
| Negative consequences| .26***  | .17               | 2.24* | -.001 .072   |                |                 |

Notes: Results are corrected for the age of the participant and ‘correction by Tax Administration’. The P–P plot suggests that the assumption of the normality of the distribution of the residuals has not been violated. \*p < .05; **p < .01; ***p < .001.

The first column of Table 2 shows that among directors all the predictors are correlated in the expected manner with compliance intentions. Fewer fines within the sector, a stronger ethical organizational culture, stronger personal and social norms, better opportunities to comply, a higher detection risk and more negative consequences are related to more compliant intentions. After entering the variables into the regression analysis, and thus after correcting for the influence of the other predictors in the equation, three predictors appear to contribute uniquely to explaining compliance intentions: industry culture, ethical organizational culture and negative consequences. The bootstrap analysis suggests that the effect of negative consequences on compliance intentions is not robust, whereas the influences of industry and organizational culture are.

Table 3 shows that employees’ compliance intentions are related to the ethical organizational culture, personal and social norms, opportunities to comply and negative consequences. Conduct in the industry and the detection risk appear to be unrelated to employees’ compliance intentions. After entering the variables into the regression analyses, the ethical organizational culture, personal norms and the perceived opportunities to comply appear to contribute uniquely to explaining the compliance intentions of employees. These results appear to be supported by the bootstrap analyses.

Next, the variables at the industry, the organizational and the individual level were entered into the regression analyses separately. The results are not depicted in a table. The results show that 1 percent of the directors’ and 0 percent of the employees’ compliance intentions are explained at the industry level, which is the industry culture. Respectively 10 percent and 14 percent of directors’ and employees’ compliance intentions were explained at the organizational level, which is the ethical organizational culture. Individual differences, which are personal and social norms, opportunities to comply, detection risk and negative consequences, explain 13 percent and 18 percent of directors’ and employees’ compliance intentions, respectively.
The results of the regression analyses suggest that several variables uniquely contribute to explaining either directors’ or employees’ compliance. The only variable that appears to contribute to explaining both directors’ and employees’ compliance intentions is the organizational ethical culture. However, the question remains whether this variable should be considered to be an indication of the organization’s culture, or should be seen as an individual difference. Further research might be able to shed light on this matter.

**Conclusion**

The results of this study confirm the hypotheses formulated in the introduction, suggesting the importance of including all three levels – industry, company and personal – in explaining compliance or rule violations. The fact that this study on SMEs’ conduct contains variables from all three levels is unique. The results suggest that all three levels play a role in explaining compliance, thereby underlining that neither compliance nor rule violation can be fully understood from only one of these perspectives. Compliance does not uniquely sprout from the industry’s culture, from the organization’s culture, or from individual differences; all three levels of explanation seem important. This is especially true for explaining the intentions of directors. Their tendency to comply appears to be related to conduct within the industry, to organizational culture and to individual motives. However, conduct in the industry does not seem to be related to employees’ compliance intentions. These findings seem logical, because external factors are generally more important to directors than to employees. However, these results do not suggest that these external influences, via directors, also indirectly contaminate employee compliance. Directors in industries with a high probability of large positive corrections by the Tax Administration appear to be more likely to break the rules than directors in industries where such corrections rarely occur. These results

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**Table 3. Regression analyses: Employees’ compliance intentions explained by industry culture, ethical organizational culture and individual differences.**

|                            | r       | Beta  | t       | 95% interval | Lower  | Higher |
|----------------------------|---------|-------|---------|--------------|--------|--------|
| Industry culture           | .07     | .06   | .91     | -.039        | .111   |
| Ethical culture            | .39***  | .26   | 3.50**  | .051         | .177   |
| Individual differences     |         |       |         |              |        |
| Personal norms             | .34***  | .19   | 2.59*   | .010         | .095   |
| Social norms               | .21**   | .02   | .26     | -.035        | .053   |
| Opportunities to comply    | .33***  | .26   | 3.93*** | .034         | .076   |
| Detection risk             | .12     | .03   | .37     | -.024        | .057   |
| Negative consequences      | .17*    | .03   | .37     | -.031        | .075   |
| F(9,178) = 7.37***; \(R^2_{adj} = 24\%\) Durbin-Watson = 1.84 |

**Notes:** Results are corrected for the age of the participant and ‘correction by Tax Administration’. The P–P plot suggests that the assumption of the normality of the distribution of the residuals has not been violated. *p < .05; **p < .01; ***p < .001.
appear to be in line with industry-oriented enforcement (Baucus, 1994; Farberman, 1975; Wang and Holtfreter, 2012).

The ethical culture of the company seems to be strongly related to the tendency towards compliance for both employees and directors. This confirms previous research that culture is strongly related to self-reported unethical conduct (Kaptein, 2010, 2011). The results with regard to ethical organizational culture seem to support the importance of the tone at the top. However, in this study, where about half of the companies lack a common ethical culture, one could also argue that the individuals’ perception of a strong ethical culture, regardless of the actual organizational culture, may be enough to promote compliance. If the director reports a strong ethical culture, employees tend to follow the rules better.

All personal motives are related to the tendency towards compliance. For employees, only the detection risk is not significant. Combining all factors in a model, the compliance of directors is somewhat, but not robustly, related to the negative consequences, whereas employee compliance is especially related to personal norms and opportunities to comply. This confirms previous research (Gorsira et al., 2016; Parker and Nielsen, 2011) and suggests that enforcement in smaller companies could, as far as personal motives are concerned, be effective in facilitating regulatory compliance. However, the fact that a company has been corrected appears unrelated to the tendency to comply with the rules. This could mean that corrections by the Tax Administration do not influence compliance intentions. Alternatively, the lack of correlation between corrections and compliance might also mean that the directors’ and employees’ intentions to comply are improved as a consequence of the imposed corrections.

A striking finding is the fact that the coherence of the ethical business culture is very different within companies. Though some studies find different hierarchical levels to have different organizational culture (Ardichvili et al., 2012; Campbell and Göritz, 2014), in general the literature refers to the existence of a more or less compliance-promoting culture within all companies. Companies with a strong ethical culture would violate fewer rules than companies with a strong unethical culture. The results of this study suggest that there is no such thing as a strong shared culture within all SMEs. In only about half of the companies did the director and the employee report a similar and related ethical organizational culture.

The results suggest that measurements of organizations’ ethical culture may not be related to the common shared culture within an organization, as generally accepted, but rather are an indication of individual perceptions about the culture. If this is true, other measures might be more effective for measuring organizational factors that influence compliance in smaller organizations. Perhaps ethical climate could prove to be more suitable in these smaller organizations (Victor and Cullen, 1988).

The absence of an ethical culture among about half of the SMEs in the current study might be related to the age of the organization or to the developmental stage of companies. In the first stages of an SME’s existence, the organizational culture might rely heavily on the vision of the founders or top management (Choueke and Armstrong, 2000), so that it is active only among those who created it. In such organizations, one would not expect a strong common ethical culture. Only as the organizational culture has been more discussed and iconic instances have occurred that mark and organically shape the
specific organizational culture, may the organizational culture strengthen, spread and become ingrained among all. In these organizations, one may expect to find a strong and common ethical culture that influences conduct among directors and employees in a very similar manner. Unfortunately our data set did not contain information about organizations’ developmental stage.

Limitations and future research

This research has several methodological limitations. The participating directors and employees report little inclination to violate the rules, but it is likely that the business culture, individual motives and the tendency to compliance will be associated with whether or not to cooperate in such research. Directors and employees who are strongly inclined to comply might be more likely to cooperate than others; volunteering and participating in research without compensation can be seen as a form of compliance. Therefore, the results of this research cannot be generalized to the general population of SMEs.

Another limitation of surveys is that they are sensitive to socially desirable answer tendencies. This applies especially to questions about socially sensitive subjects such as compliance. Asking about the intentions or behaviour of others can reduce this effect, because people tend to regard their own behaviour and ideas as normal and universal. Psychologists call this the ‘false consensus effect’ (Ross et al., 1977). As a result, a person’s estimates of others’ behaviour and ideas would largely reflect their own behaviour and ideas. A disadvantage of measuring unethical behaviour or intentions through others is that the results are mainly about the social norm. After all, one is asking what people think other people do. This makes it unclear to what extent the correlation between culture or social norms and compliance can be linked to an actual relationship.

Directors within industries where the Tax Administration (in 2009) imposed many major positive corrections seem more inclined to violate the rules than directors within industries where that was not the case. This suggests that the industry in which one operates to some extent affects the compliance intentions of the directors. As hypothesized in the introduction, it indeed seems that SMEs focus on the outside world and the industry, and are influenced by industry conduct. However, these results can be interpreted in an alternative manner with equal strength, for example, that these results are related to self-selection. This would mean that an entrepreneur is nesting in an industry where the conduct corresponds to his or her own standards and values. Which of these two or other statements is most likely cannot be determined based on this research. This requires experimental, or at least longitudinal, research. However, the validity of the proxy used for industry culture in this study – tax corrections – might be debatable. Day-to-day compliance is generally handled by the company itself; whereas external accountants are usually hired for end-of-year tax obligations and for tax-related advice to the entrepreneurs (Rawlings, 2011). The results of this study based on this proxy do encourage further research into the influence of industry culture on compliance intentions. This research should include other proxies for industry culture.

It is plausible that the extent to which there is one coherent ethical business culture can vary greatly between companies. The fact that this has an influence on the attitude
and behaviour of employees and management members seems to be obvious. To study organizational culture, it seems important to develop a methodology to determine to what extent there is or is not a coherent ethical culture. For this reason, it seems advisable to study a larger group of employees and managers within companies to determine whether there is a coherent ethical culture. Furthermore, research should look into the differences in directors’ and employees’ perceptions of ethical company culture, and how this influences compliance. It seems debatable that culture in smaller companies is an organizational variable; it might instead be more of an individual characteristic.

This article has focused on expanding knowledge about the factors promoting or obstructing regulatory compliance at the industry, company and individual level. Personal motives appear to help explain regulatory compliance. Opportunities to comply and personal norms have the strongest relation to compliance. Ethical culture is also related to intentions to comply with the rules, but only when there is a coherent ethical culture between directors and employees. Finally, conduct in the industry is related to directors’ compliance. Applying this result for regulatory enforcement has potential. Little is known about which factors contribute to the emergence and development of industry conduct. Future research could look into this.

The strength of this study is that, in contrast to previous research (which has mainly studied large corporations), it focuses on smaller companies. In these companies, both the director and an employee are questioned about their compliance intentions, their perceived ethical culture and their personal motives. This is a unique focus, which gives insight into the differences between these organizations.

The results of this study have practical implications. The study showed that the intentions to comply of directors and employees are not influenced by the same characteristics. Conduct within the industry influences the compliance behaviour of directors, but not of employees. When law enforcement uses conduct within the industry to promote compliance, this is useful only for rule violations by directors. Rule violations by employees will hardly be influenced by this industry focus.

The results also suggest that companies differ in the coherence of the ethical culture. Some companies have a strong coherent ethical culture, where directors and employees agree upon this culture, whereas within other companies directors’ and employees’ views of the ethical culture appear to be completely unrelated. This finding may have important implications for enforcement agencies that include a focus on organizations’ cultures. Several regulatory agencies are trying to monitor organizational culture and attempting to change criminogenic, unethical company cultures, for instance as part of a conditional sanction. When the focus of enforcement agencies is on organizations with a strong coherent (un)ethical culture, this focus might be advantageous. Enforcement officers can expect both directors and employees to abstain from regulatory violations in companies with a strong ethical culture; both directors and employees can be expected to join forces in violating norms in companies with a culture that is highly unethical. In companies with a non-coherent culture, a focus on the organizational ethical culture might be less advantageous. In such companies, the level of compliance can be expected to vary widely between employees and directors. For instance, horizontal supervision by the Tax Administration may be expected to be a very useful tool with regard to companies that are characterized by a strong coherent ethical organizational culture. However, when this
culture is not coherent, the use of horizontal surveillance seems less obvious. In these companies, the extent to which directors – with whom the enforcement agency is engaging – comply with the rules does not seem to be related to the extent to which employees comply with the rules.

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Notes
1. URL (accessed 24 August 2019): http://ec.europa.eu/environment/seveso/index.htm.
2. In this study, for practical reasons SMEs are defined only by the number of employees. The cut-off points are based on the Dutch National Statistics and with the aim of avoiding the larger SMEs (near to 250 employees). Such bigger SMEs are often organized into different units, at different locations, thereby hampering the possibility of finding a common organizational culture.
3. We do not know to what extent the findings of this study are unique to the Netherlands. Because the Netherlands shares many characteristics with other countries in Western Europe, we assume that the results would be similar in these countries (Van de Bunt and Huisman, 2007).
4. The participation rate of 31 percent is generally considered a good score for this type of research. Of the 321 companies that participated, both a director and an employee participated in 60 percent of the cases. Because this procedure is novel, it is not known if that is a normal rate of participation.
5. The age of the participant and having or not having been corrected by the Tax Administration were not related to the compliance intentions of either directors or employees. Therefore, these variables are not shown in Tables 2 and 3.

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