

# Does sin matter in corporate governance issues in the United States

Hanene Ezzine

*ESC Sfax University, Sfax, Tunisia, and*

Bernard Olivero

*Institute of Business Administration of Nice, Nice University, France*

Does sin  
matter in  
corporate  
governance

449

Received 19 June 2017  
Revised 3 November 2017  
18 January 2018  
Accepted 2 February 2018

## Abstract

**Purpose** – The authors provide evidence for the effects of social norms on corporate governance risk by studying “sin” stocks publicly traded companies involved in producing alcohol, firearms, biotechnology, gambling, military, nuclear power and tobacco. There is a societal norm against funding operations that promote vice and expropriation by controlling shareholders.

**Design/methodology/approach** – The sample is representative of S&P 500 firms in 2014. The authors use Datastream to obtain a sample of sin stocks. The authors’ descriptive analysis is completed by four variations of the basic ordinary least squares regression model according to dependent variable corporate governance risk score.

**Findings** – The authors find that non-financial incentives alone do not explain corporate governance risk. The authors provide strong empirical support for an alignment of financial and non-financial incentives. The authors show that when sin firm’s current performance is good, suggesting that the market holds a positive belief in firm’s future profitability, managers will likely have more incentive to expropriate shareholders.

**Research limitations/implications** – Belonging of firm to a sin industry does not reflect the acceptance level of social norms. The evolution of social norms towards sin stocks overcomes the drawback of assuming a constant social norms level over time. Therefore, researchers are encouraged to use the changes in consumption of sin products as a proxy for the evolution of social norms and examine does sin matter in corporate governance issue in other countries.

**Practical implications** – Well-planned and well-managed philanthropy sin industries to creating education programmes for the disadvantaged to protecting the environment, in the name of corporate social responsibility has become a necessary ingredient in virtually every large corporation’s business plan.

**Originality/value** – This paper fulfils an identified need to study does sin matter issue in corporate governance issue.

**Keywords** Agency theory, Corporate governance index, Stakeholder management, Social responsibility investment

**Paper type** Research paper

## 1. Introduction

This study examines how negative social perceptions of “sin” industries (alcohol, firearms, gambling, military, biotechnology, nuclear power and tobacco) affect corporate governance practices. Social economics literature has long argued that social norms are important in shaping economic behaviour and market outcomes. The social norm theory has gained momentum during the past decade. It supports the assertion that people have a tendency to cooperate voluntarily, if treated fairly and to punish noncooperators. Experimental economists have demonstrated that people display social preferences when making



economic decisions, thus deviating from the material self-interest hypothesis. These deviations have a fundamental effect on core economic issues. So, it is not surprising that recent large studies have proved that social norms affect investment decisions. In the setting of capital markets, social norms manifest themselves in the form of “socially responsible investing” (SRI) where investors avoid making investments in companies that produce, promote or sell addictive substances and activities such as alcohol, gambling and tobacco. These companies operate in specific industries perceived to be exploiting human vices. A huge number of studies have demonstrated that an interesting attitude exists that “sin” stocks are frowned upon by most firms, because they are perceived to be making money by exploiting human weaknesses and frailties, despite offering excellent investment opportunities (Frank *et al.*, 2008; Heal, 2008; Hong and Kacperczyk, 2009; Salaber, 2009). However, others have argued that investing in stocks that exploit human vices or “sin” stocks, provides superior returns when compared to other investment strategies (Richey, 2017; Statman and Glushkov, 2009).

One wonders as a result of this literature whether social norms play any role in monitoring and corporate governance, and although such an investigation has been considered vital, relevant research is nevertheless in its infancy. Two opposite theories argue for the relationship between social norms especially corporate social responsibility (CSR) and corporate governance. Barnea and Rubin (2010) support the agency theory. They consider CSR engagement as a principal-agent relationship between managers and shareholders. Affiliated insiders have an interest in overinvesting in CSR to obtain the private benefits of building reputations as good social citizens, possibly at a cost to shareholders. Higher internal and external controlling through several corporate governance practices should reduce insiders’ incentives for CSR over-investment. However, the proponents of the stakeholder theory (Freeman, 1984; Calton and Payne, 2003; Hoje and Jo, 2011) consider CSR as an engagement with business ethics that addresses morals and values when managing a firm to satisfy all related stakeholders and reduce the conflicts between them. Companies with good governance practices have clear advantages if engaging in strong CSR programmes.

There has been limited research conducted on “sin” stocks, their determinants and implications. Hong and Kacperczyk (2009) have highlighted that American “sin” stocks share particular characteristics in terms of ownership structure; they are held less by institutional investors and analysts than the stocks of other companies. The evidence on equity underpricing, lower institutional ownership and analyst coverage suggests that violating social norms leads to significant costs that are supported by “sin” firms (SINFs). Furthermore, Hong and Kacperczyk (2009) and Kim and Venkatachalam (2011) have both shown that “sin” stocks tend to outperform the market. Their outperformance was more attributable to the neglect effect than to litigation risk and was due to the high quality of financial reporting that made them attractive to a wide group of investors and analysts. Richey (2017) has also investigated the return performance of a US portfolio of “sin” stocks. Using the capital asset pricing model (CAPM), the Fama-French three-factor and the Carhart four-factor models, he has found that vice-based stocks possess a positive and significant alpha, and so they provide higher returns. According to him, these stocks are more profitable and less wasteful than those of the average corporation. However, Statman and Glushkov (2009) have highlighted that the outperformance of SRI stocks is partly offset by the exclusion of “sin” stocks. Salaber (2007) and Dyreng *et al.* (2007) demonstrated that “sin” stock returns depend on legal and cultural characteristics, such as religious adherence, tax avoidance and litigation risk. For example, Protestants tend to be more sin-averse than Catholics and require a significant premium for investing in “sin” stocks. Omer *et al.* (2012)

provided evidence regarding the relationship between social norms and audit decisions. More precisely, they found that local audit offices that conform to stronger religious social norms tend to be related with making more conservative going-concern decisions.

The extant literature addresses how financial incentives interact with social norms to shape the behaviour of economic agents. This question was widely examined during the recent financial crises when the public expressed a strong interest in knowing if the social value of economic activities was limited due to the incentives of market participants pursuing financial rewards. Financial and non-financial incentives do not align at times. Previous studies have documented how higher financial rewards can be obtained on average by violating the SRI philosophy and investing in “sin” stocks. [Liu et al. \(2014\)](#) achieved important results. Their empirical evidence suggested there is a strong interaction between social norms and financial incentives. When a stock is expected to perform poorly, being obedience to social norms is relatively less expensive, leading to additional shunning by institutions and analysts. However, when a stock is expected to perform well, obeying social norms is then more expensive, leading to the dilemma of choosing between social responsibility and financial rewards.

Against this background, we explore the association between social norms and corporate governance. The goal of the paper is to provide new evidence on the market effects of social norms in the setting of corporate governance. We examine whether disparities between SINFs' operations and prevailing social norms create an adverse context which heightens expropriation by managers that is reflected in the corporate governance risk (CGR) of certain board structures, compensation/remuneration, shareholder rights and audit practice dimensions. Governance risk applies the principles of good governance to the identification, assessment, management and communication of risks. It incorporates such criteria as accountability, participation and transparency within the procedures and structures by which risk-related decisions are made and implemented. SINFs would constitute a favourable context for managerial expropriation for an array of reasons. They outperform the market and they offer excellent dividends ([Ahrens, 2004](#)). Moreover, they experience monitoring particularities, less analyst coverage, less institutional shareholding and less interest from the wider investment community. “Sin” industries live permanently with a “negative headline risk” ([Hong and Kacperczyk, 2009](#)). Additionally, social norms may result in SINFs being subject to higher monitoring costs by regulators and higher agency costs by shareholders and debtors due to reduced market monitoring. Furthermore, the peculiarities and adversities of “sin” industries, related to broader social conditions, are an integral part of the firm risk, which is an essential component of the CGR assessment process ([Leventis et al., 2013](#)).

To test the above, we used a sample of S&P 500 firms in 2014. We found that non-financial incentives alone do not explain CGR. Additionally, we can provide strong empirical support for an alignment of financial and non-financial incentives. Managerial opportunistic behaviour, proxied by CGR on board structures, compensation and shareholder rights, is related positively to the interaction between social norms and firm performance. The degree of managerial opportunism is therefore less pronounced for non-“sin” firms (NSINFs) with higher performance.

This study offers several important contributions. First, investing in SINFs can be just as damaging in the sense that they face greater litigation risk and neglect, which makes them less followed by institutional investors and analysts and also makes them less managed. The managements of SINFs may also engage in theft, raising the probability that their stocks will default. Second, to the best of our knowledge, this is the first paper to examine the relationship between social norms and CGR. The literature relating to social norms and

corporate governance is limited to dimensions like executive compensation and audit policy (Leventis *et al.*, 2013; Sauer *et al.*, 2013). We extend prior research on the determinants of CGR, which incorporates such criteria as accountability, participation and transparency within the procedures and structures by which risk-related decisions are made and implemented. The third contribution is the finding that the governance risk scores of SINFs are not significantly higher than those of NSINFs. This suggests that social norms alone are unable to explain CGR. Then, we demonstrate that financial and non-financial incentives align themselves to explain CGR. We found that the CGR-performance sensitivities of SINFs are higher than the CGR sensitivities of NSINFs when performance is measured using returns on equity and stock returns. Better performing SINFs have higher CGR.

The rest of the paper proceeds as follows. Section 2 discusses the theoretical framework for social norms and corporate governance. Section 3 outlines the literature review and hypotheses development. Section 4 specifies the model used and provides a description of the data. Section 5 summarizes our main results. The last section focuses on the conclusions and recommendations for further research.

## 2. Theoretical framework

### 2.1 Social norms and “sin” firms

Social norms govern a wide range of economic behaviour, including consumption, contracts and work effort (Elster, 1989; Durlauf and Blume, 2008). Such an idea, argued by social scientists, has been discussed since Smith (1976). Social norms theory posits that individual behaviour is oftentimes influenced by incorrect perceptions of how other members of our social groups think and act (Akerlof, 1980; Liu *et al.*, 2014). This theory has flourished over the past decade for at least two reasons (Festre, 2010; Fehr and Gächter, 2000). First, experimental economists have provided much evidence that people exhibit social preferences when economic decision-making, which deviates from the material self-interest hypothesis. Second, there is overwhelming evidence to lead one to believe that these deviations have a fundamental impact on core economic matters. Earlier studies relied implicitly on the model of discrimination and the economics of social norms to explain the existence of discriminatory attitudes towards SINFs (Dyreng *et al.*, 2007; Hong and Kacperczyk, 2009; Kim and Venkatachalam, 2011).

During the past decade, CSR has emerged as the prevailing code of endorsed corporate attitudes and is perceived as an important aspect and expression of modern business ethics. Applied to SRI, it is generally understood that SRI encourages investors to avoid “sin” companies, such as those companies involved in the production or promotion of alcohol, tobacco, gaming, sex-related industries, weapons manufacturers and military matters. Investing in “sinful” stocks is the polar opposite of ethical investing and SRI. They are perceived by the majority of studies as making money from exploiting human weaknesses and frailties. For example, the alcohol, tobacco and gambling industries have been deserted due to the pathological or compulsive addictive effects of their products and services and their resulting harmful impacts on families and communities (Anielski and Braaten, 2008). The firearms industry has also been denounced as a result of its externalities as an environmental damager (Byrne, 2007). The nuclear industry has also been stigmatized. It has been seen as being responsible for major environmental and social catastrophes (Beelitz and Merkl-Davies, 2012).

Supporting “sin” industries is considered to be sinful behaviour for some religious denominations, the most prominent example being Islam with its adherence to *Sharia* law. SINFs stay taboo for Muslim populations and are against *Sharia* norms. Nevertheless, defence does not have a sinful quality. In fact, religion is probably the most important factor

that affects an individual's attitudes towards the legal vices of smoking, drinking and gambling. In Christian denominations, consuming alcohol and tobacco are not considered to be religious sins, except among fundamentalists. But, these industries are considered in very different ways by Catholic and Protestant populations, the main Christian denominations in the USA. Some researchers like [Fairbanks \(1977\)](#) have found a strong relationship between religious preference and sin regulation. He showed that Protestants support strict liquor and gambling controls, while Catholics are hostile to liquor and gambling prohibition. It seems that religion matters for investors' attitudes towards sin and the question of sin regulation raises another issue.

However, "sin" industries are not excluded from the CSR trend. The tobacco industry, for example, is regarded by the [World Health Organization \(2003\)](#) as one of its leading enemies. Many reports and programmes have been launched to seek a response to a very interesting question: How can tobacco companies reconcile their main aim of gaining maximum profits by producing and selling a deadly product, with the goals of CSR business norms, based on ethical values and respect for employees, consumers, communities and the environment? Major tobacco firms have made several efforts to improve their corporate image by developing and promoting ineffective youth smoking prevention programmes ([Coombs, 2017](#)). These programmes are created to dissuade or prevent young people from smoking, but actually the effect can often be contrary to that goal.

Several recent studies, such as those by [Flachsland \(2017\)](#), [Cai et al. \(2011\)](#) and [El Ghouli et al. \(2017\)](#), have demonstrated how country- and industry-level differences affect the value-creating abilities of CSR initiatives. For example, [El Ghouli et al. \(2017\)](#) has found that firms can create value through CSR initiatives in weak institutional environments. CSR can be used as a tool to overcome weak institutional environments by establishing interactions within the environments of firms. Furthermore, [Flachsland \(2017\)](#) has shown that the quality of capital markets and the quality of a country's corporate governance standards are negatively related to CSR and firm value. CSR initiatives have a higher effect on firm values in countries with a lower quality of capital markets and worse country-wide governance standards. Therefore, "sin" stocks are operated in countries that have differences in their cultural and legal environments.

Taxation systems, religious beliefs, government regulation and litigation risk are the factors that could most explain differences in the prices of "sin" stocks ([Van Liemt, 2002](#)). First, "sin" products are subject to excise taxes, which are discriminating by definition and are levied to reflect their external costs (physical, financial and psychological), as well as to discourage consumption. Second, SINFs face higher litigation exposure in their product markets than NSINFs, due to their need for legal experts, given the nature of their businesses. Litigation risk also gives industries a poor image, which could impede the marketing of products. Finally, the cost of many lawsuits and the social cost for "sin" consumption, for which substantial damages may need to be paid, require a particular level of management attention and have depressing effects on the prices of "sin" stocks. These firms have lower price earnings and lower price/book ratios than NSINFs.

## 2.2 Corporate governance and social norms

With recent social and environmental challenges, the emergence of social norms as an extension of firms' efforts to foster effective corporate governance, ensuring firms' sustainability via sound business practices that promote accountability and transparency, is essential. The study of the impact of social norms on corporate governance constitutes a fertile field of research. CSR is an extension of firms' efforts to maximize shareholders' wealth and also it conforms to the basic rules of society ([Friedman, 1970](#)). [Flachsland \(2017\)](#)

has characterized CSR by voluntariness actions; it can be seen as a stretch by companies striving for good corporate governance by respecting transparency, philanthropy and accountability principles. Despite the wide spectrum of approaches to CSR, there is a large consensus concerning at least two alternative explanations regarding its existence.

Referring to agency theory, [Barnea and Rubin \(2010\)](#) considered CSR engagement as a principal-agent relationship between managers and shareholders. Affiliated insiders have an interest in overinvesting in CSR to obtain the private benefits of building reputations as good social citizens, possibly at a cost to shareholders. The higher internal and external controlling via several corporate governance practices should reduce the insiders' incentives for CSR over-investment. However, the proponents of stakeholder theory ([Freeman, 1984](#); [Calton and Payne, 2003](#); [Hoje and Jo, 2011](#)) consider CSR as an engagement with business ethics that addresses morals and values when managing firms to satisfy all related stakeholders and reduce the conflicts between them. Companies with good governance practices have clear advantages derived from engaging in strong CSR programmes. Investors should prefer companies with effective corporate governance and good CSR activities.

Many firms exhibit actual CGRs, such as conflicts of interest, inexperienced directors, overly lucrative compensation or unequal share voting rights ([Anderson and Orsagh, 2004](#)). In the face of such scandals, the renewed emphasis on corporate governance is very interesting. The current turbulent business environment provides an excellent opportunity to establish an organizational culture that goes beyond mere legal compliance. The focus of moral firepower provides a theoretical basis for restoring confidence in a corporation. Ethical compliance mechanisms are addressed from a virtue ethics perspective. Ethics are defined by [Kidder \(1995\)](#) as obedience to the unenforceable. Nevertheless, the role of virtue in governance is very little discussed in the literature. [Arjoon \(2017\)](#), for example, has argued that the focus of virtue in governance is to establish a series of practical responses which depend on the consistent application of core values and principles, as well as a commitment to ethical business practices. Four fundamental virtues are essential for any (ethical) decision-making agent: prudence, justice, courage and self-mastery. These virtues are character traits that make a firm productive and profitable.

Relying on this background context, we argue that negative attitudes towards SINFs attributed to their deviations from social norms, affect CGR in certain dimensions like board structures, compensation/remuneration, shareholder rights and audit practices. We have focussed on the risk of internal corporate governance mechanisms because, if they ensure that the corporation is well-governed, external mechanisms presumably need to play a background role. The role of external mechanisms becomes more important when internal mechanisms fail or are deficient. The International Risk Governance Council (IRGC) has developed a comprehensive framework for governance risk. Governance risk applies the principles of good governance to the identification, assessment, management and communication of risks. It incorporates such criteria as accountability, participation and transparency within the procedures and structures by which risk-related decisions are made and implemented. According to [Ortwin and Mihail \(2006\)](#), governance risk includes the totality of actors, rules, conventions, processes and mechanisms concerned with how relevant risk information is collected, analysed and communicated and how management decisions are taken. It encompasses all the risk-relevant decisions and actions, and it calls for the consideration of contextual factors such as institutional arrangements and socio-political culture and perceptions.

### 3. Literature review and hypotheses development

#### 3.1 Social norms and board structures at “sin” firms

The board of directors is an important system for shareholding monitoring and control. A sizeable literature has investigated its determinants and relationship with firm performance (Yermack, 1996; Hermalin and Weisbach, 2003; Harris and Raviv, 2008). Nevertheless, research on boards of directors and social norms is not only limited, there is an absence of research examining the effect of negative attitudes towards SINFs on governance risk based on board structures. Using a large sample of firms listed on the Russell 2000 Index, the S&P 500 and the Domini 400 Social Index during the period from 1993 to 2004, Hoje and Jo (2011) showed that firms use governance mechanisms along with CSR engagement to reduce conflicts of interest between managers and non-investing stakeholders. They find that CSR choice is positively associated with governance characteristics mainly board independence. Furthermore, Ezzine and Olivero (2015) investigated the reasons for which companies integrate social and environmental concerns in their business activities and in their interactions with their stakeholders. Conducted on SBF 120 firms, they found that CSR implications are positively associated with corporate governance practices, such as the functioning of boards of directors during the subprime crisis of 2007. Companies with well-functioning boards of directors derive clear advantages from engaging in strong CSR programmes. Specifically, we expect that SINFs have riskier board structures.

#### 3.2 Social norms and audit practices at “sin” firms

The literature on the role of audit practices has focussed on audit effectiveness in monitoring management. The audit service is an important institutional arrangement that could align the interests of managers and shareholders and reduce agency costs. A few recent studies on audit practices have stressed that social conditions are an essential component of audit practices at SINFs. Hong and Kacperczyk (2009) suggest that auditors may respond to some adverse circumstances by resorting to additional efforts to conduct audits of SINFs. These adverse circumstances are related first to a client’s increased business risk inflamed by the possibility of regulatory intervention, litigation, negative press coverage and, second, to increased monitoring costs by regulators and agency costs by shareholders and debtors, due to reduced market monitoring. In particular, the propensity of the client for litigation and controversies and the reputational effects from the association of the audit firm with particular industries, leads to a higher assessment of audit risk. Furthermore, Kim and Venkatachalam (2011) have shown that SINFs have incentives to obtain superior audit quality to attract more institutional investors and analysts, as these industries are neglected by the investment community due to social preferences. Leventis *et al.* (2013) explored the relationship between social norms and audits. According to them, demands for increased levels of audit quality will increase audit efforts and costs. The reason for this they found, was that audit firm prices are significantly higher for those clients that belong to “sin” industries in terms of audit fees, consulting fees and total fees. Specifically, we expect that SINFs have riskier audit practices.

#### 3.3 Social norms and compensation policy in “sin” firms

The efficiency of current compensation and bonus schemes is a heavily debated subject in recent economic discussions (Coughlan and Schmidt, 1985; Graham *et al.*, 2012). Within this debate, compensation policy can serve as a decent proxy for the effectiveness of the board of directors and, therefore, as a proxy for corporate governance. But, studying how negative social perceptions of “sin” industries affect compensation policy is challenging and research on this issue is scarce. Sauer *et al.* (2013), for example, provide evidence on the effect of social

norms on CEOs' pay. They found that the CEOs of SINFs earn higher pay than the CEOs of NSINFs. The social disapproval of SINFs can adversely affect public perceptions of their executives and executives' social statuses, leading to significant personal costs for these executives to bear. In addition, they show that the bonus and cash pay-performance sensitivities of CEOs of SINFs are higher than the bonus and cash pay-performance sensitivities of CEOs of NSINFs. The study by [Novak and Bilinski \(2014\)](#) added to the debate on the controversially high level of executive compensation at SINFs. They documented a significant premium in executive compensation in "sin" industries that is not explained by standard compensation predictors such as higher managerial skill, the higher risk of employment contracts or executive entrenchment, but by the social stigma related to work in such industries, which are perceived negatively in light of social norms. Their results highlight that a major reason for high compensation at "sin" companies is due to negative social perception, not because of poor corporate governance mechanisms at these companies. Specifically, we suppose that SINFs have riskier compensation policies.

#### *3.4 Social norms and shareholder rights at "sin" firms*

Several studies agree that an essential feature of good corporate governance is strong investor protection, where investor protection is defined as the extent of the laws that protect investors' rights from expropriation by the managers and controlling shareholders of firms and the strength of the legal institutions that facilitate law enforcement ([Laporta et al., 2000](#); [Mark and Hung, 2004](#)). Nevertheless, the literature on social norms and investor protection at SINFs is very scarce. [Leventis et al. \(2013\)](#) argue that SINFs experience monitoring particularities. They are confronted with high levels of scrutiny and intervention by regulators and are discriminated against in capital markets and, so experience more coverage and less institutional shareholding. Accordingly, SINFs are subject to higher monitoring costs by regulators, higher agency costs by investors and lower investor protection due to reduced market monitoring. A study closest in spirit to [Leventis et al. \(2013\)](#) is that by [Beneish et al. \(2008\)](#), who documented the important role of corporate governance mechanisms in "sin" industries especially those that are external. They showed that tobacco firms engage in frequent acquisitions to protect investors against managerial expropriation and litigation by public authorities and private claimants. Markets for corporate control ensure that underperformers and managers will get weeded out by acquisitions, and that acquiring companies will extract higher value and synergies from these firms by putting them to more efficient uses. This mechanism expands the political capital of firms, which can reduce the likelihood of expropriation. Specifically, we suppose that SINFs have riskier protection of shareholder rights.

#### *3.5 Control factors*

We have identified control variables from past corporate governance research. It might be argued that firm size might affect corporate governance. The operations of a small firm might be more easily understood and monitored, while larger firms would exhibit potentially larger agency problems and would thus tend to adopt better corporate governance ([Chong and Lopez, 2007](#)). Whereas debt, an additional control variable, constrains the expropriation of minority shareholders by controlling shareholders, it can also facilitate this expropriation ([Faccio et al., 2001](#); [Johnson et al., 2000](#)). We controlled for firm profitability and return performance because [Valenti et al. \(2011\)](#) have documented that prior negative changes in firm performance were significantly related to corporate governance variables such as a decrease in the overall number of directors and a decrease in



the number of outside directors. [Younas et al. \(2011\)](#) have shown that a firm's performance in prior years has a positive relationship with board sizes but a negative relationship with audit expenditure. Two accounting-based variables were used for this paper: returns on assets and returns on equity. To measure return performance, we used stock returns over the period from January 2014 to December 2014.

The arguments laid out above lead to the following hypotheses ([Figure 1](#)).

## 4. Data and empirical method

### 4.1 Sample

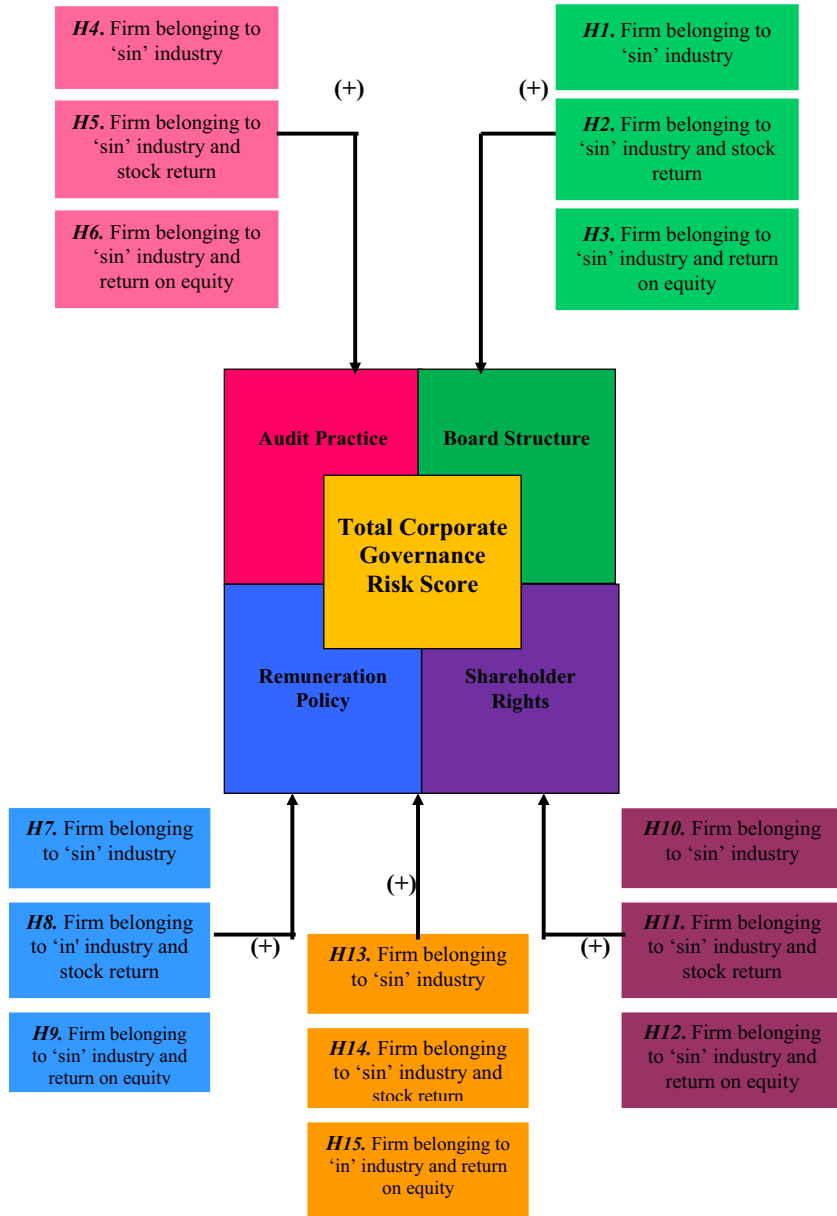
For the purpose of this paper, our analysis of "sin" stocks and CGR was conducted for the USA. The sample was representative of S&P 500 firms listed on the New York Stock Exchange in 2014. The choice of the USA financial market is interesting for at least two reasons. First, the USA is one of the top countries that invests in "sin" industries. It is among the top consumers and producers of alcohol and tobacco. The USA has one of the higher excise taxations in the world. Second, experiences of USA firms show a strong relationship between religious preference and sin regulation. In the USA, the main Christian denominations across states are Catholic and Protestant. Protestants support strict liquor and gambling controls, whereas Catholics are hostile to liquor and gambling prohibition. We merged data from different sources. Information on CGR is from Institutional Shareholder Services (ISS). Yahoo! Finance allowed us to identify the value of the local price indices and the dividends paid every day have been expressed in the local currencies. We collected all our financial data from the Zone Bourse website and from Thomson Reuters. We used Datastream to obtain a sample of "sin" stocks across the S&P 500. We identified all exchange-traded stocks classified in the six industries of alcohol, tobacco, defence, biotech, gaming and adult services.

### 4.2 Measures of corporate governance risk

We tested "sinful" operations and some control variables against CGR using ISS. ISS is the leading provider of corporate governance solutions to the global financial community. ISS has been pleased to announce Governance QuickScore, a scoring and screening solution, underpinned by hard data, designed to help institutional investors and identify CGR within portfolio companies ([ISS, 2014](#)). ISS Governance QuickScore uses a quantitatively and qualitatively driven methodology that looks for correlations between governance factors and key financial indicators. According to [Ortwin and Mihail \(2006\)](#), governance risk includes the totality of actors, rules, conventions, processes and mechanisms concerned with how relevant risk information is collected, analysed and communicated and management decisions are taken.

ISS Governance QuickScore indicates a firm's rank relative to its region. Firms are assessed by four independent dimensions: board structure (BS), compensation/remuneration (COM), shareholder rights (SHR) and audit practice (AP), and firms will also receive an overall governance score and assessment. [Table I](#) summarizes the main factors retained for each category of governance practice. The factors' coverage takes a regional approach in evaluating and scoring companies, to allow for company comparisons in markets where the corporate governance practices are the most similar. Scores indicate decile rank relative to the index. A decile score of 1 indicates lower governance risk, while a 10 indicates higher CGR.

[Table I](#) summarizes the main factors retained for each category of corporate governance practice: board structure, compensation remuneration, shareholder rights and audit



**Figure 1.**  
Summarizes the main hypotheses of study

practices. A decile score of 1 indicates lower governance risk, while a 10 indicates higher CGR.

#### 4.3 Measures of explanatory variables

Any empirical investigation of “sin” stocks begins with the difficult task of identifying and defining a “sin” stock. There is no agreed definition of SINFs in the current literature. In this study, our identification of SINFs is similar to that of Frank *et al.* (2008). “Sin” stocks are defined as the stocks of publicly traded corporations that are engaged in morally reprehensible productive activities. From Datastream, we identified all exchange-traded stocks classified in the six industries of alcohol, tobacco, defence, biotech, gaming and adult services. Specifically, we defined a variable “SIN”, which took a value of 1 if a firm belonged to one of these six industries and was 0 otherwise. Table II describes companies in “sin” industries. Consistent with the prior literature we included some control variables. We measured firm size (FSIZE) by the logarithm of the total assets. A firm’s debt ratio (DEBTR) was measured by the book value of the total debt divided by the book value of the total asset. Additionally, we also included the accounting-based variables returns on equity (ROE) and returns on assets (ROA) to measure the level of protection afforded to firms by their equity and total assets. ROE is presented as net profit before tax/shareholder’s equity. ROA is presented as net income divided by total assets. To measure return performance, we used stock return (SR), which is a share’s rate of return and includes changes in the principal value of capital (change of share’s price) and received cash dividend.

Table II provides a detailed description of “sin” activities (Frank *et al.*, 2008).

#### 4.4 Empirical model

We used ordinary least squares (OLS) regression models to examine the association between “sinful” operations and CGR. Our main model is presented as follows:

$$\begin{aligned} \text{Corporate Governance Risk} = & a + \beta_1 S_1 \text{SIN} + \beta_2 \text{ROE} + \beta_3 \text{SR} + \beta_4 (\text{SIN} \times \text{ROE}) \\ & + \beta_5 (\text{SIN} \times \text{SR}) + \beta_6 \text{Control Variables} + \varepsilon \end{aligned} \quad (1)$$

where CGR is assessed by five measures. Five variations of this basic model were then used. Model 1 used governance risk related to BS. Model 2 used governance risk based on COM. Model 3 used governance risk determined by SHR. Model 4 used risk caused by AP. Model 5 used the total corporate governance risk score (TCGS), which took account of the last four measures. SIN appears as a main effect and in interaction with accounting returns and stock

Board structure	Compensation/remuneration	Share holder rights	Audit practices
Board composition	Pay for performance	One share one vote	External auditor
Composition of committee	Non-performance-based pay	Takeover defences	Audit and accounting
Board practices	Use of equity	Voting issues	Controversies
Board policies	Equity risk mitigation	Voting formalities	Other audit issues
Related party transactions	Non-executive pay	Other shareholder rights issues	
	Communications and disclosure		
	Termination		
	Controversies		

**Table I.**  
ISS governance risk scores

**Table II.**  
Company  
descriptions in “sin”  
industries

Sin industry	Products and services
Adult services	Provides subscription-based adult entertainment Provides adult products and online entertainment Provides dating and chat services; owns and operates adult-themed clubs Manufactures and sells adult products Provides adult media content Holding company with an adult theme
Alcohol	Produces malt for brewers Produces cork stoppers for wine Produces and distributes wine Owns and operates establishments that sell alcohol Manufactures and distributes alcoholic beverages Manufactures ethanol used in liquor Imports foreign alcohols Holding company with an alcohol division Engages in retailing and brewing beer Distills liquors Designs bottles for liquor and wine
Biotech	Provides tissue engineering and gene therapy Provides biomedical research of genome applications Conducts animal testing and creates gene-modified mice Creates injectable aesthetic products Experiments with animal genes for producing proteins Conducts genetic testing and genome research Conducts nanotechnology research for the treatment of STDs Conducts stem-cell-based research
Defense	Produces products for military use Produces firearms Holding company with a firearms division
Gaming	Creates software applications used by the military Involved in aspects of gambling and operates bars Provides digital fortune-telling content Supplies and/or produces gambling-related products Owns and/or operates establishments that allow gambling Conducts gambling servicing
Tobacco	Makes paper used to wrap various parts of the cigarette Develops methods to reduce toxins in tobacco Produces tobacco-based products Sells pipes, rolling tobacco and lighters Holding company with a tobacco division

returns. The coefficients of  $SIN \times ROE$  and  $SIN \times SR$  measure the adjustments to contemporaneous governance-performance sensitivities in the presence of sin. Thus, the coefficients of ROE and SR estimate the contemporaneous governance-performance sensitivities of NSINFs.

#### 4.5 Descriptive statistics

We reported descriptive statistics for the full sample in [Table III](#). Additionally, we presented a mean for SINFs and NSINFs, using a two-sample T-test. With respect to the dependent variables, we found that for SINFs (NSINFs sample, full sample) the mean TCGR was 5.30 (4.68; 4.88), COM was 6.58 (5.13; 5.6), SHR was 4.56 (4.42; 4.47), BS was 5.56 (4.98; 5.17) and AP was 1.67 (2.14; 1.99). SINFs have higher governance risk on compensation, shareholder

**Table III.**  
Descriptive statistics

Variables	Mean	Full sample			SINFs sample Mean	NSINFs sample Mean	T-test
		SD	Maximum	Minimum			
TCGRS	4.88	2.895	10	1	5.30	4.68	1.112
COM	5.6	3.007	10	1	6.58	5.13	2.602**
SHR	4.47	3.006	10	1	4.56	4.42	0.23
BS	5.17	3.019	10	0	5.56	4.98	0.989
AP	1.99	2.091	10	1	1.67	2.14	-1.443
DEBTR	0.439	1.167	1.318	-12.411	0.467	0.426	0.255
ROE	0.269	0.703	7.587	-0.683	0.366	0.220	0.839
ROA	0.116	0.324	3.597	-0.318	0.168	0.09	0.971
FSIZE	16.56	3.35	21.245	0E-7	16.149	16.765	-1.088
SR	-0.00024	0.00209	0.0041	-0.0194	0.00191	0.00043	-0.504

**Notes:** This table presents the full and sub-samples for the descriptive statistics for the variables used in the models; \*\*indicates statistical significance at 5% level

rights, board structure and the ISS total score, but lower CGR on audit practices. *T*-tests revealed that there was a significant difference between SINFs and NSINFs only for governance risk on compensation. Furthermore, our descriptive statistics showed that SINFs performed better than NSINFs. The mean stock return was around 0.19 versus 0.043 per cent; the return on equity was 36.6 versus 22 per cent; and the return on assets was 16.8 versus 9 per cent. We also found that SINFs were more highly leveraged than NSINFs (46.7 versus 42.6 per cent). *T*-tests did not reveal any significant difference in company specific variables between SINFs and NSINFs. In unreported results, we found that correlations between explanatory variables in [Table III](#) were small on average and did not exceed 0.8, which was the rule-of-thumb level for a potential multicollinearity problem.

## 5. Empirical findings

[Table IV](#) presents the results for the effect of social norms on CGR and also the interaction effect of social norms and financial incentives on CGR. Separate OLS results are presented, respectively, for the BS, AP, COM, SHR and TCGS models. All models except Model 2 were significant, with an explanatory power (adjusted  $R^2$ ) exceeding 30 per cent.

### 5.1 The effect of social norms on corporate governance risk

The coefficient of SIN was not significant for all models, except for Model 2, which examined the association between sinful operations and CGR on compensation policy. There were no significant differences in the governance risk for board structure, audit practices and shareholder rights between SINFs and NSINFs. Thus, we rejected *H1*, *H4*, *H10* and *H13*. This result suggests that social norms have no influence on the behaviour of board structures, audit practices and also shareholder protection policies. People's attitude towards "sin" products did not affect the managers' opportunistic behaviour because of these corporate governance mechanisms. Mostly, economic agents have voiced their strong interest in maximizing short-term profits and they care about financial incentives more than social norms. Social norms fail to explain CGR. This result contradicts [Beneish et al. \(2008\)](#) who found that SINFs, in particular tobacco companies, engage in frequent acquisitions to protect shareholders against managerial expropriation. However, we found a positive relationship between managerial opportunistic risk on compensation and the "sin" versus non-"sin" stocks dummy variable. *H7* was thus accepted. This finding was consistent with

**Table IV.**  
Corporate  
governance risk at  
“sin” firms

	Board structure <i>Model 1</i> Coefficient	Audit practices <i>Model 2</i> Coefficient	Compensation <i>Model 3</i> Coefficient	Shareholder rights <i>Model 4</i> Coefficient	Total ISS governance <i>Model 5</i> Coefficient
Intercept	6.116*** (4.541)	0.927 (0.975)	7.641*** (5.802)	8.572*** (6.529)	8.742*** (6.993)
SIN × SR	0.547 (0.975)	-0.395 (-0.976)	1.304*** (2.335)	-0.395 (-0.976)	-0.395 (-0.976)
SIN × ROE	90.252*** (2.551)	18.820* (1.857)	78.567* (1.784)	70.781* (1.781)	62.150*** (2.013)
SR	0.676* (1.776)	0.135 (0.497)	0.063* (0.668)	0.398*** (1.966)	0.407* (1.645)
ROE	-87.951** (-1.998)	-8.757 (-0.209)	-3.600** (-2.062)	-5.533*** (-2.096)	-24.505*** (-2.448)
DEBTR	-0.246* (-1.666)	-0.134* (-1.714)	-0.260* (-1.722)	-0.546* (-1.717)	-0.408* (1.993)
FSIZE	-0.024 (-0.109)	0.088 (0.558)	0.360* (1.646)	0.310* (1.719)	0.408*** (1.969)
Adjusted R <sup>2</sup>	-0.075 (-0.956)	-0.395 (-0.976)	-1.304*** (-2.335)	-0.258** (-3.361)	-2.591*** (-3.552)
F-Statistic	0.312	0.143	0.345	0.375	0.361
	3.376	2.143	3.645	4.075	3.361

**Notes:** Table IV reports regression results for equation (1). The dependent variable is either an ISS corporate governance score or its components (board structure, compensation, shareholder rights and audit practices). Other variables have been defined previously. *T*-statistics are reported in parentheses. \*\*\*, \*\*, \* indicate statistical significance at 1, 5 and 10% levels, respectively

that of [Sauer et al. \(2013\)](#) who found that CEOs of SINFs earned higher salaries than CEOs of NSINFs. The significant compensation premium at “sin” companies reflects their higher managerial entrenchment and their ability to extract a rent from uncompetitive employment contracts. Nevertheless, [Novak and Bilinski \(2014\)](#) highlighted that the major reason for high compensation at SINFs was due to negative social perceptions, not because of poor corporate governance mechanisms at these industries.

Our OLS regressions results, especially in Models 3, 4 and 5 reported a significant and positive coefficient on debt ratios. The most indebted firms have the highest corporate governance risk on compensation, shareholder rights and their total ISS governance scores. Such results confirm the findings of [Faccio et al. \(2001\)](#) and [Johnson et al. \(2000\)](#). According to them, debt can facilitate the expropriation of minority shareholders for at least two reasons. First, higher leverage gives the controlling shareholder control over more resources to expropriate. Second, minority shareholders and external lenders constrain the leverage of group affiliates that seemed more vulnerable to expropriation. Our findings suggested that the coefficient on FSIZE was significantly negative. Larger firms would exhibit potentially larger agency problems, would tend to adopt better corporate governance and have lower CGR.

### 5.2 The effect of social norms and financial incentives on corporate governance risk

In the light of results which suggested that differentiations in CGR cannot be attributed to prevailing social norms working against “sin” industries, we examined, here, the effect of social norms and financial incentives on CGR. The coefficients of  $SIN \times SR$  and  $SIN \times ROE$ , which measure the adjustment to contemporaneous governance-performance sensitivities in the presence of sin, were significantly positive in all models, except Model 2. *H2, H3, H8, H9, H11, H12, H14* and *H15* were thus accepted. We found that interactions between the SIN variable and ROE had a positive and significant association with CGR. In addition, there was a positive and significant relationship between terms of interaction ( $SIN \times SR$ ) and CGR. Furthermore, the coefficients of SR and ROE, which estimate the contemporaneous CGR-performance sensitivities of NSINFs, were significantly negative in all models except Model 2. These results suggest that the CGR-performance sensitivities of SINFs are higher than the CGR sensitivities of NSINFs when performance is measured using returns on equity and stock returns. Better performing NSINFs have lower CGR. By contrast, better performing SINFs have higher CGR. The social norms and financial incentives aligned in influencing the behaviour of market participants and manager’s opportunistic behaviour. Then, when NSINF’s current performance was good, suggesting that the market hold a positive belief in the firm’s future profitability, managers would likely have less incentive to expropriate from shareholders. The CGR on the main internal corporate governance mechanisms such as board structure, audit practices, shareholders’ rights and compensation was reducing.

No empirical evidence currently exists regarding how governance risk-performance sensitivities differ between SINFs and NSINFs. But, our survey results supported some empirical evidence of the interaction between social norms and financial incentives in determining managers’ opportunistic behaviour. For example, [Kim and Venkatachalam \(2011\)](#) found that, despite superior returns and higher financial reporting quality evaluated by the predictability of earnings for future cash flows and timely loss recognition, investors were willing to bear a financial cost to comply with societal norms by neglecting “sin” stocks. [Liu et al. \(2014\)](#) showed that managers’ opportunistic behaviour, proxied by discretionary accruals and analysts’ meet-or-beat frequencies, was related negatively to the extent of social norm acceptance; and such an association

was less pronounced for firms with higher financial performance. Additionally, [Sauer et al. \(2013\)](#) found that the bonus and cash pay-performance sensitivities of CEOs of SINFs were higher than the bonus and cash pay-performance sensitivities of CEOs of NSINFs when performance was measured using accounting returns.

5.3 Summary of our main results

[Table V](#) provides a summary of the main results with respect to prior researches.

[Table V](#) reports the main findings of regression results for [equation \(1\)](#). The dependent variable is either an ISS corporate governance score or its components (board structure, compensation, shareholder rights, audit practices). The independent variables are non-financial and financial incentives.

6. Conclusion

In the public view, job creation and tax paying no longer suffice as contributions to society. The boom in social norms attests to this trend as investors express their concerns and make

	Estimated variables	Predicted signs	Hypotheses	Findings with prior researches
Governance risk on board structure	SIN	Positive	<i>H1</i> rejected	There are no significant differences in CGR on boards of directors between SINFs and NSINFs
	SIN × SR SIN × ROE	Positive Positive	<i>H2</i> accepted <i>H3</i> accepted	Better performing SINFs have higher CGR on board structures
Governance risk on audit practices	SIN	Positive	<i>H4</i> rejected	Social norms have no influence on the behaviour of audit practices
	SIN × SR SIN × ROE	Positive Positive	<i>H5</i> accepted <i>H6</i> rejected	Better performing SINFs have higher CGR on audit practices We corroborate <a href="#">Kim and Venkatachalam (2010)</a>
Governance risk on compensation	SIN	Positive	<i>H7</i> accepted	There is a positive relationship between managerial opportunistic risk on compensation and non-financial incentives
	SIN × SR SIN × ROE	Positive Positive	<i>H8</i> accepted <i>H9</i> accepted	Better performing NSINFs have lower CGR on compensation policies We corroborate <a href="#">Sauer et al. (2013)</a> and contradict <a href="#">Novak and Bilinski (2014)</a>
Governance risk on shareholder rights	SIN	Positive	<i>H10</i> accepted	There are no significant differences in CGR on shareholder rights between SINFs and NSINFs
	SIN × SR SIN × ROE	Positive Positive	<i>H11</i> accepted <i>H12</i> accepted	Better performing SINFs exhibit lower investor protection We corroborate <a href="#">Liu et al. (2014)</a> and <a href="#">Leventis et al. (2013)</a>
Total corporate governance risk score	SIN	Positive	<i>H13</i> rejected	Non-financial incentives alone do not explain CGR scores
	SIN × SR SIN × ROE	Positive Positive	<i>H14</i> accepted <i>H15</i> accepted	The interaction between financial incentives and non-financial incentives provides a strong support for explaining the manager's opportunistic behaviour We confirm the findings by <a href="#">Sauer et al. (2013)</a> , <a href="#">Liu et al. (2014)</a> and <a href="#">Leventis et al. (2013)</a>

**Table V.**  
Summary of main results



their social and ethical standpoints known to the companies they invest in and patronize. CSR has become a necessary element of virtually all large corporations' business plans. Many firms from a wide range of sectors conduct projects and programmes that aim to reduce social inequity by creating or improving health care or educational facilities, providing vocational and management training and enhancing the quality of leisure and culture activities available (World Health Organization, 2003).

While several researchers have studied the relationship between social norms and financial market outcomes, the impact of social norms on managers' behaviour has been largely unexplored. In this paper the goal has been to provide new evidence about the market effects of social norms in the context of corporate governance. In particular, our focus has been on examining whether disparities between SINFs' operations and prevailing social norms have created an adverse context which heightens expropriation by managers and CGR. We have used alcohol, firearms, biotechnology, gambling, military, nuclear power and tobacco consumption and people's attitude towards these "sin" products to proxy for the social norm acceptance level. To assess the CGR of a company, we identified and discussed several measures such as board structure, compensation, shareholder rights, audit practices and overall governance scores.

We failed empirically to demonstrate that CGR is higher for firms belonging to controversial industries. We argued that non-financial incentives do not explain CGR. However, based on the social norms and compensation literature, our regression results provided support for the view that industries which promote "vice" and are stigmatized due to their social environmental externalities encounter considerable adversity, which increases governance risk on policy compensation. Additionally, our results provided support for the interaction between social norms and financial incentives in determining managers' opportunistic behaviour. We found that the CGR-performance sensitivities of SINFs are higher than the CGR sensitivities of NSINFs when performance is measured using returns on equity and stock returns. Despite superior returns on "sin" stocks, many investors are willing to bear a financial cost to withdraw their money from all domestic-currency denominated assets, leading to greater capital outflows for SINFs. Investing in better performing SINFs can be just as damaging in the sense that they face greater litigation risk and neglect, which makes them less followed by institutional investors and analysts and makes them less managed. The managements of better performing SINFs may also engage in theft, raising the probability that these stocks will default.

Our findings have several implications. They contribute to both the economics and financial literature by providing strong empirical support for the impact of substitution effects between financial and non-financial incentives among economic agents with respect to CGR. When social norms interact with financial incentives, investors will sacrifice their adherence to social norms for financial rewards, which could encourage the opportunistic behaviour of managers and then increase the level of CGR. This finding is important and should be of interest to academics and investors, given the recent financial crisis and the limited empirical support in the literature. Shareholders, investors and market participants should be aware that the increased agency costs and considerably less institutional monitoring, along with the broader hostility to SINF operations, may be exacerbated by higher performance especially during a potential economic and/or financial shock. Companies must have financial incentives to survive, grow and sustain themselves, however, the pursuit of profits must stay within ethical bounds. Especially during a period of crisis, investing in better performing SINFs could increase the probability of minority shareholders' expropriation. Our research also

contributes to the literature pertaining to social norms and CGR. Indeed, we challenged the agency theory and stakeholder theory to explain the opportunistic behaviour of managers for some CGR measures such as boards of directors, audit practices and shareholders' rights. The social norms alone are unable to explain the firm-level differences in CGR. In addition, there are conflicts and interactions between compliance with CSR and compliance to virtues. Well-planned and well-managed philanthropic "sin" industries have created education programmes for the disadvantaged to protect the environment, in the name of CSR, and these have become a necessary ingredient in virtually all large corporations' business plans. We strongly believe that identifying the boundary of social norms and its impact on market stakeholders is a fertile area for research; one that will continue to provide useful insights into our society in the future.

We note, though, that there are some limitations. First, we cannot rule out the possibility that our results may be partially driven by religious beliefs and/or political views regarding deviant firms. Second, a firm's belonging to a "sin" industry does not reflect the acceptance level of social norms. The evolution of social norms towards "sin" stocks overcomes the drawback of assuming a constant level for social norms over time. Third, the present study is restricted to the USA and our findings are therefore limited to specific geographical borders. Future research could extend the current study in a number of ways. First, it would be worth investigating the effect of social norms on investor behaviour further. Considering the importance of social norms for understand some psychological biases, an interesting investigation could involve the examination of the differing impacts of overconfidence on investor behaviour between "sin" and "non-sin" stocks. Second, we measured "sinfulness" based on CSR concerns. Another potentially rewarding measure to use would be the changes in consumption of "sin" products as a proxy for the evolution of social norms towards such stocks. Finally, replication of this research using data from other international stock exchanges may provide insights into market responses to interactions between social norms and financial incentives and their impact on the opportunistic behaviour of managers.

## References

- Ahrens, D. (2004), *Investing in Vice*, St Martin's Press, New York, NY.
- Akerlof, G.A. (1980), "A theory of social custom, of which unemployment may be one consequence", *The Quarterly Journal of Economics*, Vol. 94 No. 4, pp. 749-775.
- Anderson, G. and Orsagh, M. (2004), "The corporate governance risk", *Electric Perspectives*, Vol. 29 No. 1, p. 68.
- Anielski, M. and Braaten, A. (2008), "The socio-economic impact of gambling (SEIG). Framework: an assessment framework for Canada: in search of the gold standard", *Inter Provincial Consortium for the Development of Methodology to assess the Social and Economic Impact of Gambling*.
- Arjoon, S. (2017), "Virtues, compliance, and integrity: a corporate governance perspective", *Handbook of Virtue Ethics in Business and Management*, pp. 995-1002.
- Barnea, A. and Rubin, A. (2010), "Corporate social responsibility as a conflict between shareholders", *Journal of Business Ethics*, Vol. 97 No. 1, pp. 71-86.
- Beelitz, A. and Merkl-Davies, D.M. (2012), "Using discourse to restore organisational legitimacy: "CEO-speak" after an incident in a German nuclear power plant", *Journal of Business Ethics*, Vol. 108 No. 1, pp. 101-120.

- Beneish, M.D., Jansen, I.P., Lewis, M.F. and Stuart, N.V. (2008), "Diversification to mitigate expropriation in the tobacco industry", *Journal of Financial Economics*, Vol. 89 No. 1, pp. 136-157.
- Byrne, E. (2007), "Assessing arms makers' corporate social responsibility", *Journal of Business Ethics*, Vol. 74 No. 3, pp. 201-217.
- Cai, Y., Jo, H. and Pan, C. (2011), "Doing well while doing bad? CSR in controversial industry sectors", *Journal of Business Ethics*, Vol. 108 No. 4, pp. 467-480.
- Calton, J. and Payne, S. (2003), "Coping with Paradox", *Business and Society*, Vol. 42 No. 1, pp. 7-42.
- Chong, A. and Lopez, F. (2007), *Investor Protection and Corporate Governance: Firm Level Evidence Across Latin America*, Stanford University Press and The World Bankó Washington, DC.
- Coombs, T. (2017), "Origin stories in CSR: genesis of CSR at British American Tobacco", *Corporate Communications: An International Journal*, Vol. 22 No. 2, pp. 178-191.
- Coughlan, A.T. and Schmidt, R.M. (1985), "Executive compensation, management turnover, and firm performance. An empirical investigation", *Journal of Accounting and Economics*, Vol. 7 Nos 1/3, pp. 43-66.
- Durlauf, S.N. and Blume, L.E. (2008), *The New Palgrave Dictionary of Economics*, Palgrave, Macmillan.
- Dyregang, S., Mayew, W. and Williams, D. (2007), "Religious social norms and corporate financial reporting", Working Paper, Duke University.
- El Ghoul, S., Guedhami, O. and Kim, Y. (2017), "Country-level institutions, firm value, and the role of corporate social responsibility initiatives", *Journal of International Business Studies*, Vol. 48 No. 3, pp. 360-385.
- Elster, J. (1989), "Social norms and economic theory", *Journal of Economic Perspectives*, Vol. 3 No. 4, pp. 99-117.
- Ezzine, H. and Olivero, B. (2015), "Corporate governance practices, corporate social responsibility (CSR) and firm performance: evidence from French stock exchange", *Asian Journal of Management Research*, Vol. 5 No. 3, pp. 391-406.
- Faccio, M., Lang, L.H.P. and Young, L. (2001), "Dividends and expropriation", *American Economic Review*, Vol. 91 No. 1, pp. 54-78.
- Fairbanks, D. (1977), "Religious forces and 'morality' policies in the American states", *The Western Political Quarterly*, Vol. 30 No. 3, pp. 411-417.
- Fehr, E. and Gächter, S. (2000), "Cooperation and punishment in public goods experiments", *American Economic Review*, Vol. 90 No. 4, pp. 980-994.
- Festre, A. (2010), "Incentives and social norms: a motivation-based economic analysis of social norms", *Journal of Economic Surveys*, Vol. 24 No. 3, pp. 511-538.
- Flachsland, C.E.O. 2017, "Does CSR create firm value?: A Comparison of moderating effects of country and industry characteristics", Master's thesis, University of Groningen.
- Frank, J., Fabozzi, K.C.M.A. and Becky, J.O. (2008), "Sin stock returns", *The Journal of Portfolio Management*, Vol. 35 No. 1, pp. 82-94.
- Freeman, R.E. (1984), *Strategic Management: A Stakeholder Approach*, Pitman, Boston, MA.
- Friedman, M. (1970), "The social responsibility of business is to increase its profits", *The New York Times Magazine*, New York, NY, Vol. 13, pp. 122-124.
- Graham, J.R., Li, S. and Qiu, J. (2012), "Managerial attributes and executive compensation", *Review of Financial Studies*, Vol. 25 No. 1, pp. 144-186.
- Harris, M. and Raviv, A. (2008), "A theory of board control and size", *Review of Financial Studies*, Vol. 21 No. 4, pp. 1797-1832.
- Heal, G. (2008), *When Principles Pay: Corporate Social Responsibility and the Bottom Line*, Columbia University Press, New York, NY.

- Hermalin, B.E. and Weisbach, M.S. (2003), "Boards of directors as an endogenously determined institution", *FRBNY Economic Policy Review*.
- Hoje, J. and Jo, H.H. (2011), "Corporate governance and CSR nexus", *Journal of Business Ethics*, Vol. 100, pp. 45-67.
- Hong, H. and Kacperczyk, M. (2009), "The price of sin: the effects of social norms on markets", *Journal of Financial Economics*, Vol. 93 No. 1, pp. 15-36.
- ISS (2014), available at: [www.issgovernance.com/policy/2013/policy\\_information](http://www.issgovernance.com/policy/2013/policy_information)
- Johnson, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2000), "Tunneling", *American Economic Review*, Vol. 90 No. 2, pp. 22-27.
- Kidder, R. (1995), *How Good People Make Tough Choices: Resolving the Dilemmas of Ethical Living*, Fireside, New York, NY.
- Kim, I. and Venkatachalam, M. (2011), "Are sin stocks paying the price for accounting sins?", *Journal of Accounting, Auditing & Finance*, Vol. 26 No. 2, pp. 415-442.
- Laporta, R., Lopez-De-Silanes, F., Shleifer, A. and Vishny, R. (2000), "Investor protection and corporate governance", *Journal of Financial Economics*, Vol. 58 Nos 1/2, pp. 3-27.
- Leventis, S., Hasan, I. and Dedoulis, E. (2013), "The cost of sin: the effect of social norms on audit pricing", *International Review of Financial Analysis*, Vol. 29, pp. 152-165.
- Liu, Y., Lu, H. and Veenstra, K. (2014), "Is sin always a sin? the interaction effect of social norms and financial incentives on market participants' behavior", *Accounting, Organizations and Society*, Vol. 39 No. 4, pp. 289-307.
- Mark, L.D. and Hung, M. (2004), "Investor protection and corporate governance: evidence from worldwide CEO turnover", *Journal of Accounting Research*, Vol. 42 No. 2, pp. 269-312.
- Novak, J. and Bilinski, P. (2014), "The wages of sin-stigma premium in executive compensation", *SSRN Electronic Journal*, Charles University.
- Omer, T., Sharp, Y. and Wang, D. (2012), "Do local religious norms affect auditors' going concern decisions?", *SSRN Electronic Journal*, Texas A&M University.
- Ortwin, R. and Mihail, C.R. (2006), "Nanotechnology and the need for risk governance", *Journal of Nanoparticle Research*, Vol. 8 No. 2, pp. 153-191.
- Richey, G. (2017), "Fewer reasons to sin: a five-factor investigation of vice stock returns", *Managerial Finance*, Vol. 43 No. 9, pp. 1016-1033.
- Salaber, J. (2007), "The determinants of sin stock returns: evidence on the European market", *SSRN Electronic Journal*, Paris-Dauphine University.
- Salaber, J. (2009), "Sin stocks returns over the business cycle", *SSRN Electronic Journal*, Paris-Dauphine University.
- Sauer, D., Schneider, G.P. and Sheikh, A. (2013), "The wages of sin: social norms and executive compensation", *Journal of Legal, Ethical and Regulatory Issues*, Vol. 16, pp. 47-56.
- Smith, A. (1976), *The Theory of Moral Sentiments*, (6th ed.), Clarendon Press (Original Work Published 1790), Oxford.
- Statman, M. and Glushkov, D. (2009), "The wages of social responsibility", *Financial Analysts Journal*, Vol. 65 No. 4, pp. 33-46.
- Valenti, A., Luce, R. and Mayfield, C. (2011), "The effects of firm performance on corporate governance", *Management Research Review*, Vol. 34, pp. 266-283.
- Van Liemt, G. 2002, "The world tobacco industry: trends and prospects", Working paper 1979, International Labour Office, Geneva.
- World Health Organization (2003), available at: [www.who.int/whr/2003/en/whr03\\_en.pdf](http://www.who.int/whr/2003/en/whr03_en.pdf)

---

Yermack, D. (1996), "Higher market valuation of companies with a small board of directors", *Journal of Financial Economics*, Vol. 40 No. 2, pp. 185-211.

Younas, Z., Mahmood, R. and Saeed, C. (2011), "Effect of firm performance on corporate governance: a panel data analysis", *Asian Journal of Empirical Research*, Vol. 3 No. 1, pp. 1-8.

#### Further reading

Chong, J., Her, M. and Phillips, G.M. (2006), "To sin or to sin? Now that's the question", *Journal of Asset Management*, Vol. 6 No. 6, pp. 406-417.

Edward, F.R. (1984), *Strategic Management: A Stakeholder Approach*, Pitman, Boston, MA, pp. 35-46.

Lewis, M. and Neighbors, C. (2007), "Optimizing personalized normative feedback: the use of gender-specific referents", *Journal of Studies on Alcohol and Drugs*, Vol. 68, pp. 228-237.

#### Corresponding author

Hanene Ezzine can be contacted at: [hanene\\_ezzine@yahoo.fr](mailto:hanene_ezzine@yahoo.fr)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgrouppublishing.com/licensing/reprints.htm](http://www.emeraldgrouppublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.