BIG PROFITS, BIG HARM? EXPLORING THE LINK BETWEEN FIRM-PERFORMANCE AND HUMAN RIGHTS ABUSES

Elisa Giuliani

Responsible Management Research Center

Department of Economics & Management

University of Pisa, Via Ridolfi 10, 56124, Pisa, Italy

E-mail: elisa.giuliani@unipi.it

Federica Nieri

Responsible Management Research Center

Department of Economics & Management

University of Pisa, Via Ridolfi 10, 56124, Pisa, Italy

E-mail: federica.nieri@unipi.it

Andrea Vezzulli

Department of Economics

University of Insubria

Via Monte Generoso 71, 21100 Varese, Italy

E-mail: andrea.vezzulli@uninsubria.it

BIG PROFITS, BIG HARM? EXPLORING THE LINK BETWEEN FIRM-PERFORMANCE AND HUMAN RIGHTS ABUSES

Abstract

We examine the relationship between the performance of companies relative to their global

industry peers and their abuse of human rights. We exploit a unique database covering 245

large publicly listed companies from eight of the principal and most economically dynamic

developing countries. We find that the more firms over-perform relative to their industry peers,

the more they are likely to engage in abusive behaviours. However, this observed positive linear

relationship becomes negative in the presence of high host country regulatory pressure. We

find also that the proclivity for top over-performing firms to abuse human rights applies only

to companies with no or limited prior commitment to addressing human rights issues as part of

their corporate social responsibility (CSR) policies.

Key-words: Business and human rights; high-performance; institutions; corporate social

responsibility (CSR); developing countries.

2

1. Introduction

Firms from developing countries face numerous challenges to compete due to their country of origin characteristics which include institutional voids, endemic corruption, and frequent lack of a pro-business environment (Cuervo-Cazurra & Ramamurti, 2017). However, despite these home country disadvantages (Meyer & Peng, 2016), some developing country firms are managing to compete with world-class companies and earning the description "emerging giants" (Khanna & Palepu, 2004; Luo & Tung, 2007). Since the early 2000s, companies such as the Indian car maker Tata Motors and the Brazilian Natura Cosmeticos and China's Lenovo have taken the world by storm and become world-class leaders in their industries. As the size and economic power of these emerging giants increases, concerns are being raised about their capacity or their willingness to act responsibly since their home country standards are often considered to be lower than those that have become accepted internationally, especially in relation to issues such as labour and the other human rights (Giuliani et al., 2016).

It is perhaps not surprising that both international and domestic developing country firms have been found to violate human rights in the conduct of their business² (Ciravegna & Nieri, 2021; Fiaschi et al., 2017; Gomero Osorio et al., 2019; Jiang, 2016; Lebaron, 2021; Olsen et al., 2021; Whiteman & Cooper, 2016, among others). Also, while most studies agree that institutional weaknesses and regulatory gaps in these companies' operating environments play a significant role in explaining the emergence and persistence of such violations, they call for a better understanding of how firm-level heterogeneity shapes abusive behaviours over time and across space (Olsen et al., 2021; Wettstein et al., 2019).

-

¹ Throughout the paper, the terms "emerging giants" and "developing country firms" are used interchangeably to refer to large-scale companies originating from developing economies which arethe focus of this paper.

² While the focus in the present paper is on companies from developing countries, there is an extensive literature documenting human rights abuses in the business sectors of high-income countries also. Indeed, most early research on corporate misbehaviour and business and human rights isfocuses on large-scale companies in North America and Europe (see, e.g., Cuervo-Cazurra et al., 2021; Nieri & Giuliani, 2018 for recent reviews).

One of the issues that is not explained in the extant literature is whether these emerging giants are more or less likely to abuse human rights as their performance relative to that of their global peers increases and what it is that influences this relationship. In other words, do their growth models include greater respect for human rights as they outperform relative to global industry peers or do out-performers abuse human rights more in the race for global competition? Also, we need to know how much this relationship depends on the extent to which companies are subject to internal or external pressure for compliance with standards and regulation. These are important questions since, given the growing relevance of some of developing countries in the global competitive landscape, their companies' impacts on human rights may be significant and may have implications for policy and managerial practice.

The preoccupation with human rights abuses in the business sector has increased following the globalization of productive activities and the consequent growth of reported business-related human rights abuses across the world. The need for companies to respect human rights has for long been advocated by United Nations (UN) agencies and Non-Governmental Organizations (NGOs) and is attracting the interest of more and more scholars (Bernaz, 2016; Buhmann, 2017; De Schutter, 2005; Kobrin, 2009; Muchlinski, 2001; Pegg & Frynas, 2003; Wettstein, 2009) and promoting important normative transformations in this camp (Ruggie, 2010; United Nations, 2011). This community of scholars called recently for more systematic, large-scale micro-level analyses to allow a more fine-grained understanding of the factors that engender human rights abuses and which would contribute to our understanding of the effectiveness of regulatory policies (Schrempf-Stirling & Van Buren III, 2020).

This paper responds to these calls and explores our research questions by investigating the link between companies' under- and over-performance relative to that of peers and the probability that they will abuse human rights. Conceptually, we bridge business and human rights studies with management theories used to explain corporate misbehaviour, and develop a framework that combines insights from the behavioural theory of the firm – with specific reference to performance feedback theory (Greve, 1998, 2003) – with neo-institutional theory (DiMaggio & Powell, 1983). We predict a U-shaped relationship between companies' performance relative to their global peers, and abuse of human rights, and hypothesize that both regulatory pressure from government and the companies' commitment to addressing human rights issues will moderate our baseline hypothesis negatively. Empirically, we exploit unique, hand-collected data covering 245 large-scale publicly listed companies from 8 developing countries (Brazil, China, India, Malaysia, Mexico, Russia, South Africa, Thailand), observed over a period of 20 years. Our analysis shows that the more firms over-perform relative to their industry peers, the more they are likely to engage in abusive behaviours. However, this observed positive and linear relationship becomes negative in the presence of high host country regulatory pressure, while heterogeneities in home countries' regulatory frameworks do not significantly affect the baseline relationship. We find, also, that this positive relationship becomes flat for companies with a strong commitment to human rights issues as part of their corporate social responsibility (CSR) policies.

Our work contributes to the current scholarship in two ways. First, we contribute to the literature on business and human rights by further enriching understanding of the causes of companies' abusive behaviour (Schrempf-Stirling & Van Buren III, 2020), and by our specific focus on developing country firms which responds to calls to conduct more research in this direction (Giuliani et al., 2016). Also, by focusing on organization-centred explanations of abusive behaviours and evaluating how these change depending firm pressure for compliance with rules and standards, our work contributes to knowledge on the anatomy of business-related human rights abuses (Wettstein et al., 2019). Empirically, we contribute by making our database on human rights abuses available for download, which responds to demands for access

to more data to strengthen research in this area.

Second, we contribute to the literature on companies' misbehaviour (e.g., Cuervo-Cazurra et al., 2021; Greve et al., 2010; Nieri & Giuliani, 2018; Palmer et al., 2016) by exploring the relationship between financial performance and corporate abuses of human rights in more depth. Most related empirical research finds that the sources of misbehaviour are resource constraints and under-performance (Asch & Seneca, 1976; Clinard et al., 1979; Cochran & Nigh, 1987; Staw & Szwajkowski, 1975). We find further evidence of the conditions which cause over-performing firms to misbehave and abuse human rights.

The article is organized as follows: Section 2 develops the research hypotheses. Section 3 describes the methodology, the database and the estimation strategy. Section 4 presents the empirical results and Section 5 concludes.

2. Background knowledge and theory development

2.1 The unclear relationship between performance and organizational misconduct

Since corporate abuses of human rights can be qualified as a form of misconduct (Whiteman & Cooper, 2016), in developing our theory, we refer to organizational theories of misconduct. Whether and why firm performance drives organizational misconduct are questions that have been posed frequently in the management and organization studies literature (e.g., Baucus & Near, 1991; Finney & Lesieur, 1982; Mckendall & Wagner, 1997; Staw & Szwajkowski, 1975), but which so far have not been answered conclusively (Greve et al., 2010).³

Empirical work on performance and misconduct mostly shows that under-performance is a driver of misconduct, that is that poor performance triggers corporate illegality (Asch &

6

³ The extant literature on organizational misconduct does not focus specifically on companies' violation of universal human rights. Most works examine this relationship using single country evidence - often from the US and only very recently from China – and, therefore, focus more narrowly on deviance from nationally-defined norms rather than on infringement of universal principles.

Seneca, 1976; Clinard et al., 1979; Cochran & Nigh, 1987; Staw & Szwajkowski, 1975), and that low levels of performance relative to a benchmark enhance financial misrepresentation (Harris & Bromiley, 2007), bribery (Xu et al., 2019) and social irresponsibility (Zhong et al., 2021). However, the results of these studies are mixed. Some find no correlation between performance and misconduct (Baucus & Near, 1991; Mckendall & Wagner, 1997). Other, more recent studies, which examine whether top performance triggers misconduct (e.g., Gao & Yang, 2021; Mishina et al., 2010), are influencing debate and calling for more research in this area (Greve et al., 2010; Wettstein et al., 2019).

2.2 Theoretical framework

We adopt a behavioural perspective on why developing country firms, if top under- or overperforming firms compared to their global industry peers, are likely to abuse human rights in the conduct of their business (Section 2.2.1). We argue that this relationship changes depending on two conditions: external pressure from the regulatory environments where they have investments (Section 2.2.2); and their commitment to human rights as part of their CSR policies (Section 2.2.3).

2.2.1 Performance relative to global industry peers and human rights abuses. The behavioural theory of the firm posits that decision-making takes place in the presence of imperfect information and considers decision-makers to have limited cognition (Simon, 1955), that is, limited capacity to process all the information screened in a timely way. This prevents economic actors from fully maximizing their goals and allows only "satisficing" results or a certain relative level of achievement compared to the given target. Limited cognition and imperfect information imply that decisions are taken based on the best available knowledge, for instance by learning from the firm's or others' experience. For instance, to orient themselves, firms make choices based on their performance records and, on this basis, establish the standards they aspire to. The behavioural theory of the firm is the conceptual foundation to

performance feedback theory, which refers to how firms' aspirations shape their managerial and strategic decisions (Gavetti et al., 2012; Greve, 2003; Washburn & Bromiley, 2012). Accordingly, if performance falls below aspirations, that is, falls below a certain reference point, the firm will embark on "problemistic" search, which entails a problem-solving journey to resolve the performance gap (Cyert & March, 1963). In most cases, problemistic search involves legitimate activities, such as greater innovative efforts or collaborative partnerships with other companies. However, Harris and Bromiley's (2007, p. 353) study of financial misrepresentation suggests that "[w]hile firms with performance close to their reference points may hope to achieve aspirations via legitimate means, firms performing far below their aspirations may find few perceived legitimate solutions. Thus, the distance a firm performs below its reference points increases the likelihood of misrepresentation". In this view, the more the firm under-performs relative to a reference point, the more it is likely to cut corners to reduce its under-performance gap.

In the specific context of developing country firms, poor performance relative to global industry peers (i.e., performance below aspirations) may lead companies to turn their home country weaknesses into strengths, by taking advantage of poorly regulated labour markets, for example, or exploiting environmental regulatory voids which can result in harm to people's rights to health and life, in order to reduce future costs and boost growth. Therefore, despite the possible risks involved in these kinds of abuses, we expect that the more firms underperform relative to their global peers, the more they will use these illegitimate means to reduce

_

⁴ Work on aspiration levels tends to focus on two aspects: the firm's internal aspirations versus its past performance (i.e., historical aspirations), and external aspirations versus the performance of competitors (i.e. social aspirations). Note that we focus on social aspirations because they position analysis of firm performance compared to that of its global competitors. In historically lagging and highly dynamic developing country contexts, managers focus not just on achieving adequate performance relative to their past, but on outperforming competitors. Social aspirations among publicly traded firms are easily identified since such firms are ranked by financial analysists based on their performance. This acts as a stronger motivation for change than comparison with their own historical performance (Audia et al., 2015).

the performance gap.

At the same time, although performance may drive behaviour, we know that companies have multiple goals (Greve & Gaba, 2017) and their propensity to take risks and engage in illicit activities may not just be driven by the need to overcome the financial constraints to growth. Performance above aspirations (or over-performance) may also trigger misbehaviour. This is not predicted in standard behavioural accounts, which posit that, as firms perform better than their aspirations, they are expected to engage in "slack search" (Cyert & March, 1963) and to have the necessary resources to experiment and find non-conventional, but legitimate ways to compete (Xu et al., 2019). We counter this view by proposing a "keeping abreast of expectations" logic: we posit that over-performing developing country firms may be reduced to abusive behaviours by urgency to remain ahead of the global competition. Hence, we expect top over-performing firms to adopt a "whatever-it-takes" approach, not to address a resource scarcity problem, but rather to remain abreast of external expectations of high performance. We referred earlier to the fragile environments in developing countries which are characterized by weak institutions, low international legitimacy and lagging business systems. This fragility, in the past caused Western audiences to stigmatize developing country firms as unreliable or low-quality producers (Cuervo-Cazurra & Genc, 2008). It has taken many years for some of these companies to catch up to the international frontier and become global leaders. Hence, we conjecture that the struggle to obtain this positive affirmations will be followed by the fight to retain this position and avoid losses in the legitimacy battlefield. We are interested in this battle to continue to meet aspirations and consolidate the position of new leading actors in the global competition. To achieve this, developing country firms will be more likely to take extra risks by cutting corners and engaging in profit-boosting abusive behaviours.

Hence, we expect that the more firms under- or over-perform relative to their global industry peers, they more they will be likely to engage in human rights abuses in the conduct

of their business. We predict a U-shaped relationship between performance relative to global industry peer and human rights abuses:

Hypothesis 1: Ceteris paribus, there is a U-shaped relationship between firms' performance relative to global industry peers and human rights abuses.

2.2.2 The moderating effect of external institutional pressures. We hypothesize, also, that this U-shaped relationship between performance and human rights abuses is likely to be nuanced by the heterogenous conditions that firms face in their operations, including the extent to which they are exposed to institutional pressure for compliance with norms and standards. We know that enforcement is a key determinant of corporate behaviour (see, e.g., Aguilera et al., 2018). Neo-institutional theory (DiMaggio & Powell, 1983) posits that, to ensure survival in their own organizational space, firms seek social acceptance by conforming to external norms. This involves a range of mechanisms, such as adaptation to formal rules (e.g., laws and regulation), which process interferes with and influences the organization's behavioural choices (Marquis & Raynard, 2015). Companies adopt norms to achieve greater socially acceptance and we can expect that as regulatory pressure increases, companies will adapt – even if imperfectly.

On this basis, we argue that greater regulatory pressure from the government in the country where the firm has its operations will negatively moderate the baseline hypothesis (Hypothesis 1). This moderating effect works through two main mechanisms, which are likely to weigh differently, depending on whether the firm is an under- or an over-performer relative to its peers. We know that stronger regulatory pressure is more likely to imply sanctions on abusing firms because the relevant regulatory and policing agencies will be more likely to detect and punish misconduct (Bernaz, 2016). Adaptation to norms, therefore, implies avoiding the costs of deviant conduct which could undermine the company's survival in its

organizational space. Companies caught abusing human rights receive either pecuniary or reputational sanctions. The former include fines, litigation costs or additional investment to remedy the damage suffered by the victims of the abuse; the latter refer to the indirect reputational harm deriving from news about an allegation or a legal conviction. We posit that under-performing firms operating in more stringent regulatory environments will likely conform to the norms to avoid pecuniary sanctions, which would affect their financial performance by increasing potential costs and duties. Over-performing firms too are also likely to adjust to regulatory pressure, but, compared to under-performing firms, are more likely to have slack resources to cope with pecuniary sanctions, but will prefer to avoid reputational sanctions that could damage their position as world-class performers. Thus, we suggest that the level of regulatory pressure will impact both under- and over-performers symmetrically, by negatively moderating the baseline relationship. As a result, we hypothesize that:

Hypothesis 2: The baseline relationship is negatively moderated by the level of companies' exposure to regulatory pressure.

2.2.3. The moderating effect of human rights commitment. Previous research shows that companies from developing countries adopt numerous CSR policies to respond to international socio-environmental demands (Fiaschi et al., 2015; Marano et al., 2017). Human rights, alongside other issues, have become prominent in the symbolic actions firms advertise to demonstrate commitment to universal values and principles (Wettstein, 2019). Their commitment to human rights is manifested in the form of narratives, often included in CSR reports, which set out their human rights policies, actions and projects and make open declarations about their intentions in this domain. We posit that stronger commitment to human rights would require communication of more detailed human rights-related plans and their operationalization in the form of structured policies adopted across multiple organizational

functions and locations. Such commitment might be genuine or merely symbolic. For instance, in the context of the oil and gas industry, Olsen et al. (2021) show that symbolic commitment to human rights principles does not reduce human rights abuses and the reduction or prevention of the most severe abuses requires strong human rights policies and demonstration of commitment to them. Yet, it is unclear how companies' declared commitment to human rights changes their human rights conduct at different levels of performance.

We conjecture that the level of declared commitment to human rights will negatively moderate our baseline relationship (Hypothesis 1). As discussed earlier, neo-institutional theory suggests that companies seek to conform to external pressure because they rely on the social approval of their external audience to prosper. To gain approval, companies both try to meet norms and regulations and undertake activities likely to be perceived positively by relevant audiences (Ashforth & Gibbs, 1990). These activities include avoidance of perception of hypocrisy such as making claims "to which their own behaviour does not conform" (Carlos & Lewis, 2018, p. 133) or decoupling practice from policies (Marquis et al., 2016; Tashman et al., 2019). In our context, perception of hypocrisy is likely to arise when companies declare strong commitment to respecting and protecting human rights, but fail to demonstrate it. Organizational hypocrisy attracts negative media coverage and, therefore, is risky (Zavyalova et al., 2012), undermines credibility vis a vis stakeholders and can damage stock prices or economic performance (e.g., Deephouse, 2000).

Perception of hypocrisy can be especially damaging for companies in need of external resources seeking to attract investors (the case of under-performers), as well as global leaders for which reputation is a valuable strategic asset required to maintain their position (the case of over-performers). Therefore, we expect that, all other things being equal, stronger commitment to human rights issues will reduce the likelihood that either under- or over-performing firms will abuse human rights and, thus, predict negative moderation to the baseline

relationship:

Hypothesis 3: The baseline relationship is moderated negatively by the intensity of the companies' declared commitment to human rights.

3. Methodology

3.1 Sample

To test our hypotheses, we use unique hand-collected longitudinal data. Our sample comprises 245 companies from a group of emerging countries (29 from Brazil, 74 from China, 51 from India, 18 from Malaysia, 15 from Mexico, 25 from Russia, 19 from South Africa, 14 from Thailand), selected on the basis of their assets and economic value, using the Forbes Global 2000 ranking. Forbes publishes annual rankings of the world's largest public companies. We used the 2000 rankings to select our sample of the most prominent and powerful economic players in our target countries. These countries are both the largest and also the fastest growing developing country economies (UNCTAD, 2014). We chose large public firms based on their prominence both domestically and internationally and their potentially significant impact on society and on human rights, in particular. We collected data from 1992 to 2012 for each of the firms in our sample, which provided an unbalanced panel of 2,955 firm-year observations. We defined our 20-year period of observation based on two considerations. First, although the international visibility of developing country companies emerged in the early 2000s, especially after 2001 when Goldman Sachs's Jim O'Neill suggested that the GDP growth of some of most dynamic emerging economies (Brazil, Russia, India and China) could have important implications for global governance arrangements (O'Neill, 2001), the foundations to their growth were laid in the 1990s (Dutrénit et al., 2019) – sometimes earlier - when developing country companies began to enter global competition via participation in global value chains

(Gereffi & Korzeniewicz, 1994). Hence, we considered the 1990s as also relevant to our study.⁵ Our data collection phase concluded at the end of 2014 and we observe a 2-year lag in reporting abuses and, therefore, our analysis covers the period up to 2012. Also, by censoring our data to 2012 we avoid any effect of the exogenous shock of the UN Guiding Principles, which were introduced in 2011.

Our sample covers firms in the banking (23%), metals and mining (14%), steel (10%), electricity and other utilities (8%) sectors and the automobile, chemicals and pharmaceuticals, electronics, food and beverages, retail, telecommunication and service sectors (together comprising 45% of firms).

3.2 Variables

3.2.1 Dependent variable. The dependent variable was built via manual coding of information retrieved via the Business and Human Rights Resource Centre (BHRRC), one of the most reliable business and human rights knowledge hubs providing regularly updated information on any evidence of business-related human rights abuses (Bernaz, 2016; Ruggie, 2013; van den Herik & Letnar Cernic, 2010). BHRRC researchers collect daily business and human rights news and reports from web and other sources, and publish on the website any news or report with a focus on the impact of companies on human rights, establishing a credibility criterion in order to exclude blind attacks on companies.

For each firm in our sample, we analysed documents providing evidence of occurrences of negative human rights impacts. In particular, we downloaded and scrutinized more than four thousand documents, including NGO reports, journal and newspaper articles and other relevant

14

⁵ Pre-1990 data on business-related human rights abuses are scarce and not fit for quantitative analysis. While business-related human rights data began to be published mostly after 2000, many reports revealed abuses committed in the 1990s and these are considered in our analysis. As a robustness check we ran the regressions using a more recent cohort (2000-2012).

documents (including video-documentaries where available), and identified the business-related human rights abuses involving the firms in our sample. We generally considered articles in English and, when available only in other languages, we consulted the relevant translators (for the languages not known by the authors). We codified the information on business-related human rights abuses to produce a dataset in which each separate business-related human rights abuse included a description of the violation and the year(s) in which it occurred (specifying the year in which it is known to have started and ceased, and the year in which it was first reported or denounced). We employed two independent coders to ensure a consistent coding process and recruited an independent human rights law expert to advise and cross-validate our coded information. On average, our dataset included at least one reported human rights abuse for 45% of the companies in our sample.

Our dependent variable, human rights abuses (HRA), is a dummy variable that takes the value 1 if firm i at time t is involved in at least one human rights abuse, and 0 otherwise. Over the period of observation, we recorded 366 human rights abuse events, 47% against workers, 52% against communities and 1% against consumers.⁶

The choice of *HRA* as a binary dependent variable is consistent with previous contributions (Baucus & Near, 1991; Schnatterly, 2003; Shi et al., 2016, among many others),⁷

-

⁶ We acknowledge that pooling these different forms of abuses overlooks important heterogeneities. However, because human rights abuses are relatively "rare" events (Cuervo-Cazurra et al., 2021), pooling the abuses in one dependent variable allows us sufficient degrees of freedom to run robust econometric analyses, which otherwise would be impossible. Hence, our study observes the general human rights conduct of firms at the more macroscopic level. In order to avoid a mismatch between the mechanisms underpinning the baseline hypothesis and the operationalization, we focus specifically on typologies of human rights abuses that are likely to have reduced production costs or generated other forms of economic and non-economic gains for the firm.

⁷ Alongside our focus on the probability of involvement in (rather than intensity of) a business-related human rights abuse, the choice to adopt a binary variable instead of *HRA* count per year is also for empirical reasons concerning the distribution of the yearly observed number of human rights abuses, which is highly skewed and includes a high proportion of 0s. Hence, the observed (dichotomous) status of a firm concerning its involvement (or not) in any human rights abuse in a given year represents a relevant part of the data-generating process leading to the final observed number of human rights abuses per year. Finally, a dichotomous variable is a more conservative means of limiting potential underreporting of the number of human rights abuses since by inflating the number of 0s instead of affecting the whole distribution of the number of abuses (in the count dependent

although, unlike these contributions, we use a dynamic econometric model specification. Thus, our regressors include the one-year lagged dependent variable ($HRA_{(t-1)}$) and the value of the dependent variable at the beginning of the period ($HRA_{(t0)}$) to take into account of this variable's state dependence, associated endogeneity and initial conditions problems (see Section 3.3).

3.2.2 Independent variables. To reduce concerns about reverse causality from possible contemporaneous idiosyncratic feedbacks from the dependent to the independent variables, most of the independent and control variables included in our econometric models are lagged one year (t-1), with respect to the reference year of the dependent variable (t).

To test Hypothesis 1, we follow earlier research and measure firm performance as Return on Assets (*ROA*), which is less volatile and less sensitive to heterogeneity in the firm's financial structures than other performance measures such as Return on Equity (ROE). ROA is generally used for this kind of estimation (Audia & Greve, 2006; Greve, 2003; Harris & Bromiley, 2007; Iyer & Miller, 2015; Mishina et al., 2010, among many others). According to our theoretical framework, our performance variable (*ROA*) is measured as the difference between firm *i*'s ROA at time *t-1* and firm *i*'s industry average ROA. We retrieved the data from Datastream and used Thomson Reuters Business Classification to match each firm to its related industry group.⁸

To account for the effect of possible asymmetries associated with positive versus negative values for firm performance (relative to the industry average) on the likelihood of involvement in human rights abuses, we considered the interaction term between ROA and a dummy variable (DummyROA) which takes the value 1 if firm i's ROA at time t-l is above the

variable) or all the intensity categories (in the ordered dependent variable) it will affect only the incidence of Type I errors (in the binary dependent variable). However, we ran a robustness check based on estimating an ordered probit model for the number of human rights abuses affecting each firm in each year. The results of this robustness check are discussed in Section 4.4.

⁸ See Thomson Reuters Business Classification at https://www.refinitiv.com/en/financial-data/indices/trbc-business-classification last accessed 10 September, 2021.

industry average ROA in the same year (i.e., ROA > 0), and 0 otherwise (i.e., ROA < 0).

Since Hypothesis 1 tests for a U-shaped relationship between firm performance relative to global industry peers and human rights abuses, we include in the regression analysis the quadratic term of ROA (ROA^2).

To test Hypothesis 2, we used a proxy for the regulatory pressure to which the firm is exposed to both home and host (in the case of internationalized firms) country regulatory pressure). We built a combined variable, *Regulatory Pressure*, which accounts for the strength of the rule of law and the judiciary system in the home country and the foreign country in which the firm has invested. We retrieved all the firm's yearly foreign direct investments including merger and acquisitions undertaken by the firm from FDIMarkets, Zephyr (Bureau van Dijk) and SDC Platinum (Thomson Reuters). We measured the strength of the regulatory environment using the World Bank Worldwide Governance Indicators Rule of Law index. ¹⁰ The variable *Regulatory Pressure* for firm *i* is defined as the average of the home and each of the host countries' rule of law indexes up to year *t-1*. This variable measures the extent to which the company is subject to regulatory pressure relative to the portfolio of its countries of operation including the home country. In another analysis, we distinguished the effect on the firm of home country versus host country, by interacting the variable *Regulatory Pressure* with a dummy variable (*Internationalization*) which takes the value 1 if firm *i* had internationalized its activities up to time *t-1*, and 0 otherwise.

To test Hypothesis 3, we built the variable (*HR_Comm*) to measures the degree of companies' commitment to human rights, by conducting an automated content analysis on their

⁹ Note that by interacting this dummy variable with the continuous measure of firm's performance (*ROA*), we obtain an econometric model, which is observationally equivalent to the "asymmetric spline function" specification used in other empirical papers (e.g., Audia & Greve, 2006; Greve, 2003; Mishina et al., 2010; Xu et al., 2019). In a robustness check, we dropped the interaction term and we split the continuous ROA variable into two different variables for positive and negative values of ROA and obtained similar results.

¹⁰ See WGI at http://info.worldbank.org/governance/wgi/index.aspx#doc, last accessed 20 July, 2018.

CSR reports. We manually downloaded companies' CSR reports published in English and obtained a total of 1,906 reports for our period of observation. To conduct the analysis, we created a custom dictionary of human rights (available on request). This step involved a topdown approach to identify the key business and human rights terminologies used internationally and a bottom up approach to select 200 reports (about 10% of the total). Their selection was based on stratified sampling (by year and country), involving two expert external coders, who read the reports and annotated human rights terminologies (following the approach suggested by Humphreys & Wang, 2018; Pennebaker et al., 2007; Strauss & Corbin, 1990). These two steps resulted in a final list of 36 keywords. The percentage agreement (Cronhbach Alpha) among the coders involved in the bottom-up approach was 92%, suggesting consistence between coders and coding reliability. Based on this dictionary, we conducted automated content analysis of the CSR reports using Linguistic Inquiry and Word Count (LIWC) 2015 software (Tausczik & Pennebaker, 2010), which is standard for text analysis (e.g., Crilly et al., 2016; Gamache & McNamara, 2019). LIWC allowed us to develop a measure of intensity of human rights terminologies in the CSR reports, based on the number of times the words included in the dictionary appeared in the text. Using this methodology, HR Comm is measured as a continuous variable. To further validate our measure, we selected a sample of 20 CSR reports scoring high (top 25% in the distribution of the variable), average (25 to 75% of the distribution) and low (bottom 25% in the distribution of the variable) for the automated content analysis, to ensure that the scores properly reflected the different levels of firm commitment to human rights. We also cross-checked with other company documents and firm websites. Firms scoring 0 for HR Comm at time t do not include human rights-related terminology in their reports or other company documents and sources. Firms with low to medium levels of HR Comm made reference to some of the human rights-related terminologies, but often those related to specific topics (e.g., slavery, child labour, indigenous communities, conflict

minerals), and gave details of alignment with human rights principles through reference to UN initiatives (such as, the UN Global Compact), OECD Guidelines on Multinational Corporations and International Labour Organization (ILO) conventions. Companies scoring high for HR_Comm had more systematic approaches to human rights, covered more topics and referred to endorsement of or adherence to human rights principles and initiatives. They seemed to have well-developed corporate-level human rights policies which included reporting of human rights metrics and indicators.

3.2.3 Control variables. We control for several other factors known to relate to HRA. First, we control for firm age (Age), measured as the log of the number of years since the firm's foundation, and firm size (Size), proxied by the log of the number of workers at time t-1. Second, we control for firm's market risk (Risk), measured based on Return on Equity (ROE) volatility at time t-1 (i.e., based on annual fluctuations in the firm's ROE around its trend value, calculated using non-parametric estimation). We retrieved these data from Datastream. Third, we control for media exposure (Media Exposure) since the likelihood of the firm's involvement in human rights abuses being reported, depends on the extent to which the company is on media and NGO radar (Fiaschi et al., 2017; Marquis & Qian, 2014). We measure firms' media exposure as the log of the number of articles on NexisUni mentioning firm i at time t-1 (News section).

In addition, since business-related human rights abuses are more likely in some industries than in others (Giuliani & Macchi, 2014), we include industry dummies. We aggregated industries into three groups, based on their macro industry classification and to distinguish among firms in the extractive, manufacturing and services sectors. The reference

¹¹ The decision to use ROE to measure the firm's market risk (rather than ROA which is used to measure firm performance) relies on the fact that as explained above, ROE is associated with higher levels of volatility, which means that our measure of market risk includes more degrees of variation.

group, *Extractive*, included firms in the oil, gas and mining industries; *Manufacturing* includes automobiles, chemicals and pharmaceuticals, electronics, food and beverages and heavy industries; and *Services* includes banking, electricity and other utilities, logistics, real estate, retail and telecommunications. We control for country-specificities using country dummies, with *South Africa* as the reference group, to account for differences in home countries; history, regulation and institutional arrangements that might affect corporations' human rights conduct (Matten & Moon, 2008). Finally, we include time dummies (*Time dummies*) to account for *HRA* time trends.

3.3 Estimation procedure

To test our hypotheses, we estimate the probability of firm *i*'s involvement in at least one human rights abuse in a given year *t*, employing a dynamic correlated random effects probit model (Hyslop, 1999; Stewart, 2006; Wooldridge, 2005). Compared to static models, our proposed approach has distinctive advantages when estimated, as in our case, on longitudinal data with strong state dependence of the dependent variable (see Table 1 for the transition matrix), because it helps to distinguish between true state dependence, driven by the effects of previous abuses on subsequent events, and spurious state dependence, driven by the presence of time-invariant unobserved individual effects (unobserved heterogeneity).

Table 1 presents the transition matrix, which cross-tabulates the values (with row percentages) of HRA in t-l versus t, to check the degree of association (persistence) between the two binary outcomes. The transition matrix shows high state dependence related to the probability of an abuse along time, with 96.41% of firms recording no abuse in t-l and no HRA

_

¹² The decision to adopt a (correlated) random effects rather than a fixed effects specification was based on its greater estimation flexibility (as explained below) and the results of a series of Hausman tests performed on different static panel logit and linear probability models which provided empirical support for this choice (Wooldridge, 2005).

event at time *t*, and 84% of firms reporting at least one human rights abuse in *t-1* and an *HRA* event at time *t*.

We use the following econometric specification:

$$HRA_{it} = \gamma HRA_{it-1} + \beta X_{it-1} + \alpha_i + u_{it} \qquad i \in \{1,2,\dots,N\}, t \in \{1,2,\dots,T_i\} \quad \ (1),$$

where HRA_{it} is the binary dependent variable, HRA_{it-1} is the one-year lagged value of the dependent variable and X_{it-1} is the (Ixk) vector of the pre-determined independent and control variables (defined above); (γ,β) is the set of unknown parameters; α_i is a firm-specific time invariant term; and $u_{it} \sim N(0,\sigma_u^2)$ is a random idiosyncratic error term.

The resulting conditional joint model for the random intercept, is the following:

$$\alpha_i = \alpha_0 + \delta_{y_0} HRA_{i0} + \delta_{\boldsymbol{X_0}} \boldsymbol{X_{i0}} + \delta_{\boldsymbol{\overline{X}_{t-1}}} \boldsymbol{\overline{X}_{it-1}} + \eta_i$$

where $\eta_i \sim N(0, \sigma_{\eta}^2)$ is an individual-specific random error term.

4. Results

Table 2 presents the descriptive statistics and the correlation matrix of the variables used in the models. Given the high correlation between some of the variables, we checked for potential multicollinearity by computing, for each linear specification of the estimated models, the mean variance inflation factor. This showed that if we adopt the rule-of-thumb cut-off value of 10, multicollinearity is not a serious problem.

4.1 Direct effect of ROA on human rights abuses

Table 3 presents the results of the estimated baseline equation (1) without interactions. To enable comparison, Model 1 reports the estimated parameters of the static random effects probit model (i.e., excluding the lagged dependent variable from the regressors), and Model 2 reports the estimated parameters of the dynamic correlated random effects probit model without correcting for endogeneity. Model 3 reports the estimated parameters including only the initial value of the dependent variable HRA_{i0} in the random term equation (2), and Model 4 reports the estimated parameters which also include the initial values of the independent variables X_{i0} . Model 5 reports the estimated parameters (column 5) and marginal effects (column 6) in the full specification which includes the within-subject means of the independent variables \overline{X}_{it-1} in the random term equation (2) and, hence, corrects for both the initial condition and the

endogenous covariate problems.¹³ Model 6 adds the quadratic term ROA² to test Hypothesis 1.

We find that the coefficients and marginal effects of ROA are positive and statistically significant in all the models while the quadratic term (ROA^2) is not significant. If we compare the Model 1 estimates (i.e., the static specification in the previous empirical literature) with the dynamic estimates in Models 2-5, we find that if the lagged dependent variable is omitted (as in Model 1), the magnitude of the estimated ROA coefficient (and other persistent regressors such as Age, International and Media Exposure) is upwardly biased. This occurs because (i) the static Model 1 does not distinguish between true versus spurious state dependence (Heckman, 1981), and (ii) the dynamic Models 2-6 distinguish between the short- and long-run effects (which are combined in Model 1) associated with each independent variable. In Model 5 (column 6), the estimated short-run (i.e., one-year lagged) ROA marginal effect is equal to 0.22, while the estimated long run effect, which can be approximated by applying the standard formula $\frac{\bar{\beta}_{ROA}}{1-\bar{\gamma}}$, is equal to 0.25.

In Model 6 (column 7) the estimated coefficients of both *ROA* and *ROA*² are not significant. These results suggest that there is a linear and positive (rather than a U-shaped or quadratic) relationship between firm performance relative to global industry peers and involvement in human rights abuses. In other words, the higher the firm's performance relative to its industry global peers, the more likely the firm will be involved in human rights abuses. This provides partial support for Hypothesis 1 by confirming, in terms of statistical significance, the positive (upward) part of the hypothesized U-shaped relationship between

-

¹³ In particular, X_{i0} and \bar{X}_{it-1} include the set of initial values and within-subject averages of the following time varying independent variables: ROA, HR_Comm , DummyROA, $Media\ Exposure$, and Risk. The variables Size, International, and $Regulatory\ Pressure$ are not included for multicollinearity reasons and because regulatory pressure is already expressed as a (weighted) within-subject average.

firm performance relative to global industry peers and human rights abuses, and rejecting the negative (downward) part concerning under-performing firms.¹⁴

Table 3 about here

Figure 1 depicts the predictive probability of *HRA* for different *ROA* values based on the estimation results in Table 3 (Models 5 and 6). The relationship between performance relative to global industry peers and the probability of *HRA* is monotonic and positive for both models, which means that the higher the firm's over-performance compared to its industry peers, the higher the probability of abuses of human rights.

Figure 1 about here

Based on these results, the interaction effects in Section 4.2 are estimated with Model 5 as the reference specification for the relationship between the dependent and independent variables.

4.2. Moderating effects

Before testing Hypotheses 2 and 3, we comment briefly on the direct effects of the related moderating variables. In all the estimated models (Table 3 Models 1-6), we find that *Regulatory Pressure* has a negative and significant direct effect on the dependent variable *HRA*, which means that the stronger the regulatory environment, the lower the probability of human rights abuses. This result is in line with earlier research on the effect of national institutional quality on firms' (mis-)behaviour (e.g., Fiaschi et al., 2017; Keig et al., 2015; Surroca et al., 2013). It is interesting that, in any of the estimated models, *HR_Comm* has no significant direct effects on the dependent variable *HRA*, which casts doubt on any direct impact of firm-level self-regulatory or CSR-related policies in deterring misconduct.

 $^{^{14}}$ This finding holds also for higher order polynomials of the variable ROA and when considering the count of HRA as the dependent variable in the ordered probit model estimated in the robustness checks (Section 4.4).

We test Hypotheses 2 and 3 by extending Model (5) (Table 3, column 5) by adding more interaction terms. Table 4 reports the main results. Note that, since we estimate a set of nonlinear probit models with several interaction terms, we cannot assess the magnitude of the estimated marginal effects or the statistical significance of the moderating factors based only on the estimated coefficients and their relative standard errors (Tsai & Gill, 2013; Zelner, 2009). Hence, following the guidelines in Zelner (2009), we simulate the magnitude and statistical significance of the marginal and moderating effects by computing and comparing the predicted probabilities of each model using delta methods (Tsai & Gill, 2013). Thus, in order to assess the overall strength of the moderating factors and to test their differential validity (using Baron & Kenny's (1986) definition) in Table 4, for Models 8 and 9, we report the likelihood-ratio (LR) X^2 statistic, which indicates whether the interaction terms included in the regressions are jointly significant (Model 7 is the null).

Table 4 about here

Model 8 tests Hypothesis 2 by interacting the variables *Regulatory Pressure*, *ROA* and *DummyROA* (to account for the asymmetric effects of positive and negative ROA values) and *Internationalization* (to account for the different exposure to regulatory pressure between only domestic firms and internationalized firms). These interacted variables are jointly significant at the 1% level, according to the X^2 LR Test statistic (Table 4 Model 8).

Figure 2 depicts the effect of firm performance on the predicted *HRA* probability for two levels of *Regulatory Pressure*: low -0.5 (1 standard deviation below the mean), and high 0.5 (1 standard deviation above the mean). The positive baseline relationship between *ROA* and *HRA* is stronger if *Regulatory Pressure* is low, and weaker if *Regulatory Pressure* is high, which

¹⁵ Figures 1-4 were produced using the "margins" and "marginsplot" commands in Stata 14. The former command provides predictive margins for theoretically interesting values of the interacting variables with all other variables held at their mean. Marginsplot graphs these predictive margins.

supports Hypothesis 2.

Figure 2 about here

Although not theorized explicitly in the theoretical section, we further examine this result to assess whether it is driven by home country versus host country pressure, or both. To do so, we distinguish between companies with foreign direct investments and companies with no such investments (i.e., with no foreign investment before year *t*). Figure 3(a) shows the moderating effect of *Regulatory Pressure* if *Internationalization* is 0, which means that it identifies only firms subject to home country regulation. In this case, the difference between the average slopes of the two lines, calculated using delta methods and representing the estimated average marginal effects of *ROA* for low and high rule of law in the home country, are never significantly different for any *ROA* values on the X-axis. This shows that home country regulatory pressure is not significantly moderating the baseline relationship.

Figure 3(b) depicts the difference in the predicted probability of human rights abuses for internationalized firms subject to foreign countries' regulation. We observe that the positive relation between *ROA* and *HRA* is significantly stronger if host country regulatory pressure is low and weaker if host country regulatory pressure is high. Notably, in the case of high levels of host country regulatory pressure the relationship between *ROA* and *HRA* becomes negative. This provides additional qualitative evidence to support Hypothesis 2 that it is regulatory pressure from highly regulated host countries, in particular, that deters abusive behaviours as performance relative to peers increases.

*** Figure 3 about here***

Hypothesis 3 predicts a negative moderation of the baseline hypothesis for companies

¹⁶ The net moderating effect of host country regulatory pressure plotted in Figure 3(b) is estimated by computing the difference between the overall effect of *Regulatory Pressure* plotted in Figure 2 minus the net effect of home country regulatory pressure plotted in Figure 3(a).

that commit more strongly to addressing human rights issues in the conduct of their business. Model 9 tests Hypothesis 3 by interacting HR_Comm , ROA and DummyROA. In Model 9, the interactions terms that identify the overall moderating effect of HR_Comm are jointly significant at the 1% level, as shown by the X^2 LR Test statistic in Model 9. Figure 4 plots the estimated moderating effect of HR_Comm using the predicted probabilities computed in Model 9, for different levels of HR_Comm : low 0 (no commitment to human rights) and high 0.1 (values below the 90th percentile of the variable HR_Comm). The observed positive relation between ROA and HRA is stronger (steeper slope) for low HR_Comm and is weaker (flatter) for high HR_Comm , which supports hypothesized negative moderating effect. In particular, the estimated average (short-run) marginal effects of ROA on HRA (the average slope of the lines in Figure 4) when HR_Comm is either low or high, are respectively 0.45 (standard error 0.14) and 0.13 (standard error 0.14). Hence, stronger commitment to respecting human rights neutralizes the positive effect of ROA on human rights abuses.

Figure 4 about here

4.3. Control variables

We comment briefly on the control variables. The coefficient of *Media Exposure* is positive and significant in Table 3 Models 1-4, but this result could be biased by reverse causality (e.g., enhanced media attention may be driven by rumours of possible involvement in human rights offences), since these models take account only of the initial condition problem. This positive coefficient becomes smaller and non-significant if within-subject averages are included in the fully specified model (Table 3, Model 5) in order to correct, also, for the endogenous covariate problem. The coefficient of *Risk* is negative and significant in Models 1, 5 and 6 (Table 3), which means that firms with higher ROE volatility are less likely to abuse human rights. In our models, *Size*, *Age*, *SOE* and *Internationalization* are non-significant, which suggests that none of these variables explains, *ceteris paribus*, human rights abuses. Regarding country

specificities, we found that involvement in human rights abuses is less likely for Mexican firms compared to South African companies (reference group), but only in Models 3 and 4 (Table 3). Finally, we find that *Manufacturing* and *Services* industry firms are less likely to abuse human rights than firms in the *Extractive* sector. This finding is in line with previous evidence and concerns expressed about the extractive industries' serious and dangerous impacts on society (Giuliani & Macchi, 2014; Vadlamannati et al., 2020).

4.4 Robustness checks

In this section we report and comment on the main results from several robustness checks.

Count dependent variable. To check the robustness of our dependent variable we consider the number of human rights abuses in which each firm was involved in each year (HRA_count) rather than the binary dependent variable (HRA).¹⁷ The results are reported in the Appendix. The frequency distribution of the yearly number of human rights abuses observed in our sample is highly skewed with a very high percentage (86%) of 0s if we consider the whole period 1992-2012 (Table A1.1). Hence, the dichotomous variable HRA accounts for most of the observed variability in abusive behaviours. Table A1.2 reports the estimates of the dynamic ordered probit regression using the dependent variable HRA_count, which provide further support for Hypothesis 1. Table A1.3 reports the marginal effects estimated using the dynamic ordered probit regression model and considering the asymmetric effect of ROA above versus below the industry average. Column (3) reports the estimated marginal effects of a one-unit increase in ROA on the probability of the firm being involved in the number per year of human rights abuses indicated in column (2). The p-values reported in column (4) show that the marginal effects of ROA are never statistically significant if firms under-perform with

-

¹⁷ We thank the editor and two anonymous referees for raising this point.

respect to the industry average, and they only become significant if ROA is above the industry average. In particular, for an over-performing firm, a one-unit increase in ROA decreases its probability of non-involvement in any human rights abuses by -0.27 and increases the probability of involvement in one human rights abuse by 0.16. It is worth noticing that the magnitude of the estimated marginal effects tends to decrease with the level of *HRA_count*, justifying our choice of a binary dependent variable (*HRA*).

Post 2000 sub-sample. We re-estimated our baseline and moderating models (Tables 3 and 4) using data covering the period 2000-2012. This robustness check addresses one concern about the quality of the information on our dependent variable, which allegedly could be lower pre-2000 due to the more limited monitoring of developing country companies in the past. The results are consistent with the main results.

Different lag structure. We checked the robustness of our lag structure by considering a two-year moving average for our independent variable *ROA*. Use of a 1-year lag is standard and widely used in prior research (see, e.g., Gao et al., 2021; Harris & Bromiley, 2007; Mishina et al., 2010; Xu et al., 2019). Also, choice of a one-year lag model versus two-year or three-year lag models is justified empirically if we compare the LR-test, Akaike and the Bayesian information criteria/statistics of the three competing models. However, to account for a slower performance feedback, we replicated our baseline regressions using a two-year lag moving average; this still provides support for our relationship.

Additional country-level indicators. We used alternative indicators to test Hypothesis 2. We replicated the moderating regressions using the World Bank Voice and Accountability rather than the Rule of Law indicator, in order to account for corporate responses to country-level freedom of expression, freedom of association and media freedom. We control, also, for level of democracy in the firm's home country (measured using Freedom House metrics) to account for the influence of different varieties of capitalism on our findings. In both cases, the

results were consistent with our main analysis.

Alternative indicators for companies' commitment to human rights. To assess the robustness our test of Hypothesis 3, we ran alternative models using a set of different CSR-related measures. First, we replaced our measure HR_Comm with a binary variable capturing only firms with high human rights reporting (i.e., firms in the 90^{th} percentile of the distribution of HR_Comm). Second, we measured the company's endorsement of the United Nations Global Compact (UNGC), a voluntary initiative involving commitment to aligning operations and strategies to ten universally accepted principles related to human rights, labour rights, environmental sustainability and anti-corruption (Kell, 2005, 2013). We collected information for the years when a Communication of Progress (CoP) was submitted to the UNGC and built a dummy variable which takes the value 1 if the company had produced a CoP at time t, and 0 otherwise. Third, we proxied the intensity of the firm's commitment to different CSR policies by considering five CSR-related activities or initiatives (philanthropy, CSR reports, adoption of the Global Reporting Initiatives for reporting; endorsement and sponsorship of the UNGC), which we coded 0,1 depending on their presence (1) or absence (0) in each year t. In all these cases, the estimates were consistent with the main analysis.

Data attrition and sample selection. Since our sample was drawn from the 2012 Forbes Global 2000 rankings, we tested for possible sample selection and attrition bias, that is, we considered the fact that our panel might be unbalanced because some firms were unlisted, not active or had changed ownership during our period of analysis. We used inverse probability weights (IPWs) in a two-step procedure. First, we collected information on Forbes Global 2000 rankings for the previous three years (2011, 2010, 2009) and, for each company, estimated the conditional probability of inclusion in these rankings using non parametric techniques (Li &

¹⁸ See UNGC at https://www.unglobalcompact.org/ last accessed December 16, 2020.

Racine, 2007). Second, we computed IPWs using a similar procedure to Wooldridge (2007) and re-estimated our models on the weighted observations. This weighting procedure assigns more "importance" to "fragile" companies, which, in a given year, are more likely to be included in the Forbes ranking "by chance", and less "importance" to companies whose ranking is more stable. The results of these robustness checks provide strong evidence that neither selection nor attrition cause serious biases in our estimates, which is in line with other similar analyses (Cheng & Trivedi, 2015).

5. Conclusions

5.1 Discussion

Some of the developing country firms have become global leaders in their industries and their size and economic power have equalled or surpassed that of industry incumbents, which often are prominent firms from the advanced economies. In the context of some of the biggest and most dynamic developing countries, we predicted a U-shaped relationship between performance relative to global peers and human rights abuses, and hypothesized that both regulatory pressures from governments and companies' commitment to human rights would negatively moderate our baseline hypothesis. We found no support for our prediction of high levels of abuse by top under-performing firms. In line with the predictions of performance feedback theory, we hypothesized that top underperformers might be motivated by resource scarcity problems to take more risks to reduce their underperformance gap. Our result suggests that our hypothesis is not supported in the case of underperforming developing countries firms struggling to compete in the global market, which, as Gao et al., (2021) also suggest, may be more likely to be more risk averse and avoid activities that could endanger rather than favour their performance in the global competition race.

More importantly, we found that the more firms over-perform relative to their industry peers, the more likely they will engage in abusive behaviours. However, this observed positive

and linear relationship is moderated negatively by regulatory pressure, specifically pressures from host country regulation, to the extent that in the case of weak international regulatory pressure, the positive relationship between performance and human rights abuses become steeper, and flattens out in a context of high levels of host country regulatory pressure. Heterogeneities in home country regulatory pressure have no effect on the outcome variable. We found, also, that the baseline relationship becomes flat for companies that commit strongly to addressing human rights issues as part of their CSR policies. Hence, the tendency for top performing firms to abuse human rights in the race for global leadership applies only to companies with no or limited commitment to human rights and strong regulatory pressures coming from host countries.

We theorized that over-performing firms would be more sensitive to reputational sanctions, which might threaten their continued position as a top performer and undermine their position as a legitimate actor in the global marketplace. Other mechanisms, such as deterrence for fear of legal sanction and high remedy costs, may also be at work. Exposure to a very stringent legal environments can be particularly enlightening for managers and might spark intra-organizational learning about human rights issues, thereby, improving the human rights conduct of the whole organization. The avoidance of harm in the presence of strong institutions could be the result of an explicit risk management strategy or an ethics-driven strategy to learn how to prevent human rights abuses, or both. As companies from developing countries became progressively more aware of human rights issues and their strategic relevance in terms of a social license to operate, they may exploit opportunities to learn from countries with more advanced health, gender and safety at work legal frameworks. It seems that companies' commitment to human rights processes is not a game changer because it has no direct impact on their abusive behaviours, but it does discriminate behaviour as a moderator.

5.2 Contributions

Our paper makes two contributions to the literature. First, we extend conceptual and empirical work on business and human rights. Conceptually, we provide a more detailed understanding of the causes of abusive behaviour (Schrempf-Stirling & Van Buren III, 2020) through a specific focus on developing country firms, which responds to calls for more research in this direction (Giuliani et al., 2016; Wettstein et al., 2019). We try to bridge between business and human rights research and management theories on corporate misbehaviour, by showing that the latter can be useful to identify the micro-level causal mechanisms of corporate human rights harms. We suggest that the complex anatomy of human rights harms (Wettstein et al., 2019) needs to be exploited through different theoretical lenses. In our study, we combine behavioural and institutional theories to examine our relationship of interest, but, given the international orientation of the business and human rights literature, which often concerns multinational companies operating across borders, we believe that the field would benefit from the application of international business theories on the functioning and strategies of multinationals. Several scholars have investigated developing country companies' international competition strategies and there is a strand of research which shows that these companies expand internationally to offset their home-country weaknesses (e.g., Luo & Tung, 2007). Here, we suggest that this expansion may involve overlooking human rights protections.

Empirically, our results are relevant for policy. Our examination of both the direct and moderating effects of regulatory pressure show a negative impact on the propensity of companies to abuse human rights. Although our focus in this paper was not on human rights regulation (e.g., human rights due diligence laws) per se, which emerged subsequent to our observation period, our results support the importance of hard law in the policy mix to regulate business and human rights. Since, at the time of writing, several different countries have adopted or are discussing adoption of human rights due diligence laws (McCorquodale et al.,

2017), it would be interesting to investigate their effectiveness for deterring abusive behaviour in the future. While regulatory pressure seems to be effective for reducing the propensity of abuse, we found no direct effect of companies' internal human rights commitment to human rights issues. Certainly, research on the effectiveness of self-regulatory human rights policies is far from conclusive and we echo Olsen et al.'s (2021) call for more research in this area. Finally, in making our database of human rights abuses available for download, we contribute empirically and respond to the demand from Schrempf-Stirling and Van Buren III (2020) for more data to strengthen research in this field.

Second, we contribute to the literature on companies' misbehaviour (e.g., Cuervo-Cazurra et al., 2021; Greve et al., 2010; Nieri & Giuliani, 2018; Palmer et al., 2016) by further exploring the relationship between financial performance and corporate human rights abuses. Most empirical research finds that misbehaviour is caused by resource constraints and underperformance (Asch & Seneca, 1976; Clinard et al., 1979; Cochran & Nigh, 1987; Staw & Szwajkowski, 1975); here, we provide further evidence of the conditions that cause overperforming firms to abuse human rights and add to the limited, but growing literature on the misbehaviour of large successful companies (Gao & Yang, 2021; Mishina et al., 2010). Our study differs from Gao et al.'s (2021) work, which also focuses on the over-performancemisbehaviour relationship in the context of a developing country (i.e., China), because we examine what moderates this relationship. Moreover, unlike Mishina et al. (2010), who find that pressures on organizations to meet or to exceed the expectations of shareholders and financial markets can spur illegal activity, we find that regulatory pressure from international markets deters abusive behaviours by over-performing firms, while internal self-regulatory commitment to avoiding human rights abuses mitigates over-performing firms' abuses of human rights. Hence, we contribute to this research area by further examining how performance-feedback works in the presence of different levels of external and internal

pressures for conformity to rules and standards. Both these pressures appear to powerfully modify companies' proclivities to perform abusive behaviours. Some studies investigate the extent to which internationalization contributes to reducing irresponsible business conduct, but internationalization tends to be considered in terms of degree of openness to international markets (see, e.g., Strike et al., 2006; Tashman et al., 2019), without taking account of differences in the regulatory environment of the countries where firms internationalize. Our work shows that outcomes differ depending on country of investment and suggests that future research on misbehaviour should not overlook the role played by host country qualities for predicting abuses.

5.3 Limitations

The limitations of our work provide opportunities for further research. First, our empirical analysis is based on a limited sample of large public companies in eight emerging countries and our results must be interpreted in the context of this boundary condition. Second, in our sample the firms categorized as low-performing are second-tier global or national leaders that perform poorly relative to their industry peers, but are not low performers in absolute terms. This needs to be accounted for when interpreting the findings. Hence, we cannot rule out that smaller unlisted firms might engage in wrongful conduct to escape their low-performance condition. However, the harm inflicted by smaller firms on human rights is likely to be on a lower scale. Third, to measure human rights abuses, we consider infringements to human rights law; this does not mean that such judgements are the result of legal proceedings since only a small minority of human rights violations result in lawsuits and receive a final judicial decision. Moreover, similar to other work on this topic (Marquis & Qian, 2014; Mishina et al., 2010; Surroca et al., 2013), we rely only on reported evidence of business conduct and, thus, our dependent variable might underestimate the problem. This concern is mitigated by our assessment of inter-firm differences on the probability of involvement in an abuse. However,

it could be problematic if some companies received more attention (and their negative conduct received more media attention) than others. For this reason, we included media exposure as a control variable. However, we acknowledge that more research is needed to further refine existing measures of business-related human rights abuses.

References

- Aguilera, R., Judge, W. Q., & Terjesen, S. A. (2018). Corporate governance deviance. *Academy of Management Review*, 43(1), 87–109.
- Aitkin, M., & Alfò, M. (1998). Regression models for discrete longitudinal responses. *Statistics Computing*, 8(4), 289–307.
- Asch, P., & Seneca, J. J. (1976). Is collusion profitable? *The Review of Economics and Statistics*, 58(1), 1–12.
- Ashforth, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation.

 Organization Science, 1(2), 177–194.
- Audia, P. G., Brion, S., & Greve, H. R. (2015). Self-assessment, self-enhancement, and the choice of comparison organizations for evaluating organizational performance. *Advances in Strategic Management*, *November*, 89–118.
- Audia, P. G., & Greve, H. R. (2006). Less likely to fail: Low performance, firm size, and factory expansion in the shipbuilding industry. *Management Science*, 52(1), 83–94.
- Baron, R., & Kenny, D. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Baucus, M. S., & Near, J. P. (1991). Can illegal corporate behavior be predicted? An event history analysis. *Academy of Management Journal*, *34*(1), 9–36.
- Bernaz, N. (2016). Business and human rights. History, law and policy Bridging the accountability gap. Oxon: Routledge.
- Buhmann, K. (2017). Changing sustainability norms through communication processes: The emergence of the business and human rights regime as transnational law. Edward Elgar Publishing.
- Carlos, W. C., & Lewis, B. W. (2018). Strategic Silence: Withholding Certification Status as a

- Hypocrisy Avoidance Tactic. https://doi.org/10.1177/0001839217695089
- Cheng, T. C., & Trivedi, P. K. (2015). Life expectancy and welfare in Latin America and the Caribbean. *Health Economics*, 24, 1101–1117.
- Ciravegna, L., & Nieri, F. (2021). Business and human rights: A configurational view of the antecedents of human rights infringements by emerging market firms. *Journal of Business Ethics*. https://doi.org/10.1007/s10551-021-04861-w
- Clinard, M., Brissene, J., Petrashek, K., & Harries, E. (1979). *Illegal corporate behavior*. Washington DC: National Institute of Law Enforcement and Criminal Justice.
- Cochran, P., & Nigh, D. (1987). llegal corporate behavior and the question of moral agency. In W. Frederick (Ed.), *Research in corporate social performance and policy*. Greenwich. CT: JAI Press.
- Crilly, D., Hansen, M., & Zollo, M. (2016). The grammar of decoupling: A cognitive-linguistic perspective on firms' sustainability claims and stakeholders' interpretation. *Academy of Management Journal*, 59(2), 705–729.
- Cuervo-Cazurra, A., Dieleman, M., Hirsch, P., Rodrigues, S. B., & Zyglidopoulos, S. (2021).

 Multinationals' misbehavior. *Journal of World Business*, 56(5), 101244.

 https://doi.org/10.1016/j.jwb.2021.101244
- Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages:

 Developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6), 957–979.
- Cuervo-Cazurra, A., & Ramamurti, R. (2017). Home country underdevelopment and internationalization: Innovation-based and escape-based internationalization.

 Competitiveness Review, 27(3), 217–230.
- Cyert, R. M., & March, J. G. (1963). *A behavioral theory of the firm*. Englewood Cliffs, NJ Prentice-Hall.

- De Schutter, O. (2005). Transnational corporations as instruments of human development. In P. Alston & M. Robinson (Eds.), *Human rights and development: Towards mutual reinforcement* (pp. 403–444). Oxford University Press.
- Deephouse, D. L. (2000). Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *Journal of Management*, 26(6), 1091–1112.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Dutrénit, G., Natera, J. M., Anyul, M. P., & Vera-Cruz, A. O. (2019). Development profiles and accumulation of technological capabilities in Latin America. *Technological Forecasting and Social Change*, *145*, 396–412.
- Fiaschi, D., Giuliani, E., & Nieri, F. (2015). BRIC companies seeking legitimacy through corporate social responsibility. *UNCTAD Transnational Corporations*, 22(3), 5–42.
- Fiaschi, D., Giuliani, E., & Nieri, F. (2017). Overcoming the liability of origin by doing no-harm: Emerging country firms' social irresponsibility as they go global. *Journal of World Business*, 52(4), 546–563.
- Finney, H. C., & Lesieur, H. R. (1982). A contingency theory of organizational crime. In S. B. Bacharach (Ed.), *Research in the sociology of organizations: A research annual*. Greenwich, CT: JAI Press.
- Gamache, D. L., & McNamara, G. (2019). Responding to bad press: How CEO temporal focus influences the sensitivity to negative media coverage of acquisitions. *Academy of Management Journal*, 62(3), 918–943. https://doi.org/10.5465/amj.2017.0526
- Gao, Y., & Yang, H. (2021). Does ownership matter? Firm ownership and corporate illegality in China. *Journal of Business Ethics*, *168*, 431–445.
- Gao, Y., Yang, H., & Zhang, M. (2021). Too bad to fear, too good to dare? Performance

- feedback and corporate misconduct. Journal of Business Research, 131, 1-11.
- Gavetti, G., Greve, H. R., Levinthal, D. A., & Ocasio, W. (2012). The behavioral theory of the firm: Assessments and prospects. *Academy of Management Annals*, 6(1), 1–40.
- Gereffi, G., & Korzeniewicz, M. (1994). Commodity chains and global capitalism. ABC-CLIO.
- Giuliani, E., & Macchi, C. (2014). Multinational corporations' economic and human rights impacts on developing countries: A review and research agenda. *Cambridge Journal of Economics*, 38(2), 479–517.
- Giuliani, E., Santangelo, G. D., & Wettstein, F. (2016). Human rights and international business research: A call for studying emerging market multinationals. *Management and Organization Review*, 12(3), 631–637.
- Gomero Osorio, L., Murray, D., & Rosenthal, E. (2019). Corporate impunity in Taucamarca: 19 years on, still no justice. *Business and Human Rights Journal*, 4(2), 329–336.
- Greve, H. R. (1998). Performance, aspirations, and risky organizational change. *Administrative Science Quarterly*, 43(1), 58–86.
- Greve, H. R. (2003). A behavioral theory of R&D expenditures and innovations: Evidence from shipbuilding. *Academy of Management Journal*, 46(6), 685–702.
- Greve, H. R., & Gaba, V. (2017). Performance feedback in organizations and groups. In L. Argote & J. M. Levine (Eds.), *The Oxford handbook of group and organizational learning*. Oxford University Press.
- Greve, H. R., Palmer, D., & Pozner, J. (2010). Organizations gone wild: The causes, processes, and consequences of organizational misconduct. *Academy of Management Annals*, 4(1), 53–107.
- Harris, J., & Bromiley, P. (2007). Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. *Organization Science*, 18(3), 350–

- Heckman, J. (1981). Statistical models for discrete panel data. In C. McFadden & D. Manski (Eds.), *Structural analysis of discrete data with econometric applications* (pp. 114–178). Cambridge MA: MIT Press.
- Humphreys, A., & Wang, R. J. (2018). Automated text analysis for consumer research. *Journal of Consumer Research*, 44(6), 1274–1306.
- Hyslop, D. R. (1999). State dependence, serial correlation and heterogeneity in intertemporal labor force participation of married women. *Econometrica*, 67(6), 1255–1294.
- Iyer, D. N., & Miller, K. D. (2015). Performance feedback, slack, and the timing of acquisitions.

 Academy of Management Journal, 51(4), 808–822.
- Jiang, M. (2016). Chinese internet business and human rights. *Business and Human Rights Journal*, *I*(1), 139–144.
- Keig, D. L., Brouthers, L. E., & Marshall, V. B. (2015). Formal and informal corruption environments and multinational enterprise social irresponsibility. *Journal of Management Studies*, 52(1), 89–116.
- Kell, G. (2005). The global compact selected experiences and reflections. *Journal of Business Ethics*, *59*(1), 69–79.
- Kell, G. (2013). 12 years later: Reflections on the growth of the UN Global Compact. *Business & Society*, *52*(1), 31–52.
- Khanna, T., & Palepu, K. G. (2004). Emerging giants: Building world class companies from emerging markets. In *Harvard Business School*. http://www.global-production.com/scoreboard/resources/khanna 2004 emerging-giants.pdf
- Kobrin, S. J. (2009). Private political authority and public responsibility: Transnational politics, transnational firms, and human rights. *Business Ethics Quarterly*, *19*(3), 349–374.
- Lebaron, G. (2021). Wages: An overlooked dimension of business and human rights in global

- supply chains. Business and Human Rights Journal, 6(1), 1–20.
- Li, Q., & Racine, S. J. (2007). *Nonparametric econometrics: Theory and practice*. Princeton University Press.
- Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, *38*(4), 481–498.
- Marano, V., Tashman, P., & Kostova, T. (2017). Escaping the iron cage: Liabilities of origin and CSR reporting of emerging market multinational enterprises. *Journal of International Business Studies*, 48(3), 386–408.
- Marquis, C., & Qian, C. (2014). Corporate social responsibility reporting in China: Symbol or substance? *Organization Science*, *25*(1), 127–148.
- Marquis, C., & Raynard, M. (2015). Institutional strategies in emerging markets. *Academy of Management Annals*, 9(1), 291–335.
- Marquis, C., Toffel, M. W., & Zhou, Y. (2016). Scrutiny, norms, and selective disclosure: A global study of greenwashing. *Organization Science*, *27*(2), 483–504.
- Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- McCorquodale, R., Lise, S., Neely, S., & Brooks, R. (2017). Human rights due diligence in law and practice: Good practices and challenges for business enterprises. *Business and Human Rights Journal*, 2(2), 195–224.
- Mckendall, M. A., & Wagner, J. A. (1997). Motive, opportunity, choice and corporate illegality.

 Organization Science, 8(6), 624–648.
- Meyer, K. E., & Peng, M. W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47, 3–22.
- Mishina, Y., Dykes, B. J., Block, E. S., & Pollock, T. G. (2010). Why "good" firms do bad

- things: The effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. *Academy of Management Journal*, *53*(4), 701–722.
- Muchlinski, P. (2001). Human rights and multinationals Is there a problem? *International Affairs*, 77(1), 31–47.
- Mundlak, Y. (1978). On the pooling of time series and cross section data. *Econometrica*, 46(1), 69–85.
- Nickell, S. (1981). Biases in dynamic models with fixed effects. *Econometrica*, 49(6), 1417–1426.
- Nieri, F., & Giuliani, E. (2018). International business and corporate wrongdoing: A review and research agenda. In D. Castellani, R. Narula, N. Quyen, I. Surdu, & W. Ames (Eds.), *Contemporary Issues in International Business* (pp. 35–53). Palgrave Macmillan.
- O'Neill, J. (2001). *Building better global economic BRICs* (Global Economics Paper No: 66). Goldman Sachs London.
- Olsen, T., Rehbein, K., Westermann-Behaylo, M., & Snelson-Powell, A. (2021). Human rights in the oil and gas industry: When are policies and practices enough to prevent abuse? Business & Society, 00076503211017435.
- Palmer, D., Greenwood, R., & Smith-Crowe, K. (2016). The imbalances and limitations of theory and research on organizational wrongdoing. In D. Palmer, R. Greenwood, & K. Smith-Crowe (Eds.), *Organizational wrongdoing: Key perspectives and new directions*. (pp. 1–16). Cambridge University Press.
- Pegg, S., & Frynas, J. G. (2003). *Transnational corporations and human rights*. New York: Palgrave MacMillan.
- Pennebaker, J. W., Chung, C. K., Ireland, M., Gonzales, A. L., & Booth, R. J. R. J. (2007). The development and psychometric properties of LIWC2007. In *LIWC.net*.
- Rabe-Hesketh, S., & Skrondal, A. (2013). Avoiding biased versions of Wooldridge's simple

- solution to the initial conditions problem. *Economics Letters*, 120(2), 346–349.
- Ruggie, J. G. (2010). Business and human rights: further steps toward the operationalization of the "protect, respect and remedy" framework. A/HRC/14/2. http://business-humanrights.org/en/john-ruggie-report-to-14th-session-of-un-human-rightscouncil-business-and-human-rights-further-steps-toward-the-operationalization-of-theprotect-respect-and-remedy-framework#c52936.
- Ruggie, J. G. (2013). *Just business: Multinational corporations and human rights*. WW Norton & Company.
- Schnatterly, K. (2003). Increasing firm value through detection and prevention of white-collar crime. *Strategic Management Journal*, *24*(7), 587–614. https://doi.org/10.1002/smj.330
- Schrempf-Stirling, J., & Van Buren III, H. J. (2020). Business and human rights scholarship in social issues in management: An analytical review. *Business and Human Rights Journal*, 5(1), 28–55.
- Shi, W., Connelly, B. L., & Sanders, G. W. (2016). Buying bad behavior: Tournament incentives and securities class action lawsuits. *Strategic Management Journal*, *37*(7), 1354–1378.
- Simon, H. A. (1955). A behavioral model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99–118.
- Skrondal, A., & Rabe-Hesketh, S. (2014). Handling initial conditions and endogenous covariates in dynamic/transition models for binary data with unobserved heterogeneity.

 *Journal of the Royal Statistical Society, 63(2), 211–237.
- Staw, B. M., & Szwajkowski, E. (1975). Scarcity- munificence component of organizational environments and the commission of illegal acts. *Administrative Science Quarterly*, 20(3), 345–354.
- Stewart, M. (2006). Maximum simulated likelihood estimation of random-effects dynamic

- probit models with autocorrelated errors. *Stata Journal*, *6*(2), 256–272.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research. Sage publications.
- Strike, V. M., Gao, J., & Bansal, P. (2006). Being good while being bad: Social responsibility and the international diversification of US firms. *Journal of International Business Studies*, 37(6), 850–862.
- Surroca, J., Tribo, J. A., & Zahra, S. A. (2013). Stakeholder pressure on MNEs and the transfer of socially irresponsible practices to subsidiaries. *Academy of Management Journal*, 56(2), 549–572.
- Tashman, P., Marano, V., & Kostova, T. (2019). Walking the walk or talking the talk? Corporate social responsibility decoupling in emerging market multinationals. *Journal of International Business Studies*, 50(2), 153–171.
- Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, 29(1), 24–54.
- Tsai, T., & Gill, J. (2013). Interactions in generalized linear models: Theoretical issues and an application to personal vote-earning attributes. *Social Sciences*, 2(2), 91–113.
- UNCTAD. (2014). World investment report 2014: Investing in the SDGs: An action plan. In World investment report. https://doi.org/978-92-1-112873-4
- United Nations. (2011). Guiding principles on business and human rights: Implementing the united nations 'protect, respect and remedy' framework. https://doi.org/U.N. Doc. E/CN.4/2006/97
- Vadlamannati, K. C., Janz, N., & De Soysa, I. (2020). US multinationals and human rights: a theoretical and empirical assessment of extractive vs. non-extractive sectors. *Business & Society*. https://doi.org/doi:10.1177/0007650320928972
- van den Herik, L., & Letnar Cernic, J. (2010). Regulating corporations under international law:

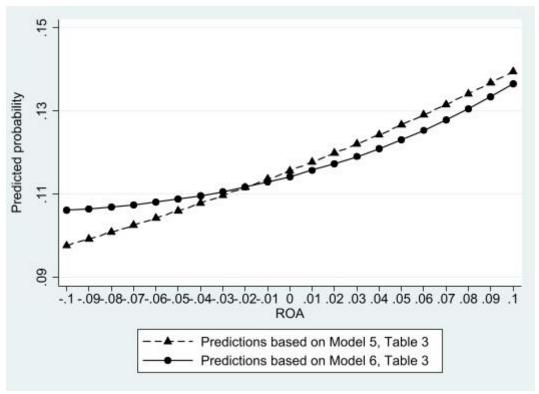
- From human rights to international criminal law and back again. *Journal of International Criminal Justice*, 8(3), 725–743.
- Washburn, M., & Bromiley, P. (2012). Comparing aspiration models: The role of selective attention. *Journal of Management Studies*, 49(5), 896–917.
- Wettstein, F. (2009). Multinational corporations and global justice. Human rights obligations of a quasi-governmental institution. Stanford: Stanford University Press.
- Wettstein, F. (2019). Human rights, emerging markets, and international business. In R. Grosse & K. E. Meyer (Eds.), *The Oxford handbook of management in emerging markets*. Oxford/New York: Oxford University Press.
- Wettstein, F., Giuliani, E., Santangelo, G. D., & Stahl, G. K. (2019). International business and human rights: A research agenda. *Journal of World Business*, *54*(1), 54–65.
- Whiteman, G., & Cooper, W. H. (2016). Decoupling rape. Academy of Management Discoveries, 2(2), 115–154.
- Wooldridge, J. M. (2005). Simple solutions to the initial conditions problem in dynamic, nonlinear panel data models with unobserved heterogeneity. *Journal of Applied Econometrics*, 20(1), 39–54.
- Wooldridge, J. M. (2007). *Inverse probability weighted estimation for general missing data problems* (Centre for Microdata Methods and Practice, No. CWP05/04; Cemmap). http://dx.doi.org/10.1920/wp.cem.2004.0504
- Xu, D., Zhou, K. Z., & Du, F. (2019). Deviant versus aspirational risk taking: The effects of performance feedback on bribery expenditure and R&D intensity. *Academy of Management Journal*, 62(4), 1226–1251.
- Zavyalova, A., Pfarrer, M. D., Reger, R. K., & Shapiro, D. L. (2012). Managing the message:

 The effects of firm actions and industry spillovers on media coverage following wrongdoing. *Academy of Management Journal*, 55(5), 1079–1101.

- Zelner, B. A. (2009). Research notes and commentaries using simulation to interpret results from logit, probit, and other nonlinear models. *Strategic Management Journal*, *30*(12), 1335–1348.
- Zhong, X., Ren, L., & Song, T. (2021). Beyond market strategies: How multiple decision-maker groups jointly influence underperforming firms' corporate social (ir)responsibility. *Journal of Business Ethics*, 0123456789. https://doi.org/10.1007/s10551-021-04796-2

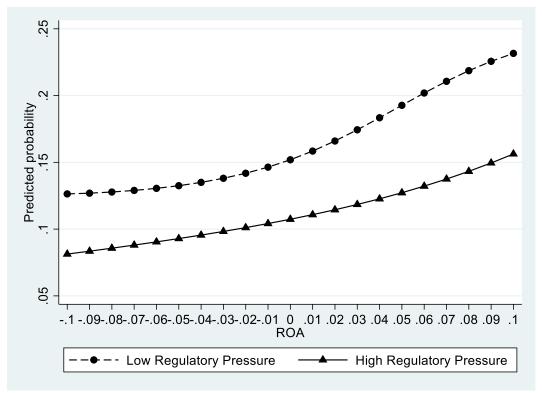
Figures

Figure 1. Predicted probability of being involved in at least one HRA for different values of ROA.



Source: Authors' own elaboration based on Models 5 and 6 from Table 3.

Figure 2. Moderating effect of Regulatory Pressure.



Source: Authors' own elaboration based on Model 8 from Table 4.

Figure 3. Moderating effect of domestic and international Regulatory Pressure

Source: Authors' own elaboration based on Model 8 from Table 4.

Note: Figure 3(a) shows the effect of domestic regulatory pressure (i.e., when firms are not internationalized) on the baseline relationship, whilst Figure 3(b) shows the effect of international pressure on the ROA-HRA relationship.

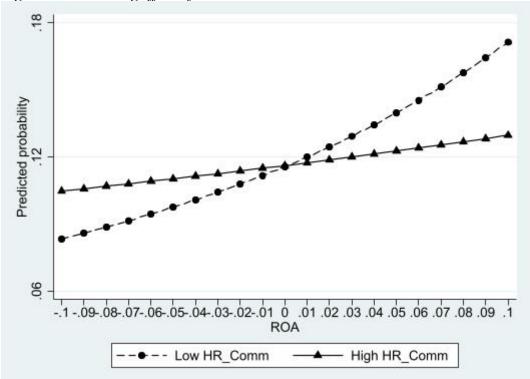


Figure 4. Moderating effect of HR Comm.

Source: Authors' own elaboration based on Model 9 from Table 4.

Tables

Table 1. Transition matrix

	HRA_t		
HRA_{t-1}	0	1	Total
0	2,474	92	2,566
	96.41%	3.59%	100%
1	59	330	389
	15.17%	84.83%	100%
Total	2,533	422	2,955
	85.72%	14.28%	100%

Table 2. Descriptive statistics and correlation matrix

	Variables	mean	sd	1	2	3	4	5	6	7	8	9	10
1	HRA	0.14	0.35	1									
2	ROA	0.02	0.06	-0.02	1								
3	DummyROA	0.71	0.45	-0.02	0.57	1							
4	Regulatory Pressure	0.11	0.52	0.05	0.06	0.08	1						
5	HR_Comm	0.05	0.09	0.13	0.09	0.04	0.12	1					
6	Age	0.53	0.50	0.11	0.00	0.06	0.51	0.17	1				
7	Size	3.45	0.88	0.05	-0.02	0.09	0.24	0.10	0.15	1			
8	Risk	9.78	1.58	0.18	-0.11	-0.05	0.05	0.12	0.34	0.04	1		
9	Age	0.10	0.19	-0.00	0.05	-0.09	-0.05	-0.02	-0.10	0.01	-0.07	1	
10	SOE	0.40	0.49	0.01	-0.19	-0.11	-0.19	-0.02	-0.11	-0.07	0.12	-0.10	1
11	Media Exposure	2.88	1.91	0.28	-0.02	-0.01	0.23	0.14	0.33	0.04	0.38	0.02	0.06

Table 3. Dynamic correlated random effect probit baseline model results

Models	Model 1	Model 2	Model 3	Model 4		del 5	Model 6
(Columns)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
HRA_{t-1}		2.06***	1.86***	1.84***	1.73***	0.12***	1.70***
		(0.21)	(0.18)	(0.17)	(0.19)	(0.02)	(0.19)
ROA	4.84***	2.35**	1.79**	2.34**	3.16**	0.22**	2.18
	(1.22)	(0.93)	(0.91)	(1.00)	(1.41)	(0.10)	(1.66)
ROA^2							8.34
							(7.59)
Regulatory Pressure	-0.49**	-0.30**	-0.34**	-0.35**	-0.30*	-0.02*	-0.31*
	(0.19)	(0.14)	(0.14)	(0.14)	(0.16)	(0.01)	(0.16)
HR_Comm	-0.34	-0.37	-0.07	-0.05	-0.20	-0.01	-0.21
	(0.66)	(0.61)	(0.58)	(0.58)	(0.77)	(0.05)	(0.78)
Internationalization	0.44**	0.05	0.05	0.07	0.10	0.01	0.10
	(0.20)	(0.15)	(0.14)	(0.15)	(0.17)	(0.01)	(0.17)
Age	0.57***	0.13	0.12	0.13	0.12	0.01	0.12
	(0.19)	(0.09)	(0.08)	(0.09)	(0.10)	(0.01)	(0.11)
Size	0.12	0.08	0.06	0.06	0.06	0.00	0.06
	(0.08)	(0.05)	(0.05)	(0.05)	(0.05)	(0.00)	(0.05)
Risk	-0.90**	-0.45	-0.49	-0.52	-0.78*	-0.05*	-0.88*
	(0.46)	(0.35)	(0.36)	(0.38)	(0.47)	(0.03)	(0.48)
Media Exposure	0.36***	0.16***	0.14***	0.12***	0.12	0.01	0.11
•	(0.06)	(0.04)	(0.04)	(0.04)	(0.07)	(0.00)	(0.07)
SOE	0.16	0.06	-0.05	-0.08	-0.11	-0.01	-0.11
	(0.30)	(0.15)	(0.13)	(0.14)	(0.17)	(0.01)	(0.17)
Manufacturing	-1.16**	-0.38*	-0.40**	-0.43**	-0.44*	-0.03*	-0.42*
•	(0.50)	(0.21)	(0.20)	(0.21)	(0.23)	(0.02)	(0.24)
Service	-2.62***	-1.03***	-0.83***	-0.84***	-0.87***	-0.06***	-0.87***
2011100	(0.48)	(0.24)	(0.20)	(0.20)	(0.23)	(0.02)	(0.23)
Brazil	0.25	0.03	0.00	-0.07	-0.26	-0.02	-0.30
Diuzn	(0.72)	(0.30)	(0.28)	(0.29)	(0.35)	(0.02)	(0.35)
Mexico	-0.89	-0.44	-0.55	-0.65*	-0.60	-0.04	-0.62
Wextee	(0.86)	(0.36)	(0.34)	(0.37)	(0.42)	(0.03)	(0.43)
China	0.00	-0.20	-0.05	-0.04	-0.06	-0.00	-0.08
Cililia	(0.68)	(0.29)	(0.27)	(0.28)	(0.32)	(0.02)	(0.33)
Malaysia	-1.18	-0.56	-0.30	-0.27	-0.44	-0.03	-0.45
ividia j sid	(0.86)	(0.37)	(0.34)	(0.35)	(0.42)	(0.03)	(0.42)
Thailand	-0.62	-0.25	-0.02	-0.04	-0.21	-0.02	-0.22
Thuhuhu	(0.94)	(0.39)	(0.34)	(0.36)	(0.43)	(0.03)	(0.44)
India	0.11	-0.01	0.12	0.15	0.16	0.01	0.15
	(0.65)	(0.27)	(0.25)	(0.26)	(0.30)	(0.02)	(0.31)
Russia	-0.25	-0.43	-0.30	-0.29	-0.27	-0.02	-0.28
T C S S S C S S S S S S S S S S S S S S	(0.76)	(0.32)	(0.30)	(0.31)	(0.36)	(0.03)	(0.36)
IID A	(0.70)	(0.52)	` /		, ,	,	
HRA_0			1.96***	2.02***	2.33***	0.16***	2.38***
			(0.37)	(0.38)	(0.43)	(0.03)	(0.44)
\mathbf{X}_0				yes	yes	yes	yes
X_{t-1}					yes	yes	yes
Time dummies	yes	yes	yes	yes	yes	yes	yes
	<i>J</i> C <i>S</i>	<i>y</i> 0.5	5 <i>1</i>	<i>y</i> C <i>B</i>	<i>y</i> 0.5	300	<i>y</i> 0.5

Constant	-4.87***	-2.84***	-2.63***	-2.62***	-3.08***		-3.09***
	(1.21)	(0.61)	(0.56)	(0.58)	(0.69)		(0.70)
Observations	2,955	2,955	2,955	2,955	2,796	2,796	2,796

^{*}p < 0.10; **p < 0.05; ***p < 0.01; standard errors in parenthesis. Note: Column (6) includes the marginal effects of Model 5.

Table 4. Dynamic correlated random effect probit interaction model results

	Model 7	Model 8	Model 9
HRA_{t-1}	1.71***	1.73***	1.72***
	(0.19)	(0.20)	(0.19)
ROA	5.23	7.83	7.46*
D. DOA	(3.75)	(7.68)	(4.24)
DummyROA	-0.26	-0.14	-0.43**
DummyROA*ROA	(0.17) -1.11	(0.34) -2.40	(0.20) -1.79
DullillyKOA·KOA	(4.04)	(8.03)	(4.55)
Regulatory Pressure	-0.30*	-0.84	-0.31*
regulatory residue	(0.16)	(0.74)	(0.16)
Internationalization	0.11	0.28	0.11
	(0.17)	(0.39)	(0.17)
HR_Comm	-0.15	0.01	-2.21
_	(0.78)	(0.79)	(2.17)
Interaction terms Model 8 (Hypothesis 2):	,	,	,
Internationalization*DummyROA		0.02	
		(0.42)	
Internationalization*ROA		7.26	
		(10.56)	
DummyROA* Internationalization* ROA		-11.38	
		(11.07)	
DummyROA*Regulatory Pressure		1.28	
		(0.86)	
ROA*Regulatory Pressure		4.80	
The state of the s		(17.31)	
Internationalization*ROA*Regulatory Pressure		0.68	
Internationalization*Regulatory Pressure		(18.78)	
internationalization Regulatory Flessure		0.13	
DummyROA* Internationalization*Regulatory Pressure		(0.82) -1.44	
DummyRO71 Internationalization Regulatory Flessure		(0.97)	
DummyROA*ROA*Regulatory Pressure		-29.12	
,		(20.70)	
Internationalization*DummyROA*ROA*Regulatory Pressure		30.68	
, ,		(22.17)	
Interaction terms Model 9 (Hypothesis 3):			
DummyROA* HR_Comm			3.85*
ROA*HR_Comm			(2.31) -54.66
			(43.89)
DummyROA*ROA* HR_Comm			16.50
,			(46.21)
Firm controls	yes	yes	yes
	-	-	-

Industry dummies	yes	yes	yes
Country dummies	yes	yes	yes
Time dummies	yes	yes	yes
HRA_{0}	2.38***	2.45***	2.36***
	(0.44)	(0.46)	(0.44)
X_0	yes	yes	yes
X_{t-1}	yes	yes	yes
Constant	-2.91***	-3.03***	-2.95***
	(0.72)	(0.76)	(0.72)
X ² LR Test for joint significance of interactions		22.59***	9.77***
Observations	2,796	2,796	2,796

^{*}p < 0.10; **p < 0.05; ***p < 0.01; standard errors in parenthesis.

Appendix 1. Estimates with count dependent variable

Table A1.1. Distribution of the number of human rights abuses per year (HRA_count).

Values of HRA_count	Frequency	Percent	Cumulative Percent
0	2411	86.23	86.23
1	201	7.19	93.42
2	106	3.79	97.21
3	47	1.68	98.89
4	10	0.36	99.25
5	7	0.25	99.5
6	4	0.14	99.64
7	5	0.18	99.82
8	1	0.04	99.86
9	1	0.04	99.89
10	2	0.07	99.96
11	1	0.04	100

Table A1.2. Ordered probit model results

	Model	Model	Model	Model	Model	Model
	1b	2b	3b	4b	5b	6b
HRA_count _{t-1}		0.60***	0.59***	0.59***	0.57***	0.56***
		(0.05)	(0.05)	(0.05)	(0.06)	(0.06)
ROA	2.39***	2.17***	1.90**	2.14***	2.09**	1.19
	(0.84)	(0.79)	(0.77)	(0.80)	(1.04)	(1.27)
ROA^2						8.17
						(6.72)
Regulatory Pressure	-0.52***	-0.42***	-0.44***	-0.44***	-0.41***	-0.42***
	(0.15)	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)
HR_comm	0.45	-0.06	0.06	0.11	-0.23	-0.24
	(0.51)	(0.52)	(0.50)	(0.50)	(0.65)	(0.65)
Internationalization	0.46***	0.30**	0.32**	0.31**	0.27*	0.28*
	(0.15)	(0.14)	(0.13)	(0.13)	(0.15)	(0.15)
Age	0.48***	0.20*	0.20**	0.22**	0.23*	0.10*
	(0.16)	(0.11)	(0.10)	(0.11)	(0.12)	(0.06)
Size	0.17**	0.12**	0.08	0.08	0.09*	0.24**
	(0.07)	(0.05)	(0.05)	(0.05)	(0.06)	(0.12)
Risk	-0.48	-0.43	-0.44	-0.42	-0.73**	-0.84**
	(0.33)	(0.31)	(0.30)	(0.31)	(0.37)	(0.38)
Media Exposure	0.34***	0.21***	0.18***	0.16***	0.15**	0.15**
	(0.04)	(0.04)	(0.04)	(0.04)	(0.06)	(0.06)
SOEs	-0.16	0.13	0.03	-0.00	-0.06	-0.06
	(0.23)	(0.18)	(0.16)	(0.16)	(0.19)	(0.19)
Manufacturing	-1.08***	-0.57**	-0.61**	-0.63**	-0.66**	-0.65**
	(0.41)	(0.28)	(0.24)	(0.25)	(0.28)	(0.29)
Service	-2.28***	-1.42***	-1.17***	-1.16***	-1.23***	-1.23***
	(0.40)	(0.27)	(0.24)	(0.24)	(0.27)	(0.27)
Brazil	0.62	0.26	0.31	0.23	0.07	0.05
	(0.62)	(0.41)	(0.36)	(0.37)	(0.42)	(0.43)
Mexico	-0.63	-0.52	-0.44	-0.64	-0.55	-0.57
	(0.74)	(0.49)	(0.43)	(0.47)	(0.51)	(0.52)
China	0.33	-0.12	0.09	0.10	0.13	0.14
	(0.58)	(0.40)	(0.35)	(0.36)	(0.40)	(0.40)
Malaysia	-0.57	-0.58	-0.32	-0.34	-0.51	-0.50
	(0.73)	(0.50)	(0.44)	(0.44)	(0.52)	(0.52)
Thailand	-0.28	-0.31	-0.03	-0.07	-0.21	-0.19
	(0.80)	(0.53)	(0.46)	(0.46)	(0.54)	(0.55)
India	0.40	0.14	0.22	0.23	0.21	0.21
	(0.56)	(0.37)	(0.33)	(0.33)	(0.37)	(0.37)
Russia	-0.16	-0.42	-0.34	-0.38	-0.37	-0.37
	(0.65)	(0.44)	(0.39)	(0.39)	(0.44)	(0.44)
HRA_count ₀			1.39***	1.35***	1.50***	1.52***
			(0.24)	(0.25)	(0.28)	(0.28)
Time dummies	yes	yes	yes	yes	yes	yes

\mathbf{X}_0				yes	yes	yes	
X_{t-1}					yes	yes	
Observations	2,955	2,955	2,955	2,955	2,796	2,796	

^{*}p < 0.10; **p < 0.05; ***p < 0.01; standard errors in parenthesis.

Table A1.3. Estimated marginal effects of ROA for different levels of HRA count.

ROA Above/below industry	Values of	Marginal effect	p-value
average	HRA_count	•	-
Below	0	-0.24	0.43
Below	1	0.14	0.43
Below	2	0.06	0.44
Below	2 3	0.02	0.43
Below	4	0.01	0.44
Below	5	0.01	0.45
Below	6	0.00	0.47
Below	7	0.00	0.49
Below	8	0.00	0.61
Below	9	0.00	0.55
Below	10	0.00	0.50
Below	11	0.00	0.44
Above	0	-0.27	0.02
Above	1	0.16	0.02
Above	2	0.06	0.03
Above	3	0.02	0.03
Above	4	0.01	0.06
Above	5	0.01	0.07
Above	6	0.00	0.12
Above	7	0.00	0.20
Above	8	0.00	0.39
Above	9	0.00	0.38
Above	10	0.00	0.26
Above	11	0.00	0.06

Note: Column 3 reports the estimated marginal effects of one-unit increase in ROA on the probability of a firm being involved in the number of per year human rights abuses indicated in column 2. The marginal effects are estimated separately for ROA above or below the average of the main industry of reference in which the firm operates.