A stakeholder resource-based view of corporate social irresponsibility: Evidence from China

Maretno A. Harjoto, Andreas G.F. Hoepner, Qian Li

Keywords: Corporate social irresponsibility, Stakeholder resource-based view, Stakeholder salience, Corporate wrongdoing, Shareholder returns

ABSTRACT
Following the stakeholder resource-based view (SRBV), we conceptualize the value relevance of corporate social irresponsibility (CSI) based on the stakeholders’ bargaining power and interests in the well-being of the firm, and classify the stakeholders into residual claimants (i.e., customers, shareholders) and fixed claimants (i.e., employees, environment). Using curated detailed news data of 816 CSI episodes and 56,503 Chinese government daily publications from June 2006 to July 2012, we find that CSI episodes alienating residual claimant stakeholders lead to greater shareholder value destruction. Drawing from the stakeholder salience, we find that CSI episodes alienating high legitimacy claims of shareholders and customers, high urgency claims of employees, and powerful claims of customers result in a more pronounced underperformance. Although there are potentially overlapping boundaries between fixed and residual claimants under special circumstances, the findings provide implications for firms making strategic decisions involving multiple stakeholders.

1. Introduction
In the last two decades, the world has witnessed large-scale corporate actions that are deemed as socially irresponsible. From Enron’s and WorldCom’s accounting fraud to Foxconn’s suicides and Sanlu’s melamine contamination in milk products, these pervasive corporate irresponsible behaviors have brought adverse impacts to our society. While the literature has focused primarily on corporate social responsibility (CSR), recent emerging studies point out that corporate social irresponsibility (CSI) brings different perspectives in terms of the context, media attention, and its value relevance (e.g., Doh et al., 2010; Hawn, 2020; Lange and Washburn, 2012; Nardella, Brammer and Surdu, 2020; Pearce and Manz, 2011; Price and Sun, 2017; Putrevu et al., 2012; Zyglidopoulos et al., 2012).

The literature defines corporate social responsibility (CSR) as corporate responsibilities that have a positive impact on the environment, society and its associated stakeholders, beyond the firms’ interests in making profits (Carroll, 1979; McWilliams and Siegel, 2001; Zyglidopoulos et al., 2012). While it is natural to consider CSI as the opposite of CSR, recent studies point out that CSI is not necessarily the opposite side of the coin of CSR, as context and incentives differ (e.g., Jones, Bowd & Tench, 2009; Lange & Washburn, 2012; Muller & Kraussl, 2011; Pearce & Manz, 2011; Price & Sun, 2017). We follow Strike et al. (2006) to define corporate social irresponsibility (CSI) as corporate actions that adversely affect identifiable stakeholders’ legitimate claims. Based on the stakeholder theory and the stakeholder resource-based view (Barney, 2018; Freeman et al., 2020), we also argue that CSI is not the exact opposite of CSR because CSI is more relevant to the maintenance of sustainable stakeholder relationships, while CSR is more relevant to the building of such relationships. Compared to CSR, companies have no incentive to publicize CSI which is usually discovered by third parties such as the government, regulators, and news media instead of actively promoted by the firm. Therefore, the government and the news media play significant roles in the value relevance of CSI. The difference between CSR and CSI has considerable implications for the timing and terminology of CSI. In terms of timing, CSR research typically observes when an act of CSR was commenced, while CSI research only observes when it was discovered. To accurately reflect this inability of researchers to observe the commencement of CSI, we use the term “episode” instead of “act” to imply the uncertain commencement time. Therefore, our study contributes to the CSI literature by examining the impact of CSI episodes observed by the public and the news media on the firms’ stock...
returns.

Studies on the relationship between CSI and corporate financial performance to date mostly focus on the developed markets (Kölbel et al., 2017; Kruger, 2015; Oikonomou et al., 2014; Price and Sun, 2017). Little is known about episodes of CSI and their potential shareholder value destruction in emerging markets. CSI episodes have occurred extensively in China over the last decade, such as the melamine contamination of milk and other high-profile food safety incidents. Similarly, China is considered to have relatively weak investor protection (Chen et al., 2013; La Porta et al., 1997) and the Chinese central government holds relatively high legal authority over corporations and financial markets (Brunnermeier et al., 2018; Claessens et al., 2000; Tian and Estrin, 2008). These settings allow us to examine the stakeholder salience because the Chinese central government’s concerns represent the legitimacy of stakeholder claims while the severity and source reach of the news media represent the urgency and power of stakeholder claims. Furthermore, Stevens et al. (2016) argue that news media reporting on Chinese firms has become important in recent years and is intensified through global distribution. Hence, based on the social media news, they acknowledge the importance of media news since “social license granted by actors in civil society is a social contract, rather than the legal one” (Stevens et al., 2016, p.951). This social (informal) contract or claim established from the news media is crucial for firms to maintain their legitimacy to operate (Henisz et al., 2014). While extant literature examines the impact of CSI, measured by CSR concerns, on firms’ performance (e.g., Strike et al., 2006; Price and Sun, 2017), our study makes an empirical contribution by examining the stock value relevance of CSI episodes that are identified by the news media and the central government concerns.

In considering the value relevance of CSI, we follow the stakeholder resource-based view (SRBV hereafter) that “the generation of firm profits requires that stakeholders, besides shareholders, hold residual claims on firm profits” (Barney, 2018: p. 3306). In other words, a stakeholder who controls and provides access to resources that create the most value in a bundle of co-specialized resources for the firm holds higher “economic bargaining power” and hence is considered a residual claimant as opposed to a fixed claimant. Drawing from SRBV, we argue that the shareholder value destruction effect of CSI is stronger when it destroys the relationships between the firm and its residual claimant stakeholders compared to the fixed claimant stakeholders because the former provides access to resources that are vital to a firm’s economic profits. Based on the SRBV, we also argue that the value relevance of CSI depends on the stakeholders’ interest in the well-being of the firm.

Furthermore, the nature of fixed and residual claims is likely to vary based on the stakeholder salience. Mitchell et al. (1997) define stakeholder groups who have the legitimate moral or presumed (implicit) claims based on the attributes of stakeholder salience: legitimacy, urgency and power. Equivalent to Mitchell et al.’s (1997) typology for stakeholder salience, we also examine the value relevance of CSI that destroys the relationship with key stakeholders who i) hold high legitimacy within our socially constructed system of laws, norms and values; ii) are considered urgent and time-sensitive to the firm; or iii) have the power to alter the firms’ CSI activities or to force the firm to follow the stakeholders’ desire (objectives).

Answering recent calls for further conceptual development in the stakeholder theory and the resource-based view (Omytriev et al., 2021; Freeman et al., 2021), our study makes a theoretical contribution by conceptualizing the value relevance of CSI drawing from the SRBV, which is based on the resource-based view, and the stakeholder salience, which is based on the stakeholder theory. This conceptual contribution is important since extant literature (e.g., Agle et al., 1999; Brower and Rowe, 2017) mostly applied the SRBV and the stakeholder salience to CSR but not to CSI. Considering that the stakeholders’ negative attributes are stronger toward CSI than their positive attributes toward CSR (Lange and Washburn, 2012), and maintaining sustainable stakeholder relationships is the key to firms’ competitive advantage, the concepts of stakeholder resource-based view and stakeholder salience are even more pertinent to examine the value relevance of the CSI.

2. Hypotheses development

Literature on CSI is growing. Based on the resource-based view, Strike et al. (2006) find that internationally diversified firms act socially responsibly in order to create value but also destroy their value when they act irresponsibly. They argue that CSI worsens identifiable social stakeholders’ welfare, which eventually negatively affects the firms’ valuable resources. Lenz et al. (2017) illustrate CSR and CSI interactions by drawing upon the instrumental stakeholder theory, and argue that different domains of CSR have differential value implications and that CSI negatively affects CSR’s positive impact on firm value. Price and Sun (2017) examine the value relevance of CSR and CSI by using a moderating high-low matrix, and suggest that CSI incidents have stronger influence and longer lasting impact on market value than CSR.

More recent studies examine CSI separately from CSR. Based on the stakeholder agency theory (Hill and Jones, 1992), Jain and Zaman (2020) demonstrate that the board structure significantly affects firms’ CSI. Drawing from the attribution theory, Lange and Washburn (2012) and Antonetti and Maklan (2016) argue that observers tend to react more negatively to CSI because social irresponsibility has a greater capacity to attract the observers’ attention. Based on attribution and expectancy violations theories, Nardella, Brammer and Surdu (2020) investigate the impact of CSI attributions on changes in organizational reputation and demonstrate stakeholder assessments from CSI according to their prior perceptions of organizational behavior. Shea and Hawn (2019) show that social perceptions of firms’ friendliness (warmth) and competence influence the value relevance of CSI. Hawn (2020) finds that the media coverage of firms’ CSI plays a more significant role than CSR in the probability of success and the duration of cross-border acquisitions. Kölbel et al. (2017) utilize the agenda setting theory as a complement to stakeholder theory and employ RepRisk data to analyze the relationship between CSI and bondholders’ credit risk. They find that the source reach and the severity of media coverage on firms’ CSI indeed increase firms’ credit risk. However, the extant literature has not yet integrated the thinking of various types of stakeholders which can make the case for comprehensive understanding of the implications of firms’ CSI profile. We argue that different domains of CSI, such as environmental episodes and corporate government episodes, only impact the concerned and relevant crucial types of stakeholders and the impact itself is also different. To the best of our knowledge, our study is the first to empirically investigate the shareholder value effect of CSI by utilizing the framework of stakeholder resource-based view (SRBV) and the stakeholder salience (see a comparison of closely related studies in Table 1). The detailed hypotheses development processes are discussed below.

2.1. Value relevance of CSI for residual and fixed claimants

The resource-based view (RBV) focuses on firms’ ability to profit from having resources and social networks that create sustained competitive advantages (Barney, 1986, 1991; Barney, 2001; Barney et al., 2011; Heifetz and Peteraf, 2003; McWilliams and Siegel, 2001, 2011; Rumelt, 1984; Wernerfelt, 1984). The literature has recognized that RBV explains how CSR can generate sustained competitive advantages for firms (e.g. McWilliams and Siegel, 2001; Orlitzky et al., 2011; Siegel and Vitaliano, 2007; Zyglidopoulos et al., 2012). Considering the importance of stakeholders in firms’ ability to obtain sustainable and cooperative advantage (Freeman et al., 2020), the SRBV is a timely extension to the RBV as it recognizes that “the generation of firm profits requires that stakeholders, besides shareholders, hold residual claims on the firms’ profits” (Barney, 2018, p.3306). Based on the SRBV and the stakeholder theory, we consider CSI as a firm’s wrongdoing that destroys its competitive advantage since CSI adversely affects the
## Table 1
Related empirical studies on CSI and corporate financial performance.

<table>
<thead>
<tr>
<th>Research objective</th>
<th>Theoretical framework for CSI</th>
<th>Sample period (Region)</th>
<th>Model/method</th>
<th>Measures of CSI</th>
<th>Summary of main results</th>
<th>Sun &amp; Ding (2020)</th>
<th>Zaman et al. (2020)</th>
<th>Hawn (2021)</th>
<th>Harjoto et al. (2021)</th>
<th>This study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focusing on CSI</td>
<td>Instrumental complexity theory</td>
<td>222 firms f between 1993 and 2003 (US)</td>
<td>GLS regression analyses</td>
<td>KLD database</td>
<td>Firms can act socially responsible and socially irresponsible at the same time, and CSI is caused by increased complexity of international diversification,</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Examining CSI across different domains</td>
<td>Instrumental Stakeholder theory</td>
<td>562 firms between 2000 and 2010 (US)</td>
<td>OLS regressions and VAR</td>
<td>KLD database</td>
<td>CSI provides a longer enduring effect than CSR and firms engaging little CSI and CSI perform better than firms engaging highly of both.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Examining CSI characteristics</td>
<td>Instrumental stakeholder theory</td>
<td>3041 firms between 1991 and 2009 (US)</td>
<td>Linear mixed with Gaussian copulas</td>
<td>KLD database</td>
<td>CSR is financially devalued when CSI occurs. CSI moderates the positive relation between other domain CSR and firm value.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Examining fixed versus residual claimants</td>
<td>Instrumental Stakeholder theory, agenda setting theory</td>
<td>539 firms between 2008 and 2013 (38 countries)</td>
<td>RepRisk database</td>
<td>Firms receiving higher CSI media coverage leads to higher financial risk.</td>
<td>8608 firm-year between 2009 and 2013 (16 countries)</td>
<td></td>
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<tr>
<td>Examining shareholder return</td>
<td>Institutional theory</td>
<td></td>
<td></td>
<td></td>
<td>CSIs in LMEs is higher than CMEs and CSI adversely affects firm performance in LMEs but not CME. Corporations mirror their institutional environment.</td>
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</table>
maintenance of relationships between the firm and its key stakeholders who provide valuable resources to the firm.

The SRBV indicates that different stakeholders have different levels or degrees of bargaining power over economic claims of a firm’s profits and these stakeholders can be categorized into two groups: fixed claimants and residual claimants. Barney (2018) indicates that the resource-based theory of profit generation must implicitly adopt a stakeholder perspective. Key stakeholders who control resources that create the most value in a bundle of co-specialized resources hold greater bargaining power over the firms’ economic claims and therefore hold a residual claim instead of a fixed claim. This classification of stakeholders based on the bargaining power of firms’ economic claims allows us to construct a novel stakeholder classification into fixed and residual claimants that is different from the traditional classification of fixed and residual claimants of firms’ economic profits.

In examining the degree of value destruction from CSI, we argue that CSI which offended the stakeholder group(s) with higher bargaining power tends to have a more damaging impact on shareholder returns since those with higher bargaining power “can use their bargaining power to become residual claimants on the firm’s profits they help generate” (Barney, 2018, p. 3306). Hinging on this definition of the residual claimants’ bargaining power, we can go beyond the standard definition of the shareholder supremacy (which recognizes only the shareholder as the residual claimant group) and re-classify those stakeholders if they can use their bargaining power to become residual claimants.

Commencing on Barney’s (2018) identification of the key stakeholder groups and with the consideration of potentially overlapping boundaries between fixed and residual claimants’ stakeholders, we examine four key stakeholder groups (domains): shareholders (corporate governance), consumers (products), environment and employees. First, we identify the shareholders who provide the necessary capital to the firm. Corporate governance scandals, such as corruption, bribery, tax evasion, fraud and misleading communication will send negative signals to shareholders and other stakeholders. We argue that shareholders have the most profoundly impactful reactions to corporate governance scandals among all stakeholders since they will most likely either withdraw their investments or demand higher premiums (returns) to compensate for higher risk. As A-shares in Mainland China are mainly available for local investors and only Qualified Foreign Institutional Investors (QFII) have limited access to invest in A-shares, we argue that this unique market structure allows local shareholders to hold a relatively high bargaining power over the firms, and therefore can use their bargaining power to become residual claimants on the firm’s profits. We also argue that shareholders have the highest interest in the well-being of the firm because their investment returns depend on the well-being of the firm.

Second, due to the abundant manufactured products with competitive prices in China, consumers hold relatively high economic bargaining power which makes it harder for Chinese companies to replace (substitute) their consumers once these consumers discover that the products have become unsafe or carry a great deal of risk (Clarke and Boersma, 2017; Jiang et al., 2009). The monopoly markets where suppliers rely heavily on their few large corporate customers (e.g., Apple, Amazon, Alibaba, etc.) make the consumers hold a relatively high economic bargaining power over the firms, and they can use their bargaining power to become residual claimants on the firm profits they helped generate. These large corporate customers also have a high interest in the wellbeing of their own firms since their own reputations also highly depend on the well-being of these suppliers. Non-corporate customers also have a high interest in the longevity of the firm since their ability to continue to consume the products depends on the well-being of the firm. Therefore, consumers are most likely to hold a relatively high level of residual claims.

Third, the environment cannot be assigned to one specific stakeholder group, and therefore it represents a variety of stakeholder groups (community, natural resources, non-governmental organizations or NGOs, etc.). Research studies have also shown that this group of stakeholders holds less bargaining power due to a lack of uniformity for environmental regulations and community protections by local governments in China, such that it provides greater bargaining power towards the firm (e.g., Yang et al., 2018). More importantly, environment has less interest in the well-being of the firm since the environment may prefer the firm to cease its operations if it pollutes the environment. Thus, we consider this group of stakeholders (environment) to hold significantly lower residual claims over the firms’ economic profits than the shareholders and the consumers, and we consider the environment to lean towards the fixed claimants group.

Finally, there is an abundant supply of labor (employees) in China. As the redundant workers caused by the privatisation reform of state-owned enterprises in the mid-1990s and the millions of migrant workers coming from the countryside, China hasn’t had issues with the supply of cheap labor. The absence of an incentive pay for these lower-level workers makes the employee group have less interest in the well-being of the firm due to high voluntary employee turnover since their main objective is to search for a better job (Cheng et al., 2019). Unlike shareholders, consumers, and the environment, social norms and shared values toward employees in China also make this group of stakeholders hold the least bargaining power over the firm due to the abundant supply of labor and a relatively weak labor union (Fu, 2017; Périsse, 2017). Cheng et al. (2019, p. 84) indicate that labor unions in China “lack independence and do not play a critical role in wage bargaining”. Therefore, employees are less likely to be able to use their bargaining power to become residual claimants. Thus, based on the lowest bargaining power of the employees over the firms, we consider the employees also to lean towards fixed claimants.

Consistent with the SRBV argument that residual claimants hold more bargaining power and have a higher interest for the well-being of the firms, and therefore have greater economic claims over firms’ profits and value creation than fixed claimants, we hypothesize based on the above reasoning as follows:

**Hypothesis 1:** CSI that affects stakeholders with high bargaining power and interest in the firms’ well-being has greater adverse effects on shareholder returns.

### 2.2. Value relevance of CSI based on stakeholder salience

Mitchell et al. (1997) define stakeholder salience as the degree to which the firm prioritizes competing stakeholder claims. They explain that the stakeholder claims could be in a form of economic claims but also a moral or presumed claim. More specifically, Mitchell et al. (1997) urge that in examining the broad view of stakeholder salience, we need to identify the stakeholders with the moral (presumed) claim because stakeholders with this claim can also influence the firms’ license to operate, survival, and competitive advantage. Mitchell et al. (1997, p. 854) argue that in determining “who and what really counts,” the firm must pay attention to all three of these categories: “the stakeholders’ power to influence the firm, the legitimacy of the stakeholders’ relationship with the firm and the urgency of the stakeholders’ claim”.

When CSI offends stakeholders who hold a high legitimacy, they can take away the firms’ legitimacy (legal rights, moral rights, moral interests, etc.) to operate. Stakeholders with high urgency could bring serious adverse media attention to the firm. When CSI offends stakeholders who hold a high power, they could potentially use their power to adversely influence resources (Pfeffer and Salancik, 1978) and increase transaction costs (Williamson, 1979) to bring about the firms’ outcomes that they desire. Thus, CSI that adversely affects these three stakeholder salience categories is expected to have adverse effects on firms’ shareholder returns.

We apply Mitchell et al.’s (1997) typology of the stakeholder salience to explain the value relevance of CSI through operationalizing the stakeholders’ legitimacy, urgency and power in China. First, we argue
that in the context of CSI, the legitimacy of a claim on a firm depends on the firm’s ‘legal title, legal right, moral right, at-risk status, or moral interest’ (Agle et al., 1999, p.508; Mitchell et al., 1997, p.862). Based on social norms, the Chinese government holds relatively high legal authority over corporations. The government represents the stakeholder group who holds a high legitimacy claim. We identify the government concern as our measure of the stakeholder legitimacy claim. The Chinese government holds the legitimacy power to take away the firm’s legal right to operate. Therefore, when the firm’s CSI is identified by the government, the firm faces the risk of losing its legal right to operate. Hence, CSI published by the Chinese government daily publications brings an adverse impact on the firm’s stock prices.

Second, the urgency of the stakeholder salience calls for immediate (pressing) attention by the firm. In the context of CSI, urgency represents the time-sensitive issues that require immediate (timely) attention by the firm. While extant literature has argued that the urgency is “irksome but not dangerous” (Mitchell et al., 1997, p.875), recent studies have shown that the stakeholder urgency from the negative news media of CSI undermines the firms’ social legitimacy (as opposed to legal legitimacy) to operate (Harjoto et al., 2021; Hawn, 2021; Köbel et al., 2017). Increasing public negative sentiments on the news media coverage of CSI over time can become increasingly harsh if the firm does not address the issue immediately. The stakeholders’ dissatisfaction further fuels the news media to strengthen their interpretive frame which influences the stakeholders’ attributions to increase the blame on the firm for its irresponsible actions (Lange and Washburn, 2012) in such that the firms can lose their social license to operate as indicated in the Iron Law of corporate social responsibility (Davis, 1967). The media coverage elevates the urgency into the social legitimacy to operate and intensifies the value relevance of CSI (Köbel et al., 2017) such that the urgency is no longer just “mosquitoes buzzing the managers’ ears”.

Third, the power represents the stakeholder power to influence the firm’s behavior. In the media agenda setting literature, the firm’s ability to manage stakeholder opinions is one of the critical elements in managing social complexity. As we are living in the digital news media, the spread of negative news from CSI (once it is covered by the prominent news media outside of China) elevates the stakeholder power to influence the firm’s economic profit. When the firm is unable to manage the stakeholder opinions, then the firm’s CSI episode becomes a media feeding frenzy or a news scandal (e.g., the news of melamine contamination in milk products was eventually covered by multiple prominent news media) as a manifestation of the media agenda setting effect (Tang and Tang, 2016). During a media feeding frenzy, stakeholders are gaining more power to influence the firm’s behavior because prominent news media with a powerful reach and wide audiences (e.g., the New York Times, the Guardian, the Economist, etc.) allows stakeholders to instantly gain support from stakeholder groups across different regions and countries around the globe. We hereby argue that higher source reach (media prominence) allows the stakeholders to gain power due to increasing public support from other stakeholder groups to demand the firm to change its irresponsible behavior.

Based on Mitchell et al.’s (1997) typology of stakeholder salience (i.e., legitimacy, urgency and power), we hypothesize that CSI has a stronger value relevance to the firm’s stakeholders when CSI action violates the stakeholders with high legitimacy, urgency and power in China. We form our second hypothesis as following:

**H2a:** CSI that affects stakeholders with high legitimacy has stronger adverse effects on shareholder returns.

**H2b:** CSI that affects stakeholders with high urgency has stronger adverse effects on shareholder returns.

**H2c:** CSI that affects stakeholders with high power has stronger adverse effects on shareholder returns.

3. Data and sample selection

To measure CSI, we obtained a one-time only access to RepRisk’s firm-level data which differs from the RepRisk’s Index data since it provides curated detailed data based on daily scanning (radar) of negative media coverage on environmental, social and governance (ESG) risks. RepRisk records media coverage in 20 different languages for more than 80,000 listed and unlisted companies, and it is managed, checked, and verified by highly-trained analyst team members – the scope of coverage is hardly curatable by a single researcher. The RepRisk database has been used by a number of researchers who have found the dataset to be robust and rigorously constructed (Breitinger and Bonardi, 2017; Köbel et al., 2017).

The RepRisk news data is derived from the news information provided by independent third parties, including international and local media, government sites, NGOs, newsletters, social media and blogs. Once companies are exposed to negative and controversial news, RepRisk records the report date, company information, news source name, issue type, and rates the severity and the source reach (i.e. prominence) of the news source. Severity indicates the strength and type of episode or accusation, and its extent and consequences for the environment or people. RepRisk uses a score of 1, 2, and 3 to represent low, medium and high severity, respectively. The source reach rating is a measure of the influence of the source. The higher the rating, the more influential the source is considered to be with the public and decision-makers. RepRisk uses a score of 1, 2, and 3 to indicate that the news is reported by local media (or national NGO), national-level media (or major NGO), and international source (or top source), respectively. If multiple sources report the same news on the same day, only the source with the highest reach is recorded.

In addition to the severity and source reach of the news to represent the urgency and power of the stakeholder salience, we also manually collect the data on government concerns from the Chinese government official website to represent the legitimacy of the stakeholder salience. The collected data contains Chinese government daily publications, ranging from June 2005 to July 2012 and comprises a total of 56,503 articles in Chinese. We translate all the RepRisk identified categories of issues (listed in Table 2) to Chinese and use content analysis method to investigate how the Chinese government announcements related to CSI issues. We count each Chinese translated terms among all the collected announcement data by using “1” to represent if the Chinese translated terms existed in the announcements, and using “0” to represent the opposite, then we rank the issues according to the number of counts (see Appendix A in Harjoto, Hoepner and Li (2021)). If the number of counts is higher, it means that a particular issue is of greater concern to the Chinese government. The government concern data was chosen one year ahead of the end of sample period as we can measure how much power government announcements have in the current month in relation to the previous twelve months. We restructure the government concern index data based on the following equation. This equation is a measurement of the annualized government concern of current month compared to the previous year.

$$
\text{government concern index} = \frac{\text{government concern index of current month} - \text{government concern index of previous year}}{\text{government concern index of previous year}}
$$
The previous 12 months. The unit-root tests indicate that equation (1) is stationary.

$$GC = \frac{1}{\sum_{i=1}^{12} x_i}$$  \hspace{1cm} (1)

When we accessed RepRisk, the news data was categorized into 27 CSI episodes. We select episodes that can be further categorized into several domains (stakeholder groups) such as environment, shareholders (corporate governance), employee relations and consumers (products).\(^5\) Table 2 presents the impact of CSI domains on key resource categories that are consistent with Barney’s (2018) stakeholder resource-based view.

We use all Chinese A-shares companies with news records in the RepRisk database from June 2006 to July 2012. A-shares are shares denominated in Chinese Yuan and listed on either the Shenzhen Stock Exchange or Shanghai Stock Exchange (Carpenter and Whitelaw, 2017). To avoid survival bias, we include firms that ceased to exist before July 2012. We remove American Depository Receipts (ADRs) and shares listed outside of Mainland China and Hong Kong from the sample. Our final sample consists of 149 A-shares Chinese companies that experienced 517 CSI events from June 2006 to July 2012. Table 3 provides the distribution for our sample. Panel A of Table 3 shows the number of news and CSI episodes considered in each year. Because one event can violate multiple CSI issues, we examine 517 events involving one or more Chinese firms and 816 CSI episodes. Table 3 shows that fewer news items were available in 2006. We begin the sample period in June 2006 because that is the earliest year when news data is available in the RepRisk dataset. Panel B of Table 3 reports the sample distribution of 149 Chinese companies across various sectors. The industry classification based on the Global Industry Classification Standard (GICS) shows that the materials and industrials sectors have the highest number of

Table 2
CSI domains.

<table>
<thead>
<tr>
<th>Domains</th>
<th>Issues</th>
<th>Impact on primary stakeholders</th>
<th>Impact on resource categories</th>
<th>Studies from the resource perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate governance</td>
<td>Corruptio, bribery, extortion, money laundering, executive compensation, misleading communication, corporate frauds, tax evasions, Anti-competitive practices</td>
<td>Shareholders (residual claimants)</td>
<td>Financial capital resources inputs (e.g. investors’ interests and engagements)</td>
<td>Muttakin et al. (2018); Cuervo-Cazurra (2016)</td>
</tr>
<tr>
<td>Product</td>
<td>Controversial products and services</td>
<td>Consumers (residual claimants)</td>
<td>Revenue generation, purchasing decision (e.g. customers’ wellbeing)</td>
<td>Brown and Dacin (1997); Wang and Sengupta (2016)</td>
</tr>
<tr>
<td>Environment</td>
<td>Global pollution and climate change</td>
<td>Local community and/or environmental NGOs (fixed claimants)</td>
<td>Physical capital and natural resources inputs (e.g. firms’ plant, equipment and environment)</td>
<td>Ramanathan (2018); Brulhart et al. (2017)</td>
</tr>
<tr>
<td>Employee relations</td>
<td>Forced labor</td>
<td>Employees (fixed claimants)</td>
<td>Human capital resources inputs (e.g. employees’ training, skills and relationships)</td>
<td>Riley et al. (2017); Wang et al. (2009)</td>
</tr>
</tbody>
</table>

Note: This table presents the RepRisk CSI domains covered in this study. The first column shows the categories of CSI domains applied in the portfolio. The second column details the specific issues in the specific category. Drawing upon insights from resource-based theory, the third column presents the impact of CSI on key resource categories as developed in Barney (1991, 2018). All principles of the UN Global Compact are addressed.

Table 3
Sample distribution.

Panel A: Sample distribution of news and CSI episodes across years

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of news</th>
<th>Number of episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>2007</td>
<td>52</td>
<td>70</td>
</tr>
<tr>
<td>2008</td>
<td>85</td>
<td>128</td>
</tr>
<tr>
<td>2009</td>
<td>72</td>
<td>127</td>
</tr>
<tr>
<td>2010</td>
<td>88</td>
<td>155</td>
</tr>
<tr>
<td>2011</td>
<td>128</td>
<td>196</td>
</tr>
<tr>
<td>2012</td>
<td>84</td>
<td>128</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>816</td>
</tr>
</tbody>
</table>

Panel B: Sample Distribution of companies with CSI episodes across sectors

<table>
<thead>
<tr>
<th>Industry code</th>
<th>Industry categories</th>
<th>Company count</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Energy</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>Materials</td>
<td>53</td>
</tr>
<tr>
<td>20</td>
<td>Industrials</td>
<td>25</td>
</tr>
<tr>
<td>25</td>
<td>Consumer discretionary</td>
<td>9</td>
</tr>
<tr>
<td>30</td>
<td>Consumer staples</td>
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</tr>
<tr>
<td>35</td>
<td>Health care</td>
<td>10</td>
</tr>
<tr>
<td>40</td>
<td>Financials</td>
<td>14</td>
</tr>
<tr>
<td>45</td>
<td>Information technology</td>
<td>5</td>
</tr>
<tr>
<td>55</td>
<td>Utilities</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>149</td>
</tr>
</tbody>
</table>

Note: Panel A reports the number of CSI news and relevant number of CSI episodes considered in each year of the sample period. Please note that one single news may involve several companies and hence several episodes. There are 517 news and 816 CSI episodes in the final sample. Panel B shows the sample distribution of 149 Chinese companies across the Global Industry Classification Standard (GICS) sectors.

\(^5\) The types of CSI issues were selected and defined in accordance with the key international standards, such as the World Bank Group Environmental, Health, and Safety Guidelines, the IFC Performance Standards, the Equator Principles, the OECD Guidelines for Multinational Enterprises, the ILO Conventions, and more. A full list of international standards used in the RepRisk database can be found at: www.reprisk.com/repriskscope/.
sample firms while energy and information technology sectors have the least number of firms. The sample distribution of companies with CSI episodes across sectors shows a reasonably well spread distribution.

4. Methodology

4.1. Calendar time portfolio approach

As the focus of this paper is specifically on the impact of CSI episodes on shareholder value, we use the calendar time portfolio approach originally developed by Jaffe (1974) and Mandelker (1974), Lyon et al. (1999) identify two general event study approaches for testing long-run abnormal stock returns: the traditional ‘per event’ study framework with buy-and-hold abnormal returns for each event and the calendar-time portfolio approach that updates portfolios as new events arrive. The traditional per-event framework struggles with overlapping news and tends to experience a poorer fit of relevant asset pricing models (Fama, 1998; Mitchell and Stafford, 2000). Therefore, we use the standard calendar-time portfolio approach following Jegadeesh and Titman (1993) and Fama (1998) to detect long-run abnormal stock returns.

The approach assumes investors rebalance the portfolio on a monthly basis. Investors include firms in the portfolio if the firm experienced events in the previous month, and calculate portfolio monthly returns based on equal-weighted or value-weighted method. Then, investors employ the portfolio returns as the dependent variable in the asset pricing models to obtain alpha, which is the intercept of the model to indicate abnormal returns. This method has been widely used in extant studies, such as Fama (1998), Lyon et al. (1999), Chan (2003), Fang and Peres (2009), and Hillert et al. (2014). This process is also consistent with CSR-related studies using the calendar time portfolio approach (e.g., Deng et al., 2013; Eccles et al., 2014; Edmans, 2011; Kempf and Osthoff, 2007). The advantage of the calendar-time portfolio approach is that it can solve the potential limitations with the event-time portfolio approach such as overlapping returns (Mitchell and Stafford, 2000). The ability to integrate events that can occur on any day of the year seamlessly into calendar time is also the advantage of our approach over the standard multivariate panel regressions approach commonly applied to annual data.

Following Fama (1998), we form monthly value-weighted portfolios of companies for a 74-month period from June 2006 to July 2012. In order to develop a test for the severity and the source reach of news characteristics in the portfolio construction, we track post-news monthly returns for a specific time period, which is dependent on the severity and source reach of the episodes. We apply variable holding periods of 6, 12, 18, and 24 months to our portfolios for each CSI dimension, for companies with aggregated severity score of four levels: 1, 2, 3, and higher than 3, respectively. A higher severity level of CSI episode corresponds to a longer holding period in our portfolio. For example, a CSI episode recorded with a severity score of 1 in a given month will be included in the CSI portfolio and held for 6 months. If no further episodes arise during this 6-month holding period, the company’s stock will be excluded from the portfolio once the period is completed. If a new CSI episode arises during the holding period, the holding period will be reset and a new length of holding period will be determined by the aggregated severity score. The maximum 24 months holding period is chosen based on Chan (2003) who shows that long-run returns exhibit a reversal around the two-year mark. Compared to short-term event studies with short event windows, we consider that 24 months holding period provides a long-term view on shareholder value. Since the news is not reported at the same time across all the companies, those included in the portfolios are not constant over the sample period. Consequently, each month, the portfolios are rebalanced. Because government announcements are less likely to be firm-specific, we add the government dummy variable into the regression equation (2) below to consider the effect of higher-level government concern.

In order to have a comparable benchmark for shareholder value performance of our sample companies, we also create a non-CSI portfolio for each CSI portfolio including all the stocks in the sample that experienced a CSI episode in the respective domain but are not in the respective CSI portfolio at the specific point in time. Simply speaking, each company is compared with itself during periods when there is news coverage and periods when there is no news coverage. Using this method, we can measure the financial returns for companies exposed to harmful CSI episodes (CSI portfolios) and compare them to periods when the same companies are not exposed to harmful CSI episodes (Non-CSI portfolios).

4.2. Regression model of the shareholder value effects

The monthly portfolio excess returns are calculated and regressed using Fama and French (1993) three-factor and Carhart (1997) four-factor models. Each month, we calculate the portfolio returns based on the captured monthly returns across all securities in the sample portfolio. Since many Chinese companies are heavy exporters into global markets, national market-based models may not fully capture the market exposure beyond the domestic level. Therefore, we extend the Carhart four-factor model (Carhart extended model) to account for the market exposure at regional and global levels (Hoepner et al., 2011). The extended Carhart regression equation (2) is specified as:

\[
\begin{align*}
\text{r}_{p,t} &= \alpha_p + \beta_{nat,p} \text{r}_{nat,t} + \beta_{glo,p} \text{r}_{glo,t} + \gamma_{nat,p} \text{SMB}_{nat,t} + \delta_{nat,p} \text{HML}_{nat,t} + \\
&\quad + \lambda_{nat,p} \text{MOM}_{nat,t} + \epsilon_{p,t}
\end{align*}
\]

where \(r_{p,t}\) represents the excess return of the portfolio \(p\) and the broad market over the risk-free asset return. \(\alpha_p\) denotes Jensen (1968) alpha. \(\beta_{nat,p}\), \(\beta_{glo,p}\), \(\gamma_{nat,p}\), and \(\delta_{nat,p}\) are the portfolio’s systematic exposure to the broad market portfolio at a national, regional, and global level. \(\text{r}_{nat,t}\), \(\text{r}_{glo,t}\), \(\text{SMB}_{nat,t}\), \(\text{HML}_{nat,t}\), and the momentum factor \(\text{MOM}_{nat,t}\) are the same as the Carhart (1997) four-factor model. \(\epsilon_{p,t}\) represents the error term.

To test the effect of government announcements and regulations on the impact of CSI issues on financial performance, we add the government factor into the following regression equation (3):

\[
\begin{align*}
\text{r}_{p,t} &= \alpha_p + \beta_{nat,p} \text{r}_{nat,t} + \beta_{glo,p} \text{r}_{glo,t} + \gamma_{nat,p} \text{SMB}_{nat,t} + \delta_{nat,p} \text{HML}_{nat,t} + \\
&\quad + \lambda_{nat,p} \text{MOM}_{nat,t} + \theta_{nat} \text{GOV}_{nat,t} + \epsilon_{p,t}
\end{align*}
\]

where \(\text{GOV}_{nat,t}\) represents a dummy for government concern based on the issues as listed in Appendix A. For each considered CSI domain, we use “1” to represent if the government concerns of current month are higher than the average of previous 12 months on a specific issue, and use “0” to represent the opposite.

All factors are value-weighted and one month lagged. The excess market return is the market return minus the risk-free rate obtained from Datastream. We use Chinese central bank three-month bills as the national risk-free rate. We use Japan three-month interbank and three-month US Treasury Bills as proxies for the regional and global risk-free rate, respectively. For the national-level market benchmark, we construct a value-weighted market benchmark that exactly matches our...
sample firms at each given point in time. This benchmark has the advantage that the performance of CSI and non-CSI portfolios have the same biases (if any) and are clean antidotes of each other. For the A-shares portfolios, no matter in which issue category, the market return is derived from the value-weighted monthly returns of all the A-shares in the sample. Compared to the characteristic-adjusted benchmark used by Daniel et al. (1997), this benchmark can conservatively control for any company- or industry-specific risks that are not captured in the model. For the regional-level market benchmark, we construct a value-weighted benchmark based on index tracked firms from 12 Asian countries including Japan, Hong Kong, Singapore, China, Indonesia, India, Malaysia, Pakistan, Philippines, Korea (South), Taiwan and Thailand. For the international-level market benchmark, we construct a value-weighted benchmark based on index tracked firms from 64 countries from the MSCI All Country World Index. The list of countries is available by request.

5. Empirical results

5.1. Value relevance of CSI for residual and fixed claimants

Table 4 shows the results of the impact of CSI episodes on risk adjusted shareholder returns by using three different asset pricing models: Fama and French (1993) three-factor model, Carhart (1997) four-factor model and Carhart extended model (Hoepner et al., 2011). Using calendar time portfolio approach, Panel A displays the results of the CSI portfolios constructed by news coverage periods. We evaluate holding periods of 6, 12, 18, and 24 months after the CSI news was recorded by RepRisk.

Based on the Carhart extended model, we find that the portfolios of firms that violated the relationship with the shareholders (corporate governance and customers) have significantly negative abnormal returns (alpha) of –1.6% (SE = 0.005, p = 0.02) and –1.8% (SE = 0.007, p = 0.01), respectively. These findings indicate that both shareholders and consumers are considered as the stakeholder groups who hold residual claims and hold relatively high bargaining power over the firms. We also find that the portfolio of firms that violated the environment has a negative abnormal return (α = -0.5%, SE = 0.003, p = .075), which is marginally significant and the magnitude of this alpha is less than one-third of the alphas for the shareholders and consumers portfolios. This indicates that the environment represents the stakeholder group with less residual claims relative to the shareholders and consumers. Finally, we find that a portfolio of firms with CSI episodes that offend the employees does not generate a significantly lower abnormal return (α = -0.6%, SE = 0.005, p = .232). Therefore, this group of stakeholders (employees) hold a fixed claim.

Panel A also shows that the regional market exposures statistically significantly explain the CSI portfolios excess returns. This indicates that controlling for regional market exposures improves our regression estimations. Previous studies that examine long-run abnormal return models generally show high adjusted R-squared statistics of 0.8 or higher (e.g., Chan, 2003; Hoepner et al., 2011; Kempf & Osthoff, 2007). We find that the extended Carhart (1997) model has similar or higher adjusted R-squared statistics compared to other models, which suggest that extended market exposure does a better job in explaining excess returns. Thus, from here on, we only present the results from the extended Carhart model.

Panel B presents the results of nonCSI portfolios for no-news coverage periods. All of the abnormal returns in the nonCSI portfolios are insignificant. This indicates that the market does not punish firms that are not found to have CSI episodes.

Our overall findings support our first hypothesis (H1) that CSI that destroys the firm’s relationship with the stakeholder groups that hold high bargaining power, thus considered as the residual claimants (consumers and shareholders), brought greater adverse impact on shareholder returns than CSI that destroys the relationships with stakeholders who hold fixed claims (environmental and employees). The empirical evidence supports Barney’s (2018) stakeholder resource-based view (SRBV) that the strength of the claims of a stakeholder group depends on whether the stakeholder groups’ claims are residual or fixed. First, because of the oligopoly (monopsony) market structure for Chinese companies (Clarke and Boersma, 2017; Jiang et al., 2009), CSI that offended the consumer (product-related CSI episodes) bring the most value destruction to long-term shareholder return. Second, the shareholders (investors) of the A-shares firms are not easily substituted with foreign investors and therefore they also hold a relatively higher bargaining power over the firms. Third, since the environment is associated with various stakeholder groups (community, natural resource, NGOs, local governments, etc.), environment as a stakeholder group resembles the fixed claimants. Finally, since companies hold significantly higher bargaining power over their employees, these stakeholders are considered as fixed claimants for which CSI episodes bring no impact on the shareholder returns.

5.2. Value relevance of CSI based on the stakeholder salience

We further examine the impact of CSI on shareholders’ returns across three different typologies based on the stakeholder salience (Mitchell et al., 1997). Table 5 displays the risk-adjusted abnormal returns of the core results from Table 4 as a comparison and the results when CSI offended the stakeholder legitimacy (high government concerns), urgency (high severity) and power (high source reach). The second column of Table 5 shows that a portfolio of firms with CSI that offended the government (high legitimacy) produces significantly –2.3% (SE = 0.009, p = .014) and significantly –2.6% (SE = 0.013, p = .046) monthly abnormal returns for the shareholders and consumers group, respectively. In contrast, portfolios of stocks for firms with CSI that violated the environment and employees do not have significantly lower abnormal returns. The magnitudes of alphas for shareholders and consumers with a high legitimate concern is stronger (i.e., more negative) than the core results in Table 4. Thus, we find evidence to support H2a, which indicates CSI episodes that offended the concerns of stakeholder with higher legitimacy more adversely affect returns, especially for the shareholders and customers.

The third column of Table 5 shows that a portfolio of stocks for firms with CSI that offended the stakeholder with higher urgency (high severity) produces significantly –1.6% (SE = 0.005, p = .004) and significantly –1.9% (SE = 0.007, p = .010) monthly abnormal returns for the shareholders and consumers group, respectively. We find that when the employees are experiencing significantly –1.6% (SE = 0.006, p = .014) monthly abnormal returns while CSI that offended the environment is only experiencing marginally significant –0.5% (SE = 0.003, p = .069) abnormal negative returns. Based on the magnitudes of the alphas, we find that CSI episodes bring significantly more negative abnormal returns when CSI offended more urgent employee-related issues compared to the core results in the first column. Thus, we find evidence to support H2b which CSI violated the relationship with high stakeholder urgency adversely affects the shareholder returns, especially for the employees.

The fourth column of Table 5 shows similar results that a portfolio of firms offended the stakeholder group who holds a high power (high source reach) produces significantly –1.6% (SE = 0.005, p = .003) and significantly –2.3% (SE = 0.008, p = .006) monthly abnormal returns for the shareholders and consumers group, respectively. CSI that offended the environment experiences significantly –0.5% (SE = 0.003, p = .078) monthly abnormal returns but again the statistical significance and the economic magnitude of alpha is lower than shareholders and consumers groups. In contrast, the portfolio of firms with CSI that violated the employees do not have significantly lower abnormal returns. Based on the alphas, we find that CSI that violated powerful customer claims brings significantly more severe negative abnormal returns compared to the core results in the first column. Thus, we find
Table 4
The domains of CSI episodes and shareholder value.

<table>
<thead>
<tr>
<th>Panel A: CSI portfolios</th>
<th>Intercept</th>
<th>Market exposures</th>
<th>SMB</th>
<th>HML</th>
<th>MOM</th>
<th>Adj. R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual Claim Stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders (Corp. Gov)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FF 3-Factor</td>
<td>–0.017***</td>
<td>0.804***</td>
<td>0.177**</td>
<td>0.319***</td>
<td>0.856</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.064)</td>
<td>(0.084)</td>
<td>(0.104)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carhart 4-Factor</td>
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<td>0.802***</td>
<td>0.162**</td>
<td>0.360***</td>
<td>0.857</td>
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</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.064)</td>
<td>(0.075)</td>
<td>(0.112)</td>
<td>(0.071)</td>
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</tr>
<tr>
<td>Carhart extended</td>
<td>–0.016***</td>
<td>0.803***</td>
<td>0.003</td>
<td>0.068</td>
<td>0.166*</td>
<td>0.352***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.064)</td>
<td>(0.059)</td>
<td>(0.159)</td>
<td>(0.084)</td>
<td>(0.109)</td>
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<td></td>
<td></td>
</tr>
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<td>0.661***</td>
<td>0.796***</td>
<td>0.137</td>
<td>0.689</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.083)</td>
<td>(0.144)</td>
<td>(0.226)</td>
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</tr>
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<td>(0.007)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FF 3-Factor</td>
<td>–0.005**</td>
<td>0.969***</td>
<td>0.033</td>
<td>0.527***</td>
<td>0.900</td>
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<tr>
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<td>(0.003)</td>
<td>(0.039)</td>
<td>(0.068)</td>
<td>(0.176)</td>
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</tr>
<tr>
<td>Carhart 4-Factor</td>
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<td>0.966***</td>
<td>0.022</td>
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<td>(0.064)</td>
<td>(0.187)</td>
<td>(0.063)</td>
<td></td>
</tr>
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<td>0.003</td>
<td>0.547***</td>
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<td>(0.042)</td>
<td>(0.065)</td>
<td>(0.188)</td>
<td>(0.063)</td>
<td>(0.192)</td>
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</tr>
<tr>
<td>FF 3-Factor</td>
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<td>0.926***</td>
<td>–0.057</td>
<td>0.651***</td>
<td>0.773</td>
<td></td>
</tr>
<tr>
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<td>(0.060)</td>
<td>(0.109)</td>
<td>(0.161)</td>
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</tr>
<tr>
<td>Carhart 4-Factor</td>
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<td>–0.057</td>
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<td>(0.106)</td>
<td>(0.175)</td>
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<td>(0.061)</td>
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<td>(0.211)</td>
<td>(0.107)</td>
<td>(0.174)</td>
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<table>
<thead>
<tr>
<th>Panel B: Non-CSI portfolios</th>
<th>Intercept</th>
<th>Market exposures</th>
<th>SMB</th>
<th>HML</th>
<th>MOM</th>
<th>Adj. R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residual claim stakeholders</td>
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<tr>
<td>Shareholders (Corp. Gov)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carhart extended</td>
<td>0.003</td>
<td>1.011***</td>
<td>–0.024</td>
<td>–0.226</td>
<td>0.038</td>
<td>0.033</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.036)</td>
<td>(0.053)</td>
<td>(0.197)</td>
<td>(0.048)</td>
<td>(0.042)</td>
</tr>
<tr>
<td>Customers (Product)</td>
<td>–0.001</td>
<td>1.010***</td>
<td>–0.044</td>
<td>0.237***</td>
<td>–0.027</td>
<td>–0.112</td>
</tr>
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<td>(0.020)</td>
<td>(0.041)</td>
<td>(0.088)</td>
<td>(0.042)</td>
<td>(0.082)</td>
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<td>Fixed claim stakeholders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carhart extended</td>
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<td>1.114***</td>
<td>0.135**</td>
<td>–0.188</td>
<td>–0.012</td>
<td>–0.240***</td>
</tr>
<tr>
<td></td>
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<td>(0.037)</td>
<td>(0.058)</td>
<td>(0.131)</td>
<td>(0.086)</td>
<td>(0.073)</td>
</tr>
<tr>
<td>Employees</td>
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<td>1.002***</td>
<td>–0.011</td>
<td>0.182</td>
<td>–0.027</td>
<td>–0.182***</td>
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<td>(0.025)</td>
<td>(0.049)</td>
<td>(0.117)</td>
<td>(0.061)</td>
<td>(0.058)</td>
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</tbody>
</table>

Note: Table 4 presents the risk-adjusted performance of the Chinese A-share companies involved in negative CSI episodes. Details of different CSI episodes are described in Table 2. Panel A shows the results of CSI portfolios including companies with the different domains of CSI episodes on three versions of asset pricing models. Panel B shows the results of non-CSI portfolios on the Carhart extended model only. The non-CSI portfolios including all the stocks in the sample which are at the respective point in time not in the respective CSI portfolio. Each portfolio includes CSI episodes on all severity levels. We hold the portfolios for 6, 12, 18, and 24 months after the CSI news was recorded by RepRisk. Unless specifically noted, all portfolios in this study are value-weighted. The market return is derived from the value-weighted portfolio of all the A-shares in the sample. Column two lists monthly abnormal returns or Jensen alpha (Jensen, 1968). Column three, four and five show market risk exposure on national, regional and global level, respectively. The next three columns present the estimated coefficients of the SMB (small cap), HML (value), and MOM (momentum) investment style benchmark factors. Negative coefficients imply exposure to the respective opposite investment styles, which are large cap, growth, and contrarian, respectively. The last column shows the adjusted R squared statistics. As the sample period is from June 2006 to July 2012, the observed monthly regressions are 73. Standard errors are in parentheses. For the remaining results, coefficient covariance and standard errors are made heteroskedasticity and autocorrelation consistent based on the Newey and West (1987) method. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.
evidence to support H2c which CSI exposed by more powerful media sources adversely affects shareholder returns, especially for the customers.

Overall, we find empirical evidence to support the typology of the stakeholder salience: legitimacy, urgency and power (Mitchell et al., 1997). More importantly, the results indicate that the significant effect of CSI across fixed and residual claimants, defined from Barney (2018), still hold across different stakeholder salience. We also find that the impact of CSI on shareholder and customers returns are more negative for those with high legitimate concerns, significantly more negative for employee issues with highly urgent claims and significantly more negative for customer claims with high power. These findings bring new nuances of value relevance for CSI across stakeholder claims of varying salience.

5.3. Robustness tests

We conduct several robustness tests to check the consistency of our empirical results. First, we use equally-weighted portfolio returns based on the same sample companies as used in the core results. Table 6 shows robust evidence of a significant underperformance of portfolios related to CSI that offended the residual claimant group, i.e., shareholders and consumers relative to CSI that offended the fixed claimant group, i.e., environment and employees.

Second, scholars have recognized the firm’s size effect on long-run abnormal stock returns (e.g., Barber and Lyon, 1997). Large companies normally have more media exposure than small companies (Strike et al., 2006; Walker, Zhang and Ni, 2008). Therefore, larger firms may dominate the returns in the CSI portfolios. Therefore, we divide the sample by using the median market capitalization as the breakpoint and exclude small companies in both the CSI portfolios and the non-CSI portfolios. Table 6 shows that company size portfolios remain similar to the core results presented in Table 4.

Third, Reporters Without Borders’ 2017 World Press Freedom Index ranks China 176th out of 180 countries. As press freedom in China is low, we are concerned that firms favored by the Chinese Communist Party (CCP) or politically connected firms would not have been targeted by negative media campaigns. Based on these concerns, we exclude news from all Chinese media agencies in the portfolio construction process. The “Exclude Chinese Media” portfolios in Table 6 produce similar results to the core results presented in Table 4, except that the environment becomes insignificant, which further confirms that the environment resembles the fixed claimants rather than the residual claimants.

Fourth, we conduct additional results based on the novelty level of the reported news. Novelty rating describes how new and thus salient the reported news. Novelty of Events (2011) finds that firm’s stock returns respond less to stale (i.e. less novel) news. As there are multiple sources of news reported for each event, we further examine if the results will be different if we only keep the first reported (novel) news. The results from the “Novelty of Events” portfolios are consistent with our main results.

Fifth, Lyon, Barber and Tsai (1999) identify two general event study approaches for testing long-run abnormal stock returns: the traditional “per event” study framework with buy-and-hold abnormal returns for each event, and the calendar-time portfolio approach, which updates portfolios as new events arise. We focus on the calendar-time portfolio approach in this paper and also test if using the method of 12 months
The untabulated results are similar to our core results in the portfolios relating to robustness tests.

Table 6
Robustness tests.

<table>
<thead>
<tr>
<th></th>
<th>Core results</th>
<th>Equal weighted</th>
<th>Company size</th>
<th>Exclude Chinese media</th>
<th>Novelty of Events</th>
<th>Buy-and-Hold 12 Months</th>
<th>Consumer Industry</th>
<th>Non-consumer Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: CSI portfolios</strong></td>
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<td>Residual claim stakeholders</td>
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<tr>
<td>Shareholders (corp. gov)</td>
<td>(-0.016^{***})</td>
<td>(-0.010^{**})</td>
<td>(-0.016^{***})</td>
<td>(-0.016^{***})</td>
<td>(-0.014^{***})</td>
<td>(-0.014^{***})</td>
<td>(-0.012^{**})</td>
<td>(-0.016^{***})</td>
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<td>(0.005)</td>
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<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.005)</td>
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<tr>
<td>Customers (product)</td>
<td>(-0.018^{**})</td>
<td>(-0.011^{*})</td>
<td>(-0.014^{**})</td>
<td>(-0.018^{**})</td>
<td>(-0.017^{**})</td>
<td>(-0.022^{***})</td>
<td>(-0.007^{*})</td>
<td>(-0.014^{**})</td>
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<td>Fixed claim stakeholders</td>
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<tr>
<td>Environment</td>
<td>(-0.005^{*})</td>
<td>(-0.007^{**})</td>
<td>(-0.005^{*})</td>
<td>(-0.003^{*})</td>
<td>(-0.005^{*})</td>
<td>(-0.005^{*})</td>
<td>(-0.006^{**})</td>
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<tr>
<td>Employees</td>
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<td>(-0.002)</td>
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<td>(-0.007)</td>
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<td><strong>Panel B: Non-CSI portfolios</strong></td>
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<td>Residual claim stakeholders</td>
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<tr>
<td>Shareholders (corp. gov)</td>
<td>0.003</td>
<td>0.001</td>
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<td>0.000</td>
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<tr>
<td>Customers (product)</td>
<td>(-0.001)</td>
<td>0.001</td>
<td>0.000</td>
<td>(-0.002)</td>
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<tr>
<td>Fixed claim stakeholders</td>
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<tr>
<td>Environment</td>
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<td>0.003</td>
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<td>Employees</td>
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</table>

Note: Table 6 presents the monthly regressions of abnormal returns or Jensen alpha (Jensen, 1968) to all robustness test portfolios of the Chinese A-share companies on the Carhart extended model. Similar to Table 4, Panel A and B respectively show the results of CSI portfolios and non-CSI portfolios. The “equal weighted” portfolios show the monthly abnormal returns of equal-weighted portfolios while all other portfolios in this table are value-weighted. The “company size” portfolios show the monthly abnormal returns of portfolios excluding small size companies while all other portfolios include the full sample of companies. The “Exclude Chinese Media” portfolios present the monthly abnormal returns of portfolios excluding all Chinese media agencies to address the concerns about appropriateness of media coverage and press freedom in China. The “Novelty of Events” column shows monthly abnormal returns of portfolios applied stringent screening methodology which consists of news that are first time reported. The “Buy-and-hold 12 months” column presents the monthly abnormal returns of portfolios constructed by using buy and hold abnormal returns method. The last two columns show the results of the consumer industry and non-consumer industry, respectively. As the sample period is from June 2006 to July 2012, the observed monthly regressions are 73. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

buy-and-hold abnormal returns will influence the results. The additional test using this method shows that the results are largely consistent with the calendar-time portfolio approach.

Sixth, we further examine the differences among different industries. The last two columns of Table 6 compare the results of consumer (end-user consumers) industry and non-consumer (business-to-business) industry (e.g., Apple, Amazon, Alibaba, etc.), respectively. Consistent with our first hypothesis (H1), we find that the impact of CSI is stronger for business-to-business consumers (non-consumer industry) because business-to-business consumers (non-consumer) have higher bargaining power than end-user consumers (consumer industry).

In untabulated results, we split the sample into sub-sample periods based on the economy bubble theory, which can detect whether CSI episodes in China are undergoing changes. Therefore, we test the periods during the financial crisis (January 2007 to March 2009) and after the financial crisis (April 2009 to July 2012) by using the core results portfolios and we also remove the outliers from the sample by excluding companies with the 5% highest and 5% lowest number of news items.7 The untabulated results are similar to our core results in Table 4.

In addition, we use two other market benchmarks for estimating the asset pricing models, namely: MSCI A IMI and CSI 300. We find less significant alphas in the CSI portfolios, however, the three benchmarks produce similar results to the core results in the portfolios relating to shareholders and consumers. This is consistent with Kothari and Warner (1997), in that abnormal returns can differ widely when different benchmarks are used.

Finally, Hsu, Liang and Matos (2017) argue that state-owned firms have better support from government through government procurement and state funding and social roles of the state-owned enterprises (Zu & Song, 2009), therefore the state ownership can be an important factor. Following Hsu et al. (2017)’s definition on state ownership which the ultimate owner (e.g., government, state or public authority) owns more than 25% voting rights of the firm, we match our sample with the ownership data in Orbis. We find that both of the “non-state-owned” and “state-owned” portfolios with CSI episodes that destroy the relationship with shareholders and employees still significantly underperform the market benchmark.

6. Conclusions

6.1. Theoretical implications

Extant literature has recognized that the development of CSI literature is still in its nascent stage (Pisani et al., 2017). Responding to the call for conceptualizing the CSI as a separate construct from CSR (Strike et al., 2006; Pisani et al., 2017), we contribute to the stakeholder resource-based view (SRBV) by applying the SRBV to explain the value relevance of CSI in the emerging country context. We invert the definitions of “resources” from the SRBV (Barney, 1991, 2018; McWilliams and Siegel, 2011; McWilliams et al., 2006; Orlitzky et al., 2011) to

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7 Lins et al (2013) demarcate the time period of the financial crisis as August 2008 to March 2009, which lies within the sample period of this study.
explain the characteristics of CSI as “resource-destroying episodes”. We argue that these “resource-destroying episodes” are rarely observed because discoveries of CSI episodes are generally less frequent relative to firms’ main operations.

By applying the theoretical framework of stakeholder resource-based view (SRBV) to CSI studies, we put a particular emphasis on the importance of the stakeholder groups with fixed and residual claims according to their bargaining power over the firms’ economic claims. We integrate the stakeholder salience lens (Agle et al., 1999; Mitchell et al., 1997) on legitimacy, urgency and power to advance our understanding of how stakeholders’ moral or presumed claims can help explain the value relevance of CSI. Compared to CSR, the media coverage is crucial for identifying the severity (harshness) of the CSI episode (Köbel et al., 2017; Tang and Tang, 2016; Tetlock, 2007). We further extend the SRBV discussions by incorporating the role of news media in influencing the stakeholder salience.

Our study also extends the recent conceptual development in the stakeholder theory of the resource-based view (Dmytryiev et al., 2021; Freeman et al., 2021) by integrating the theory of stakeholder identification and stakeholder salience (Mitchell et al., 1997) to determine “who and what really counts” based on the degree to which managers should pay attention and give priority to competing stakeholders’ claims according to the stakeholder legitimacy, urgency and power. The stakeholders’ response to the media coverage of CSI can be largely associated with the characteristics of CSI episodes.

6.2. Managerial implications

Our empirical findings suggest that the value relevance of CSI, measured by the shareholders’ abnormal returns, is most relevant when CSI offends stakeholders with higher bargaining power and higher stakeholder salience. Since corporate managers cannot attend to all stakeholders’ actual (explicit) and presumed (implicit) claims (Mitchell et al., 1997), our findings suggest that stakeholder groups that are considered residual claimants (shareholders and consumers) play a more significant role in explaining the shareholder value destroying impact of CSI episodes than the fixed claimants (environment and employees). The insignificant value relevance of CSI that offended employees calls for the need of Chinese government interventions with high legitimacy to protect labor rights in China. It should also motivate the Chinese government to take actions to encourage disclosure of negative issues and to improve regulatory transparency.

Corporate managers in China should also be aware that CSI episodes that offend fixed claimants’ stakeholder group (employees) can adversely affect stock returns when the news becomes more severe. The value relevance of CSI is also found when CSI offends customers with more powerful claims as the news is widely covered by prominent news media around the world. The insignificant result of source reach for CSI that offended employees brings significant concerns that shared values and social norms from the observers around the world (measured by a high media prominence or source reach) have become less sensitive to or less concerned about labor rights violations in China such that they do not significantly react negatively to the news regarding CSI that offended this group of stakeholders.

Our study provides a unique insight that there is a spectrum of non-shareholder stakeholder groups that have varying degrees of residual claims over the firms’ economic profits beyond the shareholders. This study provides managerial implications that the most severe CSI episodes in Chinese companies can be warning indicators for investors, analysts, institutions and governments; consequently, companies should avoid CSI episodes in their management and decision-making processes. The comparison results of representative stakeholders provide managerial implications for firms making strategic decisions on sustainable business practices and addressing sustainability priorities involving multiple stakeholder groups.

6.3. Limitations and future research

There are several limitations of our study. Due to data constraints, there are additional stakeholder groups (e.g., suppliers) excluded in the fixed and residual claimants’ comparison, and there are potentially overlapping boundaries between fixed and residual claimants under special circumstances. Our analyses are limited to investigating the domains coded by RepRisk. Future research may want to engage in additional domains and/or conduct a large-scale text-mining exercise of databases such as Factiva or Lexis Nexis. Our analyses do not examine the differences across countries due to our research focus on the Chinese context with a strong government and strong corporate customers. This raises interesting questions for further research around the impact of cultural values on determining which stakeholders have the most bargaining power to predict the strength of the relationship between CSI episodes and shareholder value in other developed and emerging countries.

CRediT authorship contribution statement

Maretno A. Harjoto: Investigation, Conceptualization, Project administration, Supervision, Writing – original draft, Writing – review & editing, Validation. Andreas G.F. Hoepner: Investigation, Funding acquisition, Conceptualization, Writing – review & editing, Validation, Supervision, Resources, Methodology. Qian Li: Data curation, Formal analysis, Investigation, Methodology, Software, Validation, Writing – original draft, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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