Chinese perceptions of corporate social responsibility: an analysis of annual reports in the housing sector (Chinese perceptions of corporate social responsibility)

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ABSTRACT
Corporate social responsibility (CSR) has been widely accepted as essential for sustainable development and, with the occurrence of such disasters as food quality scandals and building collapses, its importance has been increasingly recognised in China over the past decade. At the same time, despite property development being frequently linked in the mass media with unaffordable housing prices, bribery, and poor construction quality, many large developers have instituted programmes to improve their CSR presence. However, the perceptions of property development organisations of what CSR means to them are as yet unclear. The aim of this paper, therefore, is to better understand the way CSR is seemingly perceived by property developers in China. This is undertaken by analysing CSR disclosure and prioritising information from CSR corporate reports by developers in the housing sector. Three attributes of CSR disclosure information type, responsibility type, and stakeholder type are used to construct an analytical framework for testing of 44 published company reports by content analysis. The findings indicate a greater emphasis on management approaches and ethical responsibilities than commercial goals, with industry and ownership differences pointing to the need to be recognised by the public and future decision-makers.

INTRODUCTION
China has embarked upon an ambitious urbanisation agenda in recent decades, with the rate of urban population increasing from 27.63% in 1992 to 60.6% in 2018 (National Bureau of Statistics of China 2013). Despite the rapid economic growth in the implementation of the “reform and open door” policy in the 1980s, such industrial landscapes as environmental pollution, food security, and poor-quality buildings have focused attention on corporate social responsibility (CSR) across the country. This has been intensified by China’s 2001 entry into the WTO, making CSR one of the country’s most urgent issues to fit with its presence in the global supply chain (Tam 2002).

Many Chinese CSR initiatives, including laws, governmental instructions, industrial guidelines, and non-governmental standards have been developed (Lin 2010; Olanipekun et al. 2018). The 2006 Contract Law, for example, states that a company should fulfill CRS in addition to profit making. Since 2008, state-owned enterprises (SOEs) have been highly encouraged, or required, by the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC) to implement CSR and disclose relevant information via CSR reports. Listed companies are encouraged to publicise their CSR activities, allowing domestic business to access overseas markets, and seen as the right thing to do for obligation and reciprocity (Liu et al. 2011b).

In recognition of such bad press, and despite the limited use of CSR in the construction industry (Lin et al. 2018), many large developers have instituted programmes to improve their CSR presence. Although this has been studied to some extent for Chinese construction companies (Zhang et al. 2020), little is known of CSR activities in the property industry. Moreover, because of the potential effects of corporate ownership and industry differences as reflected in intellectual capital reporting China are being increasingly emphasised and some progress is being made (Gao 2009). In China’s mainstream media, CSR has become an indicator of brand competitiveness, allowing domestic business to access overseas markets, and seen as the right thing to do for obligation and reciprocity (Liu et al. 2011b).

The residential property development sector has a large impact on resident living quality, and moral hazard in the form of poor building quality is quite common due to information asymmetry between developers and house buyers (Xiang et al. 2012). Inattentive quality management can be serious in some situations. In 2008, for example, an 8.0 M earthquake in Sichuan resulted in more than 70,000 people killed and 350,000 people injured, with building safety and structural defects being regarded as an important catalyst (Liu et al., 2011a). Additionally, the property development boom, in conditions where land and related trades were monopolised by local authorities, also led to such problems as business bribes and exaggerating propaganda (Ding 2007; Liu et al. 2011b).

In recognition of such bad press, and despite the limited use of CSR in the construction industry (Lin et al. 2018), many large developers have instituted programmes to improve their CSR presence. Although this has been studied to some extent for Chinese construction companies (Zhang et al. 2020), little is known of CSR activities in the property industry. Moreover, because of the potential effects of corporate ownership and industry differences as reflected in intellectual capital reporting

KEYWORDS
Corporate social responsibility; property developers; China; perceptions; ownership differences; industry differences

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(Guthrie et al. 2006), it is unlikely that the findings of the general CSR literature will be applicable. This then raises the question of how CSR is perceived by property developers. Does this reflect a genuine desire to increase their social responsibility or is this simply an image building exercise devoid of any real intent? And how much is determined by discretion or legislation?

A special feature of China’s situation is the distinction between Stated Owned Enterprises (SOEs) and Non-State Owned Enterprises (NSOEs). NSOEs, permitted by China’s 1978 economic reform, have experienced fast development since 1992, have always faced more intensive market competition and less policy support from the government, and are therefore likely to have different perceptions of CSR than their SOE counterparts (Xu and Zhou 2011). This appears to be vouchsafed by the Chinese Academy of Social Sciences’ 2012 CSR Blue Book, which indicates the average SOEs’ score (40.9) to be much higher than NSOEs’ (15.2). However, this report has been criticised for ignoring differences between industries, and that NSOE CSR performance in some industries is at least equal to SOEs. Therefore, as property development is a relatively new industry in China, it is important to gauge this effect in comparison with a more traditional industry, such as construction.

Because of the influential social impacts involved, the aim is therefore to review the perceptions of property developers on CSR by investigating their CSR communication strategies and stakeholders covered. More specifically, their published CSR reports are analysed to answer the questions of what are the most important types of (1) information disclosure, (2) responsibilities, and (3) stakeholders involved, and (4) how these differ between SOE and NSOE developer and construction organisations.

**Literature review**

**Corporate social responsibility**

The consideration of CSR was triggered by Bowen (2013) in his book *Social Responsibilities of the Businessman* to question, “What responsibilities to society may businessmen be reasonably expected to assume?” (Bowen 2013; Carroll 1999). This original definition of CSR has since been developed to encompass businesses having “the obligations to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society” (Bowen 2013; Carroll 1999). With the widely recognised scope of CSR, Coleman (1988) found it useful to apply social capital theory to delineate the “social capital” contributions of managers, employees, and other non-shareholder stakeholders. These CSR definitions highlight the important role of business managers in conducting CSR activities more than traditional principal-agent theory, in which corporate managers serve only the interests of shareholders. In addition to potential externality effects, companies are expected to satisfy the often-conflicting goals of acting with morality, satisfying the needs of stakeholders, and enhancing internal and external sustainable development.

A prevalent definition of CSR was provided by the Commission of the European Communities in 2001 to stress that businesses should voluntarily integrate social and environmental concerns into their operations and interaction with stakeholders (Dahlstrud 2008). In the 1980s, the principles of sustainable development became an essential component of CSR definitions, where “sustainable development” is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland 1987). Likewise, the World Business Council for Sustainable Development (WBCSD) holds that CSR must serve to strike a balance between employees, families, and local communities to adhere to sustainable development principles (Jamali and Mirshak 2007). With definitions in mind, Carroll (1979) decomposed CSR into four categories of complying with economic requirements, obeying legal requirements, being ethical, and trying to be philanthropic (Carroll 1979). These CSR categories are too abstract and obscure for many practical managers however, prompting Freeman (1984), for example, to suggest that a CSR management strategy be built around stakeholders who are able to affect the realisation of company goals or otherwise be influenced by company decisions.

Previous studies have found that business and society are mutually dependent on shared values, and CSR acts as innovative competitiveness rather than a cost burden (Porter and Kramer 2006). This is similar with the prediction made by the Committee for Economic Development in 1971, in that “business functions by public consent and its basic purpose is to serve constructively the needs of society - to the satisfaction of society” (Carroll 1999). Based on the increasing pressures for CSR decision-making that corporate managers face, Waddock and Graves (1997) investigated the companies listed in the Standard and Poor 500 Index, finding a positive relationship between CSR and corporate financial performance. Similarly, Jean et al.’s (2020) survey of 654 Chinese companies in Madagascar found that those that maintain CSR practices have a significant impact on their overall sustainability and economic performance, and achieve greater results than their competitors do.

McWilliams and Siegel (2001) claimed that strategic CSR activities help companies build sustainable competitiveness and an optimal CSR level can be achieved by conducting cost-benefit analysis. Steurer et al. (2005) even proposed a framework including a management system, CSR, and corporate sustainable development to help companies build competitive strategies. Xiong et al. (2016) demonstrated the virtuous nexus between corporate social performance and financial performance with empirical evidence from construction contractors in China.

Many recent studies extend CSR. For example, Porter and Kramer (2011) proposed the creation of shared value (CSV) by pointing to the vicious circle in the current business world. Lassch and Yang (2011) linked CSR and international development in construction management to the search for shared value. Considering the social and environmental commitments inherent in CSR, Bansal et al. (2014) developed corporate social commitment (CSC) and corporate environmental commitment (CEC), finding that firms will converge to a moderate level of CSC but not of CEC. Angus-Leppan et al. (2010) explored the concept of CSR leadership, finding the effects of institutional forces include national business systems and social norms. In applying the Analytic Hierarchy Process (AHP) of 26 Key Performance Indicators (KPIs), Liao et al. (2015) found that “disclosing accurate information on corporate operations, financial performance, and sustainable development of shareholders (especially minority shareholders)” is the most important.

**Background: property developers in China**

Although developing spaces for housing, working, and shopping is a major concern of the government and the public, such spaces were seriously lacking in China before the 1980s. In the
30 years after the foundation of the People’s Republic of China in 1949, urban residential housing units were owned by the central government, which had the responsibility for funding house development projects and distributing the developed housing to households through corresponding work units, or danwei, which were almost state-owned enterprises (SOEs) (Wu et al., 2012). These SOEs not only provided products but also social services and benefit centres for employees known as gije ban shehui.

With the advent of the country’s 1978 “reform and opening up”, many reform policies were applied as an essential subsidy and, from that time, housing has been an essential ingredient of economic reform. Privatisation and commercialisation were the core concepts and housing units changed from welfare to commercial commodities (Shaw 1997). Property developers have since increased rapidly with aid of many government policies. For example, a property developer needs to contribute only one third of the estimated cost of a project to be permitted to start construction and obtain bank loans. Additionally, the combination of the pre-sales system and house buyers’ mortgage pre-payment acted as a catalyst for the development of the housing market, as property developers were able to obtain sufficient financial support for construction work (Deng and Liu 2009).

**CSR and property development**

Property developers are characterised by their considerable engagement in construction activities and investment decisions. They are expected to enhance socially responsible investment, sustainable construction, and quality property management. The majority of house-buyers in a recent survey in Malaysia, for example, expect property developers to provide more CSR activities in project development, although less wealthy buyers are more sensitive to associated increases in house prices (Yam and McGreal 2010). Sardinha et al. (2011) developed a CSR benchmark framework for property developers to develop and own shopping centres, finding that the highest ranked companies apply sustainable building standards and are active in transparency and CSR disclosure. Huang and Lien (2012) also conducted a questionnaire survey in Taiwan to find that CSR is positively correlated with corporate image and organisation performance. Similarly, Petrovic-Lazarevic’s (2008) survey of 17 large construction companies in Australia found CSR being developed to maintain a good corporate image, with two thirds of the respondents having changed their corporate structure through their awareness of CSR, and all supporting the concept of being a good corporate citizen.

In developed countries, property developers focus on investment and asset management, and therefore need to face such widely acknowledged general principles as socially responsible investment (SRI). In the U.S., more than 600 institutions had signed the Principles for Responsible Investment by 2010, with SRI accounting for nearly 11% of the investment market, which is nearly nine times the total market capitalisation of the real estate investment trust (REIT) industry (Pivo and Fisher 2010). In another study of the investment performance of the UK property companies, Newell (2009) found that SRI property companies received higher returns than the industry average, with a trend towards sustainable commercial property development from both top-down drivers via government authorities and bottom-up market power from stakeholder support. While in Cajias et al.’s (2014) study of American real estate companies, no positive relationship was identified for CSR rating and financial performance. However, REIT is a rare choice for property development in China as, because of legal regulations, property developers are responsible for the entire housing supply chain, from project proposal through construction supervision to sales and property management. With so many responsibilities affecting the public, it is clearly important to understand the CSR perceptions of Chinese property developers to identify what improvements might be possible.

**CSR reporting**

CSR reporting means that a company discloses its economic, social, and environmental practices as a mechanism by which accountability duties may be discharged, because it can inform a wide variety of stakeholders regarding the company’s social and environmental impact (Bouten et al. 2011). Companies usually disclose their CSR information in three ways: an official website, annual reports, and CSR reports. CSR reports are also termed non-financial reports, sustainability reports, environment responsibility reports, and corporate citizen reports. Communication with stakeholders by releasing CSR reports is a rational method to show consideration of the needs of customers, regulators, suppliers, and other stakeholders (Asif et al. 2013).

In China, the Shenzhen Stock Exchange and the Shanghai Stock Exchange issued guidelines in 2006 and 2008 respectively to encourage listed companies to disclose their CSR practices. The Hong Kong Stock Exchange also launched the Hang Seng corporate sustainability index in its 2010 series, concerning environmental impact, social impact, corporate governance, and workplace practices. The State Council issued Guidelines on CSR Fulfilment for State-Owned Enterprises in China in 2008 and required state-owned enterprises to assure CSR actively with respect to awareness, implementation, business credits, resource saving, and environment protection. In China, the CALXON Group released the first CSR report of property developers in 2007, and since then many other companies in the real estate industry have joined in reporting their awareness and practices of CSR. Furthermore, 12 property developers in the Guangdong province released their 2010 CSR reports under the organisation of Guangdong Real Estate Association, which is remarkable progress in this sector. According to the 2012 White Book of Chinese CSR Reports issued by Chinese Academy of Social Sciences, 1006 companies issued independent CSR reports in 2012 compared with only 32 issued in 2006. This exponential growth of CSR reports makes it possible to analyse the information disclosed in these reports in a quantitative way.

**Methodology**

**Content analysis**

Content analysis is a method used for analysing text data, ranging from observation analyses to strict structured analyses (Hsieh and Shannon 2005). It was originally proposed to quantitatively analyse patent content in the 1950s, but it has been used much more in interpreting latent content (i.e., qualitative analyses) over decades of development (Graneheim and Lundman 2004). Although the flexibility of content analysis makes it useful for a variety of purposes, a clear definition is limited to its applications. Hsieh and Shannon (2005) identify three approaches in qualitative content analysis: the conventional approach, summative approach and directed approach. The conventional approach involves making an observation first and generating coding
categories during data analysis, the summative approach is to count the frequency of certain pre-identified keywords, while the directed approach traces back existing theories or relevant findings as guidance in developing coding categories (Potter and Levine-Donnerstein 1999; Hsieh and Shannon 2005). The directed approach is a much more structured and therefore an appropriate choice when previous studies or established theories exist. Since this research aims to develop and test hypotheses based on previous studies, the directed approach is used.

Corporate annual reports or independent non-financial reports are usually used as information sources for studies applying content analysis, since these publications provide ways for the public to access related information and are usually endorsed by the board (Guthrie et al. 2004). Guthrie et al. (2004) pointed out that applying content analysis to annual reports is a good approach to comparing empirical data and research assumptions after conducting a review of previous studies of corporate intellectual capital reporting practices. Content analysis has been increasingly used in studies of CSR in the context of construction and property development (Daub 2007; Asif et al. 2013). Jones et al. (2010) applied content analysis to annual reports from US engineering and construction companies in analysing corporate approaches to sustainability. Newell (2008) performed a content analysis of annual reports and CSR reports from Australian-listed property trusts to assess the environmental strategies used by these companies.

Although it has been used to simply count the presence or absence of keywords in some studies (i.e., summative content analysis), content analysis can provide a powerful test of the applicability of theories in some circumstances (i.e., directed content analysis). The procedure of directed content analysis can be simply described as information extraction from sources, condensing if necessary and categorising. Graneheim and Lundman (2004) clarify some important concepts involved in content analysis such as ‘meaning units’. A meaning unit is the smallest unit for further analyses, which can be the composition of words, sentences, or even paragraphs. Creating categories is regarded as a key phase in completing the labelling process of meaning units (Graneheim and Lundman 2004).

The sample

The top 50 property developers and top 50 construction contractors listed in the Shenzhen Stock Exchange, Shanghai Stock Exchange, and Hong Kong Stock Exchange were targeted firstly in the study, according to rankings released by such authorities as the Chinese Academy of Social Sciences. The construction contractors were adopted as most of their businesses were property development. It was found that 30 property developers and 25 construction contractors have special sections in their official websites to report their CSR practices, with 25 property developers and 19 construction contractors releasing specific CSR annual reports. This is comparable with the 20 selected from 100 companies in Barringer et al. (2005). The data comprise 52% SOE property developers and 73.7% SOE construction contractors respectively, the remainder all being NSOEs. Detailed facts concerning the revenues and CSR information disclosure of the selected companies are provided in Appendix A.

Analysis procedure

Forty-four related CSR 2011 reports collected from the Shenzhen Stock Exchange and the Shanghai Stock Exchange were used for analysis and 1775 CSR-relevant meaning units were extracted. These meaning units were initially at a simple paragraph or comparatively independent sentence level, which is recommended by Graneheim and Lundman (2004) to achieve better trustworthiness of content analysis. The size is comparable with the 420 meaning units related to intellectual capital from 20 reports conducted by Barringer et al. (2005) and 115 CSR analysis units (i.e., opinion pieces) from 19 Chinese newspapers by Liu et al. (2011b). These items were then used for further analyses according to the proposed analysis framework, which is the key to the directed approach applied in this research and stated in the next section.

In an effort to ensure reliability of the coding process used, two coders and one auditor were involved. Agreement ranges from 0 (no agreement) to 1 (perfect agreement), and is suggested to be larger than 0.9 (Lombard et al. 2002). Providing basic categorisation guidance, the two coders’ agreement of decisions of 132 meaning units from 2 pilot reports was 83.3%. After training from the auditor and internal discussions on discrepancies, this increased to 91.0% when analysing 111 meaning units from another two test reports. The small discrepancies existing between coders ensure the reliability of further analyses and minor confusing decisions were resolved by further discussions including the auditor. Statistical significance is taken to be at the 0.05 level throughout this paper.

Analysis framework

Three dimensions of information, responsibility, and stakeholder type are used to test the research questions. Table 1 details the variables involved from Carroll’s (1991) CSR categorisation, Bouten et al.’s (2011) CSR disclosure, and previous studies of stakeholders.

1) Information type. Daub (2007) suggested that CSR reports should contain qualitative and quantitative information of the economic, environmental, and social effectiveness and efficiency of an organisation. To know whether a company comprehensively represents its CSR practices, Bouten et al. (2011) advocated dividing CSR item information into 3 types as vision and goals (VG), management approach (MA) and performance indicators (PI), suggesting the ideal proportions to be 1:1:1. As companies tend to report their aims and intentions much more than their actual actions and performance (Hopwood 2009), this provides a good measure of their perceptions of CSR, prompting the first hypothesis,

\[ H1: \text{the ratio } VG:MA:PI \text{ is } 1:1:1 \]

2) Responsibility type. There has already been much research in this area (e.g., Carroll 1979; Freeman 1984; Daub 2007; Jamali and Mirshak 2007; Gao 2009). For example, Gao’s (2009) analysis of the corporate social performance of China’s 100 largest companies, of which only 19 issued CSR reports, found them to be mostly concerned with economic issues and less with legal and ethical issues; although, contrary to their general irresponsible image, 38 property developers were present in the 2011 top 100 charitable Chinese enterprises list (Forbes 2012). Here, we follow Carroll (1979, 1991), who divides CSR into four responsibility types: economic responsibility (ER), legal responsibility (LR), ethical responsibility (ETR), and philanthropic responsibility (PR), and postulates weightings of 4:3:2:1 in the form of a pyramid model, to reach the second hypothesis,

\[ H2: \text{the ratio } ER:LR:ETR:PR \text{ is } 4:3:2:1 \]
3) Stakeholder type. Freeman (1984) proposes a new CSR management strategy by highlighting stakeholders who are able to affect the realisation of company goals or otherwise are influenced by company decisions. Porter and Kramer (2006) emphasise the usefulness of stakeholder management in solving CSR issues effectively and generating good business performance. A company is involved with many stakeholders with different instrumental power, in which situation stakeholder performance. A company is involved with many stakeholders with different instrumental power, in which situation stakeholder management strategy by highlighting stakeholders who are able to affect the realisation of company goals or otherwise are influenced by company decisions. Porter and Kramer (2006) emphasise the usefulness of stakeholder management in solving CSR issues effectively and generating good business performance. A company is involved with many stakeholders with different instrumental power, in which situation stakeholder management might be correlated with pragmatism. Based on Lebanese and Syrian data, Jamali (2008) claim that "firms in developing countries prioritise their stakeholders based primarily on instrumental considerations", thus prompting the third hypothesis:

H3: that the closeness of corporate management relationships has a significant presence in CSR reports

In this case, shareholders (SH), clients (CL), government authorities (GA), contractors and suppliers (C&S), creditors (CR), employees (EM), local communities (LC), the public (PU), and other (OT) are identified.

Here, H1, H2, and H3 are examined by one-sample t-tests, two-way analysis of variance, and simple effect tests.

A two-way analysis of variance is also used in pursuit of research question 4 to examine the possible main and interaction effects of ownership and industry differences on the three CSR dimensions.

Results and findings

After categorising the extracted 1775 CSR meaning units (863 from property developers and 912 from construction companies) according to the three dimensions (information, responsibility, and stakeholder type) of the analysis framework, the average numbers of disclosed items in their respective aspects and comparative weights were found as presented in Figure 1. Since the information extracted from the CSR reports does not solely represent all the organisation’s CSR activities, only comparative weights are used for further analyses.

Research question 1-3 by applying t-tests

For information type, compared with the probability of 0.333 assumed by Bouten et al. (2011), the t-test on the scores indicates a significant difference of the VG/effective meaning units ($M = 0.195, SD = 0.106, t_{24} = -6.520, p < 0.001$), MA/effective items ($M = 0.552, SD = 0.172, t_{24} = -6.386, p < 0.001$), and PI/effective items ($M = 0.253, SD = 0.162, t_{24} = -2.486, p = 0.020$). A
new and simplified weighting for VG: MA: PI of 1:3:1 was proposed and verified by further one sample t-tests, with \( p = 0.822 \), 0.178 and 0.118 respectively.

For responsibility type, the results of comparing Carroll’s (1979, 1991) 4:3:2:1 with ER/effective items, LR/effective items, ETR/effective items, PR/effective items at 0.4, 0.3, 0.2, and 0.1 respectively are \( p < 0.001 \), \( p = 0.148 \), \( p < 0.001 \), and \( p = 0.019 \) respectively. A new and simplified weighting for ER: LR: ETR: PR of 1:2:5:2 was proposed and verified, with \( p = 0.334 \), 0.125, 0.649 and 0.516 respectively.

For stakeholder type, the analysis tests whether instrumentality prioritises corporate responses. To do this, three categories of stakeholders are used. This comprises an internal layer of shareholders and employees (SH + EM); a first-out layer of clients, contractors and suppliers, and creditors (CL + C&S and CR); and a second-out layer of local communities, the public, and government authorities (LC + PU + GA). The internal layer accounts for 38% of the effective items in dimension 3, the first-out layer accounts for 25%, and the second-out layer accounts for 36%. There is therefore no clear priority due to instrumentality.

**Research question 4: two-way ANOVA**

Question 4 is not solely focused on property developers but aims to reveal whether ownership type (SOE/NSOE) and industry type (property developers/construction contractors) affect CSR activities as discussed above. Table 2 gives the results of the two-way ANOVA.

These can be categorised into three types as follows:

The significant main effects indicate that property developers are more concerned about their legal responsibilities than construction companies, with average values of 22.48% and 10.89% respectively; less concerned about their ethical responsibilities, with average values 51.76% and 68.11% respectively; and more focussed on contractors and suppliers than construction companies, with average values of 22.48% and 10.89% respectively; less concerned about their ethical responsibilities, with average values 5.95% and 3.12%, respectively. The interaction plots are provided in Appendix B.

The interaction effect is significant in that differences in industry and ownership types have a combined effect, making a simple effect test necessary for further analyses. These comprise vision and goals (VG), management approach (MA) under the information type dimension, and client (CL) and government (GA) under the stakeholder dimension. The results are summarised in Tables 3 and 4, the significant ones indicating that (1) property developer NSOEs focus less on MA than construction companies, while property developer SOEs focus more on MA and CL and less on GA, and (2) construction SOE companies focus more than NSOEs on VG and GA, while construction NSOEs focus more on MA and CL.

**Discussion**

The results show that property developers in China, particularly state-owned enterprises (SOEs), perceive CSR to be much more about management approaches (MA) than other goals and outcomes. This is consistent with some findings but contrasts with others. Bouten et al.’s (2011) content analysis of publicly traded Belgian companies, for instance, found the majority to be management approach disclosures. Similarly Khelil-Rhouma and Hamed-Sidhom’s (2019) study of corporate social responsibility commitment and environmental disclosures in the French context found that most CSR-committed firms tend to introduce more statements in their annual reports to justify the credibility of their disclosures than less committed firms.

Braam et al.’s (2016) study of Dutch companies also supports the view that legitimacy plays an important role in companies’ choices concerning environmental disclosure although, at the same time, indicating that companies systematically disclose an incomplete picture of how their decisions and activities affect the environment. Other work note that research in this area “overwhelmingly focuses on economic entities and their inputs and outputs”, with “little or no environment in environmental accounting, and certainly no ecology” (Russell et al. 2017). In the extreme is Hopwood’s (2009) contention that this is tantamount to setting goals without subsequent actions – not a situation investigated in this research - and probably related to CSR disclosures being seen as ‘soft propaganda’ for property developers (Tang 2012), with the emphasis on management and innovation presented in CSR reports being aimed more at benefitting company reputation in the long term. As a result, it is common to find that companies prefer to set an impressive but abstract goal and then develop many management approaches to realise this goal with less emphasis on results. For example, according to the
Beijing Vantone Real Estate CSR report, the company’s main CSR goal is to be “greener” and more competitive. Many consequent management approaches such as building green value systems, enhancing green behaviour, and applying “green production standards” are then applied to achieve this goal but with little reporting of the corresponding results of these measures.

The results also show a much greater presence of higher responsibilities, such as ethical responsibilities (ETR), than such basic achievements as making profits and abiding by the law. The difference between the actual situation and the theoretical ratio proposed by Carroll indicates a difference in awareness of CSR definitions. While some studies hold that the bottom-line responsibilities involved are no more than basic responsibilities (Hongjun 2014), many others regard CSR as involving distinctly more than basic responsibilities (e.g., Davis and Blomstrom 1966; Dahlsrud 2008). Additionally, the traditional culture in China is that the rich should help the poor, such as by making

### Table 2. Results of the two-way ANOVA.

| Dependent variable | Source                  | Sum of squares | Df  | Mean square | P      | Partial eta squared |
|--------------------|-------------------------|----------------|-----|-------------|--------|---------------------|
| VG                 | Industry                | .008           | 1   | .008        | .379   | .019                |
|                    | Ownership               | .015           | 1   | .015        | .234   | .035                |
|                    | Industry/Ownership      | .049           | 1   | .049        | .034   | .107                |
| MA                 | Industry                | .000           | 1   | .000        | .883   | .001                |
|                    | Ownership               | .027           | 1   | .027        | .239   | .034                |
|                    | Industry/Ownership      | .222           | 1   | .222        | .001   | .226                |
| PI                 | Industry                | .005           | 1   | .005        | .591   | .007                |
|                    | Ownership               | .001           | 1   | .001        | .775   | .002                |
|                    | Industry/Ownership      | .060           | 1   | .060        | .064   | .083                |
| ER                 | Industry                | .001           | 1   | .001        | .746   | .003                |
|                    | Ownership               | .000           | 1   | .000        | .962   | .000                |
|                    | Industry/Ownership      | .001           | 1   | .001        | .671   | .005                |
| LR                 | Industry                | .123           | 1   | .123        | .001   | .233                |
|                    | Ownership               | .003           | 1   | .003        | .615   | .006                |
|                    | Industry/Ownership      | .003           | 1   | .003        | .581   | .008                |
| ETR                | Industry                | .257           | 1   | .257        | .001   | .257                |
|                    | Ownership               | .007           | 1   | .007        | .534   | .010                |
| PR                 | Industry                | .029           | 1   | .029        | .210   | .039                |
|                    | Ownership               | .020           | 1   | .020        | .295   | .027                |
|                   | Industry/Ownership      | .020           | 1   | .020        | .293   | .028                |
| SH                 | Industry                | .003           | 1   | .003        | .464   | .013                |
|                    | Ownership               | .000           | 1   | .000        | .760   | .004                |
|                   | Industry/Ownership      | .012           | 1   | .012        | .125   | .058                |
| CL                 | Industry                | .028           | 1   | .028        | .045   | .096                |
|                    | Ownership               | .011           | 1   | .011        | .208   | .039                |
|                   | Industry/Ownership      | .041           | 1   | .041        | .017   | .134                |
| GA                 | Industry                | .056           | 1   | .056        | .001   | .245                |
|                    | Ownership               | .054           | 1   | .054        | .001   | .238                |
|                   | Industry/Ownership      | .054           | 1   | .054        | .001   | .240                |
| C&S                | Industry                | .006           | 1   | .006        | .030   | .112                |
|                    | Ownership               | .000           | 1   | .000        | .573   | .008                |
|                   | Industry/Ownership      | .003           | 1   | .003        | .086   | .072                |
| CR                 | Industry                | .000           | 1   | .000        | .898   | .000                |
|                    | Ownership               | .000           | 1   | .000        | .944   | .000                |
|                   | Industry/Ownership      | .000           | 1   | .000        | .966   | .000                |
| EM                 | Industry                | .000           | 1   | .000        | .857   | .001                |
|                    | Ownership               | .004           | 1   | .004        | .409   | .017                |
|                   | Industry/Ownership      | .000           | 1   | .000        | .873   | .001                |
| LC                 | Industry                | .015           | 1   | .015        | .118   | .060                |
|                    | Ownership               | .006           | 1   | .006        | .321   | .025                |
|                   | Industry/Ownership      | .001           | 1   | .001        | .653   | .005                |
| PU                 | Industry                | .029           | 1   | .029        | .077   | .076                |
|                    | Ownership               | .000           | 1   | .000        | .886   | .001                |
|                   | Industry/Ownership      | .022           | 1   | .022        | .125   | .058                |

Note: the industry variable contains two different levels of property developers and construction companies; the Ownership variable contains two different levels of SOEs and NSOEs.

### Table 3. Industry-Ownership pairwise comparisons.

| Dependent variables | Industry | Ownership | Ownership | Mean difference (i-j) | Sig | 95% confidence interval for difference |
|---------------------|----------|-----------|-----------|----------------------|-----|---------------------------------------|
| VG                  | Developers | NSOE | SOE | 0.033 | 0.426 | -0.049 | 0.114 |
|                     | Contractors | NSOE | SOE | -.113* | 0.038** | -0.219 | -0.006 |
| MA                  | Developers | NSOE | SOE | -0.101 | 0.076 | -0.212 | 0.011 |
|                     | Contractors | NSOE | SOE | -.209* | 0.006** | -0.126 | -0.083 |
| CL                  | Developers | NSOE | SOE | -0.032 | 0.238 | -0.098 | 0.034 |
|                     | Contractors | NSOE | SOE | 0.003 | 0.023 | 0.012 | 0.186 |
| GA                  | Developers | NSOE | SOE | 0.000 | 0.990 | -0.053 | 0.053 |
|                     | Contractors | NSOE | SOE | 0.152* | ** | -0.221 | -0.083 |

Note: * indicate difference significant at 0.05 level, ** indicates sig. < 0.001.
charitable donations, with basic achievements not being regarded as suitable for “showing”. Thus, culture may play an important inhibiting role when disclosing CSR information. Another explanation for the minor regard of basic responsibilities is related to CSR reports being independent of corporate financial reports, which cover many facets of economic and legal responsibilities. In addition, there are no significant differences between industry (property and construction) and ownership (SOE and NSOE). This may be simply an indication of the ethical norms in the market (Turan 2013), but needs to be further investigated by evidence from other industries.

Also, of significance is that construction companies are more extreme, with even more emphasis on ethical (68.11% v 51.76%) and less on legal (10.89% v 22.48%) responsibilities, reiterating the altruistic nature of perceived CSR generally.

### Conclusion

Since the China’s property market reforms and the emergence of property developers, an increasing amount of living spaces have become available and the emphasis now is on the need for developers to provide higher quality accommodation and in a more socially responsible way. This study aims to identify the Chinese perceptions of CSR by analysing the primary characteristics, priorities, and communication strategies of property developers’ corporate reports. A three-dimension framework of information, responsibility, and stakeholder type is proposed and collected CSR reports used as empirical cases for content analysis.

Three hypotheses are proposed: (1) that the VG:MA:PI ratio is 1:1:1, (2) that the ER:LR:ETR:PR ratio is 4:3:2:1, and (3) that the closeness of corporate management relationships has a significant presence in CSR reports. These were tested by t-tests, two-way analysis of variance, and simple effect tests. None are supported by the data. Two new ratios are found on the first two dimensions. For information type, the VG:MA:PI ratio is approximately 1:3:1, indicating that property developers perceive CSR to be more about management approaches (MA) than vision and goals (VG) or performance indicators (PI). For responsibility type, the ER:LR:ETR:PR ratio is approximately 1:2:5:2, with a much higher level of ethical responsibility (ETR) and lower level of economic responsibility (ER) than expected, suggesting that CSR is perceived to go beyond basic economic and legal responsibilities. For stakeholder type, not only does the closeness of corporate management relationships have no significant effect, but there are no other noticeable effects, shareholders and employees (SH + EM), clients, contractors and suppliers, and creditors (CL + CS & CR), and local communities, the public, and government authorities (LC + PU + GA) accounting 38%, 25%, and 36% of the effective items in dimension 3.

The analysis confirms the existence of interaction effects between company ownership (SOE/NSOE) and industry difference (construction companies/property developers). It will therefore be beneficial for policy makers and future researchers to take this into consideration when designing suitable CSR pathways. The finding that industry differences affect CSR perceptions indicates that the CSR of property developers are to some extent unique and cannot be well represented by that of other industries. This is particularly important for ownership types such as SOE or NSOE, which need to be recognised by the public and future decision-makers as being dependent on industry context. This may be beneficial to other newly emerging sectors open to both SOEs and NSOEs, such as the retail sector and financing services. As there is a high correlation between CSR and pricing ability in deciding profits for property developers, their CSR perceptions also need to be further investigated.

A limitation of the approach used in the study is that there may be a gap between CSR reporting and actual perceptions, which would bias the results to some extent. In addition, some CSR aspects are regarded as “soft advertisements” in the Chinese media and it is believed that property developers usually account for a large number of such advertisements in promoting housing sales (Tang 2012). The research is also limited to the CSR perceptions of Chinese property developers and the interaction effects of industry and ownership types. Further studies are needed to analyse perceptions in more industries and countries. Additional work is also needed in examining the gap between the degree of closeness of stakeholders and their influential power, the connection between CSR disclosures and corporate reputation, and the relationship between CSR and corporate financial performance.

### Disclosure statement

No potential conflict of interest was reported by the authors.

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### Appendix A

#### Table A1

| No. | Ownership type | Revenue (CNY) | CSR report |
|-----|----------------|---------------|------------|
| C01 | SOE            | 482,836,637,000.00 | Yes |
| C02 | SOE            | 459,701,343,000.00 | Yes |
| C03 | SOE            | 457,366,110,000.00 | Yes |
| C04 | SOE            | 295,370,486,000.00 | Yes |
| C05 | SOE            | 230,178,204,000.00 | Yes |
| C06 | SOE            | 113,470,881,101.36 | Yes |
| C07 | SOE            | 82,856,900,714.92 | Yes |
| C08 | SOE            | 59,521,286,813.82 | Yes |
| C09 | SOE            | 46,539,896,164.88 | Yes |
| C10 | SOE            | 27,410,640,000.00 | Yes |
| C11 | SOE            | 25,097,996,215.24 | Yes |
| C12 | SOE            | 14,191,549,858.02 | No |
| C13 | NSOE           | 13,495,846,735.79 | Yes |
| C14 | NSOE           | 12,302,839,567.97 | No |
| C15 | NSOE           | 10,145,222,762.04 | No |
| C16 | NSOE           | 8,675,626,902.16 | No |
| C17 | SOE            | 7,401,310,000.00 | Yes |
| C18 | NSOE           | 7,252,644,744.50 | No |
| C19 | SOE            | 6,715,659,829.11 | No |
| C20 | SOE            | 6,607,760,224.61 | No |
| C21 | NSOE           | 6,112,097,412.84 | Yes |
| C22 | NSOE           | 5,762,490,457.54 | No |
| C23 | NSOE           | 5,706,273,972.86 | Yes |
| C24 | NSOE           | 5,410,479,639.92 | No |
| C25 | SOE            | 5,312,933,832.86 | Yes |
| C26 | SOE            | 4,225,192,208.00 | No |
| C27 | SOE            | 4,023,936,530.03 | No |
| C28 | NSOE           | 3,656,752,163.70 | No |
| C29 | NSOE           | 3,581,268,663.36 | No |
| C30 | SOE            | 3,547,212,972.73 | No |
| C31 | NSOE           | 2,910,106,899.19 | No |
| C32 | SOE            | 2,898,647,572.89 | Yes |
| C33 | SOE            | 2,889,847,785.94 | No |
| C34 | SOE            | 2,632,356,664.70 | No |
| C35 | NSOE           | 2,552,175,984.14 | No |
| C36 | NSOE           | 2,493,495,674.68 | Yes |
| C37 | SOE            | 2,346,489,808.61 | No |
| C38 | SOE            | 2,176,562,237.26 | No |
| C39 | NSOE           | 2,167,729,399.98 | No |
| C40 | SOE            | 1,319,495,639.08 | No |
| C41 | NSOE           | 1,313,712,001.04 | No |
| C42 | NSOE           | 1,306,373,853.75 | No |
| C43 | NSOE           | 1,300,774,555.52 | No |
| C44 | NSOE           | 1,267,990,577.17 | No |
| C45 | SOE            | 1,141,767,033.45 | Yes |
| C46 | NSOE           | 800,148,296.51 | No |
| C47 | NSOE           | 426,429,261.22 | No |
| C48 | NSOE           | 264,909,931.53 | No |
| C49 | NSOE           | 163,140,797.30 | No |
| C50 | SOE            | 8,121,478.38 | No |
| D01 | NSOE           | 71,782,749,800.68 | Yes |
| D02 | NSOE           | 61,918,185,000.00 | Yes |
| D03 | SOE            | 47,036,222,186.18 | Yes |
| D04 | SOE            | 39,386,218,643.20 | No |
| D05 | NSOE           | 34,748,305,000.00 | Yes |
| D06 | SOE            | 29,018,845,170.70 | No |
| D07 | NSOE           | 27,370,095,000.00 | Yes |
| D08 | SOE            | 23,918,506,165.62 | No |
| D09 | NSOE           | 22,945,000,000.00 | No |
| D10 | NSOE           | 21,963,747,000.00 | No |
| D11 | NSOE           | 16,186,830,000.00 | No |
| D12 | SOE            | 16,130,454,122.20 | Yes |
| D13 | SOE            | 15,111,366,642.00 | Yes |
Table A1. Continued.

| No. | Ownership type | Revenue (CNY) | CSR report |
|-----|----------------|---------------|------------|
| D14 | SOE            | 12,135,475,312.40 | No         |
| D15 | SOE            | 11,699,819,780.52 | Yes        |
| D16 | SOE            | 10,834,726,000.00 | No         |
| D17 | NSOE           | 10,604,047,000.00 | No         |
| D18 | NSOE           | 10,122,595,000.00 | No         |
| D19 | SOE            | 9,637,282,533.87 | Yes        |
| D20 | NSOE           | 9,501,697,850.13 | Yes        |
| D21 | NSOE           | 9,222,444,674.92 | No         |
| D22 | SOE            | 9,042,481,279.82 | Yes        |
| D23 | SOE            | 8,578,681,925.45 | No         |
| D24 | SOE            | 7,523,321,000.00 | No         |
| D25 | NSOE           | 6,688,298,540.05 | Yes        |
| D26 | NSOE           | 6,638,354,000.00 | No         |
| D27 | NSOE           | 6,491,710,245.90 | No         |
| D28 | SOE            | 6,484,530,840.11 | No         |
| D29 | SOE            | 5,992,550,997.88 | Yes        |
| D30 | NSOE           | 5,689,480,590.08 | No         |
| D31 | NSOE           | 5,684,822,000.00 | No         |
| D32 | NSOE           | 5,677,523,000.00 | No         |
| D33 | SOE            | 5,343,884,704.40 | No         |
| D34 | SOE            | 5,329,279,000.00 | No         |
| D35 | SOE            | 5,246,498,062.03 | Yes        |
| D36 | NSOE           | 4,818,451,239.00 | Yes        |
| D37 | SOE            | 4,760,583,882.45 | No         |
| D38 | SOE            | 4,165,872,451.54 | No         |
| D39 | NSOE           | 4,065,255,660.43 | Yes        |
| D40 | NSOE           | 3,770,348,000.00 | No         |
| D41 | SOE            | 3,705,924,862.21 | No         |
| D42 | NSOE           | 3,664,524,682.14 | Yes        |
| D43 | SOE            | 3,582,293,027.22 | Yes        |
| D44 | SOE            | 3,565,366,603.92 | Yes        |
| D45 | NSOE           | 3,330,444,457.55 | Yes        |
| D46 | SOE            | 3,306,772,181.00 | Yes        |
| D47 | NSOE           | 3,228,592,049.83 | Yes        |
| D48 | SOE            | 2,614,754,011.82 | Yes        |
| D49 | NSOE           | 1,854,053,063.43 | No         |
| D50 | NSOE           | 806,492,000.00   | No         |

Note: C—construction contractor, D—property developer; italics in revenue means values transferred from Hong Kong dollars to CNY based on exchange rate on 31 December 2011, with HKD:CNY = 81.07:100, USD:CNY = 630.09:100.

Appendix B

Figures A1–A8
Figure A3. Industry-ownership interaction plots for MA.

Figure A4. Ownership-industry interaction plots for MA.

Figure A6. Ownership-industry interaction plots for CL.

Figure A7. Industry-ownership interaction plots for GA.

Figure A5. Industry-ownership interaction plots for CL.

Figure A8. Ownership-industry interaction plots for GA.