

The Corporate Social Responsibility of Chinese Corporations

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Abstract

Why are levels of CSR among Chinese companies so low relative to levels in both developed and developing countries? We answer this question in an exploration of factors associated with CSR, including levels of economic development, institutions, and culture. We find that low CSR is generally associated with low income-per-capita, high corruption, low civil liberties and political rights, low harmony, low egalitarianism, low autonomy, low individualism, and high power distance. China's level of economic development, institutions, and culture dispose it toward low CSR.

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1. Introduction

We know much about corporate social responsibility (CSR) in the United States and most other developed countries, but we know little about CSR in developing countries, such as China. Yet payoffs from improving CSR in China might well exceed payoffs from improving CSR in developed countries.

China has enjoyed a rapid economic growth over the last thirty years, surpassing Japan to become the second largest economy in the world. China's GDP, adjusted for inflation, had risen from RMB 362 billion in 1978, at the start of the reform period, to RMB 40 trillion in 2010. Yet China's economic development is often accompanied by images of poor business practices. The growing number of business scandals, such as overworked and underpaid employees, worker suicides, faulty consumer products, toxic emissions and water pollution, highlight the urgency of promoting corporate social responsibility beyond financial bottom lines.

We compare CSR levels of Chinese companies to CSR levels of companies from both developed countries, such as the U.S., U.K., and Japan, and developing economies in East Asia, such as South Korea, Hong Kong, and Taiwan. We find that Chinese companies exhibit lower levels of CSR than those from both developed and developing economies. We explore the determinants of CSR levels and the possible reasons for the relatively low levels of CSR among Chinese companies.

Income is relatively low in China and we find that low income is associated with low CSR. Corruption is relatively high in China and we find that high corruption is associated with low CSR. Culture is also associated with CSR. Harmony, egalitarianism, autonomy, and individualism are four dimensions of culture and their levels in China are relatively low. We find that low levels of harmony, egalitarianism, autonomy, and individualism are associated with low

levels of CSR. Power distance is another dimension of culture, and its level in China is relatively high. We find that high levels of power distance are associated with low levels of CSR. Levels of civil liberties and political rights are relatively low in China and we find that low levels of civil liberties and political rights are associated with low levels of CSR.

Campbell (2007) points out that “socially responsible corporate behavior may mean different things in different places to different people and at different times.” Recent empirical evidence supports this view. For example, Maignan and Ralston (2002) report systematic differences in perceptions of CSR in France, Netherlands, UK, and US. Xu and Yang (2010) draw similar conclusions from their survey of CEOs of Chinese companies. They report that while perceptions of the importance of some CSR features, such as economic responsibility, legal responsibility, environmental protection, customer orientation, employee relations, and charitable donations, are similar among Chinese CEOs and CEOs in the western world, perceptions of the importance of other features, such as national employment rate, ethics, and social stability, are higher among Chinese CEOs than among CEOs in the western world. Moreover, some CSR features that are important in the western world, such as shareholders’ rights, are not considered important by Chinese CEOs.

Variations in country-specific economic development, culture, and institutions likely contribute to such differences. Campbell (2007) argues that institutional factors play an important role in corporate social behavior. These factors include public and private regulation, the presence of nongovernmental and other independent organizations that monitor corporate behavior, institutionalized norms of appropriate corporate behavior, associations among corporations, and organized dialogues among corporations and their stakeholders. Ioannou and

Serafeim (2012) observe that companies' corporate social performance is related to the political, labor, education, and cultural systems of their countries.

Culture is expressed in behavior, including economic behavior. For example, Guiso, Sapienza, and Zingales (2008) found that people are more likely to invest in the stock market in countries where trust is high than in countries where it is low. Culture can promote socially responsible corporate behavior or hinder it. Confucian principles, deeply embedded in Chinese culture, contain aspects of modern CSR. Wang and Juslin (2009) note that Chinese prescriptions for responsible business behavior are longstanding, tracing them back to Confucius' time, in 500 B.C. Confucian values, such as righteousness, sincerity, morality, fairness, and benevolence, are respected in China, even if such values might have been sacrificed for profits during the recent decades.

Furthermore, Lin (2010) notes that the 1994 Chinese company law, drafted before discussions about CSR were prominent in the western world, reflects emphasis on the interests of workers, as workers have always had a strong representation in the national and local people's congress under the Chinese socialist model. Indeed, the Constitution of the People's Republic of China recognizes the importance of workers. The 1994 Company Law requires companies to include employee representatives on the board, to consult with trade unions and employees when making decisions concerning employees' interests, and to protect the legal rights of employees (Lin 2010).

The 2006 Chinese Company Law explicitly requires companies to "undertake social responsibility" while conducting business (Lin 2010). Environmental disclosure has drawn special attention from the Chinese government. In 2008, the State Environmental Protection Administration (SEPA), the main national regulatory agency of environmental issues,

promulgated a substantial number of environmental regulations and standards. In the same year China also launched the Ministry of Environmental Protection, which takes the responsibility for environmental governance from SEPA. The two Chinese stock exchanges have also released guidelines on social responsibility for listed companies since 2006. Similar changes also took place at the provincial level.

Campbell (2007) argues that “corporations will be more likely to act in socially responsible ways if there are strong and well-enforced state regulations in place to ensure such behavior.” Regulations have been closely linked to changes in corporate behavior in the U.S. and Europe and regulatory changes are likely to improve CSR in China. Regulations need not reduce competitive advantage. Campbell points out that Finland, Sweden, and Denmark are among the most competitive economies in the world, yet they all operate under strong state regulation, self-regulation, and corporatist bargaining that promote socially responsible behavior.

Communications between companies and community members such as investors, consumers, NGOs, and other community organizations can also affect corporate behavior (Campbell 2007). While current CSR in China is in flux and largely discretionary (Yin and Zhang 2012), CSR draws the attention of Chinese consumers. Ramasamy and Yeung (2008) found in surveys conducted in Shanghai and Hong Kong that Chinese consumers support CSR more than consumers in Europe and the United States. Ramasamy and Yeung did not investigate, however, whether Chinese investors consider CSR in their investment decisions. Incorporation of CSR in the investment decisions of Chinese investors is likely to increase in the future, as socially responsible investing (SRI) emerges in China. The first SRI index was launched by the Shenzhen Securities Information Company and Tianjin Teda Company in early 2008, followed by the “Responsibility Index” launched a year later by the Shanghai Stock exchange (Lin 2010).

2. Hypotheses Development

2.1 Economic development and CSR: *Companies in countries with relatively low levels of income-per-capita display relatively low levels of CSR*

Countries vary greatly in economic development. Monaco was the richest country in 2010, with a per capita income of \$197,460, while Burundi's per capita income was only \$160. CSR is often expensive and higher profits generated by higher levels of CSR do not always cover its costs (Kim and Statman 2012). For example, while it is possible to replace coal-burning power plants with wind-powered turbines, such replacement is expensive and more likely to reduce the profits of power-generating utilities rather than increase them, especially in the short-run. Clean air and human rights might well be luxuries in countries that lack food and other basic necessities. Therefore, we hypothesize that companies in countries with relatively low levels of economic development display relatively low levels of CSR.

2.2 Corruption and CSR: *Companies in countries with relatively high levels of corruption display relatively low levels of CSR*

Companies interact with governments in complying with regulations, lobbying, and negotiating business practices, such as CSR. Companies are tempted to engage in illegal or unethical behavior as it often reduces costs and enhances profits. Deterrence from such behavior is weak in countries with rampant corruption, as punishment is light. Therefore, we hypothesize that companies in countries with relatively high levels of corruption display relatively low levels of CSR.

2.3 Cultural Values and CSR

Harmony: Companies in countries with relatively low levels of harmony display relatively low levels of CSR

Schwartz (1999) identifies *Harmony* as a cultural dimension that relates people to the natural and social world. According to Schwartz, *Harmony* is “a cultural emphasis on fitting harmoniously into the environment (unity with nature, protecting the environment, world of beauty).” People in harmonious societies try to appreciate and fit into the world rather than to change or exploit it. *Mastery*, at the opposite end from *Harmony*, encourages active self-assertion in order to master, direct, and change the natural and social environment to attain group or personal goals (Schwartz 1999). We hypothesize that companies in more harmonious countries exhibit higher levels of CSR, especially the environmental aspect of CSR.

Egalitarianism: Companies in countries with relatively low levels of egalitarianism display relatively low levels of CSR

Egalitarianism is another culture dimension reflecting the way societies promote responsible behavior. Egalitarian cultures “induce societal members to recognize one another as moral equals who share basic interests as human beings. People are socialized to internalize a commitment to cooperate and to feel concern for everyone's welfare. People are expected to act for the benefit of others as a matter of choice” (Schwartz 1999). *Hierarchy* is at the opposite end from *Egalitarianism*. Schwartz writes that hierarchy cultures “rely on hierarchical systems of ascribed roles to insure responsible, productive behavior. They define the unequal distribution of power, roles, and resources as legitimate and even desirable. People are socialized to take the hierarchical distribution of roles for granted, to comply with the obligations and rules attached to their roles, to show deference to superiors and expect deference from subordinates.” People in egalitarian cultures are more likely to demand that companies demonstrate CSR, treating their

employees well and, more generally, promoting and protecting human rights. Therefore, we hypothesize that companies in countries with relatively low levels of egalitarianism display relatively low levels of CSR.

Autonomy: Companies in countries with relatively low levels of autonomy display relatively low levels of CSR

Our third cultural dimension concerns the nature of the relation between individual and the group. *Autonomy* is at one end of this dimension. Schwartz (1999) writes that “In autonomy cultures, people are viewed as autonomous, bounded entities. They are encouraged to cultivate and express their own preferences, feelings, ideas, and abilities, and to find meaning in their own uniqueness.” He distinguishes two types of autonomy: intellectual autonomy which “encourages individuals to pursue their own ideas and intellectual directions independently,” and affective autonomy, which “encourages individuals to pursue affectively positive experience for themselves.” *Embeddedness* is at the other end of this dimension. Schwartz writes: “In embeddedness cultures, people are viewed as entities embedded in the collectivity. Meaning in life is expected to come largely through social relationships, through identifying with the group, participating in its shared way of life, and striving toward its shared goals. Embedded cultures emphasize maintaining the status quo and restraining actions that might disrupt in-group solidarity or the traditional order.” CSR is more likely to flourish in autonomous cultures where people are willing to speak up and demand their rights, even when such demands disturb the status-quo and disrupt social order. Therefore, we hypothesize that companies in countries with relatively low levels of autonomy display relatively low levels of CSR.

Individualism: Companies in countries with relatively low levels of individualism display relatively low levels of CSR

The fourth cultural dimension we consider is *Individualism*. Hofstede (1980) defines *Individualism* as “a preference for a loosely-knit social framework in which individuals are expected to take care of themselves and their immediate families only.” At the opposite end is *Collectivism* which, in Hofstede’s words, “represents a preference for a tightly-knit framework in society in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioning loyalty.” *Individualism* is related to *Autonomy* in that they both capture the relation between an individual with others in the society. They differ in the definition of the others. *Individualism* measures the way individuals treat their families and in-groups differently from the way they treat the rest of the society, whereas *Autonomy* does not differentiate family and in-groups from the rest of society.

Individualism positively correlates with income-per-capita, but the causality is unclear. De Waal’s (1996) description of the “floating pyramid” is consistent with individualism fostered by income-per-capita. The pyramid has the self on top, family and clan below it, followed by community, tribe or nation, all of humanity, and all life forms, such as animals. Resources, reflected in income, affect the pyramid’s buoyancy. When income is low, loyalty to family and clan dominates concerns about community, tribe or nation, all of humanity, and all life forms. Higher income expands “moral inclusion” to community, tribe or nation, all of humanity, and all life forms. Nepotism is more rampant in collectivistic cultures, as people direct their resources toward family and clan, caring little about the larger community. Nepotism is relatively rare in individualist cultures where people care about the larger community almost as much as they care about their family and clan.

We expect people in individualistic cultures to be more likely to press for CSR than people in collectivistic countries. Consider the global warming, as one example. People in

individualistic cultures are likely to care about the harm global warming might do to them and their families, but they are also likely to care about the harm global warming might do to humanity. Therefore, they are likely to engage in activities that mitigate global-warming, even if the activities that benefit humanity are costly to themselves and their families, such as driving hybrid cars, paying for carbon offsets, and pressing companies to mitigate global warming. People in collectivistic culture are less likely to engage in such activities. Similarly, people in individualistic countries are more likely to press for human rights, even in distant nations, than people in collectivistic countries. Therefore, we hypothesize that companies in countries with relatively low levels of individualism display relatively low levels of CSR.

Ioannou and Serafeim (2012) also hypothesize a positive relation between Hofstede's individualism and CSR, but we argue that they misidentify Hofstede's measure of individualism. They write that "societies characterized by high levels of individualism typically allow for a larger margin of individual initiative and are more willing to tolerate unilateral decision-making. In countries with low levels of individualism, the members of society form expectations that decision-making processes will be broader, more participatory and more consultative." This description of individualism resembles Schwartz's description of the cultural dimension of autonomy, where people are "encouraged to cultivate and express their own preferences, feelings, ideas, and abilities, and to find meaning in their own uniqueness." Earlier, we have hypothesized that companies in countries with relatively low levels of autonomy display relatively low levels of CSR.

Power distance: Companies in countries with relatively high levels of power distance display relatively low levels of CSR

Our fifth cultural dimension is *Power Distance*, also identified by Hofstede (1980). Power distance, according to Hofstede, “expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally. The fundamental issue here is how a society handles inequalities among people. People in societies exhibiting a large degree of power distance accept a hierarchical order in which everybody has a place and which needs no further justification. In societies with low power distance, people strive to equalize the distribution of power and demand justification for inequalities of power.”

High power distance can guide corporate executives toward high CSR as they recognize their obligation to stakeholders and society more broadly; high power distance may also guide corporate executives away from CSR as it allows them to pursue their own interests with no regard to stakeholders and society more broadly. Ioannou and Serafeim (2012) find a significantly negative relation between power distance and CSR. High power distance is also associated with high corruption (Getz and Volkema 2001; Davis and Ruhe 2003), suggesting that corporate executives are more likely to exploit stakeholders and society more broadly than to support them. Therefore, we hypothesize that companies in countries with relatively high power distance display relatively low CSR.

2.4 Civil liberties and political rights: *Companies in countries with relatively low levels of civil liberties and political rights display relatively low levels of CSR*

People in countries with strong civil liberties and political rights are free to express their CSR concerns, such as environmental degradation, and press for their CSR rights, such as employee rights. People in countries with weak civil liberties and political rights are not as free to express their concerns and press for their rights. Marquis and Toffel (2012) find that companies in societies with weak civil liberties and political rights are more likely to engage in

selective disclosure of environmental impacts to mask their CSR shortcomings. Strong civil liberties and political rights empower people to voice their CSR concerns. Therefore, we hypothesize that companies in countries with relatively weak civil liberties and political rights display relatively low levels of CSR.

3. Sample and Data Description

We employ data on the CSR attributes of environmental, social, and governance (ESG) scores of companies from the MSCI ESG Intangible Value Assessment (IVA) database. It measures companies' risks and opportunities arising from ESG attributes. MSCI identifies five ESG key issues of each industry, defined as “an *environmental and/or social externality* that has the potential to become *internalized by the industry or the company*.” Each key issue is then assigned a weight, determined by its importance in the industry. Companies' information on these key issues is collected, primarily from public sources, and evaluated. Each company is assigned a score for each of the key issues based on its risk exposure and its performance in managing its exposures relative to the best practice in the industry. The final score is determined by the weighted average of the key issue scores, and normalized within its corresponding industry. A higher score in the rating indicates better industry-adjusted performance. Each company also receives a letter rating, based on its final score, ranging from the best (AAA) to the worst (CCC). We collect both the overall IVA rating as well as the sub-ratings on environmental and social attributes. In the later analyses, we convert these ratings into numerical scores where 1 corresponds to a CCC rating and 7 corresponds to an AAA rating.

Our version of the MSCI IVA database includes more than 1,800 global companies during 2007-2011, representing approximately 96% of the market cap of the MSCI World Index.

To verify that our results are not due to countries with extremely small number of companies, we include only countries with at least five companies in the MSCI IVA database. Our final sample consists of 2,807 companies from 36 countries.¹ Table 1 reports the number of companies and the number of company-year observations for each country in our sample. The U.S. has the largest number of companies (807) in our sample, followed by Japan (367) and the U.K. (347). A substantial number of companies are from Europe, Australia, Canada, and Hong Kong. This large cross-section of countries allows us to explore the impact of economic development, culture, and institutional factors on CSR. To address the difference in coverage across countries, we compute the median values of CSR across all firms for each country, and use these country medians in our regression analysis.

[Insert Table 1 here]

Our sample includes 38 Chinese companies. The coverage of Chinese companies is typical to the coverage of companies in other countries in the MSCI IVA database – twenty of the 36 countries in our sample have fewer companies than China. Our sample of Chinese companies includes the largest companies, mostly in the banking and insurance, construction, transportation, and mining industries. Table 2 presents these companies and their corresponding industries.

[Insert Table 2 here]

We employ country-level data from several sources. For each country, we obtain income-per-capita for the year 2010 from the World Bank as a proxy for country wealth and economic development. We measure the corruption level and law enforcement of a country by the

¹ Our baseline results are robust if we use a minimum ten firm cutoff benchmark instead of five.

Corruption perception index from Transparency International.² We include the scores of *Harmony*, *Egalitarianism*, *Intellectual Autonomy*, and *Affective Autonomy* from Schwartz (1999), as well as the scores of *Power distance* and *Individualism* from Hofstede (1980). Higher scores indicate that the culture values are more oriented towards harmony, egalitarianism, autonomy, high power distance, and individualism. We obtain ratings of civil liberties and political rights from the Freedom in the World 2010 report (Freedom House 2010).³ Our measure of *Civil liberties political rights* is the average of civil liberties ratings and political rights ratings.

Table 3 shows that the IVA ratings are significantly correlated with all the country-level variables. Companies display higher CSR in countries that are wealthier, exhibit lower corruption, greater civil liberties and political rights, and have cultures of harmony, individualism, and egalitarianism. We also study two components of the IVA rating – the Environmental rating, which is based on key factors related to protecting the environment, such as carbon emissions or biodiversity and land use, and the Social rating, which is based on key factors related to social issues, such as labor management or privacy and data security. Interestingly, we find that these two distinct components are highly correlated with a coefficient of 0.94, suggesting that companies addressing environmental issues well also behave more responsibly on social issues.

[Insert Table 3 here]

Country-level variables are correlated with each other. The level of economic development, measured by the natural logarithm of income-per-capita, is highly correlated with all institutional and cultural dimensions except *Harmony*. The correlation coefficients range from

² Every year, Transparency International ranks countries on a scale from zero (highly corrupt) to ten (highly clean). Higher values of *Corruption perception index* are associated with less corruption.

³ Based on annual surveys of the state of global freedom as experienced by individuals, each country is assigned a numerical rating on a scale of 1 to 7, where a rating of 1 indicates the highest degree of freedom and 7 the lowest level of freedom. Higher values of *Civil liberties political rights* are associated with less freedom.

-0.61 between income and *Civil liberties and political rights*, and 0.83 between income and the *Corruption perception index*. Correlations among cultural dimension and institutional features are also high. For example, the correlation between *Individualism* and *Power distance* is -0.68 and the correlation between *Egalitarianism* and *Harmony* is 0.64. This makes it difficult to distinguish relations from one another.

4. Empirical Results

4.1 CSR levels of Chinese companies

We compare CSR levels in Chinese companies to CSR levels of companies in other countries. We use two groups of companies as benchmarks: companies from three developed countries, the U.S., the U.K., and Japan; and companies from three developing countries in East Asia, South Korea, Hong Kong, and Taiwan. Table 4 reports significantly lower CSR levels among Chinese companies relative to companies in both benchmark groups. The average overall IVA rating of Chinese companies is 1.77 (somewhere between a CCC and CC rating), significantly lower than U.S.'s 3.47, U.K.'s 4.54, and Japan's 4.10. CSR levels in Chinese companies are also significantly lower than levels in the three East Asian developing countries.

Both environmental ratings and social ratings contribute to the poor overall CSR levels in Chinese companies. The pattern is the same in eight subcategories – strategic governance, human capital, stakeholder capital, products and services, emerging markets, environmental risk factors, environmental management capacity, and environmental opportunity factors.

[Insert Table 4 here]

4.2 Determinants of CSR levels

Why are CSR levels in Chinese companies so low relative to levels in other countries?

We find some answers in tests of the hypotheses presented in Section 3.

Economic development and CSR

We hypothesize that levels of CSR are relatively low in developing countries. We measure the level of economic development in a country by its income-per-capita. Table 5 Column 1 shows that, consistent with our hypothesis, CSR levels are relatively high in countries with incomes are relatively high. Variation of income explains as much as 28.5 percent of variation in CSR levels. China is still a relatively poor country today, despite its rapid economic growth in the last few decades. China ranked 121 in the world in 2010, with an income-per-capita of \$4,260. China's low income contributes to the relatively low CSR levels in Chinese companies.

[Insert Table 5 here]

Moreover, CSR levels of Chinese companies are lower than CSR levels of companies in other countries even when we adjust for differences in income. Figure 1 presents CSR levels in countries and their income. The line represents the predicted level of CSR for a given level of income. Income is a good predictor of CSR levels in Japan, Belgium, and Thailand. Income, however, is not a good predictor of CSR levels in China, France, Sweden, and the U.S., suggesting that factors other than income play important roles as well. CSR levels in France and Sweden are higher than predicted by their incomes, whereas CSR levels in the U.S. and especially in China are lower than predicted by their incomes.

[Insert Figure 1 here]

Corruption and CSR

We hypothesize that levels of CSR are relatively low in countries with relatively high levels of corruption, as companies find it cheaper to skirt CSR rather than embrace it. Consistent with this hypothesis, we find that relatively high levels of corruption are associated with relatively low levels of CSR (Table 3).

Corruption perception scores are highly correlated with income, indicating that corruption is relatively high in countries where income is relatively low. This high correlation makes it difficult to distinguish the relation between CSR and income from the relation between CSR and corruption. Indeed, statistical significance disappears when both income and corruption are placed as independent variable in a regression where CSR is the dependent variable (Table 5 Column 2).

The level of corruption in China is relatively high. The corruption perception score of China in 2010 was 3.5, compared with an average of 6.5 in all sample countries. Corruption in China is much higher than in the U.S. (7.1), U.K. (7.6), Japan (7.8) and Taiwan (5.8). Only four of our 36 sample countries are perceived as more corrupt than China.

Harmony and CSR

We hypothesize that levels of CSR are relatively low in countries with relatively low levels of harmony, and this is what we find. The correlation coefficient between the two is 0.50 (Table 3). The coefficients of both *Income* and *Harmony* are statistically significant when we include both in a regression where CSR is the dependent variable, indicating that *Income* and *Harmony* have independent explanatory power (Table 5 Column 3).

China's harmony score is 3.78, lower than the 4.06 average of all countries in our sample. China's harmony score is lower than Japan's 4.21, Taiwan's 4.12 and U.K.'s 3.91, but China's harmony score is higher than the U.S.'s 3.46. The relatively low harmony scores of China and

the U.S. may explain their relatively low CSR levels when adjusted for income (Figure 1). Countries with high harmony scores, such as Germany, Spain, and Sweden, have higher income-adjusted CSR scores.

Egalitarianism and CSR

We hypothesize that levels of CSR are relatively low in countries with relatively low levels of egalitarianism, and this is what we find. The correlation between the two is 0.61 (Table 3). The coefficient of *Egalitarianism* remains statistically significant when we include both egalitarianism and income in a regression where CSR is the dependent variable, but the coefficient of income is no longer statistically significant (Table 5 Column 4).

China's egalitarianism score is 4.23, lower than the 4.78 average of countries in our sample. Indeed, China's score is the lowest in our sample. Taiwan's egalitarianism score is 4.31, U.S.'s 4.68, and Italy's 5.27. Many European countries rank relatively high in egalitarianism, and they also rank high in income-adjusted CSR.

Autonomy and CSR

We hypothesize that levels of CSR are relatively low in countries with relatively low levels of autonomy, and this is what we find. The correlation between CSR and intellectual autonomy is 0.59, and the correlation between CSR and affective autonomy is 0.62 (Table 3). The coefficients of *Intellectual Autonomy* and *Affective Autonomy* are positive and statistically significant when we include both autonomy and income as independent variables in a regression where CSR is the dependent variable (Table 5 Column 5 and 6).

Chinese culture is oriented towards embeddedness rather than autonomy. The intellectual autonomy score of China is 4.18, lower than the 4.51 average of countries in our sample. China's intellectual autonomy score is lower than Taiwan's 4.36, Japan's 4.78, and U.K.'s 4.62, but it is

approximately equal to the U.S.'s 4.19. The affective autonomy score of China is 3.30, lower than the 3.72 average of countries in our sample. China's affective autonomy score is lower than Japan's 3.76, U.K.'s 4.26, and U.S.'s 3.87, but it is approximately equal to Taiwan's 3.27. Autonomy scores are relatively high in European countries. France, Sweden, and Switzerland rank relatively high on autonomy and have relatively high income-adjusted CSR levels.

Individualism and CSR

We hypothesize that levels of CSR are relatively low in countries with relatively low levels of individualism, and this is what we find. The correlation between the two is 0.62 (Table 3). The coefficients of both *Income* and *Individualism* are statistically significant when we include both in a regression where CSR is the dependent variable, indicating that *Income* and *Individualism* have independent explanatory power (Table 5 Column 7).

China's individualism score is 20, much lower than our 52.1 sample average. Only three countries including Taiwan (17) have individualism scores lower than China's. Japan's score is 46. Western countries tend to have relatively high individualism scores. For example, the individualism scores of the U.S. and the U.K. are 91, the highest in our sample.

Power distance and CSR

We hypothesize that CSR is relatively low in countries with relatively high levels of power distance, and this is what we find. The correlation between the two is -0.46. Nevertheless, the coefficient of *Power distance* is no longer statistically significant when we include both *Income* and *Power distance* as independent variables in a regression where CSR is the dependent variable. The coefficient of *Income* remains statistically significant (Table 5 Column 8).

China's power distance score is 80, higher than our 52.2 sample average. China's score is higher than Japan's 54, Taiwan's 58, U.K.'s 35, and U.S.'s 40.

Civil liberties, political rights, and CSR

We hypothesize that levels of CSR are relatively low in countries with relatively weak civil liberties and political rights, and this is what we find. The correlation between the two is -0.68. The coefficient of *Income* is not statistically significant in a regression where both income and civil liberties and political rights are the independent variables and CSR is the dependent variable, but the coefficient of *Civil liberties political rights* remains statistically significant (Table 5 Column 9).

China's civil liberties and political rights score is 6.5, higher than our 1.9 sample average, where higher scores indicate lower civil liberties and political rights. Indeed, China's score is the highest among our sample countries. Japan's score is 1.5, U.S.'s 1 and U.K.'s 1.

Accounting for differences in levels of CSR

Levels of economic development, measured by income-per-capita, are associated with levels of CSR. Dimensions of culture, such as individualism, harmony, and egalitarianism, and features of institutions, including levels of corruption, civil liberties, and political rights, are also associated with levels of CSR. Yet, the variables are highly correlated, making it difficult to discern the distinct effect of each; levels of corruption are low in countries where levels of income are high, and levels of harmony are high in countries where levels of egalitarianism are high. Still, we can find how much of differences in levels of CSR among countries we can account for by employing all the variables.

We place all the country-level variables as independent variables in a regression where CSR is the dependent variable (last column of Table 5). While multicollinearity removes statistical significance from most coefficients, the coefficients of *Civil liberties political rights*,

Harmony, and *Affective Autonomy* retain statistical significance. Variations in country-level variables account for 55.2% of the variation in country CSR.

5. Conclusion

Levels of CSR among Chinese companies are low relative to levels among companies in both developed countries, such as the United States and Japan, and developing countries, such as South Korea and Taiwan. Yet payoffs from increased CSR in China might well exceed payoffs from increased CSR in developed countries. We attribute the relatively low levels of CSR in China to relatively low income-per-capita and to adverse cultural and institutional dimensions including relatively low levels of harmony and individualism, relatively high levels of corruption, and relatively low levels of civil liberties and political rights.

Levels of CSR in China are likely to increase in the future. Chinese income-per-capita is rising, and higher incomes are associated with higher levels of CSR. The need for food is most pressing when income is very low, but the need for clean water and air becomes increasingly pressing as income increases. The recent protests in Qidong against a pipeline project that would have dumped wastewater from a Japanese-owned paper mill into the sea are one example. Thousands joined in the protests and the Chinese government chose to cancel the project soon after (Wall Street Journal, 2012a).

Higher incomes also bring demands for greater civil liberties and political rights. In turn, higher civil liberties and political rights are associated with higher CSR levels. Protests against a plan for a metal plant in Shifang, a small city in Sichuan province, led to violent clashes between protestors with the police. Eventually, local officials abandoned the plan. The Shifang demonstrations have drawn great attention on Weibo (Chinese Twitter), revealing deep

environmental, social, and political concerns in the Chinese public. Young people were prominent among the outraged protestors, indicating that, contrary to earlier perceptions, the young in China are not indifferent to environmental, social, and political concerns (Wall Street Journal, 2012b).

Cultures are persistent but not immutable. People in poor countries are compelled to resort to collectivism, as help from family and friends forms their safety net. Moreover, institutions, such as banks, are underdeveloped in poor countries, making it necessary for people to borrow from family and friends rather than from banks, as they do in developed countries. The need for safety nets of family and friends and the collectivism it fosters decline as incomes increase and institutions such as banks facilitate individualism. In turn, individualism promotes CSR.

Increasing globalization is also likely to increase levels of CSR in China in two ways. First, buyers of Chinese exports will continue to resist products such as toys containing lead and governments outside China would continue to enforce regulations against poor working conditions and high corruption, promoting CSR. Second, Chinese traveling abroad are likely to bring back cultural norms fostering CSR from countries they visit, such as lower tolerance for power distance and corruption, and greater desire for egalitarianism and autonomy.

Reference:

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Table 1: List of countries covered by MSCI IVA

Country	No. of companies	No. of firm-year observations
Australia	266	905
Austria	14	38
Belgium	18	50
Brazil	34	61
Canada	146	355
Chile	9	17
China	38	65
Denmark	21	54
Finland	26	71
France	90	270
Germany	61	172
Greece	13	40
Hong Kong	53	147
India	28	50
Indonesia	8	11
Ireland	22	36
Israel	14	19
Italy	54	129
Japan	367	1,062
Korea, South	30	58
Malaysia	14	25
Mexico	19	33
Netherlands	41	92
New Zealand	14	22
Norway	18	41
Portugal	12	35
Russia	17	38
Singapore	29	82
South Africa	18	39
Spain	47	121
Sweden	43	116
Switzerland	53	134
Thailand	7	11
Turkey	7	9
United Kingdom	347	902
United States	809	2,192
Total	2,807	7,502

Table 2: List of Chinese companies covered by MSCI IVA

Company Name	Company Industry
PetroChina Company Limited	Integrated Oil & Gas
HUANENG POWER INTERNATIONAL, INC.	Electric Utilities - International
China Telecom Corporation Limited	Integrated Telecommunication Services
China Construction Bank Corporation	Banks - Asia
China Petroleum & Chemical Corporation	Integrated Oil & Gas
China Life Insurance Company Limited	Life & Health Insurance
Bank of Communications Co., Ltd.	Banks - Asia
Ping An Insurance (Group) Company of China, Ltd.	Life & Health Insurance
Aluminum Corporation of China Limited	Metals and Mining - Non-Precious Metals
Shanghai Electric Group Company Limited	Electrical Equipment
SINOPEC Shanghai Petrochemical Company Limited	Commodity Chemicals
Yanzhou Coal Mining Company Limited	Metals and Mining - Non-Precious Metals
Datang International Power Generation Co.,Ltd.	Electric Utilities - International
PICC Property and Casualty Company Limited	Property & Casualty Insurance
Air China Limited	Airlines
Zijin Mining Group Company Limited	Metals and Mining - Precious Metals
China COSCO Holdings Company Limited	Marine Transport
China Shipping Development Company Limited	Marine Transport
Angang Steel Company Limited	Steel
China Shipping Container Lines Company Limited	Marine Transport
China International Marine Containers (Group) Ltd.	Industrial Machinery
Anhui Conch Cement Company Limited	Construction Materials
Jiangxi Copper Company Limited	Metals and Mining - Non-Precious Metals
Want Want China Holdings Limited	Food Products
BYD Company Limited	Electronic Equipment & Instruments
Bank of China Limited	Banks - Asia
Industrial And Commercial Bank of China Limited	Banks - Emerging Markets
Nine Dragons Paper (Holdings) Limited	Paper & Forest Products

Tencent Holdings Limited	Software & IT Services
China Merchants Bank Co., Ltd.	Banks - Emerging Markets
China Vanke Co.,Ltd	Real Estate Management & Development
Baoshan Iron & Steel Co., Ltd.	Steel
China Shenhua Energy Company Limited	Metals and Mining - Non-Precious Metals
China Coal Energy Company Limited	Metals and Mining - Non-Precious Metals
China Citic Bank Corporation Limited	Banks - Emerging Markets
China Railway Construction Corporation Limited	Construction & Engineering
Global Logistic Properties Limited	Real Estate Management & Development
Evergrande Real Estate Group Limited	Real Estate Management & Development

Table 3: Correlation table

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) IVA rating	1										
(2) Environmental rating	0.9818*										
(3) Social rating	0.9821*	0.9422*									
(4) Income(Log GNP per capita)	0.5530*	0.5722*	0.5415*								
(5) Corruption perception index	0.5329*	0.5238*	0.5202*	0.8300*							
(6) Harmony	0.5015*	0.4743*	0.5219*	0.2716	0.1429						
(7) Egalitarianism	0.6050*	0.5883*	0.6057*	0.6350*	0.4957*	0.6385*					
(8) Intellectual Autonomy	0.5871*	0.5863*	0.5876*	0.6916*	0.5447*	0.6249*	0.7018*				
(9) Affective Autonomy	0.6226*	0.6058*	0.6439*	0.6131*	0.6104*	0.1953	0.4391*	0.6585*			
(10) Individualism	0.5668*	0.5314*	0.5954*	0.6234*	0.5875*	0.1915	0.5436*	0.5390*	0.7109*		
(11) Power distance index	-0.4640*	-0.4514*	-0.5102*	-0.6589*	-0.6908*	-0.1268	-0.4872*	-0.5416*	-0.7292*	-0.6837*	
(12) Civil liberties political rights	-0.6817*	-0.6745*	-0.6988*	-0.6078*	-0.5726*	-0.3845*	-0.7244*	-0.5874*	-0.5821*	-0.6378*	0.6840*

*: significant at the 1% level.

Table 4: Compare China with the rest of the world

	Full sample	China	US	UK	Japan	South Korea	Hong Kong	Taiwan
IVA rating (1-CCC, 7-AAA)	3.93	1.77	3.47	4.54	4.10	3.60	2.97	2.80
Environmental rating (1-CCC, 7-AAA)	3.81	1.69	3.36	4.31	4.33	3.62	3.06	2.90
Social rating (1-CCC, 7-AAA)	3.99	1.95	3.62	4.61	3.89	3.53	3.03	2.95
Sub-categories								
SG (strategic governance)	5.36	2.96	5.05	5.97	5.15	4.87	4.84	4.14
HC (human capital)	5.59	3.54	5.29	6.16	5.61	4.78	4.73	4.85
SC (stakeholder capital)	5.21	3.66	5.03	5.78	5.07	5.12	4.75	4.77
PS (products and services)	5.30	3.66	5.08	5.57	5.75	5.10	4.77	4.53
EM (emerging markets)	5.36	3.81	5.37	5.68	5.29	4.52	4.43	4.38
ER (environmental risk factors)	5.84	3.20	5.10	5.68	5.54	5.08	4.63	4.82
EMC (environmental management capacity)	4.90	3.20	4.45	5.40	5.60	4.78	4.27	3.99
EO (environmental opportunity factors)	4.98	3.25	4.64	5.14	5.70	4.75	4.59	3.84

Table 5: Determinants of overall IVA ratings

This table presents OLS regression results for the sample of 36 countries covered in MSCI IVA database. The dependent variable is the country-median value of overall IVA rating. p -values based on standard errors adjusted for heteroskedasticity (White, 1980) are reported in parentheses. *, **, and *** denote statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively, based on two-tailed tests.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Income (Log GNP per capita)	0.451*** (0.001)	0.290 (0.137)	0.367*** (0.006)	0.231 (0.121)	0.230 (0.111)	0.224* (0.075)	0.267** (0.045)	0.357* (0.052)	0.179 (0.115)	0.050 (0.780)
Corruption perception index		0.093 (0.242)								0.079 (0.317)
Harmony			0.939*** (0.003)							0.919** (0.030)
Egalitarianism				1.212** (0.011)						-0.075 (0.887)
Intellectual Autonomy					0.883** (0.017)					-0.456 (0.423)
Affective Autonomy						0.926*** (0.000)				0.952** (0.019)
Individualism							0.013** (0.021)			0.003 (0.639)
Power distance index								-0.007 (0.428)		0.012* (0.061)
Civil liberties political rights									-0.323*** (0.000)	-0.249*** (0.004)
Constant	-0.689 (0.602)	0.312 (0.844)	-3.665** (0.017)	-4.297** (0.016)	-2.466 (0.130)	-1.873 (0.101)	0.475 (0.687)	0.599 (0.782)	2.647** (0.039)	-2.383 (0.433)
Observations	36	36	36	36	36	36	36	36	36	36
Adjusted R-squared	0.285	0.282	0.405	0.378	0.349	0.400	0.349	0.282	0.465	0.552

Figure 1: CSR and Income

