Overview

This study analyzes the trends and context of corporate social responsibility (CSR) in the energy industry. We take China as an example, and use environmental and social responsibility data in 34,000 CSR projects released by over 800 companies in 31 provinces. Clustering methods as well as ordinary least squares and the fixed effects panel regression modeling are performed to provide insights on the context, trends, and impact of CSR projects on companies’ productivity and financial outcomes. Results of data processing and modeling indicate that: (a) most projects focused on improving companies’ environmental sustainability (compared to social); (b) implementation of both environmental and social projects had positive impacts on companies’ performance; and (c) trends, context, and impact of the projects varied with time, company type, and location (provinces). In addition, data suggest that companies operating in regions with lower economic conditions (GDP per capita) seem to be less motivated to implement environmental and social sustainability projects compared to those operating in regions with higher economic conditions. This study is meaningful for both companies that consider adopting CSR initiatives, as well as stakeholders and managers who aim to promote sustainable development in China.

Methods

This study is the first that comprehensively captures companies’ CSR actions in China. We use a very large data set extracted from the China Stock Market & Accounting Research (CSMAR) database, and eventually collect over 34,000 CSR project announcements released by over 800 companies in China. Our analytical methods include:

- Clustering methods with big data
- Ordinary least squares
- Fixed effects panel regression modeling

Results

First, Chinese companies adopted CSR projects between 2006 and 2013 with increasing rates (As shown in Figure 1). However, the CSR projects distribute unevenly in the 31 provinces of China, and this uneven distribution is tightly related to the distribution of the energy sectors.

Second, we then analyzed the types and contexts of the CSR projects. Through reading the project reports issued by companies, we identified which issues the company would address. These issues were then categorized into two main sections for environmental sustainability or social responsibility, and then the context was specified according to the main focus of the CSR project. Our analyses of the CSR projects suggest a significant increase for CSR initiatives from 2006 to 2016 in the energy industries, and a trend toward promoting sustainable development in China. Furthermore, results suggest the importance and impact of geographical location and GDPs on the success of CSR initiatives in China. Project types and numbers shown varied according to the type of company and the anticipated impact on maintaining environmental and social sustainability in China.

Third, we find that in the regions with more CSR practices, energy companies will benefit more from their CSR practices with a higher reward of investment earnings. And aspects of CSR improve the financial health of one company.
Conclusions

This paper contributes to the body of knowledge in the areas specific to understanding parameters controlling success of CSR projects particularly in developing economies. We capture a comprehensive graph of the environmental and social responsibility projects in the energy industry of China. We investigate and compare impacts of the projects on company performance from the perspective of investors and managers; we assume that the core issues for corporate governance (including CSR initiatives) is controlled by different motivations of corporate owners, equity investors (principals), and managers (agents) who have determinative power on various company affairs including adoption of CSR initiatives. Our contribution is extended by suggesting an evolutionary path of CSR theory and practices. Results highlight the effect of state of economies on the level of acceptance and configuration of CSR projects, suggesting that companies in China are slightly shifting focus on their CSR impact from macro-social effects to organizational-level effects on the profit, and less on ethics-oriented practices.

References


