To engage or not to engage in corporate social responsibility: Empirical evidence from global banking sector ☆

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ABSTRACT

Whether or not banks should engage in corporate social responsibility (CSR) activities is controversial because of the concomitant high cost even if banks could enjoy the benefits of a higher income as a result of their good reputation. Faced with this dilemma, bank managers are hesitant to engage in CSR. This study pursues this issue by examining whether or not banks engaging in CSR can bring profits and reduce non-performing loans. We apply three novel estimation methods to obtain the unbiased and full-blown CSR effect. The first two methods are matching methods, namely, conventional propensity score matching method and nearest-neighbor variance bias-corrected matching method (nn-VBC). The third method is Heckman's two-step method in switching regression. Regardless of the methods used, CSR banks overwhelmingly outperform non-CSR banks in terms of return on assets and return on equity. Our study offers policy suggestions for both government regulators and bank managers.

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1. Introduction

Whether or not banks should conduct corporate social responsibility (CSR) activities is controversial because of the concomitant high cost even if banks could enjoy the benefits of a higher income as a result of their good reputation. The mainstream opinion stresses the need for banks to engage in CSR because banks benefit considerably from the society; for example, the government implicitly guarantees to reduce the default of banks during crises (Iannotta et al. 2013). Bank of England Governor Mervyn King accused banks of exploiting gullible or unsuspecting customers for short-term profits.[1] He criticized the culture of short-term profits and bonuses in the banking system and argues that banks should adhere more to higher moral standards when conducting business. However, not all banks are willing to engage in CSR because of the cost consideration. Even worse, for some banks, conducting CSR

may simply be lip service or part of a strategic plan. Wu and Shen (2013) raised the latter issue when they examined three motivations of banks in conducting CSR activities. The present study uses new novel and rigorous statistical methods to demonstrate that engaging in CSR is beneficial because the banks conducting CSR activities generate considerable profits compared with non-CSR banks.

This study examines whether or not banks carrying out CSR activities outperform those that do not. For simplicity, those banks conducting CSR are hereafter referred to as CSR bank and those that do not are hereafter called non-CSR banks. To answer the query regarding whether or not corporate social performance (CSP)[2] can improve profit, termed CSR effect hereafter, we compare two banks that are almost identical except one conducts CSR and the other does not. Thus, any performance difference between them could be attributed to the CSR effect. This examining approach is similar to determine the treatment effect in the medicine field, where one person undergoes the treatment and the other does not. In medical science, twins are commonly selected for such an experiment because their DNAs are 99% similar and the only difference between them is the treatment effect (Foster 2003). However, in real life, finding twins is much easier than finding "twin banks." Statisticians solve the problem of finding "twin banks" by developing matching theory, which argues that two banks with

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[2] The terms, CSP and CSR, are interchangeably in this study.

identical characteristics statistically can be treated as the "identical". Our study adheres to this concept to match CSR banks (i.e., treated banks) with non-CSR banks (i.e., control banks) and then examines the CSR effect, that is, CSR banks outperform non-CSR banks. To accomplish this task, we apply matching theory, particularly, propensity score matching (PSM), to accomplish the matching task. The goal of PSM is to reduce the multiple dimensions of bank characteristics, such as total assets, deposits, and loan-to-deposit ratio, into one dimension of propensity scores to match CSR and non-CSR banks. Then, we match the propensity scores of CSR banks to those of non-CSR banks. Accordingly, CSR and non-CSR banks are "identical" in a statistical sense except that one espouses CSR and the other does not.

We apply three novel measures to conduct the analysis, intending to solve the mixed results presented in the literature. Previous estimates may be biased when the decision to adopt CSR in banks is not random but is instead a deliberate move by managers who self-select or prioritize their preferred choices. For example, if larger banks with better return on assets (ROA) adopt CSR, then the strategic behavior (i.e., banks adopting CSR) is considered endogenous, resulting in biased estimated coefficients. Our first method is based on the conventional matching approach that randomizes the treatment assignment to eliminate selection bias (Kosuke, King, and Stuart, 2008). If the nonrandom assignment of samples causes systematic differences in the characteristic variables of two groups of observations, then these differences would influence the attributes of the various performance levels, indicating the effects of adopting CSR. The resulting difference between two matched observations with similar characteristics is the average treatment effect on the treated (ATET). This study calculates ATET in determining such a difference (Rubin 1973a, 1973b).

The second method, which was proposed by Abadie et al. (2004), extends the conventional matching method by implementing the nearest-neighbor matching after variance bias-correction (nn-VBC) method. The improved method yields both the unbiased performance difference and the resulting confidence intervals. The conventional matching method for calculating ATET is relatively straightforward in the calculation of variance. However, the conventional method remains controversial because no consensus has been reached for a finite sample undergoing non-exact matching in estimating variance. We discuss this in detail in Section 4.

Lastly, Heckman's (1978) two-step estimation method for switching model was enhanced in the present study. When estimating the switching model, the often calculated difference between the CSR and non-CSR equations is not a complete measure of the performance difference between two groups of banks. Thus, a correct method is suggested to calculate ATET in this situation. The methods employed by Clatworthy et al. (2009) and by Greene (2003, p. 788) were adopted in calculating the full-blown ATET to assess the effect of the CSR strategy. Although the discussion illustrated the theoretical calculation of the treatment effect, the formulations of the statistical inferences were not discussed because the treatment calculation was only based on the first-moment measure and no variance was immediately available.

Data from global banks in 18 countries were used in the present investigation. The CSR banks examined are those listed in the FTSE4Good Global Index published by the FTSE Good Group. These CSR banks were required to comply with five requirements, namely, environmental sustainability, human rights, countering bribery, supply chain labor standards, and climate change. The construction of the FTSE4GOOD Index is based on the questionnaires sent to the banks, direct contacts with the banks, bank reports, and bank websites, among others. The reliability of the index is further strengthened by an independent committee comprising experts from various fields. Thus, the selection of the constituents in FTSE4Good is not based merely on open communication about CSR-related areas; instead, these constituents should pass the high CSR standard and really engage in CSR activities. Thus, a bank would not be included in the FTSE4GOOD Index if it actually does not conduct any CSR activity.

This study differs from previous studies in four aspects. First, the present study compares the findings of the three methods simultaneously, thus reinforcing the results. The nn-VBC approach, which has rarely been employed in finance literature, provided an unbiased inference. Second, the current study is the first to calculate the first and second moments of the treatment effects using Heckman's model. Third, the results of this study are robust across different methods, and a number of characteristics are identified with the use of a large sample size in the banking sector. Fourth, we consider different nonlinear effects by considering how bank size and bank market share affect the relation between CSR and financial performance (FP). Aside from global data, we also consider US data only. Our results are robust given these considerations. Unlike the study of Simpson and Kohers (2002), which focused solely on the US, the present study uses global bank data to compare CSR and non-CSR banks in terms of performance. In addition, the current study considers the three estimation methods.[3]

Our study offers policy suggestions for both government regulators and bank managers. Government regulators should encourage banks to adopt CSR, which increases profits and consequently enhances the safety and soundness of the banking system. Furthermore, engaging in CSR could increase economic welfare because the environment is improved by paying more attention to the Equator Principles; social welfare is improved by focusing on the need of the customers, communities, and clients; and governance is improved by stressing the rights of shareholders. Bank managers can also convince the board to engage in more CSR activities as an important part of their strategic initiatives, which align the interests of the society, environment, and government with those of the investors.

The remainder of this paper is organized as follows. Section 2 elaborates on the importance of CSR in the banking sector. Section 3 presents a review of the literature on CSR in the banking sector, as well as the hypotheses on and channels of CSR effects on FP. Section 4 discusses data and source. Section 5 shows the treatment effects obtained using the three methods. Section 6 summarizes the results, and Section 7 displays the robustness tests. Section 8 presents the conclusions.

2. Importance of CSR in the banking sector

CSR is particularly important in the banking sector because of different reasons. First, from regulator's and the public's views, engagement in CSR activities is a means for banks to compensate for the use of considerable resources from the society instead of from their shareholders. Wu and Shen (2013) argued that, during the financial crisis, governments employed public funds to bail out distressed banks. Many countries subsequently adopted full-coverage deposit insurance to avoid bank runs. As well, the banking industry enjoys or enjoyed yet another privilege, i.e. implicit VAT exemption, which gave rise to legislative initiatives such as Financial Transactions Tax or Financial Activity Tax. These explicit benefits from outside sources brought substantial cost reductions in banks compared with non-banking sectors. Scholtens (2009) mentioned that specialized banks in member countries of the Organization for Economic Cooperation and Development (OECD) offer savings accounts to the public, with the declaration that the said savings would be used to finance so-called community investments in the environment.[4] The Community Reinvestment Act which was

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[3] Some studies argue that the mixed results on CSR and FP are due to the different motives of CSR engagement. For example, Wu and Shen (2013) classified the banks into different types based on their degree of engagement in CSR and found that strategic choice is the most important motive. However, the CSR data employed in this paper cannot allow us to distinguish CSR banks based on their degree of CSR engagement. Moreover, this paper highlights the implementation of estimation methods rather than banks' incentives for CSR engagement to interpret the conflicting relationship between CSR and FP. We will further consider the degree of CSR for future research.

[4] In 2010, companies worldwide were given much guidance and support on how to conduct their business responsibly and report on their sustainability performance through the partnership between OECD and Global Reporting Initiative.