ABSTRACT

This dissertation proposes a study on determinants of earning from Voluntary Carbon Units (VCU) at firm level. Information on the firm characteristics and VCU project details are extracted from various sources. In a stylized exercise, we test for heteroskedasticity and multicollinearity and found high degree of heteroskedasticity and absence of multicollinearity. We estimate using OLS regression method to find the relationship between total vintage quantity and firm characteristics and especially Research & Development (R&D), to find out whether firm characteristics matters or not. We have an unbalanced panel data of voluntary carbon offsetting projects executed in India covering a timeframe of 5 years (2007 – 2012). Besides, we run a Tobit-Censored regression to observe the determinants of a firm earning VCU. These results of estimations show that firm characteristics matters a lot in earning VCU. Firms that are bigger in size, profitable, capital intensive and market borrowing are the beneficiaries and at the same time, these firms come up with a technology-switch behavior which drives them to earn more carbon units.

Keywords: Voluntary Carbon Units; CO₂; R&D; firm characteristics; Carbon emission reduction; CDM; Tobit estimation; OLS estimation.