Title: The Measurement of Decoupled Payments' Effects on U.S. Agricultural Production

Under World Trade Organization (WTO) rules, green box subsidies are those subsidies that do not distort trade, or cause at most minimal distortion. They include direct income support to farmers that is decoupled from current production levels and prices. In the current WTO negotiations, the developing and the developed countries take an opposite view regarding the criteria for green box subsidies. In this background, this study investigates whether U.S. PFC and direct payment subsidies are truly decoupled from production or not. Many studies introduce the risk attitude concept to explain the possible effect of decoupled payments and argue that decoupled payments may affect the allocation of resources through the change of producers’ risk attitudes. However, it is hard to find an empirical study directly using risk attitude measures to estimate crop supply. Therefore, this study models the farmers’ risk attitudes in a non-structural approach and estimates the effect of decoupled payments on production by the change in risk attitudes. The results show that farmers’ risk attitudes are mostly risk loving and change over time, which is different from other studies. The results also show that only the amount of money matters in determining risk attitude. The effect of decoupled payments is not only statistically insignificant on corn and soybean acreage but also very small in magnitude.