Does China's "Two Control Zones" Policy Control Sulfur Dioxide Emissions? The Effect of Acid Rain and Sulfur Dioxide Control Zones Policy on China's Industrial Sulfur Dioxide Emissions

Wu Yujia

Data Description:

This dataset includes Chinese province-level panel data from 1991 to 2007. An important clarification is that Chongqing Municipality lacks data for six of the years under study because it did not become an administrative district until it separated from Sichuan Province in 1997. In order to keep consistency and avoid omitting data, this paper merges data of Chongqing Province into data of Sichuan Province between 1997 and 2007, considering these two provinces as one during the whole time frame. Independent variables include GDP per capita (GDPPC), GDP per capita squared (GDPPC2) and population density (pop_density) for each province. In order to evaluate the TCZ policy, this analysis incorporates a treatment dummy (Treatment) into each model. The treatment dummy is set equal to 1 after year 1996 for provinces that were incorporated into SO₂ and acid rain control zones and is set to 0 for observations before 1996 for all provinces. All of these data are taken from the China Statistical Year Book, so it is reasonable to assume that they are consistently measured overtime. The following variables are included:

variable name	storage type	display format	value label	variable label
id	long	%14.0g	id	Individual Identifier
year	int	%9.0g		Year of Observation (1991-2007)
province	str16	%16s		Province Name
totalpop	float	%8.0g		Total Provincial Population (10000 persons)
totalso2	long	%12.Ŏg		total SO2 (kg)
reg_GDP	float	%9.0g		Provincial GDP (100m Yuan)
time	float	%9.0a		Variable for time (coded as 1,2,3,4,etc)
treatment	byte	%8.0g		Two Control Zone policy, equal to 1 once policy implemented
provincearea	long	%12.Ŏq		province area
group	byte	%8.0g		Equal to 1 if ever received treatment
SO2PC	fĺoat	%9.0g		total SO2 emissions divided by total population
SO2PGDP	float	%9.0g		total SO2 emissions divided by total GDP
GDPPC	float	%9.0g		total GDP divided by total population
GDPPC2	float			total GDP divided by total population, squared
pop_density		%9.0g		Population Density, Numbers of people per km2