

Carbon trading

Carbon trading markets have begun to emerge across the globe. The US for a long time has had a voluntary market. Exchanges in Australia and Canada are due to launch soon and the EU's Emissions Trading Scheme has been running for a number of years.

The popularity of such schemes is that they are tangible attempts by governments to fight carbon emissions and stem global warming. They work by governments setting annual limits on the amount of carbon emissions in a given country or region. Allowances, or permits equal to the value of the carbon limit are then allocated to companies. Those companies who produce less carbon emissions than their allowance can trade their permits at a profit with those companies who require additional allowances. Polluters pay, cleaner companies gain.

Of course all of this is fine in theory. In practice, firms have reacted rather differently to carbon trading. First, the market has shown huge price movements, moving from €15 to €0.15 in less than a year. This volatility has been created by governments oversupplying permits to the market.

While traditional financial traders, those involved in stocks, shares, commodities, generally welcome some price volatility as an avenue for making profits, the holders of carbon permits have been scared away from the market.

Companies using carbon permits have generally made environmental risk managers in charge of carbon trading. Carbon trading has then been grouped within a number of other regulatory burdens, rather than seen as opportunity to speculate and profit. This is despite the clear evidence that profits exist. Carbon permits are delivered to companies one year in advance. Companies can sell them immediately and use a futures contract to buy them back for almost the same price in 12 months time. If more companies exploited this opportunity afforded by the futures market, then the profit should disappear. Instead, managers trained in risk management appear to be taking a more conservative approach and hoarding permits in case there is a sudden and unexpected need for them in the immediate future.

Some companies are better than others at exploiting trading opportunities. Power generators have developed internal expertise in using financial instruments to buy gas, coal and oil; and have become adept at modelling daily power prices. This market and financial culture within previously monolithic power companies is a great enabler when they are presented with the opportunity to make profits from carbon trading. In contrast, the plant manager at a cement works is more concerned with making sure he has enough permits to meet his annual requirements; and is keen to avoid having to ask his boss for additional money in month 12 to buy some extra permits.

Questions

1. Depict the negative externalities from pollution using demand and supply diagrams and the concepts of marginal social and marginal private costs.
2. Are carbon permits a subsidy, or a tax?
3. If the government wishes to encourage more carbon trading is it better to supply more permits to the market, or less?
4. Carbon permits are given to companies for free. What do you think would happen if companies had to pay for them?