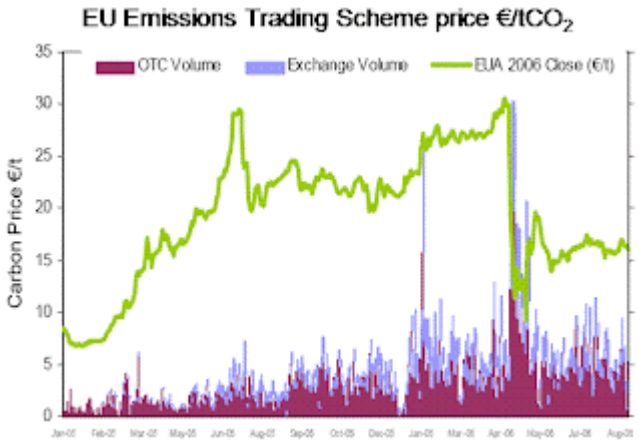
To cap or to tax?



I ended my last post noting some recent critical commentary from the FT and Economist about emissions trading being an inferior approach to a carbon tax. Here they are again….

+ FT – Undercover Economist: Emission impossible 13 April
+ Economist – Cleaning Up – 31 May
+ Economist – Business and climate change – 31 May
+ Economist – Doffing the Cap – 14 June
+ Prospect – The Cost of Carbon – July 2007
+ Martin Wolf – advice to the new Chancellor – July 2007

Are they right? The main virtue of the tax approach is the predictability of the cost and impact on business. Environmentalists would usually cite the predictability of the *environmental outcome* as a major benefit of cap & trade schemes. But that overlooks an important problem with cap setting – that when costs are uncertain, politicians and loss-averse bureaucrats, with will listen to the pleas of business or believe they can game the system for national advantage and will set caps at strongly a risk-averse level – ie. they will sacrifice the environmental outcome in return for confidence that there will not be unexpected price spikes.

There are other reasons to be more wary of cap 'n' trade…

Leakage to uncapped systems

A brutal report on the EU Emissions Trading Scheme by WWF *Emission Impossible for Carbon Trading*, showed that the level of project credits from the Clean Development Mechanism would be sufficient to meet between 88% and 100% of the 'effort' (ie. difference between business-as-usual and the caps set for 2008-2012). But the CDM attracts and deserves criticism for offering supposed

greenhouse gas savings with dubious additionality (ie. that wouldn't have happened anyway) at very low cost. The bias in the CDM is extraordinary – just over 50% of project credits [source: UNEP/Risoe] so far relate to closure and conversion of HFC-23 factories, mostly in China.

Leakage to weakly capped systems

The is much excitement in government about increasing coverage of emissions trading, as this is somehow an end in itself. It isn't. In fact, it just allows over-allocated caps to be distributed for everyone's ease of use and at a profit for those receiving the allocation. This view was uncritically encouraged by the Stern Review [see chapter 15, for example, "*To reap the benefits of emissions trading, deep and liquid markets and well designed rules are important. Broadening the scope of schemes will tend to lower costs and reduce volatility.*"] Yes, but… what if these markets are not similarly constrained? It would be just about okay if three conditions were met: first, these were all markets created under a Kyoto protocol negotiation – reflecting a political settlement of atmospheric property rights. Second, that there was a high level of confidence in compliance (ie. there wasn't a lot of money changing hands for permits and then no consequences for going over budget. Thirdly, that consistent rules for allocation were used across the system: ie. preventing gaming, state-aiding, trade distortion and political favouritism. Then who could argue with a right to trade within this political agreement? But nothing like this exists.

Poor carbon price signal for long term investment

Bureaucrats have been confused about the purpose of the EU ETS – it is there to allow a fairly short-term emissions cap to be met with reasonable economic efficiency. It doesn't plausibly give an adequate long term carbon price signal – the future price depends too much on future caps, future rules (eg. proportion of CDM allowed), future scope (eg. will aviation be in?), future participants etc etc Great volatility is already evident (see price history) – but almost all is in response to political decisions, rather than 'fundamentals'. I think this would be better done by a government or EU collectively announcing that it will place an economy-wide minimum tax on carbon of €30/tonne and that it will never let the carbon price fall below this level, with an expectation that it will rise over time towards the social cost of carbon. This could not be binding on future governments, but I think it would be possible to get (present day) political consensus, and once in place it would be hard to abolish …and who would want

to?

High transaction costs

You only have to look at the scale of the conference industry, bureaucratic expenditure, trading platforms, market makers, traders and speculation built up around carbon trading to see how wasteful it is as a way of achieving so far quite modest objectives. If all the energy going into trading was focussed on how to get emissions down to do well in the system then i wouldn't mind, but that hardly warrants a mention in most forums in which cap 'n' trade is discussed.

Profiteering

UK power companies have shamelessly added the 'opportunity cost' of the permits they have been given free to their electricity tariffs and passed the cost on to the consumer. The economic idea is that were it not for the consumer, they would have these to sell and make money, so the consumer should pay – and the money goes straight to the bottom line. It pains me that King and Big power are making money from the efforts to control climate change. Of course, only oligopolies can pull stunts like this. This is however not an inherent weakness of trading – it just means we should move to auctioning as soon as possible so that the government captures the value of scarce property rights and can use the revenues for worthwhile things (tackling fuel poverty, responding to climate change in developing countries, investing in future technologies etc) – not enriching E.ON or RWE shareholders *for no reason at all*.

Special pleading

UK has decided to let all the cuts be taken in the power generation sector and has allocated all other industries their 'business-as-usual' emissions? The power sector does not do significant international trade and can pass costs on to consumers, but all other industries are getting a kind of state aid – and because it is the EU countries are competing to feather bed-their industries.

***Having said all that**…*

The EU emissions trading regime is actually in place whereas a carbon tax isn't and isn't likely to be any time soon. The fudges and compromises of the ETS have been done to get something off the ground. This is where the bureaucrats and politicians trump the economists – they have made something work (albeit imperfectly) and now have the task of improving it – which they are steadily doing. The economists first told them the tax and trade systems were equivalent

(because they have no idea about getting things done in imperfect conditions and without absolute power) and now say “we told you so” when the difficulties are becoming more obvious.

So, I favour…
For the EU ETS …maintenance of the EU ETS with: tougher caps; central cap setting; as much auctioning as possible (probably all but the aluminium sector); use of international project credits restricted to no more than 30% of the emissions reduction ‘effort’; pan-European sectoral cap setting (with a view to achieving global sectoral agreements eventually through the Kyoto Protocol); transparent output-related benchmarks to allocate allowances where auctioning is not used, inclusion of more sectors – including aviation… so there’s a big reform agenda for the EU ETS. For countries that don’t yet have an ETS, I think the economists are right *and* they can get a carbon tax in place, that would be better in the early stages of developing a response to climate change.

and…
even where we have the ETS, I think we need a new commitment to introduce an economy-wide carbon price floor through a carbon tax, with a government and hopefully cross party commitment that this will never be less than €30/tCO2. This would have several functions: to set a minimum carbon price expectation for the long term; to raise revenue for good deeds or to displace taxes on employment or investment; to be an adjustable instrument that could be turned up if it looks as though the UK is about to mis one of the 5-year emissions budgets in the new Climate Change Bill. This would both reduce emissions through a price effect, but would also be used to purchase international project credits to make up the shortfall and, if dependence on international credits becomes excessive, to supply a carbon reduction fund that would be used to reduce domestic emissions through an auction of the fund to bodies able to make additional emissions reductions.

Perhaps that sounds like sitting on the fence – but perhaps it’s just pragmatic.

Also see Caspar Henderson: *Tax not trade.*