

Lobbyism and CO₂ trade in the EU

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Summary:

Has the EU Directive Proposal on CO₂ trade been influenced by lobbyism and can it be improved? After hypothesizing how the EU may be vulnerable to lobbyism and why industrial groups have a strong incentive to lobby for favourable environmental regulation, we turn to empirical evidence concerning design. Here, it is possible to measure lobbyism as the difference in proposed design between the Green Paper (before lobbyism) and the final Directive Proposal (after lobbyism). Overall we suggest that this lobbyism affected the design of the EU CO₂ market in favour of small-sized and well-organised industrial interest groups at the expense of the EU tax payers. Most critically, allocation of permits and enforcement issues are to be dealt with at the member state level rather than the supranational level allowing member states to favour their domestic industries. A likely market breakdown means less economic growth in the EU because the gains from free trade of greenhouse gas permits among firms in different member states disappear. Therefore, we discuss, based on the US emission trade experience, how the current design proposal can be improved.

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1. INTRODUCTION

The world's first framework for international greenhouse gas emissions trading has been proposed by the EU Commission in its new and remarkable Directive Proposal from October 2001. This Directive Proposal is the outcome of a policy process started by the EU Commission in March 2000 when launching the Green Paper. It started, in the words of the Commission: '...a debate across Europe on the suitability and possible functioning of emissions trading' and 'Emission trading is, firstly, an instrument for environmental protection, and, secondly, one of the policy instruments that will least impair competitiveness.' (CEU, 2001a). Thus, the idea is that emission trading may ensure that the stated target levels are achieved without invalidating the stated EU strategic goal of becoming the world's leading economy within a decade (from Lisbon 2000, see Svendsen, 2003).

We focus on the two main differences between the Green Paper and the Directive Proposal, namely the choice of allocation rule and enforcement. Thus, it is possible to measure lobbyism as the difference in proposed design between the Green Paper (before lobbyism) and the final Directive Proposal (after lobbyism). Lobbyism may lead to an irrational policy outcome for all market participants because the proposed market system is most likely to break down due to market distortions. A market break down means less economic growth in the EU because the gains from free trade of greenhouse gas permits among firms in member states disappear so that emission reduction efforts can no longer be carried out in the cheapest places.

Many books have dealt with emission trading in general, such as Baumol and Oates (1988), Ellerman et al. (2000), Daugbjerg and Svendsen (2001), Dijkstra (1999), Svendsen (1998), Tietenberg (1985; 2000; see 2002 for a review of the literature). Still, the recently proposed greenhouse gas market in the EU has yet to be analysed. Svendsen (1998) suggested a market scheme for greenhouse gas trading in the EU but this idea needs more elaboration concerning the preferences of the main interest groups and the establishment of a politically feasible and workable design – this is the task here. Thus, the research question of whether the EU Directive Proposal on CO₂ trade been influenced by lobbyism and whether it can be improved is stimulated by a gap in the literature.

Identifying the effect of lobbying and how to improve the design of a forthcoming CO₂ market is important because the EU has committed itself to meet an eight-percent greenhouse gas reduction target level (following the Kyoto agreement). The proposed greenhouse gas emissions trading is to be operational in the year 2005 and the idea is to devalue the emission quotas in circulation by the year 2012 at latest, when the EU must meet its Kyoto target level. Political agreement on the distribution of reduction target levels among the EU member states was reached in June 1998, and is referred to as the "burden sharing" agreement (CEU, 2001b; Grubb and Yamin, 2001).

In the following, Section 2 deals with political economy theory and develops two hypotheses. First, it suggests that an institutional set-up with power centralisation is vulnerable to lobbying. Second, it suggests that industrial groupings will lobby and dominate political decision-making due to their group size. Section 3 turns to the empirical evidence in the EU concerning these two hypotheses ending up with policy recommendations on how to improve the current directive design proposal based on the US experience. Section 4 summarizes the results.

2. LOBBYISM

2.1 Power centralisation

As argued by Svendsen (2003) and Paldam and Svendsen (2003;2002;2000), New Institutional Economics can be applied to the level of decentralisation and lobbying. Especially Douglass C. North is a prominent representative of modern institutional economics with its focus on transaction costs in a world with incomplete information. Thus, agents need to construct 'rules of the game', i.e. institutions (North, 1990).

New institutional economists tend to focus on the institutional circumstances that facilitate successful lobbying and the achievement of 'rent' among organised interest groups. Here, Schjødtt and Svendsen (2003) emphasizes, in the line of North and Weingast (1989) that the rise of England can mainly be attributed to the constitutional change following the Glorious Revolution in 1688–89 and the way political power

was divided. The revolutionary settlement stated that the parliament gained the upper hand in financial matters and the outcome was a complex institutional arrangement of checks and balances in which the parliament became the new focus of power. Due to this spreading out of power in parliament, rent-seeking activities became more difficult because interest groups had to pay a higher price for favourable regulation than they previously paid under the centralised political system of the Stuarts (ibid.).

How does this transaction cost perspective relate to the EU and its environmental policy? Here, we simply hypothesise that the more centralised power is in the EU, the easier it is for lobbying groups to achieve favours, for example within environmental regulation. If one institution basically holds all power in the EU, a EU pressure group only has to lobby one place, compared to the situation where power is spread out over many EU institutions, such as the parliament and the council, forcing interest groups to lobby many places.

Hypothesis 1: Power centralisation in the EU power lowers lobbying costs.

2.2 Who will lobby?

Mancur Olson launched the importance of group size when explaining why lobbyism and the mobilisation for ‘collective good’ provisions typically concerning redistribution of national income to their group members. Such ‘distributional coalitions’ are overwhelmingly oriented to struggles over the distribution of income and wealth rather than to the production of additional output. This line of thought in *Logic of Collective Action* (1965) is further developed in Mancur Olson’s follow-up books, *The Rise and Decline of Nations* (1982) and *Power and Prosperity* (2000). Olson argues that more and more interest groups are assumed to develop over time and by coincidence. Because these organisations tend to persist, older democracies will be filled with a greater number of groups resulting in increasing pressures for redistribution and economic decline.

According to Olson’s logic of collective action (1965), redistribution at the EU level will take place because rational interest groups will try to redistribute as much money as possible from the EU taxpayers to themselves. Such redistribution and an irrational

economic outcome for the EU as a whole can be illustrated by the use of theory. Let us in the setting of permit trade consider the potential ‘winners’ and ‘losers’ when choosing between grandfathering and auctioning permits in the EU. We assume, that the ‘collective good’ of auctioning off permits without refund or of grandfathering is provided by lobbyism. The results from this analysis lead to a hypothesis on rational interest group behaviour in the EU and an asymmetrical political pressure in favour of grandfathering. Let us illustrate this logic by a hypothetical example where we compare the lobbying capability of 200 million EU taxpayers versus 5 industrial groups. Note, that none of the groups are organized beforehand.

The hypothetical EU group of non-organized taxpayers is assumed to consist of 200 million identical agents. Furthermore, each taxpayer will earn €10 per year if the auction is chosen because the revenue from this mechanism will be redistributed to all EU taxpayers as a slightly lower income tax. Thus, the total gain for all EU taxpayers amount to a total of €2 billion. If the total cost amounts to €1 million for a single taxpayer to stay fully informed about EU policies and successfully lobby EU bureaucrats and politicians, then each individual taxpayer will not act because the individual net gain from doing so is clearly negative. This in spite of the fact that even though the EU taxpayer group as a whole would get a total gain from getting the auction worth €2 billion (2000 times higher than the total cost of €1 million), no single EU taxpayer will take the initiative to provide this collective good in the absence of organisation. Thus, in this ‘large’ group, the collective good of choosing the auction mechanism will not be provided, see Table 1.

Table 1: Taxpayers, Industrialists and the Choice Between Auction and Grandfathering.

	Taxpayers (if auction)	Industrialists (if grandfathering)
Number	200 million	5
Individual Gain	€10	€400 million
Total Gain	€2 billion	€2 billion
Total Cost	€1 million	€1 million
Individual Net Gain	€10 – €1 million	€400 million – €1 million

Consider then the small group of 5 industrial pressure groups. Say again, that their total gain from getting grandfathering rather than auction without refund matches the €2 billion that the taxpayers would have gained in case of the latter. The five identical industrial groupings would then gain €400 million each. Assume also, that the lobbying costs correspond to the figure from before, namely €1 million. Now, it pays each industrialist to act on his or her own even in the absence of organization with an individual net gain amounting to €399 million (the individual gain of €400 million minus the lobbying cost of €1 million). Therefore, the collective good of achieving the grandfathered allocation rule for this small group of five industrialists will be provided. Furthermore, there will be a strong incentive to meet and share the costs of lobbying thus realising even more gigantic individual net gains. In this way, the logic of group size demonstrates why there, e.g., is an overwhelming political pressure in favour of grandfathering rather than the auction mechanism without refund.

Hypothesis 2: Small-sized industrial groups will dominate EU lobbying and ask for favourable environmental policies.

3. CO₂ TRADE IN THE EU

After hypothesizing how the EU may be vulnerable to lobbying and why some groups may have a strong incentive to lobby, we now turn to the empirical evidence. First, we focus on hypothesis one concerning the institutional set-up in the EU (Section 3.1). Second, we turn to hypothesis two concerning dominant interest groups and try to measure and evaluate their lobbying effect on the EU CO₂ trade system policy (Section 3.2).

3.1 Commission and lobbying

The EU Commission is the bureaucracy of the EU. Twenty commissioners, or bureaucratic leaders, are appointed for five-year terms by their national governments, and must be approved by the European Parliament. One commissioner comes from each member state, and two commissioners from the five larger states (France, Germany, Italy, the United Kingdom and Spain). Each of the twenty commissioners

has their own responsibilities. One of the twenty commissioners acts as president. At the moment, the Italian socialist Romano Prodi is president and the Swedish social democrat Margot Wallström is in charge of the environment (Jones, 2001, pp. 112–135).

The bureaucratic leadership in the EU is clear because the EU Commission has the exclusive right to initiate all legislation by submitting proposals to the Council of Ministers. At the same time, the EU Commission promotes the inclusion of affected interest groups in the process of policy formulation in order to draw upon the expert knowledge of external actors. Furthermore, the EU Commission acts as the enforcement agent of EU lawmaking, and is by far the most influential institution in the EU. In contrast, the main role of the EU Parliament, with its 626 democratically elected members, is to approve the annual EU Commission budget and fulfil an advisory role, but it cannot initiate legislation (Svendsen, 2003).

Interest groups, that undertake lobbyism, can be informative and bring attention to concerns otherwise neglected. However, as we argue here, they can also seek to influence regulation in their own favour. This happens in a pluralist system with competitive lobbying similar to that of the United States. Therefore, Brussels is more like Washington DC than the national capitals in the EU (George and Bache, 2001). Competing interest groups will lobby to achieve rents and therefore lobbyism is crucial to understand distortive EU policies, which eventually will affect the economic performance in the EU. In fact, one may argue that pluralism in the EU is less ‘pluralistic’ than that of the United States because the EU Commission as the agenda-setter has more control over the entire process of interest representation (Schmidt, 1999 and Varming et al., 2000).

Concerning the number of interest groups in Brussels, it has steadily grown from 59 in 1954 to 3,000 in 1992, i.e. the number has increased more than 50 times since 1954. Also, it has been estimated by the Commission that 10,000 professional lobbyists were active in Brussels back in 1992 as well. Finally, most EU pressure groups (83 per cent) are involved in promoting business interests while only very few represent the large groups of consumers and taxpayers (CEU, 1992; Svendsen, 2003).

The findings by Daugbjerg and Svendsen (2001) confirm that consumers do not have much influence compared to business groups. This claim is documented, for example, by a detailed analysis of the actual design of CO₂ taxation in the five countries which, to date, have introduced CO₂ taxation, namely, Denmark, Norway, Sweden, Finland and The Netherlands. Here, a large difference exists between the CO₂ tax rate applicable to the large group of consumers and the one applicable to the small group of producers. In general, CO₂ taxes are non-uniform and consumers would, on average, pay a tax rate, which is six times higher than that paid by the producers. Furthermore, producers are subsidised by favourable refund systems. Likewise, the optimal solution of auctioning-off permits without refund may not be politically feasible because business interests would oppose just as they have opposed the CO₂ taxation.

3.2 Measuring lobbyism

3.2.1 Main interest groups

Six main industrial groups are dealt with in the Green Paper, namely electricity producers, iron and steel, oil and gas (refining), building materials, chemical industry and the paper and pulp industry. Together, this limited number of six sectors accounts for almost half of total EU CO₂ emissions. See Table 2.

Table 2: CO₂ emissions from six industrial sectors in the EU, 1997

Sector	% of EU CO₂ Emissions
1. Electricity (and heat) producers	29.9%
2. Iron and Steel	5.4%
3. Oil and gas	3.6%
4. Building materials	2.7%
5. Chemicals	2.5%
6. Paper and pulp	1.0%
Total	45.1%

Source: CEU (2001b)

EU electricity producers are the main emitters of CO₂, with almost a third of total CO₂ emission in the EU (Table 2), and the opinion of these large electricity producers is mainly represented by Eurelectric. Iron and steel producers are represented by The

European Confederation of Iron and Steel Industries (EUROFER) representing 96 per cent of the iron and steel industries in Europe. Oil and gas industry is represented by the International Association of Gas and Oil Producers (OGP) and its daughter organisation, Europia. Building materials are represented by two main industrial groups, namely the cement industry (represented by CEMBUREAU) and the ceramic industry (represented by CERAMIE-UNIE). The European Chemical Industry Council (CEFIC) is the umbrella organisation for the national chemical federations and chemical companies in Europe. The Confederation of European Paper Industry (CEPI) represents the paper and pulp industry in Europe. The position of CEPI is also supported by the Confederation of European Forest Owners, CEPF (Svendsen, 2003).

All six sectors are included in the Directive Proposal as the target group except for the chemical sector. The Commission states that it did not include the chemical sector for two reasons: firstly, the chemical sector's direct emissions of carbon dioxide are not significant (less than one per cent of the EU's total emissions of carbon dioxide in 1990 but had risen to 2.5 per cent in 1997, see Table 2 above). Secondly, the number of chemical installations in the Community is high, in the order of 34,000 plants, and their inclusion would substantially increase the administrative complexity of the scheme (CEU, 2001a). Thus, it did not pay to monitor and control the chemical sector for administrative reasons because of its many small producers and the fact that they generally emitted all six greenhouse gases in complicated processes (Svendsen, 2003).

3.2.2 Allocation rule

The Green Paper lists a number of possibilities concerning initial allocation rule and the EU Commission points to the auction solution because it would clearly eliminate rent-seeking: existing firms would have to pay for all the permits they need just as new firms would. The Commission states that periodic auctioning is technically preferable, as it would give an equal and fair chance to all companies to get access to the permits they want in a transparent manner. Auctioning applies the Polluter-Pays-Principle. The revenues raised by governments could be recycled in a variety of ways, even keeping the overall revenue effect neutral, or by using the revenues to promote energy efficiency investments, research and development or public investment in other greenhouse gas abatement efforts. Auctioning avoids the need to take the difficult and

politically delicate decisions about how much to give each company covered by the trading scheme. Complex issues about state aid and competition would largely disappear. It would also guarantee fair terms for new entrants to join the system as they, like existing sources, would have the same opportunity to buy the permits that they needed (CEU, 2001b).

The Directive Proposal suggests a grandfathered allocation based on historical emissions at the 1990 level, which is clearly the solution that benefits rent-seeking industry the most in theory (as argued above in Section 2.2). Grandfathering favours industry in general as it minimises private emissions reduction costs, and creates a rent for existing firms. Thus, this feature of the design in the proposal directive points in particular to the presence of powerful national industrial rent-seeking and potential achievement of significant rent in terms of a beneficial allocation rule. Therefore, the choice of allocation rule in the United States tradable permit systems has been grandfathering too (see Tietenberg, 1985; Hansjürgens 1998; Svendsen, 1998).

In the United States, the well functioning control system is enforced by a single and neutral authority (the Environmental Protection Agency in Washington D.C.), so that local authorities do not have the full control of responsibility and as such are not tempted to protect their own firms. The establishment of a common supra-national EU institution independent of local member state interests is a good idea in view of the American experience. EU member states have strong free-rider incentives to protect their 'own' firms against strict control, so some kind of central control is needed. Nationally regulated firms may be given substantial room for cheating in this kind of system because local authorities may accept violations in the interest of attracting industry (and a larger tax base) to their area (see Oates and Schwab, 1988).

However, not only did industrial groups achieve grandfathering in the EU Directive Proposal, they also achieved implementation and settlement of permit allocation among sectors at the member state level. The specific allocation of permits is to be decided at the national level, taking the burden sharing agreement, i.e. the different target levels for different member states, into account. As argued by Daugbjerg and Svendsen (2001) and Boom and Svendsen (2000), industry has, over time, succeeded in organising at the national level for two reasons. Firstly, to influence government

and achieve favours. Secondly, to negotiate with labour unions. Therefore, it is not accidental that member states have a significant influence in designing the CO₂ market – this is strongly in the interests of industrial organisations now in their ideal position with a maximum capability of influencing their national governments to give them the most rent when grandfathering CO₂ permits.

To overcome the problem of having member states favouring their own firms when allocating permits, we simply suggest the following three-step approach. Firstly, as proposed in the directive, each firm gets the right to match its 1990 emissions for free. Permit allocation would then be defined according to the nominal Kyoto emission target levels starting in 1990. Secondly, firms established after 1990 could be eligible for a free, initial standard distribution, if they apply before a certain deadline (Svendsen, 1998). Thirdly, whether the industrial sector in a country should take over the same percentage reduction as its country is a more open question. For example, Denmark is obligated to reduce greenhouse gases by 21 per cent meaning that its participating industrial sectors would have to take over the same 21 per cent reduction obligation. In contrast, for example, Sweden is allowed to increase its greenhouse gas emissions by four per cent. Such a ‘take-over’ approach may therefore distort competition in a single market for electricity. However, the member countries have politically agreed on the burden sharing agreement and therefore this politically feasible starting point should be used. Overall, we suggest that the allocation rule in the EU CO₂ should be that a sector ‘takes over’ the national target level.

3.2.3 Enforcement

In the Green Paper, it is unclear how the market is to be enforced. However, both in the Green Paper and the Directive Proposal, the Commission states that the control system is to make the whole trading scheme credible by assuring that there is a one-to-one correspondence between a permit to emit one tonne of CO₂ and the actual emission of one tonne of CO₂. Avoidance of cheating in the system is crucial to make it work. Thus, the Commission states that if the monitoring and reporting requirements are not verified in a timely and proper manner, sanctions should be imposed on the responsible operator, also including the suspension of further transfers

of permits until such a time as the deficiencies have been remedied (CEU, 2001a). Here, the monitoring system is a critical point compared to the US experience.

The main idea in the Directive Proposal is that emissions data can be collected by self-reporting from the firms after which it is possible to compare the two numbers from buyer and seller. However, cheating may take place in member states, in particular those with wide spread corruption. For example, a Greek firm may sell fictive permits to a German firm without reducing a corresponding amount of emissions, and in this way redistribute money from the German firm to itself. In fact, the Northern part of EU is generally less corrupt and better at implementing EU legislation than the Southern part, see Svendsen (2003).

Also, the indirect measurement of CO₂ emissions, as suggested by the Commission, is a cheap but uncertain method. As argued by Varming et al. (2000), a number of complications are involved in calculating the emissions from the fuel input, especially for coal fired plants. In contrast, direct measurement of actual SO₂ emissions in the Acid Rain Program has proved to be effective. Here, the electric utilities participating in the market must install an advanced measuring device in their plant chimneys. This device continually measures the emission of SO₂ and is directly connected to the computers of the American Environmental Protection Agency in Washington D.C. Because the emission of SO₂ can be monitored continually in this way it is not possible to cheat in the system, for example, by selling permits and earning money without making the corresponding reductions (Ellerman et al., 2000; Stavins, 1998; Svendsen, 1998). Thus, we suggest that direct emission monitoring, such as the equipment employed in the US Acid Rain Program, should be used for measuring CO₂ emissions in the EU permit market system due to the risk of cheating and the uncertainty of calculation.

4. CONCLUSION

We answered the research question of whether the EU Directive Proposal on CO₂ trade had been influenced by lobbyism and whether it could be improved in the following way.

First, Section 2 argued theoretically that the degree of power centralisation is crucial. In the extreme case where one institution basically holds all power, a pressure group only has to lobby one place. In contrast, when power is decentralised, for example when it is spread out on many members in a parliament, interest groups are forced to lobby many different places by which the lobbying costs increase. Second, Section 2 argued that lobbyism will take place among well-organised and small-sized ‘Euro groups’. The logic of group size gave industrial groupings small-group advantages when affecting policy outcomes and providing the collective good of favouring and redistributing resources to their members.

Section 3 observed that the EU Commission (the EU bureaucracy) holds centralised power because it has the exclusive right to initiate all legislation by submitting proposals to the Council of Ministers. Also, we identified a strong increase over time in the number of Brussels based industrial pressure groups. Therefore, the EU becomes most vulnerable to lobbyism and harmful redistribution, as known from England before its Glorious Revolution. Section 3 furthermore identified the five main industrial groupings targeted in the Directive Proposal and the two main shifts in design issues when comparing Green Paper and Directive Proposal. First, the Green Paper pointed to the use of auctions run by member states as the most preferable allocation rule for economic reasons. However, in the Directive Proposal, the suggested allocation rule was that of a grandfathered permit allocation rule like the one found in the American tradable permit systems, and the fact that member states should decide the final allocation of permits among their own sectors. Therefore, to avoid discretionary allocation decisions by national governments, which also may be heavily influenced by lobbyism and corruption, we recommended that the national industrial sectors should ‘take over’ the national target level following the burden sharing agreement as a compromise between economic optimality and political feasibility. Second, concerning enforcement, emission monitoring should be direct to avoid cheating, and an independent supranational authority to run the whole programme should be established, see Table 3.

Table 3: Lobbyism and CO₂ trade in the EU.

Green Paper	Directive Proposal	Policy recommendation
1. Allocation rule: Should preferably be an auction run by member states.	Grandfathering based on the right of member states to allocate between sectors.	Grandfathering based on the 'burden sharing' agreement so that sectors 'take over' national obligations.
2. Enforcement: Unclear.	Indirect emission monitoring based on self-reporting. Member states as authorities.	Direct emission monitoring. Independent supra-national authority.

These modifications in design are important to avoid that national firms are favoured due to their traditional domestic lobbying strength. The current design proposal may therefore lead to an irrational outcome for all market participants if the system breaks down, as they will lose rent and gains from trade. Eventually, market break down would lead to less economic growth when the gains from free trade of CO₂ permits among member states disappear and reduction efforts were no longer carried out in the cheapest places. Alternatively, more expensive solutions for reaching the Kyoto target levels would then have to be applied in the EU member states. Overall, these results were arguably consistent to our hypotheses one and two in Section 2 concerning power centralisation and industrial pressure groups. Thus, we suggest that lobbying affected the design of the EU CO₂ market in favour of small-sized and well-organised industrial interest groups but at the expense of the EU tax payers.

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