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Regulatory Competition vs Harmonization in EU Environmental Law

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This chapter addresses a topic which, in a European legal perspective, concerns the subsidiarity principle. In this presentation, the subsidiarity principle is addressed from an economic perspective. The central question of European environmental law from an economic perspective is whether we need harmonization of the conditions of competition (in other words harmonization of environmental standards) to reach the goals of the EC Treaty, as laid down in Article 2. This being essentially an economic question, economic methodology will be used to answer it.

The question merits further research since the traditional approach of European environmental law seems largely to have been based on the idea that a full harmonization of rules and standards is necessary in order to harmonize the marketing conditions. Introduced by the Single European Act for environmental matters, and enlarged to a general principle of community policy by the Maastricht Treaty, the subsidiarity principle now allows for a new and probably more critical approach than has traditionally been taken. The subsidiarity principle at least forces policy makers to think more critically about whether full harmonization of rules and standards is indeed necessary to reach the goals of the Treaty. To answer this question, attention will be paid to the literature regarding the optimal level of regulation within federal systems.1

Part I provides a brief insight into the traditional argument of European environmental policy: that conditions of competition should be harmonized. Part II discusses the criteria for (de)centralization. Part III applies this theory to environmental issues. Parts IV and V discuss the consequences of these findings for environmental standard setting, as well as for European environmental policy. Part VI presents a public choice perspective, and Part VII formulates a few concluding remarks.

1. EUROPEAN ENVIRONMENTAL POLICY:
HARMONIZATION OF CONDITIONS OF COMPETITION

So far, the European Union has been extremely active with respect to environmental law, issuing directives aimed at the harmonization of emission standards,

ambient quality standards (also referred to as target standards), and procedural rules. A nice example of an approach in which these objectives are drawn together is the Directive on the Integration of Pollution Prevention and Control of 24 September 1996 ('IPPC Directive') (Backes and Betlem 1999: European Commission 1996b). A (limited) procedural harmonization is reached in this Directive by prescribing the permit as the central instrument to control emissions. Rules are prescribed in order to harmonize emission limit values, as well as target standards (Faure and Lefevere 1996).

The European Commission has set out a variety of reasons for legislative action at the European level with respect to environmental law. Although most directives tend to have different reasons for their adoption (Van den Bergh, Faure and Lefevere 1996: 128–31), the most important for our topic are as follows.

1. The transboundary nature of the environmental problem to be targeted. Several directives refer to the transboundary character of the pollution in order to argue for regulation at the European level. This is the case with, for instance, the directive dealing with the discharge of dangerous substances into the aquatic environment (European Commission 1976b).

2. A second justification for the adoption of EC environmental legislation is precisely the creation of equal conditions of competition. It is argued that harmonizing conditions of competition is necessary for the functioning of the common market. This argument, which is often referred to as the need to create a 'level playing field' for industry in Europe, is not only used in environmental law, but is also advanced to harmonize any kind of legislation within Europe. The directive on discharges of dangerous substances into the aquatic environment, mentioned above, was based on this 'harmonization of conditions of competition' argument. It was argued that disparity between the provisions on discharge may create unequal conditions of competition and thus directly affect the functioning of the common market.

3. A third reason advanced for European action with respect to environmental matters can be called a purely 'ecological' one. There are a number of environmental directives which aim to protect the 'European environmental and cultural heritage and human health'. An example is the Habitats Directive (European Commission 1992b).

I will attempt to address the possible meaning of these reasons for legislative action at the European level from an economic point of view. First, however, it should be stressed that we can expect to learn more about the specific reasons for legislative action at the European level now that the subsidiarity principle has been introduced explicitly in the Treaty as a result of the so-called Maastricht Treaty. According to this principle, the 'community shall take action if and only in so far as the objectives of the proposed action cannot be sufficiently achieved by the member states and can, therefore, by reason of the scale or effects of the proposed action, be better achieved by the community' (Article 3b(2)). This formulation has not been changed by the Treaty of Amsterdam.

Part II turns to the economic approach by briefly addressing the question: What does economics generally teach about the necessity of harmonization? The remainder of the chapter will then deal with the question of how Europe has dealt with (environmental) subsidiarity in light of the economic criteria of centralization. These criteria have been addressed in the context of the discussion concerning (de)centralization.

II. STARTING POINTS FOR (DE)CENTRALIZATION IN GENERAL

The Tiebout model

The question whether (environmental) regulation should be promulgated at a centralized (that is, European or federal) level or at a more decentralized (that is, state) level has been addressed in the economics of federalism. The starting point for the analysis is usually the theory of Tiebout about the optimal provision of local public goods (Tiebout 1956: 416–24; Rose-Ackerman 1992: 169–70). Tiebout argued that when people with the same preferences cluster together in communities, competition between local authorities will, under certain restrictive conditions, lead to allocative efficiency. If, for example, citizens in one community have a high preference for sporting facilities and citizens in another community have a preference for opera, the first community will probably construct sporting facilities, whereas the second will probably provide an opera house. If someone living in the second community would prefer sporting facilities instead of the opera house, he could then move to the first community, which apparently provides services that better suit his preferences. The idea is that well-informed citizens will move to the community that provides the local services which are best adapted to their personal preferences. This so-called 'voting with the feet' competition between local
Competing legal orders

The Tiebout model applies not only to community services but also to fiscal decisions (Iman and Rubinfeld 1994; Kirchlämmer and Pommerich 1993; Oates 1972) and environmental choices (Oates and Schwab 1988). In addition, this idea of citizens moving to the community that provides services which best correspond with their preferences, can also be applied with respect to legal rules. Thus it has been argued by Roger Van den Bergh (1998) that competition between legislators will lead to legal systems competing with each other, and thus providing legislation that corresponds best to the preferences of citizens. Similarly, Ogus has argued that the various law makers in the nation-states will create a competitive market for the supply of law (1999). The idea, therefore, is that in an optimal world citizens will cluster together in states that provide legal rules which correspond to their preferences. Well-informed citizens who may be dissatisfied with the legislation provided, could move (voting with their feet) to the community that provides legislation which corresponds best to their preferences. This idea, assuming that different legal systems offer different legal rules, explains the variety and differences between the legal systems (Van den Bergh 1998: 134). Moreover, it shows that differences between the various legal rules of different countries should not necessarily be judged as negative, as is often the case in Europe today. The idea of competing legal systems can probably best be seen ‘in action’ in private international law, where actors can choose the legal systems that best suit their needs in a choice of law regime. Frey and Eichenberger have proposed an extreme form of this competition between legal orders by suggesting the emergence of Functional Overlapping Competing Jurisdictions (FOCJ), whereby citizens could choose different governmental unities for different functions of government (Casella and Frey 1992: 63; Frey 1996; Frey and Eichenberger 1996: 335).

Obviously, this system, assuming that competition between legal orders leads to allocative efficiency in the provision of legal rules, works only if certain conditions are met. One condition is that citizens have adequate information on the content of the legal rules provided by the various legislators, in order to be able to make an informed choice. In addition, exit is often costly, so people may stay even if the (legal) regime does not optimally suit their needs. Moreover, a location decision

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* However, the choice of a particular legal regime may not always be related to the quality of the legal system, for instance, but to the quality of the court or arbitration system. The latter explains, according to Ogus, the popularity of English law in choice of law clauses in contracts (1999: 408).

* As Ogus states, there should be no barriers to the freedom of establishment and to the movement of capital (1999: 407).

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is obviously made under the influence of a set of criteria, whereby the legal regime may not be decisive. Usually job location and residence are so important that in reality there is little left for people to choose (Rose-Ackerman 1992: 169). Finally, as I will discuss below, this system of competition between legal orders works only if the decisions in one legal order have no external effects on others.

‘Bottom up federalism’

In economic literature, this Tiebout model is used to argue that, from an economic point of view, decentralization should be the starting point, since competition between legislators will lead to allocative efficiency. Van den Bergh (1998) uses this theory as well to provide criteria for centralization/decentralization within the European Union. Taking the Tiebout model as a starting point and assuming that competition between decentralized legislators will lead to an optimal provision of legal rules, the central question is: Why centralize? Van den Bergh therefore criticizes a part of the current discussion in the European legal literature that seems to focus on the question of why there should be decentralization (referred to by Van den Bergh as ‘top-down federalization’). According to economic theory, that is the wrong question. Starting from Tiebout’s model, there is reason to believe in what Van den Bergh calls a ‘bottom up federalization’, assuming that in principle the local level is optimal, since the local level has the best information on local problems and on the preferences of citizens. Only when there is a good reason should decision making be moved to a higher level. Economic theory has indeed suggested that there may be a variety of reasons why the local level is not best suited to take decisions and where central decision making can lead to more efficient results.

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Transboundary character of the externality

The Tiebout argument in favour of competition between local communities obviously works only if the problem to be regulated is indeed merely local. Once it is established that the problem to be regulated has a transboundary character, there may be an economics-of-scale argument to shift powers to a higher legal order that has competence to deal with the externality over a larger territory. This corresponds with the basic insight that if the problem to be regulated crosses the borders

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* That is one of the reasons why Frey and Eichenberger argue in favour of FOCJ: the choice for one legal or institutional regime should not be exclusive; there may be ‘overlapping’ jurisdictions depending upon the different functions (1996: 316–18).

* A major US supporter of this ‘presumption in favour of decentralization’ is Revesz.

* Much of this Part is based upon Frey (1996: 599); Rose-Ackermann (1995); and Stewart (1977).
of competence of the regulatory authority, the decision making power should be shifted to a higher regulatory level, preferably to an authority that has jurisdiction over a territory large enough to adequately deal with the problem (Eady 1996: 625; Kimber 1995; Ogus 1999: 414; Rose-Ackerman 1992: 164–5). As Susan Rose-Ackerman points out, ‘Economic theory provides a straightforward but unrealistic answer to regional pollution problems: draw “optimal” jurisdictional boundaries’ (1995: 38).

This argument in favour of centralization could play a role with respect to environmental problems, which are often transboundary. The transboundary character of an externality is, within the European context, obviously an important argument for decision making at the European level. Indeed, many environmental problems cross national borders. A great many of the environmental directives fit into this economic criterion for community action. These include the regulation on the transboundary shipment of waste (European Commission 1993c), as well as many other directives which regulate pollution of a transboundary character.

However, some have warned that the argument that centralized powers are necessary to deal with transboundary problems should not be accepted too easily. Daniel Eady and Damien Geradin have powerfully argued against an ‘all or nothing’ approach, meaning that it is wrong to focus all powers with the local authorities or to shift all powers to the central level. They have argued that transboundary pollution problems can be dealt with via legal instruments other than centralization, such as instruments that do not involve a change of the national environmental laws of a particular country. One possibility is the external application of (domestic) high-standard country laws. Another is the national enforcement of domestic laws with cross-border monitoring. In other words, the transboundary character of the externality may be an argument for cooperation, but not necessarily for homogeneity of legal rules. However, Eady and Geradin admit that these alternative approaches have serious limitations as well and might not be effective remedies in all cases (1998: 34–5).

Marc Cohen has argued that Coasean bargaining between the polluting and the victim state may lead to negotiated agreements between them (Cohen 1996; Van den Bergh 1999). Therefore, Cohen argues that there is no a priori reason to centralize regulatory decision making (1996: 167–71). There might, however, be several reasons why the ideal solution from Coase’s world might not be possible to solve transboundary pollution problems, as in the case of transboundary rivers such as the Rhine or the Meuse. First, Coase assumes that property rights are clearly defined (Cohen 1996: 168–9). Although there are some indications in international environmental law on this point, it might not be certain whether the legal rule is the right to pollute or the polluter pays. This uncertainty concerning the assignment of property rights might endanger negotiations. Second, adequate information is needed both on the consequences of pollution and on the possible abatement techniques (Cohen 1996: 168). Third, there may be no strategic behaviour. Finally, parties need to be able to enforce a negotiated agreement.

In that respect, the EC framework might have several advantages. The European Community offers an institutional framework that provides legal instruments to enforce an agreement. Moreover, the EC regulatory framework might fix the property rights uncertainty. Also, the fact that member states within the EC framework are repeat players (he who is an injurer today may be a victim tomorrow) may cure the risk of strategic behaviour. If one also looks at the practice of transboundary pollution in Europe, one may argue that the EC approach has achieved far better results than all attempts towards bilateral agreements. For example, EC directives on (transboundary) pollution of waters provided Dutch victims of Belgian pollution of the river Meuse with a powerful tool to force the Belgians to perform pollution abatement (Pâques 1996), a result which probably could never have been achieved through the long-lasting negotiations between the two countries. Thus the European Commission has undoubtedly played an important role as far as providing remedies against transboundary pollution is concerned.

However, Van den Bergh has demonstrated that in certain situations, particularly in the area of private law, European law cannot be considered an effective remedy to the interstate externality problem (1998: 143). In some cases, European law goes further than is needed to cure transboundary externalities; in other cases, less far-reaching legal instruments than total harmonization could be used to remedy the problem (144–5). There is, in other words, always the risk that the cure may be worse than the disease. The first issue relates to the problem that European directives often cover both local and community-wide pollution, without making a distinction between regional and interstate pollution (Van den Bergh 1999: 16). The second point is that in some cases transboundary externalities may also be internalized by national law. The simple fact of transboundary effects is therefore not sufficient to justify European law making (Van den Bergh 1998: 144–5).

Nevertheless, there can indeed be cases where one can hold that decentralized legal rule making will not be able to remedy the transboundary externality.

The most important reason for community action with respect to the environment is therefore probably not the often stated argument of the ‘harmonization of conditions of competition’, but simply the transboundary character of the pollution problem to be regulated. Many of the environmental directives indeed deal with pollution problems that cross the borders of one single member state. These can be

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13 Oates and Schwab (1988) also argue that as long as the effects of pollutants are confined within the borders of the relevant jurisdictions, local authorities will make socially optimal decisions of environmental quality.

14 This is certainly also the case for Directive 76/644 on the Discharge of Dangerous Substances into the Aquatic Environment (European Commission 1976(b)). For other examples, see Van den Bergh, Faure, and Lefèvre (1996: 131–2).

15 Eady and Geradin (1997; 1998) provide an interesting overview of the various legal instruments dealing with harmonization and apply this in the NAFTA and European contexts. See also Trebilcock and Howe (1998).

16 For the case of the river Rhine, see Van Omm (1993).
justified under this first economic criterion. Obviously, this does not necessarily imply that the contents of every directive on this point have been efficient, nor that the instruments used to cure transboundary pollution have always been optimal. Indeed, in some cases the European Commission considers the transboundary character of a problem as a sufficient justification for centralized rule making without differentiating between local and transboundary pollution. Moreover, a great many of the environmental directives also deal with relatively 'local' problems that do not cross national borders. The question therefore arises whether an economic rationale can be found for European jurisdiction in those cases where the effects of pollutants are confined within the borders of the relevant member states.

'Reace to the bottom'

Risk of destructive competition

There may be an economic argument for a regulation of local pollution problems, in that there is a risk that a 'race to the bottom' between countries would result in excessive pollution. As a result of this, the European Union could arise, whereby countries would fail to enact or enforce efficient legislation. Centralization can be advanced as a remedy for these dilemmas. This 'race-to-the-bottom' argument could in theory play a role in environmental cases as well (Ezzy and Geradin 1998: 16-19). It would mean that local governments would compete with lenient environmental legislation to attract industry (Rose-Ackerman 1992: 166-70). The result would be an overall reduction of environmental quality below efficient levels. This should correspond with the traditional game theory result that prisoners' dilemmas create inefficiencies.

This 'race-to-the-bottom' argument, that competition among jurisdictions for economic activity will be 'destructive', follows the European legal argument that the creation of harmonized conditions of competition is necessary to avoid trade distortions. As indicated above, this argument was traditionally used to harmonize legislation of the member states in a variety of areas. Simply stated, the argument is that by aligning with higher standards of competition, the member states will be able to attract industry. If the goal is to harmonize, then the costs will differ as well and conditions of competition within the common market will not be equal. The argument apparently assumes that total equality of conditions of competition is necessary for the functioning of the common market. 'Levering the playing field' for European industry remains the central message.

The 'race-to-the-bottom' argument has had several supporters and opponents in US scholarship. Law economics scholars tend to stress the benefits of competition among states and the pressure of centralized regulation (Revesz 1992; 1996), whereas some legal scholars tend to profess a stronger belief in the 'race-to-the-bottom' rationale for centralization in environmental matters (Ezzy and Geradin 1997; 1998). In Europe, these issues are rarely discussed in the context of the 'race to the bottom', but rather in the EC dogma of 'leveling the playing field to avoid distortions of competition'. This somewhat confuses the debate. The 'harmonization of conditions of competition' argument could either be interpreted narrowly in 'race-to-the-bottom' terms or more broadly as a general argument to harmonize all kinds of rules and standards. The latter is the usual interpretation in Europe.

'Reace to the bottom' versus 'common market'

There are, however, some problems with this traditional European argument, which claims that any difference in legislation between the member states might endanger the conditions of competition and therefore justifies harmonization of legal rules. The latter argument seems particularly weak. From an economic point of view, the mere fact that conditions of competition differ does not necessarily create a 'race-to-the-bottom' risk. There can be differences in marketing conditions for a variety of reasons, and if the conditions of competition were indeed totally equal, as the argument assumes, there would also be no trade.

Also, Europe has developed an elaborate set of rules that guarantees, inter alia, a free flow of products and services (Articles 28-30 [30-35] of the Treaty) and thus contributes to market integration without needing to harmonize all rules and standards. In this respect, one can think of the case law of the European Court of Justice regarding the free movement of goods versus environmental protection. This shows that the goal of market integration can be achieved via (other) less far reaching instruments than total harmonization (Ezzy and Geradin 1997: 296-9). Opus 1994a: 177-9 which can equally remove barriers to trade. Hence one should make a distinction between the political ideal of creating one common market in Europe on the one hand and the (economic) 'race-to-the-bottom' argument on the other hand (Revesz 1997c). This political goal of market integration may, as such, be questioned on economic grounds (Van den Bergh 1999) and may justify the need for rules aimed at a reduction of trade restrictions, such as a harmonization of product standards. The problem in environmental law is that initiatives in that area also aim at a harmonization of process standards to harmonize conditions of competition. That seems questionable on efficiency grounds (Revesz, Ch. 1). Thus, what can be said about this 'harmonization-of-conditions-of-competition' argument either in its 'race-to-the-bottom' or 'common market' version?

From an economic perspective, differences in the conditions of competition only pose a problem if it is clear that environmental costs would be considerably different between the member states and that these differences would lead to the

17 Directive 74/464 regulates discharges of dangerous substances into the aquatic environment for both transboundary rivers and local bodies (European Commission 1976b).

18 For information on the potential conflict between free trade and environmental protection, see Ezzy (1996).

19 For an overview of this case law, see Lefevre and Fuere (1995) and Trebilcock and Howse (1998: 219).

20 These were the result of directives issued as a consequence of the so-called 'Single Market Initiative' (Vogel 2000).
relocation of firms to the member states with the lowest standards. In that case, the so-called ‘race-to-the-bottom’ argument, in environmental cases referred to as the ‘pollution haven’ hypothesis, might be an argument in favour of centralization. The question therefore arises whether there is empirical evidence that states can indeed attract industry by lenient environmental standards.

Empirical evidence of ‘pollution havens’

Empirical evidence to uphold this ‘race-to-the-bottom’ rationale is rather weak. Robert Repetto argues that pollution control costs are only a minor fraction of the total sales of manufacturing industries (1994). Moreover, Jaffe et al. (1995) have argued that empirical evidence shows that the effects of environmental regulations are ‘either small, statistically insignificant or not robust to tests of model specification’. They maintain that the stringency of environmental regulations might have some effect on new firms in their decision to locate for the first time (Esty and Geradin 1998: 12–15), but that this will not induce existing firms to relocate. They equally argue that other criteria, such as tax levels, public services, and the unionization of the labour force, have a much more significant impact on the location decision than environmental regulation. Recently this empirical evidence has been somewhat contradicted by Yuqing Xing and Charles Kolstad (1995), who have found that the laxity of environmental regulations in a host country is a significant determinant of foreign direct investment by the US chemical industry. The more lax the regulations, the more likely the country is to attract foreign investment, so Xing and Kolstad claim. Although this somewhat weakens the evidence presented by Jaffe et al. (1995) as far as the location of new firms outside the United States is concerned, it does not contradict their finding that existing firms will not relocate because of the stringency of environmental regulations (Esty and Geradin 1997: 272).

This material, therefore, debilitates the prisoners’ dilemma argument. Moreover, as far as environmental standards are concerned, it is not at all clear that there will be a race to the bottom. Some evidence suggests that member states precisely try to strive for high environmental standards, even if this puts extra costs or burdens on their industry. Some countries may actually be more involved in a ‘race to the top’ than a ‘race to the bottom’ (Van den Bergh, Faure and Lefèvère 1996: 141–2). One could also wonder whether European law is at all able to remedy a real ‘race-to-the-bottom’ risk, given the enforcement deficit.

21 Revesz also argues that, given the weaknesses of the ‘harmunization-of-conditions-of-competition’ argument, it is not surprising that recent European scholarship has sought to recharacterize the quest for harmonization in race to the bottom terms (Ch.1).

22 However, Esty and Geradin have rightly pointed out the fact that a whole variety of legal instruments exists which may remedy the problem, whereby the total harmonization of standards would be the most far reaching (1997: 282–84).

23 Ogun argues that there may be benefits to firms located in a high-standard member state, since they may generate technological advancements and thus competitive advantages; this may explain the ‘race to the top’ (Ogun 1999: 415; Vogel 1995; Trebilcock and Howse 1998: 13–14).

‘Leveling the playing field’

The European argument that markets will be distorted without a harmonization of conditions of competition is not only constantly repeated in a stereotypical way, but its validity is hardly ever questioned. The argument, as it is usually presented in Europe, cannot fit into the economic criteria for centralization, since it suggests that removing any difference in legal systems would be necessary to cure the ‘race-to-the-bottom’ risk, which is neither supported by economic theory nor by empirical evidence. Even if one took the (political) ‘common market’ goal as a starting point and environmental regulations were harmonized on that ground, a level playing field still would not be created since differences in, for example, energy sources, access to raw materials, and atmospheric conditions will lead to divergent market conditions (Van den Bergh 1996: 6).

There is, in addition, a strong counter-argument, in that there are many examples showing that economic market integration is possible (without the distortions predicted by the race-to-the-bottom argument) with differentiated legal orders. Public choice scholars have often advanced the Swiss federal model as an example where economic market integration goes hand in hand with differentiated legal systems (Frey 1994: 338–42). It is apparently possible to create a common market without a total harmonization of all legal rules and standards (Revesz, Ch. 1).

Arguments against the ‘race-to-the-bottom’ rationale for centralized environmental regulation have also been formulated with respect to the US example. Many scholars, and in particular Revesz, have argued that this race-to-the-bottom argument finds no support in existing models of interjurisdictional competition (Elliott, Ackerman, and Millian 1985; Peterman and Tideman 1972; Revesz 1992: 1996). In addition, Revesz stresses that central standard setting would not be an effective response to the race-to-the-bottom problem, since the local communities concerned would have other means to attract industry if they wish (by relaxing regulatory controls in other areas). Revesz has encountered opposition, especially from Esty (1996), but he has provided a powerful reply to his critics (Revesz 1997e).

These arguments therefore weaken the prisoners’ dilemma argument in the field of environmental law both in its ‘race-to-the-bottom’ form and in the (disguised) way it is presented in the European debate. The European argument—that any difference in legal rules between the member states would endanger market integration and therefore a harmonization of law is needed in order to harmonize conditions of competition—is too general, too unbalanced, and not supported by economic theory. Differences between legal systems of member states may, from an economic point of view, constitute a problem, if this would result in an inefficient race to the bottom. But the empirical evidence available suggests that this may not be a serious risk in the environmental field. Even if differences in the stringency of environmental law exist between member states, this will generally not lead
companies to relocate to 'pollution havens' within Europe. The least one can argue is that if the European Commission were to use a 'race-to-the-bottom' rationale for centralization, it should prove that without centralization in the specific field a risk of destructive competition would emerge. The debate in Europe has, so far, never been focused on that question, since it was always argued that any harmonization of legal rules was necessary to achieve market integration, which obviously confuses the debate.

Reduction of transaction costs?

There may, however, be one final economic argument in favour of harmonization, based on transaction costs reduction. This is often advanced by European legal scholars pleading for harmonization of private law in Europe, and is based upon the argument that differences in legal systems are very complex and only serve Brussels law firms. This argument cannot be examined in detail here. It is obviously too simple to state that a harmonized legal system is always more efficient than differentiated legal rules because of the transaction costs savings inherent in harmonized rules. The argument neglects the fact that there are substantial benefits from differentiation when legislation can be adapted to the preferences of individuals (Mendelsohn 1986: 301). Furthermore, given the differences between the legal systems (and legal cultures) in Europe, the costs of harmonization may be huge, if not prohibitive (Legrand 1997: 111). The crucial question then is whether the possible transaction cost savings of harmonization outweigh the benefits of differentiated legal rules. Yet, there is little empirical evidence to support the statement that transaction cost savings could justify a European harmonization of all kinds of legal rules. Moreover, the transaction cost savings are likely to be relatively small (Van den Bergh 1998: 146–8).

The transaction costs argument could, however, play a role to justify the so-called negative harmonization, which aims at a coordination of, for example, product standards to prevent states from hindering a free flow of products and services (Vogel, Ch. 15). While this type of cooperation between states can reduce transaction costs, it does not necessitate a homogenization of process standards, which is often the goal in environmental law.

25 In that case there may seriously be a valid argument for an intervention by Brusels. In the US context, consider the remark by Rose-Ackerman. "If state and local laws seem designed to protect local business rather than reflect genuine differences in tastes across jurisdictions, the federal government should take a hard look to determine the possible interference with interstate commerce" (1992: 173).

26 Eny and Gealdon (1997: 308) argue that the risk of a regulatory race to the bottom for environmental reasons has not been a major issue in the European Community.

27 For a somewhat related but different argument relating to economies and diseconomies of scale in administration, see Rose-Ackerman (1992: 165–6).

28 Rose-Ackerman argues that uniform federal regulation may reduce search costs and produce more stable and predictable jurisprudence (1992: 172).

The conclusion is that the economic argument to harmonize environmental rules with respect to problems that are not transboundary is relatively weak. Nevertheless, many European directives (for example, addressing drinking water or bathing water) deal with problems which are not typically transboundary, and for which economic theory does not justify European level involvement. However, can a non-economic argument be advanced for regulation at the European level?

'European heritage'?

'Psychic spillovers'?

Can this argument support environmental protection at the European level? The protection of habitats and entire ecosystems comes to mind. A traditional example is the question whether there should be any European jurisdiction to protect an imaginary turtle that has, say, only one habitat, which is in Greece. The traditional economic argument in such a case would be that since the problem is merely local, the Greek population should decide whether or not to protect the turtle. An attempt in the direction of an economic argument for European competence has been made by Wouter Wils, who classifies the protection of endangered species as justified by the fact that this endangerment causes 'psychic spillovers' (1994: 85–90). The argument then follows that the endangerment of the Greek turtle would also harm the interests of, for example, a Dutch citizen living in Maartens, who would suffer a psychic spillover from the fact that the Greek turtle would be endangered. According to this view, the externality would be considered transboundary (although the turtle lives only in Greece) and there would, again, be an economic rationale for centralization. Perhaps this argument still holds for turtles or for Italian nature parks, because their well-being also affects other European citizens. But what about a European directive regulating the quality of drinking water in Greece?

Differenciation according to preferences

A European directive regulating the quality of drinking water in Greece seems, at first sight, contrary to basic economic logic. From an economic point of view, the environmental quality to be provided could differ according to differing preferences of citizens (Ogus 1994b: 25–30; 1999: 413). Again from an economic point of view, there is no reason for centralization if the externalities are local and no prisoners' dilemmas exist. This economic argument in favour of differentiation according to the preferences of citizens is not only valid for the question of whether or not to protect the turtle. However, consider Eny's statement: 'The health of ecosystems to which we have no physical connection may enter directly into our utility calculus' (1996).

31 Ogus argues that harmonization may be justified if foreigners derive duality from observing the plight of victims in the offending state (1999: 418).

32 However, the Greeks should probably be compensated for the extra costs involved in this European habitat protection (Rose-Ackerman 1995: 42–3).
this point could take the form of guaranteeing a basic level of environmental quality to all citizens.\footnote{As Kübler states, 'An analogy may be drawn here with human rights. It is arguable that certain minimum standards of environmental protection ought to be achieved by all countries and regions, particularly if one accepts that the environment is the common heritage of us all' (1995: 1690).}

Again, I am not arguing at the normative level that this would not be a valid argument for centralization, but it is important to stress that if this argument for centralization is used, it is only for ecological (or policy) reasons, not for economic reasons, that one would strive for harmonization of environmental quality. A problem with this 'European heritage' argument is that it may be valid to defend a European-wide protection of, say, the Colosseum in Rome,\footnote{At the same time, there is the transboundary ('psychic') spillover which justifies European intervention.} but less so to guarantee a minimum environmental quality. In that case it would make more sense to strive for a European-wide minimum level of public health, which is not the case today.

But if this 'European heritage' reason for centralization in order to guarantee to all European citizens a basic level of environmental quality is accepted, there are several consequences. If externalities are merely local and no 'race-to-the-bottom' risks exist, it is hard to find an economic rationale for centralization. At the policy level, truly ecological reasons can be advanced for centralization to guarantee a similar standard of environmental quality throughout the European Union. But then this ecological argument, not the 'harmonization-of-conditions-of-competition' argument, has to be advanced to justify, for example, the guarantee of a minimum level of environmental quality in Greece. In addition, if the idea is accepted that it is for ecological reasons (harmonizing environmental quality in the European Union) that centralization is needed, this has consequences for environmental standard setting.

\section*{IV. CONSEQUENCES FOR ENVIRONMENTAL STANDARD SETTING\footnote{The arguments made in this Part of the chapter have been developed in Faure and Lefèvre (1999).}}

\subsection*{Introduction}

Esty and Geradin have rightly paid attention to the fact that 'centralization' is too general a concept, which may cover a whole variety of legal techniques to achieve a harmonization of rules, standards, or procedures (1998: 39-46). I cannot discuss all the techniques that have been used in Europe to far to construe what is now considered to be the area of 'European environmental law'. I will focus on two types of standards, ambient quality standards and emission standards, to address the issue of which of these should be harmonized at the European level. These are of particular interest because they allow us to consider whether the goal of European action should be (economic) market integration or the guarantee to European citizens...
citizens of a basic level of environmental quality. I will argue that the choice between those goals has consequences for the types of standards one wishes to harmonize; moreover, I will argue that the type of harmonization selected by the European Commission so far does not correspond with the policy goal set.

Environmental (ambient) quality standards
If it is a policy decision to guarantee a basic level of environmental quality to all European citizens, irrespective of individual preferences, quality standards should be harmonized. This idea can now often be found in European rhetoric, and this clearly shows the difference between the economic and the legal approach. From an economic perspective, the quality standards could be differentiated, taking into account individual preferences (Ogus 1994a). The European idea of guaranteeing a basic level of environmental quality can be realized only through harmonized quality standards, to which the environmental components in the European Union should, in principle, correspond. These quality standards, also referred to as target standards, should then of course be the standards of an ideal level of environmental quality to be achieved and not merely standards that function as a 'red flag', as has sometimes been the case. Obviously, this assumes that Europe would set powers to monitor whether these quality standards are actually achieved, which is not the case today.

Emission limit values
If it is accepted that in Europe a basic level of environmental quality should be guaranteed through harmonized quality (target) standards, the next step is to ask how these standards can be achieved. The quality standards will be influenced by the specific emissions coming from various sources. However, according to the theory of optimal specificity of legal rules (Ehrlich and Posner 1974; Ogus 1994a; 1994b), the costs of meeting a certain level of environmental protection (in other words, the target) may well vary according to location-specific circumstances (Espy and Geradin 1997; 1998; Faure and Lefevere 1996; Kolstad 1987). In the words of Espy and Geradin, 'Differential standards are more economically efficient than total harmonization because they better match regulatory requirements to localized needs' (1998: 43).

For example, the local conditions in Belgium or Germany may be totally different from those in Portugal or Greece. Hence the emission limit values which are needed to reach a similar environmental quality within the European Union will have to take these differences into account. The inevitable conclusion is that where the environmental quality (target) to be reached may be uniform, the emission limit values have to vary according to the location-specific circumstances and will therefore be differentiated. An obvious consequence is that firms operating in member states that are less polluted can have less stringent emission limit values and can therefore market their products at lower prices. Thus, they acquire a competitive advantage (Espy and Geradin 1997: 271, 306). Again, this should not be a problem as long as these differences do not pose a 'race-to-the-bottom' risk.

European practice
This approach of harmonized target standards, but differentiated emission limit values, has not been the European policy so far. Indeed, the often mentioned Directive 76/464 attempts to harmonize emission limit values, and even the recent IPPC Directive still explicitly refers to the setting of emission limit values at the community level. This idea of harmonizing emission limit values runs counter to the idea of achieving a uniform environmental quality: harmonized emission limit values will obviously lead to differentiated environmental quality. This was precisely the point made by the United Kingdom during the heavy discussions preceding Directive 76/464 concerning the prevention of water pollution by certain dangerous substances. The United Kingdom therefore pleaded in favour of harmonized ambient quality standards (Espy and Geradin 1997: 305-6).

The conclusion is that the European approach of harmonizing emission limit values on the basis of the 'levelling-the-playing-field' argument runs counter to the idea of achieving one similar environmental quality in Europe and, moreover, is not necessary to facilitate market integration. Hence, as far as environmental protection is concerned, the Directive 76/464 is an unwise approach to environmental protection. 43

43 Espy and Geradin rightly argue that an intervention to eliminate differences in standards which reflect natural locational advantages would not be a good policy (1997: 271).
44 Recent appropriately states: 'The harmonization argument cannot be used, as it has in the European Union, to justify both uniform ambient standards and uniform emission standards' (Reevest 1997: 1339-40; 2000: 25).
45 If there is a 'race-to-the-bottom' risk, interjurisdictional differences will still lead to inefficiencies (Rose-Ackermann 1995: 40-1).
46 Even though Espy and Geradin (1997: 304) correctly mention that this is merely a minimum harmonization (and member states are allowed to adopt stricter national standards), the preamble to the Directive clearly states that 'levelling the playing field' is the ultimate goal of this Directive. 'Any disparity between the provisions in the discharge of certain dangerous substances into the aquatic environment already applicable or in preparation in the various member states may create unequal conditions of competition and thus directly affect the functioning of the common market' (European Commission 1976b). The 'minimum' harmonization does not solve the problem of member states who argue that even the 'minimum' is too strict and unnecessary to reach the environmental quality, given their specific local conditions.
47 Article 18 of the IPPC Directive explicitly refers to the possibility of setting Community emission limit values (European Commission 1996a).
48 In the words of Van den Berg, 'This alignment of EC environmental policy to the market integration goal diverts the attention away from economic welfare oriented criteria for the diffusion of powers between the European Community and the member states' (Van den Berg 1999: 5).
policy is concerned, Europe has been 'harmonizing for the wrong reasons' (Fauré 1998: 169–75). Probably, to some extent, there is a historical explanation for this. Before the Single European Act introduced in 1987 the ability to issue directives merely for environmental reasons, it was only possible to issue directives 'to harmonize conditions of competition'. Since this was the legal basis for the environmental directives before 1987, it is likely that the Commission simply continued to refer to this 'wrong reason' even when another legal basis was already available.

V. POLICY CONSIDERATIONS FOR EUROPE

Several conclusions can be drawn from this analysis. First, if Europe is concerned with ecological goals and wishes to achieve a uniform level of environmental quality throughout the European Union, it should set harmonized target standards. Europe should, in other words, be interested in the end-product: the level of environmental quality to be reached. This also assumes that Europe would receive powerful tools to monitor whether this environmental quality is actually achieved (which is still a major weakness today⁴⁹) and to ensure the target in cases of non-compliance. The fact that it is difficult to monitor the actual quality of the environment may also explain why Europe has long preferred directives containing emission standards whereby the Commission only checked whether there was a correct formal implementation in the legislation of the member states.

Second, in order to reach this uniform level of environmental quality, the emission limit values should be differentiated. This differentiation is efficient as long as the benefits of differentiation outweigh the (administrative) costs.

Third, the conclusion that differentiated emission limit values, taking into account location-specific circumstances, are necessary to achieve uniform environmental quality does not necessarily imply that values should be set by the member states. The member states may have the advantage of better information on location-specific circumstances (Kimber 1995: 1662); on the other hand, it is also conceivable that differentiated emission limit values could be set at the European level. This would be the case if one fears regulatory capture of member states by special interests representing industry. Thus there can be centralization of decision making in Brussels, but not necessarily harmonization of standards. This would amount to a balanced and flexible solution of joint competences. However, this assumes that no serious risk of a 'race to the bottom' exists.

Fourth, some emission limit values can still be European-wide, such as a prohibition on emitting carcinogenic substances, which will always have a strong negative impact on environmental quality. The same can be said for some 'minimum standard' harmonization which may be supported by an assumption of

⁴⁹ In Europe, there is no enforcement agency that possesses police powers because this is considered by member states to violate their sovereignty (Kimber 1995: 1685; Ogsen 1994a: 212–13; Pfändler 1996: 72–8).

homogeneity of preferences (Ogsen 1994b, 1999). This point somewhat weakens our critique of European environmental law. Indeed, the rhetoric of 'harmonization of conditions of competition' seems wrong, or at least not reconcilable with the ecological goal of 'guaranteeing a minimum environmental quality'. However, in practice, many directives, such as that on the discharge of dangerous substances into the aquatic environment, deal with a prohibition on emitting carcinogenic substances. Such a prohibition at the European level could well be defended in economic terms under the assumption of the homogeneity of preferences.

Fifth, an obvious consequence of accepting the idea that emission limit values can be differentiated is that values in less polluted member states might be more lenient than in states which are more polluted. The conclusion, therefore, is that if the policy goal is uniform environmental quality, harmonization of conditions of competition should not be the goal. That would then lead to precisely the opposite result because environmental quality would be differentiated.

Sixth, it follows that the idea of harmonization of conditions of competition, as it is pronounced as a goal for European environmental action, is wrong for several reasons. It is wrong for economic reasons, since full harmonization of conditions of competition is not needed to reach the economic goals of the Treaty; and it is equally wrong for ecological reasons, since it does not allow for the goal of uniform environmental quality. The conclusion may only be different if externalities are transboundary or there is a serious risk of a run to pollution havens. However, while there may be arguments for the harmonization of emission limit values, it should be clear that this may lead to differentiations in environmental quality. In this case, European policy makers will have to make a choice between either 'levelling the playing field' through harmonized emission standards or ecological harmonization of environmental quality. One way to (partially) reconcile these goals is to shift powers to Brussels because of the transboundary character of the externality, but to set differentiated emission limit values (Eddy and Gerard 1997: 291). There are examples in the United States as well of federal regulatory programmes that take into account geographical differences (Rose-Ackerman 1992: 165).

VI. A PUBLIC CHOICE PERSPECTIVE

An obviously crucial question is why this model of differentiated emission limit values is not always followed in European legal practice, where one can still note a strong tendency to harmonize emission limit values at the European level. One explanation may be that the European Commission harmonizes emission limit values in cases where externalities are transboundary or a serious 'race-to-the-bottom' risk exists. Then harmonization would fit into the economic reasons for centralization and could be considered 'in the public interest'. Nevertheless, Europe harmonizes emission standards much more generally to harmonize
marketing conditions' in cases where the economic criteria do not call for centralization. Why? One explanation can obviously be found in the fact that Europe has been harmonizing to 'level the playing field', not merely to remedy a 'race-to-the-bottom' risk. Another reason is found in public choice theory, which focuses on the role of interest groups in legislation (Yandle 1999). Lobbying activities at the European level are extremely strong.\(^{50}\) Additionally, with respect to environmental standard setting, intensive rent-seeking behaviour by interest groups can be identified.

In this respect, one should note that one important difference between Europe and the United States has to do with the fact that European scholars fear regulatory capture, especially in Brussels, as a result of the lack of transparency of the Brussels bureaucracy. The point made by US scholars that the risk of capture is larger at the state level may be true in the US context, when compared to the open, transparent debate that can take place at the federal level.\(^{51}\) In Europe, however, industry may be confronted with 'green' non-governmental organizations (NGOs) at the member state level, at least in 'green' member states like Denmark and Germany,\(^{52}\) whereas those countervailing powers are almost absent in Brussels. Hence one can expect European industry (located in the industrialized but 'green' member states) to engage in serious lobbying efforts, particularly in Brussels.\(^{53}\)

In certain cases, special interest groups representing industry might, understandably, lobby in favour of a harmonization of European emission limit values (Esty and Geradin 1997: 303). Interest groups in areas that are already heavily regulated may have incentives to extend their strict (national) regulations to the European level, forcing foreign competitors to follow the same strict regulations with which they already comply. The result is that industry will lobby to erect artificial barriers to entry. In addition, green NGOs will be pleased with this lobby and will obviously support the demand to transfer strict national standards into a European standard.\(^{54}\) Thus industries in heavily regulated (and probably polluted) areas can (supported by green NGOs) force their very stringent emission limit values upon their (southern) competitors, although these member states probably would not need such stringent values if the policy goal were one of reaching a uniform level of environmental quality.

This is precisely what happened with the IPPC Directive. A strong lobbying exercise in favour of emission limit values at the community level was undertaken by German industry (Faure and Lefevre 1996). They argued that industries in other member states should bear the same costs that German producers already had to bear (as a result of strict domestic standards) (Esty and Geradin 1997: 30). Thus it becomes clear that the 'harmonization-of-conditions-of-competition' argument is used by industries in heavily regulated areas to erect barriers to entry. Their competitors from member states with more lenient environmental standards may indeed not have the ability to comply with these more stringent environmental standards. The southern member states (and, once again, the United Kingdom) therefore understandably lobbied in favour of harmonized ambient quality standards with domestic emission limit values (Esty and Geradin 1997: 307). Hence environmental law can be used to limit market entry, and abused to serve private interest goals.

This leads to the conclusion that the 'harmonization-of-conditions-of-competition' argument, as presented in European rhetoric, is problematic, from both the economic and ecological points of view, and in fact serves the interests of industrial groups in heavily regulated areas.\(^{55}\) It may be in their interests that 'conditions of competition' are actually harmonized.

**VII. CONCLUDING REMARKS**

In this chapter, I used the economic literature on federalism to provide a critical look at some aspects of the harmonization of environmental law in Europe. In fact, I have only dealt with two specific, but important, aspects of European environmental law. First, I have sought to provide an economic analysis of the traditional European argument that conditions of competition should be harmonized to 'create a level playing field'. This argument is too general to fit into the economic criteria for centralization. The economic literature provides for a balanced answer with respect to the types of subject matter that should be regulated at the centralized or decentralized level. This shows that the questions concerning centralization/harmonization cannot be answered in black or white statements. The European argument of equalization of marketing conditions is apparently difficult to fit into the economic model. This relates to the second point examined in this chapter: what the goal of harmonization of environmental law should be and how this relates to the issue of standard setting. If European environmental policy is, as is sometimes stated, to promote uniform environmental quality within the European Union, this can be reached by setting a harmonized environmental quality, to be enforced by the Commission, but with differentiated emission standards. As I have discussed, some European directives aim at the harmonization of emission standards to 'harmonize conditions of competition'. Although I criticized the

\(^{50}\) For a discussion of harmonization efforts from a public choice perspective, see Van den Bergh (1998: 129).

\(^{51}\) However, Rose-Ackerman (1992: 171) argues that in the United States, unlike in Europe, citizens may favour federal intervention, since special interests representing industry would be more powerful at the state and local level than they are nationally.

\(^{52}\) This may be less the case in the southern countries.

\(^{53}\) For details, see Faure and Lefevre (1994: 334-42).

\(^{54}\) These 'alliances' between environmentalists and domestic producers are also discussed by David Vogel in his contribution to this volume (Ch. 15).

\(^{55}\) This is not to say that there is no risk of regulatory capture resulting in inefficient standards at the level of the member states. For information on the US context, see Rose-Ackerman (1992: 166, 173). However, in Europe, it is especially the transparent Brussels bureaucracy that is feared from a public choice perspective.
rhetoric used, I equally indicated that the result (for example, a prohibition on emitting carcinogenic substances) may sometimes be well justified, at least if one takes into account the quality goals set.

Of course, some may reply that the conclusion of the chapter—that some pieces of European action with respect to environmental law do not correspond with the economic model of centralization—should not be surprising. There may have been other, non-economic, reasons for action at the European level with respect to environmental quality. One reason may be the simple fact that the European bureaucracy of the Commission could justify its legitimacy through these environmental directives. The fact that bureaucracies have their own incentives to seek justifications to increase their competences is well known. However, this argument may have been valid in the 1970s when the Commission probably 'needed' environmental directives to justify its existence, but is less valid today when European powers have substantially increased as a result of the Treaties of Maastricht and Amsterdam. Moreover, the Commission cannot simply neglect the economic criteria of centralization now that 'raising the standard of living and quality of life' has been promoted to one of the goals of the Treaty in Article 2. Economic concepts can certainly be useful in reaching this goal.

It is, moreover, possible that in the future the consensus on European action with respect to the environment might be more in line with the economic approach. In that respect, the Proposal of the Commission for a Council Directive establishing a framework for community action in the field of water policy is quite promising (European Commission 1997b). The focus of this framework directive is indeed to set quality standards at the European level, but to let member states and local authorities decide on the means to achieve these objectives.

To reiterate, this chapter does not deal with the basic normative question concerning the need for environmental regulation. That is undisputed. It is concerned only with the question of the level at which, within a European Union, environmental rules and standards should be set, given different policy goals. It was shown that economic literature can provide important guidance in that respect and that harmonization in fact sometimes serves industry, not ecological interests. One should, however, be somewhat cautious about generalizing the results of US (economic) studies on environmental federalism to the situation in Europe, since there are many differences. One is the lack of transparency at the European level, which explains why some European scholars especially fear regulatory capture in Brussels (Ertz 1996: 609–11) more than in member states. Another is that Europe has practically no powers to enforce, for example, European-wide ambient quality standards. This may also explain the reluctance to rely heavily on these. It is obviously easier for the Commission to force member states to impose emission standards where it only checks whether member states

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56 One is obviously the degree of market integration (Van den Bergh 1999: 5).

57 To the contrary, Rose-Ackerman (1992: 166, 171–3) fears those effects in the US context at the state level.

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have enacted legislation which formally complies with the requirements of the directives. But given differences in enforcement strategies, the differences between member states (which were the reason for European intervention in the first place) may well remain after implementation of the directive concerned. This point substantially weakens the justification for European intervention, since in practice it may not always provide the powerful tool either to remedy the ‘race to the bottom’ or to guarantee a ‘harmonization of conditions of competition’ (Van den Bergh, Faure, and LeFevre 1996).

The economic literature makes clear that European policy makers should think more thoroughly about the reasons for harmonization, or at least about the rhetoric used to justify such harmonization. More particularly, they should realize that they can either opt for the ecological goal of uniform environmental quality or for the goal of harmonizing emission standards, but not for both at the same time. One now has the impression that the instruments chosen (harmonization of emission standards) do not always correspond with the expressed goals (harmonization of environmental quality). Recently, European legal scholars have realized this insight as well. Bruno De Witte has argued that Europe should now abandon the (wrong) rhetoric about harmonization of conditions of competition and should clearly state that it wants to achieve a minimum level of environmental quality for its citizens (2000).

Equally, it should be examined whether harmonization of process standards is always needed to reach a common market in Europe. Other helpful, but not so far-reaching (less inefficient), instruments may be available. One can think, for example, of a standardization of procedures within environmental law which still remains useful because of the transboundary character of pollution and industrial operations (Ertz and Geradin 1997: 293). This can indeed increase transparency, as was intended to be achieved by the IPPC Directive, and can reduce transaction costs. However, such a harmonization should not necessarily be achieved through formal directives but through a search for common principles, using comparative research, to find a least common.

Accordingly, it should be stressed that economic analysis of federalism provides useful insights concerning the question of centralization, but it does not always provide an answer regarding which of the many possible legal techniques of harmonization should be chosen to deal with a particular problem. The economic notion of centralization is too general to cover all of the legal techniques of harmonization. It therefore certainly merits further research on which of these harmonization techniques is best suited to deal with a particular problem. Moreover, in the economic analysis there are also questions that remain unanswered. One is how the need to centralize decision making in the case of transboundary externalities can be reconciled with the ecological goal of a uniform environmental quality. Another is whether industry in heavily polluted areas may be disadvantaged with more stringent emission standards compared to their competitors in ‘cleaner’ countries. Some of the questions need further empirical research on, for
example, the influence of environmental regulation on industry behaviour. In that respect, Europe should certainly look carefully at the US experience with environmental federalism.\textsuperscript{34}

\textsuperscript{34} For comparative analyses of environmental federalism in the United States and Europe, see Kimber (1995), Pfändor (1996), Rose-Ackerman (1995), and Esty and Geradin (1997; 1998).