

**Institution-Induced Problem Solving:
Problem-Oriented Micro-Institutionalization and
the Cases of the European Steel Crises in the
European Coal and Steel Community (ECSC)**

by Oliver Buntrock

March 2006

Address for Correspondence: University of Bremen, Graduate School of Social Sciences (GSSS), Wiener Str./Ecke Celsiusstr., P. O. B. 33 04 40, 28334 Bremen/Germany, Email: buntrock@gsss.uni-bremen.de

Table of Contents

1	Introduction: Problem Solving Beyond the Nation State?	4
2	The Actors, the Strategies of Action, and the Crises: An Analytical Framework	6
3	The Institutional Structure of the European Coal and Steel Community (ECSC) and the Logic of the Steel Market	9
4	The Combined Strategy and the Problem-Oriented Micro- Institutionalization: The ECSC and its Social Impact	15
5	Conclusion	23
	References	26

Paper prepared for the 1st Graduate Student Conference on the European Union, "The Challenge for Europe: Governance, Economics and Multiculturalism," March 25, 2006, University of Pittsburgh.

Acknowledgement: The author would like to thank the *Friedrich-Ebert-Foundation* in Bonn which financially enabled the presentation of this paper at the above-mentioned conference.

Abstract

Given the theoretical presumption of most institutionalist approaches based on the Coase theorem that institutions contribute to cooperation and thus to problem solving beyond the hierarchical coordination of the nation state, the question comes up whether this assumption proves true empirically and, if so, under which conditions. As the European steel crises show, the European Coal and Steel Community (ECSC) was, despite its strong supranational design and its powerful instruments, not able for more than twenty years to contribute to the solution of these crises. Examining the cases of the European steel crises, it seems that the aforementioned presumption proves true under the following two preconditions which, moreover, presuppose each other. *First*, the specific combination of strategies of action applied by the Commission regarding the policy formulation and the implementation phase, and *second*, the organization-induced mechanism which in this paper will be presented as “problem-oriented micro-institutionalization,” which means that the organization, induces the creation of further actors and infrastructures at those sites, where cooperation problems have been located. In the case of the European steel crises, it seems apparent that the ECSC with its original institutional structure was not able to get the crises under control. Rather problem solving required the supplement of the original widely meshed institutional structure by further actors and infrastructures – a process which can be illustrated by a *matryoshka*, the Russian wooden doll with smaller and smaller dolls inside.

1 Introduction: Problem Solving Beyond the Nation State?

The process of the globalization and denationalization implies problems and crises which cannot be solved anymore by each nation state alone due to the growing incongruence between the scope of political regulations and the scope of social transactions which constrain the national scope for action on problem solving (Zürn 1999; Grande/Prange/Wolf 2004; Scharpf/Schmidt 2000; Bernauer 2000). National governments try in part to regain this lost scope for action and problem solving through structures and room for maneuver beyond the nation state. In this regard, there have already been some efforts made in the political science literature to analytically cover and explain governance beyond the nation state, which, for instance, Michael Zürn denotes as “complex world-governance” or which is generally known as global governance (Zürn 1998; Reinicke 1998; Beck 1997).

Therefore, it is not surprising that current political science analyses increasingly focus on international institutions. With reference to that, the *topos* of the classical regime analysis of the 1980s and 1990s, which tries to answer the question of the conditions under which international regimes and organizations come into existence, is not of interest. The aspects which are now of interest are the conditions and mechanisms for problem solving of already existing institutions, especially international organizations. The theoretical assumption in the literature referring to institutions is that they provide necessary preconditions, such as the reduction of transaction costs, which can enable the fulfillment of the theorem formulated by Ronald H. Coase (Keohane 1984). According to the Coase theorem (1960), all attainable welfare effects which are achieved in nation states by “ideal hierarchical coordination” (Scharpf 1991: 625) can be achieved beyond the nation state through negotiations and voluntary agreements if transaction costs can be left unconsidered and distribution questions can be ignored (Scharpf 1991; Coase 1960; Keohane 1984).

However, it is obvious that after international organizations have been created, such voluntary agreements are not accomplished inevitably or automatically, not even in situations in which welfare effects are heavily sought after, for example in problem or crisis situations. In the case of the European Coal and Steel Community (ECSC), for example, three consecutive and, in part, severe steel crises occurred between the 1960s and the mid of the 1990s. Their solution or at least mitigation required cooperation on precisely the afore-mentioned agreements and their implementation by the national governments and also by subordinated actors, such as steel companies, national, and transnational steel associations, etc. Within the strongly supranational designed institutional context

of the ECSC, under the conditions of a constant institutional design and a constant problématique, the Commission did not succeed for more than fifteen years – despite its powerful instruments – in gaining influence over the mentioned actors to commit them on mutual agreements, precisely, on the implementation of the crisis policies. Hence, international organizations as a specific kind of international institution constitute at best the enabling framework which is, of course, a necessary precondition but not sufficient to keep the promise of the Coase theorem. In the end, success of international organizations has finally still to be assessed based on the difference between normative expectations and social reality.

The solution of real problems in terms of changing undesired social conditions – which in part derive from social interactions (externalities) – as for instance, unemployment, environmental pollution, or economical crises, implies two steps. First, it is necessary to induce a behavioral change of those actors who are *relevant* to the identified problem. Second, the assumed causal impact of these pursued behavioral changes on the social conditions should be apparent. The general possibility of political control and regulation of modern and functionally differentiated societies by political institutions is, as Fritz W. Scharpf argues, despite some objections still possible to a sufficient extent (Scharpf 1988: 63-64, 1989, 1991; Scharpf/Mayntz 2005; different see: Luhmann 1981, 1984, 1987; Willke 1983, Teubner/Willke 1984). Rather, it is necessary to analyze the conditions under which this is possible (Scharpf 1989: 18).

Therefore, it is not the purpose of this paper, however, to answer a question about the foundation of international organizations. It also does not concentrate on the question of the decision making capacity within the institutional context of a certain international organization (Grande/Jachtenfuchs 2000). In order to acquire more knowledge about how international organizations contribute to the solution of problems and crises beyond the nation state, it is necessary to concentrate on the relationship between an international organization, the behavior of the relevant actors, and the aspects of the social environment which are intended to be changed – which means the problem or crisis which should be solved. Otherwise it will not be possible to make any propositions, not even limited ones, about the relation between an institution and a certain problem or crises.

Examining the cases of the European steel crises, in this paper, I argue that an international organization with its original institutional structure is not able to adequately contribute to problem solving beyond the nation state. It rather contributes to problem solving beyond the nation state *through the refinement of the institutional structure which, in turn, enables the organization to effectively apply a*

specific combination of strategies of action to solve problematic social situations. This refinement can be illustrated by a *matryoshka*, the Russian wooden doll with smaller and smaller dolls inside. Trying to develop this argument in three steps, I first elucidate the three crucial analytical aspects which are the strategies of action of the Commission, the behavior of the relevant actors, and the development of the crises. The second section sketches the peculiarities of the ECSC and the logic of the steel market. In the third step, I try to show how the problem-oriented micro-institutionalization emerges and how it results in an agreement among the European steel producers which was constitutive for the implementation of the ECSC-crisis policy and most likely decisive for the subsequent mitigation of the crisis as well.

2 The Actors, the Strategies of Action, and the Crises: An Analytical Framework

The analysis of how international institutions contribute to the solution of problems or crises beyond the nation state confronts us with the cardinal question of which aspects we analytically have to focus on or in other words, from which perspective do we have to start to conceptualize the analytical framework; from the inside perspective of comparative politics towards the outside perspective of international relations or *vice versa*? In order to analyze denationalized problem solving it is in any case necessary to “bridge the gap” between those two sub-disciplines as Edgar Grande and Thomas Risse (2000) plead for. For this reason, although this paper does not make the claim that it conceptually already bridges the gap, the analytical framework comprises the relevant actors as a dependent variable, and the institutional strategies of action as independent variables. Both are embedded in the theoretical assumptions of crisis solution and crisis development.

The Relevant Actors

First of all, *relevant actors* are considered as those actors who, according to institutional policy makers, such as scientists, experts, and politicians stand in a direct relationship to a certain problem. Such actors are not coercively only national actors such as governments, but in many cases these are also transnational and sub-national “complex” actors (Scharpf 1997: 54). For example, the relevant actors in the European steel crises were in the first place the steel producers, who had, amongst others, to modernize their production facilities and in the second place national governments. Therefore, the analysis of the organizational contribution to problem or crisis solving requires not only a focus on

the behavior of national actors but also an extension of the analytical focus also for the behavior of the relevant transnational and sub-national actors.

The “Adequate Problem-Solving” Behavior

Adequate problem-solving behavior – which in the following will simply be presented as *adequate behavior* – is that kind of behavior of the relevant actors from which the policy makers, as above-mentioned, are convinced contributes to the solution of the problem. Hence, such adequate behavior requires first the implementation of the institutional problem or crisis policy by which it is assumed that the problem can be solved. At this point, two important aspects should be emphasized.

- 1 In contrast to some compliance studies as, for example, Michael Zürn and Christian Joerges (2005) have conducted, it is important here that the assessment of the actors’ behavior focuses primarily on the fulfillment of the initial goal of a formulated policy instead of the mere compliance with certain procedures. In the case of a given detailed instruction for action, for instance, a certain legal norm, adequate behavior can also differ from the exact wording of the rule as long as this behavior contributes to the initial goal of this rule. This should be illustrated by the following two examples. If a certain norm, which has been generated by a legislation body of an international organization, requires that all factory owners cut down the operating hours of their plants in order to reduce CO₂ emission for environmental reasons, they also would act adequately if they keep the operation hours constant and instead would install air filter facilities. In comparison, if it is prohibited for national governments to continue subsidizing a certain sector of industry in order to assure an undistorted market, it cannot be denoted as adequate if governments indeed stop subsidizing the respective companies but instead absorb their debts or nationalize them.
- 2 It is important that the actors’ behavior is not assessed only according to legal norms. Even though legal norms might be the most used political steering instrument, there are also other forms of steering possible, for example, by voluntary programs, by forecasts on market development, or by long-ranging investment recommendations, as they were applied during the European steel crises.

The Crises

Beyond the dependent variable, the actors’ behavior, this study is, of course, also interested in how the problem or crisis to be solved develops. This is necessary

in order to make at least limited propositions beyond the mere actors' behavior about the impact of organizational action on crisis situations. Certainly, to do this is more complex and it requires a more sophisticated framework in order to provide such evidence. Nevertheless, these difficulties should be eased by the concept of "embedding." The variables will be embedded first, in the assumptions provided by economic theories on how specific crises can be solved and second, in the development of selected crisis indicators.¹ Practically, "embedding" means first, to consider the requirements and preconditions for crisis solution based on economic theories. Second, it will be scrutinized whether the observed actors' behavior satisfies these economic requirements, which also serves as reference point for problem solving. If this can be verified and if additionally the crisis indicators change according to the economic presumptions, then there are empirically and theoretically good reasons to assume that the organizational action had an impact on the crisis (see also Scharpf 1987).

The Strategies of Action

The strategies to be examined are the strategies of action of an international organization, precisely, of the international administrative unit (IAU) of the ECSC, which in this case is the Commission. By focusing on these strategies, this article will concentrate not only on the strategy the IAU applies in order to implement a certain institutional policy. Based on the policy-cycle, it will also in part focus on policy-formulation that is the elaboration of an institutional policy from which it is assumed that it can solve a certain problem. By so doing, it is possible to distinguish between the strategy by which the IAU created the institutional policy and the strategy by which the IAU tried to implement it. This distinction allows for more detailed propositions about the applied strategies and its potential changes.

The question of why strategies have been chosen as the independent variable instead of the institutional design of institutions themselves, as has been done in other research projects (Keohane et al. 1993; Levy et al. 1993; Zürn 1998: 192-200), should be answered by the following argument. Of course, an institutional design (i.e. the instruments, the decision modes, the legal mandates, and so forth) is important and cannot be simply neglected. But, since an international organization is a specific type of an international institution which has developed from a mere structure to a discrete actor, it is necessary to take the

¹ In the cases of the European steel crises, the indicators are, for instance, the crude steel production, the crude steel capacities, the capacity utilization, the economic condition of the steel companies, the subsidies which the companies received, the company's profit margins as well as the prevailing opinion of scientists, experts, and policy makers (Buntrock 2004).

actions of this actor within its structure into account. Hence, what at least are as important as the institutional design is how this design is used and how the instruments are applied. For example, in the case of the steel crises and the ECSC, the Commission reluctantly made use of the powerful instruments which were given to its hands, moreover with little success. In addition, as we also know from comparative politics, the mere institutional design or the institutional structure serves as a rather insufficient explanation of policy and implementation outcomes (Dahl 1975).

The strategies that constitute the independent variables are the *enforcement* and the *management strategy*. Both strategies stem from compliance theories or compliance approaches which both reflect different visions and premises of the international system (Chayes/Chayes 1993, 1995; Downs et al. 1996). Whereas the enforcement approach assumes that actors calculate costs and benefits of the behavioral change, the aim of the enforcement strategy is to raise the costs of non-compliance, namely inadequate behavior. Therefore, the enforcement strategy concentrates on *directing* – which means unilateral policy formulation by the IAU –, *monitoring*, and *sanctioning*.

The management strategy, in comparison, assumes that actors are generally willing to fulfill the commitments they once have agreed on. Inadequate behavior is, from the viewpoint of the management approach, ascribed to problems which the relevant actors are confronted with and which prevent them from changing their behavior. Such problems are, for instance, multiple interpretations of legal norms which allow for behavior which contradicts the original intent of the norm or financial and administrative inability. Thus, in comparison to the enforcement strategy, the management strategy rejects sanctions and other “hard” forms of enforcement very strongly and rather tries with *discussions*, with the *exchange of arguments*, with the *reformulation of ambivalent norms*, and if necessary, with *financial* or *administrative support* to effectuate the behavioral change of the relevant actors.

3 The Institutional Structure of the European Coal and Steel Community (ECSC) and the Logic of the Steel Market

The question of why the cases of the European steel crises have been chosen can be answered by the following two arguments. First, the three steel crises provide the possibility of a “most-similar case-design” by a longitudinal analysis within the institutional setting of the same international organization. The institutional design of the ECSC had not been significantly changed over fifty years. Second, the ECSC was designed in a strong supranational way and the Com-

mission was provided with strong instruments by which it was enabled to apply both, the management and the enforcement strategy.

The ECSC as International Organization

The ECSC Treaty went into force in 1952 and expired in 2002. In between there existed some fifty years of “ups” and “downs” concerning the performance of the European steel policy and three steel crises. The European economy and especially the European steel industry, was backward and in a bad condition after the Second World War. This was one major reason, amongst others, for the foundation of the ECSC. The overall aim of the ECSC was to gain on a higher productivity and to overcome the supply shortage within the steel industry due to the deficiencies after the Second World War. By so doing, the ECSC was to contribute to the aggregated growth, wealth, and prosperity in the member states. This was to be realized by an increase of the productivity and a more, competition induced efficient supply. Therefore, it was necessary to create a market without any distortion of the competition (Bebr 1953, 1-2, 5; Hallstein 1951, 4-5). The task of the international administrative unit (IAU) of the ECSC, namely the High Authority, which was later succeeded by the Commission, was “to serve:

- 1 the modernization of production and the improvement of its quality;
- 2 the supply of coal and steel on identical terms to the French and to the German markets as well as to the markets of other member countries;
- 3 the development of common exports to other countries;
- 4 the equalization through improvement of the living conditions of the workers in these industries;
- 5 ensure the fusion of markets and the expansion of production”

(cf Diebold 1959, 1-2).

The Commission was not only preconceived with special tasks, but also with special means and instruments which should secure the realization of the above-mentioned objectives. These special means are basically displayed – in comparison to the European Economic Community (EEC) and the European Atomic Energy Community (Euratom) – by the Commission’s authority to generate legal rules, to intervene in the steel market, to monitor the adherence of the treaty rules, and to impose fines. The Commission was, according to article 14 and in comparison to the other two communities, the main legal body and could decree *decisions*, *recommendations*, and *opinions*, which functioned as the equivalent of the *regulation*, the *directive*, and the *decision* according to the EEC. This exposed position of the Commission reflected the strong supranational character of the ECSC.

According to the ECSC Treaty, the commission was authorized, for example, to obtain information from the corporations concerning their investment planning. The commission was also authorized to take care for consulting, to supply financial resources, and to prohibit unprofitable investments. Further more, the commission was authorized to monitor the treaty rules and to “take the necessary measures to ensure the observance of the rules laid down in this Treaty” (article 5).² In cases where a *direction* was applied, the Commission affected the steel firms directly without any previous transformation into national law by the respective national government. Direct market interventions, such as the establishment of a system of production quotas, the fixing of maximum and minimum prices as well as measures in the area of commercial policy were, however, only possible after declaring a “manifest crisis.” In order to apply these direct intervention measures, the commission needed, in addition, the affirmation of the council.

In cases of non-compliance with binding legal acts, the commission was authorized, for example, to impose fines or bring action against the rule breakers. Despite that, the commission, however, had no possibility to apply direct means of coercion. Therefore, the commission was dependent on the member states. To them, the commission could only give recommendations (Jerusalem 1954: 163-164; Schroeter 1963).

The Steel and the Market Logic

With reference to the logic according to which the steel market functions, basically three relevant aspects can be identified. These are first, steel as trade product, second, political influence, and third, the constitution of the steel companies regarding their ownership and production techniques. In the following they will be sketched in brief.

- 1 Steel is one of the most important construction materials in many technical areas because of the variety of its attributes and qualities. Nevertheless, due to its detailed standardization, steel is, as far as trade is concerned, a very homogenous mass product which has turned the world wide steel market into a demand market. That means that the price formation results from the enquirers who can easily switch to alternatives and are not fixated on a cer-

² The Commission had the possibility to inform all parties through indicative instruments, namely long-ranging investment recommendations, such as the “General Objectives ‘Steel’” as well as long and short ranging forecasts, such as the “Forward Programmes” on the market development and the calculated market development concerning the steel demand. According to these instruments, the steel producers were supposed to adjust their respective planning (see also Wagenführ 1963, 507-570).

tain provider. From the combination of the steel market's high transparency and the high competition intensity, a high price and demand elasticity follows which means that in cases of even the smallest price advantages, consumers switch to the offers of the competitor. Thus, price is the competition parameter on the steel market (Oberender/Rüter 1989: 39; Conrad 1997: 20-21).

- 2 Both the usage of steel as a preliminary arms product and the high number of workers employed in the steel industry – which is of relevance for the economic and employment policies – make the steel market susceptible for political influence. Considerations and perspectives on political regulation, however, have been varying within the common market from member state to member state. For instance, other than in Germany and the Netherlands, the steel market in France, Italy, and Belgium, were especially affected in the 1970s and 1980s by comparatively strong state interventions. While in Germany, most steel companies were private, and the state hardly intervened France could look back on a traditional national steel policy (Krägenau 1986: 30-31). The steel industry in Italy was for a long time characterized by a so-called dual ownership, by the state and private interests, and thus differed from the French and the German steel industries. And in Great Britain, the ownership structure alternated according to the administration; the Labor administration nationalized and the Tories privatized the steel industry (Krägenau 1986: 33, 35).
- 3 The steel companies can be differentiated along the two dimensions of *production techniques* and *ownership*. Referring the production techniques, two general types of plants exist: *integrated steel mills* and *electric steel plants*. In *integrated steel mills*, all stages of production process (the furnace, the crude steel production, the secondary metallurgy, and the forming as partially the coating) are spatially under one umbrella. The advantages of these mills are first, the conservation of energy and second, the large lot sizes which can be produced due to their huge capacities. Considerable disadvantages, however, are the relatively expensive coking coal as main reducer, which in addition is rather scarce. A further disadvantage is the relatively low flexibility concerning any changes of steel sorts and capacities. The latter are features of *economies of scale*,³ which are only in a few sectors as pronounced as in the steel industry (see especially Cockerill 1974; Morris 1954). Due to indivisibilities which exist in integrated mills and the high fixed costs which can reach a proportion of fifty per cent or even more of total costs, the costs per

³ „Economies of scale are the reductions in average unit costs which may be associated with an increase in the scale of output of a good or service“ (Cockerill 1974: 67).

piece become reduced only in the case of a high lot size, which in turn requires high production capacities.

From this, it follows that the cost advantage of integrated mills is not realized unless there is a high utilization of their big production capacities. On the other hand, in the case of utilization below capacity, the costs per piece increase progressively and the steel products are, concerning the price, no longer competitive. Thus, there is an indirect proportionality between costs per production unit and the capacity, namely the utilization of the steel converter.⁴ In sum, such huge production mills are marked in particular by an above-average capital equipment intensity, large-scale economies, and sunk costs.⁵ Thus, the cyclical flexibility is very low due to the fact that, under business management considerations, a gradual limiting of the production or the capacities is very difficult, or even, as the case may be, almost impossible. For business management reasons, the inner logic is to continue with the steel production even if the steel demand decreases as long as the revenue covers the variable expenses. These characteristics constitute high barriers of market entry and market exit (Cockerill 1974: 67-92; Conrad 1997: 19-21; Gieseck 1995: 25-27; Oberender/Rüter 1989: 47, 56; Fritsch et al. 2001).

In comparison, *electric steel plants*, which are significantly smaller, are not designed for such huge lot sizes as are in the integrated mills. Hence, they have advantages, especially in times of fluctuation or even declining demand. First, concerning the direct reduction, they do not operate with scarce coking coal. Second, the electric steel plants offer a higher flexibility concerning the charges due to the fact that a higher amount of scrap can be utilized. More over, they have lower indivisibilities and fixed costs. That means that economies of scale are less relevant for them. Thus they possess a higher output-flexibility and a higher ability of cyclical adjustment (Cockerill 1974: 72). The technology of those “mini-mills” has led on the one hand, to the emergence of smaller steel producers, and on the other hand it allowed access to the steel market for developing and newly industrializing countries (Gieseck 1995: 27).

The second dimension, the *ownership* of the companies, can be differentiated into *private* and *nationalized* forms. In crisis situations, it is easier for nationalized steel companies to survive than for private companies due to the state

⁴ The trend towards bigger production units – especially during the time of the capacity accumulation, namely the high demand of steel, until the mid of the 1970s – was only logical and consequent (Hartmann/Konegen 1985: 14).

⁵ Sunk costs mean that the investments for a steel plant, if they are shut down, cannot be regained on the market.

aid which the nationalized companies receive. From this differentiation of the companies, a typology of four possible characters of steel companies follows with different assumed chances of survival during steel crises and different assumed motivations and actor orientations (see table 1).

TABLE 1:

Four theoretical types of steel companies referring to the chances of survival during steel crises and their general orientation

<i>Ownership</i>	<i>Nationalized</i>	<i>Private</i>
<i>Production process</i>		
<i>Integrated mills</i>	general possibility "inactives"	difficult to survive "pusher"
<i>Electric plants</i>	most easy "inactives II" (empirically almost non-existent)	good (pre-)conditions "competitives" especially the so-called <i>Bresciani</i>

The typology comprises first, those companies which are predominantly reluctant to modernize their plants and to reduce their output and their production capacities due to their state financing and thus their general possibility to survive ("inactives"). The second type of companies is that which follows a relatively independent strategy due to their advantage in competition ("competitives"). The integrated mills which are in private hands have due to their small chances to surviving in severe crises the most interest in modernizing their plants ("pushers"). The theoretical fourth category is empirically almost not existent ("inactives II").

The Steel Crises

The first phase of the existence of the ECSC until 1964 was not only unproblematic, it was rather the "golden age" (Spierenburg/Poidevin 1994: 651; Tsoukalis/Strauss 1987: 190-91; Sanderson 1958). Due to the overall steel shortage, national governments and private companies invested enormous amounts of money in the steel plant construction – too often without the consideration of a medium or long-term profitability. In this phase, every steel company could only win from this situation. The second phase of the existence of the ECSC was characterized by three steel crises between 1964 and 1994. The first steel crisis lasted from 1964 until 1974, the second from 1975 until 1986, and the third from 1986 until the mid of the 1990s. The underlying problem was the same for all three crises: the market imbalance in terms of a disproportion of production capacities, precisely, of supply and demand. The aim and the intention of the Commission as well as the required measures according to economic theories

were to create a functioning market in a socially acceptable way by achieving price stability, by reducing capacities, and by abolishing state aid. The Commission tried over years and with various measures to achieve these goals. However, the behavior patterns of the relevant actors, as it can be presumed, corresponded with the respective types of the steel companies (table 1) which led to typical dilemma situations. Hence, all crises were characterized by a distributional conflict in capacities and competitive prices. Governments reacted with national subsidies and the steel companies acted according to the principle: "Everyone versus everyone and everyone for oneself."

4 The Combined Strategy and the Problem-Oriented Micro-Institutionalization: The ECSC and its Societal Impact

This section traces one possible mechanism which presumably led eventually to the mitigation of the third of the above sketched steel crises. The examination of these steel crises reveals, as far as the empirical analyses has yet been conducted, that the mere ECSC alone, neither as structure nor as actor, was not able to solve the sketched crises, that means to effectuate the adequate problem solving behavior of the relevant actors. Rather, it seems that the preconditions for the solution of the crises consist of the combination of two aspects which in part presuppose one another:

- The refinement of the institutional structure at those sites where problematic social situations occur, which means where disparate and thus inadequate behavior of the relevant actors leads to non-implementation and thus to sub-optimal results, in terms of unwanted social conditions. This refinement, which will be called *problem-oriented micro-institutionalization*, comprises firstly, the emergence of further "complex" sub-national and transnational actors below the governmental level (e.g. interest groups, associations, unions, etc). Secondly, these new actors, by interacting and taking positions, create and shape additional infrastructures (e.g. round tables, cyclical meetings, direct collaboration between relevant actors, etc.).
- The adequate *combination of strategies of action* of the international administration unit (IAU) concerning the formulation and the implementation phase of the crisis policy. This adequate combination seems to be the application of the *management strategy* in the policy formulation phase and the *enforcement strategy* in the implementation phase.

From this, it follows that effective problem solving, as far as the contribution of an international organization is concerned, does not depend on the mere

equipment with powerful enforcement instruments but rather on the *reconnection* of the levels of interaction to each other through micro-institutionalization. In the case of the ECSC, it is obvious that the Commission was equipped with such powerful and far reaching instruments and competencies which no other organization ever had. The mere instruments, even if powerful ones, remain ineffective in great measure if the level of the international organization beyond the nation state is not reconnected to the level of the relevant actors in the nation states by further structures and by further transnational and sub-national actors. This reconnection activates and unfolds the effectiveness of the organizational action by which the behavior of the relevant actors can be changed.

It seems that the process of reconnection consists of two phases. The *first phase* starts with a policy formulation which is widely accepted by those actors who have to implement it. Such a widely accepted policy seems generally possible by direct collaboration between the IAU and the relevant actors through transnational and sub-national actors, whereas non-relevant actors need to be prevented from interfering. Hence, such a widely accepted policy is almost only possible first, if the IAU applies a management strategy, which means to allow for influencing the formulation process, and second, if a sufficient micro-institution exists which allows for the required collaboration. The *second phase* is the implementation of this formulated policy, which requires first, the application of the enforcement strategy by the IAU and second, a structure or actors which enfold the effectiveness of this enforcement strategy. For example, if the interests in implementing the respective policy of a certain number of relevant actors is strengthened (for rational and egoistic reasons) they can enable or contribute to an effective enforcement strategy through decentralized monitoring or even decentralized sanctioning (Wolf/Neyer 2005: 48-52).

However, it seems that the following basic shape of a micro-institutionalized system becomes visible. The reconnection of the level beyond the nation state to the sub-national level consists of a double-track. The first track refers to the policy formulation and consists of the connection between the relevant actors in the national arena with the IAU in the arena beyond the nation state by the micro-institutions via a "bottom-up process." In this regard, micro-institutions provide the following three functions:

- 1 They *collect information* from relevant actors which are important for the formulation of a qualitatively sufficient policy (e.g. statistics, production quotas, future plans and investments, etc.) and provide them to the IAU.
- 2 They *provide (and shape) infrastructures* (e.g. cyclical, formal and informal meetings, round tables etc.) from which the relevant actors within the national and transnational arenas make use of in order to arrange things

among each other and to develop a common position referring their needs, concerns, difficulties, etc.

- 3 They (e.g. interest groups, etc.) directly *collaborate* with the IAU in order to formulate a common and widely accepted crisis policy.

The second track refers to the implementation and consists of the connection between the IAU and those who have to implement its policies, namely with the relevant actors who were supposed to change their behavior. This connection is also realized by the micro-institutions via a “top-down process.” Referring to this, the micro-institutions fulfill the following three functions:

- 1 They *provide a structure* which enables the IAU to effectively apply its enforcement strategy in order to implement the formulated crisis policy (e.g. monitoring can be fostered by collected information about the behavior of the relevant actors).
- 2 They *actively support and foster* the enforcement procedure by conducting decentralized monitoring and sanctioning by “keeping their eyes open” in order to detect and also sanction deviant behavior, for instance, by suing, by squealing, or by suspending such actors from their association-membership, or by applying reputation measures.
- 3 Under certain conditions, they even might *exercise pressure* on national governments in order to draw them back from interfering with the implementation of the crisis policy.

The question remains open for this empirical study currently underway, whether and to which extent the actors and micro-structures which can contribute to the enforcement differ from those who were involved in the policy formulation. This might answer the question to which extent the first and the second phase are interdependent and thus to which extent the formulated policy has to be generally accepted. According to the current empirical findings, the structures and actors on both tracks are basically identical. Hence, in this case there is much evidence that the widely accepted policy in turn unfolds the essential centripetal tendencies of the effective enforcement process in the implementation phase.

Both the accepted policy and the effective enforcement process can only be enabled or at least alleviated through the necessary institutional structures and transnational and sub-national actors, which in case of the ECSC, seem to function as “transmission-belt” between the relevant actors and the Commission. As we know it from national constitutions, shortly after their creation they only provide us with a wide meshed institutional structure. In order to effectively manage and solve future anticipated problems, however, the initial constitution

needs to be tightened and supplemented by national laws and further institutions (Stone Sweet 1999). This seems to occur also within the initially widely meshed institutional structures of newly created international organizations through the above sketched process of problem-oriented micro-institutionalization.

In order to specify the kind of micro-institutionalization, the institutional system of an international organization should be differentiated along the following two dimensions: the *political arena* and the *status of actors*. Each of these dimensions will again be subdivided into *national* and *international*, or, in the case of the EU, into *national* and *supranational* (Grande 2003). From this differentiation there result four levels of action. Three of them seem to be relevant which are the *intra-national level*, the *inter-national level* and the *intra-organizational/community level*. On the first level, national actors, private and public alike, act within the national arena in order to develop their own (national) position. On the second level, national actors, such as ministers, act within the organs of the international organization (decision-making, etc.). Both levels exist shortly after an international organization has been founded. What has to be developed is the third level, on which the IAU acts together with transnational actors. However, the empirical indication for the afore-sketched problem-oriented micro-institutionalization seems to be given by two major aspects in the process of the three steel crises:

- 1 A sufficient crisis policy was formulated only after some *years of collaboration, negotiations, discussions, and problem analysis between the Commission and the national and transnational steel associations* which were created by the steel producers (i.e. *DENELUX, Eurofer, EISA, German Steel Association*, etc.).
- 2 The implementation of this policy was successful in the basic aspects presumably through the application of the enforcement strategy by the Commission which in turn was possible through the collaboration between the Commission, which insisted on a *quid pro quo*, and the mentioned sub-national and transnational actors, especially *Eurofer*.

During the *first crisis*, the Commission applied several measures in order to keep prices stable and to prevent the steel companies from enhancing production capacities. Since the steel prices in the community declined severely, the Commission tightened the pricing rules of the community according to article 60 of the ECSC Treaty.⁶ The Commission prohibited the adjustment of prices to those of state-trading countries and, furthermore, imposed a burden of proof on the steel companies for price adjustments to those prices in other community

⁶ Decisions Nr. 1/64; No. 23/63, and No. 24/63.

countries. In addition, the Commission recommended to not enhance the capacities and tried to coordinate direct investments in order to avoid capacity enlargement.⁷

In the policy formulation phase, the commission's strategy can be accounted as enforcement strategy, since the commission simply "directed" the relevant actors instead of collaborating or discussing the emerging problems with them. In the implementation phase, the Commission applied an enforcement strategy concerning prices and a management strategy concerning the capacity expansion, since it tried to convince the actors and appealed to their reason and self discipline.

However, these strategies did not lead to the desired behavior of the relevant actors. Mostly the "competitives" but also the "inactives" and in some respect also the "pushers" did not cooperate with the commission (see table 1). They secretly, and with all kinds of tricks, avoided changing their behavior and acting in accordance with the ECSC-pricing system, so that the Commission was not able to prosecute and punish deviant behavior. The same behavior can be observed concerning the production capacities. They simply did not care about the Commission's recommendations (Stegemann 1977: 9, 38, 67; Oberender/Rüter 1989: 54).

The *second crisis* was the worst one and turned out to be complex due to the measures which were applied towards the steel-companies and the national governments alike. The Commission consecutively applied two major packages of measures, according to which this crisis will be subdivided into two parts. In the first half, between 1975 and 1986, the Commission concentrated on capacity reduction and some time later also on price stability. This should be achieved by the "Simonet-plan" based on article 46 of the treaty, which was a voluntary planning for capacity reduction. More over, the Commission established orientation prices and required the reorganization of the European steel market, which were central components of the "Davignon-plan." In addition, the commission developed voluntary guidelines on subsidies for the national governments in order to counteract the increases in state aid.

Hitherto, the Commission, the steel companies, and in some respect, the national governments were the crucial actors. But in 1976, an institutionalization process was induced and new actors were created which then entered the arena. This institutionalization process and the creation of new actors can be considered as a response on the Commission's behavior. The reluctance of the

⁷ Indicative measures by *General Objectives "Steel" 1970* and the quarterly *Forward Programmes*.

Commission to act at the beginning of this crisis made the companies insecure whether or not it even would, and which kind of measures the Commission would take. This insecurity led to the foundation of steel associations along with their economic preferences with the objective to influence the policy formulation process of the Commission according to the respective interest. The more liberal oriented companies founded the *DNELUX* association in 1976, which entailed the foundation of *Eurofer* (European Confederation of Iron and Steel Industries) in the same year. Otherwise, the medium-sized and small companies such as the “Bresciani” founded the *EISA* (European Independent Steel Works Association).

With reference to the policy formulation phase, one can rather speak of a management than of an enforcement strategy. Instead of “directing” the actors, Commissar Henri Simonet and his successor Graf Etienne Davignon tried to reach a consensus between the Commission, the steel companies, and the governments. Thus, the Simonet-plan and to a certain extent the Davignon-plan too had been developed through – or at least very much influenced by – the collaboration of the Commission with the new emerged sub-national and transnational actors (Stotz 1983: 49-52). But also the implementation phase was characterized rather by the management strategy. The whole Simonet-plan and in part also the Davignon-plan was demonstratively not legally binding. Instead, the Commission tried, in order to avoid any kind of unnecessary capacity enhancement, to convince the steel companies not to enhance their capacities and appealed to their reason. The Commission consulted with the companies which showed their willingness to reduce capacities and negotiated the quotas for each company separately and secretly.

Moreover, and this is important to note, the Commission explicitly incorporated the new founded Eurofer in the policy implementation phase. The Commission relied on this new transnational actor and on the pressure it might exercise on its members. On the basis of an anti-crisis cartel, the Commission hoped to get all steel companies on board. However, the implementation of the plan collapsed. Those companies which were in good condition, especially the “competitives” (see table 1), were simply not interested in the plan and thus refused to participate. And, those companies which committed themselves had nothing to fear even if they did not comply with that commitment. This led, most of all for managerial reasons, successively to a general disinterest also in the other companies (Conrad 1997: 88-89).

The *second half* of the *second crisis* was characterized by a combination of direct measures. As the crisis worsened in 1980, the Commission declared the “Manifest Crisis” according to article 58 of the ECSC Treaty and established a system

of fixed and legally binding production quotas, minimum prices, and developed obligatory Steel Aid Codes for the governments.

Compared to the first half of this crisis, there is evidence to suggest that the Commission did not collaborate with Eurofer or other sub-national actors, as far as the policy formulation is concerned. It had rather been the enforcement strategy which the Commission applied in both the formulation and the implementation phase. In the former, the Commission rather “directed” the relevant actors, which was in part due to the more or less fixed procedure of the crisis measures to be followed in case of a “Manifest Crisis.” In the implementation phase, the Commission obviously applied the enforcement strategy due to the threats they made and the fines they imposed (Howell 1988: 81; Conrad 1997: 99).

As already seen in the period previous to the “Manifest Crisis,” the Commission relied heavily on Eurofer, which was assigned with the task of distributing the fixed quotas among the steel companies and with the monitoring procedure. As Thomas Howell *et al.* put it: “While the Commission backed the quotas with official sanctions, as a practical matter it relied heavily on the Eurofer members to police themselves and to bring infractions to the attention of the Commission” (1988: 81). However, five consecutive Eurofer cartels collapsed due to big differences among the members on the distribution of the quotas. It seems obvious that the Commission directed the crisis procedure without taking into account the different needs of the companies so that this policy was not sufficiently accepted. As a result, many of them practices free-riding (Conrad 1997: 99-101).

Despite that capacities had been reduced in the second half, it was not possible, even with strong crisis instruments, to achieve the desired result and mitigate or solve the crisis for two reasons. First, the amount of capacity reduction was not sufficient, and second, the process of reduction was inadequate. In other words, the capacity reduction was not in line with the market mechanism, which would mean the shut down of non-profitable capacities in favor of profitable working mills (Howell *et al.* 1988: 82). This inadequate reduction happened due to the fact that the Steel Aid Codes were not observed by the governments. They rather subsidized through the backdoor, nationalized companies, and assumed their debts which finally ended in a race over subsidies. This led to the situation that the “pushers,” which in addition worked generally more profitably, had to reduce capacities or they even had to shut down their plants while the “inactives” could settle back, wait and see. As, again, Howell *et al.* put it: “[...] the German industry was losing its technological edge over its competitors ‘as a direct consequence of the fact that other countries supported

their steel industries with state cash'' (1988: 64). But the governments not only subsidized their steel industries, they even nationalized companies in order to rescue them. Only the ''competitives'' could basically keep up with the situation. Hence, the implementation of the combined direct crisis measures did also not succeed in changing the actors' behavior and to establish a smoothly functioning steel market. With reference to the crisis indicators, the European steel market remained outdated, unorganized, and thus noncompetitive.

In the *third steel crisis* and after eight years of production quotas and a fixed pricing system which obviously did not lead to the desired reorganization of the European steel industry and thus to the solution of the crises, the Commission started to expose the European steel industry again to the market mechanism. In order to achieve the desired reorganization, the Commission developed a restructuring concept in order to reduce excess capacities, to privatize those steel companies which meanwhile were nationalized, and to abolish state aid. This plan, however, was again developed together with the steel associations, mainly Eurofer, and would probably not had been created without a collaborative modus, since crucial parts of the plan originate from the German Steel Association, which is a member of Eurofer. Additionally, this plan was widely accepted and appreciated, more differentiated and even considered as ''good resolution'' by almost all relevant actors (Glais 1995: 234).

This plan comprised, amongst others, a pre-financing concept. Those companies which were willing to reduce capacities should receive an equalizing payment by those companies who refused to shut down capacities. The Commission was willing to start the financing concept on a credit basis. This restructuring plan differed from the previous measures in two basic aspects. First, this plan considered the different types of steel companies, while the others basically did not. For example, private companies were eligible to receive concomitant social payments for shutting down working places (capacity reduction) if they could prove that they have closed capacities. Second, the plan combined requirements with incentives and thus lowered the market exit barriers for the steel companies. For example, the legal approval of subsidies by the Commission for a certain steel company required concomitantly a capacity reduction and/or privatization of nationalized companies. This approval of subsidies was, of course, highly criticized but by so doing and by a successive tightening of the Steel Aid Codes, the Commission was able to trace the amount of state aids and thus got an overview, and eventually controlled them which had not been possible in times when the governments subsidized through the backdoor. By dismantling the ''inactive'' nationalized type of steel companies, the steel plan made it possible first, to alter the typology of the steel companies and thus their pattern of

behavior which was the categorical problem (see table 1). Second, this plan allowed for the application of the enforcement strategy.

The implementation of this plan was accompanied by difficulties at the beginning. Finally, the success of the plan depended on the Italian government and capacity reduction by the "Bresciani." Even though the world wide economic situation in the steel sector improved, it can be asserted that the steel plan was implemented to that extent where it matched the improving economic situation. Already in March 1993, one year before the economic situation started to improve, the President of the German Steel Association, Ruprecht Vondran, who always pleaded for a free steel market without subsidies, declared that the resolutions of the Commission have already had a stabilizing effect.⁸ Eventually, in Italy, fifty small steel mills were shut down.

Concerning the formulation of this plan, the Commission applied the management strategy. The plan was at crucial points influenced by Eurofer and the steel associations. For example, as far as the pre-financing concept is concerned, the commission resorted to proposals of the German Steel Association, a member of Eurofer. But the formulation of the steel plan was also influenced by some cumbersome negotiations with various governments on subsidies and reduction quotas. In the implementation phase, the Commission rather applied the enforcement strategy, due to the fact that the financial help by the Commission was subject to certain requirements. More over, it seems that the Commission again relied on the pressure which Eurofer would exercise on their members and other steel companies to stick to the plan (Conrad 1997: 135).

Hitherto the European Steel industry was backward and non-competitive. After the third steel crisis, the sun shined on a different European steel industry, one which is meanwhile highly competitive and which is one of the most profitable and successful steel industries in the world.

5 Conclusion

As we have seen, crucial parts of the steel plan in the third crisis, which also was widely accepted, resulted from the consideration of the suggestions which had been made by Eurofer and the German Steel Association. The plan was also adjusted to the results of negotiations with diverse national governments. Thus, there are good reasons to assume that it would not had been possible for the Commission to formulate such a differentiated and generally accepted steel

⁸ „Steel Crisis: First Signals of Hope“ [„Stahlkrise: Erste Zeichen der Hoffnung“], Frankfurter Allgemeine Zeitung, March 12, 1993: 15.

plan without any collaboration and discussion together with the transnational and also sub-national actors. Furthermore, it seems that these micro-structure and emerged actors did also contribute to the implementation of this crisis policy in a significant way by exercising pressure on their own members.

Although the High Authority and later the Commission had far reaching, extensive, and powerful instruments compared to any other IAU, the Commission was not able, even by applying these instruments, to achieve the desired and necessary goals, precisely, to adequately modernize and reorganize the European steel industry. This ineffectiveness, as far as the implementation is concerned, one might argue, results from the fact that the arena of interaction is beyond the nation state, outside of any hierarchical context. But even if hierarchy was given, as we know from comparative politics, this hierarchy gives no guarantee that a generally qualitative sufficient policy will be implemented (Scharpf 1983; 1987).

From this it follows that the decisive aspect for policy implementation and thus for effective problem-solving is not, even though they might be important, the mere existence of powerful instruments, but rather the elaboration of a policy which considers the concerns of the relevant actors. This is generally possible by the application of the management strategy that means by the participation of transnational and sub-national actors. They seem to reconnect the political arena beyond the nation state with the relevant societal actors within the nation states. The implementation, in contrast, requires an enforcement strategy. As seen in the second crisis, a completely voluntary policy, such as the “Simonet-plan” will not be implemented but, even worse, invites free-riding. Hence, the solution of distributional conflicts which require a societal contribution to their solution, as was the case in the three steel crises, requires a functional differentiated strategy of action concerning the policy formulation and the implementation phase by the IAU. This, however, depends in turn on an adequate micro-institutionalization. Hence, this preliminary conclusion might contribute to the following two fields of research:

For *European multi-level* and possibly also *global governance*, this preliminary conclusion means that the role and the function of national governments in the concept of governance beyond the nation state has to be thought over and has possibly to be re-conceptualized. On the one hand, as we know from studies on the European Union and other international organizations, national governments are not necessarily weakened if they participate in international organizations or other kinds of institutions. Indeed, formally, they transfer national sovereignty to the institutional level beyond the nation state. De facto, they gain power against their domestic societal actors by *scapegoating* and *credit claiming*.

This phenomenon, which in the literature is called the “Paradox of Weakness” (Grande 1996) or as Andrew Moravcsik puts it: “Why the European Community Strengthens the State” (1994) might prevent effective problem-solving or might prolong crisis situations. In the cases of the European steel crises, however, it was the governments’ short-term preferences which interfered against effective problem-solving. On the other hand, to some extent governments might be necessary, and in some respect, a *conditio sine qua non* for global governance due to their hierarchical power to implement international agreements by transforming them into national law within a hierarchical context (Grande 2001). Hence, two interesting questions arise which in further research have to be answered:

- 1 To which extent are governments necessary or even helpful and in which situations are they rather counterproductive? This question is interesting because of the fact that international organizations are regarded as the backbone of global governance. The question might be answered by focusing on the type of the problem or crisis. For instance, in the case of the ECSC the crises were characterized by a distributional conflict which to solve required a societal contribution by sub-national actors. This type seems firstly to represent most of the current welfare problems, which in literature are ascribed to the effects of globalization, and furthermore, it seems to be sensitive to any governmental action which opposes the intended goal of the respective crisis policy.
- 2 To which extent and under which conditions is it possible for transnational or sub-national actors on the one level, and supranational or international actors on the other level, to perform the “sandwich” approach, which means to exert influence on national governments (Sandholtz/Zysman 1989; Zimmermann 1990; Glotz 1990).

Since the *problem-oriented micro-institutions* are at best only a part of what in the literature is known as *neo-corporatism*, this preliminary conclusion might contribute to the research on neo-corporatism by providing an explanatory mechanism of how neo-corporatist structures emerge, especially those neo-corporatist structures which effectively contribute to problem solving.

However, dependent on further empirical study, it might turn out that governance and problem-solving beyond the nation state presupposes a more developed institutional structure and additional actors. Their emergence can be induced by international organizations in a process of problem-oriented micro-institutionalization. This could be, amongst others, the real contribution of international organizations for problem solving beyond the nation state.

References

- Bebr, Gerhard, 1953, The European Coal and Steel Community: A Political and Legal Innovation, in: *The Yale Law Journal* 63 (1): 1-43.
- Beck, Ulrich, 1997, *Was ist Globalisierung?*, Frankfurt a.M.
- Bernauer, Thomas, 2000, *Staaten im Weltmarkt. Zur Handlungsfähigkeit von Staaten trotz wirtschaftlicher Globalisierung*, Opladen.
- Buntrock, Oliver, 2004, *Problemlösung im europäischen Mehrebenensystem. Das Beispiel der Stahlpolitik der Europäischen Gemeinschaft für Kohle und Stahl (EGKS)*, Wiesbaden: Deutscher Universitätsverlag.
- Burley, Anne-Marie/Mattli, Walter, 1993, Europe before the Court: A Political Theory of Legal Integration, in: *International Organization* 47 (1): 41-76.
- Chayes, Abram/Chayes, Antonia Handler, 1993, On Compliance, in: *International Organization* 47 (2): 175-205.
- Chayes, Abram/Chayes, Antonia Handler, 1995, *The New Sovereignty: Compliance with International Regulatory Agreements*, Cambridge, Mass.: Harvard University Press.
- Coase, Ronald H., 1960, The Problem of Social Cost, in: *Journal of Law and Economics* 3 (1): 1-44.
- Cockerill, Anthony, 1974, *The Steel Industry. International Comparisons of Industrial Structure and Performance*, Cambridge: Cambridge University Press.
- Conrad, Christian, 1997, *Europäische Stahlpolitik zwischen politischen Zielen und ökonomischen Zwängen*, Baden-Baden: Nomos.
- Dahl, Robert A., 1975, Governments and Political Oppositions, in: Fred I. Greenstein & Nelson W. Polsby (eds.), *Macropolitical Theory*, vol. 3, London: Addison-Wesley: 115-174.
- Diebold, William, 1959, *The Schuman Plan. A Study in Economic Cooperation 1950-1959*, New York: Praeger.
- Downs, George W./Rocke, David M./Barsoom, Peter N., 1996, Is the Good News About Compliance Good News about Cooperation?, in: *International Organization* 50 (3): 379-406.
- Duffield, John S., 1994, Explaining the Long Peace in Europe: The Contributions of Regional Security Regimes, in: *Review of International Studies* 20 (4): 369-388.
- Fritsch, Michael/Wein, Thomas/Ewers, Hans-Jürgen, 2001, *Marktversagen und Wirtschaftspolitik. Mikroökonomische Grundlagen staatlichen Handelns*, 4. Aufl., München: Vahlen.
- Gieseck, Arne, 1995, *Krisenmanagement in der Stahlindustrie. Eine theoretische und empirische Analyse der europäischen Stahlpolitik 1975 bis 1988*, Berlin: Duncker & Humblot.

- Glais, Michel, 1995, Steel Industry. Discussion Fernand Braun, in: Pierre Buigues, Alexis Jacquemin & André Sapir (eds.), *European Policies on Competition, Trade and Industry. Conflict and Complementaries*, Aldershot: Elgar.
- Glutz, Peter, 1990, *Der Irrweg des Nationalstaats*, Stuttgart: DVA.
- Grande, Edgar, 1996, The State and Interest Groups in a Framework of multi-Level Decision-Making: The Case of the European Union, in: *Journal of European Public Policy* 3 (3): 318-338.
- Grande, Edgar, 2001, Die neue Unregierbarkeit. Globalisierung und die Grenzen des Regierens jenseits des Nationalstaats, in: *Jahrbuch Arbeit und Technik 2001/2002*, Bonn: J.H.W. Dietz: 95-110.
- Grande, Edgar, 2003, How the Architecture of the European Union Political System Influences European Union Business Associations, in: Justin Greenwood (ed.), *The Challenge of Change in EU Business Associations*, Houndmills: Palgrave Macmillan: 45-59.
- Grande, Edgar/Jachtenfuchs, Markus, 2000, *Wie problemlösungsfähig ist die EU? Regieren im europäischen Mehrebenensystem*, Nomos: Baden-Baden
- Grande, Edgar/Prange, Heiko/Wolf, Dieter, 2004, *Die Wahl der Qual? Staatliche Handlungsmöglichkeiten im Zeitalter der Globalisierung*, Unveröffentlichtes Manuskript, München/Berlin/Bremen.
- Grande, Edgar/Risse, Thomas, 2000, Bridging the Gap. Konzeptionelle Anforderung an die politikwissenschaftliche Analyse von Globalisierungsprozessen, in: *Zeitschrift für Internationale Beziehungen* 7 (2): 235-266.
- Hallstein, Walter, 1951, *Probleme des Schuman-Plans. Eine Diskussion zwischen Walter Hallstein und Andreas Predöhl und Fritz Baade, gehalten am Institut für Weltwirtschaft an der Universität Kiel*, Kiel: Institut für Weltwirtschaft.
- Hartmann, Reiner/Konegen, Norbert, 1985, Das Leben geht weiter, die Krise auch. Resümee und Perspektiven der Stahlpolitik, in: *Jeder kocht seinen eigenen Stahl. 10 Jahre Stahlpolitik in der Krise – Darstellung und Perspektiven*, Göttingen: Sovec: 9-73.
- Hellwig, Fritz, 1962, Möglichkeiten und Grenzen einer Teilintegration. Rückblick nach zehn Jahren Montanunion, in: *Wirtschaftsdienst. Zeitschrift für Wirtschaftspolitik* 42 (7): 305-314.
- Howell, Thomas R./Noellert, William A./Kreier, Jesse G./Wolff, Alan Wm., 1988, *Steel and the State. Government Intervention and Steel's Structural Crisis*, Boulder: Westview Press.
- Jerusalem, Franz W., 1954, *Das Recht der Montanunion*, Berlin/Frnakfurt a.M.: Vahlen.
- Keohane, Robert O., 1984, *After Hegemony. Cooperation and Discord in the World Political Economy*, Princeton, N.J.: Princeton University Press.

- Keohane, Robert O., 1989, *International Institutions and State Power. Essays in International Relations Theory*, Boulder: Westview Press.
- Keohane, Robert O., 1996, Analyzing the Effectiveness of International Environmental Institutions, in: Robert O. Keohane & Marc A. Levy (eds.), *Institutions for Environmental Aid: Pitfalls and Promise*, Cambridge, Mass.: 3-27.
- Keohane, Robert O./Nye, Joseph S. Jr., 1977, *Power and Interdependence: World Politics in Transition*, Boston: Little Brown.
- Keohane, Robert O./Haas, Peter M./Levy, Marc A., 1993, The Effectiveness of International Environmental Institutions, in: Peter M. Haas, Robert O. Keohane & Marc A. Levy (eds.), *Institutions for the Earth. Sources of Effective International Environmental Protection*, Cambridge: MIT Press: 3-24.
- Krägenau, Henry, 1986, *Stahlpolitik und Strukturanpassung in der EG-Stahlindustrie*, Hamburg: HWWA-Institut für Wirtschaftsforschung.
- Levy, Marc A./Keohane, Robert O./Haas, Peter M., 1993, Improving the Effectiveness of International Environmental Institutions, in: Peter M. Haas, Robert O. Keohane & Marc A. Levy (eds.), *Institutions for the Earth. Sources of Effective International Environmental Protection*, Cambridge: MIT Press: 397-426.
- Levy, Marc A./Young, Oran R./Zürn, Michael, 1996, The Study of International Regimes, in: Oran R. Young (ed.), *The International Political Economy and International Institutions*, Vol. II, Cheltenham: Edward Elgar: 503-557.
- Luhmann, Niklas, 1981, *Politische Theorie im Wohlfahrtsstaat*, München: Olzog.
- Luhmann, Niklas, 1984, *Soziale Systeme. Grundriß einer allgemeinen Theorie*, Frankfurt: Suhrkamp.
- Luhmann, Niklas, 1987, *Soziologische Aufklärung 4. Beiträge zur funktionalen Differenzierung der Gesellschaft*, Opladen: Westdeutscher Verlag.
- Morris, James, 1954, The Concept of Steel Capacity, in: *Journal of Industrial Economics* 3 (1): 47-49.
- Moravcsik, Andrew, 1994, *Why the European Community Strengthens the State: Domestic Politics and International Institutions*, Center for European Studies Working Paper Series 52 (Cambridge: Center for European Studies).
- Oberender, Peter/Rüter, Georg, 1989, Stahlindustrie, in: Peter Oberender (ed.), *Marktökonomie. Marktstruktur und Wettbewerb in ausgewählten Branchen der Bundesrepublik Deutschland*, München: Vahlen: 29-77.
- Philip, André, 1948, France and the Economic Recovery of Europe, in: *Foreign Affairs* 26: 325-334.
- Reinecke, Wolfgang H., 1998, *Global Public Policy. Governing without Government?*, Washington D.C.

- Sanderson, Fred, 1958, The Five-Year Experience of the European Coal and Steel Community, in: *International Organization* 12: 193-200.
- Sandholtz, Wayne/Zysman, John, 1989, Recasting the European Bargain, in: *World Politics* 42 (1): 95-128.
- Scharpf, Fritz W./Brockmann, Marlene (eds.), 1983, Institutionelle Bedingungen der Arbeitsmarkt- und Beschäftigungspolitik, Frankfurt a.M.: Campus.
- Scharpf, Fritz W., 1987, Sozialdemokratische Krisenpolitik in Europa. Das „Modell Deutschland“ im Vergleich, Frankfurt a.M.: Campus.
- Scharpf, Fritz W., 1988, Verhandlungssysteme, Verteilungskonflikte und Pathologien der politischen Steuerung, in: Manfred Schmidt (ed.), *Staatstätigkeit, International und historisch vergleichende Analysen*. Politische Vierteljahresschrift. Special Issue. Opladen: Westdeutscher Verlag: 61-87.
- Scharpf, Fritz W., 1989, Politische Steuerung und Politische Institutionen, in: *Politische Vierteljahresschrift* 30 (1): 10-21.
- Scharpf, Fritz W., 1991, Die Handlungsfähigkeit des Staates am Ende des Zwanzigsten Jahrhunderts, in: *Politische Vierteljahresschrift* 32 (4): 621-634.
- Scharpf, Fritz W., 1997, *Games Real Actors Play. Actor-Centered Institutionalism in Policy Research*, Boulder, Co.: Westview.
- Scharpf, Fritz W./Schmidt, Vivian (eds.), 2000, Welfare and Work in the Open Economy. From Vulnerability to Competitiveness. Volume 1 and 2, Oxford: Oxford University Press.
- Scharpf, Fritz W./Mayntz, Renate, 2005, Politische Steuerung – Heute?, in: *Zeitschrift für Soziologie*, 34 (3): 236-243.
- Schroeter, Henning von, 1963, *Montan-Behörde und EWG-Kommission. Leitbild und Bewährung, Studien zum internationalen Wirtschaftsrecht und Atomenergierecht* 12, Göttingen.
- Spierenburg, Dirk/Poidevin, Raymond, 1994, *The History of the High Authority of the European Coal and Steel Community. Supranationalism in Operation*, London: Weidenfeld & Nicolson.
- Stegemann, Klaus, 1977, *Price Competition and Output Adjustment in the European Steel Market*, Kieler Studien 147, Tübingen.
- Stone Sweet, 1999, Judicialization and the Construction of Governance, in: *Comparative Political Studies* 32, 147-184.
- Stotz, Rüdiger, 1983, *Die EG-Stahlkrise im Licht der Wirtschaftsverfassung des EGKS-Vertrages (Wirtschaftsrecht und Wirtschaftspolitik 73)*, Baden-Baden.
- Teubner, Gunther/Willke, Helmut, 1984, Kontext und Autonomie: Gesellschaftliche Selbststeuerung durch reflexives Recht, in: *Zeitschrift für Rechtssoziologie* 1: 4-35.
- Tsoukalis, Loukas/Strauss, Robert, 1987, Community Policies on Steel 1974-1982: A Case of Collective Management, in: Yves Mény & Vincent Wright (ed.), *The Politics*

- of Steel: Western Europe and the Steel Industry in the Crisis Years (1974-1984)*, Berlin/New York.
- Verdun, Amy, 1999, The Role of the Delors Committee in the Creation of EMU: An Epistemic Community?, in: *Journal of European Public Policy* 6 (2): 308-328.
- Victor, David G./Raustiala, Kal/Skolnikoff, Eugene B., 1998, Introduction and Overview, in: David G. Victor, Kal Raustiala & Eugene B. Skolnikoff (eds.), *The Implementation and Effectiveness of International Environmental Commitments. Theory and Practice*, Cambridge, MA: MIT Press: 1-46.
- Victor, David G./Raustiala, Kal/Skolnikoff, Eugene B. (eds.), 1998, *The Implementation and Effectiveness of International Environmental Commitments. Theory and Practice*, Cambridge, MA: MIT Press.
- Wagenführ, Rolf, 1963, *Europäische Gemeinschaft für Kohle und Stahl 1952-1962. Ergebnisse, Grenzen, Perspektiven*, Luxemburg.
- Willke, Helmut, 1983, *Entzauberung des Staates. Überlegungen zu einer sozietaalen Steuerungstheorie*, Königstein/Ts.: Athenäum.
- Wolf, Dieter/Neyer, Jürgen, 2005, The Analysis of Compliance with International Rules: Definitions, Variables, and Methodology, in: Michael Zürn & Christian Joerges (eds.), *Law and Governance in Postnational Europe. Compliance Beyond the Nation-State*, Cambridge: Cambridge University Press: 40-64.
- Young, Oran R., 1999, *Governance in World Affairs*, Ithaca: Cornell University Press.
- Young, Oran R. (ed.), 1999a, *The Effectiveness of International Environmental Regimes. Causal Connections and Behavioral Mechanism*, Cambridge, Mass.; MIT Press.
- Young, Oran R./Levy, Marc A., 1999, The Effectiveness of International Environmental Regimes, in: Oran R. Young (ed.), *The Effectiveness of International Environmental Regimes. Causal Connections and Behavioral Mechanism*, Cambridge, Mass.; MIT Press: 1-47.
- Zimmermann, Horst, 1990, Gewichtsverlagerung im föderalen Staatsaufbau unter EG-Einfluß?, in: *Wirtschaftsdienst* 70 (9): 451-456.
- Zürn, Michael, 1997, "Positives Regieren" jenseits des Nationalstaates, in: *Zeitschrift für Internationale Beziehungen* 4(1): 41-68.
- Zürn; Michael, 1998, *Regieren jenseits des Nationalstaats. Globalisierung und Denationalisierung als Chance*, Frankfurt/M.: Suhrkamp.
- Zürn, Michael, 1999, The State in the Post-National Constellation – Societal Denationalization and Multi-Level Governance, *ARENA Working Papers*, WP 99/35.
- Zürn, Michael/Joerges, Christian (eds.), 2005, *Law and Governance in Postnational Europe. Compliance beyond the Nation-State*, Cambridge: Cambridge University Press.