Steel and the European Communities

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Summary
The focus of this paper is to describe the historical background of the industry, the strategies of governments and firms and the role of the Commission of the European Communities (EC). The pursued thesis is that the uncoordinated industrial strategies of the diverse European governments led to a maldistribution of benefits and costs across the region. As a result, not only did this maldistribution generate tremendous inter-governmental conflict, but also led to an economic outcome that is decisively sub-optimal at the regional level in terms of differences in comparative advantages among European nations and particularly in the context of world competition.

1. Introduction
European steel has been in crisis for almost a decade. The external factors contributing to the crisis are fairly transparent. Competition on world markets has grown significantly over the years, as Japanese exports have increased and developing nations have begun to create their own steel industries. A second factor has been the poor state of the European economies, resulting in a depressed demand for investment goods, including steel. Coupled with a long-term trend towards the use of nonferrous materials, increasing world competition and slower economic growth translated into a stagnant, if not declining, demand for European steel. None of these factors are policy variables to European governments or firms, but represent complex structural changes.

If the causes of the crisis are outside the control of the European steel industry itself, the process of adjustment is, on the other hand, directly influenced by the policies pursued by national governments and the strategies employed by enterprises. National policies can vary between nationalization, subsidization, and various types of regulation. Firm strategies differ in the choice of final products, technologies, or scale of production. In the context of the European Communities (EC), there is also the participation of a third actor, that is, the Commission which is embodied with certain regulatory powers.

The overall thesis developed in this paper is based on a historical description of the steel industry. The first part explains the institutional structure of the
European Coal and Steel Community as laid out in the Treaty of Paris in 1952. The second part describes the historical developments of the Community up to 1975. Based upon this background, the third section turns to an analysis of government and firm policies during the crisis. The conclusions address the troubling issue of the implications of the steel crisis for the Community at large.

2. Institutional Background

The European Coal and Steel Community was the first major achievement towards the elimination of trade and investment barriers in Western Europe. Within two years of the proposal of the ECSC by the French foreign minister Robert Schuman in 1950, it had been debated, contested, and accepted by the national governments. If the political motives behind the creation of the ECSC have proven successful in contributing to the pacification of Western Europe, the economic contribution is far more problematic. In addition to political motives, Schuman's plan was influenced by the fear of the cartelization of Ruhr industry and the recognition of the benefits flowing from the unification of Ruhr coal with Lorraine iron ore. The irony is, however, that the "natural harmony" of the region was established politically at a time when the economic value of the region's coal and iron ore was no longer viable relative to the international market.

Substantively, the Treaty of Paris which established the ECSC in 1952 can be broken down into four facets: prohibitions on member states' interventions, the anti-trust provisions, supranational powers, and pricing rules. The prohibition on the member states took the expected form of the elimination of all tariffs, of subsidies (except for regional development), of preferential taxation, and of certain kinds of non-tariff barriers (particularly on border crossings). The provision that proved particularly troublesome was that relating to subsidization. The issue has never been resolved satisfactorily in the case of coal, and it has become increasingly sensitive in the present European steel crisis.

The later Treaty of Rome (which established the then European Economic Community, EC) contained a number of anti-trust provisions that were generally stricter than the various national codes, with the exception of that of Germany’s. Article 85 made illegal any restraint of trade which may affect trade between member states, except when justified by welfare considerations. Article 86 outlawed the abuse of a dominant position. Of importance is that the treaty of the ECSC stipulates that notification of and authorization by the High Authority – absorbed eventually in the Commission of the EC – is, by Article 66, a legal prerequisite for any merger or contract which affects control. The High Authority has, therefore, greater power to influence and constrain mergers than that granted to the EC Commission in respect to other industries.

Partly related to the above are the supranational powers granted to the High Authority to fine and subpoena (including violations of Article 66), to tax production, to borrow on international markets, and to grant loans for the purposes of investment or employment relocation. The power to tax has been especially important, as it allowed the ECSC in its early years to build up a sizeable treasury for future loans. A particularly important power, granted by Article 58, is the right to declare a "manifest crisis" by which mandatory reductions in production schedules may be set (Jolivet 1979).

The provisions establishing a set of pricing rules proved to be of special importance in influencing the behavior and conduct of the industry in that it reinforced the tendency of an oligopoly inclined, as will be seen, towards collusive behaviour. The history of pricing and production behavior reflects a remarkable stability within national markets (Stegemann 1977, chs. 1 and 2). The pricing mechanism of the ECSC operates on a multiple basing-point system, that is, producers are obligated to publish a list of their mill prices and then charge a buyer a price no lower than listed, plus some standardized amount representing transportation costs as a function of distance. By the word "multiple", it is meant that there exist several possible reference points, one of which each producer is expected to choose for each product. Whereas, for example, a producer of steel plates in the Ruhr might choose Oberhausen as the basing-point for this product, a Lorraine producer might choose a point such as Thionville. The territory between Oberhausen and Thionville would, then, be the natural area of competition for the Lorraine and Ruhr producers. Though, in general, a producer is expected to choose a basing-point within close proximity, this was not always the case; some producers adhered to basing-points hundred of kilometers away. Whereas most of the discussions in favor of the founding of the ECSC took note of the natural harmony of the Saar, Ruhr, and Alsace-Lorraine area, there has, at least up to 1977, been a complete absence of joint basing-points across national borders (Stegemann 1977, p. 39).

Despite justified claims by the High Authority of the early success of the ECSC, industrial behavior was conditioned along national lines due to an explicit set of pricing rules embodied in the Treaty of Paris (Haute Autorité 1963; Diebold 1959; Haas 1959). These rules can be broken down into four primary components:

1. Prices must be published and open.
2. Firms cannot exceed their list prices, including freight, from their basing points.
3. Firms can not undercut their list prices in their own basing-point regions, with certain exceptions.
4. These exceptions fall under what is called the "alignment clause" (Article 60), which permits the matching of prices against third party imports or
against products of competing basing-point regions. In such cases, the producer is allowed to match the competing price (what is commonly called "freight absorption") but may not price under it.

These rules, as described in the next section, were reinforced by minimal transnationality in ownership and intrasectoral specialization.

3. Historical Background to 1975

The history of the ECSC displays three major institutional trends, namely, increasing government ownership and intervention, increasing concentration rates, and transparent collusion between firms. It is not the purpose of this chapter to investigate whether these trends represent attempts to increase efficiency and scale of the operations or to effect market power. Rather, we restrict ourselves to a description of how these trends varied in the different national settings.

As collusion has proven to be of central importance, it is worthwhile, nevertheless, to consider some of the theoretical aspects. Because the production of steel incurs tremendous upfront capital investment, there are significant cooperative incentives to coordinate investment programs and stabilize prices by quantity allocations across firms. If formalized, cooperation may be institutionalized in a formal cartel. Under standard economic assumptions, the optimal cartel rule is to set equal the marginal costs and marginal revenues of all firms in order to achieve maximum profits for the entire group. While the fulfillment of such a rule diminishes profits of inefficient firms and raises profits of others, these distributional effects can be solved, in theory, by compensatory transfers. The dilemma facing the cartel is, then, to devise procedures for determining the optimal allocation of production under conditions of uncertainty, as well as for restraining and detecting cheating (Stigler 1963; Osborne 1976). As the requisite knowledge of marginal costs of each plant and the enforcement of disciplinary powers are likely to be flawed, most cartels are imperfect in their strategy and organization.

As commonly witnessed in the steel industry, attempts to make compliance more transparent include the advertising of price lists (which is required by the Treaty of Paris), the announcement of new investments, and joint sales agents. The ability of a cartel to monitor and enforce can be enhanced through crosscountry participation or through mergers. In fact, the perfect cartel is the multi-plant monopolist which can enforce the cartel rule without the costs of monitoring and enforcement. Cartelization agreements can vary, therefore, from informal channels of collusion to the extreme solution offered by mergers.

Another form of cartelization is government intervention. Governments can, in a sense, perfect the cartel by serving as an enforcer of cooperative rules. It is unlikely, however, that the cooperative rules for the cartel are the same when government is an active player, for governments and firms pursue invariably different objectives. As a normative statement, both governments and firms will seek investment redundancies, the difference lying between the two actors in that firms may seek market power at the expense of consumers in the form of pricing and production agreements, whereas governments may be sensitive to particular political constituencies, such as labor. Despite the perjorative connotation of collusion and cartels, one can posit that all things held equal investment coordination in capital intensive industries may avoid redundancies and operations built at less than optimal scale. In short, collusion can under reasonable assumptions be welfare improving (Dewey 1979; Smith 1983).

In the various national industries, diverse institutional frameworks evolved to solve the cartel problem of investment coordination and redundant capacity. One of the more interesting mechanisms which facilitated coordination are the formal ownership links between the firms. The multiple interests of Société Générale de Belgique, for example, consisted of sizeable holdings of the Luxembourg-based corporation ARBED and of Cockerill-Ougree (13% and 19%, respectively). The Groupe Schneider also was an active participant in many of the Belgian and Luxembourg concerns, as well as in Creusot-Loire in France. Similar sets of relations can be charted for France and, less strikingly, for Germany. In part, these ownership patterns result from the massive size of certain financial groups in Europe and the magnitude of the steel industry, in addition to the pooling of capital for investments in specialized products or in finishing plants.

Furthermore, the interests of the industry and government were often one and the same, as the state held substantial control in most European countries. State ownership resulted not from the aftermath of World War II, but evolved steadily over the thirty year history of the community. British Steel Corporation is the product of government nationalization of a score of smaller firms in 1967 and represents over 90% of British steel. The Italian industry is dominated by state-owned Fin sider, though its share of Italian production has fallen under 50% as small private northern firms have grown. Hoogovens, of which the Dutch government and the city of Amsterdam owns 37%, produces over 90% of Dutch steel. The Belgian government was also historically an equity participant, holding in the late 1970s 29% of Cockerill, 10% of Car lam, and 22% of Sidmar. The French government exercised substantial financial control through its state-owned banks and through the administration of its economic plans (Padoleau 1981; MacArthur and Scott 1969). Even the German government,
which has been influenced by the free market policy stemming from the Erhard era, owns outright Salzgitter, one of the top five German producers.

In addition to state participation, a second major trend has been the increasing industry concentration resulting from mergers. The immediate impact of the creation of the customs union was a visible increase in the number of mergers in order to achieve defensible scale economies in production. Mergers were particularly notable in Germany, where the steel industry had been fragmented as part of allied policy to break the market power of the historical firms, such as Krupp, Hoesch, and Thyssen. Much of the German mergers in the 1950s were a regrouping of these enterprises according to traditional affiliations.

Moreover, the development of the basic oxygen process and continuous casting mills had increased the minimum efficient scale of steel production. It has been estimated that the minimum efficient scale for a fully integrated steel plant is in the order of at least 6 million tons of annual steel production (Cockerill 1974, pp. 70–73). While few EC plants have achieved more than half of this scale, the trend in new investments has been toward considerably greater scale, thus eliminating the competitiveness of many smaller producers. It is this trend towards greater scale that explains the plant closures and rationalization, for example, following the acquisition of Bochum by Krupp, Dortmund Hoerde by Hoesch, and Niederrheinische by Thyssen.

Because of the creation of the common market as well as increasing pressure from efficient overseas competitors, the Commission recommended in the early 1970s that further consolidation be encouraged towards the goal of concentrating 90% of production to approximately a dozen firms, with no firm having more than 12% to 13% share (Journal Officiel 1970). By 1974, about 80% of all crude steel was produced by the ten largest firms, although plant size was still smaller than the estimated minimum efficient scale. The concentration ratios (i.e. the ratio of output of the ten largest firms to total industry output) were, however, all in the range of 90% for finished products, with the exception of wire rod and merchant bars (Stegemann 1977, pp. 256–257).

Despite these high concentration ratios, the Commission encouraged consolidation in the belief that the Community would only be viable if world competitive. Shifting from a relatively strong anti-trust policy in the late 1960s, the Commission was particularly anxious to encourage the development of new coastal plants and transnational cooperative ventures. As the costs of shipping plummeted and iron ore far superior to traditional sources in Europe became available, new steel coastal sites, e.g. Dunkerque and Marseilles in France, Bremen in Germany, Ghent in Belgium, the south of Rome in Italy, and the further development of Ijmuiden, began to displace the competitiveness of the Saar and Lorraine. These coastal developments were completed in the early 1970s, thus greatly expanding European capacity just prior to or concomitant with the fall in steel demand.

The Commission also sought the creation of transnational ventures to bind the Community in interlocking patterns of ownership (Journal Officiel 1971). The most notable ventures have been Salomer at Fos-sur-Mer in France, involving originally Usinor, Sacilor, and Thyssen; Sidmar in France, involving ARBED and Cockerill, among others; ARBED’s acquisition of Roechling-Burbach in Germany; and ESTEL, which was the most extensive venture, involving Hoesch and Hoogovens. Solmer illustrates most persuasively the desire of the Commission to foster transnational ventures at the expense of competition. Originally planned to produce 12–15 million tons a year, Solmer would have represented just under 10% of total EC crude steel production and a far greater proportion of flat products. It is difficult, to say the least, to reconcile the planned Solmer venture between the two largest French producers and the largest German producers to the anti-trust clauses of the ECSC and EC treaties.

In addition to government ownership and concentration, a third trend consisted of tacit and formal collusion in intra-European sales as well as in exports. Whereas most national markets were dominated by a state-owned firm, the Belgian, French, and German industries consisted of several private firms. The German industry maintained discipline through the creation of joint sales agents that stabilized prices through quantity adjustments of inventories (Stegemann 1977). Four Walzstahlinkontore or rolled-steel sales associations – were created in 1967 during a major slump in orders, but were prohibited by the Commission in 1971. They were succeeded by so-called “rationalization groups” that were theoretically prohibited from entering into production quotas. Interestingly, recent proposals by the German government to restructure the industry is strongly reminiscent of these earlier groups.

The French industry cooperated at multiple levels ranging from industry associations to participation in the national plans. Investment coordination was facilitated by the Groupement d’Industrie Siderurgique which borrowed against the collective creditworthiness of the industry. Furthermore, cooperation was organized through the industry trade association, as well as through the participation of industry leaders in joint government-business planning committees. The Plan Professionnel of 1967 is a classic example of this cooperation, whereby the state provided some 2.7 billion francs in financing over five years in return for new investment programs, including the consolidation of smaller units into four principal firms (Padieau 1981; MacArthur and Scott 1969; Stora 1978).

A major exception to industrial cooperation during this period were the Belgian producers. Having been the most efficient producers of steel in the 1930s, the
Belgian firms suffered from their small scale and outdated equipment. An important market for the Belgian producers were exports outside of the EC, but as world competition increased, their targetted markets shifted increasingly towards the continent. Thus, in order to cover fixed costs, the Belgian producers tended towards aggressive price cutting, particularly on the German market. Price cutting led to competitive responses on the part of German producers, until an uneasy stability again prevailed (Steigemann 1977, chs. 2 and 3).

Thus, by 1974, the European Communities displayed a combination of new and efficient plant installations and of older plants that were maintained for cyclical swings in demand. Production reached a historical peak of 155,000 tons. New coastal plants were on-stream, and Kloechner's new Bremen facility would soon open. Moreover, interpenetration of trade in steel was significant, partly due to differences in business cycles, partly due to the achievement of a regional basis for trade (Steigemann 1977, pp. 153-160). Although each national market was dominated either by a single national firm or industry cooperation, a number of transnational ventures promised the growth of a steel industry not only European in trade, but also in ownership. Few suspected that neither production nor employment in the steel industry would ever be so high again.

4. Historical Background since 1975

The collapse of the demand for steel in 1975 led, at first, to a number of interim agreements at the regional level designed to respond to a crisis that was not expected to last ten years. That the crisis has indeed endured ten years can be seen from table 1. What is striking from this table is the persistence of the downturn of steel production from its 1974 peak of 154.7 million tons. Accordingly, utilization rates averaged in the low 60 percentile for the period, having fallen from 87% in 1974 to its lowest point of 55.9% in 1982. Yet, despite these low rates, capacity was, in fact, added during this period, rising from 197.4 million tons in 1976 to 202.5 million tons in 1980.

The growth in capacity is the result primarily of the rapid expansion of Italian mini-mills in Brescia. This expansion is reflected not only in the growth of electric arc furnaces (which is the process technology of a mini-mill), but also in a remarkable increase of the Italian share of the European market from 14% in 1974 to 19% in 1983. Since mini-mills produce long products, particularly reinforcing rods for construction, they compete in products which are undifferentiated and price sensitive. Whereas the rest of the EC was trimming workforces and setting capacity idle, steel capacity of electric-arc furnaces in Italy grew from 14.4 million tons in 1974 to 20.1 million tons in 1980, an increase of 40%. By 1980, electric arc furnaces were producing 53% of Italian crude steel.

At the same time that the Bresciani were placing pressure on the lower end of the product line, the new coastal plants of Solmier, Sidmar, and Kloechner were coming on stream and competing in flat products. The dilemma was straightforward. As outsiders, the Bresciani posed a long term threat in long products by pricing under the umbrella set by the dominant German producers. As new plants came on stream and demand fell, excess capacity in flat products posed the threat of a collapse in industry discipline and incipient competitive price cutting.

The ensuing pressure on prices and national shares of production has led to the intervention of governments and the Commission. The Commission has been particularly activist, serving as a power broker between the various governments while seeking to preempt purely national solutions to the crisis by framing policies of intervention under its own auspices. These policies have been crystallized under two major programs, the first called the Simonet Plan, introduced in 1976, and succeeded by the Davignon Plan in 1977 which has evolved increasingly in its powers and provisions. The thrust of the two programs, which we will treat as one, is based on the simple premise that European steel can only effectively compete when inefficient plants are closed. In the short run, though, the Commission was faced with the safeguarding of European industry against third country imports and with the maintenance of discipline among European firms. Only by regulating import and regional competition, the Commission felt, presumably, could it preempt more massive interventions at the national levels.

But the short-run and long-run policies are, however, at loggerheads with each other, unless there exists a supranational agency endowed with powers to extract capacity concessions in return for pricing stability. In other words, what is required is an agency with the power to tradeoff its ability to perfect the cartel in terms of pricing and quotas in return for extracting concessions on investment and capacity. The original provisions of the Davignon Plan were deficient in these policies. The Commission relied primarily upon its coffers – derived from taxing production – to bargain with ailing firms in return for aid and its right to review all investment programs and potentially influence banks by its non-binding veto and to fine for violations of minimal prices. One reflection of this deficiency is the reliance of the Commission upon an industry cartel, called Eurofer, to negotiate the specifics of its broader policies. Created in 1976, it consists of 12 of the major integrated steel firms in the EC. As Eurofer publishes no record of its activities and grants no interviews, its significance is open to debate. But it has played an important role in negotiating the critical issue of burden sharing.

The initial program established by the Simonet Plan required community and third country steel firms to file a record of their deliveries with the Commission.
Based upon this record, the Commission in 1977 developed two sets of measures to regulate imports and internal competition. The first set consisted of production and price regulations. Initially, the Commission recommended a set of production targets for EC producers. Due to the difficulty of enforcing production targets, the Commission also established a list of "recommended" prices and later fixed minimum prices for certain long products. Not surprisingly, these minimum prices were particularly unpopular among the Bresciani, who were the principal target of the measures. Following the imposition of fines by the Commission on violators on the minimum prices, the Bresciani filed for suit against the Commission at the European Court of Justice. Subsequent to the failure of legal recourse, the Bresciani and smaller firms of the Community established their own association, called the European Independent Steel Association, to represent their interests in Brussels. Competition had shifted from the market place to the halls of policy making.

The second set of measures were designed to regulate import competition. Requiring initially that exporters to the Community acquire an import license, import regulations were expanded subsequently by an aggressive anti-dumping policy and by orderly marketing agreements established with principal exporters to the EC. Having established market shares, the Commission also stipulated that third country imports must also comply with the recommended and minimum prices, thus eliminating the possibility that community producers would align their prices to imports. (For alignment, see the pricing rules outlined in section one above.) Since the late 1970s, imports have fluctuated around 9% of market share as measured in tons.

Ironically, due to the success of the short-term measures, guidelines towards reductions in capacity were ineffective. Though the market rebounded slightly in 1978, excess capacity remained a substantial issue. Due to low utilization rates and excess capacity, a number of governments, particularly the Belgian and French, also increased their subsidies to their national industries. The Commission had hoped that its control over regional aid and its putative influence over bank lending to new investment projects would lead to the scrapping of capacity. National subsidies prevented this result. As a result, the more efficient firms of the community were unable to utilize full capacity.

One solution to this dilemma was to increase exports to third countries, especially to the United States. Two kinds of firms exported. One kind was efficient and turned to export markets as European demand fell. The second was subsidized and turned to export markets to cover some of their fixed costs. But what should not be overlooked is that exports from the first kind of firm were also promoted because subsidies to inefficient firms producing for the community market pushed all firms towards exporting. EC exports to the United States rose from 2694 million tons in 1976 to its peak of 6222 million tons in 1977, consisting of 1867 million tons from Germany, 1020 million tons from Belgium, and 1484 million tons from France. Belgium was, thus, exporting nearly 9% of its total crude steel production to the United States. Despite that the eventual inquiry by the United States found remarkable differences in subsidies and dumping between different national arenas, the EC and the United States reached an accord which did not respond directly to these interfirm differences (Lambert 1982). These accords established in 1978 a trigger price mechanism based on the yen costs of the most efficient Japanese producers. In 1982, as the yen appreciated and European exports to the United States of the previous year remained near the 1977 peak, the trigger price mechanism was replaced by a voluntary export restraint agreement. Thus, by 1982, export growth to the United States as a vehicle to dampen the sharing of burden within Europe was eliminated.

On the other hand, tremendous structural change had already taken place. One dramatic index of the extent of structural adjustment are changes in employment in representative countries given in the table below (Hogan 1983, p. 51):

The magnitudes of these figures express concisely the depth of the steel crisis. Between 1974 and 1981, the United Kingdom shed 56% of its steel labor force; Luxembourg, 41%; France, 33%; Belgium, 31%; Germany, 20%; and the Netherlands, 13%. On the other hand, Italian employment went up 2.1%. (Commission of the EC 1982).

Despite this structural change, the Community had not solved the basic issues of reducing excess capacity. To resolve this issue, the Commission established in 1980 a five year program designed to eliminate all state subsidies by the end of 1985. Declaring a manifest crisis, the Commission broadened its quotas on: 1) imports, 2) exports, 3) intra-European trade and 4) production. Quotas on

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<th>Table 1: EC Crude Steel Production (million tons)</th>
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<td>Belgium</td>
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<td>France</td>
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between 1974 and 1977 as the reference point (Kogan, 1983). However, this favors the status quo as of 1975, it penalizes heavily firms whose major expansion came on-stream after 1975 and whose production was constrained by the initial agreements. In addition to hurting the Bresciani, the rule also penalized very heavily the German firm Kloeckner whose modern coastal works at Bremen came on-stream in 1975 and was not allowed to be counted towards the quota. Representing one of the most efficient installations in Europe, the Bremen works consist of a production potential of 4 to 5 million crude steel, a continuous casting facility, and a rolling mill for wide strip. Distressed by being required to leave idle their Bremen plant, Kloeckner withdrew from Eurofer – which had been instrumental in allocating production quotas by product at the national level – and from the German industry association – which had allocated the quotas at the firm level. Kloeckner’s refusal to abide by the production quotas, which were stipulated by the Commission under the powers of a manifest crisis, led to a levying of some 58 million DM in fines by the start of 1984. In response, Kloeckner has announced its future compliance and has rejoined Eurofer. The Commission has also extended the duration and breadth of minimum prices, as well as required in late 1983 that producers post a bond of 15 ECU on every ton shipped to assure compliance (Official Journal 1983).

The stated target of the Commission is, however, not to regulate competition, but to reduce excess capacity in the steel industry. To accomplish this end, the Commission has negotiated, once again with the assistance of Eurofer, an agreement to reduce capacity at hot rolling mills from 165 to 137 million tons a year (Bulletin 1983). (Capacity was measured for hot wide-rolling mill for the period between 1977 to 1980, as these mills represent the binding constraint on the production of the targeted products.) The national breakdowns are given in table 2. Further reductions are still under negotiations.

The proposed reductions imply dramatic alterations in the structure of European steel and have been anticipated by, or resulted in further consolidation of production under the auspices of the national governments. Following the election of François Mitterrand in 1981, the French government ended a long process of creeping nationalization and took complete ownership over the major steel firms – Saclor, located primarily in the Lorraine and producing long products and Usinor, located primarily in the North and producing flat products. It established a coordinating committee for the two major steel firms plus the firm Normandie, creating, thereby, the largest steel producing group in the Community. In compliance with the proposed capacity reductions, the French government has announced the elimination of some 25,000 to 35,000 further jobs in steel, which will bring employment down from 157,000 in 1974 to around 50,000 in 1985.

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<td>West Germany</td>
<td>42,284</td>
<td>22,000</td>
<td>2,374</td>
<td>3,460</td>
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<td>Italy</td>
<td>26,740</td>
<td>3,000</td>
<td>550</td>
<td>410</td>
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<tr>
<td>Luxembourg</td>
<td>7,297</td>
<td>4,000</td>
<td>250</td>
<td>700</td>
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<tr>
<td>Netherlands</td>
<td>22,840</td>
<td>14,000</td>
<td>4,000</td>
<td>500</td>
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<tr>
<td>Total</td>
<td>167,660</td>
<td>101,000</td>
<td>18,370</td>
<td>8,300</td>
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Source: Bulletin of the European Communities (June 1983)

Similar measures have been announced by other governments. Given the size of their national industries, the further closures required by the Commission are particularly problematic for Belgium and Italy, the former facing the prospects of closing capacity in distressed Walloon, the latter being asked to close the Bagnoli plant south of Rome after having modernized it. Belgium is particularly troubled by the closures. Having merged Cockerill and Sambre-Hainaut in 1982, the government must now move past administrative changes to actual capacity reductions that tradeoff issues of equity and efficiency in the context of the Walloon and Flander dispute. The Italian government is caught between the choices of closing the state-owned and labor-intensive plants in the south or forcing several smaller and often efficient mini-mills to close in the north. On behalf of the Bresciani, EISA has filed suit against the latest price measures of the Commission and is not anxious to cooperate on capacity reductions.
The Dutch case is complicated by the dissolution of Estel into the constituent parts of the Dutch Hoogovens and the German Hoesch. Hoogovens is in the peculiar position of having lost a substantial part of its rolling mills and thereby, a portion of its share of production quotas. (Oddly, though, it slips under the export quotas by shipping semi-finished steel which is not covered by the Community agreement.) It also faces further capacity reductions, while negotiating for new mills and for new downstream partners. One likely candidate is Valli in the French-speaking part of Belgium, which could use Hoogovens high quality steel for producing wire. But one obstacle are linguistic differences – which had troubled the Estel merger –, and it is likely that Valli and ARBED will enter into a formal agreement, even though ARBED already has modern wire facilities.

The United Kingdom may be in the best position in the Community. Having targeted in the early 1970s a production of over 30 million tons, the United Kingdom responded dramatically after 1979 in cutting capacity and production. Whereas the United Kingdom cut some 40% of its steel employment between 1979 and 1982, Belgium shed only 2% of its workers. Though BSC is still subsidized, the United Kingdom has now the lowest per capita steel production of traditional producers in the Community.

The German producers, on the other hand, are confronted with the politics of having to allocate plant closings among five major steel producers. Partly to arrive at an equitable and efficient solution, the German government established a commission (the so-called “Moderatoren”) to investigate possible avenues of consolidation and rationalization (Bierich, Herrhausen and Vogelsang 1983). The commission recommended in 1982 that German production be consolidated in two major holdings. Hoesch, Kloeckener, and Salzgitter would merge into one group, whereas Thyssen and Krupp would join their steel facilities. Moreover, sales would be made through four associations, which, as noted before, resemble the earlier sales associations. If enacted, the reorganization would have created two groupings roughly equal in size and balanced in product mixes. The plan failed on a disagreement between Thyssen and Krupp regarding the valuation of the latter’s assets. Despite promising some 3.2 billion Deutsche Mark in aid between 1983 and 1985, the German government refused to make up the difference.

Given the highly politicized environment, corporate strategies have to be designed within these broader constraints, as well as directed to influence the nature of policy interventions. The primary trend has been further merger activity, either by choice or by government fiat. With the exception of the Italian and German markets, each national industry is dominated currently by a single firm or coordinated group. Moreover, the Italian Finsider is one of the largest steel firms in the world, and if the report of the “Moderatoren” had been accepted, German industry – which produces about one-third of EC steel – would have been organized around two groups.

Despite the growth in concentration, it is yet to be seen whether the increase in administrative size translates into more efficient productive units. Usinor and Sacilor, for example, produce generally in different regions and different products. Much of their current competition is directed towards shifting the burden of plant closures on the other (Le Monde 1983). Nor is the Cockerill-Sambre merger likely to generate the sought efficiencies without resolving conflict over the rules for allocating plant closures and compensation between the Walloon and Flander operations. The situation of Belgium is the microcosm of Europe.

Other firms are better positioned than those located in the Lorraine or in Belgium. Thyssen, for example, has pursued for a number of years both a policy of diversification and development of steel products of high value-added. Thyssen has traditionally benefited from being situated in a region where 50% of its buyers are within 100 kilometers. With the purchase of Rheinstahl in 1974, Thyssen acquired substantial capabilities in specialty steel, which proved to be a significant contributor to profits. Its diversification policy proved less successful, as its acquisition of the American Budd Company – a producer of auto parts and metropolitan trains – has drained substantial financial resources. Like Krupp and Kloeckener, Thyssen also integrated over the past ten years further downstream, including shipbuilding and machine tools. Given the general political climate of European steel, Thyssen has, therefore, announced a reduction of its steel production from 16 thousand tons to 11 thousand tons, concentrating its efforts in the area of flat products to meet the needs of German customers.

Unlike Thyssen, ARBED is banking primarily on long products. ARBED controls one of the most advanced integrated plants in Sidmar, located in Flanders, which produces flat products for export and for the German market. Its works in Luxembourg are, however, less favorably situated and are dedicated to long products, which are generally lower value-added products. It faces considerable competition from the Bresciani in these products. Its competitiveness will depend partly on its ability to streamline production, partly on the price of scrap which is the major input for mini-mills. (To encourage this trend, there is some discussion that firms are withholding scrap from the market.)

The success of these corporate strategies depends not only on conditions of future demand, but also on the success of the Davignon Plan itself. No firm can tolerate successive years of losses as experienced by the main integrated producers. Finsider, for example, reported losses of $1.300 million; Sacilor and Usinor, over $1.100; Thyssen’s steel operations, lost over $200 million; and
British Steel, near $300 million (London Financial Times 1984). As a result, government subsidies have been flowing rapidly. By the agreement established under the “Codes of Aids”, national subsidy programs must be submitted to the Commission and approved if in concordance with Community objectives on capacity reduction. By 1983, some 9032 ECU's of aid had been approved, with 16747 ECU's still being examined. France is responsible for some 40% of the subsidies; another 23% is earmarked for the British Steel Corporation. Given the magnitude of the aid, it is unlikely that subsidies will indeed be phased out entirely by the 1986 deadline (Europe 1983).

5. Conclusions

That the European steel industry has undergone tremendous structural change is not open to question due to the massive changes in employment and shrinkage of activity in traditional but dated regions. Nor has the costs of worker displacement and regional dislocation been achieved without remarkable accomplishments. In 1972, 18.5% of crude steel was produced in open hearths. By 1983, all open hearths were out of production. (Even in the strong year of 1979, only 5.4% of crude steel was produced by open hearths.) Another strong indication of the strengthening of the industry is the increase of continuously cast steel from 7.1% in 1972 to 53.2% in 1982. It is not unlikely, therefore, that subsidies may be minimal, certainly not by 1986, but by the close of decade.

On the other hand, the lowering of subsidies is a poor index of the success of the restructuring unless placed in the larger context of the degree of insularity of the European market. For the steel crisis is currently being resolved in terms of a regional problem when, in fact, the issue is structural change in world competition. Here, in fact, lies the irony. The solution sought to the steel crisis has been predicated upon the reallocation of intra-sectoral activity within the protected borders of the common market. The Community was not able to solve the crisis as an issue of inter-sectoral allocations at the regional level, not to mention at the global level.

The result of the present agreements is easy to forecast. Every European nation with a historical tradition in steel-making will maintain a national producer. This outcome not only denies the benefits of specialization of the Community. It also raises the troubling question whether European steel must forever remain behind a wall of import quotas in order to survive internationally. Proposals to reorient corporate strategies to specialty steels and other high-value added products avoid, undoubtedly, the corollary implied by this kind of capital and technology intensive production, namely, that these products do not require anywhere near the present labor force or crude steel capacity of the European producers. If crude steel production and labor are to be maintained, then, the implications are quite clear. Europe must maintain its share of production of low-value added products and basic steel facilities. In other words, it must operate behind tariff walls, especially given its inability to transfer resources to regions and firms where the competitive advantage is the greatest.

It can be reasonably argued that given the political sensitivity of the steel industry, the EC has displayed significant resilience in responding to the crisis and has achieved a fundamental objective, that is, the preservation of the Community itself. But there are two objections to this argument. The first is that the behaviour of the industry and Commission over the history of the steel and coal agreement displayed a sort of cognitive dissonance. On the one hand, the Treaties of Paris and, even more so, of Rome embraced market competition. On the other, industry agreements and government interventions have historically prevented the emergence of a European market. This conflict raises the perplexing, though mute, question: what would be the result today if competition had been more bold? Indeed, at present, the only competitive market in European steel is the trading of production quotas.

The second objection rests on the current status of the Community, a status best illustrated by the fate of transnational ventures upon which the Commission had once banked its hopes. Thyssen withdrew from the Solmar venture in 1975, citing, among other factors, difficulties with government intervention. Sidmar is no longer a joint venture between European firms, but between ARBED and the Belgian government. Estel dissolved officially in 1982. Hoesch is seeking a German partner, while Hoogovens is troubled by its loss of a foothold in the German market.

The frustration of the German producers, who possess among the most efficient integrated steelworks in Europe, over their loss of export markets and inability to seize, if not defend market share against more heavily subsidized European firms has led to certain proposals for a concerted German effort. As one executive of a leading German firm explained: "The present crisis can be resolved in three ways for German producers. Close the borders, close the plants, and open the coffers." Though an extreme position, there exists a sentiment that access to the German market may no longer be as easy as in the past. No better example of this is available than ARBED's desire to retain 25% of its ownership in Saarstahl, which is highly unprofitable and represents redundant capacity to ARBED, in order to maintain a German presence.

The exact conditions of negotiation and trade in the steel industry are not presently known. The role of associations such as Eurofer is not specified in law and is not open to public scrutiny. Without knowledge of these negotiations, it
is difficult to answer the fundamental question over the extent to which agreements over the intra-European allocation of steelmaking activity will generate a Europe that survives only behind protective walls in other sectors. But the crisis in the steel industry presents, nevertheless, an intriguing, if not troubling hypothesis on European cooperation. For perhaps the misfortune of the steel industry is that the national character of steel production prevented the entry of firms by third countries. The resulting irony is not lost on the designers of the Davignon Plan. In advancing towards the rationalization of the industry on a regional basis, the achievement of a more fundamental goal has been bypassed: the creation of a European steel industry competitive on world markets.

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