# Merger Remedies in the European Union: An Overview<sup>\*</sup>

<u>Massimo Motta,</u> European University Institute (Florence), Universitat Pompeu Fabra (Barcelona), and CEPR (London)

> Michele Polo, Univ. of Sassari and IGIER (Milano)

> > And

<u>Helder Vasconcelos,</u> European University Institute (Florence).

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#### 1. Merger Remedies in the EU

Under the Merger Regulation 4064/89, the European Commission (henceforth, EC) assesses proposed concentrations (the legal term which comprehends mergers and acquisitions, as well as full-function joint ventures) on the basis of whether or not they "would create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market or a substantial part of it".<sup>1</sup> In case it raises competition concerns, the EC might block the merger proposal. If however the parties modify the merger operation in a suitable way, i.e. they offer "commitments" (or "remedies"), the EC might clear the merger. A considerable and increasing proportion of the mergers reviewed by the EC is actually approved after remedies have been offered, as the table below shows.

Years	1997	1998	1999	2000
Cases submitted	188	235	292	345
Remedies (phase I)	0	12	19	28
Remedies (phase II)	8	5	8	12

#### Table 1: Merger cases

Source: European Commission, Competition Policy Annual Reports

On 21st December 2000, the EC adopted a Notice on merger remedies (EC Notice from now on).<sup>2</sup> This Notice sets both the substantial and the procedural requirements that merging parties must fulfil when proposing remedies to address competition concerns raised by the EC and, therefore, to win regulatory clearance in the European Economic Area.<sup>3</sup> It also summarises the main lines of intervention that were offered in the recent experience,<sup>4</sup> offering a coherent picture for the future implementation of the policy. As such, the Notice can be seen as the EC Guidelines on merger remedies.

<sup>&</sup>lt;sup>1</sup> The fact that the EC uses a dominance test rather than the "substantial lessening of competition" test as in the US is obviously of paramount importance when discussing merger remedies in specific cases. The same is true for the consideration of efficiency gains, that are usually disregarded in the EC merger policy. However, we do not discuss them here. Note that the recent Green Paper on the Review of the Merger Regulation adopted by the EC on 11 December 2001 opens a discussion on both issues.

<sup>&</sup>lt;sup>2</sup> EC "Notice on remedies acceptable under Council Regulation No 4064/89 and under Commission Regulation No 447/98". Official Journal 2.3.2001, C 68/3.

 $<sup>^{3}</sup>$  The Notice stresses that it is the responsibility of the notifying parties to propose ways to eliminate the competition concerns raised by the EC.

<sup>&</sup>lt;sup>4</sup> For more detailed discussions on single cases, see the Competition Policy Newsletters published by the EC Competition DG and available at their web site.

<sup>&</sup>lt;sup>5</sup> It will be interesting to observe how the newly created Merger Task Force Unit on the enforcement of remedies will develop.

It also gives an overview of the main types of remedies that have been accepted in merger cases up to date (such as divestitures, termination of exclusive agreements and licensing agreements to provide access to infrastructure and key technology). In addition, it confirms a clear preference of the EC for *structural* remedies rather than *behavioural* remedies which would absorb scarce resources since they require intensive monitoring by the EC.

In this article, we briefly review the EC policy on merger remedies. In doing so, we stress the possible problems and risks associated with the different types of remedies. Although overall we believe the EC has taken a very sensible approach (its recent policy on merger remedies clearly makes treasure of the FTC experience), we are still not too optimistic that remedies will be able to restore competition in the majority of the cases. Although we acknowledge that the EC has taken a number of steps to guarantee that remedies will be successful in restoring competition, we argue that the EC should make even more attention to the possibility that the divestiture favours collusion, and we suggest that a more widespread use of the practice of finding an 'upfront buyer' might also help in this respect.

We shall also emphasise that remedies – including structural ones – modify the task of the EC Merger Task Force (MTF), making it closer to a regulator than a Competition Authority (CA). This change is inherently linked to the nature of remedies, that by their very nature aim at changing the structure of the industry, and it occurs despite the MTF is sensibly trying to avoid becoming a regulator.<sup>5</sup> We shall also argue that these different tasks objectively raise challenges for the EC, and that economic theory can so far offer little help to it (or other CAs): more work is needed in this field.

#### 2. TYPES OF REMEDIES AND THEIR POTENTIAL PROBLEMS

Merger remedies as they have been used in competition policy in the European Union and the US seem to follow a relatively similar pattern. There are no guidelines for the US experience, but the paper by Parker and Balto (2000)<sup>6</sup> nicely reviews the evolution in the US policy and the recent changes after the 1999 Divestiture Report. One can group merger remedies in two categories.<sup>7</sup>

- i. *Structural remedies* modify the allocation of property rights and create new firms: they include divestiture of an entire ongoing business, or partial divestiture (possibly a mix and match of assets and activities of the different firms involved in the merger project).
- ii. *Non-structural remedies* set constraints on the merged firms' property rights: they might consist of engagements by the merging parties not to abuse of certain assets available to them. They might also consist of contractual arrangements such as compulsory licensing or access to intellectual property.

Of course, not all different remedies are applicable to the same merger, that is, they are not necessarily substitute to each other. Also, it is in principle possible to resolve

<sup>&</sup>lt;sup>6</sup> Parker R., Balto D. (2000), "The Evolving Approach to Merger Remedies", *Antitrust Report*, also available at www.ftc.gov/speeches

<sup>&</sup>lt;sup>7</sup> The EC Notice talks of structural and behavioural remedies, but does not define them. Parker and Balto (2000) distinguish between behavioural measures and contractual arrangements.

<sup>&</sup>lt;sup>8</sup> The emphasis on certain words is in the original text.

competition concerns in a particular merger with a package of different remedies, that is, they might be complementary measures in certain cases.

When choosing a remedy over others, a CA has in mind the main objective, which is to make sure that the merger does not have anticompetitive effects. However, a remedy that in theory solves a certain problem might not be effective in practice. This is because there exist information asymmetries among the merger parties, third parties and the CA; because certain remedies might be difficult to implement; or because they involve parties that have different incentives than the CA. Furthermore, remedies differ in the engagement required to the CA. Behavioural remedies and contractual arrangements entail continuous monitoring by the authorities, whereas structural remedies do not. On the other hand, structural remedies might be more risky, as they are not reversible: if the wrong buyer is chosen for a certain asset divested by the merging parties, for instance because the acquiring firm is not viable or not competitive enough, or because it ends up colluding with the merged firm, the competitive damage is there, and cannot be undone.

In what follows, we briefly review the use made of these different remedies in the European merger policy and underline the possible problems associated with each type of remedy.

#### **2.1 DIVESTITURES**

As already mentioned the EC will try to obtain divestments of overlapping assets where possible. Indeed, the Notice (§13) says that "the most effective way to restore effective competition, apart from prohibition, is to create the conditions for the emergence of a new competitive entity or for the strengthening of existing competitors via divestiture".

As the quotation indicates, divested assets can either create a new firm or be acquired by an existing competitor. In the first case, the EC Notice (§14) stresses that "(t)he divested activities must consist of a **viable business** that, if operated by a suitable purchaser, can compete effectively with the merged entity on a lasting basis. Normally a viable business is an **existing** one that can operate on a **stand-alone basis**, which means independently of the merging parties as regards the supply of input materials or other forms of cooperation other than during a transitory period."<sup>8</sup>

This implies that the acquirer will have the possibility to purchase "all the elements of the business that are necessary for the business to act as a viable competitor in the market: tangible (such as R&D, production, distribution, sales and marketing activities) and intangible (such as intellectual property rights, goodwill) assets, personnel, supply and sales agreements (with appropriate guarantees about the transferability of these), customer lists, third party service agreements, technical assistance (scope, duration, cost, quality), and so forth." (EC Notice, §46)

The EC is aware that the viability of a firm is sometimes determined by the possession of complementary assets, and that economies of scope or (hardware-software) network effects make it profitable to produce a certain good or service only

if there is joint production of other goods or services.<sup>9</sup> Accordingly, "(i)n order to assure a viable business, it might be necessary to include in a divestiture those activities which are related to markets where the Commission did not raise competition concerns because this would be the only possible way to create an effective competitor in the affected markets." (EC Notice, §17)

An example of a case which illustrates both these points is the *Unilever/Bestfoods*<sup>10</sup> case. To remove the competition concerns raised by the EC, the parties undertook to divest a significant number of brands (such as Lesieur, Royoco and Oxo). First, to ensure the viability of the divested businesses, the divestiture package also included elements such as appropriate supply arrangements, manufacturing facilities, sales forces and intellectual property rights associated with the individual businesses. Second, in order to assure that the acquirer would be able to fully compete with the merging entity, the merging parties had to divest a full range of products, including products for which the EC had not raised competition concerns.

Another case which is related to this second remark is the *Total Fina/Elf Aquitaine* case.<sup>11</sup> There, the parties had first proposed to sell several assets to eliminate competition concerns in the LPG (liquefied petroleum gases) industry. However, due to the negative feedback obtained through the EC market test about the viability of the proposed remedy, the merging parties had to divest a full subsidiary, a remedy that went clearly beyond the elimination of the identified overlap.

It is conceivable that the acquirer of divested assets is a firm already active in the market. If this is the case, then it would not need all the assets, resources and contracts listed above, but the divestiture can be limited to particular production plants, or retail outlets, or brands, or more generally assets that would be integrated in the business of the acquirer. However, the EC does not look favourably at this "mix-and-match" approach: "a divestiture consisting of a combination of certain assets from both the purchaser and the target may create additional risks as to the viability and efficiency of the resulting business. It will, therefore, be assessed with great care." (EC Notice, §18) This is certainly a sensible approach, also in the light of the FTC divestiture study, that reveals that the likelihood of successful entry was much higher when an entire ongoing business was divested, whereas entry was significantly more problematic in case of divestiture of selected assets.<sup>12</sup>

A case which is related to this approach is the one involving the world's leading provider of Internet connectivity (MCI WorldCom) and one of its main competitors, Sprint (*MCI WorldCom / Sprint* case).<sup>13</sup> The EC concluded that this merger would have resulted in the creation of a dominant position in the market for top-level universal Internet connectivity. To try and remove the EC competition concerns, the parties proposed to divest Sprint's Internet business. However, the EC decided to

<sup>&</sup>lt;sup>9</sup> This principle is present in the US practice as well. The FTC often asks for divestiture of a greater set of assets than those that participate in the market overlapping, if ancillary assets are required to replicate economies of scale or economies of scope without which competition could not be restored. See Parker and Balto (2000).

<sup>&</sup>lt;sup>10</sup> Case No. Comp/M. 1990 – Unilever/Bestfoods; Article 6(2). Decision of 28/09/2000.

<sup>&</sup>lt;sup>11</sup> Case No. Comp/M. 1628 - Total Fina/Elf Aquitaine, Article 8. Decision of 9/02/2000.

<sup>&</sup>lt;sup>12</sup> (Parker and Balto (2000, 6/19).

<sup>&</sup>lt;sup>13</sup> Case No. Comp/M. 1741 - MCI WorldCom / Sprint, Article 8(3). Decision of 28/06/2000.

prohibit the merger since its investigation showed that Sprint's Internet business was completely intertwined with the rest of Sprint's telecom business. In other words, the divested business would have never constituted a strong and viable competitor of the merged entity.

Of course, the viability of the business might also depend on the identity of the purchaser. If the latter does not have any experience in the market, or does not have appropriate know-how or financial standing, there might be a problem. In normal circumstances, a Competition Authority is not a consulting firm and should not care whether a firm is viable or not. However, when it comes to merger remedies, the viability of the acquirer is crucial because the degree of competition of the market depends on the competitiveness of the acquirer. Therefore, "(i)n order to ensure the effectiveness of the commitment, the sale to a proposed purchaser is subject to prior approval by the Commission. The purchaser is normally required to be a viable existing or potential competitor, independent of, and unconnected to the parties, possessing the financial resources, proven expertise and having the incentive to maintain and develop the divested business as an active competitive force in competition with the parties." (EC Notice, §49).

For these reasons, the EC Notice states that in some cases the merger will not be authorised unless "the parties undertake not to complete the notified operation before having entered into a binding agreement with a purchaser for the divested business (known as 'upfront buyer'), approved by the Commission". (EC Notice, §20)

The first case in which the EC imposed this condition was the *Bosch/Rexroth* case.<sup>14</sup> The EC investigations revealed that the merged entity would have a dominant position on the market for hydraulic piston pumps. Rexroth produces only axial piston pumps and Bosch radial piston pumps. However, the EC's review showed that there was a high degree of substitutability between the two types of products. To address the EC concerns regarding the potential creation of a dominant position, Bosch proposed to sell its radial piston pumps business to a competitor. None the less, the investigation showed that to restore effective competition, it was not sufficient to sell. The EC had to make sure that the acquirer was a strong competitor. Otherwise, over time, Bosch would have been able to win back the market shares lost through the sale. This is so because Bosch benefits from strong costumer's relations in the industrial hydraulics field and this could be used to persuade its former consumers to switch from radial to axial piston pumps.

#### **POSSIBLE PROBLEMS WITH DIVESTITURES**

Structural remedies are, in general, the best corrective measures for potentially anticompetitive mergers, and the Commission is right in emphasising it, as well as in preferring divestment of entire businesses to a mix-and-match approach. Structural remedies, contrary to the behavioral or quasi-structural measures we shall analyse below, have also the additional advantage that they do not occupy further the scarce resources of a CA after they have been implemented. Once the buyer has been identified and the transaction relative to the divested assets finalised, the EC will not have to monitor further the deal (unless of course suspected infringements of articles

<sup>&</sup>lt;sup>14</sup> Case No. Comp/M. 2060 – Bosch/Rexroth; Article 8(2). Decision of 4/12/2000.

81 or 82 arise).

None the less, this measure is probably trickier than one would think at first sight. Parker and Balto (2000) and FTC (1999) unveal that structural remedies can go wrong in a number of respects, due to a combination of informational asymmetries and incentives of the parties not in line with the objective of restoring competition.

First of all, it is clear that the merging parties have all the incentive to make sure that the purchaser of the divested assets will not be a competitive firm. This might result in several problems. For instance, in the period the assets are for sale and it still manages them, the seller might have an incentive to decrease their value, by transferring valuable personnel, disposing of certain brands, patents and activities, or not maintaining properly the production plants or the shop premises.<sup>15</sup> The divesting firm has also little incentive to find a proper buyer (not so say to sell at all), and it would probably use very different criteria than the CA to select the buyer. The EC is aware of these problems, and to this end the EC Notice establishes the figures of the 'holdseparate trustee' and of the 'divestiture trustee', that replace the Commission in ensuring that the seller does not engage in activities that could reduce the value of the assets or hinder the sales.<sup>16</sup>

Second, as already mentioned above, the FTC ex-post study of merger remedies reveals that the mix-and-match approach is not very successful in fostering entry. One of the reasons why this occurs lies in the significant informational asymmetries between the seller and the buyer, and the problem also concerns sales of ongoing businesses.<sup>17</sup> The study reveals that when the latter is not already operative in the industry, it often does not know what are the crucial assets to be an effective competitor in the industry, and it might end up with a package of assets that falls short of what is needed to be successful. The problem is made more serious by the fact that the seller has all the incentive to design a package that does not include the right (from the point of view of the competitor) assets, and that a competition authority is

<sup>&</sup>lt;sup>15</sup> Parker and Balto mention a case where the seller purposedly acted so as to decrease significantly the value of the assets to be divested. Although it was later sued and fined, they argue that this strategy was more profitable than having a dangerous competitor in the industry.

<sup>&</sup>lt;sup>16</sup> The trustees, as well as their mandate, has to be approved by the Commission. See EC Notice, §50-

<sup>58,</sup> for details. <sup>17</sup> The difficult task of assuring viability of the new firm is usually run by assigning to the merging firms have firms the burden of action: if competitive concerns are raised by the enforcer, the merging firms have to present a remedy plan that will be analysed, discussed, corrected and possibly approved by the authority. Although this sequencing might be efficient, it is evident that the asymmetry in information between the proposing firms and the Authority is not solved by leaving the firms the first strike.

not an industry regulator and has thus limited expertise in any given sector.<sup>18</sup>

Third, the study underlines that whenever some relationships were needed between the seller and the buyer of the divested assets (for instance, if the buyer needs supply of certain inputs or technical assistance) the remedy did not manage to restore competition. In the FTC study, in thirteen out of the nineteen cases reviewed where there existed such a relationship, either the buyer did not manage to operate effectively, or there was collusion between the two firms. (Parker and Balto (2000, 6/19)). The same difficulties arise when technology transfers are an integral part of the divestiture: the combination of the informational disadvantage of the buyer, who does not know the technology, and the seller's lack of incentives to provide the buyer with assistance and know-how, imply that technology transfers often do not achieve the desired results.

Fourth, it is obvious that the merging parties have all the incentives to select a buyer that does not jeopardise its market position, but – perhaps less obvious – it is far from clear that an 'aggressive' buyer will be the one who will secure the divested assets. Suppose that there are two potential buyers, identical in other respects but who differ in their market attitude. If it secures the assets, one expects that it will use a soft pricing policy, share the markets, or (tacitly or overtly) collude with the seller. The other instead is a firm that is planning an aggressive price strategy. It is likely that the expected profit of the former is higher than the latter, and it will accordingly be willing to pay more to obtain the assets. An auction will therefore not guarantee the best possible outcome from welfare's point of view. Again, the identity of the buyer is therefore crucial, not only for the viability of the business, but also to make sure that the purchaser will be an effective competitor. In order to evaluate these aspects, it seems to us that resorting to an upfront buyer should be systematic: the CA should lead a full assessment on whether the buyer is more or less likely to engage in effective competition, whereas a trustee is not in the position to decide on such aspects.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> The EC tries to gather as much information as possible from competitors, buyers and consumers that are regularly consulted about the likely effectiveness of the remedy (the so-called 'market testing' of the remedies). This might somehow alleviate its informational disadvantages, but we doubt that all the above sources have the incentives to truthfully disclose their information to the EC. As for buyers-consumers, they are often not organised and it might accordingly be difficult to perceive the impact on them of a certain operation.

<sup>&</sup>lt;sup>19</sup> True enough, the Commission has to approve the final sale of the assets, but it is probably very difficult for it to veto a buyer who fulfills the basic requirements set out in the commitment. If the identity of the buyer was known upfront, instead, it would be easier for the Commission to assess the likelihood it would be a serious competitor in the industry.

<sup>&</sup>lt;sup>20</sup> See Compte, O., Jenny, F. and Rey, P. (2000), "Capacity Constraints, Mergers and Collusion", *European Economic Review* (forthcoming), Kuhn, K.-U. and Motta, M. (1999), "The Economics of Joint Dominance", *mimeo*, University of Michigan, and Vasconcelos, H. (2001), "Tacit Collusion, Cost Asymmetries and Mergers", *mimeo*, European University Institute. For empirical evidence, see Barla, P. (2000), "Firm Size Inequality and Market Power", *International Journal of Industrial Organization*, 18(5), 693-722.

<sup>&</sup>lt;sup>21</sup> Case No. Comp/M. 190 – Nestlè/Perrier; Article 8(2) (b). Decision of 22/07/1992.

Fifth, the use of structural remedies, especially when the divested assets are used to strengthen an existing competitor, might increase the risk of collusion in the industry due to two problems: *symmetry* and *multimarket contacts*, two features that facilitate collusion. To understand better this point, recall that to ensure the viability of the business to be formed, a CA would give preference to an existing competitor or to a potential entrant, the latter probably consisting of a firm active in a related product market or another geographic market.

Consider first the case where the buyer is a firm already active in the market. By purchasing the assets divested by the merging parties, the risk of single-firm dominance decreases, as a competitor is made more powerful. However, to the extent that capacities, market shares and other assets become more symmetrically distributed, the risk of a collusive outcome (the so-called *joint* or *collective dominance*) increases. Indeed, that symmetry helps collusion is not unknown to competition authorities and courts, and it has been stressed in a series of recent papers.<sup>20</sup>

One well-known case of a merger involving asset transfers amongst rivals is the *Nestlè/Perrier* case,<sup>21</sup> in the French mineral water industry. The EC authorised (subject to a set of commitments) the purchase of Perrier by Nestlè and the contemporaneous transfer of ownership of one of the major Perrier brands (Volvic) to the main rival of Nestlè, BSN. Surprisingly, the EC cleared the concentration as well as the Volvic parallel sell-off deal, even though it helped Nestlè and BSN to restore the symmetry in the industry which would have been lost had Volvic not been transferred to BSN. In a detailed analysis, Compte, Jenny and Rey (2000) argue convincingly that symmetry was indeed an important issue in this case and conclude that "the proposed takeover of Perrier by Nestlè with the resale of Volvic to BSN was the worst possible solution from the point of view of competition."<sup>22</sup>

Consider next the case where the buyer is a firm active in a neighbouring product market or in the same product market but in another geographic area. Again, such a firm will probably be a viable market participant if given the appropriate set of assets. Relative to a new entrant, it should have more expertise and suffers less from informational disadvantages. However, it is possible that entry into this particular market will make the buyer and the seller operate in the same markets. If this is so, there exists the danger that a collusive outcome will arise. Indeed, economic theory has showed that multi-market contacts facilitate collusion,<sup>23</sup> and there exists some empirical evidence that this has been the case in some markets.<sup>24</sup> This is perhaps a more serious problem, to the extent that the EC now shows to be aware that symmetry

<sup>&</sup>lt;sup>22</sup> Compte, Jenny and Rey (2000, p. 28).

<sup>&</sup>lt;sup>23</sup> See Bernheim, B. and Whinston, M. (1990), "Multimarket Contact and Collusive Behavior", *Rand Journal of Economics*, 21(1), 1-26.

<sup>&</sup>lt;sup>24</sup> See for instance Parker, P. and Roller, L.-H. (1997), "Collusive Conduct in Duopolies: Multimarket Contact and Cross-Ownership in the Mobile Telephone Industry", *Rand Journal of Economics*, 28(2), 304-22

<sup>&</sup>lt;sup>25</sup> Case No. Comp/M. 1853 – EDF/EnBW; Article 8(2). Decision of 07/02/2001.

helps collusion in its joint dominance decisions, whereas multi-market considerations appear rarely, if at all, in the EC decisions.

In our view, a case in which a collusive outcome might arise after the merger due to multimarket contacts is the recent *EDF/EnBW* case.<sup>25</sup> The case concerns the acquisition by Electricité de France (EDF) of a stake of 34 percent in EnBW, therefore taking joint control with OEW in Germany's fourth largest electricity firm. Before the merger, EDF enjoyed a dominant position for the supply of eligible customers (i.e., large customers) in France. EnBW, due to its location, is one of the most likely potential entrants in the French market for eligible customers. Its supply area is in the Southwest of Germany, therefore having a long common border with France. To solve competition concerns raised by the EC, EDF undertook to make available to competitors 6,000 MW of generation capacity located in France.<sup>26</sup> Access to this capacity will be granted via auctions prepared and operated by EDF under the supervision of a trustee and will enable foreign suppliers to have access to a large share of the French market. Notice, however, that if this capacity was bought by a strong German competitor there would be the risk of multimarket contacts that might favour collusive outcomes.

Therefore, the solutions that seem more easily implementable to solve the problem of the viability of the firm created or augmented by the divested assets are often likely to be conducive to more collusion in the sector. Further, note that the new entity receives assets, including human capital, that previously were in one of the merging firms. The informal linkages with the old firm are therefore very strong, something that might allow to implement subtle schemes of tacit collusion quite easily.

Moreover, finding the buyer among the existing competitors can give the direction of this 'new' entity to one of those "good old boys" that have been in the market for a long time. Although this is not equivalent to reinforcing the attitude to collude, the destabilizing role of mavericks is rarely found among the existing long run competitors.

All this points to a tension between two problems. On the one hand, CAs have to guarantee the reinforcement or the creation of a viable firm to avoid problems of unilateral effects (single firm dominance by the merging firm). On the other hand, they also have to avoid pro-collusive effects after the merger (joint dominance). We argue that the implementable rules to solve unilateral effects emphasise the problem of pro-collusive effects. The EC is probably aware of this danger, when it recommends (Notice, §24-25), among the ancillary clauses of a remedy, divestiture of shareholding in joint ventures and minority cross-ownership and the removal of interlocking directories.<sup>27</sup> But unfortunately cutting these structural linkages among competitors is only part of the story: divestiture might create a fertile environment for collusion, for the reasons we have just explained.

<sup>&</sup>lt;sup>26</sup> This capacity amounts to around 30% of the market for eligible customers in France.

<sup>&</sup>lt;sup>27</sup> As will be explained below, in the *Vivendi/Canal+/Seagram* case the commitments package included the elimination of the notifying party shareholding on the British pay-TV company BSkyB. This example confirms the fact that the EC has insisted on eliminating minority shareholdings or links amongst competitors which could prevent them from effectively competing in certain markets.

An example of a case in which the EC cleared a merger after the merging parties complied with the commitment of divesting their shareholdings in a Joint Venture was the *Kali&Salz MdK/Treuhand* case.<sup>28</sup> The EC argued that the proposed concentration would create a situation of joint dominance on the part of the merged entity and the French (state-owned) producer SCPA. The EC decision was based on three criteria: the degree of post-merger concentration; the structural factors regarding the nature of the market and characteristics of the product; and the existence of "structural links" between the two leading firms in the industry.<sup>29</sup> As a result, the EC required the merged entity to eliminate its structural links with SCPA to clear the proposed concentration. In response to appeals against the EC decision, the European Court of Justice (ECJ) found, however, that the EC had not proved, using a detailed and prospective economic analysis, that an oligopolistic dominant position would be created or strengthened by the links and, consequently, annulled the EC decision.<sup>30</sup>

To conclude, we think that the evaluation of merger remedies should follow the same twofold approach used in merger analysis, that is the evaluation of unilateral effects (or single firm dominance: does the merger reduces the degree of competition in a non-cooperative equilibrium of the market?) and of pro-collusive effects (or joint dominance: does the merger facilitates the condition for a (tacit or overt) collusive outcome to arise?). Remedies should be accepted, and the merger proposal cleared, only if both tests are satisfied.

It is also our opinion that the Commission should use its bargaining power to cease practices that might foster collusion. For instance, if information exchange agreements or other practices (basing point pricing, best price clauses, or other) that facilitate collusion without proved efficiency reasons are in use in the industry, the EC should require the merging firm to discontinue its participation in them.

Summing up, whereas structural remedies, if available, are the easiest solution to competitive concerns created by a proposed merger, there exist several reasons why such measures might have more difficulties in restoring competition than one would think at first sight. Despite the EC shows awareness with some of these difficulties and it appears to have taken safeguards to face them, these measures might not be enough. In particular, information disadvantages and lack of incentives on the seller's side to collaborate might result in widespread difficulties for new firms to successfully enter the industry.

Further, successful entry by the acquirer of the divested assets is not synonymous of restored competition: first, both the buyer and the seller of the assets have all the incentives not to fiercely compete to each other; second, the new configuration of the industry assets after divestiture might structurally favour a collusive outcome because of more symmetric distribution of the assets or the creation of multimarket contacts.

<sup>&</sup>lt;sup>28</sup> Case No. Comp/M. 308 – Kali&Salz MdK/Treuhand; Article 6(1) (b). Decision of 09/07/1998.

<sup>&</sup>lt;sup>29</sup> These links were the following: (1) the control of a Joint-Venture in Canada (Potacna), in which Kali&Salz and SCPA each had 50% of the shares; (2) cooperation in the export cartel Kali-Export GmbH, wich coordinated its members' sales of potash in non-member countries and in which Kali&Salz MdK and EMC/SCPA and the Spanish potash producer Coposa each had a 25% interest; and (3) long established links on the basis of which SCPA distributed almost all of Kali&Salz's supplies in France.

<sup>&</sup>lt;sup>30</sup> France and Others vs. Commission (Joined Cases C-68/94 and C-30/95): [1998] E.C.R. I-1375 [1998] 4 C.M.L.R. 829-953.

Therefore, the EC should take extra care not only that the assets go into the hand of a viable firm – as it is rightly emphasised in the Notice – but also that the conditions for a collusive outcome after divestiture are eliminated or alleviated – an aspect that the current EC practice and the Notice does not in our opinion stress enough.

We also argue that a proper assessment of the likelihood that divestiture restores competition can be done only if the identity of the buyer is known to the authority. To this purpose, the requirement of an upfront buyer should be systematic rather than occasional.<sup>31</sup> Otherwise, we are pessimistic that the remedies would be an effective measure to restore competition.

#### 2.2 NON-STRUCTURAL REMEDIES

In some situations, divestiture is not feasible, for instance because a buyer for the divested assets cannot be found (this was the case for instance in *Boeing/McDonnell Douglas*), cannot solve the problem (the Notice mentions the existence of exclusive agreements, network effects and the combination of key patents), or would entail inefficiencies (for instance when in a high-technology market where R&D is carried out on a number of projects that are related but would involve separate markets: in this case a divestiture might disrupt R&D efforts and licensing might be preferred).<sup>32</sup> It is also possible that divestiture must be complemented by additional measures to ensure competition will be restored. In these circumstances, behavioural or quasi-structural remedies might be used.

Behavioural remedies consist mainly of commitments aimed at guaranteeing that competitors enjoy level playing field in the purchase or use of some key assets, inputs or technologies that are owned by the merging parties. Therefore, this situation mainly arises when the merged entity is vertically integrated. When this is the case, by linking up positions in the upstream and downstream markets, firms may be able to foreclose the access to existing or potential competitors at both levels of the vertical chain.<sup>33</sup>

Typical remedies might then be purely behavioural, as when the parties 'commit' to give access to rivals and/or accept non-discrimination provisions, that is they agree not to make offers to competitors that are less attractive in quality and price than those made to the own subsidiary. In some recent cases, commitments of this type were offered by parties to clear the proposed concentration.

A first example is the *Vodafone Airtouch/Mannesmann* merger.<sup>34</sup> This merger gave rise to the creation of the first single Europe-wide mobile network. The Commission thought that since after the merger, the new entity would have sole control of mobile

<sup>&</sup>lt;sup>31</sup> According to Parker and Balto (2000, 7/19), upfront buyers are currently used by the FTC in the US in over 60 per cent of the cases where the remedy is non-behavioural, whereas we know only of two cases where the MTF used it in the EU.

<sup>&</sup>lt;sup>32</sup> See Parker and Balto (2000, 8/19) who mention the *Ciba-Sandoz* case to this purpose.

<sup>&</sup>lt;sup>33</sup> We should emphasise that foreclosure is not as likely to happen as one would think when reading some EC decisions. Once said so, it might be appropriate that a CA wants to avoid the risk that a relatively unlikely event such a foreclosure of assets might occur, to the detriment of welfare.

<sup>&</sup>lt;sup>34</sup> Case No. Comp/M. 1795 - Vodafone Airtouch/Mannesmann; Article 6(1)(b). Decision of 12/04/2000.

operators in eight Member States and joint control in three, it would be in a unique position to build an integrated network which would enable a quick implementation of seamless pan-European services. Other operators, on the other hand, would not be able, in the short to medium term, to replicate the merged entity network footprint through mergers and/or agreements. To grant other mobile operators the possibility to provide pan-European seamless services, the parties offered access to their integrated network, for a period of three years. The idea was that by granting access to its network on a non-discriminatory or favourable terms, the merged entity would not be able to make third party offerings of advanced seamless services across Europe unattractive or simply not competitive.<sup>35 36</sup>

A second recent example where purely behavioural commitments have been proposed is the *Vivendi/Canal+/Seagram* case.<sup>37</sup> In this case, competition concerns were raised regarding the European pay-TV market. Seagram has control over content through its subsidiary Universal, one of the six major Hollywood studios. Canal +, on the another hand, is the largest pay-TV operator and also the first acquirer of premium films for pay-TV signed with the US major studios and in particular with Universal.<sup>38</sup> The EC worried that upstream content providers could deny or limit the access to premium films to some downstream active users or potential entrants. In a first round of negotiations, the parties tried to address these concerns by proposing a mechanism to single out the winner of an output deal for broadcasting of Universal films which would not discriminate against rivals. The EC, however, showed scepticism towards such type of 'essentially behavioural' remedy and considered it unsatisfactory. The concentration was afterwards cleared subject to the parties' commitment not to grant Canal+ "first-window" rights covering more than 50% of Universal production and co-production. This commitment covers the territories where Canal+ is active, for a period of 5 years after the expiration of the current output deals (the EC considered 5 years the necessary period rivals need to adapt to the new market structure).<sup>39 40</sup>

<sup>&</sup>lt;sup>35</sup> The Commission also identified horizontal geographic overlaps regarding the national mobile networks (namely, in Belgium and in the U.K.). In order to remove these competition concerns, the parties undertook to de-merge Orange Plc and all its subsidiaries. <sup>36</sup> We have doubts, however, over the effectiveness of such remedies. The merged entity has committed

<sup>&</sup>lt;sup>36</sup> We have doubts, however, over the effectiveness of such remedies. The merged entity has committed to the provision of a roaming tariff and/or wholesale services on a non-discriminatory basis between operators of the merged entity's group and other mobile operators. However, it is entitled not to provide such services in cases of "unavailability of adequate network capacity" and/or "technical unfeasibility". In particular, the first exception (unavailability of adequate network capacity) might, be strategically used by the merged entity in periods of very high demand. In addition, this undertaking will certainly turn out to be extremely demanding in terms of ex-post monitoring by the EC.

<sup>&</sup>lt;sup>37</sup> Case No. Comp/M. 2050 - Vivendi/Canal+/Seagram; Article 6(2) Decision of 13/10/2000.

<sup>&</sup>lt;sup>38</sup> Premium films constitute a key quality input to increase the attractiveness of pay-TV and the level of subscriptions. They are acquired through the so-called output deals. These output deals include "first-window" agreements signed on an exclusive basis, where first-window is the first period of premium films available on pay-TV.

<sup>&</sup>lt;sup>39</sup> As already mentioned, the notifying party also undertook to divest its stake on the British pay-TV company BSkyB, which has links with Fox, another major US film studio.

<sup>&</sup>lt;sup>40</sup> The *AOL/Time Warner* case (Comp/M. 1845, Decision of 11/10/2000) is another interesting example of vertical integration. The merger would create the first Internet vertically integrated content provider distributing Time Warner's branded content (music, news, films,...) through AOL's Internet distribution network. Because of the structural links and some existing contracts with Bertelsmann, the merged entity would have had access to Bertelsmann content and would have controlled the leading source of music publishing rights in Europe. The parties offered a package of commitments whose ultimate goal was to break the links between AOL and Bertelsmann.

Non-structural remedies may also be of a contractual type, and therefore 'quasistructural'. For instance, the merging parties might be obliged to license a given technology to a rival. Or, in case the merging parties' key assets are not owned but were secured by exclusive long-run contracts, the remedy might involve giving up or shortening part or the totality of such contracts.<sup>41</sup> This specific type of commitment was used both in the Astra/Zeneca case<sup>42</sup> and in the Lufthansa/SAS case.<sup>43</sup>

In the Astra/Zeneca case, the EC investigations showed that, in the market for plain betablockers in Sweden and Norway, Zeneca is Astra's main competitor. In particular, Zeneca has been very actively promoting its plain betablockers (Tenormin) as a competitive alternative to Astra's largest selling betablocker in those countries. Therefore, a merger between the two companies would certainly rule out the competition between these two alternative products. This concern was addressed by the parties' undertaking to "grant a viable independent third party exclusive distribution rights for *Tenormin* in Sweden and Norway for a period of at least 10 years."

The Lufthansa/SAS case, on the other hand, regards a cooperation agreement to create a long-term alliance between the two airlines, establishing an operationally and commercially integrated air transport system. The agreement provides a setting up of a joint venture to act on behalf of the two airlines as their exclusive vehicle for offering integrated air transport services between Scandinavia and Germany.<sup>44</sup> The EC decided to authorize the cooperation agreement for a period of 10 years subject to certain conditions. One such condition was that the involved airlines should give up slots at saturated airports in case there were potential entrants. This commitment clearly intends to diminish the risk of foreclosure by the incumbents.<sup>45 46</sup>

Another category of behavioural remedies might consist of the so-called 'vertical firewalls'. When the merger creates a vertically integrated firm, say one where the upstream unit supplies not only the downstream unit but also the rivals, it is possible that competitively sensitive information about downstream rivals be passed from the upstream to the downstream unit of the merged entity, thereby distorting the competitive process.<sup>47</sup> It might then be required by the CA that no such information is

<sup>&</sup>lt;sup>41</sup> Similar provisions might be taken in horizontal cases: if following the merger most of the buyersdistributors were linked to the merged entity by exclusive contracts, a remedy might consist of asking to shorten the length of a proportion of such contracts, or simply to cancel them. We are, however, not aware on any remedy of this type sofar.

<sup>&</sup>lt;sup>42</sup> Case No. Comp/M. 1403 - Astra/Zeneca; Article 6(1)(b). Decision of 26/02/1999.

<sup>&</sup>lt;sup>43</sup> IV/35.545 LH/SAS. Decision of 16/01/1996. This decision was not taken under the Merger Regulation but under article 81. However, since the last revision of the Regulation full-function joint ventures are now reviewed as mergers. <sup>44</sup> This integrated transport system involves a joint network planning, a joint pricing policy and the

harmonization of product and service levels, without creating however a new common entity.

<sup>&</sup>lt;sup>45</sup> As far as we have understood the decision does not specify who chooses the slots to be attributed, and the details of how this measure was to be implemented and monitored.

<sup>&</sup>lt;sup>46</sup> The EC also imposed that the parties should conclude interlining agreements with new entrants and freeze the number of frequencies operated to facilitate entry. Since the routes between Scandinavia and Germany are mostly used by businessmen who are locked in through frequent-flyer programs, the EC imposed that Lufthansa and SAS should allow the entrants to participate in their frequent-flyer programmes, in case they do not have their own. It is not clear to us to which extent such a measure could be effective. <sup>47</sup> The sensitive information might be of different type, depending on the industry involved. It is natural

that in a long-standing relationship between a supplier and a buyer these parties exchange business

circulated within the different units of the firm (non-disclosure provisions).<sup>48</sup> We are not aware of any case where the EC has used this measure (and the Notice does not mention it), but this has been repeatedly used in the US and belongs to the set of remedies the EC might resort to.<sup>49</sup>

#### PROBLEMS WITH NON-STRUCTURAL REMEDIES

Most of these remedies by their nature require some type of ongoing regulation or monitoring, and they are therefore likely to engage the resources of a CA long after the merger has been cleared and carried out. Some of these measures are relatively easy to evade unless there is a careful monitoring and the regulator knows the industry very well, which is not likely to be the case for a CA.

When the CA identifies the risk of foreclosure, for instance, short of divestiture (that might be unfeasible, as the very reason behind the merger might precisely be to integrate vertically related or complementary activities) behavioural remedies are difficult to administer and not likely to be successful unless there is heavy monitoring. Foreclosure or discriminated access might take different forms, from obvious (say, bluntly refusing to supply an input) to more subtle ones (increasing prices, reducing quality, blaming insufficient capacity to justify missed shipments, delaying supplies, reduce accessory services and so on). Therefore, a remedy that calls for an obligation to supply is tantamount to an empty promise, but even a seemingly more sensible obligation to non-discrimination might not be easily enforceable. As just mentioned, discrimination might often occur at different levels and with different features, and it is probably rare the case where one can just look at transaction prices to determine whether discrimination has occurred or not.

Furthermore, even when prices were the only relevant variable, it cannot be excluded that transfer prices, allocation of common costs, or other compensatory measures might occur between vertically units of the same firm, so as to hide a different treatment between a subsidiary and a rival. Of course, industry regulators – whose main job is often to guarantee that access is granted to all competitors – are aware of these problems, but these are often difficult problems to cope with for a regulator, and they will a fortiori be for a CA whose expertise lies elsewhere and whose knowledge of the industry is not like that of a regulator.

Vertical firewalls might be a reasonable remedy to solve the competitive problems involved,<sup>50</sup> but there are some doubts on specific aspects of their implementation. In

information (of financial and commercial order, relative to the specification of some products or processes, or the units/volumes bought and sold, and so forth) that they wish rivals would not share.

<sup>&</sup>lt;sup>48</sup> Obviously, the same might happen when it is the downstream unit that distributes products not only of the upstream unit of the merged firm but also of rivals.

<sup>&</sup>lt;sup>49</sup> U.S. antitrust authorities approved several vertical mergers subject to the imposition of nondisclosure and/or nondiscrimination requirements upon the post-merger vetically integrated entity. For a very detailed analysis of U.S. merger cases in which these types of commitments have been used see Klass, M. W. and Salinger, M. A. (1995), "Do New Theories of Vertical Foreclosure Provide Sound Guidance for Consent Agreements in Vertical Merger Cases?", *The Antitrust Bulletin*, Vol. XL, No.3, 667-698., and Willcox, T. C. (1995), "Behavioral Remedies in a Post-Chicago World: It's Time to Revise the Vertical Merger Guidelines", *The Antitrust Bulletin*, Vol. XL, No.1, 227-256.

<sup>&</sup>lt;sup>50</sup> However, notice that firewalls might also have efficiency-destroying effects, as pointed out by Klass and Salinger (1995): "since sensitive information does not necessarily come in neatly labeled packages,

particular, it is not clear to us how one can guarantee that no such communication will take place between different units of the same firm (what about employees meeting in the cafeteria?), and – if it does – that it will not be misused.

Behavioural remedies may also be problematic when they aim at facilitating market entry by ensuring competitors will have access to a key technology. Often, the implementation of this kind of remedy requires a (transitory) period of collaboration between the merged entity, on the one hand, and a third party to which access is going to be provided, on the other. In such cases, this third party is usually an actual or potential competitor and, therefore, it is extremely difficult to ensure that the merged entity will have the right incentives to effectively collaborate during a pre-defined transitory period to make entry by this third party successful.

A good example of a case which illustrates this potential problem is the *Astra/Zeneca* case. In the market for local anaesthetics, Astra's *Bupivacaine* is the most widely used longer acting local anaesthetic and is already long off patent. In addition, although until 1998 Zeneca was not present in this market, in March 1998 it concluded an exclusive world-wide (except for Japan) agreement to license-in *Chirocaine*, a longer acting local anaesthetic. As shown by the EC investigations, due to the inexistence of other strong competitors in the market, the exclusive license for *Chirocaine* constituted the only potential source of competition in this market segment.<sup>51</sup> To address this concern, Astra committed to reverse all the agreements relating to *Chirocaine* (surrender of license, trademark, etc.). Astra also undertook to support a third party, during a transitional period, in the process of launching *Chirocaine*. Notice, however, that the merging partners have little incentive to make the buyer of *Chirocaine* successful. Hence, given that a collaboration between them is necessary during the launching period, problems could arise.<sup>52</sup>

At the very least, such behavioural remedies need continuous monitoring, either by the CA itself, or by an industry regulator. Given the very nature of CAs and their lack of resources, non-discriminatory access or firewalls should be implemented when the firms involved are subject to the scrutiny of a regulator. It follows that, to guarantee success of such measures, the industry regulator should be involved in the discussions leading to remedies as soon as possible by the CA.

firewalls could prevent the sort of productive information traditionally thought to be a benefit of vertical mergers" (p. 690). For a formalised paper that offers a critical view of firewalls, see also Milliou (2002), "Vertical Integration and R&D Spillovers: Is There a Need for Firewalls?", *mimeo*, European University Institute.

<sup>&</sup>lt;sup>51</sup> It would not be likely that the merger parties would be willing to support and invest in the launching of a new product which would compete harshly with other products in the merged entity portfolio of existing products.

<sup>&</sup>lt;sup>52</sup> Interestingly, this last point is related to the *Abbot/ALZA* case in the pharmaceutical markets discussed in Parker and Balto (2000, 14-14/19). There, parties proposed to sell several assets to another pharmaceutical company and, because of the risks involved in a necessary ongoing relationship between the merged entity and the potential third party, the FTC refused the commitment, leading to the parties' withdrawal of the merger proposal...

# 3. MERGER REMEDIES: A CHALLENGE FOR COMPETITION AUTHORITIES (AND FOR ECONOMIC THEORY)

We have seen that there are different types of remedies that a CA can resort to. We argue in this section that, in each type or remedies, CAs face new questions and problems that differ substantially from the approach followed and the tool kit needed in the traditional antitrust enforcement activity. Moreover, we claim that in many situations they cannot even rely on a strong and consolidated guidance from economic theory, that has hardly devoted effort to these issues.

## 3.1 COMPETITION AUTHORITIES OR REGULATORS?

It is difficult to distinguish in a clearcut way the differences between competition policy and regulation, and between competition authorities and industry regulators. There are several criteria that one can use to make such a distinction, but for each criterion there are probably exceptions and qualifications to be made that make the line of demarcation between the two blurred. We believe that merger remedies contribute to make such line even fuzzier.

 $\text{Rey}^{53}$  (2000) classifies competition policy and regulation along the following dimensions (among others). 1) Procedures and control rights: whereas CAs generally limit themselves to checking the lawfulness of firms' activities, industry regulators have more extensive powers, as they can constrain firms' conduct in several ways, for instance by capping or fixing their prices, checking their investment decisions, restricting their product choices. They can also modify the structure of the industry by establishing when new entry in the sector is allowed, and fixing the criteria that decide market entry. 2) Timing of oversight. Generally, CAs intervene ex-post whereas regulators act ex-ante. Also, CAs have usually more time available for investigations, whereas regulators have to come up with rapid decisions, as the firms' normal business (such as pricing, investments, launch of new products) might need the preventive authorisation of the regulators. Regulators' involvement with a particular case is long-run and continuous, whereas CAs' interventions tend to be occasional. 3) Information intensiveness. Regulators usually have an industry-specific expertise whereas CAs have not. In part, this is also determined by the fact that the regulators' relationship with an industry is continuous and of a long-term nature.

The distinction between competition policy and regulation along the lines described above only captures part of the story: antitrust intervention is described by the features above mainly when it acts as a law enforcement activity, that is in the areas of agreements and abuse of a dominant position. In these cases the law identifies certain conducts which are unlawful, and the authority verifies ex-post if such behaviour has occurred.

Merger control by itself is already a mixed area. In fact, points 1) and 2) above are certainly not satisfied in concentration cases: the authority intervenes ex-ante and with short deadlines, and it has implicitly the power to decide on the structure of the industry. What still is different with respect to the role of a regulator is that the

<sup>&</sup>lt;sup>53</sup> Patrick Rey (2000), "Towards a Theory of Competition Policy", presented at the World Meeting of the Econometric Society. See page 44 and ff.

antitrust authority deals with concentration projects in any industry of the economy, and it is therefore lacking the specific knowledge of the industries investigated that a sectoral regulator accumulates over time.

The regulatory component of antitrust intervention is even more pronounced when we look at merger remedies. To the extent that non-structural remedies are followed, the CAs must monitor the behaviour of the firms long after the merger has been authorised and carried out. It is still true that merger remedies do not change the specialisation of the CAs, but to the extent that behavioural remedies imply that a continuous relationship is engaged, a better knowledge of the industry monitored will probably be built over time.

When we consider structural remedies, other regulatory features come in. In a traditional merger case framework, in fact, the authority has the power to decide between two industry structures: the status quo and the market that would arise if the merger project is realized. With merger remedies, in a sense, we fill the gap between these two extremes, and many intermediate structures can be implemented as a result of the bargaining process between the firms and the authority. In other words, the authority is in the position to fine tune its intervention on industry structures much more than in traditional merger cases.

Moreover, we have stressed that the key point in the evaluation of structural remedies is to assess if the divested assets can create a viable competitor. Guaranteeing the viability of a firm is an objective specific to the merger remedy area, as in no other field of competition policy the enforcer promotes the creation of a new firm (perhaps with the US exception, rare indeed, of breaking up firms that have been found guilty of monopolisation). Moreover, the theoretical arguments and tools that are needed to assess the competitive viability of a remedy are in a large part different from those that are used by competition authorities in general, and in the evaluation of the original merger project in particular.

Mergers always require a prospective exercise on the equilibria that will arise after the structural modification of the market; for this reason, merger analysis is more theoretically based and less dependent on facts findings than other areas of intervention as agreements or abuse of a dominant position. And the theoretical tools that are needed to perform such analysis are those of oligopoly theory, as well as, to the extent that they can forecast possible impact upon prices, of econometrics. Whether the merged firm has the ability to make profits and survive in the market is never a relevant issue in the analysis of the original project.

Structural merger remedies, on the contrary, require to identify and evaluate which are the competences, assets, know how, personnel and other common resources that must be packaged in the new entity to create a competitive enterprise. Hence, the tool kit for merger remedies is pretty different from that needed for merger analysis.

More importantly, we think that there is no piece of economic theory that offers a robust and consolidated background to such analysis (which are the features needed to create a new competitor), as instead oligopoly theory does for the evaluation of the original merger project. In a general sense, creating new enterprises is exactly what the market is required to do, and under this respect the formidable task of designing

viable structural remedies is something very far from the 'light' approach of competition policy.

While structural remedy design is an exercise quite different from the traditional merger analysis, we can find some examples in which regulatory policy at large has been recently challenged with relatively similar problems. One case is that of market design in public utilities reforms, notably the electricity industry, and the other is the design of auction mechanisms in telecommunications, and specifically the UMTS licences auctions in the European countries.

Since the pioneering reform of the early Nineties in UK, the electricity industry has been a very interesting workshop for market design in most industrialized countries. One of the key issues addressed is the possibility to create a competitive market in the generation segment of the industry, by divesting assets and power plants of the incumbent monopolist. The theoretical excercise behind this discussion was that of creating an industry structure, defined both in terms of number of operators and their cost structures, competitively viable, similarly to the merger remedy problem.

However, this excercise has been performed, in the case of liberalization plans, in a much more abstract framework than in a merger case, since a very large set of relevant elements (including the rules of the bulk energy market, the identity of the competitors, etc.) were not usually defined at that stage. This explains why the analysis focussed on the desirable structural properties of the reformed industry, but did not address the subsequent step of assessing whether the divested assets were able to become viable competitive firms. As we claimed above, in a merger remedy analysis, instead, the market environment is much more defined and the viability of the new competitors becomes a more relevant issue.

Evaluating if a potential competitor is viable has been recently an issue also in the design of auction rules for UMTS mobile telephone licences in many European countries.<sup>54</sup> Once the auction rules have been set, deciding the number of licences to be issued has required an evaluation of the incumbent operators as well as of the new entrants, in order to forecast how many bidders will participate. Assessing whether new entrants with no previous experience were viable competitors turned out to be a very difficult task. But still, this issue was crucial in deciding the number of licences needed to ensure a competitive auction.

In the pre-auction phase candidates were examined and some conditions on financial stability (as bank warrantees) and industrial experience were set. Fixing a positive, although relatively small, entry cost allowed in principle to eliminate frivolous participants. But the entry fee could not prevent the participation of (and side payments to) weak firms colluding with the larger firms just to keep high the number of (formal participants and) licenses and to soften competition in bidding. The need to consider unilateral effects (the number of paticipants) as well as pro-collusive

<sup>&</sup>lt;sup>54</sup> See Klemperer P. (2000), "What Really Matters in Auction Design", *mimeo*, for a discussion of the main issues involved and the comparison of the different auctions used in European countries. See also Klemperer, P. (2002), "How (not) to Run Auctions: The European 3G Telecom Auctions.", *European Economic Review* (forthcoming), and Van Damme, E. (2002), "The European UMTS-Auctions... and Next", *European Economic Review* (forthcoming).

effects (the incentives to collude) remind our observations on structural merger remedies.

### 4. SUMMARY

It has recently been observed that the Merger Task Force of the European Commission (EC) has been adopting a tougher stance in merger control, and the one year-old Notice on merger remedies, as well as the recent decisions in this area, would be further proof of its stricter approach.<sup>55</sup> We have argued in this article that this (alleged) strictness might still not be enough to restore competition in industries where mergers take place.

If it is well known that behavioural remedies might be problematic, and the EC has rightly expressed its preference for divestitures, we have stressed that structural remedies are made difficult by information asymmetries, incentive problems, and the possibility that divestitures might exacerbate *pro-collusive effects*. We believe that the EC has paid attention mostly to the issue of the *viability* of the new firm created with the divested assets, whereas it has not attached enough importance to the possible procollusive effects of divestiture. We suggest therefore that the EC should follow for structural remedies the same double test it uses to assess mergers in the first place: (1) Single firm dominance will likely not arise after divestiture (unilateral effects).

To understand whether our preoccupations are only theoretical or real, a more accurate analysis of the recent EC practice in merger remedies is needed. After some years of policy in this area, the time is now ripe for the EC to carry out an ex-post study on the lines of the recent FTC report.

<sup>&</sup>lt;sup>55</sup> See Ersboll, N. C. (2001), "Commitments under the Merger Regulation", *European Competition Law Review*, Issue 9, 357-364; De Matteis, A. (2001), "The Commission Develops its Policy on Merger Cases: the New Notice on Remedies and its Recent Application", International Antitrust Bulletin, Fall/Winter 2001, Vol. 4, Issue 3, pp. 21-33.