CHALLENGES IN DESIGNING AND IMPLEMENTING MERGER REMEDIES – A MONITORING TRUSTEE PERSPECTIVE

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Abstract *As Monitoring Trustee, I have observed an increase in complexity at several levels requiring more time and resources to ensure effective implementation of merger remedies. I advocate that purchaser reviews in EC merger control are enhanced and extended, particularly in complex up-front merger divestiture remedies that require careful economic analysis of competition and innovation incentives and independence of potential purchasers. This raises the question whether overly complex cases should be rejected as too big-to-fix. To avoid this dramatic step leading to more prohibition decisions, I support the published ex-post reviews and the potential modification of remedies to obtain more assets post-closing.*

Index 1. Introduction. 2. Challenges. 2.1 Complexity. 2.2 Innovation incentives. 2.3 Independence. 2.4 Urgency. 3 Discussion and conclusions

1. INTRODUCTION

In this short paper, I summarise my reflections and thoughts on the challenges of designing and implementing merger remedies from the perspective of the Monitoring Trustee that I presented in an open seminar at the Portuguese Competition Authority in July this year[1].

In my view there are three major challenges which have become increasingly important and and re-enforce each other: (i) the complexity of the underlying competition issue and subsequent complexity of remedial actions, (ii) the analysis of incentives of potential purchasers in a divestiture remedy to compete as well as to continue to innovate, (iii) the analysis of common

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1 I have previously discussed this topic on a panel at the 2019 GCLC Annual Conference in Brussels on 1 February 2019.

ownership structures of divestors and potential purchasers and (iv) the urgency to complete a transaction through increased use of up-front buyer provisions.

2. CHALLENGES

Let me start with the first challenge, complexity.

2.1. Complexity

The most important challenge to the effective implementation of remedies is the increased complexity of the subject matter under investigation. Take the major antitrust cases such as Google Shopping and Google Advertising and global mergers such as Dow/DuPont (2017) and Bayer/Monsanto (2018), to name just a few recent cases. These cases illustrate well the different dimensions of the complexity: technical, legal, institutional, financial, and economic complexity. Technical complexity is inherent in antitrust remedies in the ICT industries such as Google and the earlier Microsoft Decisions of the European Commission (2004) and the DOJ (1999) and requires dedicated highly specialised technical resources in a Monitoring Trustee team. The same is true in complex mergers in the pharmaceuticals sector (e.g. Novartis/ GSK Oncology, 2015).

The economic and financial complexities directly affect the three major remedy implementation risks identified by the UK Competition and Markets Authority in its guidance on merger remedies[2]:

- Composition risks – these are risks that the scope of the divestiture package may be too constrained or not appropriately configured to attract a suitable purchaser or may not allow a purchaser to operate as an effective competitor in the market.
- Purchaser risks – these are risks that a suitable purchaser is not available or that the merging parties will dispose to a weak or otherwise inappropriate purchaser.
- Asset risks – these are risks that the competitive capability of a divestiture package will deteriorate before completion of divestiture, for example through loss customers or key members of staff.

2 Classification adopted by UK Competition Commission, CMA – Competition & Market Authority, 2018: p. 38

The legal and institutional dimensions of complexity tend to present more procedural and jurisdictional challenges. They affect the ability to design comprehensive and effective remedies in a timely manner and thereby indirectly affect the implementation risks of complex remedies. Legal and economic complexity can further occur in complex carve-outs of business assets in divestiture remedies sometimes further complicated with reverse carve-outs such (e.g. Merck/Sigma-Aldrich, 2015)[3] and complex transitional and long-term supply and technology agreements (e.g. automotive component manufacturing mergers and recent major agrochemical mergers). In these cases, the assessment of viability post-divestment can become challenging and requires the increased monitoring of transitional supply agreements, manufacturing and other purchase and supply agreements post-Closing relying on the extended monitoring of the trustee MT, following the findings of the FTC Merger Remedies Study published in 2017.[4]

To take just one case to illustrate the degree of complexity across all the five dimensions highlighted above: Dow/DuPont (2017).[5] With a combined value of the two global agrochemicals businesses of $170 billion this was the largest transaction subject to global merger review in the last few years. The transaction was reviewed and conditionally cleared subject to remedies in the major antitrust jurisdictions of the US, EU, China, and some 20 other authorities in countries with large agricultural interests such as Canada, Brazil, India etc. The coordination of the merger control investigations and the global implementation was not straightforward and required significant coordination efforts and resources at various levels [parties, external advisors (economic, legal), authorities, trustee].[6]

The remedies in the EU which cleared the merger on 27 June 2017 included the divestment of DuPont's global herbicide, insecticides businesses and the divestment of the complete DuPont R&D business organization including non-tangible and tangible assets.

3 Decision (EC) M.7435 – *Merck/Sigma-Aldrich*.

4 Federal Trade Commission, 2017.

5 Decision (EC) M.7932 – *Dow/DuPont*.

6 The author was a senior advisor to the trustee monitoring the implementation of the Commitments globally.

1. Globally, DuPont's herbicides for cereals, oilseed rape, sunflower, rice and pasture and insecticides for chewing insect and sucking insect control for fruits and vegetables, etc.
2. An exclusive license to DuPont's product for rice cultivation in the European Economic Area to address the more limited concerns relating to fungicides.
3. DuPont's global R&D organisation, with the exception of a few limited assets that support the part of DuPont's pesticide business, which was not being divested.

For a longer list of cases that have presented major challenges through their complexity I refer to the list of 10 innovation mergers that were reviewed by DG Comp 2015-2017 and discussed by Carles Esteva Mosso at the 2018 ABA conference[7]. In addition, I have prepared another list to include major mergers in the ICT industries 2015-2018.[8] These cases are shown in Table 1 below.

All these cases involved a complex assessment of innovation and competition effects of a merger that carried through to the design and implementation of appropriate remedies. In the list of ICT mergers we find cases such as Qualcomm/NXP (2018)[9], Microsoft/LinkedIn (2016)[10], Brocade/Broadcom (2017)[11] and Discovery/Scripps (2018)[12] which are notable as they led to the acceptance of behavioural remedies (including interoperability commitments) whereas the innovations cases cited by Esteva Mosso typically led to structural remedies in the form of divestiture of existing products or pipeline products, supported in some cases by behavioural elements i.e. licensing, long term supply, etc.

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7 Esteva Mosso, 2018.

8 Hoehn, 2018.

9 Decision (EC) M.8306 – *Qualcomm/NXP*.

10 Decision (EC) M.8124 – *LinkedIn/Microsoft*.

11 Decision (EC) M.8314 – *Brocade/Broadcom*.

12 Decision (EC) M.8665 – *Discovery/Scripps*.

Table 1 – Innovation Mergers in 2015-2018

Pharmaceutical and medical devices	*Agrochemicals*
1. BD/Bard,	10. Dow/DuPont
2. J&J/ Actelion,	11. Bayer/Monsanto (2018)
3. Boehringer Ingelheim/Sanofi Animal Health Business	
4. Novartis/GSK Oncology Business,	*ITC industries*
5. Pfizer/Hospira,	12. Discovery/Scripps (2018)
6. Medtronic/Covidien	13. Qualcomm/NXP (2018)
	14.Microsoft/LinkedIn (2016)
Industrial or vehicle components	15. Brocade/Broadcom (2017)
7. General Electric/Alstom	16. Equens/Worldline (2016)
8. Halliburton/Baker Hughes	
9. Knorr-Bremse/Haldex	*High Tech engineering*
	17. RR/ITC (2017)

Sources: Esteva Mosso 2018, Hoehn 2018

The complexity challenge for remedies can be further illustrated by an older French merger involving a large package of remedies including a significant number of behavioural remedies (59 in total): Canal Plus /TPS (2006). Not surprisingly, in this case, the complex implementation proved to be too difficult and led to the imposition of significant fines in 2011 for non-compliance with the commitments and required the renotification of the transaction leading to a new set of commitments.[13] Another major media merger in 2011, this time in the US between Comcast and NBC, resulted in a similar larger number of behavioural remedies (79 individual remedy components). This latter case illustrates that the US authorities are not completely averse to adopt behavioural remedies despite a clear preference for structural solutions.

The implications for the implementation of complex remedies is that more monitoring efforts are required. This applies to structural as well as behavioural remedies. Monitoring trustee teams require more technical expertise and economic skills as will become clear when we analyse below the challenges brought about by innovation mergers with remedies that seek to ensure that the incentives to innovate are maintained.

2.2 Innovation incentives

It is useful to remind ourselves of the fundamental objective of EU merger control which is to ensure that "*Effective competition brings benefits to consumers, such as low prices, high quality products, a wide selection of goods and*

13 See press release Authorité de la concurrence, 21 September 2011 (Case n.° 11-D-12) http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=389&id_article=1697

services, and innovation".[14] The European Commission´s guidelines stress that "*in markets where innovation is an important competitive force, a merger may increase the firms' ability and incentive to bring new innovations to the market and, thereby, the competitive pressure on rivals to innovate in that market. Alternatively, effective competition may be significantly impeded by a merger between two important innovators, for instance between two companies with "pipeline" products related to a specific product market.*"[15] In the US the authorities similarly recognise the possibility that a merger may diminish innovation competition by "*encouraging the merged firm to curtail its innovative efforts below the level that would prevail in the absence of the merger. That curtailment of innovation could take the form of reduced incentive to continue with an existing product-development effort or reduced incentive to initiate development of new products*".[16]

What this means in practice is that a balancing of pro-and anticompetitive innovation and R&D effects is needed. Anti-competitive unilateral effects arise when a merger brings together two out of a limited number of effective innovators which, but for the merger, would have been likely to divert significant profitable future sales from each other by investing and by competing in improved, innovative, products. A merger, therefore, can reduce innovation incentives, and more generally reduce the intensity of competition in innovative products, by internalising these competitive effects. Conversely, pro-competitive effects arise when a merger would stimulate innovation through the ability of firms to better appropriate the social value of their innovation. For example, in the absence of a merger competitors may be able to free-ride on successful innovation carried out by their rivals. A merger could boost innovation by internalising these involuntary knowledge spill-overs. Similarly, a merger may enhance innovation by bringing together complementary R&D assets, by allowing for greater scale economies in process innovation, or by enabling cost efficiencies in R&D. In the Dow/DuPont case the European Commission and the DoJ had to do exactly this balancing of pro- and anti-competitive effects.[17]

The European Commission was concerned that the merger, as notified, would reduce competition on price and choice in a number of markets for

14 Source: European Commission, 2004: Paragraph 8.

15 European Commission, 2004: Paragraph 38.

16 Source: U.S. Department of Justice & Federal Trade Commission, 2010: section 6.4.

17 For a discussion see Esteva Mosso, 2018 cited above 7.

crop protection products, and also stifle innovation to improve existing crop protection products and develop new active ingredients for crop protection. In order to address the European Commission's concerns, the parties agreed to divest the relevant DuPont pesticide businesses and almost the entirety of DuPont's global crop protection R&D organisation, an unusual measure by historical standards. DuPont also agreed to divest all tangible and intangible assets underpinning the divested businesses. The European Commission concluded that the divestment package will enable a buyer to replace the competitive constraint exerted by DuPont.[18]

Similarly, after an in-depth review the Department of Justice found that as originally proposed, "*the merger would have eliminated important competition between Dow and DuPont in the development and sale of insecticides and herbicides that are vital to American farmers who plant winter wheat and various specialty crops. In addition, it would have given the merged company a monopoly over ethylene derivatives known as acid copolymers and ionomers that are used to manufacture many products, including food packaging*"[19]. The remedies obtained by the DOJ's settlement included the divestiture of DuPont's market-leading Finesse and Rynaxypyr crop protection products and the divestment of its U.S. acid copolymers and ionomers business to a buyer approved by the United States. Like the European Commission, the DOJ examined the effect of the merger on development of new crop protection chemicals but did not come to the same or similar conclusion regarding the need for a divestiture of DuPont's R&D organisation and assets.

As I found in my recent overview of merger remedies[20], the reception to this decision has been mixed. Ersbøll et al (2018) in their review of EU merger control on 2017 discuss the Dow/DuPont merger and claim that "*[t]here were no traces of this theoretical framework in past EC merger decisions. Instead the EC drew inspiration form its own guidance on technology transfer agreements and the DoJ/FTC proposal for IP licensing guidelines in the US.*"[21] Economists have also weighed in on the debate. For example, Fauver et al (2018) refer to the direct effect of the proposed merger on innovation

18 See European Commission cited 6 above.

19 Acting Assistant Attorney General Andrew Finch of the Justice Department's Antitrust Division, as quoted in Press Release Depratment of Justice, 15 June 2017. See https://www.justice.gov/opa/pr/justice-department-requires-divestiture-certain-herbicides-insecticides-and-plastics

20 See 9 supra.

21 Ersbøll; Gavala; Iverson & Naydenova, 2018.

incentives, an approach reminiscent of the "innovation markets" framework developed in the 1990s.[22] Even members of the Commission's Chief Economist team weighed into the debate and published a paper on the possible effects of mergers on innovation and consumer welfare in a model where firms compete among others through the quality of their products by innovating.[23] Their formal model suggests that a merger between two out of a limited number of innovators can depress innovation incentives and more broadly reduce current and future consumer welfare, in the absence of innovation-related efficiencies, including the internalisation of knowledge spillovers. This publication has led up to a lively debate in economic circles on the impact of mergers on innovation.

I agree that the analysis of innovation effects in merger control is challenging, not least because of the difficulties in obtaining and assessing solid empirical evidence. In my view it is not primarily the absence of a theoretical framework that is the main challenge, rather it is a question of not having sufficient data and foresights that is able to distinguish between pro- and anti-competitive effects and coming to robust conclusions. The challenge is increased through the difficulties of judging the success of pipeline products in early stage clinical trials and establishimng whether and to what extent they will compete with other pipeline products in future. These challenges carry over into the implementation of remedies where the approval of a suitable purchaser in a divestiture remedy is required who may or may not be engaged in developing similar products. Such merger reviews are in my experience as Monitoring Trustee becoming ever more demanding and complex necessitating for innovation mergers an assessment not only of a purchaser´s ability and incentive to compete but also to continue to innovate and invest in R&D at a similar level to the divesting parties. This is no mean task. Let me elaborate and explain what I mean by this.

The criteria for accepting a purchaser of a divestment business are laid out in the Commitments and have to be reviewed and assessed by the Monitoring Trustee who then provides the European Commission with a purchaser approval report based on which the European Commission can issue its approval decision.[24] What do we typically look at?

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22 Fauver; Ramanarayanan & Tosini, 2018.

23 Federico; Langus & Valletti, 2018.

24 European Commission, 2008: Paragraph 119.

- Independence
- Finances
- Expertise, strategic rationale and incentives
- Competition issues
- Analysis of the transaction agreements

This requires expertise in finance and accounting, business strategy and economics.

Typically, the Trustee mandate provides for such a report to be prepared within one week of the submission of a proposal of a suitable purchaser by the parties. Such an analysis is impossible to complete within one week unless there has been plenty of time prior to the formal submission of a suitable purchaser proposal. In practice, the European Commission does not insist on the Trustee adhering to this strict deadline as the quality of the purchaser review is more important to the European Commission who has to be able to issue a purchaser approval decision that is robust and can withstand scrutiny should the purchaser approval decision be challenged in court, something that has happened in a number of instances.[25]

2.3 Independence

The suitability assessment of a potential purchaser requires among other an assessment of whether a purchaser is independent from and unconnected to the merging parties.

One issue that I want to raise in this context concerns the potential for common ownership of the merging parties and the proposed purchaser becoming an issue for purchaser approval. Common ownership of shares in competing firms by institutional investors has been identified by antitrust scholars in the US as a potential problem for effective competition in certain highly concentrated industries such as airlines.[26] The European Commission has picked up on this and took it into account in recent merger decisions such as Dow/DuPont (2017) and Bayer/Monsanto (2018). In Dow/DuPont the Commission found that 17 shareholders collectively owned ca. 21% in BASF, Bayer and Syngenta and 29-36% of Dow, DuPont and Monsanto. [27]

25 See for example the Judgment of the European Court of Justice, C-514/14 P, *Éditions Odile Jacob SAS v Commission*, ECLI:EU:C:2016:55 and Decision (EC), D/203365 – *Wendel Investissement*.

26 See: Azar; Schmalz & Tecu, 2018 or Elhauge, 2017.

27 See 6 supra, Paragraph 80, Annex 5.

The Commission considered that, "*in general, market shares used by the Commission for the purpose of the assessment of the Transaction tend to underestimate the concentration of the market structure and, thus, the market power of the Parties, and that common shareholding in the agrochemical industry is to be taken as an element of context in the appreciation of any significant impediment to effective competition that is raised in the Decision*."[28]

What does this mean for the analysis of the analysis of a proposed purchaser in a divestiture remedy? Should the assessment of a purchaser´s independence of the parties and their incentives to compete be taken into account and if how?

In the table below I show the institutional shareholding of the seller and the buyer in Linde/Praxair (2018) where the parties agreed to sell the majority of Praxair´s European business to Taiyo Nippon Sanso Corporation. The major shareholders in Praxair/Linde are[29]:

PRAXAIR (PX) / Linde PLC	
Major Shareholders	Equities %
Capital Research & Management Co. (World Investors)	6.11%
The Vanguard Group, Inc.	4.05%
Norges Bank Investment Management	3.27%
SSgA Funds Management, Inc.	2.37%
Massachusetts Financial Services Co.	2.37%
BlackRock Fund Advisors	2.21%
Wellington Management Co. LLP	1.47%
Parnassus Investments	1.02%
Franklin Advisers, Inc.	0.97%
Walter Scott & Partners Ltd.	0.80%

There was only one common major shareholders in Taiyo Nippon Sanso Corp, The Vanguard Group, with 0.89% in the Japanese company and 4.05% in the German/US entity. However, The major shareholder in the Japanese entity is Mitsubishi Chemical Holdings Corp. When this entity is taken into account the common shareholding increases as The Vanguard Group holds another 2.19% in Mitsubishi Chemical Holdings and BlackRock Fund

28 Paragraph 81 supra.

29 Source: https://www.marketscreener.com (accessed 31 January 2019).

Advisors have 3.58% in the same entity as well as Norges Bank Investment Management.[30] Thus, taking into account the common shareholding structure of all three entities reveals we can see linkages albeit at lower levels than those found in Dow/DuPont. Nevertheless, it is instructive to consider the concentration of ownership in a divestiture as well as the underlying transaction. This adds to the complexity of the implementation of divestiture commitments but may in some circumstance be important.

TAIYO NIPPON SANSO CORPORATION (4091)	
Major Shareholders	Equities %
Mitsubishi Chemical Holdings Corp.	50.60%
Taiyo Nippon Sanso Business Association	4.33%
JFE Holdings, Inc.	2.92%
Meiji Yasuda Life Insurance Co.	2.31%
Mizuho Financial Group, Inc.	1.89%
Japan Agricultural Cooperatives Group	1.62%
Asset Management One Co., Ltd.	1.49%
Nomura Asset Management Co., Ltd.	0.89%
The Vanguard Group, Inc.	0.85%
Capital Research & Management Co. (Global Investors)	0.84%

MITSUBISHI CHEMICAL HOLDINGS CORP. (4188)	
Major Shareholders	Equities %
Mitsubishi Chemical Holdings Corp.	5.52%
Meiji Yasuda Life Insurance Co.	4.27%
Asset Management One Co., Ltd.	4.20%
Sumitomo Mitsui Trust Asset Management Co., Ltd.	4.05%
BlackRock Fund Advisors	3.58%
Nippon Life Insurance Co.	2.82%
Nomura Asset Management Co., Ltd.	2.66%
The Vanguard Group, Inc.	2.19%
BlackRock Japan Co., Ltd.	1.80%
Norges Bank Investment Management	1.60%

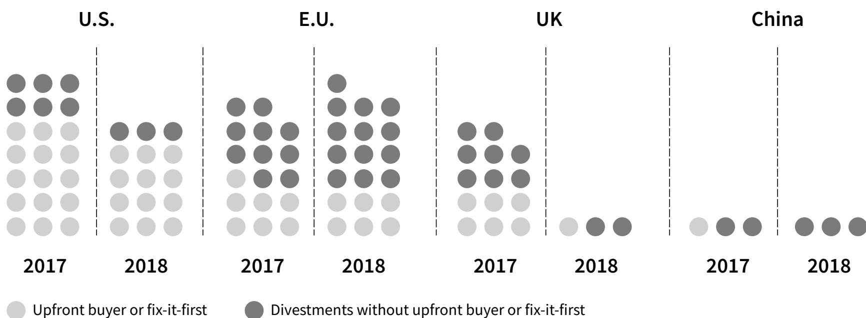
30 Source: https://www.marketscreener.com (accessed 31 January 2019).

2.4 Urgency

The fourth challenge which exacerbates and reinforces the challenges discussed above has to do with the increased urgency through the increased use of up-front buyer provisions in divestiture commitments. In 2017 and 2018, approximately one in three of all EC remedy decisions imposed an upfront or fix-it-first purchaser clause. They have been common in the US but not are more regularly used in the EU and other jurisdictions as well as the chart below illustrates.

Figure 1: Use of Upfront Buyer and Fix-It-First Remedies

USE OF UPFRONT BUYER AND FIX-IT-FIRST REMEDIES COMPARED TO THE TOTAL NUMBER OF DIVESTMENT REMEDY CASES



Source Allen Overy (2019). Global Trends in Merger Control Enforcement

While there are good reasons for including such provisions, they do put pressure on all parties to complete a divestiture asap. As the EU Merger Remedies Notice puts it: "*There are cases where only the proposal of an upfront buyer will allow the Commission to conclude with the requisite degree of certainty that the business will be effectively divested to a suitable purchaser. The parties therefore have to undertake in the commitments that they are not going to complete the notified operation before having entered into a binding agreement with a purchaser for the divested business, approved by the Commission.*"[31]

There are two reasons for insisting on an upfront buyer provision: a) the difficulty finding a suitable purchaser and b) concerns over rapid deterioration of the divestment business. From a Trustee perspective these concerns

31 See European Commission, 2008: Paragraph 53.

need to be balanced by the challenges of reviewing a complex transaction in a very short time period and the risks that full consistency of a divestment with the Commitments cannot be achieved, or the pool of suitable purchaser has not been properly identified and potential purchasers have been deterred (purchaser risk). The Trustee is under huge pressure to review and assess a buyer right at the beginning of its mandate and not towards the end of the first divestiture period. In contrast, in a standard divestiture with a first divestiture period of 6 months[32] this give the monitoring trustee valuable time to get to know the business to be divested and familiarise itself with the markets the divestment business competes in as well as the potential buyers who may be interested and prima facie suitable. With the upfront buyer condition this time period is typically cut short and the learning curve thus very steep. The monitoring trustee does not know the business well and issues have not arisen yet under his watch. It therefore becomes difficult to know what clauses in the transaction agreements may be problematic and how the agreements being negotiated will continue to evolve.

3. DISCUSSION AND CONCLUSIONS

In this paper I have discussed four major challenges of designing and implementing timely and effective remedies in merger control. Of these, the increased complexity is the most important challenge.

A complex design of merger remedies leads to complexity in the implementation and monitoring the effectiveness of remedies. While not new (e.g. EU state aid remedies during the financial crisis 2008/2009, or complex remedies in media or telecoms mergers in US, France and EU are a case in point), I have recently observed an increase in complexity at several levels. First there are legal and institutional complexities arising through global mergers and present major challenges for competition authorities and the coordination of remedies. Economic complexity is also introduced in innovation remedies where the ability of incentive to compete of a purchaser of divestment business and/or assets needs to be assessed very carefully and often under tight time constraints in upfront buyer cases. The third challenge which exacerbates and reinforces the two challenges discussed above has to do with the

32 See paragraph 98, *supra*.

increased urgency through the increased use of up-front buyer provisions in divestiture commitments.

This raises the question whether there is a limit to the degree of complexity a merger control review leading to complex remedies can tolerate and what if anything can and should be done. Is it simply a question of allowing for more time and require more resources? Should overly complex competition issues leading to complex remedies be rejected as too big to fix? Or is it a question of relying on *ex-post* reviews of remedies and modifications of commitments by the authorities within a certain time period? These are important questions.

Before I provide my own views, I would like to refer to the discussion raised by the Bayer/Monsanto case[33] where this question whether the transaction was too big to fix was asked and the recently retired head of the compliance division of the FTC, Daniel Ducore, felt compelled to answer with a letter to the American Antitrust Institute (AAI). The AAI had criticized the remedy for raising "execution risk". Ducore´s letter discusses the broad scope of the remedy, the risks that remain, and some suggestions for how the Antitrust Division should continue to review this particular remedy in the years following its implementation and share its learning with the public.[34] In his robust defense of the settlement, which is a fix-it-first remedy and makes the approved buyer BASF party to the settlement although it is not a named defendant in the Complaint, Ducore points out one of the more unusual aspects of the decree, namely to reduce the "asset package risk" to near zero by allowing BASF within the first year following divestiture, to obtain any additional assets if such assets have been "previously used by" the Divestiture Businesses and are "reasonably necessary" for the businesses continued competitiveness. The final decision lies with the DOJ in its sole discretion and Ducore acknowledges that "… *it is rare that either the Division or the FTC has provided for the buyer's reaching back to obtain additional assets*."

I believe this case illustrates very well the dilemma of complex mergers requiring broad and complex remedies. I fully agree with Ducore that *ex-post* reviews are essential to inform and reassure the public and that the antitrust authorities are held accountable for such high-profile decisions.

33 Decision (EC), M.8084 – *Bayer/Monsanto*. Please note that the author was a senior advisor to the trustee monitoring the implementation of the Commitments globally.

34 Ducore, 2018.

More generally, it is in my view very important that regular *ex-post* reviews of decisions of competition authorities are undertaken and published. The UK CMA does so regularly and is to be complimented for this. The CMA builds on a rolling programme of *ex-post* evaluations of merger decisions started by the UK Competition Commission (one of its predecessor bodies) in 2004 and offers a number of learning points regarding merger remedies policy and different types of remedies. Among the general lessons is the need for parties to have appropriate incentives to implement remedies and the limited circumstances in which behavioural remedies might be effective (Hoehn, 2018).

The most recent CMA report further refers to the conclusions regarding the need to recognise the difficulties of selling selected assets rather than on-going (e.g. stand-alone) business and the need for sufficient information to be provided to potential purchasers.[35] The CMA report also highlights an observation made by the FTC in its 2017 remedy study that there was a reluctance of some buyers to raise concerns with FTC or an independent monitor and that the FTC needed to impress on affected parties to raise issues when they arise. In the opinion of the CMA there is an important difference between the US/Canadian and EU systems in that DG Comp can only consider remedy proposals offered by the parties. While it has the ability to decline those proposals the only real alternative is to propose and prepare for a prohibition decision. The CMA believes that this may lead to "*problems related to an inadequate scope of divestiture packages and perhaps also to a lack of suitable purchasers*".

From my own experience, and as discussed in this paper, I would further advocate that the status of purchaser reviews in EC merger control is enhanced and the Trustee given more time to evaluate the suitability of a proposed purchaser, particularly in complex merger remedies that require economic analysis of competition and innovation effects and sometimes alos common ownership structures. One week is clearly not enough! The Trustee also will require sufficient resources to evaluate such complex effects. These resources are not only those that economists can provide but also external legal and industry expertise. This means that the appointment of a suitably qualified trustee or trustee team becomes central to the successful implementation of a complex remedy. It is not surprising that in my experience the

35 CMA – Competition & Market Authority, 2019.

European Commission has insisted on the inclusion of a technical expert as a key member of a trustee team.

While I have focused in this paper on the challenges that typically arise in merger control, I would like to point out that there is at least one more challenge that deserves to be considered but is beyond the scope of this short paper: the design of effective remedies in the digital data economy. This point has become the focus of much public debate triggered by the publication of various expert reports by the US and UK Governments, the Director General of DG Competition and a number of national competition authorities around the world who have become concerned about the competition implication of big data, big tech and the growth of artificial intelligence (AI) and machine learning solution in today´s economy.[36] The issues raised by these reports relate not to only to the complexity of analysis of competition issues in antitrust cases but also to merger control involving the acquisition of actual or potential competitors and start-ups that have promising technologies (e.g. Facebook/WhatsApp, Microsoft/LinkedIn) and have a direct bearing on the question how to remedy any competition problems identified. For example, the academic expert panel advising the DG Competition, consisting of Crémer; Montjoye & Schweitzer (2019) suggests more sharing of data alongside other suggestions on how EU Competition Policy should deal with increased scope for market power through digital platforms by shifting burden of proof of beneficial impact of certain behaviour for dominant platforms including acquisition of start-ups. Furman et al (2019) advising the UK Government propose the creation of digital market unit alongside suggestions for greater personal data mobility and remedies involving greater data openness as has been applied in the 2016 Open Banking Orders of the CMA[37]. And the US Federal Trade Commission has investigated a breach by Facebook of its 2011 privacy commitments, leading to a $5 billion penalty for Facebook.[38] What these proposals would mean for the effective implementation of remedies and what challenges these would represent for a monitoring trustee or any regulatory agency entrusted with overseeing these remedies can without a detailed assessment of these proposal only be speculative. But is it reasonable to assume that the challenges

36 Crémer; Montjoye & Schweitzer, 2019. Furman et al, 2019.

37 See CMA – Competition & Market Authority, 2016.

38 Facebook Settlement with the FTC, July 24, 2019 See https://www.ftc.gov/news-events/blogs/business--blog/2019/07/ftcs-5-billion-facebook-settlement-record-breaking-history, accessed 19 August 2019.

will be similar to the ones discussed in this paper as the issues raised by the digital data economy are by their nature they are bound to be complex and requiring a careful balancing of innovation and competition effects of remedies involving extensive data sharing, data portability, data and protocol interoperability, never mind structural remedies that are increasingly being advocated at the political level.

BIBLIOGRAPHY

Allen & Overy
2019 "Global Trends in merger control enforcement", in *Allen & Overy*, available at: http://www.allenovery.com/publications/en-gb/mergercontrol-trends/Pages/Global-trends-in-merger-control-enforcement/Default.aspx

Azar, José; Schmalz, Martin C. & Tecu, Isabel
2018 "Anticompetitive Effects of Common Ownership", in *Journal of Finance*, 73(4), available at SSRN: https://ssrn.com/abstract=2427345

Ducore, Daniel P.
2018 *Letter to Diana L. Moss, President American Antitrust Institute, August 2, 2018*, available at: https://www.justice.gov/file/1111051/download [accessed on August 19th 2019]

Elhauge, Einer
2017 "The Growing Problem of Horizontal Shareholding", in *Antitrust Chronicle*, Vol. 3, June 2017, Competition Policy International; Harvard Public Law Working Paper No. 17-36, available at SSRN: https://ssrn.com/abstract=2988281

Ersbøll, Niels; Gavala, Athansia; Iverson, Tiiu & Naydenova, Lazarinka
2018 "2017 EU Merger Enforcement Year in Review", in *Arnold & Porter, Kaye Scholer*, available at https://www.arnoldporter.com/-/media/files/perspectives/publications/2018/02/2017-eu-merger-enforecment-year-in-review.pdf?la=en

Esteva Mosso, Carles,
2018 *Innovation in EU Merger Control*, ABA Spring Meeting, Washington, April 12th 2018, available at: http://ec.europa.eu/competition/speeches/text/sp2018_05_en.pdf

Fauver, Jennifer Cascone; Ramanarayanan, Subramaniam (Subbu) & Tosini, Nicola

2018 "The Increasing Cross-Border Importance of Innovation in Merger Review", in *Antitrust*, Spring 2018, pp. 70-75

Federico, Giulio; Langus, Gregor & Valletti, Tommaso M.

2018 *Horizontal Mergers and Product Innovation*, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2999178

Hoehn, Thomas

2018 "Merger Remedies and competition law: An overview of recent EU case law and international policy developments", in *e-Competition Bulletin Merger Remedies* (Foreword), September 27th

OFFICIAL DOCUMENTS

CMA – Competition & Market Authority

2016 *Retail Banking Market Investigation – Final Report*, of August 9th

2018 *Merger remedies guidance*, CMA87, of December 13th

2019 *Merger remedy evaluations – Report on case study research*, CMA109, of June 18th

Crémer, Jacques; Montjoye, Yves-Alexandre de & Schweitzer, Heike

2019 *Competition policy for the digital era*, Directorate-General for Competition, Luxembourg Publication Office of the European Union, of April 2019

European Commission

2004 *Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings*, 2004/C 31/03, of February 5th

2008 *Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004*, 2008/C 267/01, of October 22nd

Federal Trade Commission

2017 *The FTC's Merger Remedies 2006-2012, A Report of the Bureaus of Competition and Economics*, of January 2017 (available at https://www.ftc.gov/system/files/documents/reports/ftcs-merger-remedies-2006-2012-report-bureaus-competition-economics/p143100_ftc_merger_remedies_2006-2012.pdf)

Furman, Jason et al.

2019 *Unlocking digital competition, Report of the Digital Competition Expert Panel*, HM Treasury, of March 13th

U.S. Department of Justice & Federal Trade Commission

2010 *Horizontal Merger Guidelines*, of August 19th

CASE-LAW

Judgment of the European Court of Justice, of January 28th 2016, *Éditions Odile Jacob SAS v Commission*, C-514/14 P, ECLI:EU:C:2016:55

DECISIONS

Autorité de la Concurrence
Decision of September 20th 2011 (published on September 21st), Case n.º 11-D-12

European Commission
Decision of July 30th 2004, D/203365 – *Wendel Investissement*
Decision of June 15th 2015, M.7435 – *Merck/Sigma-Aldrich*
Decision of December 6th 2016, M.8124 – *LinkedIn/Microsoft*
Decision of March 27th 2017, M.7932 – *Dow/DuPont*
Decision of May 12th 2017, M.8314 – *Brocade/Broadcom*
Decision of January 18th 2018, M.8306 – *Qualcomm/NXP*
Decision of February 6th 2018, M.8665 – *Discovery/Scripps*
Decision of June 30th 2019 M.8084 – *Bayer/Monsanto*