Response to CMA Consultation Regarding Merger Assessment Guidelines (CMA129)

I write in response to your invitation to reply to the proposed Merger Assessment Guidelines which the Competition and Markets Authority issued on 17 November 2020.

My enclosed article, *From Innovation Markets to Innovation Spaces*, which is published in the current issue of the European Competition Law Review, directly contradicts the second part of the CMA's claim, in § 5.2 of the proposed guidelines:

> Accordingly, while the CMA's assessment of dynamic competition may, in some cases, focus on entry and expansion in relation to specific products, in others, *it may consider a broader pattern of dynamic competition in which the specific overlaps may not be identified easily at the point in time of the CMA's assessment*. (Emphasis added)

The CMA supports its claim that it can consider this broader pattern of dynamic competition on, among others, the European Commission's decisions in *Dow/Dupont* and *Bayer/Monsanto* (see Proposed Guidelines, pp. 42-43, fn. 101). My article shows that in these cases, and others, the European Commission was able to do no more than act to preserve competition in a market for specific future products, a Future Market.

The true issue in this area is therefore: How much uncertainty will the authority accept when acting to preserve competition in a Future Market? In other words, as the part of § 5.2 which is in italics above implies, the CMA will be making its assessment when it cannot easily determine what products, if any, firms will eventually sell in a Future Market. Because this determination will not be easy, the CMA must make a policy decision to determine how much uncertainty it will accept.

As I say in my article: "There is nothing wrong, and indeed everything right, with aggressively enforcing the antitrust laws." I therefore encourage the CMA to aggressively enforce the antitrust laws and preserve competition in Future Markets.

But good public policy requires clear thinking. And such clear thinking is particularly important in this area because preserving future competition has such a direct impact on long-term economic growth. I therefore also encourage the CMA to be analytically forthright and acknowledge the true public policy choice it faces. Just as the European Commission could not "consider a broader pattern of dynamic competition" in the two cases the CMA cites, neither can the CMA itself.

Lawrence B. Landman 6 January 2021

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From innovation markets to innovation spaces in Europe: a new phrase is not innovation
Lawrence B. Landman [1]

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*30 The impossible dream

All antitrust authorities, at one time or another, dream of leading the fight to regulate innovation directly. First the Americans grabbed this mantle, loudly proclaiming that they had created "Innovation Markets", markets in which innovation was itself the product. Now the European Commission has grabbed the mantle, claiming that it is regulating innovation by finding "Innovation Spaces".

In the first article of what is now a series in this journal, "Innovation Markets in Europe",[1] I show that the Americans were not able to actually create Innovation Markets.[2] Instead they protected competition in future goods markets, markets for products which do not exist yet but would likely compete against each other in the future.[3] And, as that article was the first to show, the European Commission, with less fanfare, and acting a bit less aggressively, acted in this way as well.

Now the European Commission, starting with Dow/Dupont,[4] claims that it has created something fundamentally new, an Innovation Space. Many commentators agree with the Commission's claim that an Innovation Space is something fundamentally new. One leading commentator, Nicolas Petit, says that in Dow/Dupont the Commission created[5]:

"two significant variations from past practice.

First, the Commission's intervention entails a broadening of the way innovation competition harms are evaluated. While the decision looks at the loss of rivals with key innovation capabilities for competing in the future, it does not seem to regard as a necessary requirement the identification of specific future products applications or R&D areas.

Second, the Commission's decision marks a conspicuous attempt to shoehorn theories of harm to innovation competition within the unilateral effects model conventionally applied in horizontal merger cases." [6]

But does Dow/Dupont really offer any "significant variations from past practice"? Regarding what Petit claims is the first significant variation, is an Innovation Space really a *broadening* of the way innovation competition harms are evaluated? Does

the decision "not seem to regard as a necessary requirement the identification of specific future products applications or R&D areas"? In other words, will the Commission really act when it cannot identify a future goods market? As this article will show, the answer to all these questions is "No".

And, regarding what Petit sees as the second significant variation, does "the Commission decision mark a *conspicuous* attempt to *shoehorn* theories of harm to innovation competition"? Again the answer is "No".

In reality, just as the Americans were not able to actually find an Innovation Market, so too can the European Commission not find an Innovation Space. This article will show that the methodology the Commission claims to have developed in Dow/Dupont does not offer any significant variation from past practice. Thus we have gone from Innovation Markets in Europe to Innovation Spaces in Europe, but we have not seen any innovation.

As this article will show, when trying to regulate competition to innovate, if the authorities—on both sides of the Atlantic—do not limit themselves to acting only when there are either specific products which would compete against each other in the future, or where the transaction would block entry into the broader market, such as by creating too broad a patent portfolio, then as a practical matter there would be no limits on when an authority may act. And the authorities have to develop a methodology which limits their actions in some reasonable way.

Further, there will always be issues on the edge—when are future products' features sufficiently different that the products are "different"? How broad is "too" broad a patent portfolio? When does a merger create too many barriers to entry into a market? When is a product still in development sufficiently likely to become a product? At most the Commission is now answering these questions more aggressively at the edge, but it is not creating something fundamentally new. It is not creating an entirely new methodology. ***31**

As all writers in this field agree, the authorities must decide each individual case based on the unique facts of that case. And, over time, different personnel, with different policies, will decide these cases. Thus, over time, there will be some divergence and disagreement at the edge. But, fundamentally, the methodology the authorities on both sides of the Atlantic have used to regulate competition to innovate has not changed and, if these authorities are to continue to act reasonably, then it cannot change.

What the Commission actually did in Dow/Dupont is act in the same fundamental way it and the American authorities have always acted when they allegedly act to protect competition to innovate. To show this we must look at the history of the authorities' attempts to regulate competition to innovate. And it is appropriate to look at the American authorities' initial efforts, as well as the Commission's efforts, even when evaluating Dow/Dupont, because in this area, as in many areas of antitrust law, these efforts have always been, and continue to be, intertwined. And many currently authoritative documents—which Dow/Dupont cites—such as the American 2017 Licensing Guidelines,[7] rely on cases decided when the Americans first claimed they could find Innovation Markets.

Back to the future

In Dow/Dupont the Commission clearly and explicitly said an Innovation Space is not an Innovation Market.[8] The Commission knew it needed to say this clearly and explicitly because it knew that when it was claiming to create a new concept, an "Innovation Space", it was walking in the footsteps of the American authorities' earlier claims that they could develop a methodology to explicitly regulate competition to innovate. The methodology the American created was one which allowed them to at least claim they could find Innovation Markets. So what, exactly, are Innovation Markets?

Innovation Markets burst onto the antitrust scene when the American authorities took three co-ordinated actions: In 1993 they brought the General Motors-ZF Friedrichshafen (GM/ZF) case,[9] in 1995 they issued new Licensing Guidelines,[10] and,

at essentially the same time, the then Deputy Assistant Attorney Generals for Economics and Mergers, respectively, Richard J. Gilbert and Steven C. Sunshine, published "Incorporating Dynamic Efficiency Concerns in Merger Analysis: The Use Of Innovation Markets" (1995) 63 Antitrust Law Journal 569. As will be explained in greater detail below, these two authors, clearly if informally speaking on behalf of the American authorities, tried to explain Innovation Markets in detail.

Although the 1995 Guidelines have now given way to the 2017 Licensing Guidelines—which Dow/Dupont cites[11]—regarding Innovation Markets the 2017 Licensing Guidelines continue to use language comparable to the language of the 1995 Guidelines. What the 1995 Guidelines call an "Innovation Market" the 2017 Guidelines just call a "research and development market".[12] But the substantive difference between the two Guidelines is negligible.[13] For example, the 2017 Guidelines continue to cite many of the same cases, including GM/ZF, which the 1995 Guidelines cite as examples which illustrate when the American authorities will find what they now call a "research and development market".[14] The 1995 Guidelines, GM/ZF, and Gilbert and Sunshine's article therefore continue to have a direct impact on this field generally and thus on understanding the Commission's Dow/Dupont decision specifically.

In GM/ZF the Department of Justice ("DOJ") sought to regulate the two firms' competition to develop better automatic transmissions. The two firms competed in only two narrow product market segments in the US, those for automatic transmissions for buses and refuse trucks. But the firms competed broadly, in many market segments, in Europe. And the firms had developed a clear pattern of competing to make better automatic transmissions.

DOJ wanted the firms to continue to compete to make better automatic transmissions. To do this, however, it needed to regulate more than just the two narrow market segments in which the firms competed in the US. So DOJ claimed the two firms also competed in a worldwide market for innovation to make better automatic transmissions. And, DOJ claimed, it had jurisdiction to regulate this worldwide Innovation Market.[15]

But in reality DOJ was regulating a current goods market—a market for products which already existed. It was regulating the current goods market for automatic transmissions. That market existed, but was in Europe. Thus DOJ did not actually find an Innovation Market: it did not find a market in which innovation was itself the product. ***32** [16]

The 1995 Guidelines say, in § 3.2.3 "A licensing arrangement may have competitive effects on innovation markets that cannot be adequately addressed through the analysis of goods or technology markets". The section then goes on to develop a methodology which is essentially a shortened version of the methodology Gilbert and Sunshine develop in their article.

If any one authority explains what an Innovation Market at least in theory should be, it is Gilbert's and Sunshine's article. The authors developed a five-step methodology which they claim allows authorities to define an Innovation Market. In "Did Congress Actually Create Innovation Markets?",[17] on pp.727–757, I explain and criticise this methodology in detail. To summarise the five steps:

Step One:

Identify the overlapping R&D activities of the merging firms.

Step Two:

Identify actual and potential competitors in the Innovation Market.

Step Three:

Identify what competitive pressure, if any, current goods markets exert on the Innovation Market.

Step Four:

Identify the concentration of the Innovation Market.

Step Five:

Identify any efficiencies which the relevant transaction may develop.

After deciding GM/ZF, issuing the 1995 Guidelines, and after Gilbert and Sullivan published their article, the American authorities went on to at least claim that they found what the 1995 Guidelines call an Innovation Market, and the 2017 Guidelines call a "research and development market", in a number of cases. These included Wright Medical[18] and American Home Products,[19] which both the 1995 and 2017 Guidelines cite. They also include Sensormatic and Ciba-Geigy/Sandoz. This article will analyse all four of these cases; the last two because in both the FTC acted to stop the relevant firms from combining patents in a way which would allow them to block entry into the broader market. As shown below,[20] Petit—while citing these cases—ignores the fact that in Dow/Dupont the Commission acted in exactly the same way as the FTC did in these two cases. Thus, as is also shown below, by misinterpreting Sensormatic and Ciba-Geigy/Sandoz Petit has fundamentally misunderstood Dow/Dupont.

The explanation "Innovation Markets in Europe" provides of Wright Medical is still relevant[21]:

"Although Wright Medical Technology already controlled 95 per cent of the orthopaedic hand implant market, when the FTC opposed Wright Medical's purchase of Orthomet it alleged that the purchase would harm competition not only in the relevant goods market, but also in a related innovation market."

Yet, as "Did Congress Actually Create Innovation Markets?" shows, on pp.772–774, Orthomet controlled a patent which would allow it to develop the next generation of hand implants. Wright Medical was therefore purchasing its only future competitor; the FTC, unsurprisingly, opposed this merger. And as "Did Congress Actually Create Innovation Markets?" shows by trying to apply Gilbert's and Sunshine's Innovation Market methodology, in this case the FTC actually found, not an Innovation Market, but a future goods market for the next generation of hand implants.

And the explanation "Innovation Markets in Europe" provides of American Home Products is also still relevant[22]:

"The FTC opposed American Home Product's purchase of American Cyanamid…at least in part because the firms were two of only three doing research regarding rotavirus vaccines. No relevant product market yet existed."

As "Did Congress Actually Create Innovation Markets?" shows, on pp.780–781, the FTC found, not an Innovation Market, but a future goods market. This is the market for future rotavirus vaccines.[23]

The explanation "Innovation Markets in Europe" provides of Sensormatic is also still relevant[24]:

"[The FTC] opposed Sensormatic's attempt to purchase Knogo's electronic marker business although no product market yet existed." [25]

As "Did Congress Actually Create Innovation Markets?" shows, on pp.781–787, this was actually a rather complex transaction. In essence, Knogo controlled patents which would allow it to make the next-generation of anti-shoplifting equipment, and the

two firms were combining their patents in a way which, the FTC feared, ***33** would block other firms from entering the market. The FTC stopped the firms from combining their patents in an anti-competitive fashion.

Ciba-Geigy/Sandoz was a very high-profile case, the Dow/Dupont of its day. Both the FTC[26] and the European Commission[27] reviewed this transaction, in which the two firms merged to create Novartis. The FTC clearly saw antitrust problems. As Petit says,[28] in para.9 of its complaint the FTC listed four specific future goods markets in which it believed the merging firms would have competed but for the transaction.[29]

But in para.10 of the complaint the FTC said that another relevant market, in which it also believed the merger raised antitrust concerns, was the broad gene therapy market. The first sentence of this paragraph shows that the FTC saw an antitrust problem in this market, and acted to protect competition in this broad market:

"While no gene therapy product has yet been approved by the FDA, gene therapy treatments now in clinical trials offer patients the prospect of significant medical improvements or cures for diseases, particularly in oncology, transplantation and central nervous system diseases."

The FTC was concerned that the two firms, by combining both their R&D capabilities and their patents, would monopolise the broad future gene therapy market. The FTC made this clear in para.15 of its complaint:

"Only Ciba together with Chiron,[30] and Sandoz control the substantial proprietary rights necessary to commercialize gene therapy products and possess the technological, manufacturing, clinical, regulatory expertise and manufacturing capability to commercially develop gene therapy products." [31]

And, as discussed below,[32] this is exactly the same concern the Commission expressed in Dow/Dupont.

As "Innovation Markets in Europe" explains on pp.28–29, not just the FTC, but the European Commission also evaluated the merger of *Ciba-Geigy* and *Sandoz*. As these pages explain, at the beginning of its decision the Commission said that it was analysing a future goods market, which it called a "future market". Then, as these pages also explain, the Commission recognised that the parties had applied for broad patents which may allow the merged firm, Novartis, to block entry into the broad gene therapy market. But, said the Commission, these were only patent applications, and, relatedly, future market developments were too uncertain to permit the Commission to act.

But as "Innovation Markets in Europe" also explains on these pages, the European Commission may very well have anticipated the actions of the FTC. The FTC ordered Novartis to grant to other gene therapy researchers non-exclusive licences to essential gene therapy technology, including technology the European patents cover.

In Dow/Dupont this was most decidedly not true. Regarding this merger the American authorities did not see substantial antitrust problems.[33] Thus, unlike in Ciba-Geigy/Sandoz, in Dow/Dupont the Commission knew that if it were to protect competition in the broad market it must itself act.

Petit also implies that the FTC found an Innovation Market in Glaxo/Wellcome.[34] Understanding this case, which both the FTC[35] and the European Commission[36] analysed, also helps shed light on the Commission's reasoning in Dow/Dupont. In this case, as "Innovation Markets in Europe" explains on pp.25–26, both firms were trying to develop, among other drugs, new anti-migraine drugs. Glaxo sold an injectable form of the drug and both firms were trying to develop a new oral form of the drug.

The FTC found that the oral and ingestible forms of the drug constituted separate markets. It claimed to have found an Innovation Market in the market to develop an oral form of the drug. Glaxo, undoubtedly anticipating the FTC's concerns, had volunteered to grant to a third party an exclusive licence to either its own or Wellcome's anti-migraine R&D programme.

The Commission also analysed this anti-migraine market. It found that oral and ingestible forms of the drug constituted the same market. But because it found that at least two other major pharmaceutical companies were trying to develop comparable drugs it did not see an antitrust problem.

In Europe and the US Innovation Markets are future goods markets

As shown above, at the time the American authorities were claiming they could find an Innovation Market in reality the Americans—and the European Commission—were actually regulating competition in ***34** future goods markets. After evaluating the cases discussed above, and other cases, "Did Congress Actually Create Innovation Markets?" concluded on pp.793–794:

"In none of these cases have the agencies found innovation markets. In none of these cases were the agencies able to apply Gilbert and Sunshine's innovation market methodology…The European Commission analyzed many of the same cases which the American authorities also analyzed. The European Commission, however, does not claim to have found an innovation market in these cases. And just as the European Commission was not able to find an innovation market, the American authorities were unable to find an innovation market." [37]

And as "Innovation Markets in Europe" shows, the Commission, with less fanfare, and without claiming it was finding an Innovation Market, was acting in essentially the same way as the American authorities.[38] After evaluating the cases discussed above, and other cases, "Innovation Markets in Europe" concluded on p.30 that the Commission, rather than find an Innovation Market, itself recognised that it was regulating competition in "future markets":

"In these cases the current products market was either undeveloped or did not exist at all … The Commission [called] markets for products which did not yet exist 'future markets'. The Commission then analyzed future markets in much the same way as it would a traditional product market."

The authorities on both sides of the Atlantic continued to analyse cases in this way: they protected competition in future goods markets. One example is Amgen Inc., which the 2017 Guidelines also cite.[39] The 2017 Guidelines summarise this case as: "identifying a research and development market for inhibitors of cytokines that promote the inflammation of human tissue". This summary is a simplification of the case, which actually found two specific different future goods markets regarding two different kinds of cytokine inhibitors, each with different market participants.[40] The FTC acted to protect competition in these specific future goods markets.

Thus, the "past practice" of the authorities on both sides of the Atlantic was to apply this basic methodology to regulate competition in future markets or future goods markets, which are the same thing.[41] The question now is whether, as Petit puts it, Dow/Dupont now represents "significant variations from past practice".[42] As the following analysis will show, the answer is "no". Past practice remains current practice.

Dow/Dupont: are Innovation Spaces different from Innovation Markets?

In Dow/Dupont the Commission gave us the concept of an "Innovation Space". Realising the history into which it was introducing what it claims is a new concept, the Commission, correctly, felt that it must explain how, if at all, an Innovation Space differs from an Innovation Market. The Commission's explanation, in paras 342–352, is, for lack of a better term, imprecise.

Imprecise explanations require careful analysis. And careful analysis of the Commission's explanation shows that an Innovation Space is (like an Innovation Market) actually a future goods market. Indeed, as we will see, the authorities cannot escape regulating what are in reality future goods markets.

First, in para.343, the Commission clearly recognised that, in this area, an Innovation Market is an important concept. The Commission said: "In the US, the antitrust agencies have used the concept of innovation markets". Yet, while this is true, as support for this claim the Commission cites the new, 2017 Licensing Guidelines.[43] As we have seen, unlike their 1995 predecessor, the 2017 Guidelines do not actually use the term "Innovation Market".[44] Thus the Commission implicitly recognises that the 2017 Guidelines, while not using the term "Innovation Markets", still do claim that the American authorities will find Innovation Markets.

As the Commission says, the American 2017 Guidelines do say (in § 3.2.3) that:

"A research and development market consists of the assets comprising research and development related to the identification of a commercializable product, or directed to particular new or improved goods or processes, and the close substitutes for that research and development."

But in the previous paragraph of § 3.2.3 the 2017 Guidelines say:

"[T]he arrangement may affect innovation that is related to research to identify a commercializable product or to the development of particular goods or services. 40 Alternatively, the arrangement may affect the development of new or improved goods ***35** or processes in geographic markets *where there is no actual or potential competition in the relevant goods*." 41 (emphasis added; footnotes in original)

And to support this, the 2017 Guidelines cite, in fnn.40 and 41, many cases in which the American authorities claimed to have found an Innovation Market. Footnote 40 of the Guidelines cites Wright Medical and American Home Products and fn.41 cites GM/ZF, all of which were discussed above.

Thus the 2017 Guidelines do leave open the possibility that the American authorities may claim to find an Innovation Market, a market in which innovation is itself the product, but the new guidelines just call this a research and development market. Yet as the sentence from § 3.2.3 which the Commission cites, makes clear, sometimes the Americans will examine a party's research and development assets which are directed towards the commercialisation of new or improved goods.[45] But § 3.2.3 also includes the other sentence quoted above. Clearly the American Guidelines are inconsistent and, to seek support for its supposedly new concept of an Innovation Space, the Commission is citing the American Guidelines selectively.

On the other hand, the Commission does acknowledge that it itself has issued guidelines in which it left open the possibility that it itself would find a market in which innovation is itself the product. In para.347 of Dow/Dupont the Commission quotes para.26[46] of the European Technology Transfer Guidelines[47]:

"… potential competition which must be taken into account when assessing the impact of the agreement on product markets and technology markets. *In a limited number of cases, however, it may be useful and necessary to also analyse the effects on competition in innovation separately*. This is particularly the case where the agreement affects innovation aiming at creating new products and where it is possible at an early stage to identify research and development poles. In such cases it can be

analysed whether after the agreement there will be a sufficient number of competing research and development poles left for effective competition in innovation to be maintained" (emphasis added).

If the Commission were to analyse the impact of an agreement not on a product market or a technology market (a market for existing technology), but were instead to "analyse the effects on competition in innovation separately", then it would be analysing competition in an Innovation Market, a market in which innovation were itself the product.

Yet in the very next paragraph the Commission makes it very clear that in Dow/Dupont it is not doing this. Very significantly, the Commission says it is not finding a market in which innovation is itself the product:

"[I]nnovation should not be understood as a market on its own right, but as an input activity for both the upstream technology markets and the downstream product markets. This however does not prevent the Commission to assess the impact of the Transaction …".[48]

The Commission then goes on to describe its two-step methodology which it says allows it to define an Innovation Space. Since an Innovation Space is not a separate market in which innovation is itself the product, an Innovation Space is clearly narrower than the Innovation Market Gilbert and Sunshine describe in their article. But if the Innovation Space methodology does not allow the Commission to define a market in which innovation is itself the product, then how, if at all, does an Innovation Space differ from a future goods market? As we will see, it does not. Careful analysis of the Innovation Space methodology reveals that an Innovation Space is just a broadly defined future goods market.

The Commission describes the first of its two-step methodology to find an Innovation Space in Dow/Dupont, para.349:

"First, the assessment of innovation competition requires the identification of those companies which, at an industry level, do have the assets and capabilities to discover and develop *new products* which, as a result of the R&D effort, can be brought to the market" (emphasis added).

This first step, therefore, requires the Commission to identify companies *capable* of making the relevant *new products*.

The Commission describes the second step of its methodology in para.350:

"Secondly, it is also relevant to identify and analyse those spaces in which innovation competition occurs in the crop protection industry. The R&D players do not innovate for all the product markets composing the entire crop protection industry at the same time. They also do not innovate randomly without *targeting specific* spaces within that industry. When setting up their innovation capabilities and conducting their research R&D players have *specific discovery targets*." (emphasis added) ***36**

This second step therefore requires the Commission to identify the companies which are actually trying to make *specific discovery targets*. Thus, unless a "target" is different from a "product", this second step requires the Commission to determine which companies are actually trying to make the relevant future goods—those which will compete in the future goods market.

How, if at all, is a "target" different from a "product"? The Commission's answer, in para.351, shows that in reality there is no difference between a "target" and a "product". As the Commission further describes the second step of its methodology in para.351:

"A given *discovery target* is based on lead crops and lead pests and may thus comprise AIs [Active Ingredients] that can be used in *several downstream formulated product markets* (for example chewing Lepidopteran insecticides, broadleaf herbicides)". (emphasis added).

This paragraph is on one hand ambiguous, but on the other hand this ambiguity is actually irrelevant. Since the active ingredients could be used to make several downstream future products, then either the active ingredients are themselves the products which are competing in the future goods market, or the "downstream formulated products" are the goods competing in the future goods markets. On one level this is a matter of semantics, and on another level outside observers cannot tell because the decision does not reveal enough technical information. But the answer really does not matter; despite the ambiguous wording the Commission will not find an anti-competitive problem unless the relevant products would, in the future, compete against each other.

The Commission goes on in para.351 to, again, imply that an Innovation Space is broader than a future goods market; but, again, careful analysis shows it is not. The Commission next says in para.351:

"The spaces where innovation competition takes place are thus broader than an individual downstream crop protection market, but are nonetheless small."

The Commission says that Innovation Spaces are "broader than an individual downstream crop protection market, but are nonetheless small". But if an Innovation Space is "small" than how, if at all, does it differ, at most, from a broadly defined individual downstream crop protection market? The answer is it does not: an Innovation Space is at most a broadly defined future goods market.

In Glaxo/Wellcome, discussed above,[49] while the FTC found that the oral and injectable versions of the relevant anti-migraine drug did not compete in the same market, the Commission found that these two variations of the same drug did compete in the same future goods market. In that case the Commission said it conducted its enquiry:

"in order to verify that the acquisition of Wellcome by Glaxo would not result in a significant reduction of potential competition within the market for antimigraine products." [50]

Thus in that case the Commission analysed the potential competition in the market for anti-migraine products. Since Glaxo sold an injectable form of the drug and both firms were trying to develop a new oral form of the drug, and the Commission found that this was one market, the Commission in that case analysed a future goods market for all the new anti-migraine products.

How, if at all, does the Commission's finding in Glaxo/Wellcome differ from its finding in Dow/Dupont? The answer of course is very little, if any. In Glaxo/Wellcome the Commission found a future goods market which it defined more broadly than the Americans. While technical information is lacking in Dow/Dupont, at most in Dow/Dupont the Commission found a similarly broad future goods market.

And, in Dow/Dupont, the Commission concludes para.351 by saying:

"In fact, in light of increasing regulatory hurdles, which require crop protection products to be ever more selective, *the innovation spaces in the crop protection industry are getting ever smaller*: the innovation output tends to be confined to ever *narrower spaces* from which it is *more difficult to adapt the innovation to other purposes*." (emphasis added)

Obviously, if the innovation can only be adopted for one purpose, then it can be adopted to make just one product—the product that will compete in the future goods market.

And the Commission concludes its Innovation Space methodology in para.352:

"In conclusion, in order to assess innovation competition, the Commission will both consider metrics of innovation taking place at industry level, as well as innovation taking place in spaces consisting of groupings of crop/pest combinations (as will be defined *specifically* for the areas where the Parties overlap in Section V.8.8)" (emphasis added).

By considering innovation at "the industry level" the Commission presumably is referring to the first step of its methodology. It is thus repeating the requirement that it identify firms capable of making the relevant future ***37** good. And by saying that Section V.8.8 illustrates how it applies the second step of its methodology, as shown below, the Commission if effect says that indeed, the second step of its methodology requires it to identify future goods markets.[51]

Applying the Innovation Space methodology: Section V.8.8

In Section V.8.8 the Commission does indeed explain the markets within which it is protecting competition. The first few paragraphs of this section remove any doubt that the Commission is protecting competition in future goods markets. The very first paragraph of this section, para.2600, cites para.28 of the Horizontal Merger Guidelines, which the Commission promulgated all the way back in 2004.[52] As para.2600 of Dow/Dupont recognises, para.28 of the Horizontal Merger Guidelines says that the higher the substitutability of different products, the more they exert competitive pressure on each other. Thus in para.2600 the Commission acknowledges that it is applying a very well established principle. Thus the Commission acknowledges, again, that when it finds Innovation Spaces it is not applying new principles.

And in the next paragraph, 2601, the Commission acknowledges that to see if there is a competitive problem in an Innovation Space it will look at current products and new specific products—*early pipeline products*—which the merging firm will sell in the future:

"The extent to which the Parties exert competitive pressure on each other on innovation competition can be captured by *current product overlaps* as well as by overlaps in their lines of *research and early pipeline products*." (emphasis added)

And in the next paragraph, 2602, the Commission says that this section analyses "concrete cases" in which the merging firms are developing products which, if the merged firm sold one, then it would be unlikely to sell the other. Thus the Commission, applying the standard of para.28 of the Horizontal Merger Guidelines, is ensuring that these products, which it clearly believes are either identical or close substitutes for each other, are sold in the future. Thus, the Commission in effect says, it is acting to ensure that there is competition in concrete future goods markets.

The rest of the section does indeed analyse these concrete future goods markets. The decision redacts too much confidential information for outsiders to determine exactly how much each relevant future product differs from the other. But clearly the Commission believes that each future product would exert competitive pressure against at least one other future product. Thus, again clearly, the Commission is analysing future goods markets.

The Commission falsely claims to be—directly—evaluating R&D capability

Petit, and others, attach great significance to the Commission's claim in Dow/Dupont that it was able to look at the merging firms' R&D capabilities. Petit says on pp.891–892 that another difference between the Commission's methodology in Dow/Dupont and:
5.

"Proof

Past EU and U.S. practice is one of method. Until now, agencies had measured the merging parties' competitive strengths in innovation by looking up the value chain: they considered R&D investments, assets and strategies. 99 On that basis, agencies have mostly focused on characterizing substitute R&D pipelines and on measuring the postmerger reduction in alternatives. 100 In recent years, antitrust guidelines have, however, appeared to stray from purely structural analysis, delineating R&D markets by qualitative observations of similarities in firms' research capabilities, assets, and characteristics. 101 In contrast,

the Commission in Dow/DuPont essentially measured competition in innovation spaces by looking down the value chain. 104 Instead of considering R&D expenditure, the Commission relied on the patent portfolios of the merging companies as 'a metric to assess their strength at the discovery level'." 105 (footnote numbers in original)

Thus, as Petit himself acknowledges, the Commission acted, not because Dow and Dupont each had great research abilities, but because by merging they would create a new firm with a broad patent portfolio. The Commission said explicitly in para.387 of Dow/Dupont, as Petit himself acknowledges,[53] that the Commission used the merged firms' patent portfolio as a metric to assess the merged firm's R&D abilities.

Yet this is what all the antitrust authorities have always done in the appropriate case—act to stop a firm from having so broad a patent portfolio that it could block entry into the market.[54] As we have already seen, and as discussed in greater detail below, this is exactly what the American authorities did in the very cases and authorities Petit cites in his fnn.100 and 101—Ciba-Geigy/ Sandoz, ***38** Sensormatic and the 1995 and 2017 American Licensing Guidelines. Petit claims that these cases and authorities support his conclusions quoted above but they do not.

In almost all cases in which firms combine patents in a way which may allow them to improperly block entry into the broad market these firms will have significant R&D capabilities. If two firms control patents of such breath and quality that their transaction will create so large a patent portfolio that they may be able to block access to a market, then almost by definition the two firms must have had the significant R&D capabilities needed to generate those patents of such breath and quality.

And even if the firms somehow lack the significant R&D capabilities, but still combine patents of such breath and quality that they could block access to a broad market, the authorities still will not allow them to do so. The Commission, for example, would not have allowed Dow and Dupont to create a broad patent portfolio, and spin it off in some entity which, even if it lacked R&D capability, could still block access to the broad market.

In fn.100 Petit cites the FTC's decisions in Ciba-Geigy/Sandoz and Sensormatic, but these cases do not provide Petit with the support he claims they do. According to Petit, these cases show that "agencies have mostly focused on characterising substitute R&D pipelines". But, as shown above,[55] in these cases the FTC acted to block the firms from creating patent portfolios that would be so broad that they could block entry into the larger market. In Ciba-Geigy/Sandoz the FTC *also* identified four specific future goods markets in which it believed the merging firms, were it not for the merger, would compete in the future.[56] And in Sensormatic the FTC did not even do this.[57] Thus the FTC in these cases did exactly what the Commission did in Dow/Dupont.

Further, as the sentence of para.15 of the Ciba-Geigy/Sandoz complaint, quoted above,[58] makes clear, in that case the FTC was, in reality, using the merging firms' patent portfolio as "a metric to assess their strength at the discovery level". As Petit acknowledges, the Commission was doing exactly the same thing. Petit cites para.387 of the Dow/Dupont decision, in which the Commission said:

"While different companies have different patenting strategies, the analysis of the patent portfolio of crop protection companies can be a metric to assess their strength at the discovery level." [59]

Thus even though the Commission claimed in other paragraphs in Dow/Dupont that it was looking at the merging firms' broad innovation capabilities, and Petit and others seem to believe that it did do this, in reality the Commission evaluated the strength of Dow's and Dupont's patent portfolio. It was reasonable for the Commission to do this, just as it was reasonable for the FTC to do the same thing in Ciba-Geigy/Sandoz: if firms have broad patent portfolios then they most probably also have strong R&D capabilities. But the authorities are acting, not directly because the merged firm will have strong R&D capabilities, but because it will have too broad a patent portfolio. Thus the Commission's actions were not unreasonable, just not new.[60]

In fn.101 Petit contrasts the 2017 Licensing Guidelines with the 1995 Licensing Guidelines. Petit says that the newer guidelines no longer use the term "Innovation Market," and he thus implies that the 2017 Guidelines no longer claim to apply the Innovation Market concept. However, as shown above, the new guidelines have not changed the concept, they just call them "research and development markets".[61]

Further, Petit cites this contrast to support his claim that, pursuant to the 2017 Guidelines, the antitrust authorities (presumably including the Commission) are now, as quoted above, "delineating R&D markets by qualitative observations of similarities in firms' research capabilities, assets, and characteristics". This seems to mean that the authorities are, according to Petit, examining firms' R&D capabilities.

But again, the authorities have always claimed they could do this. While Petit correctly notes that the 2017 Guidelines allow for such analysis, so too did the 1995 Guidelines, which provide in § 3.2.3:

"An innovation market consists of the research and development directed to particular new or improved goods or processes, and the close substitutes for that research and development."

On the other hand, Petit does correctly point out that in the 2017 Guidelines the American authorities do stop using the term "Innovation Market". Petit implies that by doing this the American authorities are admitting that that they cannot find an Innovation Market. As shown above, this is not true: the 2017 Guidelines do still implicitly claim that they can find Innovation Markets.[62] Further, to the extent one wants to interpret the 2017 Guidelines as admitting that the Americans cannot find an Innovation Market, then this is because the authorities are only able to actually regulate a more narrow future goods market. This does not at all support Petit's contention that the Commission is able to define an Innovation Space which is broader than an Innovation Market. ***39** [63]

Commission economists: innovation is important

As Petit also notes, economists with connections to the European Commission, but writing independently, have published articles which support the idea that mergers can lessen competition to innovate.[64] Since these authors published their articles at more or less the same time that the Commission issued its Dow/Dupont decision, Petit speculates that these articles influenced, or illustrate, the model the Commission used when deciding Dow/Dupont.

The temptation to compare these articles to Gilbert's and Sunshine's article is strong, but doing so would be misleading. Gilbert and Sunshine also published their article at more or less the same time that the American authorities issued their 1995 Licensing Guidelines. But Gilbert and Sunshine laid out the methodology they believed the antitrust authorities should use to define an Innovation Market. The authors of the articles Petit cites, by contrast, do not lay out a methodology which they believe the Commission should use to find an Innovation Space.

The authors Petit cites instead develop an economic model which they say shows that competition spurs innovation. And they say that mergers which hinder competition also retard innovation. This general conclusion, that antitrust authorities should protect competition so as to spur innovation, is not new.[65] And to the extent these articles, while not advocating Innovation Spaces specifically, advocate that antitrust authorities should enforce the antitrust laws vigorously so as to spur innovation, they do advocate what the Commission actually is doing in Dow/Dupont.[66]

Further, Annex 4 of the Dow/Dupont decision, in which the Commission explains its economic reasoning, does not cite either of these articles. These articles therefore do not seem to have the close relationship with the Dow/Dupont decision that Petit implies.

Further, in Annex 4 the Commission itself claims it is doing nothing new. As the Commission says in para.5 of this Annex:

"The economic principles laid out in the economic literature indicate that a merger between two out of a limited number of significant innovators is likely to reduce product innovation."

Thus in this Annex 4 the Commission itself says that when deciding Dow/Dupont it was just applying generally accepted economic theory. Thus the Commission itself says that in Dow/Dupont it did nothing fundamentally new.

Conclusion: same fundamental methodology, applied aggressively

As this article has shown, whenever any authority has tried to regulate competition to innovate it has, in reality, acted to ensure that a sufficient number of products will compete against each other in the future—that the future goods markets will be competitive. Or the authorities have acted to ensure that the relevant firms do not block entry into the broader market, in particular by creating too broad a patent portfolio. If the authorities did not limit themselves in these two ways then, as a practical matter, there would be no limits on when an authority may act. And the authorities have to develop a methodology which limits their actions in some reasonable way.

Further, there will always be issues on the edge. For example, when are future products' features sufficiently different that the products are "different"? In Glaxo/Wellcome the FTC found that the oral and injectable versions of the anti-migraine drug competed in separate markets while the Commission found that both versions of the drug competed in the same market.[67] In Dow/Dupont, as it did in Glaxo/Wellcome, the Commission may have found a broad future goods market. Doing so is not "wrong", but doing so is also not new.

Another issue on the edge is: When are products which don't exist yet sufficiently formed that they are "products"? Comparing the answers to this question across cases is very difficult first because doing so requires one to, almost literally, compare apples to oranges. Secondly, the available case information often lacks sufficient technical detail. In Dow/Dupont however, it is fair to say the Commission answered this question more aggressively than did DOJ,[68] and, possibly, more aggressively that it or the American authorities have done in at least some past cases.

This is what the Commission did, define a future product aggressively, in two oft-cited paragraphs of Dow/Dupont, paras 3025 and 3053.[69] In both paragraphs the Commission said it could not: "identify precisely which early pipeline products or lines of research the Parties would likely discontinue, defer or redirect".[70] In both paragraphs the Commission was summarising its ***40** analysis of many different development efforts: in para.3025 for herbicides (s.8.9.2), insecticides (s.8.9.3), and fungicides (s.8.9.4), and in para.3053 also for fungicides. In both paragraphs the Commission in effect said that while it did not know which development efforts would succeed, enough would probably succeed that but for the merger the development efforts would probably create some products which would compete against each other in the future.[71] And the Commission acted to protect competition in these future goods markets.[72]

Another issue on the edge is: How many competitors must remain in the market for the market to be "competitive"? Dow and Dupont were the numbers four and six competitors in the broad crop protection market, and smaller firms competed in various market subsegments. Thus, while the actual numbers varied from product to product, it seems that, in general, the Commission found a merger which left five competitors in the market as not sufficiently competitive.[73] By contrast, in Glaxo/Wellcome a decrease from three to two competitors did not seem to concern the Commission.[74] Again, the Commission seems to have been aggressive in Dow/Dupont.

Another issue on the edge is: what should the remedy be? The Commission in Dow/Dupont required the merging firm to spin-off its research unit.[75] In Ciba-Geigy/Sandoz, when the FTC reached a conclusion similar to the one the Commission reached in Dow/Dupont, it required the merged firm to grant non-exclusive licences to essential technology.[76]

Thus in Dow/Dupont the Commission decided these and related issues on the edge aggressively. It is hoping that by aggressively enforcing the antitrust laws it will, among other things, spur innovation.[77] There is nothing wrong, and indeed everything right, with aggressively enforcing the antitrust laws. And protecting competition in future goods markets is aggressively enforcing the potential competition doctrine.[78] But aggressively enforcing the antitrust laws is not fundamentally new. By doing so the Commission did not create an entirely new methodology.

Thus the dream of regulating innovation directly remains just that, a dream. In their new Licensing Guidelines the Americans are keeping their dream alive.[79] Perhaps it is fitting that the European Commission, which among other things regulates competition in Spain, has not only joined the Americans, but now claims to be leading the fight to regulate innovation directly. Yet the dream of being able to do so remains just that, a dream. The (so far) impossible dream.

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Footnotes

1 BA, Stony Brook University; Juris Doctor, University of California, Berkeley; MBA, Columbia University; PhD, Roskilde University, Denmark. Partner, The Interagan Technology Group. The author wishes to thank Robert H. Lande, Morten Broberg and Henrik Buhl for all their help; any errors, however, remain my own.

1 Lawrence B. Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21.

2 See also Lawrence B. Landman, "Did Congress Actually Create Innovation Markets?" (1998) 13 Berkeley Tech. L.J. 721.

3 This includes markets in which one product is already sold and one, or more, products will probably be sold in the future.

4 Commission Decision of 27.3.2017 declaring a concentration to be compatible with the internal market and the EEA Agreement (Case M.7932—Dow/DuPont).

5 Nicolas Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 875–876.

6 While many commentators see Dow/Dupont as ushering in a significant new methodology, see, e.g. Nelson Jung and Elizabeth Sinclair, "Innovation Theories of Harm in Merger Control: Plugging a Perceived Enforcement Gap in Anticipation of More Far-Reaching Reforms?" (2019) 40 E.C.L.R. 266, others see the Dow/Dupont decision as offering a new, but perhaps not revolutionary, methodology, see, e.g. Marina Chernenko, "An Innovative Theory of Innovation Harm? An Assessment of the European Commission's Approach to Innovation Competition in Merger Review" (2019) 40 E.C.L.R. 9.

7 The Dow/Dupont Decision cites in, among others, para.343, proposed guidelines: Dept. of Justice (DOJ) and Federal Trade Commission (FTC), Antitrust Guidelines for the Licensing of Intellectual Property: Proposed Update (2016). The Americans have since issued final guidelines. Since these final guidelines are, for the purpose of this article, identical to the proposed guidelines, this article will cite the final guidelines: DOJ and FTC, Antitrust Guidelines for the Licensing of Intellectual Property (2017) (2017 Licensing Guidelines).

8 See below fn.48 and accompanying text.

9 United States v General Motors Corp., No. 93-530 (D. Del. filed 16 November 1993).

10 DOJ and FTC, Antitrust Guidelines for the Licensing of Intellectual Property (1995) (1995 Licensing Guidelines).

11 See above fn.7.

12 Compare § 3.2.3 of the 1995 and 2017 Guidelines. The major change is just to substitute the term "research and development" for "innovation", and thus to refer not to Innovation Markets but to research and development markets.

13 See also below text accompanying fn.61. Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873 is wrong to imply on p.892, in fn.101, that the 2017 Guidelines do not claim to still apply the Innovation Market concept.

14 These include not only GM/ZF but also *Wright Medical* and *American Home Products*, which are discussed below. See text accompanying fnn.18–23.
15 See Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21, 22.
16 Arguably DOJ also regulated the future goods market for better automatic transmissions. For an in-depth analysis of this case see Landman, "Did Congress Actually Create Innovation Markets?" (1998) 13 Berkeley Tech. L.J. 721, 759–767.
17 Landman, "Did Congress Actually Create Innovation Markets?" (1998) 13 Berkeley Tech. L.J. 721.
18 Wright Medical Technology, Inc., 60 Fed. Reg. 460 (F.T.C. 1995).
19 American Home Prods. Corp., 59 Fed. Reg. 60,807 (F.T.C. 1995).
20 See text accompanying fnn.55–63.
21 Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21, 23.
22 Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21, 23.
23 The 2017 Guidelines also cite Amgen Inc., 134 F.T.C. 333, 337–339 (2002). But in this case the FTC just found a future goods market of inhibitors of cytokines that promote the inflammation of human tissue. Again, it found, not an Innovation Market, but a future goods market. See also below, text accompanying fnn.39–40.
24 Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21, 23.
25 Sensormatic Elecs. Corp., 60 Fed. Reg. 5428 (F.T.C. 1995).
26 Ciba Geigy Ltd., FTC File No. 961-0055 (5 December 1996).
27 Ciba-Geigy/Sandoz, Case No. IV/M.737 (17 July 1996).
28 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 891, and at fn.100 cites Ciba-Geigy/Sandoz and Sensormatic as showing that the "agencies have mostly focused on characterising substitute R&D pipelines and on measuring the post-merger reduction in alternatives". "R&D pipelines" are presumably R&D efforts to create new products. Petit therefore seems to be saying that in these cases the agencies focused on the companies' efforts to create new products—in other words on their efforts to compete in future goods markets. This is particularly true since Petit says on p.888, fn.81 that Sensormatic relates to a market for new disposable labels. But see, regarding Ciba-Geigy/Sandoz, fn.59.
29 These are laid out clearly in Landman, "Did Congress Actually Create Innovation Markets?" (1998) 13 Berkeley Tech. L.J. 721, which discusses this case in detail on pp.787–793.
30 In para.1 of the complaint the FTC says that: "Ciba participates in the field of gene therapy in the United States through the Chiron Corporation".
31 See also Landman, "Did Congress Actually Create Innovation Markets?" (1998) 13 Berkeley Tech. L.J. 721, 787–792.
32 See below text accompanying fnn.53–63.
33 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 881 and 905.
34 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 888, fn.81 (referring to this case as "Glaxo").
35 Glaxo Plc, FTC File No. 951-0054 (29 March 1995).
36 Glaxo/Wellcome, Case. No. IV/M.555 (28 February 1995).
37 As *Marcus Glader, Innovation Markets and Competition Analysis (Cheltenham: Edward Elgar 2006)* notes on p.163 regarding Ciba-Geigy/Sandoz, regulating competition in a future goods market is an expansion of the potential competition doctrine.
38 See also Lawrence B. Landman, "Innovation and the Structure of Competition: Future Markets in European and American Law" (1999) 81 J. Pat. & Trademark Off. Soc'y 728, 789, 838.
39 2017 Licensing Guidelines § 3.2.2, fn.40.
40 134 F.T.C. 333, 337–339 (2002).
41 For an overview of the European cases in this area see Chernenko, "An Innovative Theory of Innovation Harm? An Assessment of the European Commission's Approach to Innovation Competition in Merger Review" (2019) 40 E.C.L.R 9. See also Mario Todino, Geoffroy van de Walle and Lucia Stoican, "EU Merger Control and Harm to Innovation—A Long Walk to Freedom (from the Chains of Causation)" (2018) 64 Antitrust Bull. 11 arguing that previous Commission decisions have laid the groundwork for "the novel theory of harm developed in Dow/DuPont".
42 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 875.
43 The Commission actually cited the 2016 proposed guidelines. As explained at fn.7 above, this article refers instead to the 2017 Guidelines.
44 See above fn.12 and accompanying text.
45 Since these research and development assets are "directed towards the commercialization of new or improved goods" even when applying this test the American authorities are in effect finding future goods markets. And

indeed, as this section of this article shows, when examining an Innovation Space the European Commission is doing so as well.

46 The Dow/Dupont Decision incorrectly cites this as para.27.

47 Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements (2014/C 89/03) (European Technology Transfer Guidelines).

48 Dow/Dupont Decision at para.348.

49 See above text accompanying fnn.34–36.

50 Glaxo/Wellcome Decision, at para.30.

51 In Commission Decision of 21.3.2018 declaring a concentration to be compatible with the internal market and the EEA agreement (Case M.8084 – Bayer/Monsanto), the Commission essentially repeated this definition of an Innovation Space. See, e.g. para.80, fn.23: "The term 'innovation spaces' refers to spaces in which innovation competition occurs … R&D players … do not innovate randomly without targeting *specific* spaces within that sector. When setting up their innovation capabilities and conducting their research, R&D players have *specific research targets*" (emphasis added).

52 Guidelines on the Assessment of Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings (2004/C 31/03).

53 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 892, fn.105.

54 See, e.g. European Technology Transfer Guidelines, para.179.

55 See above text accompanying fnn.24–31.

56 See above fn.29 and accompanying text.

57 See above text accompanying fnn.24–25.

58 See above text accompanying fn.31.

59 Petit, Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 892 also notes the similarity between Ciba/Geigy and Dow/Dupont on p.893, fn.107. But he does not draw the appropriate conclusion: the authorities are acting in exactly the same way.

60 In Bayer/Monsanto not only did the Commission repeat its definition of an Innovation Space, see above fn.51, but it also examined the merging firms' patent portfolios, see, e.g. para.1045: "[P]atents are a key determinant in the commercial and development strategies of the Parties".

61 See above text accompanying fnn.11–13.

62 See above text accompanying fnn.11–13.

63 See above text accompanying fn.5.

64 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 882 cites, in fn.45, Giulio Federico, Gregor Langus and Tommaso Valletti, "A Simple Model of Mergers and Innovation" (2017) 157 Econ. Letters 136 and, in fn.46, Giulio Federico, Gregor Langus and Tommaso Valletti, "Horizontal Mergers and Product Innovation" (2018) 59 Int'l J. Indus. Org. 1.

65 See, e.g. Lawrence B. Landman, "The Economics of Future Goods Markets" (1998) 21 World Competition: Law and Economics Review 63. As I say on p.85: "When the authorities argue that innovation is important and that competition encourages innovation, they are explaining why they act in all cases."

66 As the conclusion explains, in Dow/Dupont the Commission is aggressively enforcing the antitrust laws.

67 See above text accompanying fnn.34–36.

68 See above fn.33.

69 See, e.g. Todino, van de Walle and Stoican, "EU Merger Control and Harm to Innovation—A Long Walk to Freedom (from the Chains of Causation)" (2018) 64 Antitrust Bull. 11, quoting para.3025 on p.21, Jung and Sinclair, "Innovation Theories of Harm in Merger Control: Plugging a Perceived Enforcement Gap in Anticipation of More Far-Reaching Reforms?" (2019) 40 E.C.L.R. 266, quoting para.3053 on p.271 (with an incorrect attribution), and Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, citing both paragraphs on p.880, fn.32.

70 In para.3025 the Commission uses the word "re-direct".

71 In addition, the Commission was also acting in these markets to stop the firms from improperly combining patents and other intellectual property. See above text accompanying fnn.24–31 and 53–60.

72 In related paragraphs of the Dow/DuPont Decision, such as paras 3021 and 3057, the Commission tries to evaluate the firms' incentives to innovate. This analysis is of course speculative. In reality the Commission is assuming that by preserving competition in the future goods markets it is spurring innovation. See Landman, "The Economics of Future Goods Markets" (1998) 21 World Competition: Law and Economics Review 63. Regarding para.3057 see Chernenko, "An Innovative Theory of Innovation Harm? An Assessment of the European Commission's Approach to Innovation Competition in Merger Review" (2019) 40 E.C.L.R. 9, 18.

73 Petit, "Innovation Competition, Unilateral Effects, and Merger Policy" (2019) 82 Antitrust L.J. 873, 878.

74 Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21, 25.
75 Dow/DuPont Decision, para.3912.
76 Landman, "Innovation Markets in Europe" (1998) 19 E.C.L.R. 21, 29.
77 This is consistent with the articles the Commission economists published. See above text accompanying fnn.64–66.
78 See above fn.37.
79 See above text accompanying fn.63.

E.C.L.R. 2021, 42(1), 30-40