

Untangling innovation in EU merger control

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The European Commission's Directorate-General for Competition has renewed its focus on deals' effects on innovation. At GCR Live: Brussels in July 2017, a panel of experts explored the issue.

DG Comp has frequently analysed pipeline products when figuring out what could happen to them post-merger, perhaps most prominently in a slew of generic pharmaceutical tie-ups.

But recent years have seen DG Comp not only refine how it conducts that type of small-picture product-specific analysis, but also start looking at the big-picture effects of what a deal could do to innovation in relevant sectors as a whole, with Dow/DuPont unusually involving an analysis of 'innovation spaces'.

There's a lot to unpack. In July, GCR Live gathered a panel in a bid to clarify where DG Comp currently stands, cover the controversy in its stance – and to establish what has actually changed. This is a transcript of that session, edited for brevity and clarity.

Speakers

Benoît Durand – RBB Economics, Brussels (moderator)

Fiona Carlin – Baker McKenzie, Brussels

Frederic Depoortere – Skadden Arps Slate Meagher & Flom, Brussels

Giulio Federico – European Commission's Directorate-General for Competition, Brussels

David Tayar – Clifford Chance, Paris

Benoît Durand: The issue of competition and innovation has been debated for decades between economists. On the one hand, competition is probably a very good thing for innovation. It stimulates firms to innovate. Firms that are racing to develop a new product or patentable technology will be under pressure and they will do this quickly if they feel they won't be the first. So in that sense, a reduction in competition may not be such a good thing for innovation. But on the other hand, there is also the view that, after all, firms are trying to innovate – and what they are trying to get at is obtaining a good payoff out of it. If firms are sufficiently large, they may be better equipped or better able to actually recoup the fixed cost of R&D, and maybe also reap a higher benefit from the R&D investment. So less competition will seem to actually, in this sense, promote innovation; if there is too much competition at the product level, it might be more difficult to appropriate those returns on investment.

What are the standard innovation theories of harm? Can we apply the presumption that when markets are too concentrated, they are likely to give rise to harm to innovation? There is a notion that when a market becomes too concentrated as a result of a merger, there might be a presumption it will lead to price increases. Can that presumption be also transferred to innovation? To start this, I'll ask Fred to give us his views on these questions.

Frederic Depoortere: My first question is the following: is it really a good idea for the commission to apply economic theory to concrete cases before the economic theory is sufficiently settled?

I'm not an economist but what I think is clear from what Benoît said is that innovation competition is complex. You need to look at these two forces that work in the context of innovation competition: on the one hand, cannibalisation – less competition could lead to less innovation; and on the other hand, appropriability – less competition could, in certain circumstances, lead to more innovation. So you have these two forces – cannibalisation and appropriability – that work together.

Now, it's incumbent on the commission to carefully analyse these two forces. Paragraph 38 of the merger guidelines confirms this. The first sentence of paragraph 38 says that "a merger may increase the firm's ability and incentive to bring new innovation to the market". Paragraph 38 recognises the point that increased concentration pursuant to a merger may lead to more innovation. The problem is that in its first case where innovation competition is assessed as such, so independent from buy-plan products, the commission has ignored the complexity of innovation competition analysis.

The way the commission has done this – and I think everybody will be able to judge when the decision is actually published – it basically dismisses the concept of appropriability fairly quickly and focuses instead mainly on cannibalisation, to which it then applies its standard framework. It looks at closeness of competition in innovation efforts and it also compares, or tries to compare, the strength of innovation of the two merging parties with the competitors' strength. As you can imagine, in the context of innovation competition, all of these standard metrics and measures or concepts on the price competition do change and do become quite abstract.

My second point is that the commission should capture the complexity of innovation competition in this theory of harm, and it cannot do what it did in Dow/DuPont, saying that – I quote from the decision – "A discussion on the appropriate notion of appropriability is largely semantic, as the commission's theory of harm on innovation captures all of the possible effects raised by the parties." I don't think you can just dismiss appropriability like that.

Then two more short points: one, the commission considers the possible pro-innovation effects of a merger due to appropriability and also economies of scale. This goes to the burden of proof. The commission focuses on canni-

balisation, loss of competition equals loss of innovation, and then basically it's up to the parties to prove that this conclusion is not correct.

I don't think this is the right approach. As Benoît said, appropriability should be a full and integral part of the commission's analysis of the competitive effects on innovation competition.

Finally, there's a question of quantification. There needs to be a significant impediment of effective competition. You cannot just say there's a loss of innovation competition and be done with it. The issue was very important in Dow/DuPont in the crop protection business because innovation is driven largely by increasing resistance of crops to pesticides, and regulation. Increasing regulation and changing regulation forces companies to always come up with new products. Those are very important driving forces that would continue to force companies to innovate, and the commission said: "Well, we are going to ignore those largely because the merger doesn't affect them; they don't change; they're not affected by the merger."



Fiona Carlin: It seems to me that the real discussion today is: Can we craft a test that's fit for purpose in the real world?

I was following the debate with interest as the commission went from the Bayer/Aventis Crop Science in 2000 to Medtronic/Covidien, to Pfizer/Hospira where they are looking at innovation, going back to pipeline products. I can get that you look at the pipeline because you can see that there's a real product that's going to come on the market in some foreseeable future, and that's a legitimate area of concern. I think GE/Alstom started to break new ground, and introduced a broader notion of innovation harm. I was a little bit baffled, I suppose, with some of the criteria that the

commission apparently place quite a lot of weight on. For example, the fact that Alstom was in the top three in the industry in terms of research spend; it had the highest number of full-time equivalent R&D headcount in the business; it had shinier and brighter testing facilities; and that somehow all of these various factors suggested that its powers and innovative force was greater than its actual market shares than a product market would have suggested.

And then we have Dow/DuPont, and I'm talking about innovation spaces all of a sudden. They also started looking at patent citations – which is another kind of curious factor; you wonder, well, why are you only looking at external patent citations? Why not internal, what's the relevant framework, what's the relevant time or geographic scope, how does this work?

In Dow/DuPont – I'm only quoting from the press release and some presentations that the commission has made on the case – it seems to have relied on an observed negative relationship between past consolidation in the industry and innovation levels in this sector, so reduced R&D spend and a significant increase in EBITDA to kind of show that profitable innovation output restriction is a viable and feasible option. I'm asking myself whether merger control is the appropriate instrument to actually address the imperfections of the capitalist markets.

To take it back to the beginning, where I struggle is the notion of innovation markets and how to even just begin to define that, in order to then get to what presumptions might be appropriate when you are looking at innovation theories of harm. I get that a definition anchored on likely outcomes in terms of real products and processes is something tangible and a sensible starting place. But the commission is going much beyond that, and Dow/DuPont would seem to involve looking at relative advantages in R&D capability divorced from any potential product market at the end of it.



Giulio Federico: As usual I speak in my personal capacity, and this topic is of great interest to me but doing justice to it in five minutes is going to be impossible.

I will of course talk about the framework and theory of harm, but let's remember that these cases were grounded in facts first and foremost, not in economic theories. Fred probably knows that, for example, Dow/DuPont was driven in large by the body of evidence – in particular initially on the significant R&D cuts that Dow and DuPont planned as part of their synergies plan.

It's important to discuss facts, which includes the dates of patents; the significance of the evidence on suppression of innovation efforts; the presence and strength of other rivals in innovation. On the theory of harm, I think it's important to bear in mind that at least in my mind, an innovation theory of harm is about whether a merger between two out of a small number of significant innovators may harm future competition, and therefore lead to future harm to consumers via two mechanisms. One is the suppression of future price competition based on improved products; the second is whether there's also suppression of innovation efforts. Both of those, I think, are innovation-related theories of harm because they are both premised on the fact that absent the merger, the parties would have innovated. There is price component to that: future prices go up based on improved products.

But you know, all the R&D guidelines, and block exemption regulations, and IP guidelines, which are about cooperation on R&D and suppression of competition, are concerned about this effect. They realise that cooperation will be good in some cases but also may suppress that competitive process in others. I find the debate more interesting when we come to limiting principles: when a theory of harm is really concerned about the significance of the effect, and when it is not. I think Dow/DuPont is trying to set out a limiting principle.

I think there are some principles from the economic literature. If we're talking innovation, innovation needs to be an important competitive parameter; so if it is about steel or chemicals in a very stable technology we may be worrying about process innovation, but most likely we are worrying about standard static price effects. The second: high concentration matters. You're bringing together two significant close innovators, so innovators are likely, absent the merger, to capture sales from each other in an environment where that diversion of sales between them is high, because there are few other innovation competitors. So I don't think any authority will bring an innovation case in a fragmented market.

I don't think that the basic common sense logic of unilateral effects is going out of the window because we are talking about innovation. Of course the other effects need to be looked at carefully, and of course you have to fine-tune the theory of harm to the nature of the competitive parameter you are talking about, but I don't think that the rest of the framework goes out of the window. The drafters of the merger understood this because in paragraph 8 they do say we worry about competition and price, quality and innovation. The rest of the guidelines apply, by implication, to the other competitive parameters.

David Tayar: First of all, I think that there was an implicit throughout the discussion until now between two situations which are actually very different: the traditional product-specific situation, and the broader macro concern about the effect of mergers on innovation. We should keep that distinction in mind, as concerning product-specific concerns I don't think there is anything surprising or unusual in the analytical framework that the commission has



been following – it's really about the reduction of the number of alternatives in potentially concentrated markets. I think that in such circumstances, the traditional presumption of price increases should arguably apply.

This being said, I don't think this means there are not certain product-specific issues that can arise with respect to innovation. I think all those issues really relate to the fundamental question about the uncertainty as to whether or not by buying a product, we will reach the market.

To illustrate this point, I will take the example of the generic pharmaceutical industry, with which I'm a little bit familiar. There has been considerable uncertainty in this

field: At which point in time does a pipeline product really become for the competition assessment? As of when a pipeline product really becomes relevant for the analysis, in the early days of generic-to-generic mergers, the commission took a six-month period as the cut-off date. It then moved the needle to one year, and then it was one year and a half, and most recently it was two years. Really, the parameters are evolving very rapidly, and I think some legal certainty would be highly appreciated.

And more conceptually, I think the issue arises: when do you really regard a product as a pipeline? Does it become a pipeline when it makes its way into some sort of wish list by the R&D team of a particular company, or do you require some level of investment to be made to regard the product as a potential competitor? All those issues are very much alive and interesting, but I think the analytical framework is relatively clear.

The situation of course is very, very different when we look at macro issues, and you really move away from product specific concerns and you look at the R part of R&D. I guess the key question is: Should we have a presumption? I can be very brief; I would very much agree with what Frederic said. The economic literature seems to be showing mixed conclusions at best. The horizontal merger guidelines, especially at paragraph 38, do acknowledge that mergers can promote innovation. You would never find a similar statement for traditional unilateral effects. I think that potentially explains why the US authorities have been much more careful about tackling those effects. When you look at Dow/DuPont, for instance, it seems to me that they did look at product specific issues, but arguably stayed a bit more away from the macro concerns that the European Commission laid out in its decision. To be brief, I think I would argue against any presumption, at least as things currently stand, and leave the burden of proof for the commission.

Benoît Durand: Since you raise the question of the merger guidelines and Giulio also broached that topic, I think this a good question to ask: We have paragraph 8 of the guidelines, but we also have paragraph 38 in the guidelines, so there is more of a balancing act here. But Giulio expressed, perhaps, that we should look at the US DOJ/FTC guidelines. So are we seeing a change here in approach? I'll ask Fiona first to take the floor on this and tell us what her views are.

Fiona Carlin: From recollection, paragraph 38 is very short; it's got three sentences. One sentence that says "A merger may increase a merged firm's ability and incentive to innovate", and two sentences that tell us the opposite might also hold true. That doesn't tell us very much at all, other than what Giulio has already outlined, which is that in markets which are highly concentrated with high barriers to entry, there may be an issue.

That isn't enough by way of limiting principle, I would humbly suggest. We need the next chapter on limiting principles. In markets with strong patent protection, that are reasonably concentrated, where there isn't a whole lot

of new disruptive entry, what are the limiting principles that are going to give us a framework for an analysis that doesn't lead you to prohibit all mergers in those sectors or extract heavy remedies going right back to the R in the R&D? I think that's the debate.

It's also a bit troubling that the commission dismisses all of the arguments around the uncertainty as to research, innovation output. Uncertainty, they say, doesn't mean that we can't predict the likelihood of future competitive harm. It is highly speculative; there is no limiting principle there. They seem to assume, I think – which is overly simplistic – a positive correlation between R&D spend and innovation output. I don't hear any discussion about the massive investments that are made in products or ideas that never get to the market. I don't hear any discussion of the fact that the science can be incredibly difficult: We don't have an Alzheimer's cure, not for want of trying. But it's not good enough to say that five research pills are better than four.

Giulio Federico: I think it's fair to say that economists have generally been a bit to blame for having a very static approach to merger control. We have had our new toys for unilateral effects since the 2004 reform, and we played a lot with our mathematical toys and maybe got our eyes off the ball on competition as a process of dynamic rivalry that leads to a number of outcomes that are procompetitive – not just lower prices but also innovation.

Now the next chapter on limiting principles. The limiting principles debate is not one, really, about innovation, it's one about what's the SIEC [significant impediment of effective competition] test in the absence of dominance. We had this question on limiting principles four years ago at the start of the mobile merger saga; was the commission, after the Austrian merger, going to intervene in all four-to-three operators in the mobile market? I think those type of chapters are written by case enforcement. It's very hard to generalise when the assessment is that the two innovators are sufficiently close, there are enough overlaps, there's enough evidence on the direct impact on the innovation to actually set them out in general terms. I don't think I am able to do that. Hopefully we'll get some guidance on the limiting principles from the Dow/DuPont decision when it's out – much in the same way as with the mobile market decisions in the past few years hopefully giving guidance on what the commission found was supportive evidence for unilateral effects.

One last point on uncertainty in the R part of R&D. When we think about development pipelines and product markets, the issue of uncertainty is less important. The products are likely to be in the market, so it's a very traditional analysis. When it comes to the R part, I think the pipeline assessment or the assessment of overlaps in research, targets, in early pipelines, is more about the closeness of competition between rivals, less about whether that particular product is going to be suppressed. You may have evidence that that product is going to be suppressed and that's problematic, but it's much a big picture type of question: Are these parties innovating in the same direction, trajectory, space? Is there diversion between the parties by innovation absent a merger? That's what I think analysis of early pipelines is trying to capture.

Benoît Durand: It seems we can expect at least the commission to definitely have a closer look at innovation. Does that reflect your view, David, of what you've seen in your own experience? Is there a shift in the way the commission has looked at innovation?

David Tayar: I think the commission takes the position that in a way nothing has really changed.

First of all I think it is true that before the Dow/DuPont and Bayer/Monsanto there were a few cases that did look at innovation independently from product-specific overlaps. Google/Motorola was one example of that.

Secondly – I don't want to create a wind of panic in the room, but I think those innovation concerns are probably only the most visible part of a much, much bigger iceberg. The bigger iceberg is the commission's tendency to really look at not only product-specific issues, but macro issues. Again, I would take the example of the generic

pharmaceutical industries where in the recent Allergan merger, the parties had to deal with extremely thorough and detailed questions that went much, much beyond individual product overlaps. To give you an example without divulging anything particularly confidential, they were asked to explain their strategy in terms of IP litigation and how would they typically penetrate the market. The underlying concern, I think, was that litigation was one of the competition dynamics in the sector and that because of the merger there would be one less litigant, less patent challenges and ultimately later generic entry.

Those issues did not necessarily make their way into the decision because the possible theory of harm was perhaps a bit shaky, but still this has huge practical implications. Pre-notification has become very, very long. It's already



quite cumbersome to deal with many affected product markets in a Form CO – but if you also need to educate the commission about those broader macro concerns, this has huge implications in terms of information gathering. Something is definitely changing and not necessarily to the benefit of the merging parties.

Benoît Durand: Fred, you've been around for many years, you've done merger control, you've done Dow/DuPont, so what's your take on how the commission is looking at innovation?

Frederic Depoortere: I'll just say a couple of short things; the first on the issue of whether this is novel or not. GE/Alstom is often mentioned. The innovation concerns were there, but they were linked to a specific product. With Dow/DuPont, the commission has taken a step further – I don't think that's a big point of contention – and a step further away from what the US is doing. The concept of innovation market was an issue in the US at a certain point in time, but it's no longer the case. Even though Giulio's right that there references in the merger guidelines, it's clear that in practice the commission has taken a step further compared to what it had done before, and a step further away from what is happening in the US.

The DOJ did not take the same measures in Dow/DuPont with regard to the party's R&D activities. So there is a gap. Obviously, the commission is entitled to do that. Everybody agrees that innovation is important. Everybody agrees that the commission is entitled to look at it. Nobody contests that.

My only point is that, given the uncertainty in economic theory, given the fact that the commission is at the forefront and is pushing the envelope, I think the commission should be careful in what it is doing. My concern there is



that if the five criteria that you mentioned, Giulio, are not limiting criteria. They are, because they are very similar again to what the commission is doing in unilateral effects on price competition – they're the same, perhaps with the exception of IP rights and appropriability. The point is obviously that the analysis of innovation competition under those different criteria is very, very different than on price competition.

Benoît Durand: I want to talk about remedies. When the authority finds a merger will harm innovation, what type of remedy might be suitable?

David Tayar: I would again come back to a broad distinction that I made earlier about product-specific concerns and broader concerns. For product-specific concerns, arguably the position should be relatively straightforward: the parties should divest one of the two overlapping assets. But I don't think it is that simple. There can be lots of very practical difficulties in terms of implementing the remedies.

Again I think the issues are much broader when it comes to non product-specific innovation concerns. I think the commission explained that the R&D divestment was in any case necessary to address the downstream concerns, because without the R&D assets the business would not have been viable. I think there's a key question about proportionality and viability of the business that would be retained by the parties, because it also raises all sorts of fascinating questions about carving out assets which are typically used across many, many different products or sectors.

Benoît Durand: Maybe I'll ask Fred also to say a few words.

Frederic Depoortere: Just a few. A couple of weeks ago, [DG Comp Acting Deputy Director-General for Mergers] Carles Esteve Mosso, I think it was in London, looked at enforcement statistics and basically came to the conclusion that the number of cases where remedies are imposed as a percentage has remained relatively stable over the past year. That may be true. I think, however, that the commission in its policy of imposing remedies has become more and more demanding. If you look at the actual remedies that are offered to address a given issue, the remedies have become much more extensive. Viability trumps proportionality, according to many people in DG Comp, and that has become a problem. So what do you offer as a remedy? Basically the only thing that you can do is divest the innovation operations – which is a cost centre, so it's not so easy to divest it to a third party and create a new innovator which has a lot of complexities. If the commission continues to push innovation competition as such, independent from specific pipeline products, then the remedy discussion is going to continue to be very difficult.

