

## Frederich Hayek's Contribution to Antitrust Law and its Modern Application

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*Frederich von Hayek is one the most influential economists of his time. Yet, Hayek's influence on antitrust judges and antitrust agencies is quite low compared to the one other economists have. This should change. The very rapid growth of high-technology markets tends to confirm Hayek's views on competition, that reason why it is time to (re)consider his work. As of today, dynamic efficiencies are not fully considered in most antitrust analyses. Based on Hayek's work, the essay proposes some concrete changes in our modern laws. They imply to consider every aspect of the concept of 'innovation' in all antitrust analyses, by taking position on standardization, predatory innovation, disruptive innovation and other major themes for our economies. Also, analysing Hayek's thinking show us why antitrust laws should only apply with certitude and agencies should consider false positives with more consistency.*

*'Economic liberalism is opposed (...) to competition being supplanted by inferior methods of coordinating individual efforts.'*<sup>1</sup>

### I. Introduction

Frederich von Hayek is one the most influential thinkers of the 20<sup>th</sup> century, if not all time. He won the Nobel Prize in Economics in 1974, 40 years ago, and a recent empirical study shows that he is considered as one of the 'most distinguished academic public intellectuals active in the second half of the twentieth century'.<sup>2</sup>

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<sup>1</sup> Friedrich Hayek, *Road of Serfdom*, (first published 1944, Routledge Classics 2001) 37.

<sup>2</sup> M. Todd Henderson, 'The Influence of F.A. Hayek on Law: An Empirical Analysis' (2005) 1 NYU Journal of Law & Liberty 249.

He is constantly ranked as one of the 'top ten most influential economists of the legal academy', in fact, right after Ronald Coase, Gary Becker, George Stigler, Kenneth Arrow, and Milton Friedman.<sup>3</sup>

However, Hayek's influence on judges is quite low compared to the one other economists have. As a matter of fact, when analysing state and federal court decisions, studies show that Hayek's ranks have tied for twenty-seventh out of sixty economists with at least one mention.<sup>4</sup> The ratio of Hayek's mentions in legal journals to judicial opinions is the highest among forty-nine world class economists. This does mean that Hayek's repercussions on academic work are very wide while the one on practical law is very poor.<sup>5</sup> This should change. Hayek could have a very positive impact on antitrust authorities, on the European Commission, the FTC,<sup>6</sup> and many more. Hayek's thinking is all about efficiencies and humility, two elements which antitrust enforcers and agencies often forget to consider.

### 1. The promotion of dynamic efficiencies and legal humility

On the efficiencies part, it implies to promote them, and not to focus on static ones. Some have argued that promoting efficiencies lead the judge and antitrust authorities into industrial policy.<sup>7</sup> We do believe that, on the contrary, promoting efficiencies might lead to more constant and effective antitrust rulings because they would be more fact-based. Also, as noticed by Thomas O. Barnett, at the time Assistant Attorney General Antitrust Division for the U.S. Department of Justice, 'focusing on static efficiency alone sells our economies far short of their potential'.<sup>8</sup> Yet, we'll show that antitrust authorities tend not to consider dynamic efficiencies in a full manner. For instance, the Horizontal Merger Guidelines contains elements that are difficult to conciliate with dynamic efficiencies<sup>9</sup>. One of them is that efficiencies have to be 'verifiable', 'precise' and 'convincing'. But so

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<sup>3</sup> See also the previous paper by the same author, 'L'apport de Milton Friedman au droit de la concurrence', on Milton Friedman's contribution to antitrust law, 27 May 2013 <<http://leconcurrentialiste.com/2013/05/27/colloque-milton-friedman-droit-de-la-concurrence/>> accessed 11 December 2014 (*text in French*).

<sup>4</sup> Henderson (n 2).

<sup>5</sup> Ibid.

<sup>6</sup> See the Remarks of J. Thomas Rosch, at the time Commissioner of the FTC, given at the New York Bar Association Annual Dinner New York in January 29, 2009.

<sup>7</sup> Maurice Stucke, 'Reconsidering Antitrust's Goals' (2012) 53 Boston College Law Review 551.

<sup>8</sup> Thomas O. Barnett, 'The Role of Competition and Liberalization in Furthering Competitiveness', 4th Annual Competition Policy Conference, June 20, 2008.

<sup>9</sup> Inge Graef, Sih Yuliana Wahyuningtyas and Peggy Valcke, 'How Google And Others Upset Competition Analysis: Disruptive Innovation And European Competition Law', 25th European Regional Conference of the International Telecommunications Society (ITS), Brussels, Belgium, 22-25 June 2014.

far, our economic tools don't allow us to fully quantify dynamic efficiencies (the same is true for negative impacts on competition). The legal test is therefore, in some ways, unachievable. Antitrust authorities should therefore give more room for potential efficiencies.

Furthermore, it remains unclear whether efficiencies can be proved in cross market analyses. Article 2(1) (a) of the EU Merger Regulation refers to 'the structure of all the markets concerned', which seems to indicate that it is possible to do so. However, the Regulation provides no method for this. Plus, this focus on market structure also indicates how authorities tend to neglect dynamic efficiencies.<sup>10</sup> The Harvard school's structuralist vision of antitrust cannot be conciliated with the consideration of disruptive innovations, which create new markets and are, therefore, mostly irrelevant to market structure and barriers to entry. Yet, European analysis is closer to structuralist studies than American ones.<sup>11</sup> Hayek was against ordoliberalism. He showed us why we should not give market structures too much importance.

On the humility part, Hayek showed us that antitrust authorities and regulators should intervene only if it is clearly necessary. As Ronald Coase explains that:

If an economist finds something – a business practice of one sort or another – that he does not understand, he looks for a monopoly explanation. And as in this field we are very ignorant, the number of understandable practices tends to be very large, and the reliance on a monopoly explanation, frequent.<sup>12</sup>

Furthermore, Hayek's lessons should particularly be considered because of the very fast growth of high-technology markets. The rapidity of these markets raised new concerns that false positive could occur. Unfortunately, false positives tend to be underestimated.<sup>13</sup> Sometimes, the regulator even sustains that 'there is no such thing as a false positive'.<sup>14</sup> Hayek teachings show us why such reasoning could

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<sup>10</sup> Recently, the European Parliament proposed to break Google in two parts, based on structural analysis.

<sup>11</sup> Liza Lovdahl Gormsen, 'The Parallels between the Harvard Structural School and Article 82 EC and the Divergences between the Chicago- and Post-Chicago Schools and Article 82 EC,' (2008) 4 European Competition Journal, 221-241.

<sup>12</sup> Ronald Coase, 'Industrial Organization: A Proposal for Research,' in 3 Policy Issues And Research Opportunities In Industrial Organization.

<sup>13</sup> 'Consumer Protection & Competition, Regulation in a High-Tech World: Discussing the Future of the Federal Trade Commission' (December 2013) <[http://docs.techfreedom.org/FTC\\_Tech\\_Reform\\_Report.pdf](http://docs.techfreedom.org/FTC_Tech_Reform_Report.pdf)> accessed 11 December 2014.

<sup>14</sup> Christine Varney, former U.S. Assistant Attorney General for the Antitrust Division, Remarks Before the American Antitrust Institute (February 2008).

lead to great errors. For that reason, some have argued that the new economy moves too fast for antitrust law to remain relevant,<sup>15</sup> as the Microsoft case tends to show.<sup>16</sup> Hayek contribution to antitrust law is, at minimum, about applying antitrust law only if strong economic proofs support the application of the law.

## 2. The disruptive nature of Hayek's thinking

At the time of their publications, Hayek's writings represented a significant split from Léon Walras theories of perfect competition and, most generally, mainstream microeconomics.<sup>17</sup> Hayek is also one of the fathers of complex systems,<sup>18</sup> which give great insights on how competition work and can be used to better understand many aspects of antitrust laws. However, we believe that Hayek's direct contribution to antitrust is, mostly, about his refutation of perfect competition and his thoughts on monopolies.

Hayek contended that competition, synonymous for a 'discovery procedure',<sup>19</sup> was the best way to ensure a free market. However, he noticed that all models of competition do not ensure a real competition, and that is why Hayek wrote quite a lot on which kind of competition was best. And, as he said, the functioning of competition requires

adequate organisation of certain institutions like money, markets, and channels of information-some of which can never be adequately provided by private enterprise-but', but also of an 'appropriate legal system, a legal system designed both to preserve competition and to make it operate as beneficially as possible.

The law should not only recognize the principle of private property and freedom of contract, but the legal system should also give a precise definition of these two principles in a way that promote competition.<sup>20</sup>

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<sup>15</sup> Some have argued that the economy moves too fast for antitrust remedies to be fully effective. See Robert W. Crandall and Clifford Winston, 'Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence' (2013) 17 *Journal of Economic Perspectives* 3.

<sup>16</sup> William H. Page and Seldon J. Childers, 'Measuring Compliance with Compulsory Licensing Remedies in the American Microsoft Case', (2009) 76 *Antitrust L.J.* 239.

<sup>17</sup> Jack Birner and Rudy van Zijp, (eds), *Friedrich Hayek, Co-Ordination And Evolution* (Routledge 1994).

<sup>18</sup> Friedrich Hayek, 'The Theory of Complex Phenomena', in *The Critical Approach to Science and Philosophy* (Collier McMillan 1964).

<sup>19</sup> Friedrich Hayek, 'Competition as a Discovery Procedure,' 5 *Quarterly Journal of Austrian Economics*, 5.

<sup>20</sup> Hayek, *Road of Serfdom* (n 1) 39.

Hayek thought that, in order to design the best legal system possible, the state has a role to play. Indeed, he argued that ‘in no system that could be rationally defended would the state just do nothing’. The legal system should continuously improve the law in order to ensure competition while maintaining some degree of legal certainty.<sup>21</sup>

However, he also thought that better goods are provided to consumers when there is effective competition that allows exploiting opportunities. He added that ‘we generally find that government authority or a highly undesirable exercise of private power have hitherto prevented their exploitation’.<sup>22</sup> Therefore, the forms of institutions which make the competitive system work great need to be intelligently made,<sup>23</sup> without which the State will often negatively disrupt the market.

For this reason, Hayek devoted many of his writings to the question of the better legal and economic goals to reach, to ultimately conclude that perfect competition is a disastrous model to follow, although antitrust authorities and economic literature had encouraged it for a long time, and sometimes still do (Section II). As a matter of fact, this model leads to misinterpreting the exact nature of monopolies and how to fight against some of them (Section III). Through the means of private property, Hayek’s analyses finally give us a great insight on what should be done to our antitrust laws, and these theoretical developments lead us to propose some concrete changes in our modern laws (Section IV).

## II. Competition as a dynamic discovery method

### 1. The rejection of the model of perfect competition

Hayek explained that perfect competition and monopoly are, in practice, often found to be linked<sup>24</sup>. The problem is as follows:

It appears to be generally held that the so-called theory of ‘perfect competition’ provides the appropriate model for judging the effectiveness of competition in real life and that, to the extent that real competition differs from that model, it is undesirable and even harmful.<sup>25</sup>

This being said, what exactly is this model of perfect competition? As Hayek noticed, perfect competition is an economic model in which ‘we assume that state

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<sup>21</sup> *Ibid* 40.

<sup>22</sup> Hayek, ‘Competition as a Discovery Procedure’ (n 19).

<sup>23</sup> Hayek, *Road of Serfdom* (n 1) 39.

<sup>24</sup> Friedrich Hayek, ‘Meaning of Competition,’ in *Individualism and Economic Order* (University Of Chicago Press 1958) 102.

<sup>25</sup> *Ibid* 92.

of affairs already to exist'.<sup>26</sup> A certain competitive equilibrium is considered to be the goal to reach. Within this competitive equilibrium, it is assumed that individuals 'are fully adjusted to each other'. The model of perfect competition is, therefore, about how to reach a pre-defined market structure in which competition will be 'perfect'. However, Hayek posits that:

the description of competitive equilibrium does not even attempt to say that, if we find such and such conditions, such and such consequences will follow, but confines itself to defining conditions in which its conclusions are already implicitly contained and which may conceivably exist but of which it does not tell us how they can ever be brought about. Or, to anticipate our main conclusion in a brief statement, competition is by its nature a dynamic process whose essential characteristics are assumed away by the assumptions underlying static analysis.<sup>27</sup>

Hayek saw that competition is important because it is the only mean to reach unpredictable economic efficiencies and improvement, avoiding then to frustrate great intentions.<sup>28</sup>

Ordoliberalism theories that appeared in the 1930's with the Freiburg school give the state a great credit to organize the market in order to reach a predefined competition structure. Hayek called these theories 'restrained liberalism'. Even if Hayek was in favour of a legal framework settled by the government, in which competition could be optimized, he always rejected the idea of a market structure as a way to achieve a particular outcome. It is all about 'playing a non-zero-sum game whose rules have the objective of increasing the payoff but leave the share of the individuals partly to chance'.<sup>29</sup>

Contrary to what Hayek always campaigned for, ordoliberalism intends all competitors to have the same information (or the same access to it) in order to set up a competitive market. And this is what perfect competition is about.

According to the generally accepted view, perfect competition presupposes:

1. A homogeneous commodity offered and demanded by a large number of relatively small sellers or buyers, none of whom expects to exercise by his action a perceptible influence on price.
2. Free entry into the market and absence of other restraints on the movement of prices and resources.
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<sup>26</sup> *Ibid.*

<sup>27</sup> *Ibid* 94.

<sup>28</sup> Hayek, 'Competition as a Discovery Procedure' (n 19) 10.

<sup>29</sup> *Ibid.*

Complete knowledge of the relevant factors on the part of all participants in the market.<sup>30</sup>

However, Hayek later demonstrated that only a dynamic competition process could ensure the best result, and that is not necessary that all competitors have the same amount of information. It is the main reason why, on an ideological point, he rejected ordoliberalism, and why, on a practical point, Hayek was against perfect competition.

## 2. The wrong assumptions on information and standards

The model of perfect competition wrongly assumes that all competitors possess, or should possess the same information. Hayek argued that it is impossible and, what is more, not desirable because competition itself is undeniably a discovery process that allows competitors to gain information. ‘No theory can do justice to it which starts from the assumption that the facts to be discovered are already known’. Indeed, Hayek states that:

competition is essentially a process of the formation of opinion: by spreading information, it creates that unity and coherence of the economic system which we presuppose when we think of it as one market.(...) It is thus a process which involves a continuous change in the data and whose significance must therefore be completely missed by any theory which treats these data as constant.<sup>31</sup>

By letting dynamic competition lead the market, information is spreading and competition becomes stronger, with no need for a perfect distribution of information at first.

In fact, dynamic competition spreads information through many means, including prices.<sup>32</sup> Hayek always saw prices as signals, carrying the important information of telling us ‘what we should accomplish, not how much’.<sup>33</sup> If prices do not give impartial information by themselves, he thought that prices remained a great form of communication.<sup>34</sup> But, dynamic competition may also produce information by

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<sup>30</sup> Hayek, ‘Meaning of Competition’ (n 24) 95.

<sup>31</sup> Hayek, ‘Meaning of Competition’ (n 24) 106.

<sup>32</sup> See a speech given by Deborah Platt Majoras, at the time Chairman of Federal Trade Commission, called *The Vital Role of Truthful Information in the Marketplace*, October 11, 2007; Todd J. Zywicki, Director Office of Policy Planning Federal Trade Commission, in a speech called ‘*Competition Policy and Regulatory Reform: Means and Ends*’.

<sup>33</sup> Hayek, ‘Competition as a Discovery Procedure’ (n 19).

<sup>34</sup> Friedrich Hayek, ‘*The Use of Knowledge in Society*,’ (1945) 35 *American Economic Review* 519, 526.

other simultaneous ways, like advertising, sales, or the quality of the product. Indeed, as Hayek noticed, advertising, undercutting, and improving the goods or services produced are all excluded in the 'perfect' competition model which 'means indeed the absence of all competitive activities'.<sup>35</sup>

The works done by George Stigler on the importance of searching as a discovery procedure<sup>36</sup> allowing the information to be revealed complement to Hayek's work on this question, establishing in particular that information is a good like any other, subject to the economics of scarcity.<sup>37</sup> Even today, these works can actually be used in many antitrust issues: when network effects are implied, when standardization issues are raised before the judge. Frederic Hayek's dynamic conception of competition is a central point of thinking. This practically means that judges should not focus neither on uneven information, nor on reaching a certain market structure, but rather on letting dynamic competition act, and on considering efficiencies. The same applies for agencies and authorities where the Hayekien view could have a very positive effect. Yet, these agencies are generally looking for a perfect sharing of information. That is why the DOJ imposed Microsoft to give its competitors all necessary information in order to ensure product compatibility.

Dynamic competition, by spreading information, finally allows the best use of resources and creates alternatives.<sup>38</sup> Because alternatives are the mean and the result of competition, Hayek also focused on what could destroy them: standardization which is linked to product compatibility.

Standardization can lead to uniformed productions and a lesser value of information since all products have to comply with standards. As Hayek described, competitors usually don't believe that 'the variety of people's tastes should be disregarded and the constant experimentation with improvements should be suppressed in order to obtain the advantages of perfect competition'. Indeed, 'it would clearly not be an improvement to build all houses exactly alike in order to create a perfect market for houses, and the same is true of most other fields where

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<sup>35</sup> Hayek, 'Meaning of Competition' (n 24) 96.

<sup>36</sup> George J. Stigler, 'The Economics of Information,' 69 *Journal of Political Economy* 213 (1961); George J. Stigler, 'Perfect Competition, Historically Contemplated,' (1957) 65 *Journal of Political Economy* 1.

<sup>37</sup> Geoffrey A. Manne and Joshua D. Wright, 'Google and the Limits of Antitrust: the Case Against the Antitrust Case Against Google,' (2001) 34 *Harvard Journal of Law & Public Policy* 171.

<sup>38</sup> Friedrich Hayek, *The Constitution Of Liberty* (The University of Chicago Press 1978).



differences between the individual products prevent competition from ever being perfect'.<sup>39</sup>

There are two types of standardizations: the private one and the public one. Private standardization can be considered as the result of a private organization of competitors and, therefore, as a way to improve efficiencies and dynamic competition on focusing on aspects that private actors judge more important. It is how Ronald Coase explained the creation of enterprises, based on private property and free market organization. It can lead to great efficiency,<sup>40</sup> and Hayek's view does not give us much to debate about on this point.

However, public standardization poses a high risk if the adopted standard (i) is not the best that could have been, and (ii) settles a technology/technique on which some private actors would have desired to compete. Also, public standardization comes with great deals of cartel and monopolization issues.<sup>41</sup> In other words, public standardization can eliminate dynamic competition in order to reach a predefined market structure.

Despite this and the fact a dynamic competition enhances better innovation and progress, public standardization is today a widely used process and very few people question it. Hayek's views should be considered on this issue, particularly at a time where thousands of standards are adopted every year on high-tech markets, the new heart of our economies.<sup>42</sup> On a less technical point, Hayek teaches us that if private standardization can be seen as a natural organization of competitors, public standardisation raises different issues because public entities cannot know better than private actors which standard should be used. It is very important that public standards setting organisations always remain very connected to the private sector. Plus, let us not forget that 'scientific discoveries have ample time to demonstrate their value'.<sup>43</sup>

### **iii. Hayek's views on monopolies**

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<sup>39</sup> Hayek, 'Meaning of Competition' (n 24) 99.

<sup>40</sup> Joanna Tsai, Joshua D. Wright, 'Standard Setting, Intellectual Property Rights, and the Role of Antitrust in Regulating Incomplete Contracts', (2015) 80 (1) *Antitrust Law Journal*.

<sup>41</sup> See for instance Case C-113/07P *Selex Sistemi Integrati SpA. v Commission* [2009] ECR I-2207

<sup>42</sup> Daniel F. Spulber, 'Unlocking Technology: Antitrust and Innovation,' (2008) 4 *Journal of Competition Law and Economics* 915. He draws a very interesting distinction between 'Consumer Coordination in the Small and Adoption of Innovations' and 'Consumer Coordination in the Large and Adoption of Innovations'. The second one is based on Hayek spontaneous order theory.

<sup>43</sup> Hayek, 'Competition as a Discovery Procedure' (n 19).

## 1. Monopolies and the Spontaneous Order

Hayek's thoughts on monopolies can be intricate: was he against all monopolies, or simply against some behaviours that monopolists may adopt? Is it, in other words, a structural issue or a behavioural one?<sup>44</sup>

In *Legislation and Liberty*, Hayek devoted an entire chapter (*Government Policy and Market*) to the question of monopolies. And there are a lot of indecisions in Hayek's thoughts on this point, which make it particularly interesting. His views changed over time, but always kept coherence through his very humble approach.

Hayek showed a particular distrust *vis-à-vis* monopolies. As he said in his *Lecture to the memory of Alfred Nobel*, 'competition, for instance, is a process which will produce certain results only if it proceeds among a fairly large number of acting persons'.<sup>45</sup> As a matter of fact, he argued that monopolies, under several conditions, can be a threat to dynamic competition. For instance, he explained that:

a person who possesses the exclusive knowledge or skill which enables him to reduce the cost of production of a commodity by 50 per cent still renders an enormous service to society if he enters its production and reduces its price by only 25 per cent-not only through that price reduction but also through his additional saving of cost. But it is only through competition that we can assume that these possible savings of cost will be achieved. Even if in each instance prices were only just low enough to keep out producers which do not enjoy these or other equivalent advantages, so that each commodity were produced as cheaply as possible, though many may be sold at prices considerably above costs, this would probably be a result which could not be achieved by any other method than that of letting competition operate.<sup>46</sup>

But Hayek also added that mini-monopolies are natural and good for competition, because they create a disequilibrium that competitors are trying to carve out, which is driving economy forward. For his writings in *Individualism and Economic Order*, we understand that as long as there are no barriers to entry a market, the result is a constant flow of information in prices which reflect the health of markets. And only free market may allow this spontaneous ordering-seemingly

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<sup>44</sup> Norman P. Barry, *Hayek's Social and Economic Philosophy* (Palgrave Macmillan 1979); Jeremy Shearmur, *Hayek and After: Hayekian Liberalism as a Research Programme* (Routledge 1996).

<sup>45</sup> Friedrich Hayek, *Lecture to the memory of Alfred Nobel*, December 11, 1974.

<sup>46</sup> Friedrich Hayek, 'Meaning of Competition' (n 24) 101.

chaotic, leaving room for imaginative and entrepreneurial vision, where, ‘in a nutshell, perfect competition is antithetical to innovation’.<sup>47</sup>

Herein, Hayek is elaborating on the famous chaos theory and spontaneous order.<sup>48</sup> The whole theory<sup>49</sup> is about explaining how competition creates ‘a more efficient allocation of societal resources than any design could achieve’.<sup>50</sup> He adds that ‘this order manifests itself first of all by virtue of the fact that the expectations of particular transactions with other persons, upon which the plans of all the economy’s participants are based, are to a considerable extent realized’.<sup>51</sup>

Hayek disagreed with the idea that supply-side economies of scale would necessarily lead to monopoly. He said that ‘this argument singles out one effect sometimes accompanying technological progress; it disregards others which work in the opposite direction; and it receives very little support from a serious study of the facts’.<sup>52</sup> In fact, markets with strong network effects reach equilibrium well short of monopoly. Therefore, positive network effects are not leading to monopoly by themselves.<sup>53</sup> But yet, even in Hayek’s writings, his spontaneous order postulates one condition: the absence of barriers to entry the market.<sup>54</sup>

## 2. Monopolies and barriers to entry the market

Hayek was mostly negative to monopolies where there are barriers to entry the market, or when the monopolist has essential facilities. A monopolist can exercise coercion when he controlled ‘an essential commodity on which people were completely dependent’.<sup>55</sup>

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<sup>47</sup> Israel M. Kirzner, ‘The Market as a Discovery Process,’ in *Discovery, Capitalism, and Distributive Justice* (Oxford: Basil Blackwell, 1989), 72-96.

<sup>48</sup> Maureen K. Ohlhausen very recently made some great comments on this theory at the occasion of the Sixth Annual Telecom Policy Conference in a speech, *The Procrustean Problem with Prescriptive Regulation*, March 18, 2014.

<sup>49</sup> From a purely semantic point, it is also interesting to note that Hayek preferred the concept of order to the one of equilibrium that we often find in antitrust analyses. The reason is that the concept of order can be realized to a greater or lesser degree, contrary to the one of equilibrium that never exists in practice.

<sup>50</sup> Christina Petsoulas, *Hayek’s Liberalism and Its Origins: His Idea of Spontaneous Order and the Scottish Enlightenment*, (Broché 2013).

<sup>51</sup> Hayek, ‘Competition as a Discovery Procedure’ (n 19).

<sup>52</sup> Hayek, *Road of Serfdom* (n 1) 42.

<sup>53</sup> Mark A. Lemley and David McGowan, ‘Legal Implications of Network Economic Effects’ (1998) 86 *California Law Review* 479.

<sup>54</sup> William J. Kolasky, ‘Network Effects: A Contrarian View,’ (1999) 7 *George Mason Law Review* 577.

<sup>55</sup> Hayek, *The Constitution Of Liberty* (n 38).

Hayek highlighted two main issues relating to monopolies: (i) the power to discriminate and (ii) the power to prevent competition. With regard to the power to discriminate, Hayek explained that when a monopolist detains an essential product – we can today make some analogies with standard essential patents (SEPs) –, he therefore has a power to discriminate between different customers. This is another reason why Hayek was negative to standardization. With regard to the power to prevent competition, Hayek reported that a monopolist is able to use its market power to ‘protect and preserve [its] monopolistic position after the original cause of [its] superiority has disappeared’.<sup>56</sup> However, he also noticed that a monopolist would be free to act this way only if there were barriers to entry the market. Regarding to these barriers and the means to avoid them, he always thought that government was inefficient because: (i) antitrust law is often designed in a certain way that it helps create barriers and maintain monopolies, and (ii) patents, copyright and trademarks also lead to this result. He indeed contended that limited liability companies and patents ‘greatly assisted the growth of monopoly’.<sup>57</sup>

Hayek recognized that as long as the institution of private property prevails, there is no moral justification for curtailing the power of an owner of a rare resource from setting its own prices and quality of its product. But he also added that the situation is ‘wholly different’ where market power allows the monopolist to prevent others from ‘serving the customer better’. This is to say that no intervention is needed when the monopolist acquired its position by ‘serving [its] customers better than anyone else, and not by preventing those who think they could do still better from trying to do so’.<sup>58</sup> He added that:

strong arguments can be advanced that serious shortcomings here, particularly with regard to the law of corporations and of patents, not only have made competition work much less effectively than it might have done but have even led to the destruction of competition in many spheres.<sup>59</sup>

To sum up, Hayek was not against all monopolies, but those set up by the law or the regulator.

In the Hayekien view, barriers to entry a market are state-made. Time resolves monopolies, except when the government creates an artificial barrier to entry (patent could be one of them).<sup>60</sup> ‘Where monopoly does exist in most cases time

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<sup>56</sup> Friedrich Hayek, *Law, Legislation and Liberty* (first published 1973, Routledge 2013).

<sup>57</sup> Hayek, ‘Meaning of Competition’ (n 24) 116.

<sup>58</sup> Hayek, *Law, Legislation and Liberty* (n 56).

<sup>59</sup> Hayek, *Road of Serfdom* (n 1) 40.

<sup>60</sup> Regarding this question, see Thibault Schrepel, ‘Les brevets: un mal nécessaire ? Étude d’une possible remise en cause,’ *Le Concurrentialiste*, 25 July 2014 <

will solve the problem if, when circumstances change, no artificial, man-made barriers to entry exist that will prevent others from entering the fray.’ Because barriers to entry are human creations, his spontaneous order theory finds a very strong justification in eliminating state interventions in the field of legislation. That is, in other words, the reason why Hayek was in favour of antitrust law, which sets general rules with no specific goal besides the one of ensuring dynamic competition, but was against legislations. That is also the reason why he only endorsed laws that ‘serve general and timeless purposes, not specific ends.’<sup>61</sup> This is why he always endorsed the complex doctrine of the rule of law which implies that ‘the laws themselves are truly general and create no privileges for class or person’.<sup>62</sup>

Yet, natural barriers to entry the market are a very central point of American and European antitrust analyses. They lead antitrust authorities to regulate the market in order to preserve the process of competition. In short, the importance given to barriers to entry explains why Hayek’s thinking failed to win over judges and experts. Indeed, it erases every other aspect of Hayek teachings, because regulators believe that barriers to entry are the main reason why competition sometimes fails to exist. As a result, Hayek spontaneous order is mostly seen as a utopian vision of competition and economy.

High-tech markets are characterized by the spontaneous apparition of disruptive technologies and permissionless innovations.<sup>63</sup> These disruptive technologies create new markets, on which dominant companies have no control. New battles start every day, and market shares are moving as fast as it never was. The Internet allows the challengers to quickly spread their innovations.<sup>64</sup> Network effects of an existing market become in part irrelevant when a new network is created, which is mostly the case when a new technology appears. For these reasons, high-tech markets are closer to spontaneous order than other markets. They should, consequently, lead experts to consider Hayek thinking in a brand new way, especially in term of dynamic efficiencies.

Nonetheless, Hayek’s thinking might, once again, fails to win the ideological battle, which could have some serious practical impacts. Indeed, recent history

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<http://leconcurrentialiste.com/2014/07/25/les-brevets-un-mal-necessaire/> > accessed 11 December 2014 (*text in French*).

<sup>61</sup> Hayek, *The Constitution Of Liberty* (n 38) 226.

<sup>62</sup> Friedrich Hayek, ‘Decline of the Rule of Law’ (1953) *The Freeman*, 518-520.

<sup>63</sup> Innovations on which neither the regulator nor the dominant companies have control.

<sup>64</sup> Nick Bilton, ‘A Lot Changes in Tech over Four Years and 1,000 Blog Posts’ (*NYTimes*, 27 May 2013) <<http://bits.blogs.nytimes.com/2013/12/24/four-years-and-1000-blog-posts-ago/>> accessed 11 December 2014.

shows us that market shares are quickly moving in high-tech markets. There is a high risk that competitors that were in a comfortable position before the emergence of a new technology will go to the regulators and ask for regulations in order to recover their old market shares. The violence of high-tech markets might, in that sense, create a new incentive to regulate even more than before, this will kill the spontaneous order that we are currently seeing on these markets.<sup>65</sup>

#### IV. Hayek's lessons for today's antitrust law

Hayek's lessons for today's antitrust law are very broad and specific at the same time. Of course, his dynamic conception of competition is being increasingly considered in legal and economic analyses. Yet, much progress can be done. The static conception of competition remains the framework in many cases. As the FTC's commissioner Joshua D. Wright noticed many times, efficiencies tend to be too little considered.<sup>66</sup>

##### 1. To consider all aspects of innovation

Applying Hayek's principles should also lead us to seriously consider the concept of 'innovation' in all antitrust laws and decisions. This implies integrating it as real antitrust standard. Within the new economy and all high-tech markets, judges and antitrust agencies could and should indeed consider all innovative aspects of the case. Without this, it will remain wrong to argue that dynamic efficiencies are fully considered.

The concept of innovative market has been considered since 1995, and was replaced with the concept of innovation competition in 2010. Since 2011, the European Commission uses the term of competition in innovation in its Article 101 Guidelines. Yet, antitrust authorities are not fully considering high-tech market characteristics. For instance, the idea of disruptive technologies is not integrated in antitrust analysis<sup>67</sup>, which tend to confirm that authorities are still running on

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<sup>65</sup> This order is characterized by a large spreading of wealth on these markets. For instance, back in 2009, none of the following companies even existed. There are now worth more than a billion dollars: SnapChat, Instagram, Pinterest, Fab, Square, Waze, Pine.

<sup>66</sup> See for instance his very recent Dissenting Statement of in the matter of Ardagh Group S.A., and Saint-Gobain Containers, Inc., and Compagnie de Saint-Gobain FTC File No. 131-0087, April 11, 2014.

<sup>67</sup> There is not any European decision employing these terms, which reveal a certain reluctance to even consider the possibility that disruptive innovations might occur. Very few American decisions are using these terms, see Thibault Schrepel, *Disruptive innovation: statistical comparison between cases and scholarly papers*, Le Concurrentialiste, 2014, for statistical analyses on this subject, 3 March 2014, <<http://leconcurrentialiste.com/2014/03/03/disruptive-innovation-statistical-comparison-between-cases-and-scholar-papers/>> accessed 11 December 2014.

perfect competition model, because the concepts of network effect, lock-in and switching costs are given a great importance that tend to promote structural analyses.

In practical terms, this could mean implementing a framework for predatory innovation by creating legal presumptions, by applying fine reductions when practices imply an innovative product, or, in other instances, by exonerating anticompetitive practices on the basis of the welfare created by all innovative aspects of a product. It will imply to consider that the fact that legal certainty is very low for companies which are creating a new market where unknown rules will eventually apply.

Furthermore, integrating innovation as an antitrust standard could be very useful to better define relevant market in merger control (especially by considering post-merger innovation efficiencies) and in the assessment of unilateral conduct. Indeed, depending on the kind of innovation involved in a particular market – whether it has high switching costs or not, and whether network effects are strong or not – analysing it could help to implement better dynamic antitrust analyses.

And again, it also means to be more humble in terms of antitrust policy. From a macro point of view, it could lead us to evaluate whether, by applying antitrust law, incentives for innovation would be reduced or not, and if so, to which level. For instance, the obligation to give licenses on essential technology diminishes the incentive to pursue innovation.

Evaluating competition policy is central in analysing Hayek's works. Contrary to Schumpeter's conception of innovation<sup>68</sup> where the importance of incentives (as being able to hold a monopoly position) is a direct explanation of innovation, Hayek thought that the best innovations emerge when companies are uncertain about the direction to take in order to gain market shares.<sup>69</sup> Nonetheless without the possibility of holding a monopoly position, Hayek's paradigm fails. If incentives promote innovation by increasing the number of firms trying to get more market shares, there is a risk that punishing companies with a monopoly position, or more generally heavily intervening on a particular market, will create a deterrent factor. Therefore, antitrust authorities have to be prudent when sentencing companies with such a position.

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<sup>68</sup> Timothy B. Lee, 'Two Views of Innovation' (Forbes, 27 May 2012) <<http://www.forbes.com/sites/timothylee/2012/05/27/two-views-of-innovation/>> accessed 11 December 2014.

<sup>69</sup> Pedro Bento, 'Competition as a Discovery Procedure: Schumpeter Meets Hayek in a Model of Innovation' (2011) 6 *American Economic Journal: Macroeconomics* 124.

## 2. To ensure that breakthrough technologies can emerge

As we showed, barriers to entry the market were a central element of Hayek's antitrust analyses. Many consider that high-tech markets present lower barriers to entry, because of the existence of permissionless and disruptive innovations. This is one of the main reasons why it is time to reconsider Hayek's influence on antitrust laws.

These markets have few characteristics that may give Hayek's contribution to antitrust law a new meaning. High-technology markets have an instable equilibrium,<sup>70</sup> because the emergence of a new technology tends to move competition on new grounds. High-technology markets where disruptive innovations can appear anytime may reduce the importance we should give to network effects in antitrust analyses, because high-tech market are often characterized by a competition *for* the market, rather than competition *on* the market<sup>71</sup>.

The consequences are direct in terms of antitrust analysis. The role of the regulator is then no longer to seek to preserve the structure of the market, but to enable new breakthrough technologies to emerge by ensuring that companies remain unsure about the direction to take. The fact is that antitrust authorities often operate the choice to favour sustaining innovations over disruptive ones, which is quite the opposite of keeping them in doubt. For instance, by requiring Microsoft to deliver all necessary information to its competitors in order to ensure product compatibility, the European Commission has clearly favoured sustaining innovations. Hayek's contribution to antitrust law teaches us to be very careful in choosing such policy. This shows us that antitrust authorities should not go for one kind of innovation over the other.

## 3. To consider false positives and apply antitrust law carefully

Hayek teaches also us a lot on how to apply antitrust law. He started his essay on *Competition as a Discovery Procedure* by saying that 'it is useful to recall that wherever we make use of competition, this can only be justified by our not knowing the essential circumstances that determine the behaviour of the competitors'.<sup>72</sup> False negatives and false positives are central in Hayek's analyses,

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<sup>70</sup> Stan J. Liebowitz and Stephen E. Margolis, *Winners, Losers & Microsoft: Competition and Antitrust in High Technology*, (The Independent Institute, 2001)

<sup>71</sup> Fred von Lohmann, 'Fair Use as Innovation Policy,' (2008) 23 *Berkeley Technology Law Journal* 829.

<sup>72</sup> Hayek, 'Competition as a Discovery Procedure' (n 19).



even though he did not use these terms. Hayek indeed<sup>73</sup> said ‘I prefer true but imperfect knowledge... to [s]eemingly simple but false theories may have grave consequences’.<sup>74</sup>

In other words, antitrust laws should only apply with certitude. This certitude should be found in economic analyses. Hayek showed us that competition is a discovery process. When condemning a company on *per se* illegal grounds, or by object,<sup>75</sup> European and American authorities are taking the risk not to enhance the discovery process. This is far from Hayek’s idea of applying law with certitude. For that reason, we argue that *per se* illegal judgment should be erased from our legal systems, as John Sherman admitted himself stressing that the meaning of the Sherman Act ‘must be left for the courts to determine in each particular case’.<sup>76</sup>

There are various economic models and it is now possible to predict anything. ‘The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design’.<sup>77</sup> And empirical evidence shows that antitrust agencies made some mistakes,<sup>78</sup> demonstrating that false positives are always pendant. Specifically, in terms of unilateral conduct practices, there is no empirical basis which shows that any type of conduct has, *per se*, anticompetitive effects on the market. Hayek thinking, with all of his prudence, emphasises that error-costs framework should predominate.<sup>79</sup>

Our techniques to analyse anticompetitive unilateral conducts are under construction. Antitrust enforcers consequently need to be very careful when applying antitrust law. Furthermore, we lost a great deal of years not integrating dynamic effects into our analysis, and even today, dynamic effects are only partially considered since the concept of innovation, in all its forms, remains absent of most antitrust tests (for instance, there is, to the author’s knowledge, no game theory model that integrates innovation as a variable determining which move a player is about to make) and most courts decisions.

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<sup>73</sup> Chiaki Nishiyama & Kurt Leube, *The Essence of Hayek* (Hoover Institution Press 1984).

<sup>74</sup> Hayek, Lecture to the memory of Alfred Nobel (n 45).

<sup>75</sup> See Case C-67/13 P Groupement des cartes bancaires [2014].

<sup>76</sup> William H. Page, John E. Lopatka, *The Microsoft Case, Antitrust, High Technology, and Consumer Welfare* (The University of Chicago Press, 2007), quoting 21 Cong. Rec. 2460 (1890).

<sup>77</sup> Friedrich Hayek, *The Fatal Conceit: The Errors of Socialism* (Routledge 1988) 76.

<sup>78</sup> Lawrence Lessig, at one time a special master in the case and one of its vocal proponents has avowed his error, declaring, ‘I blew it on Microsoft.’

<sup>79</sup> Geoffrey A. Manne and Joshua D. Wright, ‘Innovation and the Limits of Antitrust’ (2010) 6 *Journal of Competition Law and Economics* 153.

## V. Conclusion

The overview of Hayek's contribution to antitrust law has highlighted the need for some changes in our analyses. More than anything, humility should be the guiding principle of all reasoning. It implies to give more attention to error-cost analyses and to remove any kind of *per se* illegal and condemnation by object, because they give no room for economic truth and improvement of our assessing tolls. It also means to reject ordoliberalism and all structural analyses, because they lead to focus on the wrong elements. With the very fast growing of high-tech markets, it becomes a prominent necessity not to consider structures and essential facilities as we did 20 years ago. Market shares move faster, barriers to entry the market tend to be much lower, and natural monopolies leave as fast as they come. In short, these markets are closer to Hayek's spontaneous order than other ones. The fast growing of high-tech markets is leading us to update our antitrust approaches. We should take the opportunity to include more of Hayek's rationale.

Hayek saw competition as a discovery process. The condition for that process to be sustainable is to favour the model of dynamic competition over perfect competition. A paradox clearly appears on this point. Indeed, very few persons argue that antitrust should promote perfect competition. However, not to take every single aspects of innovation into account, – for instance, by not including disruptive and permissionless innovations in our analyses – has for consequence to indirectly promote this model of perfect competition. For the reason, it is time to hold innovation as real antitrust standard.