ONLINE PLATFORMS AND ANTITRUST: WHERE DO WE GO FROM HERE?

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Abstract: Competition policy faces new challenges in its application to digital markets and online platforms. This article develops an analytical framework that rests on three pillars: (a) only conduct that, by restricting competition, reduces long-term social welfare should be prohibited; (b) in applying such a rule, it is important to bear in mind that, under imperfect information, a decision-maker’s task is to minimise the risk and cost of both false convictions and false acquittals; (c) dynamic efficiency is a key driver of long-term social welfare, economic growth and productivity. The article goes on to apply this framework to three specific issues that are debated in relation to digital markets and online platforms: (a) market definition; (b) barriers to entry, including data and Big Data; (c) innovation.

1. INTRODUCTION2

There is much debate today as to whether digital markets call for different tools in antitrust analysis or whether the existing tools are sufficient to address the new challenges that policy makers and enforcers face when dealing with such markets. My observations aim at sketching out an analytical framework which is both consistent with the current law and suitable to addressing the complex problems that arise and showing how such a framework might be applied.3

I’m doing so, my plan is to discuss, briefly, the following. Firstly, it is necessary to understand what we mean when we talk about digital markets and online platforms. A clear and robust definition of these economic phenomena is the necessary premise for a proper analysis of the competition issues that arise. Secondly, it is important to set out the theoretical framework for the analysis; a framework that, in my view, rests on the three pillars on error cost theory, the objective of the competition rules, and the relative weight of different types of

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efficiencies. Thirdly, I shall review three main issues that arise in relation to digital markets and online platforms, namely: (a) market definition and market power; (b) barriers to entry; and (c) the role of innovation. Finally, conclusions will be drawn.

2. DEFINITION OF ONLINE PLATFORMS

When discussing issues relating to digital markets and online platforms, the starting point is to define these economic phenomena. The definition of digital markets is simpler and can be more general. Digital markets are places where goods and services are bought and sold using digital technology, that is, technology that uses a binary code to record information and allows such information to be transmitted electronically over telecommunication networks. Thus digital markets require a trading environment that relies on electronic information exchanged between users. Today this mainly happens on the world wide web or internet. Online platforms come into the picture as they are systems that allow users to interact with content, services and functionalities over the internet. This broad definition of platform includes services (search engines, social networks, e-commerce sites), software (web browsers, operating systems) and even devices (smartphones and tablets). Online platforms are a key component of digital markets because they provide the infrastructure for goods or services to be bought, sold, or provided on the internet.

The most important feature of online platforms, and possibly the most relevant for competition purposes, is that they are two-sided markets. A two-sided market, according to Rochet and Tirole, is a market “in which the volume of transactions between end-users depends on the structure and not only on the overall level of the fees charged by the platform”. It is, therefore, important to focus on the structure of the platform: a market is two-sided when the total volume traded on the platform does not depend only by the total price charged to users overall but by how much each group of users is charged. The key insight is that a platform must be allowed to fine-tune its business model so that it can charge less on one side of the market (up to zero or even a negative price) and more on the other side of the market. Furthermore, the platform’s pricing structure on one side of the market must deal with externalities on the other side of the market – “attracting one side by lowering price is particularly profitable for the platform if this side creates substantial externalities on the other side”.

Online platforms can adopt different business models. For example, they can give away a product for free in order to maximise profits on complementary products (e.g. applications) or invest heavily on quality on one service to maximise revenue on other services (e.g. search engines). Multi-sided strategies, bundles, product design, and product integration are key to innovation in these markets.

5 ibid, 659.
The multi-sided nature of online platforms is important as a matter of law. In *Cartes Bancaires*, the Commission had concluded that the Groupement des Cartes Bancaires (“CB”) had infringed Article 101(1) TFEU by applying fees on issuing banks designed to increase the costs of cards to the benefit of the larger banks and to the detriment of consumers. The Commission concluded that the restriction was a restriction by object. CB argued that the purpose of the measures was twofold: (a) to encourage those members of the Groupement that are issuers rather than acquirers to develop their acquiring activities, and (b) to give financial recognition to the efforts of the ‘founding members’. The General Court upheld the Commission decision. However, the Court of Justice set aside the judgment of the General Court and held that the General Court had been wrong to conclude that an analysis of the balancing requirements between issuing and acquisition activities could not be carried out in the context of Article 101(1) (because the purported restriction took place in the market for issuing only). The Court of Justice held that the General Court had confused two issues: (a) that of the definition of the relevant market; and (b) that of the context to be taken into account to ascertain whether the content of an agreement reveals the existence of a restriction by object. Since the General Court had found issuing and acquiring activities to be essential for the operation of a card payment system, it could not ignore this simply because the act of acquiring did not occur in the issuing market. It is important that the Court of Justice was discussing whether the restriction was a restriction by “object” and it was in that context that the Court said that the multi-sided nature of the market had to be taken into account. The “object” test under EU law is the test where the least market analysis is required in order to conclude that a practice restricts competition. Thus analysis of the two-sidedness of the market is always necessary to determine whether any practice is restrictive of competition.

### 3. Analytical Framework

#### 3.1 Error costs analysis

In framing an effective antitrust policy under imperfect information, error cost analysis should be an important guiding principle. This means that, when deciding whether to prohibit

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or allow certain types of conduct, in general, or even in each particular case, it is relevant to balance the cost and risks of a false acquittal against the cost and risk of a false conviction. A false acquittal occurs when, under the relevant rule, conduct is allowed which should be prohibited. Vice versa, a false conviction is the prohibition of conduct which, under the relevant rule, should be allowed. The cost of false acquittals is the welfare loss resulting from the unlawful practice continuing and from similar practices by the same or other firms not being deterred whereas the cost of false convictions is the welfare loss resulting from the welfare enhancing practice being prohibited and the deterrence of similar practices by the same or other firms. The risk of a false acquittal is the risk that conduct which should be prohibited under the relevant rule is allowed. The risk of a false conviction is the risk that conduct that should be allowed under the relevant rule is prohibited.

The debate as to the cost and risk of false acquittals and false convictions depends, crucially, on one’s set of beliefs, which should not be purely subjective but may well be dictated by the law, which crystallises certain beliefs at a given time, and on the available evidence, both in general, for example evidence relating to whether a particular type of conduct, say, a cartel, is more or less likely to be welfare-reducing, and of course evidence in the particular case. The stronger is the evidence in the particular case, the less important are general evidence and beliefs. However, when a competition authority or court cannot be certain that the conduct under review is pro or anti-competitive, general evidence and beliefs become important. General evidence relates to factors such as the likelihood of the practice being beneficial or not in the abstract, the ability of enforcers accurately to ascertain whether the practice is detrimental or beneficial to competition, the complexity of market/sector and the potential magnitude of welfare benefits or losses. When it comes to cartel conduct, all these factors may well point towards intervention even if the enforcer cannot be certain that the conduct is anti-competitive. However, when it comes to assessing the behaviour of an online platform, its business model, and the way in which it fine-tunes its commercial offer, the outcome of error cost analysis may well be different. Such practices are, at best, ambiguous and often pro-competitive, the sectors are complex and the ability of an enforcer to make a correct assessment more limited than in the case of a cartel. The welfare losses that might be caused by anti-competitive conduct in these markets may be significant but so could be the costs of a false conviction. I am not, of course, advocating for no intervention in digital markets. Far from it. But intervention should be considered only after a careful examination of all the available evidence to avoid costly mistakes. In terms of error cost analysis, the decision to prohibit a price fixing arrangement among suppliers of cement is not the same as the decision to prohibit a social network to integrate messaging functionality into its platform, which may harm competitors providing only messaging functionality.

3.2 Objective of the competition rules

The concept of ‘competition’ is, in and of itself, indeterminate. Moreover, competition rules rely on concepts such as “prevention, restriction or
distortion of competition”\textsuperscript{10} or “abuse . . . of a dominant position”\textsuperscript{11}. These concepts may themselves have different meanings depending on factors such as the political environment, prevailing market conditions, or economic and political theories. As a result, competition law may be used to pursue different objectives. Nor is there a consensus on which objectives competition law should pursue from a normative point of view. By way of example, a 2007 ICN Report on the Objectives of Unilateral Conduct Laws identified no fewer than ten objectives of unilateral conduct rules: ensuring an effective competitive process,\textsuperscript{12} promoting consumer welfare,\textsuperscript{13} maximizing efficiency, ensuring economic freedom, ensuring a level playing field for small and medium-sized enterprises, promoting fairness and equality, promoting consumer choice, achieving market integration, facilitating privatization and market liberalization, and promoting competitiveness in international markets.\textsuperscript{14} But even this long catalogue is not complete. At least three further objectives that were not explicitly addressed by the respondents to the ICN questionnaire must be added to this list: increasing productivity,\textsuperscript{15} promoting social welfare\textsuperscript{16} and, ultimately, promoting sustainable economic growth.\textsuperscript{17}

Not only are different objectives of competition law adopted in different jurisdictions but even a single jurisdiction often adopts, in its statutory framework or through evolving court jurisprudence and enforcement practice, more than one objective.\textsuperscript{18} It may be tempting to argue

\begin{itemize}
\item \textsuperscript{10} Art 101(1) TFEU.
\item \textsuperscript{11} Art 102 TFEU.
\item \textsuperscript{12} ‘Effective’ is a key term in the definition of the competitive process or the market structure which competition law aims at protecting. ‘Effective’ refers to a relational concept and denotes a competitive process or a competitive market structure which is such as to achieve its intended or desired objectives. A full understanding of the term ‘effective’ requires, therefore, a definition of the objectives of the competitive process or a competitive market structure.
\item \textsuperscript{13} Consumer welfare or surplus is a consumer’s valuation of a product minus the price he paid for it. Consumer welfare or surplus in an industry is the aggregate surplus of all consumers in that industry.
\item \textsuperscript{14} International Competition Network (ICN), ‘Objectives of Unilateral Conduct Laws, Assessment of Dominance/Substantial Market Power, and State-Created Monopolies’, ICN Reports (2007) (the ‘2007 ICN Report’). The Report is based on questionnaires submitted by 35 ICN members. A number of ICN members emphasized that the objectives of unilateral conduct rules are the same as the objectives of competition law more generally (ibid, 6–8) and, therefore, this overview may be used as a starting point for a catalogue of the possible objectives of competition law.
\item \textsuperscript{16} M. Taylor, \textit{International Competition Law: A New Dimension for the WTO} (Cambridge, CUP 2009) 8–12; H. Bork, \textit{The Antitrust Paradox} (New York, Free Press 1993) 107–110 (somewhat misleadingly using the phrase ‘consumer welfare’ to denote social welfare). Social welfare is the sum of the surplus of producers and consumers in an industry. Producer surplus is the price of a product minus the opportunity cost of producing it. In this book, the phrase ‘social welfare’ will be used instead of ‘total welfare’ to emphasize that the maximization of the sum of the surplus of producers and consumers benefits society as a whole.
\item \textsuperscript{17} For a discussion of the objectives of competition law, see R. Nazzini, \textit{The Foundations of European Union Competition Law: The Objective and Principles of Article 102} (Oxford, OUP 2011), 11 – 50.
\item \textsuperscript{18} An interesting example is the Canadian Competition Act (RS, 1985, c C-34), s 1(1), which reads as follows: “The purpose of this Act is to maintain and encourage competition in Canada in order to promote the efficiency and adaptability of the Canadian economy, in order to expand opportunities for Canadian participation in world markets while at the same time recognizing
that different existing or desirable objectives of competition law may be reconciled and all pursued at the same time. In this way, competition law within a given jurisdiction and the competition laws of different jurisdictions pursuing apparently different objectives would all ensure at the same time an efficient allocation of resources, maximize consumer and social welfare, protect small and medium-sized enterprises, and achieve a level playing field in which all firms and consumers are treated fairly and granted the economic freedom to which they are entitled. However, different objectives of competition law cannot always be reconciled. A simple example illustrates the tension between productive efficiency and consumer welfare. If a higher-cost undertaking enters the market, a lower-cost incumbent may exclude it by lowering its price below the cost of the entrant but still above its own costs. A consumer welfare-based competition law would protect the entrant in these circumstances because the entrant will increase market output and cause market prices to fall on a lasting basis. An efficiency-based competition law would balance the increase in allocative efficiency resulting from lower prices against the decrease in productive efficiency resulting from the entrant capturing some of the sales of the incumbent. Intervention to protect the less efficient entrant is not as obvious as it would be under a consumer welfare objective. The trade-offs between different objectives also crucially depend on how each objective is defined. Much of the current confusion stems not only from the uncertainty as to the objective competition law does, or should, pursue but also from the lack of clarity and precision as to the what is meant by each objective. This is particularly true of the objectives of a more political or legal nature, such as the protection of competition as an institution or the protection of economic freedom, but also of economic concepts such as efficiency or productivity. These objectives are capable of being defined with a significant degree of precision in theory, but are often used in a general and unprincipled way in practice.

As I have explained in detail elsewhere, my view is that the objective of competition policy should be to prohibit conduct that, by reducing market rivalry, is detrimental to long-term social welfare understood as the sum of the surplus of producers and consumers in the long term reflecting not only purely economic welfare but also societal preferences and values.¹⁹ In its long-term dimension, social welfare is theoretically superior to other measures of welfare as the objective of competition law because it relies on formal equality among all economic agents and, ultimately, all citizens. Allocative, productive, and dynamic efficiency, and germane measures of efficiency such as productivity, are all


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relevant to maximizing social welfare in the long term. They are all, therefore, elements of a competition law analysis aimed at determining whether the conduct under review harms long-term social welfare. The protection of competitors, of an effective competitive process, of economic freedom, and of other similar economic or non-economic values is also highly relevant but as a means to an end rather than an end in itself. It ensures that, by protecting competitors, effective competition, economic freedom, and so on, social welfare in the long term is maximized.

The objective of competition policy is not the same as a legal rule or test. A rule whereby producers of substitutable goods cannot agree among themselves the prices that they are going to charge to their customers is clearly consistent with a long-term social welfare objective. Similarly, a rule whereby, for certain complex market conduct to be prohibited, it is necessary to show that it harms customers, is also consistent with such an objective. Harm to customers is a reasonably good filter to distinguish, under imperfect information, conduct that harms competitors but is beneficial to long-term social welfare and conduct that harms competitors and is also detrimental to long-term social welfare. The reason is that, if customers are not harmed, or even benefit, conduct that harms competitors is likely competition on the basis of superior efficiency, quality or product design. If, on the other hand, customers are also harmed, it is likely that harm to competitors is not the result of competition on the merits but of purely exclusionary practices aimed at increasing market power. The same reasoning applies to non-exclusionary conduct, such as horizontal or vertical agreements. If customers benefit, the agreement is likely to be pro-competitive. If customers are harmed, the agreement is likely to be detrimental to long-term social welfare.

3.3 Relative weight of different types of efficiency

In shaping an analytical framework for the assessment of anti-competitve conduct on digital markets, it is important to clarify the relative weight of allocative, productive and dynamic efficiency.

Allocative efficiency relates to the efficient use of resources in that resources are used to produce what society values most highly and production cannot be increased without foregoing production of a more valued product. Allocative efficiency is maximized when price equals marginal cost. As shown in the Figure below, a monopolist will choose to produce at the output where marginal cost (MC) equals marginal revenue (MR) and charge consumers a price PM in order to maximize its profits. This results in a loss of consumer and producer surpluses, indicated by the striped and spotted areas respectively. This is known as the deadweight loss under monopoly and illustrates that, in terms of allocative efficiency, a monopoly is less efficient than the same industry under perfect competition. Essentially, prices are higher and consumption lower than it would be under perfect competition – or more competitive conditions.
Productive efficiency relates to efficiency in production. Production is efficient when a given output is produced at the lowest possible cost given the current technology. The figure below illustrates the importance of productive efficiency. The left-hand side of the graph illustrates a situation in which production is inefficient across the industry. If the industry could reduce costs of production to the lowest possible cost given the current technology then we would see the supply curve shift as shown in the diagram, the equilibrium price fall, and a greater output being achieved. We also see that this increase in productive efficiency leads to greater consumer and producer surpluses, the areas ABPe and CBPe are both larger than the areas CDPi and EDPi.

Dynamic efficiency relates to the introduction of new production technologies or product developments. The introduction of a new production technology increases productive efficiency. Product development increases demand and, therefore, the price that consumers are willing to pay for the product. The effect of dynamic efficiency may be described as innovation. The figure below illustrates the effects of an improvement in dynamic efficiency in an industry. When a more efficient manufacturing process is introduced across the industry, then the supply curve shifts from S to S’, meaning more can be produced at each price level. If demand stays constant at D, the equilibrium price falls. However, improvements in dynamic efficiency could also mean the production of a better product that consumers value more, thus meaning they will purchase more at each price, resulting in a shift of the demand curve from D to D’. If the increase in demand is greater than the increase in supply, as shown in the graph, then the equilibrium price will be raised from P to P’. Crucially, both the producer and consumer surpluses will increase. To see this increase in social welfare, compare the size of the areas PCE and PCF with P’BA and P’BG.

All three types of efficiency are, of course, relevant to long-term social welfare. However,
it has been argued that “the consensus among economists since Schumpeter is that the gains achieved from innovative efficiencies dwarf those derived from maximising allocative efficiency and that innovation is the most important factor in the growth of the economy”.

At this risk of oversimplifying a complex problem, while producing wheels at the lowest possible cost and selling them at a price equal or close to marginal cost has been, and still is, beneficial to long-term social welfare, the invention of the steam engine first, followed by more advanced combustion engines, electrical motors, and so on has opened up possibilities of improvement of human life that were unimaginable in an economy where transport relied on animal or human power. By the same token, the digital eco-system and the connectivity and volume and use of data that it has enabled have been, and have the potential to be even more, of great benefit to society. These benefits, arguably, outweigh even those of a hypothetical pre-digital world where all goods and services were priced at marginal cost. It seems, therefore, correct that the weight given to dynamic efficiency in competition analysis should be more than the weight attached to allocative or productive efficiency and that conduct that is dynamically efficient should rarely, if ever, be prohibited under competition law.

3.4 Conclusions on the analytical framework

The discussion above shows that, in assessing anti-competitive conduct in the digital eco-system, we should look for rules that prohibit only conduct that, by restricting competition, reduces long-term social welfare to the detriment of economic growth, productivity and the well-being of the society as a whole. In applying such a rule, it is important to bear in mind that, under imperfect information, we should try and minimise the risk and cost of both false convictions and false acquittals. And, finally, we should never forget that dynamic efficiency is a key driver of long-term social welfare, economic growth and productivity. As a consequence, on the one hand, we should intervene robustly to prohibit conduct that harms dynamic efficiency and innovation and, on the other hand, look favourably on conduct that is dynamically efficient.

Having clarified these guiding principles, we can now apply them to three thorny issues in digital markets: how to define markets and the significance of market shares, the analysis of barriers to entry, and innovation.

4. ANTITRUST ANALYSIS OF ONLINE PLATFORMS

4.1 Market definition and market shares

Market definition in digital markets has become a hotly debated issue and rightly so. The evolving nature of such markets, their special features, including the fact that they are two- or multi-sided, the circumstance that often

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services are provided for free, or – as some argue – at no observable price, certainly make market definition more challenging. However, the issue would become much less pressing if market definition were properly understood for what it is and has always been: a tool to determine whether an undertaking has market power and whether the conduct under review has anti-competitive effects. Market definition is a tool - by no means the only tool - to addresses one, albeit undoubtedly important, aspect of the problem of market power and anti-competitive effects: the short-term competitive constraints that customers and suppliers exert on a product. The rub is that market definition has become, in practice, a short cut to finding market power and anti-competitive effects: once a market is defined, then it is possible to “calculate” the market share of an undertaking, a group of undertakings, or the merging parties. Once the market share is “calculated”, then, if the market share is “high”, it becomes much easier for a competition authority to infer market power and anti-competitive effects and much more difficult for undertakings to rebut a case made against them. Therefore, although not many of the sophisticated competition authorities today would equate a given market share with market power and market power with anti-competitive effects, the fact remains that the battle for market definition may well be decisive or, at least, may reduce or increase significantly, as the case may be, the chances of establishing or refuting an infringement case. If market definition were brought back to what it actually is, that is, a tool for identifying short-term demand- and supply-side competitive constraints on a product, then at least some of the drama would fade away. Market definition would become what it should be, namely but one element of the overall evidence needed to find market power. The other elements are well known and well rehearsed in economic and legal literature: barriers to entry and expansion and countervailing buyer power.21

Another, very practical, reason for being cautious about market definition and for playing down its prominence in competition analysis is of course that the art of market definition is prone to a significant risk of error. Consider, for example, the Commission’s analysis in the Facebook/WhatsApp merger. The Commission defined an EEA-wide or global market for consumer communication apps for smartphones. It then went on to note that traditional electronic communication services (e.g. mobile telephony and text messaging) could be in the same market and so could services offered on other devices could be part of the same market.22 But then, do we have an EEA-wide market or a global one? One that includes mobile telephony and text messages or one that is limited to consumer communication apps? These permutations are hugely significant and can make a real difference to a case. But possibly even more interesting is the approach to “calculating” market shares. Facebook’s proposal was to use app reach, that is, the percentage of users on a representative panel

22 Commission’s decision of 3 October 2014 in Case No COMP/M.7217 Facebook/WhatsApp, paras 20 – 34 and 36 – 44.
who used the app over a 30 day period. Other
market participants proposed to look at
monthly minutes of use but no reliable data
could be collected. Nor was there any reliable
data on messages sent, messages received, and
individual vs. group messages. This double
uncertainty over market definition and
“calculation” of market shares should caution
against any form of overreliance on these
indicators of market power and any inference
of anti-competitive effects drawn from these
crude structuralist tools.

Does this mean that competition authorities
should do away with market definition and
“calculation” of market shares? This may be
over-ambitious. When the DG Comp Economic
Advisory Group on Article 102 suggested that
this could be done in abuse of dominance cases,
this quickly, and unfairly, became one of the
least popular proposals ever made in
competition enforcement in the European
Union. Old ways are hard to die. But if good
old market definition is here to stay, at least I
would suggest:

i) considering all plausible market definitions;

ii) taking full account of feedback effects of
any price increase or degradation of quality
on one side of the market on the other side
or sides of the market:

iii) analysing the competitive pressure on the
platform under investigation regardless of
formal market definition and market shares;

iv) verifying whether the evidence of anti-
competitive effects is consistent with the
existence of substantial and durable market
power by the platform;

v) rejecting any inference market share =
market power = likely anti-competitive
effects;

vi) focusing on evidence of restriction of
competition and anti-competitive effects on
the market. In the absence of such evidence,
no infringement can be established
regardless of market definition and market
share. A useful question to ask for a
competition authority or court would be:
given this evidence of restriction of
competition and anti-competitive effects,
would I find an infringement even if the
market were much wider and the market
share much lower?

4.2 Barriers to entry

In antitrust analysis, barriers to entry and
expansion play a key role. Size does not matter
if markets are open and contestable and any
undertaking with a sound business model and
appropriate resources can enter the market and
compete on the merits.

In digital markets, disruptive innovation is
particularly relevant. Competition is not only
competition in the market, that is, competition
by players in relation to given products and
technologies, but could be competition from
innovators that introduce a new product or
technology which is alternative and eventually

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23 Case No COMP/M.7217 Facebook/WhatsApp, paras 95 – 100.

24 J. Gual et al, Report by the EAGCP “An economic
approach to Article 82”, July 2005, <<
http://ec.europa.eu/dgs/competition/economist/eagcp
_july_21_05.pdf>>, accessed on 1 May 2018.
may replace the previous ones and render them obsolete. When such successive innovation cycles are observable in the market, then even high market shares may simply be a transient phenomenon. The European Commission explained this concept eloquently in Facebook/Whatsapp. In particular, the Commission notes that the consumer communications sector is a recent and fast-growing sector which is characterised by frequent market entry and short innovation cycles in which large market shares may turn out to be ephemeral. In such a dynamic context, the Commission takes the view that in this market, high market shares are not necessarily indicative of market power and, therefore, of lasting damage to competition.

Moreover, the consumer communications apps market has been characterised by disruptive innovation. For example, BlackBerry launched the first successful smartphones with integrated consumer communications app and had a very significant market position. However BlackBerry Messenger was available only for BlackBerry smartphones and lost importance with the emergence of multi-platform apps once Android and iOS devices gained a larger part of the smartphone market. WhatsApp itself was launched in 2009, when the shift of users of consumer communications services from PC to smartphone started, and today it has approximately 600 million active users. Similar market dynamics can be found with respect to LINE and WeChat, which were both launched in 2011 and each of which has now more than 400 million active users worldwide.

Of course, disruptive innovation is not an article of faith or a pretext for a non-interventionist agenda. Relying on disruptive innovation as a competitive constraint requires evidence that the market dynamics is characterized by innovation cycles and that this does in fact exert competitive pressure on the incumbents. This may or may not be true on the facts of each individual case. When it is true, however, then heavy-handed competition intervention aimed at solving perceived problems may do more harm than good.

Primum non nocere, deinde curare. A maxim as needed in medieval medicine as in 21st Century competition policy.

Evidence does indeed suggest that barriers to entry on online markets are not necessarily significant. The success of WhatsApp in messaging services, Facebook’s success over MySpace in social networks, Google’s success over Yahoo! and AltaVista in search, would appear to show that innovative companies can quickly gain market share and displace less efficient incumbents. This is also due to the ease with which consumers can switch to new apps, platforms, and services. Apparently, Pokémon Go reached 40 million users within weeks of launch and in July 2016 iPhone users were spending more time on Pokémon Go than on Facebook. Whatever view one takes of Pokémon Go, reaching so many customers in such a short time would be unthinkable outside the “digital space”, which has opened up enormous opportunities for innovation, entry of new competitors, and expansion of existing suppliers into new sectors.

25 Case No COMP/M.7217 Facebook/WhatsApp, paras 99 and 116.
This does not mean, of course, that competition enforcement becomes irrelevant in digital markets. On the contrary, competition enforcement has a key role to play in policing these markets to keep them open and contestable by intervening timely and robustly against any conduct that raises entry barriers and excludes competitors not on the basis of superior efficiency but as a means of preserving market power and slowing down innovation and growth. Commentators have pointed to data and c.d. Big Data potentially being a barrier to entry. The fact that online platforms rely on data in their business models and may obtain a vast amount of data that they can process at incredible speed is not, in itself, a matter of concern. Quite the contrary, the benefits of this new data-driven economy are enormous. Furthermore, precisely because of the new opportunities unleashed by the digital economy, obtaining and using data have become much easier and cheaper today than they were in the past. In Google/DoubleClick, for example, the merged entity would obtain data sets from Google and Double Click thus becoming able to match data from both data sets. However, there were several competitors that ran both a search engine and ad serving and, furthermore, data could be purchased from third parties. In Facebook/WhatsApp, the merged entity could collect data from WhatsApp in order to improve targeting of advertising on Facebook. However, the amount of data available to competitors remained considerable. In Microsoft/Yahoo!, combining data from both search engines would improve services and allow the merged entity better to compete with Google.

On the other hand, in Bazaarvoice/Powerv-Reviews in the United States of America, a merger was reversed on application by the Department of Justice because it would have substantially lessened competition in “ratings and reviews platforms” used by retailers and manufacturers in the United States by eliminating Bazaarvoice’s closest competitor. Although the focus of the analysis was not data or Big Data, one of the key findings was that the parties’ network connecting retailers and brands and the parties’ combined datasets would not have been replicable by competitors either organically or by M&A. As more manufacturers purchased the parties’ platform, it became more valuable to retailers because it allowed them access to a greater volume of ratings and reviews. And the more retailers used the platform, the more valuable it became to manufacturers because it allowed them to share their reviews with a greater number of outlets through “syndication”. Network effects were crucial to the decision to order the divestiture of the acquired business.


27 Case No COMP/M.7217 Facebook/WhatsApp, paras 180 – 189.

28 Commission’s decision of 18 February 2010 in Case No COMP/M.5727 Microsoft/Yahoo! Search Business, para 192.

29 All the key documents in the case, including the memorandum opinion and the judgments of the court, are available at <<https://www.justice.gov/atr/case/us-v-bazaarvoice-inc>>, accessed on 1 May 2018.
Thus, data and Big Data may or may not be a barrier to entry in given circumstances. Careful analysis is required before conclusions are drawn in any individual case.

4.3 Innovation

Firms must be able to innovate even if innovation excludes competitors. But how to define “innovation”? And are there exceptions, that is, could innovation be detrimental to competition?

As to the first question, a working definition of innovation could be coextensive with dynamic efficiency: innovation is the introduction of new production processes or new or improved products that shifts the supply and demand curves so as to increase social welfare. From this definition the answer to the second question follows: as a general principle, there should be no exceptions to the rule that innovation is presumptively pro-competitive and cannot be prohibited under competition law. This is, however, and somewhat bizarrely, not the position under EU competition law: under Article 101(3) improvements to technical and economic progress that also restrict competition are allowed only if certain conditions are fulfilled, namely if a fair share of the resulting benefits is passed on to consumers, if the restrictions of competition are proportionate to the objective pursued and if they do not result in the elimination of all competition in the products or services concerned. A similar test applies under Article 102 and in the review of mergers. This is, at first sight, surprising, if not shocking: competition authorities and courts appear to be able to evaluate innovation under a broad proportionality test and prohibit improvement to technical and economic progress if, in their judgment, the restrictive effects on competition are not outweighed by the benefits.

If we were starting with a clean slate, perhaps a different rule would be better and more in line with the objective of competition policy, which is to maximise social welfare and productivity growth in the long term. It would be possible to establish a safe harbour, that is, a presumption of lawfulness, for conduct that is genuine innovation, regardless of any balancing test. Under such a safe harbour, conduct could still be prohibited when innovation is not genuine innovation but has no other purpose than to exclude rivals. It is important to note that the test cannot be only “intention to exclude rivals” – all innovation is carried out with the “intention to exclude rivals” in one way or another. A necessary limb of the test is that conduct is not “genuine innovation” – this should require proof that the conduct is not of any material benefit to consumers and that it is therefore only aimed at excluding competitors.

30 Art 101(3) TFEU.


32 Commission’s decision of 13 July 2011 in Case No COMP/M.6342 UPM/Myllykoski and Rhein Papier, para 167 and Commission’s decision of 1 February 2012 in Case No COMP/M.6166 Deutsche Börse/NYSE Euronext, paras 1133 – 1342.
A classic objection to this approach is that competition authorities and courts should not “second-guess” the market on innovation: they should not be allowed to judge whether innovation is “genuine innovation”. However, this cannot mean that it is sufficient for an undertaking simply to state that something is innovation to escape any antitrust liability. Competition authorities and courts must be able to verify whether the safe harbour applies in the first place, which means that they must be able to verify whether the conditions for the application of the “safe harbour” are met. This would still be a significant change to the current legal position under EU law, which regards innovation as a possible defence to a prima facie infringement case.

However, even under EU law, it is possible to adopt a more or less restrictive approach to defences based on dynamic efficiency. At one end of the spectrum, undertakings can be put to the strict proof that their conduct fulfils all the conditions necessary to establish the relevant defence. On the other hand, a competition authority or court could recognise that the importance of innovation in fostering economic growth is such that the law cannot require the adoption of less efficient alternatives simply in order to keep inefficient rivals afloat. In Streetmap.eu Ltd v Google, Roth J in the English High Court, having ruled that technical improvements in the quality of the goods can be a defence to an abuse case, went on to say that, where the efficiency is a technical improvement, proportionality does not require adoption of an alternative that is much less efficient in terms of greatly increased cost or which imposes an unreasonable burden (at the very least in a case where there is no suggestion that the conduct impugned was likely to eliminate competition).

In the end, the difference between dynamic efficiency as a safe harbour or as defence may be somewhat abstract. It is obviously for the undertakings concerned to plead that their conduct is dynamically efficient and adduce sufficient evidence to substantiate their pleading. There is no difference, up to this point, between the safe harbour and the defence approach. However, under the safe harbour approach, provided that the safe harbour is pleaded and sufficient evidence to substantiate the pleading is adduced, it is then for the competition authority or claimant to prove that conduct is not “genuine innovation”. Under the defence approach, it is for the undertakings concerned to prove that, or at least to discharge an evidential burden to the effect that, the conditions of the defence are established. In practice, the problem lies in the burden and standard of proof or evidential burden. Provided that (a) the burden/standard of proof or evidential burden are not so strictly interpreted and set so high that they cannot reasonably be met, on the understanding that businesses cannot be expected to have knowledge that goes beyond a reasonable assessment of own demand and opportunities for growth; and (b) businesses are not required to incur additional burdens or choose less efficient alternatives for the purpose of helping

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33 Streetmap.eu Ltd v Google Inc [2016] EWHC 253 (Ch), paras 142 – 176 (Roth J).
or not damaging rivals, then the defence approach can also be sensibly applied and be consistent with a competition policy that truly fosters economic growth and productivity and contributes to the maximisation of the opportunities that the digital economy brings about for businesses and consumers alike.

5. Conclusion

The digital economy has created unimaginable opportunities for growth for business and consumers and has the potential further to improve social welfare, living standards, and productivity. Competition has an important role to play to help market players deliver these benefits to the economy. The main task of competition enforcement is to ensure that markets remain open and competitive and that new entrants and innovative undertakings have a fair opportunity to compete with incumbents on an equal footing. To accomplish such a task effectively, competition policy should develop and apply analytical tools that, while consistent with the existing legal framework, raise to the challenges and opportunities created by the new, dematerialized, highly dynamic, innovation-driven digital environment.
6. REFERENCES


Table of cases

Deutsche Boerse/NYSE Euronext (Commission’s decision of 1 February 2012 in Case No COMP/M.6166).

Facebook/WhatsApp (Commission’s decision of 3 October 2014 in Case No COMP/M.7217).

Google/DoubleClick (Commission’s decision of 11 March 2008 in Case No COMP/M.4731).


Case T-201/04 Microsoft Corp v Commission

Microsoft/Yahoo! Search Business (Commission’s decision of 18 February 2010 in Case No COMP/M.5727).

Post Danmark A/S v Konkurrencerådet, Case C-209/10, ECLI:EU:C:2012:172.

Streetmap.eu Ltd v Google Inc [2016] EWHC 253 (Ch), paras 142 – 176 (Roth J).


UPM/Myllykoski and Rhein Papier (Commission’s decision of 13 July 2011 in Case No COMP/M.6342).