Articles

The double duality of two-sided markets

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Introduction

The increasing relevance of multi-sided markets² and business models in the economy has over the past few years been mirrored in academic writings, mostly in economic literature,³ and increasingly in competition law enforcement.

The intention of this brief intervention is not to incorporate novel theories into the discussion of multi-sided platforms nor to summarise the main findings of the literature that is currently available. As an avid reader of academic works on the subject, and although I much appreciate their lessons, when I read them I realise that the vast majority of papers have been authored by economists, mostly academics, and only in very rare cases by lawyers in private practice.

This – like other features I will comment on later – has dual implications: on the one hand it means that practitioners haven't (yet) muddled the discussion by writing one-sidedly in defence of the positions they are hired to represent;⁴ on the other hand, it also means that certain practical legal issues may not have received the attention they perhaps should.

When legal scholars have touched upon the application of competition law in two-sided platforms they have moreover done so for the most part in relation to specific markets, notably payments, media and search engines. There is nothing to criticise this focus, but while specificity has advantages, it also has downsides. Indeed, in my view, complex problems are better assessed with perspective; it is only with a wider approach that patterns become clear and that conclusions intended to be of general application can be adopted without influence or prejudice derived from fact, case, or market-specific elements.

The relative lack of attention on the part of legal scholars has not been compensated by any clarification by competition authorities. Indeed, the majoritarian position of competition

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2 Whereas the title of my intervention at the *Pros and Cons* conference referred to 'two sided markets', I will hereinafter refer to 'multi-sided platforms' in order to avoid misunderstandings with the competition law notion of 'market' as well as to acknowledge that platforms may have more than only two sides.

3 For a survey of economic literature on the topic, see D Evans and R Schmalensee, 'The Antitrust Analysis of Multi-Sided Platform Businesses', in R Blair and D Sokol (eds), Oxford Handbook on International Antitrust Economics (Oxford University Press, 2015) or University of Chicago Institute for Law / Economics Olin Research Paper No 623, available at: http://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1482&context=law_and_economics.

4 Some of the articles written by practicing lawyers (and practicing economists) in this regard are indeed so one-sided that it is surprising to see them written on both sides of the paper. Contrary to this tradition, this article does not intend to defend the particular position of a given client; I have, rather, chosen to adopt a different forward-looking approach and present both the 'pros and the cons' of market structures and business practices in multi-sided settings. This balancing exercise is not only in line with the theme of the *Pros and Cons* conference, it also should also have the positive externality of lowering my switching costs should that be necessary.

authorities has been one that at first sight may appear as prudent, but that on closer inspection may not be proving the wisest: to argue that the economic literature is still at an early stage, that there is little empirical work from which to draw lessons and, in sum, that more economic research is needed prior to advancing changes in the way the law is applied.⁵

Against this background, the pages that follow seek to provide the personal views of a practitioner on how to deal with a subject that has become increasingly relevant to the practice of competition law and that lies at the core of some of the most prominent cases in recent times. I essentially intend to submit that – contrary to the most widely held stance – perhaps we know all we need to know about two-sided platforms in order to refine our legal approach to them.

Indeed, 'unlike, say, macroeconomics or behavioral economics, there is no serious controversy among economists' on this topic and therefore it seems fair to claim that 'the multisided platform analysis is well within the economic mainstream'; over the past few years thanks to the work of many economists we have robust theoretical and empirical grounds on which to build, these theories already have their Nobel prize, and perhaps the time is ripe for the law to take the driver's seat in these discussions.

My concern, however, is that we, as lawyers and jurists, seem not to know what to do with it. Indeed, authorities and lawyers are used to (let us not change metaphors) driving in auto-pilot, repeatedly resorting to the same tools, tests and rules, and feel uncomfortable in multi-sided platforms because the setting forces us to go back to basics and to interrogate ourselves about where we really want the application of competition law to take us.

In other words, by breaking the inertia of business as usual, multi-sided platforms place us out of our comfort zone, expose our contradictions and insecurities and oblige us to think. This may, on the one side, be most uncomfortable but, on the other side, presents us with a most interesting opportunity to go back to the basics of our discipline, perhaps too often forgotten.

In sum, I will argue that what is missing is not empirical work but a wider reflection on the goals of competition law and on how they are to be attained.

The complexity and duality of multi-sided scenarios On the need to refine traditional tools and rules

It already has become commonplace to say that multi-sided platforms pose particular challenges to competition law enforcement, and it is true in many ways that the logic, the rules and the tools we are accustomed to are not valid in these settings, at least not without important refinements.

⁵ See for example European Commission, 'Note to the OECD's Roundtable on Two-Sided Markets', 28 May 2009, p 5, stating that 'empirical research is lacking' and is 'indispensable' and that 'it is still early for a competition authority to adopt any definitive views, let alone concrete policies or assessment methodologies, concerning the application of competition policy un cases involving two-sided platforms'.

⁶ These include various investigations in Google's search and mobile OS products, several investigations into payment networks as well as on Most Favoured Nation clauses in online websites.

⁷ D Evans, 'The Consensus among Economists on Multisided Platforms and Its Implications for Excluding Evidence that Ignores It' (2013), p 3, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2249817. At p 11 he states that '[w]hile the result that traditional models may not be applicable to multisided platforms is inconvenient in practice, it is not controversial among professional economists'.

⁸ At roughly the same time both the Swedish Competition Authority and the Swedish Academy decided to honour the developments in the field of two-sided markets, albeit somehow asymmetrically: the latter by granting a Nobel Prize to Jean Tirole, one of the pioneers of this literature and the former inviting me, among others, to participate at the *Pros and Cons* conference.

Such claims are not unusual. As a lawyer, I do not recall having ever worked on a case in which someone did not claim that the sector at issue deserved special antitrust scrutiny; all sectors claim to be special and, in a sense, they all are. Admittedly, however, multi-sided scenarios (which might arise in many markets, both technological and not) do seem to pose, or rather exacerbate, practical problems that take competition law out of its comfort zone.

Most of the theoretical models on which competition law typically relies assume one-sidedness, in that they consider one single set of customers and their reaction to changes in supply, as well as the response of suppliers to changes in that demand. In multi-sided platforms however, the assessment becomes multi-dimensional. In these settings one needs to factor in the existence of multiple customer groups with interdependent demand and analyse (i) how each side will react to a given move on the part of the platform; (ii) how will the platform react to moves on the different sides; and (iii) how each side will react to each other.

The complexity of these exercises is further enhanced by another important dimension to consider: time. One of the crucial features of these markets – particularly technology markets – is the speed at which they progress; business practices are not only complex, but also highly dynamic; the ability of these platforms to grow, and the speed at which they scale, is unprecedented in any other business. Accordingly, these platforms are constantly increasing their depth and reach, constantly redefining their boundaries as well as those of entire industries. In case things were not difficult enough, competition authorities are asked to react swiftly to rapidly evolving situations. Moreover, and aside from substantive questions, the time dimension also raises enforcement issues: when should competition authorities intervene? Is it preferable to prevent or to cure?

Interdependency, the pattern of cross-responses and speed are, in sum, what makes everything a bit more complicated, in life, in economics and also in multi-sided platforms. And by 'everything' I mean, literally, everything. As acknowledged by the European Commission, '[t]his pattern of cross responses will generally affect each step of standard antitrust analysis, from product market definition, the competitive assessment, entry, efficiencies, etc'.⁹

In light of the above, it is unquestionable that having to apply competition law to multi-sided platforms breaks the inertia and forces us not to do things like we used to, thereby obliging us to think.

Against this background, I submit that the thinking has been asymmetrical on the part of economists, on the one side, and lawyers on the other.

Much attention on the part of economists and scholars has lately centred on how to adapt and make practicable the tools we are most accustomed to (such as the small but significant and non-transitory increase in price (SSNIP) test or the Areeda-Turner/AKZO test), and progress has certainly be made in this regard.

Whereas the refinements and adaptations to our toolkit proposed by economists are most valuable and welcome, my contention is that they may be of little use if jurists continue not to address other questions raised by these markets which go more profoundly both to the root of the discipline and to the way in which the rules are enforced in practice.

⁹ European Commission note to the OECD's Roundtable, n 5, above, p 4. For a 'not necessarily complete compendium of known and well-documented problems with applying results based on a single-sided analysis to multi-sided platforms', see Evans, n 7, above, p 9. For a list of eight one-sided fallacies in which may occur when dealing with multi-sided platforms, see J Wright, 'One-sided Logic in Two-sided Markets' (2004) 3(1) Review of Network Economics 44–64.

As I will submit in the discussion which follows, the duality or ambiguity for competition purposes of practices carried out in multi-sided platforms has not been properly accounted for in the law. As will be explained below, this duality raises substantive and practical questions that expose the inconsistencies and insecurities of competition law and oblige us to question the very values we purport to defend and the objectives we intend to pursue.

On the double duality of business practices in multi-sided platforms

The platforms discussed in this contribution typically receive special attention because of their already explained duality; that is, they are said to be peculiar because they involve two (or more) sets of users that interact with each other through the platform which, in turn, means that business practices will be felt on multiple sides of the market.

But in my view there is a second element of duality of two-sided platforms that has not received equal attention and that relates to the competitive ambiguity of the practices carried out in these settings.

Indeed, the circumstances in which practices in multi-sided platforms may lead to foreclosure are precisely the same ones in which they may yield benefits for consumers.

The defining characteristic of a multi-sided platform is that it solves a transaction problem and creates value by bringing together – physically or virtually – different groups/sides that need each other but that cannot get together easily on their own. The platform makes users better off by harnessing indirect network effects by ensuring that there are enough players on both sides. This means that advantages arise when a platform or intermediary manages to attain a critical mass of users, and balances and optimises the network effects (often by resorting to asymmetric pricing, exclusivity and/or tying, among other possible strategies).

On the other side, however, attaining the necessary scale may very well imply depriving competing platforms of the critical mass they need, thus leading to their exclusion from the market. Such exclusion may occur as a result either of the natural tipping of the market towards the most valuable platform¹⁰ or of exclusionary strategies which in other contexts would be deemed irrational (in these settings each time a competing platform is deprived of a given customer it loses not only the potential revenues from that customer but also suffers a loss in the overall value of the platform). One illustrative example is that of interoperability denials. Although lack of interoperability diminishes the value of a given network, it may appear as a rational strategy given that it may particularly damage small networks by denying them a minimum viable scale.

This second dimension of the duality of two-sided markets (ie their competitive ambiguity) is indeed not exclusive to this context but rather derives from the existence of network externalities which – although present by definition in multi-sided settings – may well exist in one-sided ones. It implies, in sum, that moves to increase the scale of the side of the market generating those externalities might result both in greater scale and concentration (typically assumed to be detrimental to consumer welfare) as well as in increased platform value (which is welfare enhancing for its members).¹¹

¹⁰ Whereas it is by now acknowledged that in most instances multi-sided platforms (or more generally speaking markets characterised by network externalities) do not tend to monopolise given the prevalence of product differentiation on attributes or quality and of the possibilities for multi-homing, switching and, in many cases, interoperability, the fact is that many multi-sided platforms operate in highly concentrated environments. This is not necessarily good (except for competition lawyers) or bad, it simply is part of the background in which competition rules are to be applied.

¹¹ HJ Hovenkamp, *The Antitrust Enterprise*, *Principle and Execution* (Harvard University Press, 2005), at 281 ('These same features that make networks attractive also create the opportunity for anticompetitive practices'); M Schanzenbach, 'Network Effects and Antitrust Law: Predation, Affirmative Defenses, and the Case of U.S. v. Microsoft' (2002) 4

The problem that competition law faces in these settings is similar to the one faced by multi-sided platforms when conducting business – in essence, how to strike a balance between the two sides, in this case the offensive/anti-competitive and the defensive/pro-competitive.

In what follows, I will contend that whereas it is clear in economics that business practices in multi-sided platforms setting have both an offensive and defensive potential, and whereas this seems to have been acknowledged on a theoretical basis by competition authorities and courts, the practical application of the competition rules results in an imbalance that overplays the offensive, or anti-competitive, potential of such practices and makes defences effectively unavailable.

Multi-sided market features as a sword

Competition authorities have been aware since the early 1990s of the offensive potential of network effects, including in multi-sided platform settings.

Interestingly, both the doctrine and the application of the law in the face of network effects have tended to focus on their anti-competitive potential (which is somehow paradoxical for a positive, theoretically desirable, externality). Indeed, most of the attention paid to network effects by antitrust enforcers and scholars – later consolidated in precedents and guidelines¹² – eminently relates to their characteristic as a barrier to entry. As a result, network effects have proved to be, in practice, a most effective basis for legal arguments challenging allegedly anti-competitive conduct.¹³

Stanford Technology Law Rev 3 (asserting that 'network competition provides unique opportunities for anti-competitive strategies', but emphasises that 'network competition also provides some unique pro-competitive justifications for practices that have traditionally received antitrust scrutiny, such as tying, exclusive dealing, and low-pricing strategies', concluding that 'network effects can be a double-edged sword'); GL Priest, 'Rethinking Antitrust Law in an Age of Network Industries' (2007) 4 Yale Law & Economics Research Paper No 352, at 4 ('[M]any practices in the context of networks that may seem puzzling become understood when the need to correct for positive network externalities is taken into account'); DJ Gifford, 'The European Union, the United States, and Microsoft: A Comparative Review of Antitrust Doctrine', CLEA 2009 Annual Meeting Paper, available at SSRN: http://ssrn.com/abstract=1434089 or http://dx.doi.org/10.2139/ssrn.1434089, pp 19-20: 'Network effects carry a double edge'; SF Ross, 'Network Economic Effects and the Limits of GTE Sylvania's Efficiency Analysis' (2001) 68 Antitrust Law Journal 951: 'Firms that produce goods with network effects can engage in conduct that promotes efficiency, in the sense that the resulting product is cheaper, intrinsically superior in quality, or that the product's greater use by others increases each consumer's utility. The same conduct can simultaneously have significant exclusionary effects because the conduct makes it even more difficult for new entrants to overcome the fact that so many consumers now use the dominant firm's product'; WH Page, 'Microsoft and the Limits of Antitrust' (2009) Journal of Competition Law & Economics (forthcoming), University of Florida Levin College of Law Research Paper No 2009-40, available at SSRN: http://ssrn.com/abstract=1501079, at 9: 'The very existence of network effects makes certain practices that resemble antitrust violations socially beneficial ...'; WJ Kolasky, 'Network Effects: A Contrarian View' (1999) 7 George Mason Law Review 578: 'Network effects may well exhibit unique characteristics, but these characteristics do not all point in one direction. Network effects will as often provide a valid precompetitive business justification for conduct as they will a reason for holding otherwise lawful conduct unlawfully'.

12 European Commission, Guidance on the Commission's enforcement priorities in applying Article 102 TFEU to abusive exclusionary conduct by dominant undertakings, paras 17–20 ('The Commission will normally intervene under Article 82 where, on the basis of cogent and convincing evidence, the allegedly abusive conduct is likely to lead to anti-competitive foreclosure. The Commission considers the following factors to be generally relevant to such an assessment: (...) the existence of economies of scale and/or scope and network effects. Economies of scale mean that competitors are less likely to enter or stay in the market if the dominant undertaking forecloses a significant part of the relevant market. Similarly, the conduct may allow the dominant undertaking to 'tip' a market characterised by network effects in its favor or to further entrench its position on such a market. Likewise, if entry barriers in the upstream and/or downstream market are significant, this means that it may be costly for competitors to overcome possible foreclosure through vertical integration'), 24; Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2004) OJ C 31/5, para 72; Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2008) OJ C 265/6, paras 62, 101.

13 Perhaps with the exception of the *Microsoft/Skype* case (in which the Commission's unconditional authorisation in Phase I was validated by the judgment of the General Court of 11 December 2013 in *Cisco Systems, Inc and Messagenet SpA v European Commission* (Case T-79) EU:T:2013:635, but for reasons not attributable to (and still not well understood by)

This has been evident with regard to a wide array of practices, both price and non-price related, as well as in relation to merger control.

The approach of competition authorities to pricing practices is perhaps most striking, at least at first sight, 14 As observed by Rochet and Tirole, 'theoretical models predict that skewed pricing is more likely to be the norm than the exception for MSPs [multi-sided platforms]' but 'surprisingly, skewed pricing has sometimes been used by competition authorities in completely opposed ways'.15 Indeed, proving true a well-known quote that is often used to ridicule competition law enforcement, 16 competition authorities and courts in the EU have taken action against prices that were too high (notably concerning the multilateral interchange fee (MIFs) applied by card payment systems), against prices that were allegedly too low (see eg the allegations on predatory pricing on the part of Google regarding maps and mobile operating systems) as well as against prices that were considered to be too stiff (eg the recent investigations into MFNs/best price guarantees applicable to online resellers in hotel reservation systems, e-books or Amazon's marketplace). In relation to non-pricing practices attention has tended to focus on exclusivity arrangements, ¹⁷ as well as on tying/bundling18 and on alleged access and discrimination issues against so-called 'gatekeepers' - a fashionable term nowadays - or 'competitive bottlenecks' (which arise when a given platform is an unavoidable trading partner for agents on one side of the market to reach the single-homing agents on the other side). 19

The same vigilant approach is visible in the preventive field of merger control. The predominant tendency on the part of antitrust agencies has typically²⁰ been to assume that network effects may increase barriers to entry as well as incentives to act anti-competitively following a change of market structure pursuant to a merger.²¹

the lawyers representing the applicants, including myself. For my comments on this case, see http://chillingcompetition.com/2014/05/12/a-comment-on-case-t-7912-cisco-systems-and-messagenet-veuropean-commission-microsoftskype/.

15 J-C Rochet, J Tirole, 'CPI Introduction to the Symposium' (2007) 3(1) 148, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=987339

18 Tying and bundling are looked at more suspiciously in industries with network effects, economies of scale and high barriers to entry (see, eg, the Microsoft cases, concerning the tying of Windows Media Player and Internet Explorer; see also the European Commission's Staff Discussion Paper on the application of Article 82 EC to Exclusionary Abuses, para 180 (2005), available at http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf).

20 Perhaps with the exception cited at n 13 (apologies for the one-sidedness on this one).

¹⁴ In reality, the apparent contradictions observed in this regard may not be such, given that, in practice, pricing practices can certainly be used to exploit, exclude and reinforce a firm's position. That there may not be a real inconsistency in the approach of competition authorities does not mean that the approach in all individual cases has been the right one.

^{16 &#}x27;Ronald [Coase] said he had gotten tired of antitrust because when the prices went up the judges said it was monopoly, when the prices went down they said it was predatory pricing, and when they stayed the same they said it was tacit collusion', W Landes, 'The Fire of Truth: A Remembrance of Law and Econ at Chicago' (1981) *Journal of Law and Economics* 193.

¹⁷ The prevalent thinking among competition authorities with regard to exclusivity on one side of multi-sided platforms is that it would artificially increase switching costs, thereby hindering competing platforms' ability to obtain the necessary critical mass with which to gain a foothold on the market. In these circumstances it is generally assumed that network effects exacerbate the collective choice problem, since consumers will be aware of the disincentives created by exclusivity for other consumers to shift network. Consequently, a rival firm, even one which could offer a superior product or service, would not have any opportunities unless users have the ability to act coordinately, which may be rare.

¹⁹ Theories of harm alleging the existence of competitive bottlenecks have been brought in relation to search engines, computerised reservation systems, mobile communication networks, Internet Service Providers, credit card networks and supermarkets, among others.

²¹ Accordingly, network effects are generally seen as factors with the potential to complicate the anti-competitive effects of a merger. Perhaps the first example of the application of network theory to the assessment of merges lies on the MCI/WorldCom case, which was cleared both by the European Commission and by the DOJ upon the condition that WorldCom would divest MCI's internet business. Since then, the European Commission has approached mergers in multi-sided platforms with particular care; think, for instance of Microsoft/Yahoo, Travelport/Worldspan and Google/DoubleClick, all of which were centered on theories of harm which were explicitly based on cross-market effects. Once again, the outlier here is Microsoft/Skype, a case in which a theoretically straightforward cross-market effects theory of harm was put forward but was labelled as 'conglomerate' and rapidly dismissed too 'complex' and 'uncertain'.

Multi-sided market features as a shield

Whereas discussions on network effects have typically focused on their offensive potential, discussions on multi-sided platforms (which, as explained, deal in reality with the same root phenomenon) rather tend to highlight their theoretical defensive potential.

The key idea I want to convey here is that the economic literature shows that demand-side efficiencies achieved by multi-sided platforms may turn typically condemned practices into welfare enhancing ones. This is the case, for example, with horizontal cooperation agreements within the network aimed at capturing externalities or expanding the network (think of the MIFs in the payments industry, of standard setting agreements, of collecting management societies or of airline alliances), of what could prima facie be regarded as predatory/excessive pricing,²² as well as with other unilateral practices such as exclusivity arrangements²³ and tying/bundling,²⁴ all of which might be used to harness network effects.

In spite of these conceivable defences, it is still most rare to see demand-side efficiencies being effectively acknowledged as a valid defence in real cases.²⁵

My contention is that this lack of consideration for possible redeeming virtues arising from demand-side efficiencies stems both from the inability of economics to quantify the externality, as well as from the inability of the law to account for this gap and adapt to it.

I attribute this problem to three main causes:

First, competition authorities are out of their comfort zone when asked to assess defences based on the internalisation of network externalities (ie the increase in the value of the platform to make it viable or more effective) in the absence of quantification. The lack of a reliable method to quantify the advantages derived from the externality means that, in practice, attempts to bring up defences related to the efficiencies arising from a larger or more balanced platform are typically doomed.²⁶

- 22 Contrary to the *Areeda/Turner* and *AKZO* assumption that underlying a price below marginal cost there is generally an anti-competitive purpose, exclusionary intent is not necessarily present in relation to penetration pricing aimed at providing incentive for one side to join, thus making the platform viable or expanding its reach and, consequently, its value. In fact, low pricing is the most obvious way in which a network owner can internalise the consumption externality by setting the price charged for joining at a price below the costs that the addition implies for the network firm with a view to building critical mass. In a way, the firm using such strategy is investing in the network through the purchase of its most valuable input: the customer. Low prices on one side of the platform may very well be accompanied by what could be regarded as excessive prices on the other side thereof. Admittedly, the increase in the value of the network could also be coupled by the exclusion of competitors, thereby making it necessary to balance pro and anti-competitive effects.
- 23 As observed by Shapiro, whereas it is widely assumed that in network settings pro-competitive features will be outweighed by greater competitive harm, exclusivity can also serve to differentiate products and networks, to encourage investment in these networks, and to overcome free riding. Exclusivity obligations may also act to the detriment of an incumbent firm facing a particularly strong entrant given that it may '[induce] customers who would otherwise be a member of both networks to join only the new network'. In addition, multi-sided platforms may possibly enhance some of the pro-competitive effects of exclusivity. It is commonly admitted that exclusivity might facilitate long-term planning, thus reducing the risk of incurring fixed costs in production. This contribution to the elimination of uncertainties is particularly useful in multi-sided markets, characterised by the necessity of incurring large sunk costs in unpredictable contexts. C Shapiro, 'Exclusivity in Network Industries' (1999) 7 George Mason Law Review 675.
- 24 In certain multi-sided settings tying may contribute to preserving or expanding the positive network externality by adding new functionality to network platforms, by helping entrants overcome barriers to entry. See, eg Priest, n 11, above, p 8 and Page, n 11, above, p 9. In a multi-sided market tying/bundling can also be used as a monetisation strategy.
- 25 This has lead even Nobel-prize winners to underline the 'insufficient attention paid to efficiency considerations related with usage externalities', Rochet and Tirole, n 15, above, p 148.
- 26 An illustration can be found in the *Mastercard Interchange Fees* case. In a nutshell, a 2007 Commission decision concluded that MasterCard's intra-EEA cross-border multilateral interchange fees for credit and debit cards were contrary to Art 101(1) TFEU in as much as they restricted competition between acquiring banks by artificially increasing the basis on which these banks set their charges to merchants. MasterCard argued that the anti-competitive effect outlined above could be outweighed by efficiencies stemming from MIF in the form of lower cardholder fees on the

The requirement of objective quantification contrasts with the much lighter burden imposed on the authorities, which are not obliged to 'objectively quantify' restrictions; they can meet their burden of proof on the basis of qualitative factors, but private undertakings having to defend themselves cannot. This unevenness in the applicable standard of proof risks – as will be discussed in detail later – an effective shift of the burden of proof from the Commission to the undertaking. Consequently, in doubtful cases authorities and courts may risk following the reflex of condemning complex practices despite, or precisely because of, the impossibility to adequately assess their effects.

Secondly, the legal principles typically used to assess redeeming virtues have not always been interpreted in a manner well-suited to account for cross-market efficiency assessments, which will obviously be necessary when more than one side of a platform is affected by a given practice.²⁷ This is in contrast with the lessons derived from economics, which tell us that the ideal solution here would be to strike a balance between all interests at play (balancing favourable and detrimental effects of the agreement across markets and across customer groups).

According to the Guidelines on the application of Art 101(3) efficiency gains are in principle assessed 'within the confines of each relevant market to which the agreement relates'. Whereas the guidelines envisage that where two markets are related one can take into account the efficiencies in the other, they nevertheless require that the group of consumers affected by the restriction and benefitting from it be substantially the same.²⁸

The Guidelines on 101(3) not only reflected, or rather set, the creative – and in these settings problematic – approach adopted by the Commission in this regard, but they also somehow captured the General Court,²⁹ which validated them on this point its *Mastercard* judgment.³⁰ On appeal, however, despite upholding the General Court's *Mastercard* ruling, the Court of Justice of the European Union (ECJ) made it clear that when assessing compliance with 101(3) 'it is necessary to take into account the system of which that measure forms part, including, where appropriate, all the objective advantages flowing from that measure not only on the market in respect of which the restriction has been established, but also on the

opposite side of the market. In other words, MasterCard's reasoning was that in light of the 'two-sided' nature of the payment card industry, MIFs were 'set to balance issuing and acquiring demands, so as to 'get both sides on board', thereby internalising network externalities and maximising output and consumer welfare. The Commission observed that MIFs were also able to generate significant efficiencies in light of the 'two-sided' nature of the market. Nonetheless, it rejected MasterCard's allegations considering that even though MIFs could be a potential source of efficiencies, 'MasterCard failed to submit the required empirical evidence to demonstrate any positive effects on innovation and efficiency which would allow passing on a fair share of the MIF benefits to consumers'. The decision was appealed before the General Court and subsequently before the ECJ, both of which upheld the Commission's decision, thus confirming the difficulties incumbent upon any party wishing to claim the benefits arising from network effects in multi-sided markets. The General Court ruled that Mastercard had 'failed to submit empirical evidence on the positive effect of MIFs on system output' and that since these had not been 'objectively quantified', they could not be taken into account. The ECJ did not dispute this finding.

²⁷ The two dualities that we have referred to can furthermore be apparent at the same time whenever a reduction of competition on one side is coupled by welfare enhancing effects on another side of the platform. This, moreover, will frequently be the case for affecting the cross-group externality; those practices might both enhance users' welfare and exclude third parties, often at the same time.

²⁸ Commission Guidelines on the application of Article 81(3) of the Treaty, Official Journal No C 101 of 27.4.2004, at 43.

²⁹ For more developed comments on this issue, see http://chillingcompetition.com/2015/01/20/on-the-misapplication-of-article-1013-of-judicial-capture-and-cross-market-assessments/.

³⁰ In its judgment of 24 May 2012 in MasterCard, Inc and Others v European Commission (Case T-111/08) EU:T:2012:260, the General Court acknowledged at para 228 that 'the appreciable objective advantages to which the first condition of Article [101(3)] EC relates may arise not only for the relevant market but also for every other market on which the agreement in question might have beneficial effects', but nevertheless ruled that 'as merchants constitute one of the two groups of users affected by payment cards, the very existence of the second condition of Article [101(3) TFEU] necessarily means that the existence of appreciable objective advantages attributable to the MIF must also be established in regard to them'. In other words, since no quantifiable advantages benefitted merchants, there was no need to verify whether any such advantages benefitted cardholders.

market which includes the other group of consumers associated with that system, in particular where, as in this instance, it is undisputed that there is interaction between the two sides of the system in question'.³¹ The same idea, in relation to Art 101(1) underscores the judgment in *Groupement des Cartes bancaires* rendered by the ECJ on the very same day.³²

In these judgments the ECJ showed that it had become aware of this flaw in the traditional analytical framework, and appears to have set the law on a new course, at least with regard to multi-sided platforms.

Thirdly, we have so far proved unable to trade off the benefits and the perils of having one large scaled platform as well as the circumstances in which one platform is preferable to having several.

The *Mastercard* case once again provides a useful example of a circumstance in which, in the face of doubt or ambiguity, the offensive theory is favoured.³³ A similar illustration can be found in the CFI's judgment in *Microsoft*.³⁴

Addressing a practical imbalance – back to basics

We have seen that while business practices in multi-sided platforms are often pro-competitive, or at least ambiguous from a competitive standpoint, the practical application of the law reflects an imbalance in which offensive arguments are favoured and conceivable defences are most often effectively ignored.

This results partly from the inability to quantify the value of the externality, partly from the wording and the 'funnel structure' of competition law provisions, partly from the difficulties inherent in cross-group assessments and partly from our natural inclination to favour narrow prisms and one-sidedness in the face of complexity.

In my view, this imbalance results in a problematic imbalance or, put differently, in enforcement hemiplegia.³⁵

³¹ MasterCard Inc and Others v European Commission (Case C-382/12 P) EU:C:2014:2201, para 237. In spite of this sensible statement, para 248 of the same judgment implicitly validates the contrarian approach adopted in first instance by the General Court.

³² Groupement des cartes bancaires (CB) v European Commission (Case C-67/13 P) EU:C:2014:2204, paras 76-79.

³³ Paragraph 222 of the General Court's judgment states that 'an increase in the platform's output can be the source of efficiencies, so in addition to giving rise to efficiencies, it could also enable Mastercard to extract rents'. In the case at issue, the Court understood that the fact that Mastercard could extract rents was automatically sufficient to nullify the advantages flowing from the output/network expansion sought by MIFs (which theoretically should benefit all members) without considering it necessary to undertake any balancing exercise.

³⁴ In this case the Court rejected Microsoft's arguments on the existence of an objective justification for its conduct. Microsoft had contended that integrating Windows Media Player in Windows provided software developers with a stable and well-defined platform for software development that could facilitate their tasks. In response to this claim, the CFI stated that '[a]lthough, generally, standardization may effectively present certain advantages, it cannot be allowed to be imposed unilaterally by an undertaking in a dominant position by means of tying (...) [I]t cannot be ruled out that third parties will not want the de facto standardization advocated by Microsoft but will prefer it if different platforms continue to compete, on the ground that that will stimulate innovation between the various platforms'. (See Microsoft Corp v European Commission (Case T-201/04) EU:T:2007:289, paras 1152–1153.) As pointed out by Larouche, the Court's argument that some third parties would rather prefer competition between platforms is little more than a mere unsupported conjecture. See in this regard Larouche arguing that the CFI's reasoning in this regard calls for 'further research on the link between competition policy, innovation policy, and standardization', P Larouche, 'The European Microsoft Case at the Crossroads of Competition Policy and Innovation' (2008) 22 TILEC Discussion Paper No 2008–021, available at http://ssrn.com/abstract=1140165.

³⁵ As José Ortega y Gasset said in one of my favourite quotes, included in *Toward a Philosophy of History* (WW Norton & Company Inc, 2002): 'Aligning oneself fully with the left, as with the right, is only one of the numberless ways open to man of being an imbecile: both are forms of moral hemiplegia.'

Against this background, what this contribution posits is that if there is a problem at the legal level, it is there that we need to act; it is therefore not only economic tools that need to be refined in the presence of multi-sided platforms, but also the law, or rather the application thereof.

These refinements I am referring to do not require a policy revolution, but rather increased analytical vigilance, mainly concerning (i) the assessment of welfare enhancing features; and (ii) the upholding of certain basic limiting principles that should not be forgotten.

Assessment of welfare enhancing features/efficiencies

To start with, in my view many of the identified problems in two-sided markets would be avoided if we were to adopt a more reasonable interpretation of Art 101(3) TFEU and of the 'efficiency defences' as part of the assessment of practices and mergers under Art 102 TFEU and the Merger Regulation.

In what follows I will mainly refer in this regard to Art 101, given that it incorporates an explicit and specific sub-provision laying down the analytical principles governing the assessment of welfare enhancing features that also inspire – in practice – the operation of Art 102 TFEU and of the Merger Regulation,³⁶ and that make more evident some of the issues that I intend to explain.

From an orthodox perspective, welfare enhancing features pertain to an Art 101(3) analysis, but nevertheless assessments carried out at this stage very rarely prosper in individual cases. I would argue that the overly restrictive interpretation of Art 101(3) endorsed by competition authorities and exposed in soft law instruments is at the root of many contemporary controversies and contortions in EU competition law, also regarding multi-sided platforms.

In my view, reasonable competition law enforcement should be characterised by fewer object cases, more effects cases, and many more Art 101(3) cases, and it is therefore here that we should first take action. Among others, and in line with what has been explained above, I submit that a proper interpretation of this sub-provision (and of analogous analytical steps in other areas of competition law) should not require 'objective quantification' of demand-side efficiencies, and that it should allow for cross-market assessments, also regarding distinct groups of customers, contrary to what had been done in the recent past.

The EU Courts more recently seem to have acted at this level, but with a twist that is, in my view, a second best, but welcome, solution.

In the light of the truncated analysis carried out under competition law and the circumstances already explained, what we see nowadays is that in any given case the accusing party is able to more easily discharge its burden of proof in a first step of the analysis, whereas the defendant will very rarely be able to comply with the burden of showing the existence of sufficient, objective, in-market welfare enhancing features.

Perhaps the acknowledgement of this situation may have led the EU Courts increasingly to tolerate and encourage that redeeming considerations be looked at within a first stage in which the burden of proof remains on the accusing party.

³⁶ See eg para 30, Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (2009) OJ C 45; Art 2(1) of Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation) (2004) OJ L 24; Section VII of Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (2004) OJ C 31.

This, once again, is particularly evident in the *Mastercard* and *Cartes bancaires* judgments of 11 September 2015, in which the ECJ arguably conveyed the message that welfare enhancing features derived from two-sidedness can be better assessed as part of Art 101(1), instead of within Art 101(3).³⁷

In my view, the analytical framework called for in these two recent judgments implies that, in the future, if a competition authority or complainant were to suspect a prima facie Art 101 or 102 infringement in a case, it would then be up to the defendant to bring a prima facie – even if abstract – claim that the practice is necessary to create, maintain, balance or expand the platform at issue. Should the defendant then be able to make such claim, it would be up to the party claiming the existence of an infringement to motivate why such contentions are not valid and/or to conduct *itself* the balancing of pro- and anti-competitive effects, dispensing the defendant of that burden.

This is also in many ways the message that, in the US the DC Circuit Court sent in its Opinion in *Microsoft II* with regard to similar issues: that one should not hurry to condemn practices for which a prima facie justification could be put forward.³⁸

Given that, in practice, the operation of the burden of proof often determines the outcome of cases, acting at this level – by alleviating the burden of proof incumbent upon the defendant – is probably the most simple and effective way of addressing these difficulties.

Do not forget the value of limiting principles – back to basics

In addition to the above, and in order to achieve consistency in the application of competition rules in these markets, I believe that we also need to revisit some basic tenets of competition law.

The 'double duality' of two-sided markets raises substantive and practical questions that expose the inconsistencies and insecurities of competition law and oblige us to interrogate ourselves about the very valued we purport to defend and of the goals we intend to pursue.

In my view, the main challenge posed by these markets/platforms lies not in the novelty of the issues they raise, but on the intensity with which those issues – notably related to the 'old' phenomenon of 'scale' – arise in these settings.

This means that the questions we are facing now are to a great extent ones to which antitrust already replied in earlier days; the difference is mainly one of degree.

Indeed, in any given case involving multi-sided platforms competition enforcers will invariably face certain empirical questions³⁹ but, ultimately there will remain other more 'philosophical' ones that go to the heart of the discipline and that risk being answered on casuistic, inconsistent and almost reflexive or ideological – and, as such, unsupported – grounds.

³⁷ See notably Groupement des cartes bancaires (CB) v European Commission (Case C-67/13 P) EU:C:2014:2204, paras 72–79 and MasterCard Inc and Others v European Commission (Case C-382/12 P) EU:C:2014:2201, paras 170–180.

³⁸ United States v Microsoft Corp, 253 F.3d 34 (DC Cir 2001), at 58–59. ('If a plaintiff successfully establishes a prima facie case under s.2 by demonstrating anticompetitive effect, then the monopolist may proffer a "pro-competitive justification" for its conduct. If the monopolist asserts a precompetitive justification – a nonpretextual claim that its conduct is indeed a form of competition on the merits . . . then the burden shifts back to the plaintiff to rebut the claim . . . [I]f the monopolist's pro-competitive justification stands unrebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the precompetitive benefit.')

³⁹ Among others, how strong is the interdependency/network affects across the different sides? What is the relative strength of differentiation versus network effects? How easy is it for users to switch platform? Is multi-homing possible and/or prevalent? What is the optimal scale and what is the minimum critical mass for others to compete?

Against this background, I submit that it is necessary to recall clear principles, filters or bright lines capable of adding some predictability to the law or, in other words, to go back to basics.

I would propose to go back to basics and to reinstate some key principles that competition law has learnt over the years, but that are worth recalling now that some of the earlier questions antitrust faces are resurfacing with increased intensity.

In my view, we should hold the following to be self-evident, also, and particularly, in multi-sided settings:

(1) Absence of rivalry does not equal infringement (protecting competition vs protecting competitors).

Economics teaches us – and competition authorities have accepted in some settings⁴⁰ – that, at the extreme, a monopolistic structure could in some scenarios (natural monopoly, no diseconomies of scale on the cost side, no congestion effects on demand, homogeneous consumers on both sides) be the most efficient market structure. In this regard, it is perfectly conceivable, at least in theory, that the benefits of a larger platform outweigh other possible downsides of market power such as higher prices.⁴¹

(2) Remedies and objective justifications follow the establishment of an infringement by the authority, not the other way around.

As competition law has become increasingly more regulatory⁴² this – I would say obvious – principle seems to have been partly forgotten. Competition law, which is repeatedly held to be *quasi*-criminal in nature, is not supposed to kick-in in the face of a sub-optimal functioning of markets, but only when an infringement has been established by the authority or plaintiff.

(3) Companies must be free to choose their business model.

It is companies and not competition enforcers which will strive or fail in the adoption of their business models, and it is therefore companies and not competition enforcers who are to decide on what business models to use. Some will prove successful and others will not; some companies will thrive and some will disappear, but with experimentation with business models, success and failure are and have always been part of the game.⁴³

In other words, we should not forget that competition law is, or should be, business-model agnostic, and that regulators are – like anyone else – far from omniscient.

- (4) Competition law is about protecting the process of competition from undue restraints. It is not about shaping the process (see above), and it is not about creating or preserving
 - It is not about shaping the process (see above), and it is not about creating or preserving competition in the face of the natural evolution of markets.

(5) Competition law should be applied consistently and there is no reason to favour one parameter of competition over others.

There will be situations in which our natural reflexes will lead us to think – in the abstract – that an apparent reduction in static competition might possibly reduce

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⁴⁰ See the European Commission note to the OECD's Roundtable on Two-Sided Markets, n 5, above, p 7: '... as in all markets with network externalities, there is often the possibility that one platform will corner (both sides of) the market if the inter-group externalities are powerful. It can be very hard for an entrant in such markets to get started. However, this outcome is not necessarily bad from a societal point of view when externalities are strong'.

⁴¹ Kolasky, n 11, above, at 585. ('[S]ince positive network effects give rise to efficiencies which firms may capture and pass on to consumers, it is important that we not interfere with the natural operation of the market, making the old mistake of protecting competitors, rather than competition.')

⁴² P Ibañez Colomo, 'On the application of competition law as regulation: elements for a theory' (2010) 29 Yearbook of European Law 261–306.

⁴³ See FA Hayek, 'Competition as a Discovery Procedure', in New Studies in Philosophy, Politics, Economics and the History of Ideas (University of Chicago Press, 1978), at 179.

innovation, choice or quality even if (or especially when) the analytical framework centred on price does not enable us to find an infringement.

However, since we are not yet capable of adequately balancing the benefits of differentiation and possible innovation against the increases in value of a multi-sided platform these decisions may be adopted on the basis of ideological considerations,⁴⁴ which are, in my view, ill-suited to be the basis of a sanctioning regime.⁴⁵

In sum, the fact that it is harder to measure parameters other than price and output does not mean that these should be privileged over others (rather the contrary) or that it is justified to depart from well-established principles when intervention is a response to the alleged impact of a practice on a parameter other, and more abstract, than price.

(6) In dubio pro reo (or, when in doubt, don't chill competition).

In many ways, the above can be summed up in one simple idea, that competition law should explicitly acknowledge its limitations and not condemn what it does not fully understand.

Indeed, being aware of the fact that many practices carried out by or within multi-sided platforms may be efficiency enhancing and that the prohibition of such arrangements may greatly damage consumer welfare is useful and necessary, and pleads in favour of the inadequacy of outdated and simplistic *per se* rules to these settings. In other words, traditional assumptions and inclinations should be relaxed, and particular caution is needed to approach multi-sided platform issues with more humility.

Established economics tells us that any welfare enhancing policy should encourage, or at least tolerate, internalisation strategies. On the contrary, failing to identify and protect network efficiencies in multi-sided platforms will be to the detriment of societal welfare. The main competition law issue must therefore be to sort the practices that effectively contribute to balancing the externalities and contribute to the optimal size of the platform from those that do not.

To be sure, this is not to say that competition law does not have a role to play in multi-sided platforms markets. The fact that authorities are to try harder does not mean that they may not be able to bring solid theories of harm; it only means that they cannot do this in a simplistic manner or in the abstract. In particular, I believe that the proposed filter does not in any way hinder authorities' ability to purse cases concerning what should perhaps be their main target in these markets: 'cheap exclusion'.⁴⁶

Finally, I submit that it would be most useful for these principles to be reflected in some informal guidance, deserving specific treatment within the main soft law instruments issued by competition authorities. Competition law is often seen as too special an animal by companies and judges, and all of them would benefit from having an established analytical framework in writing, which would moreover contribute to minimising the risk of divergences in the resolution of cases.

45 On a personal level I could even agree with the contention that in some settings the most economically efficient outcome might not be the most convenient for societal welfare. That, however, is a problem that can, if needed, be addressed via regulation, but not through the use of competition law.

⁴⁴ Interestingly, the use of an ideological approach to condemning conduct in network markets has been explicitly advocated by some commentators. See Ross, n 11, above, at 947 (proposing that 'where monopolistic conduct significantly inhibits the ability of rivals to engage in fair competition by means that to some extent frustrate consumer preferences, and network effects suggest that courts cannot practically determine if claimed efficiency benefits outweigh these harms, courts should employ a "Jacksonian" value of equal economic opportunity to proscribe the conduct and give others a meaningful chance to compete with the dominant firm').

⁴⁶ See in this regard SA Creighton, DB Hoffman, TG Krattenmaker and EA Nagata, Cheap Exclusion (2005) 72 Antitrust Law Journal 975.

Conclusions – a reminder of the fallibility of competition law

The preceding pages submit, first, that a crucial peculiarity of multi-sided settings derives from the fact that when there are various sides to one platform, there are often two sides for every story or theory of harm; that everything has pros and cons.

Economic lessons have served us well in this regard by providing us with a balanced view of the ambiguity of business practices in these settings and confirming that some problems are so complex that one needs to be very well informed just to be undecided about them.

In spite of economic consensus on the duality or ambiguity of practices carried out in multi-sided settings (as a subset of the situations in which network effects are key), I have attempted to show that there is an imbalance in the practical application of the law that favours offensive theories to the detriment of equally plausible defensive ones.

Against this background, what my contribution posits is that we need to be aware of that imbalance with a view to correcting it at the level of the application of the law, and that what is needed is not a policy revolution, but analytical prudence.

In many ways, however, the ideas that I have tried to develop in this contribution do not relate to multi-sided platforms alone. In reality, they are pertinent to the application of competition law in general.

Indeed, and as already noted, the main specificity of multi-sided markets is that they pose the very same issues that have troubled antitrust law since its inception; the difference is that those same issues arise now with renewed strength, particularly in technology enabled markets in which the phenomenon of scale has reached new heights.

By presenting us with extreme cases and questions, multi-sided platforms not only reveal the inadequateness of traditional tools and proxies to these specific settings, they also expose the insecurities and inconsistencies of this discipline by reminding us that, in those tools and proxies are, in reality, and irrespective of multi-sidedness, never accurate.

In this sense, the challenges raised by multi-sided platforms are a useful reminder of the fallibility of competition law, and of the need for humility, prudence and clear limiting principles.