



Multisided markets and the challenge of incorporating multisided considerations into competition law analysis

Gönenç Gürkaynak,* Öznur İnanılır,[†] Sinan Diniz[‡] and
Ayşe Gizem Yaşar^{**}

ABSTRACT

Since the seminal paper of Rochet and the Nobel Prize laureate Tirole in 2003, the theory of multisided markets has garnered considerable academic attention. The practical application of the theory remains, however, challenging. This article seeks to bring together the key features of multisided market economics and identify the key principles, which can affect practical enforcement. Following a consideration of the economic and legal challenges involved in the analysis of multisided platforms, the article reviews two case studies—the European Court of Justice’s recent MasterCard decision concerning multilateral interchange fees and the Dutch Competition Authority’s review of the European Directories—Truvo Nederland merger—and showcases the associated enforcement challenges.

KEYWORDS: multisided markets, two-sided markets, network effects, most-favoured-nation clause, multilateral interchange fees, allocative efficiencies

JEL CLASSIFICATIONS: K00, K20, K21, L40

1. INTRODUCTION

As the Court of Justice of the European Union (ECJ) confirmed in *Groupeement des Cartes Bancaires*,¹ the interactions among parties in multisided platform settings must be taken into consideration in antitrust analysis. Yet, despite the proliferation of

* Gönenç Gürkaynak, Esq., ELIG, Attorneys-at-Law, Managing Partner. Member of Faculty at Bilkent University Law School, and Yeditepe University Law School. LLM (Harvard Law School). The author is qualified in Istanbul, New York, Belgium, and England and Wales (currently a non-practicing Solicitor).

[†] Öznur İnanılır, ELIG, Attorneys-at-Law, Partner. LLM (London Metropolitan University). The author is qualified in Istanbul.

[‡] Sinan Diniz, Juris Doctorate (Georgetown University).

^{**} Ayşe Gizem Yaşar, LLM (Université Paris II Panthéon-Assas). The author is qualified in Istanbul.

1 Case C-67/13 P *Groupeement Des Cartes Bancaires v European Commission* (ECJ, 11 September 2014) (hereinafter *Groupeement des Cartes Bancaires*).

multisided markets,² the incorporation of multisided considerations into competition law cases is not easy. There is limited consensus on the definition (or even on the terminology)³ of multisided markets, which makes it hard to establish whether a market is actually multisided. In turn, multisided markets have sparked antitrust attention mostly in the past two decades and competition authorities continue to display reluctance towards accepting and thoroughly considering the characteristics of these markets.⁴

The first section of the article sets the theoretical background. It first discusses the various definitions provided for multisided markets outlining the key characteristics of multisided markets on which most economists agree. The article then moves on to identifying the major antitrust issues that enforcers and undertakings face in multisided markets. The second section tests the theoretical background against the practical application. We focus on classic examples of two distinct multisided platform settings and antitrust problems as case studies and analyse the use (or lack thereof) of the lessons from the economic theory of multisided markets in the relevant contexts.

This article ultimately aims to provide a platform for jurists, on which we bring together the key features of the multisided market economics and antitrust problems in the multisided markets, as well as identify lessons to be drawn from the analysis of the selected case studies.

II. CHARACTERISTICS OF MULTISIDED MARKETS

Many differing definitions have been provided in the literature for multisided markets.⁵ The lack of consensus results in a wide range of opinions as to whether a given market should be deemed multisided.⁶ In this section, we try to reconcile the various

2 Common examples of multisided markets include payment cards (S1: cardholders, S2: merchants), newspapers (S1: readers, S2: advertisers), search engines (S1: search users, S2: advertisers), academic journals (S1: researchers, S2: academics who publish), PC operating systems (S1: PC users, S2: software developers), craigslist (S1: consumers, S2: advertisers), real estate agents (S1: house buyers, S2: house vendors), B2C marketplaces (S1: consumers, S2: merchants), smartphones (S1: smartphone users, S2: application developers), shopping malls (S1: consumers, S2: shops), etc.

3 There is no consensus in the economic literature on the terminology. ‘Two-sided markets’, ‘platform industries’, ‘multisided platforms’ have all been used to refer to platform businesses. In addition, despite the widespread use of ‘two-sided markets’ terminology, some platforms may cater to more than two sides (eg some journals cater to readers, writers, and advertisers). Therefore, we prefer using the ‘multisided market’ and ‘multisided business’ terminology as opposed to ‘two-sided markets’ terminology. Referenced papers may include the ‘two-sided markets’ terminology. In the economics literature of multisided markets, the term ‘market’ is not always used in the traditional sense as used in competition law and antitrust and may refer to the business model or the platform.

4 Alfonso Lamadrid de Pablo, ‘The Double Duality of Two-Sided Markets’ (2015) 64 Comp Law 5, 6.

5 Organization for Economic Co-operation and Development (hereinafter OECD), *Two-Sided Markets* (2009) (hereinafter OECD Two-Sided Markets Report) 11 <<http://www.oecd.org/daf/competition/44445730.pdf>> accessed 6 October 2015; E Glen Weyl, ‘A Price Theory of Multisided Platforms’ (2010) 100 Am Econ Rev 1642, 1644; Andre Hagiu and Julian Wright, ‘Multisided Platform’ (2015) Harvard Business School Working Paper 15-037, 4 <http://www.hbs.edu/faculty/Publication%20Files/15-037_cb5afe51-6150-4be9-ace2-39c6a8ace6d4.pdf> accessed 31 March 2016

6 Dirk Auer and Nicolas Petit, ‘Two-Sided Markets and the Challenge of Turning Economic Theory into Competition Policy’ (2016) 20 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2552337> accessed 31 March 2016

definitions and move beyond the approach that ‘you know a two-sided market when you see it’.⁷

To begin with, it is arguable that definitions such as ‘bringing different sides to a mutual platform’ and ‘getting the two sides on board’ are overly-broad and too inclusive in scope.⁸ Every market could be attributed the label of multisidedness if multisided markets theory is boiled down to bringing different parties to a common platform, since even parties in a classical, one-sided market must also come together for transactions to occur.⁹

Narrowing down the above definition, Rysman¹⁰ provides that in two-sided markets: ‘1) two sets of agents interact through an intermediary or platform, and 2) the decisions of each set of agents affects the outcomes of the other set of agents, typically through an externality’. This definition of two-sided markets highlights the existence of the platform and the interdependence among the different sides. However, it is silent on whether the platform is necessary or crucial for the sides to interact. Rysman has also noted that ‘showing that a market is not two-sided may be difficult However, markets that exhibit positive feedback loops (or indirect network effects) are two-sided under any definition’.¹¹ Based on this approach, markets with indirect network effects are multisided, without any further requirement.

In the same vein, Armstrong describes two-sided markets as markets where ‘two or more groups of agents interact via intermediaries or “platforms” and ‘cross-group network effects are present, and the benefit enjoyed by a member of one group depends upon how well the platform does in attracting custom from the other group’.¹² Again, the platform is considered to be an intermediary and the network effects are recognized. However, under this definition, the platform is not necessary in order for the different sides to come together and carry out transactions. A similar definition was provided by Boik, according to whom ‘[t]wo-sided markets consist of two distinct groups of users who interact with each other via a platform and whose utility depends on the number of users in the other group’.¹³ Finally, according to an earlier definition provided by Wright, ‘[t]wo-sided markets involve two distinct types of users, each of whom obtains value from interacting with users of the opposite type. In these markets, platforms cater to both types of users in a way that allows them to influence the extent to which cross-user externalities are internalized’.¹⁴ This

7 That approach is mentioned in Rochet and Tirole’s 2006 paper: Jean-Charles Rochet and Jean Tirole, ‘Two-Sided Markets: A Progress Report’ (2006) 37 RAND J Econ 645, 645–46.

8 Hale Gündüz, ‘Competition Law Practices in Two-Sided Markets’ (2010) Turkish Competition Authority’s Competition Expert Thesis Series No: 106, 4 <<http://www.rekabet.gov.tr/File/?path=ROOT/1/Documents/Uzman%C4%B1k+Tezi/tez118.pdf>> accessed 7 October 2015

9 Rochet and Tirole (n 7) 646.

10 Marc Rysman, ‘The Economics of Two-Sided Markets’ (2009) 23 J Econ Perspect 125, 125.

11 Marc Rysman, ‘The Empirics of Antitrust in Two-Sided Markets’ (2007) 3 Competition Poly Intl 197, 198.

12 Mark Armstrong, ‘Competition in Two-Sided Markets’ (2005) 1 <<http://econwpa.repec.org/eps/io/papers/0505/0505009.pdf>> accessed 31 March 2016.

13 Andre Boik, ‘Essays on Uniform Pricing and Vertical Contracts in Two-Sided Markets’ (2014) 8 <https://tspace.library.utoronto.ca/bitstream/1807/68129/1/Boik_Andre_201406_PhD_thesis.pdf> accessed 31 March 2016.

14 Julian Wright, ‘One-Sided Logic in Two-Sided Markets’ (2003) 1 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=459362> accessed 7 October 2015

definition draws attention to the role of the platform in internalizing externalities. Nevertheless, it remains broad in the sense that the market can be labelled multisided to the extent that the platform is capable of impacting the degree to which the cross-group externalities are internalized. The foregoing definitions are also among the broad definitions of multisided markets. They are all conceptually correct as regards certain characteristics of multisided platform businesses. Under these definitions, however, the platform does not appear to be an essential tool for the different sides to come together.

Evans and Schmalensee have proposed a practical definition for platform businesses, identifying the multisided platform as an ‘economic catalyst’ which ‘has (a) two or more groups of customers; (b) who need each other in some way; (c) but who cannot capture the value of their mutual attraction on their own; and (d) rely on the catalyst to facilitate value-creating interactions between them’.¹⁵ This definition highlights the role that the platform plays in identifying multisided markets. Evans and Schmalensee also explain that ‘the platform can be thought of as providing a technology for solving the externality in a way that minimizes transaction costs’,¹⁶ emphasizing the role of the platform in terms of externalities that users cannot directly solve themselves. In the definition of Evans and Schmalensee, therefore, the users need the platform to interact.

The pioneers of the multisided markets theory, Rochet and Tirole, have provided a formal definition that focuses on the pricing structure. Based on their 2006 paper, ‘a market is two-sided if the platform can affect the volume of transactions by charging more to one side of the market and reducing the price paid by the other side by an equal amount. In other words, the price structure matters, and platforms must design it so as to bring both sides on board’.¹⁷ Rochet and Tirole further narrow down the limits of two-sided markets by providing a definition for one-sided markets. They suggest that ‘[t]he market is one-sided if the end-users negotiate away the actual allocation of the burden (ie the Coase theorem applies); it is also one-sided in the presence of asymmetric information between buyer and seller, if the transaction between buyer and seller involves a price determined through bargaining or monopoly price-setting, provided that there are no membership externalities’.¹⁸

Rochet and Tirole emphasize the role of the pricing structure in their definition, a primary area of focus in the multisided literature particularly in terms of distinguishing multisided markets from traditional markets.¹⁹ However, their approach to the pricing structure may not always be applicable. For example, in multisided settings where one side does not pay to use the platform’s service (eg free newspapers), the pricing on different sides cannot possibly be ‘tied together in a fixed proportion’ as

15 David Evans and Richard Schmalensee, ‘The Industrial Organization of Markets with Two-Sided Platforms’ (2007) 3 *Competition Policy* Intl 151, 152.

16 *ibid* 154.

17 Rochet and Tirole (n 7) 664–65.

18 *ibid* 665. ‘Membership externalities arise from joining the platform . . . , whilst usage externalities arise from using the platform’ Eric C van Damme and others, *Mergers In Two-Sided Markets - A Report to the Nma* (2010) (hereinafter NMa Report) 48 <https://www.acm.nl/download/documenten/nma/NMa_Two-Sided_Markets_-_Report_-_16_July_2010.pdf> accessed 7 October 2015.

19 Gündüz (n 8) 11.

there is no price on one of the sides. Further, according to Rochet and Tirole, users in multisided markets should not be able to go around the platform's pricing structure through Coasian bargaining. On the other hand, when it comes to applying Rochet and Tirole's definition, it is not always easy to decide whether the sides in a given scenario can or cannot beat the pricing structure of the platform.²⁰ This difficulty is evident especially in platforms where there are no transactions among the sides, as is the case of search engines or social media platforms.

Meriting consideration at this juncture is a markedly different approach adopted by Hagiu and Wright in a recent paper.²¹ The pair proposes a new definition for multisided platform businesses which is based upon two elements: (i) '[multisided platform businesses] enable direct interactions between two or more distinct sides' and (ii) 'each side is affiliated with the platform'. They complement this definition by explaining what 'direct interactions' and 'affiliation' mean. 'Direct interactions' are described as arising where 'the two or more distinct sides retain control over the key terms of the interaction, as opposed to the intermediary taking control of those terms'. 'Affiliation' is used in the sense that 'users on each side consciously make platform-specific investments that are necessary in order for them to be able to directly interact with each other'.²² Furthermore, Hagiu and Wright criticize the multisided market definitions that are based solely on the existence of indirect network effects. In our view, Hagiu and Wright's new definition does not enable the classification of various quintessential multisided markets as 'multisided', such as search engines and e-commerce platforms. Under a literal reading of this definition, one would have to observe the users on all sides making platform-specific investments in order for there to be a finding of a multisided platform. However, this does not hold true for users in the online search setting who do not need to make any investments over and above those needed to go online.

While discussing 'direct interactions', Hagiu and Wright do not appear to think of prices as a key term of interaction among the sides. As such, even where the platform users do not decide the prices, a business may still be classified as a multisided platform.²³ But as prices are more or less essential in business transactions and, therefore, have the potential to be regarded as a 'key term of the interaction', the definition poses the risk of overlooking markets where the prices are not decided by the groups of users using the platform but by the businesses themselves, as in the case of Uber and newspapers.²⁴ These are markets that in our view deserve particular attention in an antitrust review.

How, then, is one to decide when a market is multisided? In our view, the definition of Evans and Schmalensee provides a practical solution. Broader definitions overlook the significance of the platform in multisided businesses. On the other

20 David S Evans and Richard Schmalensee, 'The Antitrust Analysis of Multisided Platform Businesses' (2012) Chicago Institute for Law and Economics Working Paper No 623 (2d Series), 7 <<http://www.law.uchicago.edu/Lawecon/index.html>> accessed 24 December 2014; Auer and Petit (n 6) 14–15.

21 Hagiu and Wright (n 5).

22 *ibid* 5.

23 *ibid* 8.

24 Hagiu and Wright's multisided platform businesses include Uber, newspapers, modern video game console companies such as Microsoft, Sony, and Nintendo, shopping malls, etc.

hand, Rochet and Tirole's approach to the pricing structure and their requirement that Coasian bargaining should not be possible, make it difficult to decide whether a business deserves attention under the multisided markets theory in antitrust enforcement. Under the Evans and Schmalensee definition, either different groups cannot interact, or the value generated by the interaction through the platform is far greater than the value generated if the sides interact in the absence of the platform. These groups in turn are brought together by the platform, which creates value by internalizing the externalities. While the Evans and Schmalensee definition is not so narrow as to exclude traditional multisided markets, it is also sufficiently precise as to include various quintessential characteristics. Needless to say, as the literature on multisided markets evolves, new approaches to the theory may lead to consensus on a definition that is different than the one provided by Evans and Schmalensee.

Setting aside the variety of definitions, certain aspects of multisided markets are more or less common in every definition. There are four major elements of multisided markets: the platforms, the users brought together by the platforms, the pricing structure applied by the platforms, and the (indirect) network effects which the platforms try to internalize. In what follows, these elements are further discussed.

Network effects

Multisided markets are characterized by indirect network effects. There is an indirect (or inter-group) network effect 'when the utility of a consumer belonging to one group of consumers depends on the number of consumers in the other group(s)'.²⁵ Put another way, indirect network effects exist when 'the value a consumer derives from a good or service increases with the number of additional users of identical and/or interoperable complementary goods'.²⁶ Therefore, in markets with network effects, each consumer's choice affects the value each other consumer derives from the market.²⁷ The different sides in a multisided market are interconnected by reason of the existence of network effects. More agents on one side bring more agents to the other side(s). For instance, a person buying a smartphone will care about the number of applications developed for that smartphone brand, while app developers would prefer developing apps for brands that have the most users, in order to increase revenues.

There are views in academia and case law that barriers to entry are higher in multisided markets as a result of network effects.²⁸ Similarly, indirect network effects have often been seen as capable of enabling platforms, especially in the case of

25 Marc Bourreau and Nathalie Sonnac, 'Introduction to Competition in Two-Sided Markets - Application to Information and Communication Industries' (2006) 61 *Commun Strateg* 11, 12.

26 Cento Veljanovski, 'Network Effects and Multisided Markets' (2007) 6 <<http://ssrn.com/abstract=1003447>> accessed 7 October 2015.

27 Marc Rysman, 'An Empirical Analysis of Payment Card Usage' (2007) 55 *J Indus Econ* 1, 7.

28 For example, OECD Two-Sided Markets Report, 98, 115; Guidance on the Commission's enforcement priorities in applying art 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2008] OJ C45/7, para 17. See also Gönenç Gürkaynak, Ayşe Güner and Ayşe Gizem Yaşar, 'Competition Law and Personal Data Crossing in Digital Markets' in David Edward, Jacquelyn MacLennan and Assimakis Komninos (eds), *Ian S. Forrester QC LL.D. A Scot Without Borders, Liber Amicorum - Volume II* (Concurrences 2015) 163.

first-mover firms,²⁹ to rapidly increase their market power simultaneously on all sides.³⁰ Authors have also noted that network effects can contribute to consumers getting ‘locked-in’ to a certain network,³¹ due to increased switching costs and the difficulty of collective switching by consumers in some cases.³² Network effects have also been held responsible for ‘tipping’ markets in favour of large market players.³³ In sum, it appears that the doctrine and enforcers have been concentrating on the ‘anticompetitive potential’ of network effects, associating network effects with barriers to entry.³⁴

On the other hand, some authors hold the view that network effects are not ‘inherently and necessarily problematic’.³⁵ In the same vein, in *Facebook/WhatsApp*, the Commission provided that ‘(t)he existence of network effects as such does not a priori indicate a competition problem in the market affected by a merger’.³⁶ The Commission confirmed that network effects would better be analysed on a case-by-case basis.³⁷ Network effects can also lead to the market share of the incumbent platform to lose power and/or quickly crash. A platform operator, which loses users on one side, will also begin to rapidly lose users on the other sides of the platform. This is why the ‘divide and conquer’ strategy, in other words, the strategy to challenge an established platform by subsidizing agents that are the most price-sensitive, and using them to draw participants to the other side of the platform, can be highly valuable for new entrants in multisided markets.³⁸ In the same vein, Lerner argues that ‘online markets have not “tipped to” dominant online platforms’. Many early online platforms once believed to be dominant have lost their popularity. A classic example is Facebook overcoming the popularity of MySpace in social networking.³⁹

There are certain other features of multisided markets that counterbalance the possibility of network effects becoming entry barriers. Multi-homing (in other words,

- 29 Max Schanzenbach, ‘Network Effects and Antitrust Law: Predation, Affirmative Defenses, and the Case of *U.S. v. Microsoft*’ (2002) 4 Stan Tech L Rev, para 25 <<https://journals.law.stanford.edu/sites/default/files/stanford-technology-law-review/online/schanzenbach-network-effects.pdf>> accessed 31 March 2016.
- 30 Dissenting Statement of Commissioner Pamela Jones Harbour in Google/DoubleClick, FTC File No 071-0170 (20 December 2007) (hereinafter Dissenting Statement of Commissioner Pamela Jones Harbour) <http://www.ftc.gov/sites/default/files/documents/public_statements/statement-matter-google/doubleclick/071220harbour_0.pdf> accessed 7 October 2015.
- 31 Schanzenbach (n 29) para 28; see, in general, Joseph Farrell and Paul Klemperer, ‘Coordination and Lock-In: Competition with Switching Costs and Network Effects’ in Mark Armstrong and Robert Porter (eds), *Handbook of Industrial Organization – Volume III* (Elsevier B.V. 2007) <http://www.nuff.ox.ac.uk/users/klemperer/Farrell_klempererWP.pdf> accessed 12 October 2015
- 32 Schanzenbach (ibid) para 28.
- 33 ibid para 26; Gürkaynak, Güner and Yaşar (n 28) 161, 164; Amelia Fletcher, ‘Predatory Pricing in Two-Sided Markets: A Brief Comment’ (2007) 3 Competition Poly Intl 221, 223.
- 34 Lamadrid (n 4) 9.
- 35 Farrell and Klemperer (n 31) 2055.
- 36 *Facebook/WhatsApp* (Case COMP/M.7217) Commission Decision C(2014)7239 (2014) para 130 (hereinafter *Facebook/WhatsApp*).
- 37 ibid, para 135.
- 38 Bruno Jullien, ‘Competition in Multisided Networks: Divide-and-Conquer’ (2011) 3 Am Econ J: Microecon 186.
- 39 Andreas Lerner, ‘The Role of “Big Data” in Online Platform Competition’ (2014) 46 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2482780> accessed 12 October 2015.

‘consumers connecting or belonging to multiple platforms’⁴⁰) and product differentiation have been considered as ‘working offset network effects’.⁴¹ This is the case for many online markets, where the switching costs among platforms and costs of multi-homing are considerably low.⁴² Users can go from one online platform to the other with just a few keystrokes.

As the foregoing discussion confirms, network effects are not necessarily evil, a point further discussed throughout the article.

Pricing

Multisided platforms create value by bringing together distinct groups of agents and reducing interaction costs among the agents. However, bringing together all sides is complicated and the solution lies on the price structure.⁴³ When deciding on the pricing structure, platforms must factor in the interdependence of prices among the sides in order to operate successfully. An outcome of this intricate pricing structure is that ‘prices charged on one side of the market need not reflect the costs incurred to serve that side of the market’.⁴⁴ In principle, from a one-sided point of view, platforms would charge all sides as they provide products or services to each side of the platform. However, in multisided settings, each side is priced not just based on its own costs and demand, but also depending on the benefits derived from their participation on the other side(s), particularly the demand and profits on the other side(s).⁴⁵ An important consequence is that in many multisided markets, the interaction cost on one side is reduced, sometimes even to zero. In fact, in multisided markets, one group of agents using the platform is usually subsidized by the platform, whereas the other group(s) of users pays for the services provided by the platform.⁴⁶

One group of users may, therefore, be used as bait to attract users on the other side(s). In the online context, in particular, one side usually pays nothing to use the platform. This is a mainstream strategy in multisided markets to get all sides on board and generate revenues.⁴⁷ In an online meal order platform, for instance, the restaurants pay to join, while the consumers ordering meals on the platform are usually not charged for this service. The French newspapers, *20 Minutes* and *Métro*, are distributed for free: they make money solely from the advertisers, and generate no (direct) revenue from the readers. All in all, subsidization of users should come as no

40 Jean Tirole, ‘The Analysis of Tying Cases: A Primer’, (2004) 10, fn 15 <<http://idei.fr/sites/default/files/medias/doc/by/tirole/analysis.pdf>> accessed 7 October 2015.

41 Marc Bourreau, David Sevy and Nathalie Sonnac, ‘Interview with David Evans’ (2006) 61 *Commun Strateg* 97, 102; David S Evans, ‘Competition and Regulatory Policy for Multisided Platforms with Applications to the Web Economy’ (2008) para 37 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1090368> accessed 8 October 2015; Gündüz (n 8) 8; *Facebook/WhatsApp* (n 36) para 133.

42 Lerner (n 39) 20.

43 Rochet and Tirole (n 7) 645.

44 Fletcher (n 33) 221.

45 Rysman (n 10) 129.

46 David S Evans, ‘The Antitrust Economics of Two-Sided Markets’ (2002) 65 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=332022> accessed 7 October 2015.

47 OECD, *The Digital Economy* (2013) (hereinafter OECD Digital Economy Report) 27 <[http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP\(2012\)22&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP(2012)22&docLanguage=En)> accessed 8 February 2016.

surprise in multisided settings, as it is in line with the economic theory of multisided markets.

Users

The users in multisided markets can either be distinct groups of users, or the same users switching sides in each transaction.⁴⁸ Furthermore, the users can single-home or multi-home. A user may find several platforms appealing by reason of their distinct characteristics and use several platforms for a given service. Multi-homing is possible due to product differentiation. Product differentiation can be defined as platforms differentiating themselves from other platforms either based on the quality of products (vertical differentiation) or based on characteristics and prices (horizontal differentiation).⁴⁹

Platforms

Evans and Schmalensee refer to platforms as ‘catalysts’. This is because they function as an interface, which connects different agents, among whom, without the aid of the platforms, it would be troublesome and in particular costly, or even impossible to carry out transactions. Forms of multisided platforms vary from shopping malls, academic journals, payment card systems to search engines, PC operating systems, dating websites, e-commerce platforms, meal order websites, auction websites, and smartphone applications. In terms of competition among platforms, while multisided platforms compete with other platforms, they arguably also compete with one-sided businesses,⁵⁰ especially given the emergence of disruptive technologies. An illustrative example is e-book platforms competing with brick and mortar bookstores, or Uber competing with taxis.

III. COMPETITION LAW ANALYSIS

Owing to the aforementioned characteristics of multisided markets, certain competition law principles become inapplicable or need alteration to be applicable in the multisided context. Overall, as a result of these characteristics, multisided markets do not allow competition authorities to continue functioning in their accustomed ways. This is evident in the observed flood of antitrust scrutiny in digital markets. Platforms are increasingly attracting attention due to the rapid integration of digital technologies into our everyday lives. In a great number of digital markets, the service providers are multisided platform businesses, as in the case of Facebook, Google, Amazon, Booking.com, and Android. Below, the most essential antitrust problems identified in our study in relation to multisided markets are discussed.

Definition of the relevant product market

For a number of reasons, defining the relevant product market in multisided markets is challenging. As one side of the market is usually subsidized, the antitrust

48 Veljanovski (n 26) 33.

49 NMa Report (n 18) 22; Gündüz (n 8) 8.

50 Alfonso Lamadrid de Pablo, ‘Regulating Platforms? A Competition Law Perspective’ (*The Disruptive Competition Project*, 24 November 2015) <<http://www.project-disco.org/competition/112415-regulating-platforms-a-competition-law-perspective/#.VvulC-KLTIV>> accessed 2 February 2016.

authorities may be inclined to define the relevant product market solely based on the paying side.⁵¹ Each side of a multisided market, paying or non-paying, could also theoretically constitute a separate product market, which in turn creates difficulties in seeing the broader, multisided picture. Another important discussion is whether, and to what extent, tools created to define the relevant product market in one-sided markets can be used in multisided markets.⁵²

The SSNIP test (Small but Significant and Non-transitory Increase in Price test) is a widely-used example in these discussions.⁵³ The SSNIP test ‘defines the smallest set of products, including some focal product of interest that can jointly profit from a non-marginal, typically 5 percent, increase in price(s)’.⁵⁴ If this increase in prices of the focal product of interest is non-profitable for a hypothetical monopoly due to the existence of alternatives, these substitutable products are included in the same relevant product market.

The literature on multisided markets suggests that in defining the relevant product market, all sides should be analysed together.⁵⁵ Leaving out one group could result in errors of judgment. As such, a one-sided SSNIP test in multisided markets would ignore the consequences of indirect network effects and the interdependence between the sides.⁵⁶ However, there is as yet no consensus on how to apply a multisided SSNIP test.⁵⁷ Hesse and Soven support the view that the SSNIP test could be applied separately to all sides.⁵⁸ Therefore, no major alteration would be needed. In the *MasterCard* interchange fees case (which will be further discussed below under section ‘Multilateral Interchange Fees in the Payment Cards Market and the MasterCard Decisions’) MasterCard invited the Commission ‘to conduct a SSNIP test on the sum of the two prices charged to the two demand sides, namely cardholder fees and merchant fees’.⁵⁹ The Commission rejected this request. Similarly, Emch and Thompson proposed the application of the SSNIP test to the sum of prices applied on all sides in payment card networks.⁶⁰ More recently, Filistrucchi, Geradin, Van Damme, and Affeldt

51 Lapo Filistrucchi and others, ‘Market Definition in Two-Sided Markets: Theory and Practice’ (2014) 10 JCL & E 293, 300.

52 Gündüz (n 8) 22.

53 Lamadrid (n 4) 7.

54 Øystein Daljord, Lars Sørsgard and Øyvind Thomassen, ‘The SSNIP Test And Market Definition With The Aggregate Diversion Ration: A Reply to Katz and Shapiro’ (2008) 4 JCL & E 263, 263.

55 NMA Report (n 18) 26; Auer and Petit (n 6) 30; Filistrucchi and others (n 51) 338–39.

56 Renata B Hesse, ‘Two-Sided Platform Markets and the Application of the Traditional Antitrust Analytical Framework’ (2007) 2 Competition Poly Intl 191, 192–93; David S Evans, ‘Two-Sided Market Definition’ (2009) 2 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1396751> accessed 7 October 2015; Filistrucchi and others (n 51) 331–32.

57 Auer and Petit (n 6) 30.

58 Renata B Hesse and Joshua H Soven, ‘Defining Relevant Product Markets in Electronic Payment Network Antitrust Cases’ (2006) 73 Antitrust LJ 709, 727–28.

59 *MasterCard – EuroCommerce – Commercial Cards* (Case COMP/34.579, Case COMP/36.518, and Case COMP/38.580) [2007] OJ C264/8 (hereinafter *MasterCard*) para 252.

60 Eric Emch and T Scott Thompson, ‘Market Definition and Market Power in Payment Card Networks’ (2006) 5 Rev Network Econ 45, 54 <<http://down.cenet.org.cn/upfile/36/200811474349199.pdf>> accessed 10 March 2016.

provided a more detailed method of applying the SSNIP test in two-sided markets:

[i]n a two-sided non-transaction market, one should check profitability of a rise in price on each side of the market; in a two-sided transaction market, one should instead check the profitability of an increase in the price level (that is, the sum of the prices paid for the transaction by the two parties). Ideally, in both cases one should allow the hypothetical monopolist to adjust the price structure.⁶¹

In our view, due to the variety of multisided markets and pricing structures as well as the level of indirect network effects in multisided markets, it may not necessarily be useful to set a uniform SSNIP methodology for all multisided cases. As there are novel multisided business models emerging every day, it is becoming even harder to find a one-size-fits-all SSNIP test. We agree with the general idea that the definition of the relevant product market in multisided markets should encompass all sides ‘in order to correctly assess the competitive constraints faced by firms’.⁶² To that end, the underlying rationale of the SSNIP test can be applied in a way that embraces all sides of the platform business at hand and factors in the indirect network effects. Beyond this, we do not find it possible (at least at the current stage of the multisided markets theory) to come up with a SSNIP test model that can be applied uniformly in multisided markets.⁶³

Measuring market power

In measuring market power in multisided markets, an important consideration is whether competition authorities can use conventional market power measurement methods. Although market shares are a common tool in measuring market power, it is not always clear how to analyse market shares in multisided settings.⁶⁴ For instance, the platform’s shares on different sides of the market could be calculated separately and the competition authority could then analyse both sets of market shares together. However, it is likewise possible that these shares differ greatly, thereby complicating the analysis of market power even further.

The price/cost margin is another widely used tool, although it may not be easily applied to multisided markets. As discussed earlier, the prices charged on one side of the market do not always depend on the costs incurred on that side of the market. Therefore, that ‘a high price-cost margin indicates market power’ may be a false assumption in the multisided context.⁶⁵

Finally, we agree with authors arguing that market shares are not always accurate indicators of market power in multisided markets.⁶⁶ History has shown that, despite

61 Filistrucchi and others (n 51) 333.

62 *ibid* 330.

63 For a similar view, see Auer and Petit (n 6) 30.

64 Evans and Schmalensee (n 20) 20.

65 Wright (n 14) 5.

66 Torsten Körber, ‘Common Errors Regarding Search Engine Regulation - and How to Avoid Them’ (2015) 36 ECLR 239, 241; OECD Digital Economy Report, 5–6.

the supposed first-mover advantage in multisided markets, some players once believed to be strong or dominant have lost significant market share over the years. For example, Microsoft was once found to be abusing its dominant position in the market for PC operating systems. Now, however, people use various platforms for computer-based needs other than PCs. Meanwhile, '[o]n these new mobile platforms, Windows is far from dominant.'⁶⁷ There are numerous other unsuccessful multisided platform businesses that were among the first of their kind but then failed to hang onto their market position such as MySpace, Friendster, and Altavista. Failing to catch up with eager and innovative newcomers, or not managing to fulfil ever-changing customer needs, can swiftly spell the end for first-comer platform businesses. This is particularly the case in digital markets. This feature of multisided platforms warrants particular attention in antitrust enforcement. Therefore, in the case of market power in multisided markets, looks can be deceiving.⁶⁸

Price discrimination

Non-discriminatory practices in multisided markets may be mistaken with practices that are considered price-discriminatory in one-sided markets.⁶⁹ This is again primarily due to the price structure in multisided markets. Therein, different groups of consumers will be charged different prices to maximize profits by internalizing the network effects. This practice has been described as 'discrimination'.⁷⁰ In multisided settings, the different prices charged to each group of users may not always depend on costs borne for the same user group.⁷¹ Such pricing schemes in multisided markets can be justified based on the multisided nature of the market.⁷² For example, Wright's work on the market for payment cards has shown that 'excessive interchange fees can be fully explained (along with the other concerns of policymakers) without relying on any anticompetitive behaviour on the part of the card networks or their members'.⁷³ It is also worth noting that Weyl, who has worked on price discrimination in multisided markets, finds that 'price discrimination is probably neither systematically easier nor more difficult in two-sided markets than standard markets'.⁷⁴

Predatory pricing

Investigating predatory pricing allegations is hard, in general, as the conduct involves low prices, which are desirable for the consumers. At the same time, the rules developed for the detection of predatory pricing can be complex and hard to

67 Sharon Chan, 'Antitrust Saga Ends for Microsoft' *The Seattle Times* (Seattle, 12 May 2011) <http://old.seattletimes.com/html/microsoftpri0/2015034116_antitrust_saga_ends_for_microsoft.html> accessed 1 March 2016.

68 OECD Digital Economy Report, 7.

69 Veljanovski (n 26) 35.

70 *ibid* 11; OECD Two-Sided Markets Report, 30.

71 Veljanovski (*ibid*) 11.

72 OECD Two-Sided Markets Report, 193.

73 Julian Wright, 'Why Payment Card Fees are Biased Against Retailers' (2012) 43 *RAND J Econ* 761, 775.

74 Weyl (n 5) 1645.

implement.⁷⁵ Therefore, there are not many examples of predation.⁷⁶ In the context of multisided markets at any rate, a few elements require particular attention in the assessment of predatory pricing claims.

As provided above, multisided platforms often charge nothing or very low prices on one side, therefore, charging well below cost. On the other side, however, the platforms may charge well in excess of cost in order to subsidize the first side. If the low-priced side of the market is 'looked at in isolation', the platform may be condemned for predatory pricing.⁷⁷ The separation of predatory pricing from optimal pricing, therefore, warrants careful consideration when an authority is investigating predatory pricing allegations in multisided markets.⁷⁸

Furthermore, a number of authors have highlighted that the well-known Areeda–Turner test for predatory pricing is hard to apply in multisided markets. For instance, Schanzenbach explains that based on the Areeda–Turner test, a dominant company which charges below its marginal costs, unless it has a 'pro-competitive' justification, is selling at a loss and most likely engaging in predatory behaviour.⁷⁹ On the other hand, platforms often charge below cost, or not charge at all, on one side, without having to incur losses overall.⁸⁰ Fletcher explained that the test is prone to result in errors in two-sided markets, and, therefore, that enforcers should bear in mind this particularity of the pricing structure in platforms when assessing predation.⁸¹ The International Competition Network (ICN) Predatory Pricing Report also accepts 'two-sided markets' as an objective justification for below-cost pricing.⁸²

Nonetheless, predatory pricing could occur in the multisided context. According to Evans and Schmalensee, a platform would engage in predatory pricing if it was losing money over the whole platform. It would thereby be applying low prices even on the non-subsidized group of agents, and not merely on the subsidized side.⁸³

Anticompetitive agreements

Associations of undertakings are often under scrutiny for alleged anticompetitive agreements in the payment cards industry. Two of the most recent and most discussed decisions in this context are *Groupement des Cartes Bancaires* and *MasterCard*.⁸⁴

Groupement des Cartes Bancaires shows the consequences of the failure to take into account the particularities of multisided markets in evaluating conduct under

75 International Competition Network, *Unilateral Conduct Workbook Chapter 4: Predatory Pricing Analysis* (2012) (hereinafter ICN Predatory Pricing Report) paras 6–8 <<http://www.internationalcompetitionnetwork.org/uploads/library/doc828.pdf>> accessed 13 October 2015.

76 Schanzenbach (n 29) para 65.

77 Fletcher (n 33) 222.

78 *ibid* 222–24.

79 Phillip Areeda and Donald F Turner, 'Predatory Pricing and Practices Under Section 2 of the Sherman Act', (1975) 88 Harv L Rev 697.

80 Schanzenbach (n 29) paras 67–68.

81 Fletcher (n 33) 223.

82 ICN Predatory Pricing Report, paras 6–8.

83 Evans and Schmalensee (n 20) 34.

84 Case C-382/12 P *MasterCard v Commission* (ECJ, 11 September 2014) (hereinafter *MasterCard v Commission*)

Article 101 of the Treaty on the Functioning of the European Union (TFEU).⁸⁵ The dispute related to a set of complex measures adopted by *Groupeement des Cartes Bancaires* ('CB Group'), an association of undertakings established by the major banks in France and active in the payment cards market. The disputed measures were different types of fees to be paid by new entrants, by existing but dormant members and by existing members who were engaged in issuing, ie bank card issuing, to a greater extent than acquiring, ie merchant acquiring.⁸⁶ The CB Group maintained that the measures aimed to encourage acquisition and to combat free-riding in the system which was, according to the CB Group, a legitimate objective.⁸⁷ In sum, the CB Group argued that the number of members whose issuing activities outweighed acquiring activities and who exclusively engaged in issuing was fast growing in the system and that such members were free-riding on the investments by acquirer banks.

The Commission defined the relevant product market as 'the payment cards issuance market'.⁸⁸ This was despite the CB Group's arguments that in light of the two-sided nature of payment card systems, issuing and acquiring activities should both be included in the market definition. The Commission ultimately found that the CB Group could not demonstrate the existence of free-riding in the system. The disputed measures accordingly were found to be anticompetitive due to both their object and effects. The anticompetitive object, according to the Commission, corresponded 'to the real objectives of those measures . . . namely the intention to impede competition for new entrants and to penalise them, the intention to safeguard the main members' revenue and the intention to limit the price reduction for CB cards'.⁸⁹ The General Court (GC) upheld the decision, finding that the measures at hand had an anticompetitive object.⁹⁰ The GC did not examine whether the measures had anticompetitive effects, notwithstanding the fact that the CB also contested the effects analysis of the Commission.

When the CB Group brought the case before the ECJ, contending that the GC erred in law in the application of the 'restriction of competition by object'⁹¹ concept,

85 Gönenç Gürkaynak and Ayşe Gizem Yaşar, 'Re-Assessing Object Restrictions: A New Day in Light of the "*Groupeement des Cartes Bancaires v Commission*" Decision' (2015) 16 *Competition J* 41, 73 <<http://www.rekabet.gov.tr/File/?path=ROOT%2f1%2fDocuments%2fRekabet+Dergisi%2f01-2016+Dergi.pdf>> accessed 31 March 2016.

86 Acquiring banks provide point of sale terminals to merchants and on behalf of the merchant, whereas issuing banks issue credit cards to customers. Acquirers, therefore, both manage transactions and undertake the financial risks associated with the payments. A bank can be both an issuer and an acquirer.

87 Booth explains free-riding as follows: 'If it is assumed that a group forms to provide or to lobby for the provision of, a good that is collective to potential members, then the major conceptual problem to the formation of such a group is that individuals can enjoy the benefits of group action without incurring the costs. By doing this, they free ride.' (Alison L Booth, 'The Free Rider Problem and a Social Custom Model of Trade Union Membership' (1985) 100 *QJ Econ* 253, 253.)

88 *Groupeement des Cartes Bancaires 'CB'* (Case COMP/D1/38.606) [2007] OJ C183/12, para 189.

89 Opinion of Advocate General Wahl (hereinafter AG Wahl) in *Groupeement des Cartes Bancaires*, para 10.

90 Case T-491/07 *Groupeement des Cartes Bancaires v European Commission* [2012].

91 Agreements which may affect trade between Member States and which have as their object or effect the prevention, restriction, or distortion of competition within the internal market are prohibited by Article 101 TFEU.

AG Wahl explained in his opinion that under settled case law in the European Union (EU), it is necessary to examine agreements within their legal and economic context when answering the question whether an agreement has a restrictive object.⁹² This contextual analysis can take an agreement out of the ‘object box’⁹³ even when the agreement appears to have a restrictive object at first glance.⁹⁴ He then concluded that the GC should have taken account of the two-sided nature of the market.⁹⁵ There is a nuance in the AG’s opinion. AG Wahl considered the definition of the relevant product market to be separate from the analysis of the two-sided nature of the market.⁹⁶ Based on this approach, the manner in which the relevant product market is defined does not provide leeway to avoid multisidedness in the competition law analysis.

The ECJ upheld AG Wahl’s view, resolving that the GC erred in law in its finding of restrictive object as it failed to consider the interactions among the sides as well as the indirect network effects present in the payment systems market.⁹⁷ The decision confirms that ‘when examining conduct in two-sided markets, competition rules cannot be applied to one side only (eg issuing of bank cards) with total disregard of the other (eg acquisition of merchants)’.⁹⁸

In the context of anticompetitive agreements, there has also been discussion on the application of Article 101(3) of TFEU and whether the EU authorities have been applying this provision correctly in the context of multisided markets. *MasterCard* is a recent example from the case law demonstrating challenges in the individual exemption cases in multisided markets. This decision is further discussed under Section IV.

Vertical restraints

The use of vertical restraints in multisided settings can also have a complex set of effects. On one hand, vertical restraints are associated with a variety of benefits. For instance, the use of exclusive dealing arrangements with customers by a multisided platform may ensure that customers on both sides are assured about the ongoing existence of counterparties on the other side, which may help a start-up platform reach critical mass for growth.⁹⁹ Evans and Schmalensee explain that a study of the video game industry demonstrates that ‘exclusive contracts can facilitate entry rather than

92 Opinion of AG Wahl in *Groupeement des Cartes Bancaires* (n 89) para 41; Frédéric Pradelles and Andreas Scordamaglia-Tousis, ‘Two Sides of the Cartes Bancaires Ruling: Assessment of the Two-Sided Nature of Card Payment Systems Under Article 101(1) TFEU and Full Judicial Scrutiny of Underlying Economic Analysis’ (2014) 10 *Competition Poly Intl* 139, 142.

93 Whish uses the terminology ‘object box’ when referring to agreements that have a restrictive object. (Richard Whish, *Competition Law* (7th edn, OUP 2012) 120).

94 Opinion of AG Wahl in *Groupeement des Cartes Bancaires* (n 89) para 147.

95 *ibid*, para 149–52.

96 *ibid*, para 149–50.

97 *Groupeement des Cartes Bancaires* (n 1) para 74.

98 Pradelles and Scordamaglia-Tousis (n 92) 145.

99 David S Evans, ‘Economics of Vertical Restraints for Multi-Sided Platforms’ (2013) University of Chicago Institute for Law & Economics Olin Research Paper No 626, 18 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2195778> accessed 31 March 2016.

deter it'.¹⁰⁰ This is due to the fact that when a new game console developer is entering the industry, it first needs to lock-in game developers who will develop games for the relevant platform before there yet being a demand for the relevant console. Therefore, the new entrant benefits from an exclusive arrangement, which ensures that developers stick with its platform, as opposed to developing games for the incumbent platforms for which there is already significant pre-existing demand.¹⁰¹ While exclusivity arrangements with suppliers or customers can be useful for new entrants to establish themselves in single-sided markets as well, the need to ensure that a sufficient number of users are on board for both sides in order for indirect network effects to kick in and propel the multisided platform towards growth, makes the benefits of such arrangements particularly important in multisided settings.¹⁰²

On the other hand, exclusive dealing arrangements by incumbents could also translate into an entry barrier for new entrants by making it more difficult for them to obtain enough customers on each side to launch their business.¹⁰³ Doganoglu and Wright show that, due to the presence of indirect network effects in multisided markets, established platforms may be able to foreclose a more desirable entrant through signing exclusivity contracts with users on one side and extracting profits from the other side.¹⁰⁴

Additionally, certain vertical restraints can specifically be creatures of multisided markets. A good example is 'retail-most-favoured-nation (MFN) clauses' or 'platform-MFN clauses'.¹⁰⁵ In such arrangements, 'a supplier who markets products through a platform guarantees the platform operator that it will not offer the same products for a cheaper price or more advantageous terms through another platform'.¹⁰⁶ Retail-MFNs have certain critical benefits for platform businesses, most prominently in terms of protecting the brand value of the platform and preventing free-riding by suppliers using the platform.

Without a retail-MFN in place, the suppliers could lead the customers to switch sales channels before a platform transaction is concluded and get them to finalize the transaction on their own website. This way, they could avoid paying a commission to the platform.¹⁰⁷ Even without any inducement, the suppliers could still free-ride on

100 Evans and Schmalensee (n 20) 31; see also the relevant research by Robin S Lee, 'Vertical Integration and Exclusivity in Platform and Two-Sided Markets' (2013) 5 <<http://www.people.fas.harvard.edu/~robinlee/papers/VIExclusivity.pdf>> accessed 16 October 2015.

101 Lee (*ibid*) 2.

102 Evans (n 99) 23.

103 *ibid* 20.

104 Toker Doganoglu and Julian Wright, 'Exclusive Dealing with Network Effects' (2006) Working Paper, 31 <[ftp://ftp.zew.de/pub/zew-docs/workshop/ICT/Doganoglu.pdf](http://ftp.zew.de/pub/zew-docs/workshop/ICT/Doganoglu.pdf)> accessed 16 October 2015; Evans and Schmalensee (n 20) 31; Evans (n 99) 17.

105 Gönenç Gürkaynak and others, 'Most-Favored-Nation Clauses in Commercial Contracts: Legal and Economic Analysis and Proposal For a Guideline' (2015) EJM & Econ, 3 <<http://link.springer.com/article/10.1007%2Fs10657-015-9515-y#page-1>> accessed 31 March 2016.

106 *ibid*.

107 Bundeskartellamt, 'Vertical Restraints in the Internet Economy' (2013) Meeting of the Working Group on Competition Law Background Paper, 25 <http://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Diskussions_Hintergrundpapiere/Vertical%20Restraints%20in%20the%20Internet%20Economy.pdf?__blob=publicationFile&v=2> accessed 16 October 2015.

the traffic created by the platform since customers who realize that cheaper prices are available from the suppliers would simply use the platform's service and then go on to conclude the transaction elsewhere. In light of this, the platform would not be able to exploit its investments through generating more demand and traffic. Additionally, disadvantageous offers on its own platform could seriously damage the business of a platform as the reduction in transaction costs, and thus the value, which the platform generates for customers, would decrease as customers are also forced to search elsewhere. Moreover, due to the feedback loops, the resulting reduction in brand value vis-à-vis customers would also reduce the platform's value for the suppliers on the other side and vice versa.¹⁰⁸

Retail-MFN clauses have come under antitrust scrutiny due to the concern that they may create price rigidity in the market as well as exclusionary effects on rivals and potential entrants.¹⁰⁹ A primary concern is that where a supplier has retail-MFN arrangements with large platforms, it may have a reduced incentive to accept offers by low-cost/low-price platforms willing to sacrifice some of their commissions in order to host cheaper offers on their platforms.¹¹⁰ Such an effect could also make it more difficult for new entrants to enter the market through a low-cost/low-price model by obtaining lower priced offers from suppliers and building up a customer base on this basis.¹¹¹ Considering the latter effect, Boik and Corts find that the existence of retail-MFNs in the market may reduce the incentive to enter via a low-cost model, while the incentive to enter via a high-cost/high-quality model may increase due to greater industry profits.¹¹²

Finally, the presence of indirect network effects in multisided settings could lead one to believe that the potential exclusionary effects of vertical restraints would be automatically exacerbated in such settings, in tandem with the views that multisided markets are already prone to high barriers to entry due to indirect network effects.¹¹³ However, as seen above, while a retail-MFN may deter entry through a low-cost model, the same effect may translate into an increased incentive to enter with a high-cost/high-quality model. On the one hand, given that one of the potential and relatively straightforward ways of product differentiation is to adopt a low-cost/low-price strategy, retail-MFNs rendering entry with such a model more difficult could potentially reduce entry. On the other hand, given the dynamic nature of many multisided markets, the overall effect of the use of retail-MFNs (or vertical restraints, in general)

108 Martha Samuelson, Nikita Piankov and Brian Ellman, 'Assessing the Economic Effects of Most-Favored-Nation Clauses' (2012) 3 <http://www.analysisisgroup.com/uploadedfiles/content/insights/publishing/samuelson_mfn_springaba_2012.pdf> accessed 19 October 2015.

109 Gürkaynak and others (n 105) 10. To provide a few examples, see Bundeskartellamt, Case No B 9 - 66/10 - HRS, Decision of 20 December 2014, paras 156–62, 251–58 <http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Entscheidungen/Kartellverbot/B9-66-10.pdf?__blob=publicationFile&v=3> accessed 19 October 2015 (hereinafter *HRS*).

110 Gürkaynak and others (ibid) 9; OXERA, 'Most-Favored Nation Clauses: Falling Out of Favour?' (2014) <<http://www.oxera.com/Latest-Thinking/Agenda/2014/Most-favoured-nation-clauses-falling-out-of-favour.aspx>> accessed 31 March 2016.

111 *ibid*.

112 Andre Boik and Kenneth S Corts 'The Effects of Platform MFNs on Competition and Entry' (2013) 12, 14–15 <http://economics.yale.edu/sites/default/files/corts_17-oct-2013.pdf> accessed 19 October 2015.

113 For example, OECD Two-Sided Markets Report, 98, 115; Evans (n 99) 18.

in a multisided setting could be ambiguous. This is particularly true as significant changes in the structure of digital markets often happen not through price-based competition but through the development of better products and business models. As noted, various multisided digital markets have seen successful entrants quickly grow and overtake the incumbent firms, including social media, where Facebook overtook established market leader MySpace and blogging platforms, where WordPress overtook Blogger.¹¹⁴

Additionally, in dynamic multisided markets, competition often enters the market through differentiated products finding additional niches in the market.¹¹⁵ This makes sense, since an entrant with a purely price-based competition model and an identical product would already be at a disadvantage due to the higher number of users on both sides in the established platform.¹¹⁶ Instead, entering based on a product differentiated in terms of quality and characteristics would permit the newcomer to attract certain customers with a higher preference for its service and also potentially encourage multi-homing by the customers. To illustrate, it is unlikely that a social media company with no product differentiation over Facebook would be able to overtake it, or establish itself in the market, based simply on reducing its commissions towards advertisers. However, subsequent entrants such as Twitter, Instagram, and LinkedIn, who have positioned themselves differently in the social media atmosphere, have indeed been able to establish themselves and grow. As a result, the use of retail-MFNs in an industry, which would incentivize high-cost/high-quality entry, while at the same time deterring low-cost/low-quality entry, could lead to more competitive outcomes by encouraging innovation and product differentiation as opposed to price competition.

In light of the above, the presence of indirect network effects; the pressing need for entrants to get both sides on board in the starting phase; and the dynamic nature of many multisided markets introduce significant nuances into the assessment of vertical restraints in multisided settings even where the competitive effects seem to be similar to single-sided settings. Additionally, those assessing vertical restraints in multisided settings should be cautious about simplistic generalizations, such as automatically assuming a greater risk of exclusionary effects, and should carefully consider the overall short-term and long-term effects of the relevant restraint in light of the particular market conditions.

Mergers in multisided markets

A multisided setting introduces many additional considerations for the assessment of mergers. For one, the academic literature regarding multisided markets suggests that traditional tools of market analysis may not necessarily work in the case of multisided markets unless they are properly adjusted.¹¹⁷ Similarly, focusing on the market shares

114 Lerner (n 39) 46–47.

115 Evans (n 99) 21.

116 *ibid* 22.

117 Lapo Filistrucchi, Tobias F Klein and Thomas O Michielsen, 'Assessing Unilateral Merger Effects in a Two-Sided Market: An Application to the Dutch Daily Newspaper Market' (2012) 8 JCL & E 297, 326; David S Evans, 'The Consensus among Economists on Multisided Platforms and Its Implications for Excluding Evidence that Ignores It' (2013) 9 <<http://ssrn.com/abstract=2249817>> accessed 8 October 2015.

or the profit margins on only one side of the platform could provide highly misleading results.¹¹⁸

An important issue regarding mergers in multisided markets is the existence of two (or more) distinct consumer surpluses to take into consideration on each side.¹¹⁹ This issue is further complicated by the fact that a merger in a multisided market is likely to affect not only the price level, but also the price structure, which is of crucial importance to platform businesses.¹²⁰ As a result, the effects on consumer welfare may well move in opposite directions depending on which side of the platform is being analysed. This feature introduces a level of complication to the merger analysis.¹²¹

Furthermore, the presence of indirect network effects in multisided markets provides an opportunity for the merging parties to create value through the merger of their respective networks.¹²² Where the merging parties indeed create a single platform bringing together customers of both platforms (at least some of whom were not multi-homing across both platforms already), this would create value for the customers on the other side by means of providing access to a greater network. For instance, there might be more readers or viewers for advertisers. Due to the value created by network effects, the transaction could raise consumer surplus even though it also results in higher prices.¹²³ The Dutch Competition Authority's European Directories—Truvo Nederland Decision, which constitutes an example of the above phenomenon, is discussed in greater detail in Section IV below.

As indirect network effects are also considered to be entry barriers, it can be argued that enforcement agencies should be cautious of established companies' settling into a practice of acquiring rivals in their start-up phases before positive feedback loops are triggered and multisided business is able to grow at a rapid pace. As discussed however, many multisided markets have gone through considerable upheavals where the incumbent undertakings have lost their leadership position to more efficient newcomers. Therefore, the dynamic nature of multisided markets could make up for the potential barriers created through network effects. Indeed, as noted, the Commission has refrained from taking a position that the existence of network effects would automatically translate into competition problems in and of themselves, and are better analysed on a case-by-case basis.¹²⁴ At any rate, the presence of indirect network effects is often a double-edged sword. They can also lead to a rapid loss of market shares, while multi-homing can also reduce the likelihood of indirect network effects translating into entry barriers.¹²⁵

The European Directories—Truvo Nederland decision by the Netherlands Competition Authority, which will be evaluated under Section IV, is an example of a case where multisided considerations played a major role in the outcome.

118 NMa Report (n 18) para 83.

119 *ibid* (n 18) para 239.

120 *ibid* (n 18) para 243.

121 *ibid*; Evans and Schmalensee (n 20) 23.

122 Evans and Schmalensee (*ibid*) 25.

123 NMa Report (n 18) para 245.

124 *Facebook/WhatsApp* (n 36) para 130–35.

125 *Case T79/12 Cisco Systems, Inc and Messagenet SpA v European Commission* [2013] para 79.

Discussion

The above list under Section III provides only a few examples in terms of how anti-trust analysis in the multisided context can be tricky. As competition law and markets evolve, there will always be new issues arising in terms of antitrust enforcement in multisided markets, in terms of both finding classic infringements, as well as new types of competition law sensitivities, such as the retail-MFNs. The message to be drawn from the above discussion is clear: When dealing with multisided markets, it is crucial for enforcers to be mindful of the multisided nature of the markets which they examine. The application of traditional methods without making the necessary modifications to the tools of analysis in question is prone to result in substantial errors.

IV. CASE STUDIES

Despite the relatively large body of literature regarding the theory of multisided markets and its implications for antitrust cases, courts and competition authorities have a mixed track record in terms of bringing the lessons and implications of this literature to bear in their analysis of cases involving multisided markets. Below, we present two case studies involving multisided markets to demonstrate the importance of multisidedness to the antitrust analysis. We then engage in an assessment of the extent to which the analysis conducted by the relevant authorities/courts is in line with the implications of the emerging theory of multisided markets.

Multilateral interchange fees in the payment cards market and the Mastercard Decisions

Market for payment card systems

The market for payment card systems constitutes one of the clearest examples of multisided markets and is likely one of the most-studied multisided markets. Payment cards providing a service to cardholders makes it significantly easier for them to pay for a purchase. They also provide a service to merchants that enable them to receive payment in a more efficient manner and realize a greater amount of sales. More importantly, the demand structure in the two sides of the market is inter-dependent: the value that consumers derive from a specific credit/debit card depends on the number of merchants willing to accept the card, while the value merchants derive from the specific card depends on the number of customers using it. Accordingly, a payment card system operator needs to make its pricing decisions in a way which brings both sides on board, therefore, paying specific attention to the pricing structure across the different sides as opposed to simply the price level on each side.

The market for payment cards includes two distinct business models: open and closed systems. Earlier examples of payment card systems, such as Diners Club and American Express, are closed systems where the payment platform between the merchants and cardholders is operated by a single business dealing with the customers on both sides. Open platforms such as Visa and Master Card are not operated by a single undertaking but an association of banks which cooperate to facilitate the realization of the payment from the customer to the merchant. In an open platform, the

transaction structure includes four distinct actors: the customer/cardholder, the issuing bank, the acquiring bank, and the merchant. When a customer makes a purchase using the credit card of an open network, the payment originates from the bank which issued the relevant credit card. The issuing bank transfers the amount to the acquiring bank and the acquiring bank then transfers the payment to the merchant's account. Both the open and closed systems involve a fixed membership fee to cardholders (charged by the issuing bank in the case of open platforms) and a usage-based merchant discount (charged by the acquiring bank in the case of open platforms) to the merchants. However, as the transactional structure of an open system includes an extra step, it also includes an extra fee. As it transfers the payment to the acquiring bank, the issuing bank charges an interchange fee.

Given that the open platforms involve numerous banks in both the issuing and the acquiring side, the bilateral negotiation of interchange fees involves significant transaction costs. As a result, both of these platforms have adopted multilateral interchange fees (MIFs). In other words, the relevant associations set the interchange fees to be used within the platform (at least by default) between issuing and acquiring banks. As open payment card platforms are cooperative associations of competitors, the establishment of the interchange fee by the association implies the joint determination of price by competing undertakings. Naturally, this practice has come under antitrust scrutiny. Various antitrust agencies and courts have a long history of dealing with interchange fees, particularly those of Visa and MasterCard.

MasterCard cases and multisided markets analysis

In its prohibition decision, the Commission found the specific fall-back MIFs used by MasterCard to be in violation of European competition law. In its defence, MasterCard argued that: (i) the MIF was objectively necessary for the functioning of the MasterCard scheme and, therefore, constituted an ancillary restraint which should be held outside the prohibition of Article 101(1) of the TFEU, and (ii) at any rate, the MIF should receive an exemption under Article 101(3) of the TFEU due to the efficiencies generated for the MasterCard system.

Much of the Commission's decision hinges on the argument that MasterCard should have presented a defence that the particular level of the MIF it set resulted in efficiencies sufficient to balance the restraint in competition. As such, while MasterCard presented theoretical arguments emphasizing the role of price and cost structure for the platform, this was not accepted as sufficient. The Commission emphasized that 'any claim that a MIF creates efficiencies within the first condition of Article [101(3)] of the Treaty must be founded on a detailed, robust and compelling analysis that relies in its assumptions and deductions on empirical data and facts'.¹²⁶

In this section, rather than engaging in a thorough analysis of the decisions of the Commission, GC and the ECJ, we will highlight various points in the decisions which can be criticized from the perspective of the economic theory of multisided markets.

Market definition

MasterCard argued before the Commission that the relevant product market definition should include a single multisided market, which was rejected. In rejecting a single multisided market definition, the Commission mainly relied on the arguments that: (i) the MasterCard platform is only a vehicle for distinct suppliers to serve distinct customers as opposed to a product offered jointly to both sets of customers,¹²⁷ (ii) such a market definition would not be appropriate for assessing the competition and different levels of interaction within the relevant scheme,¹²⁸ and (iii) a single multisided market definition is at odds with the Commission's decisional practice.¹²⁹ Ultimately, the Commission defined separate markets with respect to issuing and acquiring services, as well as an upstream 'network market' where card scheme owners compete to persuade banks to join their scheme.¹³⁰

In essence, the Commission's position on the market definition is not determinative of its position with respect to the issues that will be discussed below, as the Commission could have potentially defined two separate markets and yet conduct a holistic analysis covering both sides. This was essentially the point made by AG Wahl in *Groupeement des Cartes Bancaires* as discussed above.¹³¹ Nevertheless, coupled with a formalistic application of principles from the single-setting in the present case, the refusal to define a single market encompassing all sides has resulted in a tendency to view each side in isolation—particularly with respect to the Article 101(3) TFEU analysis. As a result, it seems that rather than providing an avenue to assess the complex interactions in a payment card scheme, the definition of separate markets has tended to oversimplify the relevant analysis. To that end, we believe that the MasterCard case also demonstrates the risk that defining separate markets could lead the courts and agencies to pay insufficient attention to the multisided nature of the overall structure.

Comparison with a zero-MIF alternative

MasterCard argued that the MIF was an objective necessity for the working of the MasterCard system and, therefore, it should be regarded as an ancillary restraint falling outside the prohibition of Article 101(1) TFEU.¹³² The Commission, however, that a default MIF could not be justified on this ground.

Rysman and Wright compare the Commission's approach to the earlier *National Bancard Corporation* ('Nabanco') case in the USA. The MIF used by Visa came under antitrust scrutiny in the *Nabanco* case in 1976 when Nabanco, a processing agent involved in the merchant side of the system though not officially a Visa member, claimed that the MIF constituted horizontal price fixing and, therefore, a *per se* restriction of antitrust law.¹³³ The Court in *Nabanco* conducted its analysis through comparison with a state of affairs involving no MIF, and therefore bilateral

127 *ibid*, para 261.

128 *ibid*, para 265.

129 *ibid*, para 266.

130 *ibid*, paras 281–82.

131 Opinion of AG Wahl in *Groupeement des Cartes Bancaires* (n 89) paras 149–50.

132 *MasterCard* (n 59) paras 536ff.

133 *National Bancard Corp v Visa, USA, Inc*, 596 F Supp 1231, 1241, 1250 (SD Fla 1984).

negotiations.¹³⁴ Based on this assumption, the Court recognized that a default MIF created significant efficiency gains through eliminating the transaction costs of inefficient bilateral negotiations and resolving the potential ‘hold-up problem’ between issuers and acquiring banks.¹³⁵ The hold-up problem would be expected because of the honour-all-cards rules (HACR) in both the Master Card and Visa systems which force participating merchants to accept all cards of the given network regardless of the issuing bank. As a result, without a bilateral agreement or a default MIF in place, issuing banks would be free to charge any *ex post* prices, giving them the leverage to hold-up the other party in a bilateral negotiation and resulting in high interchange fees. This would in turn threaten the viability of the HACR.¹³⁶

The Commission on the other hand, reasoned that, in such a situation, the hold-up problem could be solved by prohibiting issuers from engaging in any *ex post* pricing and forcing them to honour any payment requests by acquiring banks without charging an interchange fee in the absence of a bilateral agreement.¹³⁷ This stance has been upheld by the GC, as well as the ECJ. The Commission and the courts have mainly discussed the extent to which the Commission (or the GC) was permitted to make use of the counterfactual where *ex post* interchange fees are prohibited, and the extent to which a system such as the MasterCard network could indeed be viable under this assumption. Significantly, an additional argument before the GC and the ECJ also challenged whether this would in fact be a scenario which is less restrictive of competition.¹³⁸

This argument was swiftly rejected by both the GC and the ECJ, though neither court considered the interdependence between the issuing and the acquiring sides in their rejection of the relevant argument. In our view, this stance can be regarded as an example of applying the presumptions coming from single-sided markets to a multisided markets case.

As argued by the applicants, it is not entirely clear why a default MIF of zero is seen as a lesser restraint on competition itself than any other default MIF. Both default MIFs would displace bilateral negotiations between issuers and acquirers to an equal degree.

In concluding that a prohibition of *ex post* pricing would be less restrictive, the Commission’s decision states that ‘that solution to “protect” acquirers if issuers should indeed abuse their power under an HACR is less restrictive of competition than a MIF as it does not set a minimum price level on either side of the scheme’.¹³⁹ In other words, a default MIF of zero is seen as setting merely a maximum price as opposed to a minimum or fixed price. However, this view ignores the effects of a MIF of zero on the issuing side of the platform. Ultimately, a multisided platform business facing two sets of customers on each side of the platform must cover their operations and earn profits through either charging only customers on one side, or

134 Marc Rysman and Julian Wright, ‘The Economics of Payment Cards’ (2012) 17 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2183420> accessed 8 October 2015.

135 *National Bancard Corp* (n 133) para 1261.

136 *ibid*.

137 *MasterCard* (n 59) para 554.

138 *MasterCard v Commission* (n 84), paras 97, 124, 131.

139 *MasterCard* (n 59) para 554.

charging the sets of customers on both sides. Where it is prevented from charging one side—to the extent it will not operate at a loss—it should finance its costs through charging the other side. To provide an example from a three-party scheme, should American Express be barred from charging merchant discounts, it would have to charge fees to cardholders in order to operate profitably. In other words, the imposition of a maximum price of zero on the merchant side of the platform creates an effect similar to a price floor with respect to the issuing side.

While the situation in a four-party system is more complicated, the issuing banks face a similar economic reality in the case of a default MIF of zero. Issuing banks face a variety of costs, some of which directly benefit acquirers such as bearing the risk of non-payment. Where they are prevented from passing on these costs to acquiring banks through an interchange fee, they would have to cover these costs through fees to cardholders—effectively setting a floor in relation to such fees. As a result, while the Commission's assertion that a default MIF of zero would not set a minimum price on either side might be considered formally true, the practical effects of this restriction would likely generate an effect similar to a minimum price on the issuer side.

A similar issue would not necessarily arise for most single-sided settings where a given product or service would have one set of customers who would all automatically benefit from the price ceiling. Instead, where there are two (or more) sets of customers, the imposition of a price ceiling on one side affects the price structure for the whole scheme, thus producing different effects for different sets of customers. As a result, unlike the case of a single-sided market, the assumption that a dictated default interchange fee of zero is less restrictive in comparison to any other given MIF is problematic in the case of a multisided market.

The ECJ points out that the GC in its decision demonstrates that the presence of the MIFs limited the bargaining power of the merchants vis-à-vis the acquiring banks by 'reducing the possibility of prices dropping below a certain threshold'.¹⁴⁰ As noted by the ECJ, the GC discusses at length the data relied upon by the Commission in demonstrating a negative effect on the bargaining position of merchants.¹⁴¹ However, neither the GC nor the ECJ addresses the essential part of the above argument. Both merely address the merchant side of the multisided market. As explained above, where one analyses the merchant side as a completely separate single-sided market, a MIF of zero can be regarded as a mere maximum price as opposed to a fixed price/price floor. However, upon considering the interdependent nature of the two sides of the market, it becomes apparent that a MIF of zero would function as an indirect price floor on the issuing side. To that end, when one considers the situation across both sides of the platform, it becomes harder to conclude, as the GC and the ECJ have done, that a MIF of zero would necessarily be less restrictive of competition across the whole platform.

As a result, independent of whether or not the Commission was permitted to make use of this counterfactual in its Article 101(1) TFEU analysis, the implications

140 *MasterCard v Commission* (n 84) para 193.

141 *Case T-111/08*, paras 157–65.

of the multisided setting cast doubts upon whether the Commission was correct to assume that the counterfactual scenario is in fact less restrictive of competition based solely on the effects on the merchant side.

Analysis of efficiencies

One of the important points of appeal in the recent ECJ decision was whether the GC erred in holding that the Commission was justified in focusing on the benefits to merchants in its exemption analysis under Article 101(3).¹⁴² The applicants in the case defended the linked nature of the two markets and further reasoned that, even in the absence of sufficient benefits to the merchants, the GC should not have held that, as a matter of law, the first two conditions in Article 101(3) TFEU could not be met based on the benefits to the cardholders alone.¹⁴³ This ground of appeal related fundamentally to paragraph 228 of the GC's judgment which provided 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'.¹⁴⁴ The GC's stance, however, was approved by the ECJ.¹⁴⁵

From a legal standpoint, the position of the GC and the ECJ are well in line with the general principle outlined in paragraph 43 of the Guidelines on the application of Article 101(3) TFEU ('Guidelines').¹⁴⁶ The relevant paragraph states that:

... efficiencies generated by the restrictive agreement within a relevant market must be sufficient to outweigh the anti-competitive effects produced by the agreement within that same relevant market.¹⁴⁷

The only recognized exception to the above rule is where, despite the separation in the defined markets, the 'group of consumers affected by the restriction and benefiting from the efficiency gains are substantially the same'.¹⁴⁸

The stance set out in the Guidelines, also adopted by the GC and the ECJ, constitutes another example of analytical approach derived from single-sided markets becoming problematic when applied to multisided markets. When each side of a multisided market is defined as a separate market and the above principle is applied, some of the fundamental aspects of multisided businesses may appear problematic even though they are socially desirable from an economic standpoint.

A fundamental aspect of platform businesses in multisided markets is that price structure between the two sides of the platform is of paramount importance and the resulting value created on each side of the platform is ultimately interdependent. Nevertheless, the requirement of paragraph 43 of the Guidelines that the group of

142 *MasterCard v Commission* (n 84) para 220.

143 *ibid*, para 223.

144 *Case T-111/08*, para 228.

145 *MasterCard v Commission* (n 84), para 242.

146 Guidelines on the application of Article 81(3) of the Treaty [2004] OJ C101/97, para 43.

147 *ibid*.

148 *ibid*.

consumers affected by the restriction and benefiting from the efficiency gains should be the same does not hold.

Moreover, as discussed above under Section II, the business models in many platform markets are skewed in a way where most of the revenues are derived from one side of the platform. A similar relationship generally exists between cardholders (the loss-leader segment) and the merchants (the profit centre).¹⁴⁹ Given this characteristic, the position that a restriction imposing a burden on one side in a platform must be justified primarily based on the benefits provided to that side is highly problematic.

Post-script on MIFs

The negotiation between the Commission and MasterCard in the aftermath of the prohibition decision ultimately culminated in MasterCard's adoption of a number of undertakings including a cap on its MIFs.¹⁵⁰ MasterCard was able to address the Commission's concerns about the calculation of its interchange fees by adopting a methodology which is based on a comparison of merchants' avoided cost of accepting payments in cash to those of accepting payments made by payment cards.¹⁵¹

This methodology, developed by Rochet and Tirole,¹⁵² is generally referred to as the 'Tourist Test'. The 'tourist' reference stems from the fact that the test attempts to control for the negative effects of rejecting credit cards on the reputation of the merchant's business, as well as the effect of lost business where the customer does not possess sufficient cash for the transaction. As a result, the test assumes that the buyer 'is a tourist, who will never patronize the store again in the future and shows up at the cash register with ostensibly enough cash to pay the wares'.¹⁵³ The merchant discount satisfies the 'tourist test' where a merchant in such a situation should be indifferent as to whether the customer pays by card, in other words, where 'accepting the card does not increase the retailer's operating costs'.¹⁵⁴ Rochet and Tirole show that under perfect user competition, the interchange fee thresholds obtained by the tourist test correspond to the welfare-maximizing amount.¹⁵⁵ Under imperfect issuer competition on the other hand, the tourist test amounts turn out to be lower than the welfare (including the issuers' profit) maximizing amount even though they still maximize consumer surplus for the platform users.¹⁵⁶

149 Jean-Charles Rochet and Jean Tirole, 'Platform Competition in Two-Sided Markets' (2003) 1 *J Eur Econ Ass* 990, 992.

150 Commission Press Release IP/09/515, 'Antitrust: Commissioner Kroes Takes Note of MasterCard's Decision to Cut Cross-Border Multilateral Interchange Fees (MIFs) and to Repeal Recent Scheme Fee Increases' (2009) <http://europa.eu/rapid/press-release_IP-09-515_en.htm> accessed 8 October 2015.

151 Wilko Bolt, Nicole Jonker and Mirjam Plooi, 'Tourist Test or Tourist Trap? Unintended Consequences of Debit Card Interchange Fee Regulation' (2013) DNB Working Paper No 405, 2. <http://www.dnb.nl/en/binaries/working%20Paper%20405_tcm47-301519.pdf> accessed 8 October 2015.

152 Jean-Charles Rochet and Jean Tirole, 'Must-Take Cards: Merchant Discounts and Avoided Costs' (2008) IDEI Working Paper No 496 <http://idei.fr/doc/wp/2008/must_take_cards.pdf> accessed 8 October 2015.

153 *ibid* 7.

154 *ibid* 8.

155 *ibid* 19.

156 *ibid*.

In subsequent cases, the Commission went on to apply this methodology to the MIFs used by Visa as well, calculating the appropriateness of the ‘caps’ proposed by Visa in its commitments through the use of the tourist test (also referred to as the ‘merchant indifference test’ by the Commission).¹⁵⁷

The latest turn in the European MIF saga came about in the Spring of 2015 when the European Parliament and subsequently the European Council adopted a Regulation capping interchange fees for payments using consumer debit and credit cards.¹⁵⁸ In conformity with the levels in the commitments by Visa and MasterCard, the relevant Regulation caps interchange fees at 0.2 per cent of the transaction value for consumer debit cards and at 0.3 per cent for consumer credit cards. This development shows Europe’s new tendency to deal with the issue of MIFs through regulatory intervention as opposed to antitrust enforcement.

In contrast to the enforcement landscape in Europe, on the other side of the Atlantic, as noted by Judge Gleeson, ‘[n]o American court has ever held that Visa or MasterCard’s default interchange rules violate the antitrust laws.’¹⁵⁹ Starting with the *Nabanco* case, the challenges to MIFs have either been dismissed,¹⁶⁰ or settled.¹⁶¹ Hence, there is a significant contrast between the willingness of the European anti-trust authorities and courts to intervene and condemn the MIFs of payments card networks and the restraint shown by the US courts.

A case of merger analysis in Multisided Markets: The Dutch Competition Authority’s European Directories—Truvo Nederland Decision

While *European Directories*—Truvo Nederland¹⁶² (*‘European Directories’*) is not a particularly recent decision, it merits particular analysis for several reasons. While various cases after *European Directories* have been mindful of the two-sided nature of the relevant markets and the resulting antitrust implications, *European Directories* stands apart as a transaction where the multisided considerations played a significant role in the clearance of an otherwise problematic merger.

European Directories involved the merger of the only two nationwide print directories in the Netherlands and therefore looked like a ‘2-to-1’ decision.¹⁶³ Indeed, in its Phase I decision, the Dutch Competition Authority (‘NMa’) assumed a separate

157 *Visa MIF* (Case COMP/39.398) Commission Summary Decision [2010] OJ C79/05, paras 8(a), 8(b); Bolt, Jonker and Plooi (n 151) 3; *Visa MIF* (Case COMP/39.398) Commission Decision of C(2014)1199 (26 February 2014).

158 European Council Press Release, ‘Capping Fees for Card-Based Payments: Regulation Adopted’ (2015) <<http://www.consilium.europa.eu/en/press/press-releases/2015/04/20-capping-fees-card-based-payments/>> accessed 22 April 2016.

159 *In Re Payment Card Interchange Fee And Merchant Discount Antitrust Litigation*, 986 F Supp 2d 207, 227 (EDNY 2014) (hereinafter *In Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation*).

160 *Kendall v Visa USA, Inc*, 518 F 3d 1042 (9th Cir 2008).

161 *In Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation* (n 159).

162 Netherlands Competition Board Decision No 6246 (*European Directories – Truvo Nederland*) (28 August 2008).

163 Peter D Camesasca and others, ‘The Dutch Yellow Pages Merger Case -2-1 Will Go!’ (2009) 30 ECLR 4, 4–5.

market for print directories, setting apart online directories and other advertising media.¹⁶⁴ Not being convinced of the parties' counterbalancing arguments, on 11 March 2008, the NMa launched a Phase II investigation.

The NMa recognized the multisided nature of the industry at the outset; that there are users on one side, who receive the directories for free, and advertisers on the other.¹⁶⁵ NMa's recognition of the multisided nature of the market was important in the assessment of the parties' first main argument. This was that online alternatives such as online search advertising provide a significant competitive constraint against price increases. Throughout its in-depth review, the NMa was able to find evidence supporting the competitive pressure from online options. However, after examining the parties' turnover and prices, it was unable to confirm that the growth in the online industry had in fact affected the parties,¹⁶⁶ and therefore could not confirm the existence of a competitive constraint. Nevertheless, it posited that such pressure 'will increase in due course'.¹⁶⁷

Camesasca and others point out that the NMa's willingness to assume a future increase in competition from online advertising media and to include this consideration in its analysis can be interpreted as sensitivity towards the dynamics of multisided markets.¹⁶⁸ Indeed, the NMa recognized that 'the two-sided character of the directories means that the willingness of advertisers to pay for advertisements in directories depends partly on the number of users that the directory attracts'. This led the authority to conclude that while the advertisers had yet to respond to the decrease in the use of print directories and the accompanying increase in the use of online directories, it could be reasonably assumed that such a response was forthcoming and should be taken into consideration.¹⁶⁹

Considering the effects on the users' side, the NMa also analysed whether the combination may lead to deterioration in the quality of the combined directory. Here, the NMa took account of the multisided framework. In particular, it noted that, given the multisided nature of the directory business, the parties were unlikely to have an incentive to reduce the quality of the directory because this could 'instigate a (further) downward trend in the use of the directory ...' and '[t]he potential consequence of this would be that the directory became a less attractive advertising medium'.¹⁷⁰

The most important element of the *European Directories* decision from the perspective of multisided markets theory is the analysis of efficiencies. As discussed above, the presence of indirect network effects provides a direct opportunity for the merging parties to create value through the merger of their respective networks. As a result, in multisided markets the concentration arising as a result of a transaction may itself enhance consumer welfare.

164 *European Directories* (n 162) para 62.

165 *ibid*, para 106.

166 *ibid*, para 137.

167 *ibid*, para 153.

168 Camesasca and others (n 163) 10–11.

169 *European Directories* (n 162) para 141; Camesasca and others (*ibid*) 5.

170 NMa Report (n 18) para 180.

In its analysis of potential efficiencies, the NMa notes that about 90 per cent of the users use only one directory during the same search action.¹⁷¹ As a result, advertisers need to place ads on both directories in order to reach all potential customers. The NMa's assessment shows that such overlapping customers account for 20 per cent of the advertisers whereas they account for 'about 41%' of the parties' combined earnings.¹⁷² Against this background, the NMa recognizes that, both overlapping and non-overlapping customers experience benefits as a result of the integration. The non-overlapping advertisers, being those businesses advertising in one of the directories, would benefit through increased 'use'. The exposition of their advertisement would lead to a greater number of users. The overlapping customers would also benefit as they would no longer have to advertise in two different directories.

After this recognition, the NMa conducts an analysis as to whether these benefits could be negated through price increases. With regard to non-overlap advertisers, it notes that 'the parties have calculated that the nominal price for Telefoongids advertisers must increase by 76 per cent and that for Gouden Gids advertisers by about 90-95 per cent before there will be an increase in the relative price, given the increase in use estimated by the parties'.¹⁷³

Based on the foregoing, the discussion of the allocative efficiencies arising out of the multisided nature of the industry is different in character from the 'traditional' efficiency analysis in mergers. Allocative efficiencies arising from the positive network effects do not generally result in the mitigation of the effects of the merger on price (as would, for instance, cost synergies).¹⁷⁴ Indeed, the NMa readily admitted that the nominal price relating to advertising in the combined directory would increase.¹⁷⁵ While there is arguably a reduction in effective price for overlapping advertisers who would otherwise pay for both directories, non-overlapping advertisers benefit in spite of an increase in the nominal price for advertising in the directory. In other words, the effects of the transaction result in higher consumer surplus despite the increase in price *because* of the increase in value created for the advertisers.

This is a significant departure from a purely price-based understanding of efficiencies in merger analysis. More importantly, it challenges the traditional understanding in the merger context that 'more competition' is always better. This is emphasized by Camesasca and others who argue that the reviewing authority may evaluate whether 'a transaction will restrict competition from which customers benefit'.¹⁷⁶ Ultimately, *European Directories* demonstrates that the benefits created through a combined network introduce a new and incredibly important dimension to the analysis of mergers in multisided settings.

The assessment conducted by the NMa in *European Directories* makes significant use of the academic literature on multisided markets. This in turn allows the authority to modify its Phase I position in a variety of issues, proving decisive in its

171 *European Directories* (n 162) para 168. In this respect, they could be considered 'single-homing' customers.

172 *ibid.*

173 *Ibid.*, para 172.

174 NMA Report (n 18) para 245.

175 *European Directories* (n 162) para 172.

176 Camesasca and others (n 163) 13.

clearance of a merger which at first glance appears to be a highly problematic '2-to-1' transaction. Accordingly, the decision constitutes a notable precedent where the theory of multisided markets has been put to good use by a competition authority, while concurrently demonstrating the pitfalls inherent in neglecting to recognize the multisided nature of the markets at hand.

V. CONCLUSION

As discussed throughout this article, multisided markets differ from single-sided ones in various important respects. Therefore, the principles drawn from traditional single-sided markets may often produce misleading results when applied to the multisided setting. This is particularly challenging for legal practitioners who seek to rely on tested rules and who crave a predictable landscape. Much of our trusted anti-trust principles are based on input from single-sided models. However, given that many platform settings such as payment cards, search engines, social media platforms, and online reservations websites are relatively new and innovative industries, there is a need to avoid a formalistic approach at all costs. A more pragmatic solution would be to adopt a flexible and realistic approach in cases involving multisided markets.

The analysis of *MasterCard* and *European Directories* decisions constitute good examples of how assumptions based on single-sided logic can become problematic when applied to a multisided platform business. As a result, where an antitrust issue revolves around a multisided market, it is useful to pay close attention to how this would lead to deviations from a traditional setting as a preliminary manner. That said, this is only a beginning and there is no easy shortcut to a satisfactory result without undertaking a rigorous analysis of the dynamics at hand.