Out-Of-Market Efficiencies, Two-Sided Platforms and Consumer Welfare: A Legal and Economic Analysis

by

Francesco Ducci

A thesis submitted in conformity with the requirements
for the degree of Master of Laws

Faculty of Law
University of Toronto

© Copyright by Francesco Ducci (2015)

Out-Of-Market Efficiencies, Two-Sided Platforms and Consumer Welfare: A Legal and Economic Analysis

Francesco Ducci

Master of Laws

Faculty of Law
University of Toronto

2015

Abstract

This paper analyzes the scope of out-of-market efficiencies in competition policy from a legal and economic perspective. It identifies potential shortcomings in neglecting their relevance, both in relation to the economic principles of two-sided platforms and, more generally, in the fulfillment of the consumer welfare standard. This paper tackles this issue by looking at the specific condition laid out in Article 101(3) of the Treaty on the Functioning of the European Union, requiring that a fair share of efficiency benefits must be passed on to consumers in order to justify an otherwise anti-competitive agreement. The implications of forbidding or allowing aggregation of efficiencies across markets are examined with reference to the two-sided market of payment card systems and the anticompetitive concerns regarding Multilateral Interchange Fees.

Acknowledgments

To my supervisor Professor Edward Iacobucci, for his insightful feedback and generous availability;

To my parents, Carlo and Mariangela, for their persistent support.

Table of Contents

Acknowledgments	iii
Table of Contents	iv
Introduction.....	1
1 Efficiency Claims in Competition Policy	2
1.1 Types of Efficiencies and Trade-Offs	5
1.2 Welfare Standards: Consumer Welfare, Total Welfare.....	7
1.3 One-Stage and Two-Stages Assessment	10
1.4 Out-of-Market Efficiencies	11
2 Two-Sided Platforms and ‘Out-of-Market’ Efficiencies: A Legal Analysis.....	13
2.1 Two-Sided Platforms and Competition Policy.....	13
2.2 Proposed Framework.....	16
2.3 ‘Out-of-Market’ Efficiencies: A Legal Analysis.....	18
2.3.1 <i>Mergers</i>	18
2.3.2 <i>Anti-Competitive Agreements under Article 101 TFEU</i>	22
2.4 ‘Out-of-Market’ Efficiencies in Two-Sided Markets: A Legal Analysis.....	24
2.4.1 <i>Rule of Reason versus Per Se Illegal Price-Fixing under US Antitrust Law</i>	25
2.4.2 <i>European Approach in Cartes Bancaires and MasterCard: Restriction ‘by effect’ and ‘fair share to consumers’</i>	26
2.5 Conclusion.....	29
3 Out-of-Market Efficiencies and Two-Sided Platforms: An Economic Analysis	31
3.1 The Limits of Market Definition	31
3.2 Aggregating Efficiencies Across Markets and the ‘Consumers’ Substantial Similarity’ Test	34
3.3 Efficiencies in Two-Sided Markets and the ‘Appreciable Objective Advantage’ Test	39
4 Application to Multilateral Interchange Fees	42
Conclusion	47
References.....	48

Introduction

Efficiency gains have been vastly debated in antitrust scholarship and have gradually gained greater prominence in competition law cases, notably due to the rise of economic analysis in many jurisdictions. Their importance and problematic nature is rooted in the fact that determining the scope of efficiencies claims in competition policy ultimately depends on deeper fundamental choices about the purpose of this body of law. Although the controversy surrounding the choice among different types of efficiencies and welfare standard is well-known, relatively less attention has been given to the role of efficiencies that materialize outside the boundaries of the relevant market. Generally, the market definition exercise provides the framework within which to assess the anti-competitive effects and potential countervailing efficiencies of a given conduct. This paper investigates, from a legal and economic perspective, the question of whether out-of-market efficiencies should play any role in competition policy. The proposed framework of enquiry examines the treatment of efficiencies that can justify an otherwise anti-competitive agreement under European competition law. Specifically, this paper analyzes the condition outlined in Article 101(3) of the Treaty on the Functioning of the European Union (TFEU) that a ‘fair share’ of efficiency gains resulting from an anti-competitive agreement must be passed on to consumers. In other words, it asks whether ‘consumers’ should be the same affected by anti-competitive effects in the relevant market, or, rather, whether it would be more desirable to aggregate efficiencies across related markets involving different consumers. In order to answer these questions, this thesis looks at the specific case of two-sided platforms, by discussing in detail a decision of the Court of Justice of the European Union (CJEU) that found the Multilateral Interchange Fee (MIF) set by MasterCard to acquiring banks to be in breach of Article 101 TFEU.

As will be discussed further on, the European regime does not allow for the taking into account of out-market efficiencies, except for the special case when consumers are ‘substantially the same’ in both markets. In the context of two-sided platforms, this aforementioned exception is partially modified by requiring that, when consumers are not the same across related markets, the consumers negatively affected by the agreement in the relevant market must obtain at least some ‘appreciable objective advantages’ from the anti-competitive agreement. When that is the case, even if those advantages are not in themselves sufficient to compensate for the restrictive effects,

the advantages obtained by different consumers in connected markets could justify the restriction if, taken together, they are sufficient to compensate for the restrictive effects. This paper criticizes the limitations against aggregating across markets, and advocates for a broader scope of out-of-market efficiencies, by specifically relying on three elements: (i) the inherent limits of market definition, (ii) the failure to align with the economics of two-sided platforms, and (iii) the potential inconsistencies with the initial choice in favour of consumer welfare.

Chapter 1 begins by providing a general overview of efficiencies in competition policy. It describes the various trade-offs between different types of efficiencies, illustrates the implications of adopting alternative welfare standard, and delineates the ways efficiency claims can be integrated into the legal analysis. It then introduces the question of the role of out-of-market efficiencies in competition law. Chapter 2 outlines the specific characteristics of two-sided platforms and follows by discussing the legal treatment of out-of-market efficiencies in the European regime, both in one and two-sided markets. Chapter 3 analyzes the validity of such a restrictive position from an economic perspective, criticizing the rationale of both legal tests and advocating for a broader scope of out-of-market efficiencies. Chapter 4 applies the outcome of the analysis to the assessment of anti-competitive concerns regarding privately set interchange fees. This paper then concludes by suggesting that ‘consumers’ under Article 101(3) TFEU should include both those in the relevant market and those in other related markets.

1 Efficiency Claims in Competition Policy

Robert Bork, in a famous passage, stated that “antitrust policy cannot be made rational until we are able to give a firm answer to one question: what is the point of the law - what are its goals?”¹ Bork opted for consumer welfare as the sole goal of competition policy, although what he really meant by it was the notion of total welfare, confusion later known as the ‘Chicago trap.’ There is an enormous amount of literature on the goals of competition law, as many conflicting interests — economic efficiency,² consumers,³ small and mid-sized competitors,⁴ non-economic public

¹ Robert H Bork, *The Antitrust Paradox: A Policy at War with Itself* (New York: Basic Books, 1978) at 50.

² Richard Posner, *Antitrust Law*, 2nd ed (Chicago: University of Chicago Press, 2001) [Posner, “Antitrust Law”]

policy objectives⁵ — are potentially at stake in competition analysis. At different times, these conflicting interests have been defended as being an integral part of the philosophical and historical foundation of competition law. Today, following a historical trend of gradual alignment of competition law with economic theory, economic efficiency has generally been recognized as one of the main goals of competition policy.⁶

The Canadian *Competition Act*, for instance, begins with a statement of purpose which explicitly identifies among its goals, *inter alia*, “the promotion of efficiency and adaptability of the Canadian Economy.”⁷ The European regime, originally concerned with the promotion of single market integration, and strongly influenced by the ordoliberal school of thought in the protection of competitors themselves rather than the competitive process, has undergone a major modernization process in order to realign with a more economically oriented approach.⁸ Despite the lack of a univocal position in the case law,⁹ consumer welfare and efficient allocation of resources¹⁰ are now the main objectives promoted by the European Commission.¹¹ Similarly, in

³ John B Kirkwood & Robert H Lande, “The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency” (2008) 84 Notre Dame L Rev, Seattle University School of Law Research Paper No. 09-02; Pinar Akman, “Consumer Welfare and Article 102 EC: Practice and Rhetoric” (2009) 32 World Competition, 71-90

⁴ This is explicit in the Canadian *Competition Act*, R.S.C. 1985, C-34, s. 1.1. [*Competition Act*]

⁵ Christopher Townley, *Article 81 EC and Public Policy*, 1st ed (Oxford: Hart Publishing, 2009); Thomas B Nachbar, “The Antitrust Constitution” (2013), Iowa Law Review, forthcoming; Virginia Public Law and Legal Theory Research Paper No. 2013-09. Joseph F Brodley, “The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress” (1987) 62 NYU L. Rev. 1020.

⁶ See e.g. OECD Policy Roundtables, *Competition Policy and Efficiency Claims in Horizontal Agreements* (Paris, 1996), OCDE/GD(96)65 at 5, online at: <<http://www.oecd.org/competition/mergers/2379526.pdf>>: “There is wide consensus that the basic objective of competition policy is to protect competition as the most appropriate means of ensuring the efficient allocation of resources – and thus efficient market outcomes – in free market economies”

⁷ *Competition Act*, *supra*, note 4

⁸ Alison Jones & Brenda Sufrin, *EU Competition Law*, 5th ed (Oxford: Oxford University Press, 2014) at 42 [Jones & Sufrin, “EU Competition Law”]

⁹ See e.g. Case C-8/08 *T-Mobile Netherlands BV v. Raad van bestuur van de Nederlandse Mededingingsautoriteit* [2009] ECR I-4529, at para 38: “Article [101 TFEU], like other competition rules of the Treaty, is designed to protect not only the immediate interests of individual competitors or consumers but also to protect the structure of the market and thus competition as such.”

¹⁰ Philip Lowe, “Consumer Welfare and Efficiency – New Guiding Principles of Competition Policy?” (13th International Competition and 14th European Competition Day, Munich, March 1997)

the United States, despite the lack of an explicit purpose contained in the *Sherman Act*, economic welfare is considered to be the central standard.¹² In particular, US courts have also adopted consumer welfare as the goal of antitrust law.¹³

As a result of this trend, and beginning with the work of Oliver Williamson's *Economies as an Antitrust Defence: The Welfare Tradeoffs*¹⁴ efficiencies gradually started playing a major role in competition law analysis. Both in the assessment of antitrust and merger cases, efficiencies are, in various ways, taken into account in the determination of whether a conduct may create anticompetitive concerns. Yet, there is no unanimous consensus in the scholarship on the kind of efficiency gains that should have prominence among those identified in welfare economics; nor, is there agreement on the welfare standards that should ultimately be adopted by a competition regime, a choice that affects whether certain types of efficiencies are more easily accepted in practice.¹⁵ In addition, efficiency claims are also incorporated through different legal standards and evaluated against the potential negative effects of a given practice in a variety of different ways, which can be summarized as either a one-step or two-steps legal analysis. The way efficiencies are incorporated, too, influences the likelihood of allowing or blocking a practice on such grounds. Within the debate surrounding efficiency claims, a question worth investigating is whether efficiencies that can justify an otherwise anticompetitive practice should exclusively be those arising within the boundaries of the relevant market. Interestingly, the scope of 'out-of-market' efficiencies appears to have attracted relatively less attention in the scholarship. The central motivation of this paper is to assess whether, and to what extent, efficiencies arising outside the relevant antitrust market should be taken into account by competition authorities and courts alike. In particular, this issue is analyzed in light of the framework of two-sided markets,

¹¹ See e.g. EC, *Guidelines on the application of Article 81(3) of the Treaty* [2004] OJ C 101/7, at para 13 [EC, "Guidelines on Article 101(3)"]: "the objective of Article 81 is to protect competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources."

¹² Sherman Act 26 Stat. 209, 15 U.S.C. §§ 1-7. Luis Kaplow, "On the Choice of Welfare Standards in Competition Law" in *The Goals of Competition Law*, (Daniel Zimmer, ed, Edward Elgar, 2012).

¹³ *FTC v Actavis, Inc.* 570 US, 133 S. Ct. 2233, 2238 (2013) [*Actavis*].

¹⁴ Oliver E Williamson, "Economies as an Antitrust Defence: The Welfare Tradeoffs" (1968) 58 Am. Econ. Rev. 1, 18-36 [Williamson, "Economies as an Antitrust Defence"]

¹⁵ OECD Policy Roundtables, *The Role of Efficiency Claims in Antitrust Proceedings* (2012) DAF/COMP(2012)23 online at: < <http://www.oecd.org/competition/EfficiencyClaims2012.pdf>>

as such an approach provides a specific context in which the need to scrutinize the current legal treatment of ‘out-of-market’ efficiencies in competition regimes is particularly forceful.

This chapter provides an overview of the different types of efficiencies generally identified in welfare economics, the welfare standards that may be set as goals of competition policy, and the way efficiencies are evaluated, either as a defence to rebut a prior finding of an anti-competitive practice or as directly incorporated in the analysis of pro and anti-competitive effects. It then introduces the issue of ‘out-of-market’ efficiencies to set the stage for the analysis that follows in the subsequent chapters.

1.1 Types of Efficiencies and Trade-Offs

Welfare economics identifies three types of efficiencies: allocative, productive and dynamic.¹⁶ Efficiencies can also be distinguished between static (allocative and productive) and dynamic, based on the time horizon over which they arise. In the case of static efficiencies, the efficiencies are observed at a particular point in time, and the level of technology with which the goods are produced is assumed to be fixed. On the other side, dynamic efficiency arises when producers are incentivized to innovate and create new products or processes of productions. Through innovation, firms can shift the efficient production possibility frontier forward.

Within the category of static efficiencies, allocative efficiency is achieved when the market processes lead society’s resources to be allocated to their highest valued use among all competing uses. Allocative efficiency can be achieved in a perfectly competitive market. Because firms are atomistic and their conduct does not affect the market price, all consumers pay exactly a price that equals marginal cost and their surplus is equal to the aggregate social welfare. Allocative efficiency also occurs with a monopolist that perfectly discriminate, although in this case its surplus is equal to the aggregate social welfare. Conversely, in the scenario of a monopolist who charges the same price to all consumers, those who are willing to pay a price below that set by the monopolist yet still above the marginal cost of the good, are not supplied. Therefore, the market outcome is allocatively inefficient, resulting in a deadweight loss. Productive efficiency, on the other hand, means that a firm is capable of producing a given

¹⁶ *Ibid*, at 5

quantity at the lowest production costs, and operates at the frontier of its production possibilities. A firm enjoying substantial market power may negatively impact productive efficiency, as the lack of competition would reduce the incentive to minimize production costs, resulting in so-called X-inefficiencies.¹⁷ In sum, competition policy is concerned with market power because it may lead to inefficiencies, both allocative and productive. On the other hand, the impact of market power on innovation remains disputed among economists, as illustrated by the well-known debate between Schumpeter and Arrow.¹⁸

Although competition aims at achieving economic efficiency by increasing allocative, productive and dynamic efficiencies, it is generally not possible to maximize all of them simultaneously. As shown in the Williamson trade-off between allocative and productive efficiencies,¹⁹ depicted in the figure below, a merger may have two conflicting effects. On the one hand, it can create market power, allowing merged firms to raise prices. On the other, it can simultaneously reduce average costs. The cost savings and price increase for consumers are competing effects from a social welfare perspective. Whether the society gains as a whole from the merger depends on whether producers' gains derived from cost savings is larger than consumers' losses as a result of prices being above marginal cost. From a competition policy perspective, the solution to this trade-off depends on the welfare standard adopted in a specific regime and on the weight to be given to the welfare of consumers over producers.

¹⁷ *Ibid*, at 13

¹⁸ Miguel De La Mano, "For the Customer's Sake: The Competitive Effects of Efficiencies in European Merger Control" (2002) Enterprise Papers No 11, Directorate-General European Commission. [De La Mano, "For the Customer's Sake"]

¹⁹ Williamson, "Economies as an Antitrust Defence", *supra*, note 14.

1.2 Welfare Standards: Consumer Welfare, Total Welfare

The relationship between the role of efficiencies and the ultimate goals of competition policy is made explicit in the choice between consumer welfare and total welfare standard.²⁰ On the one hand, consumer surplus describes the difference between what a consumer is willing to pay and what the consumer actually pays when buying a product. On the other hand, producer surplus is the difference between the price that producers receive for their products in the market and the sum of their respective marginal costs at each level of output. Total surplus is the sum of producer and consumer surplus.

The consumer welfare standard is concerned primarily with preventing an increase in consumer prices due to an increase of market power. It can be referred to as Pareto efficiency, namely a situation where it is not possible to make at least one person better off without making another

²⁰ Herbert Hovenkamp, “Implementing Antitrust’s Welfare Goals” (2013) 81 *Fordham L. Rev.* 2471

person worse off, requiring gainers to explicitly compensate losers in any change.²¹ Accordingly, a consumer welfare approach views redistribution in the form of wealth transfers from consumers to producers as undesirable.

Conversely, according to a total welfare standard, the main objective of competition policy is to increase the sum of consumer and producer surplus. It is a variant of Kaldor-Hick efficiency,²² which is an attempt to surmount the restrictions of the Pareto criterion, by recommending those changes in which winners win more than losers.²³ Under a Kaldor-Hicks criterion, restraint of competition is acceptable if it leads to an increase in welfare of producers that is greater than the loss suffered by consumers.²⁴ Accordingly, if total welfare is adopted, competition authorities and courts do not require firms to pass on efficiency benefits directly to consumers, since the total sum of consumer and producer surplus is what matters. In terms of allocative efficiency, it is therefore irrelevant whether consumers or producers capture the surplus arising from efficiencies, as wealth-distribution is neutral under this approach.²⁵

The conflict between these two standards can emerge when the prohibition of conducts that reduce consumer welfare may not allow efficiency gains that maximize social welfare. Going back to the figure above, E depicts the beneficial effect of efficiency gains from the hypothetical merger. D represents the deadweight loss triangle, namely lost surplus from buyers who have been priced out of the market. Area T is where the conflict between consumer and producer welfare arises when conceptualizing the negative effects of anti-competitive prices. Area T, unlike the triangle D, is not what society loses. Rather, it is a transfer of surplus from consumers to producers. Post-merger, the area T represents producers' profit that previously was consumer surplus, and the value given to this transfer is what distinguishes the two welfare standards. This

²¹ Robert D Cooter & Thomas S Ulen, *Law & Economics*, 6th ed (Boston: Pearson Addison Wesley, 2011) [Cooter & Ulen, "Law & Economics"]

²² *Ibid.*

²³ Jules S Coleman, "Efficiency, Utility, and Wealth Maximization" (1980) 8 Hofstra Law Review 509 at 513-514

²⁴ Michael J Trebilcock, "The Lessons and Limits of Law and Economics" (2007) in *In the Eye of the Beholder*, (Pierre Nadeau, ed., Université de Montreal)

²⁵ Posner, "Antitrust Law", *supra*, note 2.

issue was largely discussed in the Canadian case *Superior Propane*.²⁶ Historically, Canada constituted an exception to the consumer welfare trend.²⁷ The 1991 Merger Enforcement Guidelines opted for a total surplus standard to the efficiency defence contained in section 96 of the Competition Act.²⁸ In *Superior Propane* — a merger case between two propane suppliers where at issue was the interpretation of the efficiency defence to an anti-competitive merger — this test was substituted with a “balancing weights approach,” which compares the effects on consumer and producer surplus, by attaching a multiplier to consumer surplus. The nature of this standard has been subject to academic debate,²⁹ but it still can be seen as closer to a total surplus with a partial wealth distribution weighing test.

Conversely, the US and the EU generally converge on adopting a consumer welfare standard. For example, in the *Actavis* case the US Supreme Court analyzed the anti-competitiveness of pay-for-delay settlements by adopting a consumer welfare perspective, with Judge Roberts explicitly stating “the point of antitrust law is to encourage competitive markets to promote consumer welfare.”³⁰ Similarly, the European Commission identified in various soft-law instruments the protection of competition as a means of enhancing efficiency and consumer welfare.³¹ This approach is explicit, for example, in the Guidelines on Article 101(3), where it is stated that the objective of the article is to “protect competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources.”³² The

²⁶ *Canada (Commissioner of Competition) v. Superior Propane, Inc.* [2003] 3 F.C. 529 [*Superior Propane*, Second Appeal]. For a discussion, see Edward M Iacobucci, “*The Superior Propane Saga: The Efficiencies Defence in Canada*” in *Landmark Cases in Competition Law Around the World in Fourteen Stories* (Barry Rodger, ed., The Netherlands: Kluwer Law International, December 2012), 63-87 [Iacobucci, “*The Superior Propane Saga*”]

²⁷ See Michael J Trebilcock, et al, *The Law and Economics of Canadian Competition Policy*, (Toronto: University of Toronto Press, 2002) at 40: “Competition policy is appropriately viewed as an instrument to maximize efficiency or the ‘total surplus’ gained by market participants. The use of competition policy to achieve not merely efficiency but an equitable distribution of wealth would result in an excessively complex and non-transparent set of legal rules.” [Trebilcock et al, “*The Law and Economics of Canadian Competition Policy*”]

²⁸ Iacobucci, “*The Superior Propane Saga*”, *supra*, note 26

²⁹ *Ibid*; Frank Mathewson, & Ralph Winter, “*The Analysis of Efficiencies in Superior Propane: Correct Criterion Incorrectly Applied*” (2000) 20 Canadian Competition Record 88

³⁰ *Actavis*, *supra*, note 13

³¹ See e.g. EC, “*Guidelines on Article 101(3)*”, *supra*, note 11, at para 13

³² *Ibid*.

Commission, in other words, is concerned with distributional effects, and this is confirmed by the fact that Article 101(3) demands that a ‘fair share’ of the efficiency gains resulting from anti-competitive agreements must be passed on to consumers. The notion of consumer welfare in the European regime is also a broad one. It includes not only private end-users, but also intermediate customers and intermediate producers as well. It may, however, still be argued that it is the interest of final consumers that drives the initial choice in favour of such standard and is at the heart of European competition policy.³³ In the *GlaxoSmithKline* case, for instance, the General Court held: “the objective of the Community competition rules is to prevent undertakings . . . from reducing the welfare of the *final* consumers of the products in question.”³⁴ The problem of this broad notion of consumer welfare is that it is based on the presumption that a harm or benefit to intermediate customers’ welfare will coincide with a harm or benefit to end-consumers’ welfare. However, the interest of end-users and intermediate customers may not always coincide. As a result, when the focus is on intermediate buyers, this standard may favour a buying *firm* over the selling one, while potentially ignoring the ultimate effects on final consumers. As is discussed later in this paper, these striking contradictions raise fundamental questions about the desirability of pursuing consumer welfare *vis-a-vis* total welfare, and also about the role of out-of-market efficiencies in competition law.

1.3 One-Stage and Two-Stages Assessment

There are generally two ways to take into account efficiency gains. The first is through an efficiency defence. The second involves a holistic analysis where pro and anticompetitive effects are taken into account at the same time. Where an efficiency defence is introduced, it is usually part of a two-stages analysis, which involves first assessing whether a practice is anti-competitive, and then analyzing whether the practice can be justified on efficiency grounds if efficiencies are proven to offset the anticompetitive effects. There is usually no requirement that efficiency gains must prevent the anti-competitive effects from occurring, but that efficiencies must be greater than the negative effects on competition. An efficiency defence is generally

³³ Neelie Kroes, “Consumers at the Heart of EU Competition Policy” Speech at The European Consumers’ Association (Strasbourg, April 2008), SPEECH/08/212 online at: http://europa.eu/rapid/press-release_SPEECH-08-212_en.htm?locale=en

³⁴ Case T-168/1 *GlaxoSmithKline Services Unlimited v Commission* [2006] ECR II-2969, at para 118 [*GlaxoSmithKline*].

compatible with a total surplus standard, entailing a trade-off between allocative inefficiencies and costs reductions. Under a holistic approach, on the contrary, efficiencies are taken into account in a one-stage analysis together with the negative elements, as a factor in the overall assessment of the competitive impact of a conduct. Such efficiency ‘rebuttal’ is more consistent with a consumer welfare standard, because the impact of efficiencies has to be large enough to cleanse anti-competitive effects so that consumers are not harmed (in most cases, preventing higher prices from occurring).³⁵

1.4 Out-of-Market Efficiencies

It is generally assumed that the competitive analysis revolves around the relevant product and geographic market. As a consequence, the efficiencies that are usually taken into account are only those that arise within the boundaries of the relevant market, as defined in individual cases. More often than not, efficiencies that arise in other related markets are either neglected or subject to specific conditions in order to be considered in the competitive analysis. To put this issue more concretely, imagine a merger that creates anti-competitive concerns in the relevant market, but that creates significant efficiencies in another related market that would outweigh the harm occurring in the relevant market. Should those efficiencies be taken into account and balanced against anti-competitive effects? Similarly, should consumers benefitting from efficiency gains be the same that are affected by anti-competitive effects, under a consumer welfare standard? In principle, the hypothetical merger could be blocked in the US or in the EU when it causes anti-competitive effects in one market, even if efficiencies arising in another related market and benefitting different consumers would outweigh the harm.³⁶ Similarly, the EU Guidelines on Article 101(3) TFEU explicitly state that in principle “efficiencies generated by the restrictive agreement must be sufficient to outweigh the anti-competitive effect produced by the agreement *within the same relevant market*.”³⁷

In other words, efficiencies are generally considered at the level of individual relevant markets: where several markets are identified, efficiency gains must reverse the harm in each of the

³⁵ De La Mano, “For the Customer’s Sake”, *supra*, note 18

³⁶ See e.g. *US v Philadelphia National Bank*, 374 US 321 (1963) [*Philadelphia National Bank*]

³⁷ EC, “Guidelines on Article 101(3)”, *supra*, note 11, at para 43

markets, unless specific conditions are met that exceptionally allow aggregation across market. As this paper shows when discussing the rationale of these conditions, ignoring ‘out-of-market’ efficiencies may create significant problems when tackling competition policy issues involving two-sided platforms. It may also create potential inconsistencies with the consumer welfare objective itself.

By contrast, the Canadian competition law regime has a more favourable approach towards out-of-market efficiencies, at least as far as merger cases are concerned.³⁸ The efficiency defence contained in Section 96 of the Competition Act requires that gains in efficiency must be “greater than and offset” the effects of lessening competition, rather than preventing those effects from occurring. As explained by the Competition Tribunal in *Superior Propane*,³⁹ Section 96 of the Act applies to a transaction in its entirety, with no requirement that gains in efficiency in one market must exceed and offset the effects on that market.⁴⁰ On the contrary, the test “greater than” and “offset” requires a comparison of the aggregate gains in efficiency with the aggregate of the effects of lessening competition across all market and areas. Therefore, the Canadian *Competition Act* accepts that some markets or areas may experience gains in efficiency that exceed the negative effect, while others may not.⁴¹

The two different approaches introduce some of the issues that are discussed in the analysis that follows. As is argued below, there are valid reasons for advocating in favour of aggregation across markets. Starting by the shortcomings of market definition, this paper subsequently shows how taking into account out-of-market efficiencies allows consistency with the economics of two-sided markets, where the two different consumers groups may be part of separate markets, and users who benefit may be different from those that are harmed. Tackling this issue from the specific perspective of two-sided market also makes clear how ignoring out-of-market

³⁸ Jan M Rybníček & Joshua D Wright, “Outside In or Inside Out: Counting Merger Efficiencies Inside and Out of the Relevant Market” in 2 *William E Kovacic: An Antitrust Tribute – Liber Amicorum* (Nicolas Charbit & Elisa Ramundo, ed., New York: Institute of Competition Law, 2014) [Rybníček & Wright, “Outside In or Inside Out”]

³⁹ *Canada (Commissioner of Competition) v. Superior Propane Inc.*, 2002 Comp. Trib. 16, 18 C.P.R. (4th) 417 [*Superior Propane*, Second Decision]

⁴⁰ *Ibid.*, at para 140

⁴¹ *Ibid.*

efficiencies can ultimately contradict the very rationale of adopting consumer welfare as the goal of competition policy.

2 Two-Sided Platforms and ‘Out-of-Market’ Efficiencies: A Legal Analysis

This chapter starts by providing a general overview of specific characteristics of two-sided platforms. After laying out the proposed framework of investigation, it then looks at the legal treatment of ‘out-of-market’ efficiencies generally. Subsequently, by reference to a decision of the European Court of Justice concerning the application of Article 101 TFEU to privately set Multilateral Interchange Fees, this chapter discusses the role of out-of-market efficiencies in the context of two-sided platforms, from a legal perspective.

2.1 Two-Sided Platforms and Competition Policy

Starting from the seminal work of Rochet and Tirole,⁴² economic theory has identified a specific class of businesses defined as two-sided platforms.⁴³ Two-sided platforms serve two or more groups of customers, which are linked by indirect network externalities that cannot be internalized on a bilateral basis. By facilitating the interaction between distinct but inter-dependent groups of customers, two-sided platforms solve a transaction cost problem, enabling the creation of efficiencies and generating value for at least one of the consumer groups.⁴⁴ According to the definition given by Rochet and Tirole, 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

⁴² Jean-Charles Rochet & Jean Tirole, “Platform Competition in Two-Sided Markets” (2003) 1:4 Journal of the European Economics Association 990-1209

⁴³ See David Evans & Richard Schmalensee, “The Antitrust Analysis of Multi-Sided Platform Businesses” (2012) Coase-Sandor Institute for Law & Economics Working Paper No. 623 [Evans & Schmalensee, “The Antitrust Analysis of Multi-Sided Platform Businesses”]; David Evans & Richard Schmalensee, “The Industrial Organization of Markets with Two-Sided Platforms” (2007) Competition Policy International, 3:1; David Evans & Richard Schmalensee, “Markets with Two-Sided Platforms” (2008) Issues in Competition Law and Policy ABA Section of Antitrust Law 1:28 667 [Evans & Schmalensee, “Markets with Two-Sided Platforms”]; Jean-Charles Rochet & Jean Tirole, “Two-Sided Markets: A Progress Report” (2006) 35:3 The RAND Journal of Economics 645-667 [Rochet & Tirole, “Two-Sided Markets: A Progress Report”]; Jean-Charles Rochet & Jean Tirole, “Defining Two-Sided Markets” (2004) IDEI, Toulouse, France; Jean-Charles Rochet & Jean Tirole, “Two-Sided Markets: An Overview” (2004) IDEI, Toulouse, France; Marc Rysman, “The Economics of Two-Sided Markets” (2009) 23:3 The Journal of Economic Perspectives 125-43.

⁴⁴ Evans & Schmalensee, “Markets with Two-Sided Platforms”, *supra*, note 43

price paid by the other side by an equal amount.⁴⁵ Because of the inter-dependency between the two or more groups of consumers interacting through the platform, two-sided platforms need to get ‘both sides on board’ in order to operate; without one side of the platform, the other side will not join, and vice versa. The classic and often cited example is heterosexual dating clubs, where no man will join unless women join as well and conversely.⁴⁶ In order to attract the different sides in the right proportion, an appropriate price structure, set according to the differences in price elasticity between the two groups, is the mechanism utilized to balance both usage and membership externalities and maximize the platform’s value.⁴⁷

Another example of a two-sided market is advertisement-based media, which acts as a platform connecting users and advertisers. Advertisers value the platform the more readers there are, but the users may not value the platform if there are more advertisers. Based on the differences in demand elasticity between the two groups, the platform may decide to charge more to advertisers and subsidize readers by providing them with the service for free or at a price below cost. Other examples of two-sided markets include online search engines, operating systems for software, social networking, video game consoles and payment card systems. For instance, payment card systems require both cardholders and merchants in order to operate: cardholders benefit from holding a card only if it is accepted by a wide range of merchants, and merchants benefit from the card only if a sufficient number of consumers use it. A card network may decide to price cardholders and merchants differently, according to their sensitivity to price changes, in order to effectively balance the demand on the two sides of the platform.⁴⁸ Many recent antitrust cases worldwide revolved around the role of default interchange fees as a balancing mechanisms utilized by card networks, which require acquiring banks (banks providing services to

⁴⁵ Rochet & Tirole, “Two-Sided Markets: A Progress Report”, *supra*, note 43

⁴⁶ *Ibid*, at 668

⁴⁷ Evans & Schmalensee, “The Antitrust Analysis of Multi-Sided Platform Businesses”, *supra*, note 43

⁴⁸ David Evans & Richard Schmalensee, “The Economics of Interchange Fees and Their Regulation: An Overview” (2005) MIT Sloan Working Paper 4548-05 [Evans & Schmalensee, “The Economics of Interchange Fees and Their Regulation: An Overview”]

merchants) to pay an interchange fee to issuing banks (banks providing cards to cardholders), in order to reduce the cost of the service for the more elastic side (in this case, cardholders).⁴⁹

The development of two-sided markets' economics has various implications for competition policy. Practices that would be traditionally considered anti-competitive may be welfare enhancing in a two-sided context, and be justified on the grounds of countervailing efficiencies. The skewed price structure enables an otherwise unavailable interaction between users on the two sides, increasing overall welfare on all sides. At the same time, risks of anti-competitive foreclosure resulting from indirect network externalities may arise but potentially be ignored in a traditional 'one sided' analysis. This may happen when indirect network externalities give a platform market power to divert transactions away from another competing and potentially more efficient platform. This can occur due to a specific price structure that leverages on a large user base on one side to reduce the other side's demand elasticity. The specificities of multi-sided platforms, therefore, complicate the traditional 'one-sided' analysis when assessing market power, the anti-competitiveness of agreements, unilateral conducts, mergers, and the scope of efficiencies.⁵⁰ In the definition of the relevant market, for instance, the product and geographic market boundaries are traditionally set by looking at the firm's ability to raise prices by a small but significant non-transitory amount (SSNIP test), usually around 5-10 percent. Products are included at each stage of the next-best substitute, until a group of products for which it would be profitable to increase price by 5-10 percent is identified. In two sided markets, however, the market definition analysis becomes more complex because it requires taking both sides into account. Evans suggests that competition authorities should not consider in the same way a 5-10 price increase to one side of a two-sided platform, in which the other side has no increase or perhaps benefits from a decrease in price.⁵¹ In credit card markets, for instance, it could not automatically follow that a hypothetical monopolist can earn supra-competitive returns, if an increase in the interchange fees by a hypothetical monopolist is offset by an outweighing decrease in fees or increased benefits for cardholders. Theoretically, merchants may accept

⁴⁹ Dennis Carlton & Ralph Winter, "Competition Policy and Regulation in Credit Card Markets: Insights from Single-sided Market Analysis" (2014) available at SSRN: <http://ssrn.com/abstract=2532166> [Carlton & Winter, "Competition Policy and Regulation in Credit Card Markets"]

⁵⁰ Julian Wright, "One-Sided Logic in Two-Sided Markets", (2004) 3:1 Review of Network Economics [Wright, "One Sided Logic in Two-Sided Markets"]

⁵¹ David Evans, "The Antitrust Economics of Two-Sided Markets" (2002)

higher interchange fees not because of a lack of actual or potential competition from other payment mechanisms, but because an increase may be accompanied by higher benefits to cardholders that make them more likely to use credit cards, so that higher merchant discounts are offset by increased sales.⁵² Therefore, ignoring the inter-dependencies between the two sides can be potentially misleading when defining the relevant market in a two-sided market, and increase the risk of type I and type II errors.

The problem of market definition in a two-sided context is closely related to the issue of ‘out-of-market’ efficiencies. In both cases, there may be a concern about one side of the platform that is excluded from the assessment of market power and of the overall impact of potentially anti-competitive practices. A broader relevant market including all consumers dealing with a platform is likely to reduce the chances of proving market power and of excluding one side of the platform from the analysis of anti and pro-competitive effects. Conversely, a narrow market definition makes it easier for a competition authority to find an exercise of market power, and reduces or, in some jurisdictions, excludes the possibility to take into account the efficiencies obtained outside the relevant market.

In the following chapters, this paper shows why ignoring out-of-market efficiencies may be particularly problematic in a two-sided context, where it is necessary to take into account the interactions between the two or multiple sides of the platform and the externalities across the different groups of consumers. For the analysis that follows, in particular, significant issues for competition policy emerge in relation to: (a) the suitability of per se rules or their equivalents, such as “restriction by object” in the EU, to horizontal agreements; and (b) the possibility to aggregate efficiencies among related markets, in order to take into account efficiencies that go beyond the boundaries of market definition.

2.2 Proposed Framework

The scope of ‘out-of-market’ efficiencies is discussed with specific reference to Article 101 of the Treaty on the Functioning of the European Union (TFEU). In particular, the analysis is based

⁵² Alan Sykes, “Antitrust Issues in Two-Sided Network Markets: Lessons from in Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation” (2015) NYU Law and Economics Research Paper No. 14-45

on two recent decision of the Court of Justice of the European Union (CJEU): *Groupement des Cartes Bancaires*⁵³ and *MasterCard*.⁵⁴ Both cases involved the assessment of pro-competitive effects of horizontal agreements in the context of payment card systems. Article 101(1) TFEU prohibits all agreements between undertakings, decisions by associations of undertakings and concerted practices 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. A restriction by object is a practice that in all likelihood will harm competition, such as price-fixing or market allocation. Agreements placed within the ‘object’ category are considered ‘by their very nature’⁵⁵ to restrict competition and are presumed to lead to negative effects on the market.⁵⁶ Proof of actual or potential anti-competitive effect will not be required in order for an agreement to be declared illegal. Conversely, restrictions ‘by effect’ are those that do not have the object of restricting competition, but may have an ‘appreciable’ effect on competition that must be proved by the European Commission.

An agreement can be exempt from the application of Article 101(1) if it is proved to be an ancillary restraint, namely if it is objectively necessary for the achievement of a particular legitimate commercial aim and if it is proportionate to it. If the agreement has the object or the effect of restricting competition and does not fit within the category of ancillary restraints, the analysis moves to Article 101(3), which provides an exemption based on pro-competitive efficiencies. The burden of proof shifts from the Commission to the party invoking the efficiency defense. However, the Commission has declared that, in practice, it is ‘unlikely’ that hard-core restrictions can ever benefit from an individual exemption pursuant to Article 101(3).⁵⁷ For those conducts that can benefit from Article 101(3) TFEU, the prohibition contained in Article 101(1) TFEU may be declared inapplicable in the case of practices which i) contribute to improving the production or distribution of goods or to promoting technical or economic progress, while ii) *allowing consumers a fair share of the resulting benefits*, and which iii) only impose restrictions

⁵³ *Groupement des Cartes Bancaires (CB) v European Commission* C-67/13 P, [2014] EU:C:2014:2204 [*Cartes Bancaires*]

⁵⁴ *MasterCard and Others v European Commission* C-382/12 P [2014] EU:C:2014:2201 [*MasterCard*]

⁵⁵ EC, “Guidelines on Article 101(3)”, *supra*, note 11

⁵⁶ Jones & Sufrin, “EU Competition Law”, *supra*, note 8

⁵⁷ EC, “Guidelines on Article 101(3)”, *supra*, note 11

which are indispensable to the attainment of these objectives and iv) do not afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products concerned.

The second condition of Article 101(3) – the requirement that consumers receive a ‘fair share’ of the agreements resulting benefits – explicitly adopts a consumer welfare standard. The term ‘consumers’ covers not only end consumers but also undertakings acting as intermediate customers, including producers purchasing the products as an input, wholesalers, retailers, etc.⁵⁸

The provision does not specify, however, whether consumers should be exclusively those within the relevant market. In this regard, the Commission’s Guidelines on Article 101(3) reveal partial inconsistencies with the case law. The analysis that follows shows that the European Commission, unlike European Courts, adopts an excessively restrictive position that either excludes or subordinates the incorporation of ‘out-of-market’ efficiencies to exceptional and specific circumstances. The following section touches firstly on merger control and then moves to the treatment of efficiencies that may justify otherwise anti-competitive agreements under Article 101 TFEU.

2.3 ‘Out-of-Market’ Efficiencies: A Legal Analysis

2.3.1 Mergers

Both in the US and in the EU, antitrust law allows the challenge of a merger that may create anticompetitive harm in the relevant market, even when such harm is outweighed by efficiencies in another market. In this way, competition authorities can stop an overall welfare increasing practice on the basis that it creates harm in a narrowly defined market. This rule, which has been criticized by Wright as a general way to take into account efficiencies under the US Merger Guidelines,⁵⁹ is crucial in a two-sided context, where two or more set of consumers are necessarily and closely interconnected.

A potential scenario may be a merger between two firms, where prices for consumers in the relevant market are predicted to increase, but, as a result of merger-related efficiencies, the reduction of costs are passed to other consumers outside the relevant market in the form of lower

⁵⁸ Jones & Sufrin, “EU Competition Law”, *supra*, note 8

⁵⁹ US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (2010)

prices. In such a case, even if the benefit for consumers outside the relevant market is higher than the welfare loss of the consumers in the relevant market, the merger would be challenged even though the total effect of the merger is welfare increasing. The prohibition against out-of-market efficiencies is absolute under the European merger control. The EU Horizontal Merger Guidelines establish that efficiencies should, in principle, benefit consumers in those relevant markets where it is otherwise likely that competition concerns would occur.⁶⁰ According to this approach, it is not possible to trade off benefits to consumers in one market against consumers in another market.

In the US, the prohibition can be considered a general rule with specific exceptions. The US authority for this restrictive approach is *Philadelphia National Bank*.⁶¹ In that decision, the Department of Justice (DOJ) challenged the merger of the second and third largest banks in the Philadelphia Metropolitan area, on the basis that it would substantially lessen competition in the market defined as commercial banking in the four-County Philadelphia Metropolitan area. In assessing whether the concentration would substantially lessen competition in the banking services, the merging parties argued that the merger would allow the merged entity to increase lending limits and better compete with large out-of-state banks for large loans.⁶² In that way, despite the risk of price increase for consumers in the Philadelphia metropolitan area, the parties argued that the merger would create benefits for consumers outside the relevant market in the form of better competition for large loans, which would outweigh any anticompetitive harm within the relevant market. The US Supreme Court rejected the ‘out-of-market’ efficiencies argument, holding that anticompetitive effects in one market could not be justified by efficiencies in a separate market under the *Clayton Act*.⁶³ Similarly, in *Tenet Healthcare*⁶⁴ which involved a merger between hospitals, the merger was blocked on the ground that it would substantially lessen competition between acute-care hospitals in Poplar Bluff, Missouri. The defendants claimed that the merger would allow them to bring open-heart surgery and other

⁶⁰ Commission Notice, *Guidelines On The Assessment Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings*, OJ 2004 C31/03, at para 79

⁶¹ *Philadelphia National Bank*, *supra*, note 36

⁶² *Ibid*, at para 370-371

⁶³ *Ibid*.

⁶⁴ *FTC v Tenet Healthcare Corp.* 17 F. Supp. (2d) 937, 948

tertiary services to Poplar Bluff. However, the Court held that “these alleged benefits, even if possible, cannot justify the proposed merger because the relevant market in this case includes acute care services, not tertiary care services.”⁶⁵ In a less restrictive fashion, the 1992 version of the FTC Horizontal Merger Guidelines acknowledged the role of out-of-market efficiencies in merger analysis, stating that antitrust agencies may use their “*prosecutorial discretion*” to consider efficiencies not strictly in the relevant market, but “*so inextricably linked*” with it that “a partial divestiture or other remedy could not feasibly eliminate the anticompetitive effect in the relevant market without sacrificing the efficiencies in the other markets.”⁶⁶ Despite recognizing this possibility, the 1992 Guidelines, however, clarified that such efficiencies can rarely be a relevant factor in the analysis of merger cases⁶⁷ and that ‘out-of-market’ efficiencies are “*most likely to make a difference when they are great and the likely anticompetitive effect in the relevant market is small.*”⁶⁸ The 2006 Commentary on the Horizontal Merger Guidelines also clarified that agencies will “often find an acceptable narrowly tailored remedy that preserves the efficiencies while preventing anticompetitive effects.”⁶⁹ For example, in a 2004 case concerning a proposed merger between two companies operating in the market for solid organ transplant acute therapy drugs, the merging parties argued that the transaction, despite reducing competition, would create efficiencies in the separate market for oncology treatments.⁷⁰ The FTC took into account those efficiencies, but required a remedy and divestment of contractual rights in the market for solid organic transplant acute therapy drugs. The latest version of US Horizontal Merger Guidelines, published in 2010, contains some openings in favour of cross-market efficiencies. Firstly, the statement “inextricably linked efficiencies rarely are a significant factor in the Agency’s determination not to challenge a merger” has been eliminated. Further, the new version explicitly states that the analysis should focus on whether “the merger is likely to

⁶⁵ *Ibid.*

⁶⁶ US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (1992, rev. 1997), at 31, note 36

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ US Department of Justice and Federal Trade Commission, *Commentary on the Horizontal Merger Guidelines* (2006)

benefit customers overall.”⁷¹ However, the evaluation of out-of-market efficiencies is still conditioned upon “prosecutorial discretion” of antitrust agencies, and on the disproportion between benefit and harm.⁷² In this way, the 2010 Horizontal Guidelines still relegate out-of-market efficiencies to a secondary role.⁷³

On a different note, the Canadian Merger Enforcement Guidelines explicitly provide, in section 12.23, that “In addition to direct effects in the relevant market, *the Bureau also considers price and non-price effects in interrelated markets.*” This position seems more in line with standard cost-benefit analysis and reflects more generally a higher sensitivity of Canadian competition policy to align to economics principles.⁷⁴ In this regard, it is not a coincidence that, at least until the *Superior Propane* case, economic efficiency was generally considered the fundamental goal of Canadian competition law⁷⁵ and a total surplus standard was adopted under section 96 of the Competition Act.⁷⁶ In *Superior Propane*, the Competition Tribunal considered explicitly the effects of the merger on *interrelated markets*.⁷⁷ On this basis, it seems plausible to conclude that the assessment of a merger would be carried out taking into ‘out-of-market’ efficiencies under Canadian competition law. Conceptualizing the same hypothetical merger case under the US regime, efficiencies between interrelated markets may be aggregated on the basis of the “inextricably linked” test, but such analysis would be subordinated to the prosecutorial discretion of the FTC and on the disproportionality requirement between benefit and harm. Conversely, the European Commission would be required to ignore the effects to consumers in interrelated markets.

⁷⁰ FTC, *Genzyme Corporation/Novazyme Pharmaceuticals, Inc.* File No. 021 0026 (2004).

⁷¹ U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (2010), at 30, note 14

⁷² *Ibid.*

⁷³ Rybnicek & Wright, “Outside In or Inside Out”, *supra*, note 38

⁷⁴ Michael J Trebilcock, “The Great Efficiencies Debate in Canadian Merger Policy” (2004) 10:4 New Zealand Business Law Quarterly 298

⁷⁵ However, In *Director of Investigation and Research v. Hillsdown Holdings (Canada) Ltd.* (1992), 41 C.P.R. (3d) 289, the Competition Tribunal expressed in *obiter dicta* reservations about the total surplus test.

⁷⁶ Trebilcock et al, “The Law and Economics of Canadian Competition Policy”, *supra*, note 27

⁷⁷ *Superior Propane*, Second Decision, *supra*, note 39, at para 250; *Superior Propane*, Second Appeal, *supra*, note 26, at para 21

2.3.2 Anti-Competitive Agreements under Article 101 TFEU

European competition law also adopts a restrictive position in relation to anti-competitive agreements under Article 101 TFEU. Echoing the principles applicable to mergers, the Guidelines on the Application of Article 101(3) specify that benefits flowing from restrictive agreements are in principle assessed only within the confines of each relevant market to which the agreement relates. According to the Guidelines, the condition that consumers must receive a fair share of the benefits implies, in general, 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. Negative effects on consumers in one geographic market or product market cannot normally be balanced against and compensated by positive effects for consumers in another unrelated geographic market or product market. The Guidelines provide, however, an exception to this rule.⁷⁸ Specifically, a) where two markets are *related*, efficiencies achieved on separate markets can be taken into account provided that b) the group of consumers affected by the restriction and benefiting from the efficiency gains are *substantially the same*. For instance, in the *Continental/United/Lufthansa/AirCanada* case,⁷⁹ the European Commission considered the benefit produced on routes connected to the route included in the relevant market, because there was considerable commonality between passengers of both routes.

In contrast with this position, the case law of European courts reveals a less restrictive approach. In *Compagnie Générale Maritime*, the General Court (GC) concluded that, in regard to Article 101(3), in appropriate cases regard must be had to benefits “*for every other market on which the agreement in question might have beneficial effects*, and even, in a more general sense, for any service the quality or efficiency of which might be improved by the existence of that agreement.”⁸⁰ There, the Court did not explicitly set out as a condition for the aggregation of cross-market efficiencies that consumers benefitting and affected must be the same. However, in the specific circumstances of case, the affected groups of consumers were in fact the same. The case concerned inland and maritime transportation services provided to shipping companies

⁷⁸ EC, “Guidelines on Article 101(3)”, *supra*, note 11, at para 43

⁷⁹ EC, Commission Decision in Case COMP/39.595 *Continental/United/Lufthansa/Air Canada* [2013]

⁸⁰ *Compagnie Générale Maritime and Others*, T-86/95 [2002] ECR II-1011, at II-343-345

across the European market. These two types of services were considered two separate markets. Even though the restrictions impacted inland transport services and the benefits occurred in relation to maritime transport services, both services were demanded by shippers requiring intermodal transport services between northern Europe and South-East and East Asia.⁸¹ Further, in *GlaxoSmithKline v Commission*, a decision delivered after the adoption of the Guidelines, the General Court explicitly recognized that: “It is therefore for the Commission, in the first place, to examine whether [...] the agreement in question must enable appreciable objective advantages to be obtained, it being understood that these advantages may arise *not only on the relevant market but also on other markets*.”⁸² Here, too, the consumers were the same, but there is no explicit mention of the ‘consumers’ commonality’ condition required to take into account out-of-market efficiencies.⁸³

This discrepancy between case law and the Guidelines is likely to create potential conflict and inconsistencies, and it also raises questions about the *ratio* of the ‘consumers’ commonality’ test adopted by the Commission. Perhaps, some justifications may be advanced on the ground of distributional effects and problematic choices that competition authorities would be required to make in balancing the interests of different consumers’ groups. One potential explanation may be that the Commission can avoid the need to make subjective evaluations between different consumers. Another additional rationale for the ‘consumers’ commonality’ requirement may be to avoid national bias when two different geographic markets are at issue.⁸⁴ If an agreement harms consumers of good A in one Member State and benefits consumers of good B in another Member State, competition authorities may give preference to certain consumers and market on the basis of non-economic justifications.

However, as this paper discusses more in detail below, these potential justifications may be criticized on various grounds. At the outset, distributional considerations are already carried out within the relevant market, since competition law allows aggregation across consumers *within*

⁸¹ EC, “Guidelines on Article 101(3)”, *supra*, note 11, at note 57

⁸² *GlaxoSmithKline*, *supra*, note 34, at para 248

⁸³ *Ibid*, at para 251

⁸⁴ Damien Geradin, Anne Layne-Farrar & Nicholas Petit, *EU Competition Law and Economics* (Oxford: Oxford University Press 2012), at 169-170

markets. For instance, in *Asnef-Equifax*, the Court of Justice held that: “it is the beneficial nature of the effect on all consumers in the relevant markets that must be taken into consideration, not the effect on each member of that category of consumers.”⁸⁵ In that case, the Court also dismissed the argument that an agreement that had a detrimental effect on a particular category of consumers, but no pro-competitive effects for the same group, could not benefit from an exemption.⁸⁶ Moreover, taking into account only a relevant market and not another is not, in itself, a neutral judgement from a consumer welfare perspective. A decision to block a merger because it is supposed to harm consumers in the relevant market in itself is a decision that may harm another group of consumers, by denying them of the benefits that would arise from the agreement, in order to safeguard existing benefits to those within the relevant market.⁸⁷ This is exacerbated by the fact that the boundaries of the relevant market are not always clear-cut. Finally, and most importantly for the purpose of this work, this test becomes even more problematic when applied to two-sided markets, with potential inconsistencies with the teachings of economic theory. The next section elaborates on this issue by discussing two recent decisions of the Court of Justice of the European Union concerning payment card markets, where the scope of efficiencies was discussed at large.

2.4 ‘Out-of-Market’ Efficiencies in Two-Sided Markets: A Legal Analysis

An agreement between newspapers sellers may result in lower prices for newspapers but higher prices for advertisers. Considering the two-sided nature of the market, and assuming that the relevant market is newspapers advertisements, should the lower price for purchasers of newspapers and the indirect network externalities be taken into account?⁸⁸ As a result of the lower price of newspapers, the number of consumers may increase and, as a consequence, the value for advertisers would also increase. In this case, because consumers are not substantially the same, the agreement may be found illegal under European law even in case (a) one side of the platform is benefitting from lower prices, and this benefit may outweigh the harm suffered by

⁸⁵ *Asnef-Equifax v Ausbanc* C-238/05 [2006] ECR I-11125, at 70

⁸⁶ *Ibid*, at 169-170

⁸⁷ OFT, “Article 101(3) - A Discussion Of Narrow Versus Broad Definition Of Benefits” (Discussion Note for OFT Breakfast Roundtable, 2010)

⁸⁸ *Ibid*.

the other side; (b) the other side of the platform facing higher prices may benefit from the network externalities that allow them to reach more readers. To answer this question, it is helpful to start by looking generally at the treatment of efficiencies in horizontal agreements involving two-sided platforms. A good starting point is the US case *National Bancard Corp. (NaBanco) v. Visa U.S.A., Inc.*,⁸⁹ which involved the application of the rule of reason, rather than per se rule, to credit cards' default interchange rates.

2.4.1 Rule of Reason versus Per Se Illegal Price-Fixing under US Antitrust Law

In *NaBanco*, the plaintiffs claimed that the interchange fee set by Visa was a horizontal price fixing agreement that violated Section 1 of the *Sherman Act*. Visa, on the contrary, argued that the interchange fee was a necessary mechanism for the existence of the product sold by the association, and was required in order to allow an appropriate balance between card-issuing and merchant-servicing. Accordingly, Visa argued for the application of the rule of reason to interchange fees. The U.S. District Court for the Southern District of Florida accepted the arguments offered by Visa and by its expert William Baxter that interchange fees were necessary to the existence of the Visa credit card system, so long as use of the Visa processing network was not mandatory. The district court also accepted arguments that the relevant market was broad, including all payment methods, and Visa therefore lacked market power. Most importantly, the District Court opted for a rule of reason, rather than a *per se* rule approach toward interchange fees. In its reasoning, it recognized the interchange fee as a transfer payment between card issuing side and merchants, required in order to equilibrate the supply and demand for VISA services by bringing the costs of the system in line with the revenues for each participating VISA member bank. The Eleventh Circuit affirmed the decision for the following reasons. Firstly, it held that the District court was correct in considering the agreement under the rule of reason, because of the potential efficiencies emerging from it. Secondly, it concluded that the interchange fee allowed the coordination between the two mutually dependent groups that would otherwise face high transaction costs: “The fundamental economic inter-dependence between the card-issuing and merchant-signing banks . . . demonstrated that redistribution of revenues or

⁸⁹ *National Bankcard Corp (NaBanco) v VISA USA Inc* 779 F (2d) 592 (11th Cir 1986)

costs is a must for the continued existence of the product.”⁹⁰ In that way, the Eleventh Circuit recognized the two-sided nature of the market and the interchange fee as a mechanism to design a price structure necessary to get ‘both sides on board’. Furthermore, the court found that the interchange fee was pro-competitive in nature and created cognizable efficiencies on the basis of a broad market definition that included both acquiring and issuing side.

2.4.2 European Approach in *Cartes Bancaires* and MasterCard: Restriction ‘by effect’ and ‘fair share to consumers’

On September 11, 2014 the Court of Justice of the European Union delivered two seminal decisions concerning agreements among competitors in the context of two-sided markets. In *Groupement des Cartes Bancaires v Commission*⁹¹ and *MasterCard v Commission*,⁹² the Court clarified the distinction between restriction ‘by object’ and ‘by effect’ under Article 101(1) and also the scope of efficiencies under Article 101(3) in the context of two-sided markets. Both cases concerned infringement of EU competition law in the sector of payment card systems.

In *Groupement des Cartes Bancaires*, the major credit institutions operating in France created an association (CB Group) in order to manage their system for card services. The system enabled the use of cards issued by CB members (issuing side) to all affiliated merchants, and withdrawals from ATMs controlled by any of the members of CB Group (acquiring side). The members of the association agreed to set fees to be paid by CB Group members when issuing cards or joining the group. In particular, the agreement included: (i) the so-called MERFA (‘mechanism for regulating the acquiring function’)⁹³ formula to determine the fees payable by card issuers, to ensure that those members mainly issuing cards would pay higher fees compared to acquiring merchants and installing ATMs; (ii) a membership fee per card issued; and (iii) a “wake-up” fee to be paid by inactive members. According to the Association, those measures were necessary to avoid free-riding on the investments made by the main members and to encourage new competitors to acquire merchants and install ATMs.

The Commission categorized these measures as an anti-competitive agreement aimed at keeping

⁹⁰ *Ibid*, at para 57

⁹¹ *Cartes Bancaires*, *supra*, note 53

⁹² *MasterCard*, *supra*, note 54

⁹³ Mécanisme de Régulation de la Fonction Acquéreur

the price of payment cards artificially high, to the advantage of the major banks and to the detriment of new entrants. The General Court confirmed the Commission's decision and concluded that the agreement was a restriction of competition "by object." Therefore, there was no need to assess the effects of such agreement on the market. The CB Group appealed to the CJEU, arguing that the GC had erred in applying the concept of restriction of competition "by object." Specifically, the CB Group argued that the Commission did not recognize the two-sided nature of the payment system and ignored the specific legal and economic context. The CJEU decided to set aside the GC judgment. Most importantly, the CJEU made it clear for the first time, echoing the outcome in *Nabanco*, that agreements in novel or complex economic settings, such as multi-sided markets, should not be subject to a 'by object' analysis.⁹⁴ Restrictions 'by object' such as price fixing are those that create a "sufficient degree of harm" to competition that make it unnecessary to examine their effects on the market. However, the CJEU made it clear that, in order to identify a conduct as a restriction 'by object', the Commission needs to take into account "all relevant aspects . . . of the economic and legal context in which that coordination takes place".⁹⁵ Further, it concluded that it is "immaterial *whether or not such an aspect relates to the relevant market*."⁹⁶ On the contrary, regard must be given to the "the nature of the services at issue, as well as the real conditions of the function and structure of the markets."⁹⁷ By taking into account the interaction and necessary balance between acquiring and issuing sides, the Court concluded that this mechanism could not, by its very nature, be considered harmful to competition. However, it held that by carrying out the market analysis solely based on the issuing of payment cards in France, rather than considering also the market for payment systems, the GC ignored an essential element of the two sided market, confusing the definition of the relevant market with the contextual analysis required to determine whether an agreement restricts of competition by object or by effect.

The *MasterCard* ruling delivered on the same day also revolved around the two-sided nature of

⁹⁴ Javier Ruiz Calzado & Andreas Scordamaglia-Tousis, "Groupement des Cartes Bancaires v Commission: Shedding Light on What Is not a 'by object' Restriction of Competition" (2015) 6:6 Journal of European Competition Law & Practice

⁹⁵ *Cartes Bancaires*, *supra*, note 53, at para 78.

⁹⁶ *Ibid.*

⁹⁷ *Ibid.*

the markets. The CJEU held that an agreement to set intra EEA multilateral interchange fees (MIFs) for cross border transactions paid by merchant's banks (acquiring bank) to the cardholder's banks (issuing bank) for card-based payment transactions breached Article 101 TFEU. In particular, the CJEU found that: a) MasterCard was an association of undertakings, a characterisation that was not altered by MasterCard's initial public offering; b) MasterCard's decision setting MIFs was an anti-competitive agreement that had the effect of restricting competition and violated Article 101(1), because the MIFs set a minimum price that merchants had to pay to their acquiring banks for accepting payment cards and this harmful effect was enhanced by incentives given to cardholders by the issuing banks to use the highest revenue generating cards and by network rules such as the Honour-All-Cards rule; c) MasterCard's MIFs were not objectively necessary to sustain the overall MasterCard payment scheme and, therefore, could not avoid the application of Article 101(1) on the basis that they were ancillary restraints; *d) MasterCard's MIFs did not create sufficient pro-competitive efficiencies to allow them to be exempted under Article 101(3) TFEU.* In the decision, the Court identified three different product markets: 'inter-system market' where various card systems compete, 'issuing market' in which issuing banks compete for the business of the cardholders, and the 'acquiring market' where the acquiring banks compete for the merchants' business. The Court did not accept the argument advanced by MasterCard to apply the SSNIP test on the sum of the cardholders and merchant fees. The relevant market was instead defined as national *acquiring markets* in the Member States of the EEA. The MIF was considered a restriction of price competition between acquiring banks to the detriment of merchants.⁹⁸

In relation to the fair share of benefits that must be passed to consumers according to Article 101(3), the appellants argued that the Commission and the General Court did not take into account the two-sided nature of the system and had, therefore, adopted an incorrect approach in regard to the market in which the advantages referred to in Article 101(3) TFEU should be considered.⁹⁹ The CJEU, however, disagreed and found that the General Court did take sufficiently into account the two-sided nature of the MasterCard system, by analysing the role of the MIFs in balancing the issuing and acquiring sides of the system. Specifically, it agreed with

⁹⁸ *MasterCard*, *supra*, note 54, at para 11

⁹⁹ *Ibid*, at para 140

the finding of the General Court where it considered that, since merchants constituted one of the two groups of users affected by payment cards, it was necessary to establish the existence of appreciable advantages attributable to the MIFs in regard to them.

In this way, the Court clarified the scope of ‘out-of-market’ efficiencies in the context of two-sided markets by holding that if there are ‘appreciable objective advantages’ for consumers in the relevant market, even if those advantages are not in themselves sufficient to compensate for the restrictive effects, the advantages for different consumers on the connected market could justify the restriction if, taken together, they are sufficient as to compensate for the restrictive effects. Nevertheless, the CJEU concluded that if there are no appreciable objective advantages for consumers on the relevant market, any advantages for the consumers on the connected market cannot in themselves sufficiently compensate for the restrictive effects, unless consumers in both markets are substantially the same. The General Court found that there was no proof of the existence of objective advantages flowing from the MIFs and enjoyed by merchants on the relevant market (the acquiring market). In those circumstances, according to the Court, it was not necessary to examine the advantages for consumers on the connected market (the issuing market), since they could never, by themselves, be of such a character as to compensate for the disadvantages resulting from the fees, given that consumers on the acquiring market (merchants) were not the same as those in the issuing market (cardholders).

2.5 Conclusion

The recognition of the two-sided nature of the market played a role both in shrinking the scope of ‘restrictions by object’ under Article 101(1), and in relation to efficiencies under Article 101(3). In either cases, the CJEU makes it clear that regard must be had to all relevant aspects of the economic and legal context in which coordination takes place, it being immaterial whether or not such an aspect relates to the relevant market. On the other hand, however, the CJEU limits the possibility to combine efficiencies among related markets to a specific and restrictive condition. When consumers in different markets are not the same, consumers in the relevant market negatively affected by the agreement should at least obtain some ‘appreciable objective advantages’ in order for the benefits arising in related market to be considered.

In principle, therefore, the ‘consumers commonality’ requirement remains in place both for one and two-sided markets. In the case of two-sided markets, however, such requirement can be

substituted by showing proof of ‘appreciable objective advantages’ for the consumers in the relevant market affected by an anti-competitive agreement. When sufficient proof is advanced, the ‘fair share’ to consumers can include the aggregated benefit across all different sides of multisided platforms.

Despite the overall positive step in aligning Article 101 TFEU with the economic literature on two-sided markets, the restrictions that remain in place against aggregating efficiencies across markets in this context require further scrutiny. In the first place, it must be established whether the distributional concerns that may explain the adoption of the ‘consumers commonality’ are in fact required by the adoption of the consumer welfare standard and whether they are consistent with current antitrust practice. Based on the results of this inquiry, it must be then assessed the ‘appreciable objective advantage’ test, if justified at all, successfully incorporates the economic principles of two-sided platforms. As it is argued in the following chapter, there are reasons to doubt this. If a higher interchange fee that merchants have to bear, given their less elastic demand, is passed to cardholders in the form of lower prices and higher benefits, this may increase final consumers’ welfare and, by enlarging the number of cardholders, also increase the value of the platform for merchants themselves. However, both effects are ignored by the Court, because MasterCard did not satisfy its burden of proof of quantifying the indirect network externalities created by the MIF in favour of merchants. This approach reveals an imbalance in the standard of proof between the Commission and the parties, which makes it very hard for the latter to prove efficiencies across markets and comply with the ‘appreciable objective advantages’ test. In addition, the worry toward national bias may have also played a role in the decision. Since interchange fees applied to cross-border activities within the EEA, the activities involved cardholders from Member State A doing transactions with merchants in Member State B. Having identified the relevant market as national acquiring markets, there might have been a concern of favouring cardholders from certain member states *vis-a-vis* merchants from others. Such considerations, however, have little to do with the impact on overall consumer welfare. Furthermore, the decision departed in many respects from a similar 2002 interchange fee case against VISA, which was decided before the publication of the Guidelines.¹⁰⁰ There, the Commission exempted the interchange under Article 101(3), by recognizing positive network externalities that benefitted both cardholders and merchants, provided that MIF was public and

¹⁰⁰ EC, Commission decision COMP/29.373, *Visa International – Multilateral Interchange Fee* [2002]

linked with the cost of the specific services provided. Moreover, the market was defined as ‘payment systems’, including both issuing and acquiring banks. A comparison between the two decisions reveals a higher bar required to establish efficiencies for the purpose of Article 101(3) after the publication of the Guidelines. Lastly, the Court surprisingly focuses its analysis not on final consumers, but exclusively on ‘intermediary customers’. Although both categories are part of the definition of consumer welfare under EU competition law, it is surprising that the impact on end-users is neglected from the competitive analysis under Article 101 TFEU. In sum, these critical aspects of the decision have important implications for the application of Article 101(3) to two sided markets, which go beyond the context of payment card systems. The next chapter analyzes more in detail the compatibility of the just discussed legal restrictions with the economics of ‘out-of-market’ efficiencies and two-sided platforms.

3 Out-of-Market Efficiencies and Two-Sided Platforms: An Economic Analysis

Starting with the legal treatment of out-of-market efficiencies just outlined, this chapter identifies the potential shortcomings of limiting the scope of efficiencies to the boundaries of the relevant market. It suggests that this approach fails to incorporate the economic principles of two-sided platforms and, more generally, raises important questions about the very rationale of consumer welfare in European competition law. On the basis of these elements, this chapter concludes by advocating for a wider role of out-of-market efficiencies.

3.1 The Limits of Market Definition

The economic theory of antitrust generally relies on concepts of partial equilibrium where the effects on welfare in a particular market are assumed to have no effects in other markets. In this way, the assessment of market power is carried out through a structuralist approach that revolves around the definition of a relevant product and geographic market. As such, market definition is the cornerstone of both antitrust and merger cases, which indirectly assesses market power by looking at the substitutability of products as a competitive constraint on the behaviour of suppliers of the respective products. A relevant market, in other words, is “something worth

monopolizing.”¹⁰¹ Once the relevant market is identified, the undertaking’s power on that market is generally assessed by relying substantially on market shares.

Despite its centrality in the assessment of anti-competitive issues, the importance and precision of market definition should however not be overestimated. In fact, the delineation of a relevant product and geographic market is not an end in itself, but only a filtering tool to identify situations where there might be competition concerns. It is also important to point out that the analysis carried out through market definition is a simplification, for the sake of workability, of more complex dynamics and interactions between a number of different buyers and sellers, which is not entirely reflected in the determination of an antitrust market. The boundaries between markets delineated through the application of the SSNIP test, therefore, cannot be taken as perfectly clear and precise. Richard Posner, for instance, back in 1976 argued: “it is only because we lack confidence in our ability to measure elasticities, or perhaps because we do not think of adopting so explicitly an economic approach that we have to define markets instead.”¹⁰² Generally, economists criticize over-reliance on market shares and prefer to see market power as a relationship between a firm’s marginal costs and the elasticities of supply and demand that it faces.¹⁰³ When available, the use of econometric evidence on the elasticities therefore leads to putting less emphasis on the role of market definition for the determination of market power based on market shares.

The sharpness of market definition is further blurred in complex settings including aftermarkets, R&D markets, and two-sided industries.¹⁰⁴ In these settings, it may be problematic to determine which and how many markets should be considered, or how to apply the SSNIP test and critical loss analysis correctly. In two sided markets, for instance, a price increase on one side of the market may be accompanied by a price decrease on the other side. This interdependency raises the question of whether a single market including both sides should be defined for antitrust purposes. Similarly, when each side is defined as a different market, it must be established

¹⁰¹ Simon Bishop & Mike Walker, *The Economics of EC Competition Law: Concepts, Application and Measurement* 3rd ed. (London: Sweet & Maxwell, 2010)

¹⁰² Richard Posner, *Antitrust Law; An Economic Perspective* (Chicago: University of Chicago Press, 1976)

¹⁰³ Trebilcock et al, “The Law and Economics of Canadian Competition Policy”, *supra*, note 27

¹⁰⁴ Dennis Carlton, “Market Definition: Use and Abuse” (2007) 3:1 Competition Policy International

whether to look at each market separately or jointly. Various commentators argue that all markets must be considered jointly, since the strength of competition faced by a platform on one side depends on the level of competition on the other side.¹⁰⁵ The reason is that one side of the platform exerts a form of competitive pressure on the other that is not reflected in one-sided analysis. Although shopping malls, for instance, usually do not charge customers themselves, malls compete for them against other malls, as well as competing for retailers. The zero price is explained by the fact that the number of shoppers affects the demand and the (higher) price charged for renting space. The respective price charged to the shoppers and retailers would not, in isolation, fully explain the competitive pressure that each side exerts on the other. Some authors conclude that, except in the case of a two-sided non-transaction market with only one externality, both sides of the market should be taken into account when defining the relevant market.¹⁰⁶

Related complexities emerge when performing the SSNIP test, since two separate prices are set by platforms. On the one hand, the SSNIP test looks at the effect of a price increase on the demand and profit of one side. On the other hand, it ignores the effect that reducing the number of consumers on that side would have for the other side of the platform. The two markets are in a way like communicating vessels, where indirect network effects may reduce the profitability of any price increase. It has been suggested, therefore, that the SSNIP test should take into account the changes in profit on both sides of the market and the feedback effect between demands as a result of the hypothetical raise in price.¹⁰⁷ This, for example, may be implemented by looking at the increase in the price level (the total price per transaction) rather than the price structure (the amount that each side is required to pay for a given transaction), although there is less agreement on whether a hypothetical monopolist should be allowed to optimally adjust the price structure.¹⁰⁸ Emch and Thomson propose the application of this approach to payment cards.¹⁰⁹

¹⁰⁵ David Evans & Michael Noel, “The Analysis of Mergers that Involve Multisided Platform Businesses” (2008) 4 J. Competition L. & Econ. 663

¹⁰⁶ *Ibid.*

¹⁰⁷ *Ibid.*

¹⁰⁸ *Ibid.*

¹⁰⁹ Eric Emch & T. Scott Thompson, “Market Definition and Market Power in Payment Card Networks” (2006) 5:1 Review of Network Economics

They argue that in assessing market power the focus should not be the interchange fee alone. An independent profit-maximizing monopolist would set a specific interchange rate to balance demand on the two sides to maximize output, without retaining it. The authors argue that this balancing function does not in itself entail market power concern, and it may actually be efficient behaviour. Accordingly, they conclude that instead of applying the SSNIP test separately to the net prices charged to each side, the appropriate candidate should be the total price charged to all sides.¹¹⁰

In sum, the core function performed by the relevant market and the simplifications implicit in its definition are preliminary reasons why it is incorrect to adopt a black-and-white approach in assessing the impact of a practice respectively within and outside the relevant market. An economic analysis of out-of-market efficiencies — where anticompetitive effects are felt in one market and efficiencies arise in another related market — starts therefore from recognizing that their neglected or secondary role depends on a mechanical and sometimes inaccurate approach to market definition. Arguably, such formalism can create sharp boundaries where they should not in fact exist. This conclusion is *a fortiori* defensible when two-sided industries are involved. The economic literature on market definition in this context is still at an early stage, but reflects an overall concern about incorrect outcomes that may easily result through the application of traditional tests. In particular, a common concern found in the literature is that failing to take into account the feedback effects between the different consumer groups can lead to a too narrow definition of the relevant market. When that happens, and out-of-market efficiencies are neglected, incorrect outcomes may easily occur.

3.2 Aggregating Efficiencies Across Markets and the ‘Consumers’ Substantial Similarity’ Test

As was described in the previous chapter, the European provision dealing with anticompetitive agreements explicitly requires that consumers should be awarded a ‘fair share’ of the possible efficiency gains that are claimed by producers and resulting from an anticompetitive agreement. For this reason, it would not be possible to justify under Article 101(3) an agreement that affects consumers because it leads to higher prices, lower output or reduced quality, even if the aggregate effect provides important efficiencies to producers, enabling them to theoretically

¹¹⁰ *Ibid.*

compensate consumers for their losses.¹¹¹ According to the Commission's Guidelines, the concept of 'fair share' implies that the pass-on of benefits must at least compensate *fully* and *effectively* consumers for any actual or likely negative impact caused to them by the restriction of competition. Efficiencies, even in the form of increased quality or other benefits, must neutralize the effect of higher prices. This is an explicit endorsement of the consumer welfare standard, which, in maximizing consumer surplus, focuses mostly on the effect on prices as an anti-competitive concern (where price may also include reduced output, quality, choice, innovation).¹¹²

Although all welfare standards generally refer to the welfare effects in a single, defined antitrust market, there are a number of (arguably unjustified) reasons that can explain why adopting a consumer welfare standard may result in overlooking out-of-market efficiencies compared to a total welfare standard. To be precise, both standards can be applied by looking at each market separately. In fact, it is possible to apply a total surplus standard by comparing the allocative inefficiency resulting from a price increase and the efficiency gains in each individual market, requiring divestitures remedies in those markets where concerns for anticompetitive effects still remain. Nonetheless, a total surplus standard reflects a Kaldor-Hicks parameter of economic efficiency, which is satisfied any time a practice creates a net gain for the economy as a whole, regardless of the anti-competitive effects for consumers in the relevant market.¹¹³ The maximization of economic efficiency, therefore, would favour more trading-off the aggregate efficiency gains and anti-competitive effects across markets in order to assess the overall effects of a conduct on social welfare. Conversely, the consumer welfare standard requires that gains in efficiencies must be sufficient to ensure that price for consumers will not increase, in order to avoid a transfer of wealth from consumers to producers. Since the 'pass-on' condition requires actual and full compensation, the specific group of consumers in the relevant market affected by anti-competitive effects is firstly identified in order to verify the effective passing on to them. This inevitably creates a link between efficiency gains and the relevant market.

¹¹¹ Ioannis Lianos, "Some Reflections on the Question of the Goals of EU Competition Law" (2013) CLES Working Paper Series 3/2013 [Lianos, "Some Reflections on the Question of the Goals of EU Competition Law"]

¹¹² Jones & Sufrin, "EU Competition Law", *supra*, note 8

¹¹³ De La Mano, "For the Customer's Sake", *supra*, note 18

This link, however, is at times unnecessarily limiting the maximization of consumer welfare and denying importance to significant efficiency gains. In fact, looking at this issue more carefully, it is hard to understand why efficiencies passed on to different consumers outside the relevant market could not satisfy Article 101(3), if the justification for the pass-on requirement is avoid a transfer of wealth from consumers to producers. Any time efficiency gains are passed on to consumers, regardless if they are or not in the relevant market, such distributional concerns in favour of consumers over producers are satisfied. This brings to the other possible reason that may explain the ‘substantial similarity’ test, namely distributional concerns among different consumers. On the one hand, under a total welfare standard redistribution is neutral and resolution of such issues is left to re-distributive instruments other than competition policy. Hence, concerns of this kind do not play against multimarket aggregation. On the other hand, under a consumer welfare standard distributional issues may *prima facie* present themselves also as an uneasiness to accept that consumers affected by an exercise of market power should pay for the benefits of other consumers in related markets, especially when located in different countries. This seems to be the rationale of allowing aggregation across markets exclusively when consumers are substantially the same. Nonetheless, it is surprising to use the relevant market as a proxy for distributional considerations, as if consumers within its boundaries are always more deserving of protection than others. Ultimately, a deeper look into the rationale of consumer welfare as the goal of competition policy reveals that none of these explanations is in fact demanded by the adoption of such standard. Commentators point at various reasons for the original adoption of consumer welfare in the European regime, including historical explanations, public choice views based on the comparative weakness of consumers’ lobbying, and social justice distributional concerns.¹¹⁴ Despite the potential inconsistencies of consumer welfare, all these views seem to put the defence of final consumers’ interests at the centre of competition policy, while at the same time ignoring other re-distributive concerns among consumers themselves, at least when part of the same relevant market.

On this basis, the ‘substantial similarity’ test, as a way to avoid re-distribution of wealth among consumers, appears not only unnecessary under the consumer welfare standard (which simply worries about re-distribution from consumers to producers), but also inconsistent with current antitrust practice, because it ignores that re-distribution usually happens also *within* the relevant

¹¹⁴ Lianos, “Some Reflections on the Question of the Goals of EU Competition Law”, *supra*, note 112

market. If aggregation among consumers *within* markets is allowed, then why not *across* markets? Any form of price discrimination implies that consumers in the relevant market will be treated differently, with some being charged a higher price than others. As noted by Hovenkamp, in some tying cases, as well, when a firm sells a durable good tied together with consumable complements in variable proportions, this can benefit some consumers while harming others.¹¹⁵

There are some consumers who would not be in the market at all, but enter the market as a result of the tying product price cut. Another group of consumers would instead be in the market with or without the tie, but for them the price decrease in the durable good is greater than the price increase in the tied product. A third group of buyers is however made worse off by the tie, namely those who make more use of the tied good. For this latter category, the higher cost of variable goods more than offsets the lower price of the principal good.¹¹⁶ All consumers may be part of the same relevant market, but no distributional issues are considered when assessing the effect of the tie. For this reason, it seems inconsistent to ignore the distributional effect among groups within the relevant market, but worry when consumers are in different markets.

In sum, the consumer welfare standard appears to be neutral on where the benefits should occur, and it does not play against aggregating the net consumer welfare impact on all affected markets.¹¹⁷ The pass-on requirement is satisfied when consumers receive a fair share of the benefits associated with efficiencies, no matter if consumers are within or outside the relevant market, because in both cases there is no transfer of wealth from them to producers. Accordingly, there seems to be no rationale for artificially ranking consumers based on their inclusion or not in the relevant market. Certainly, a broader notion of consumer welfare may complicate the assessment that competition authorities have to carry out, and to some extent it may negatively impact legal certainty, but this has little to do with the economic rationale and correct application of the consumer welfare standard. Indeed, looking at the aggregate effect of a practice among multiple markets allows a more comprehensive picture of the effect of a practice on consumer welfare. For instance, the increase in price of a product sold by two hypothetical merging firms

¹¹⁵ Herbert Hovenkamp, “Distributive Justice and Consumer Welfare in Antitrust” (2011), available at SSRN: <http://ssrn.com/abstract=1873463>

¹¹⁶ *Ibid*, at 15

¹¹⁷ Leigh Hancher & Paul Lugard, “Honey, I Shrunk the Article! A Critical Assessment of the Commission's Notice on Article 81(3) of the EC Treaty” (2004) 25(7) E.C.L.R. 419

to end-users may also affect different industries and markets where the product is utilized as an intermediate input.¹¹⁸ In such cases, an increase in the price for customers in the relevant market could also increase the cost of goods that use the product in question as an input, potentially resulting in additional deadweight losses and transfer effects beyond those identified in the relevant market.¹¹⁹ Similarly, an agreement that allows air transport operators of complementary services to increase their network and destinations may have a small negative effect on a group of consumers travelling on a hub-to-hub route, but create substantial efficiencies for the passengers of other routes. Such network benefits realized outside the markets may be so significant that the overall effect is an increase in consumer welfare, but this improvement would not be realized if out-of-market efficiencies are neglected.

The arguments advanced so far as a critique of the ‘substantial similarity test’ are based on the idea that the consumer welfare standard does not in itself require that consumers should be the same in order to aggregate across markets. There is, though, another fundamental reason why requiring consumers’ communality may in fact be contrary to the logic of such standard. As previously noted, although it is the interest of final consumers that motivates the choice in favour of consumer welfare, the definition of ‘consumer’ in EU competition law includes both intermediate customers and final consumers. This over-inclusive notion seems to be based on the presumption that reduction in intermediate customers’ welfare will result in a reduction in final consumers’ welfare, and vice versa.¹²⁰ As recognized by the European Commission: “harm to intermediate buyers is generally presumed to create harm to final consumers.”¹²¹ However this presumption has no clear basis in economy theory, and, in practice, interests of intermediate customers and end consumers may in some instances not coincide.¹²² Inconsistently, when that is the case, the welfare of some *producers* (as intermediate customers in the relevant market) can

¹¹⁸ See e.g. *Superior Propane*, Second Appeal, *supra*, note 26, at para 250 and Carlton & Winter, “Competition Policy and Regulation in Credit Card Markets”, *supra*, note 49

¹¹⁹ Thomas Ross & Ralph Winter, “The Efficiency Defence in Merger Law: Economic Foundations and Recent Canadian Developments” (2003), 72:2 Antitrust Law Journal 471-503

¹²⁰ Pinar Akman, “‘Consumer’ versus ‘Customer’: the Devil in the Detail” (2008) ESRC Centre for Competition Policy Working Paper No. 08-34

¹²¹ EC, “DG Competition Discussion Paper on the Application of Article 82 of the Treaty to Exclusionary Abuses” (Bruxelles, December 2005)

¹²² Jones & Sufrin, “EU Competition Law”, *supra*, note 8, page 46

be privileged against upstream producers and *final consumers*. This can hardly be the rationale behind the requirement that a fair share of efficiencies must be passed to consumers. Why, then, not adopting a total welfare standard? Although it appears straightforward that the effect on final consumers should be assessed in order for consumer welfare to be consistent with itself, there may nonetheless be cases where the ‘substantial similarity’ test leads to these paradoxical results.

In conclusion, Article 101 TFEU is concerned with the welfare effects on consumers and with ensuring an efficient allocation of resources.¹²³ This means that increases in society’s total wealth are not sufficient to justify an agreement if efficiencies are not passed on to consumer — because re-distribution from consumers to producers is not neutral — although economic efficiency remains one of the main concerns of European competition policy. At the same time, this standard does not entail re-distributive concerns among consumers themselves. While acknowledging that the preference for consumer over producer welfare represents a distributional justice rationale, this does not exclude that there will be winners and losers among consumers themselves, within and across markets. The unavoidable tension between re-distribution and economic efficiency would be better tackled by recognizing that, except for the initial pro-consumers choice, other re-distributive concerns among consumers usually do not play any role within the relevant market, and should remain alien to competition policy also across markets. Hence, choosing the avoidance of harm to consumers within the relevant market against efficiency benefits passed-on to different consumers outside the relevant market implies a value judgement that has no economic basis and no re-distributive rationale. Thus, these conclusions suggests that the ‘consumer’s substantial similarity’ test unnecessarily limits a more complete fulfillment of the consumer welfare standard, while neglecting significant efficiency gains.

3.3 Efficiencies in Two-Sided Markets and the ‘Appreciable Objective Advantage’ Test

The arguments advanced in support of cross-market aggregation of efficiencies appear particularly forceful when applied to two-sided markets. As already described, two-sided markets are characterized by the interaction of different consumer groups that may be part of different relevant markets. The chicken-and-egg problem faced by platforms requires a specific

¹²³ EC, “Guidelines on Article 101(3)”, *supra*, note 11, para 13

price level and price structure that ‘gets both sides on board.’¹²⁴ Such skewed price structure — which requires one side to subsidize the other — enables an interaction that is generally welfare enhancing for all sides and generates positive feedback effects. Indeed, the side that bears the higher burden can benefit from indirect network externalities arising from a wider consumer base on the other side. In this regard, it is well accepted that an efficient price structure does not reflect relative costs, since it incorporates the surplus that one side enjoys when additional users on the other side are attracted to the platform, and vice-versa.¹²⁵ The fact that one side is charged above cost does not, therefore, necessarily imply market power. Nor is necessarily true that an increase in competition would necessarily result in a more balanced price structure.¹²⁶ However, when two markets are defined separately for each respective side, it would be easy to mistakenly conclude that the side paying more, taken in isolation, is facing anticompetitive behaviour. At the same time, it may well be that in some circumstances network effects can create anti-competitive concerns. That is, network effects can enable a platform to divert transactions from more efficient competing platforms, if a large user base further reduces the elasticity of the more inelastic side. By doing so, the platform can exploit those externalities to charge a higher mark-up to that side. In either case, to correctly understand the dynamic of the market, it would be logical to look at the two markets together in order to take into account both the countervailing effect of a price increase to the other side, and the network externalities. When looking at one market in isolation, it would not be possible to verify the anti-competitiveness of a given price level (as the sum of what a platform charges to all consumer groups) or of usage externalities.

For the purpose of provisions dealing with anti-competitive agreements such as Article 101 TFEU, the first point to be made is that the negative effect of a price increase for one group of consumers may be offset by lower prices for the other group. For the purpose of maximizing consumer welfare, both effects must be taken into account when judging the anti-competitiveness of an agreement or concerted practice. Given that this balancing exercise is often carried out by multi-sided platforms and can generate significant efficiencies, it appears

¹²⁴ David Evans, “The Antitrust Economics of Multi-Sided Platform Markets” (2003) 20:2 Yale J of Regulation 325 354

¹²⁵ Wright, “One Sided Logic in Two-Sided Markets”, *supra*, note 50

¹²⁶ *Ibid*, at 48

particularly incorrect to ignore the welfare of one group on the basis of the artificial boundary created by market definition, and to require proof that consumers in the relevant market receive some ‘appreciable objective advantage’ before allowing aggregation across markets.¹²⁷ This conclusion is particularly compelling when considering the risks of getting market definition wrong in cases involving two-sided market. When the relevant market is defined too narrowly and out-of-market efficiencies cannot be recognized, the risks of type I errors becomes particularly high. On the one hand, the refinement of market definition’s tool in this context depends on the implementation of economic tests capable of incorporating the specificities of such markets. Although interesting suggestions have been advanced by some authors,¹²⁸ no final proposal has been formally implemented yet. On the contrary, the limited scope of out-of-market efficiencies is based on legal tests that find no ground in two-sided markets economics. In particular, ignoring the economic theory of two-sided markets, which teaches that higher prices for one side of the platform may be offset by lower prices for the other side, can create, too, inconsistencies with the maximization of final consumers’ welfare. As it was previously explained, the ‘pass-on’ requirement reflects the need for efficiencies to cleanse anti-competitive effects, in order to avoid distribution of wealth from consumers to producers. Although both users dealing with two-sided platforms are generally ‘consumers’ for the purpose of EU competition law, nonetheless, not all are final consumers. The examples of two-sided platforms where one group of users represents end consumers and the other intermediate customers/producers are many: cardholders and merchant (payment cards), eyeballs and advertisers (search engines), readers and advertisers (newspapers), consumers and shops (shopping malls), consumers and software developers (videogames), and so on. Since the unique dynamics of two-sided platforms require a skewed price structure in order to get both sides ‘on board’ and present complications in assuming a pass-through of any harm or benefit to final consumers, there may be paradoxical cases in which, by relying on market definition, intermediate producers are preferred over final consumers when the ‘appreciable objective advantage’ test is not met. Ultimately, complying with such a test may in many cases depend on the capability to quantify network externalities, which is troublesome given the *de facto*

¹²⁷ Evans & Schmalensee, “The Antitrust Analysis of Multi-Sided Platform Businesses”, *supra*, note 43

¹²⁸ David Evans, “Two-Sided Market Definition” (2009), ABA Section of Antitrust Law, Market Definition In Antitrust: Theory And Case Studies

unevenness in the standard of proof under Article 101 TFEU. Defendants are usually required to quantify efficiencies, while the European Commission faces, in practice, a lower standard of proof that can be satisfied on the basis of qualitative factors. The result is an effective shift of the burden of proof that makes it quite difficult for a platform to successfully raise efficiency arguments and prove ‘appreciable objective advantages’ associated with indirect network externalities.

In conclusion, the ‘appreciable objective advantage’ test is potentially inconsistent both with the economic theory of two-sided platforms and with the *raison d’être* of the consumer welfare standard. Firstly, the literature recognizes that a platform’s ability to set a particular price structure to balance demand on each side is generally pro-competitive and generates overall efficiencies through the internalization of indirect network externalities. The total price level, more than the price structure per se, should be of concern to competition authorities. Secondly, this test may hinder a proper assessment of overall consumer welfare, by mistakenly focusing on losses to one group of consumers and ignoring gains by another consumer group outside the relevant market. This is particularly problematic when the latter are *final* consumers. This ultimately depends on a very demanding burden of proof, which makes it unlikely to quantify benefits arising from indirect network effects. On these grounds, it is suggested that the ‘appreciable objective advantage’ condition under article 101(3) TFEU unnecessarily relegates the role of ‘out-of-market’ efficiencies in the context of two-sided markets. This paper advocates for the possibility to aggregate across market with no condition attached. The next chapter applies the results of this analysis to privately set interchange fees.

4 Application to Multilateral Interchange Fees

The analysis conducted so far can be applied to the determination of anti-competitive effects of privately set interchange fees. As this paper previously discussed, one of the main issues that troubles competition authorities and regulators around the world is that the IF reduces price competition among acquirers, creating a floor to the minimum amount that acquiring banks are required to pay issuing banks for each transaction. Since this strategy is intended to increase the consumer base on the more elastic side through a subsidy from the more inelastic one, competition between networks would excessively increase the level of said subsidy in order to enlarge the number of cardholders and exploit the reduced elasticity of merchants. The restriction

of competition between acquiring banks would prevent bilateral negotiations below the floor set by the MIF and result in over-provision of credit cards as a consequence of inter-competition between networks, a cost which would be ultimately passed on to consumers paying by cash.¹²⁹ This issue has been tackled through competition law and in some countries also through regulation, with ambivalent results.¹³⁰ Generally, the agenda followed by regulators has been based on the idea of a cost-based IF.¹³¹

A review of the relevant economic literature reveals a striking divergence of conclusions regarding the optimal level of interchange fees, with different authors disagreeing on whether the interchange fee is inherently anticompetitive, output maximizing, or irrelevant.¹³² However, few commonly accepted policy prescriptions might be relevant for the analysis of this issue as price-fixing behaviour: a) a variety of factors may result in a privately determined interchange fee that diverges from the socially optimal fee, resulting in payments networks that are either too large or too small; b) a zero interchange fee is generally not socially optimal; c) an interchange fee based purely on costs, ignoring the effect of changes in prices on consumer's and merchant's demand for payment services is generally not socially optimal.”¹³³

Like any two-sided platform, a central decision to be made by a card payment system is how much to charge merchants versus how much to charge cardholders in order to get both sides on board in the right proportion. On the one hand, proprietary credit card schemes can set fees directly to merchants, calculated as a percentage of the value of each card transaction, while charging less to cardholders, who usually pay only annual fees and are often given rebates for

¹²⁹ Julian Wright, “Why payment card fees are biased against merchants” (2012) 43(4) The RAND Journal of Economics.

¹³⁰ See Joshua S Gans & Stephen P King, “Approaches to Regulating the Interchange Fees in Payment Systems” (2003) 2:2 Review of Network Economics.

¹³¹ Wright, “One Sided Logic in Two-Sided Markets”, *supra*, note 50

¹³² Carlton & Winter, “Competition Policy and Regulation in Credit Card Markets”, *supra*, note 49

¹³³ Robert Hunt, “An Introduction to the Economics of Payment Card Networks” (2003) 2 Review of Network Economics, at 88. For more extensive literature on this issue, see: William Baxter, “Bank Exchange of Transactional Paper: Legal and Economic Perspectives” (1983) 26(2) Journal of Law and Economics; Jean-Charles Rochet and Jean Tirole, “An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems” (2003) 2(2) Review of Network Economics; Julian Wright, “The Determinants of Optimal Interchange Fees in Payment Systems” (2004) 52(1) Journal of Industrial Economics; Richard Schmalensee, “Payment Systems And Interchange Fees” (2002) 50(2) Journal of Industrial Economics

using cards. On the other hand, non-proprietary card associations cannot set those fees directly. On the contrary, member banks deal directly with merchants and cardholders and set their respective fees. In order to achieved its desired price structure, a card association sets an interchange fee that acquiring banks pay to issuing banks any time the cardholder uses a card to make a purchase at a merchant. Because an increase in the interchange fee is an increase in acquirers' costs, acquirers respond by increasing their merchant fees. Conversely, from the point of view of issuers, the interchange fee is instead a rebate obtained for providing services to cardholders. An increase in the interchange fee will result in an increase in issuers' rebates, which will increase the rebate offered to cardholders or decrease their card fees. To the extent that increase in merchant fees perfectly equals the decrease in card fees, the only effect of an increase in the interchange fee is a change in the fee structure, with no change in the overall level of combined issuers' and acquirers' fees. For the purpose of assessing supra-competitive prices, it is clear that while some consumers may face higher prices, others will benefit from lower prices as a result of a given interchange fee. According to Evans and Schmalensee, unlike a price in a typical one-sided market, a privately set IF is a cost shifting mechanism that may in some instances enhance the value of the system rather than resulting in an increase in price and reduction of output, as is the case in price-fixing cases.¹³⁴ From an overall consumer welfare perspective, different price structures may keep the price jointly paid to consumers on the same level, while creating cognizable efficiencies for the entire system through the internalization of externalities that one group of users exert on the other group.

When the relevant market includes only merchants, the interchange fee appears a price above the competitive level charged by card associations to merchants, especially if the IF's level is assessed by reference to the cost of providing the service to merchants. However, because the services are jointly provided to cardholders as well, it is necessary to take into account the effects of the interchange fee also on them. When the market is defined narrowly, one way to do so under Article 101 TFEU is to look at the efficiencies generated by the IF and at the effective pass-on to consumers, including those outside the relevant markets. If the price increase for some consumers (merchants) is cleansed by lower prices for other consumers (cardholders) outside the relevant market, there is no harm to the overall consumer welfare. Why, then, require a proof that

¹³⁴ Evans & Schmalensee, "The Economics of Interchange Fees and Their Regulation: An Overview", *supra*, note 48

merchants receive at least some of the benefits from a given interchange fee, when quantifying indirect network externalities is such a demanding and unbalanced burden of proof? As it was argued above, no re-distributive rationale could justify this requirement. This seems *a fortiori* puzzling given that cardholders, not merchants, are final consumers. Under a consumer welfare standard, it is their interest that would be expected to have prominence when assessing any anti-competitive harm. In this regard, Evans and Mateus show how the impact of a hypothetical IF's reductions ultimately depends on the economics of pass-through.¹³⁵ In particular, they point out that the effect on consumers depends on the relative magnitude of the increase in banking fees and the reduction of merchant prices. Specifically, final consumers are more likely to benefit when their retail banks have significant market power and where merchant and acquirers have little market power. On the other hand, the consumers are less likely to benefit when their retail banks are competitive, and merchants and acquirers have market power.¹³⁶ The authors conclude that, except for the rare case where the pass through rates of cost changes for merchants and retail banks are perfectly symmetrical, final consumers are likely to incur net losses as a result of interchange fee reductions.¹³⁷

In the light of the above, it appears erroneous to automatically conclude that collectively set interchange fees negatively impact consumer welfare more than the competitive counterfactual with a lower interchange fee would do only by looking at the merchants' side, without considering the effects on cardholders. This approach is built on the idea of a vertically organized market where issuers provide services to merchants,¹³⁸ which ignores the fact that two-sided platforms provide services to both users jointly. Possibly, an excessively high level of interchange fees could be theoretically explained without relying on any anticompetitive behaviour on the part of the card networks,¹³⁹ that being the result of a skewed price structure

¹³⁵ David S. Evans & Abel Mateus, "How Changes in Payment Card Interchange Fees Affect Consumers Fees and Merchant Prices: An Economic Analysis With Applications to the European Union" (2011) available at SSRN: <http://ssrn.com/abstract=1878735>, at 159,

¹³⁶ *Ibid.*

¹³⁷ *Ibid.*

¹³⁸ Jean-Charles Rochet and Jean Tirole, "An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems" (2003) 2(2) Review of Network Economics

¹³⁹ Julian Wright, "Why payment card fees are biased against merchants" (2012) 43:4 The RAND Journal of Economics

that may in some instances generate efficiency gains for their users. If the concern is that consumers pay a too high price, it must be acknowledged that the economic theory of two-sided markets demonstrates that higher prices for users on one side of the market may be offset by lower prices for users on the other side, as a result of a balancing exercise that platforms must perform in order to get both sides on board. In general, this seems to be consistent with overall consumer welfare, especially when the side paying less represents *final* consumers. Other examples of this asymmetric price structure that favours final consumers are various: search engines usually charge advertisers but not searchers, shopping mall charge retailers but not consumers, video games consoles charge game developers more than final consumers, and so on.

Nonetheless, once anticompetitive effects are found in the relevant market, and the efficiency gains that must be passed on to consumers are assessed under Article 101(3), focusing exclusively on the impact on merchant's welfare can hardly give a complete picture of the effects on consumer welfare properly understood. Such an approach either presumes that merchants' costs (benefits) from a higher (lower) IF are going to be automatically passed on to final consumers, or it arbitrarily privileges merchants' welfare over cardholders' welfare, choice that finds little rationale under a consumer welfare standard. As this paper argued above, although recognizing that both final and intermediate consumers fall within the definition of consumer welfare under EU competition policy, it is the impact on final consumers that should have prominence in order for such standard to be consistent with its initial rationale.¹⁴⁰ Given the unusual dynamics that characterize such platforms and the complex economics of pass-through, it cannot be automatically presumed that the benefit from a lower IF for merchants as intermediary consumers would be passed-on to cardholders as final consumers.

In summary, this specific antitrust issue shows that there are convincing reasons why limiting the analysis of efficiency gains on consumers in the relevant market due to the 'appreciable objective advantage test' may lead to undesirable results. Firstly, it does not allow a proper incorporation of the two-sided platforms' economic principles. It ignores the countervailing effects of the IF on cardholders, disregarding the total price level charged by card network, and it makes it unlikely to raise efficiency arguments based on network externalities. Secondly, it favours the welfare of merchants against the welfare of cardholders, despite the fact that the latter are final consumers,

¹⁴⁰ *GlaxoSmithKline, supra*, note 34

lacking any convincing ground for preferring re-distribution in favour of merchants, and ignoring the effective incidence and pass-through of any hypothetical IF's reduction. A broader definition of the fair share that must be passed on to consumers under Article 101(3) TFEU, that would allow the aggregation of benefits arising to consumers across markets affected by the agreement, would not only positively align Article 101 TFEU with the economics of two-sided markets, but could also, in some instances, avoid the exclusion of final consumers' welfare from the competitive analysis.

Conclusion

The insights derived from the economic theory of two-sided platform raise fascinating questions for competition law. This paper employed the issue of how to incorporate the multisided dimension in the assessment of efficiencies created by anti-competitive agreements under European competition law, in order to identify potential shortcomings in limiting the scope of out-of-market efficiencies, both in this context and more generally. Interestingly, the outcome of this investigation does not simply emphasize the need to align with the unique characteristics of two-sided markets, but also highlight the inescapable contradictions inherent in the choice of consumer welfare as the ultimate goal of competition policy. On the basis of the analysis carried out in the previous pages, this paper suggests that the 'fair share' of efficiencies that must be passed-on to 'consumers' in order to justify an anti-competitive agreement under Article 101(3) TFEU should be interpreted as including not only consumers within the relevant market, but also those in other related markets. In this way, acknowledging the importance of 'out-of-market' efficiencies would allow a better incorporation of two-sided markets' economic principles and, ultimately, a proper fulfillment of the consumer welfare goal.

References

Jurisprudence

Canada (Commissioner of Competition) v. Superior Propane Inc., [2002] Comp. Trib. 16, 18 C.P.R. (4th) 417

Canada (Commissioner of Competition) v. Superior Propane, Inc. [2003] 3 F.C. 529

Case C-238/05 *Asnef-Equifax v Ausbanc* [2006] ECR I-11125

Case C-382/12 P *MasterCard and Others v European Commission* [2014] EU:C:2014:2201

Case C-67/13 P *Groupement des Cartes Bancaires (CB) v European Commission* [2014] EU:C:2014:2204

Case C-8/08 *T-Mobile Netherlands BV v. Raad van bestuur van de Nederlandse Mededingingsautoriteit* [2009] ECR I-4529

Case T-168/1 *GlaxoSmithKline Services Unlimited v Commission* [2006] ECR II-2969

Case T-86/95 *Compagnie Générale Maritime and Others* [2002] ECR II-1011

Director of Investigation and Research v. Hilldown Holdings (Canada) Ltd. (1992), 41 C.P.R. (3d) 289

European Commission Decision COMP/29.373, *Visa International – Multilateral Interchange Fee* [2002]

European Commission Decision COMP/39.595 *Continental/United/Lufthansa/Air Canada* [2013]

FTC v Actavis, Inc. 570 US, 133 S. Ct. 2233, 2238 (2013)

FTC v Tenet Healthcare Corp. 17 F. Supp. (2d) 937, 948

FTC, Genzyme Corporation/Novazyme Pharmaceuticals, Inc. File No. 021 0026 (2004).

National Bankcard Corp (NaBanco) v VISA USA Inc 779 F (2d) 592 (11th Cir 1986)

United States v Philadelphia National Bank, 374 US 321 (1963)

Secondary Materials: Articles

- Akman, Pinar, “Consumer Welfare and Article 102 EC: Practice and Rhetoric” (2009) 32 *World Competition*, 71-90
- Akman, Pinar, “‘Consumer’ versus ‘Customer’: the Devil in the Detail” (2008) ESRC Centre for Competition Policy Working Paper No. 08-34
- Baxter, William, “Bank Exchange of Transactional Paper: Legal and Economic Perspectives” (1983) 26(2) *Journal of Law and Economics*
- Brodley, Joseph F, “The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress” (1987) 62 *NYU L. Rev.* 1020.
- Calzado, Javier Ruiz & Scordamaglia-Tousis, Andreas, “Groupement des Cartes Bancaires v Commission: Shedding Light on What Is not a ‘by object’ Restriction of Competition” (2015) 6:6 *Journal of European Competition Law & Practice*
- Carlton, Dennis & Winter, Ralph, “Competition Policy and Regulation in Credit Card Markets: Insights from Single-sided Market Analysis” (2014) available at SSRN: <http://ssrn.com/abstract=2532166>
- Carlton, Dennis, “Market Definition: Use and Abuse” (2007) 3:1 *Competition Policy International*
- Coleman, Jules S, “Efficiency, Utility, and Wealth Maximization” (1980) 8 *Hofstra Law Review* 509 at 513-514
- De La Mano, Miguel, “For the Customer’s Sake: The Competitive Effects of Efficiencies in European Merger Control” (2002) *Enterprise Papers* No 11, Directorate-General European Commission.
- Emch, Eric & Thompson, T. Scott, “Market Definition and Market Power in Payment Card Networks” (2006) 5:1 *Review of Network Economics*
- Evans, David & Noel, Michael, “The Analysis of Mergers that Involve Multisided Platform Businesses” (2008) 4 *J. Competition L. & Econ.* 663
- Evans, David & Schmalensee, Richard, “Markets with Two-Sided Platforms” (2008) *Issues in Competition Law and Policy* ABA Section of Antitrust Law 1:28 667
- Evans, David & Schmalensee, Richard, “The Antitrust Analysis of Multi-Sided Platform Businesses” (2012) *Coase-Sandor Institute for Law & Economics Working Paper* No. 623
- Evans David & Schmalensee, Richard, “The Economics of Interchange Fees and Their Regulation: An Overview” (2005) *MIT Sloan Working Paper* 4548-05

- Evans, David & Schmalensee, Richard, “The Industrial Organization of Markets with Two-Sided Platforms” (2007) Competition Policy International, 3:1
- Evans, David & Mateus, Abel, “How Changes in Payment Card Interchange Fees Affect Consumers Fees and Merchant Prices: An Economic Analysis With Applications to the European Union” (2011) available at SSRN: <http://ssrn.com/abstract=1878735>
- Evans, David, “The Antitrust Economics of Multi-Sided Platform Markets” (2003) 20:2 Yale J of Regulation 325 354
- Evans, David, “The Antitrust Economics of Two-Sided Markets” (2002)
- Evans, David, “Two-Sided Market Definition” (2009), ABA Section of Antitrust Law, Market Definition In Antitrust: Theory And Case Studies
- Filistrucchi, Lapo, Gerardin, Damien, Van Damme, Eric, Affeldt, Pauline, “Market Definition in Two-Sided Markets: Theory and Practice” (2014) 10:2 Journal of Competition Law and Economics, 293-393
- Gans, Joshua S & King, Stephen P, “Approaches to Regulating the Interchange Fees in Payment Systems” (2003) 2:2 Review of Network Economics.
- Hancher, Leigh & Lugard, Paul, “Honey, I Shrunk the Article! A Critical Assessment of the Commission's Notice on Article 81(3) of the EC Treaty” (2004) 25(7) E.C.L.R. 419
- Hovenkamp, Herbert, “Implementing Antitrust’s Welfare Goals” (2013) 81 Fordham L. Rev. 2471
- Hovenkamp, Herbert, “Distributive Justice and Consumer Welfare in Antitrust” (2011), available at SSRN: <http://ssrn.com/abstract=1873463>
- Hunt, Robert, “An Introduction to the Economics of Payment Card Networks” (2003) 2 Review of Network Economics, at 88.
- Iacobucci, Edward M, “The Superior Propane Saga: The Efficiencies Defence in Canada” in Landmark Cases in Competition Law Around the World in Fourteen Stories (Barry Rodger, ed., The Netherlands: Kluwer Law International, December 2012), 63-87
- Kaplow, Luis, “On the Choice of Welfare Standards in Competition Law” in *The Goals of Competition Law*, (Daniel Zimmer, ed, Edward Elgar, 2012).
- Kirkwood, John B & Lande, Robert H, “The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency” (2008) 84 Notre Dame L Rev, Seattle University School of Law Research Paper No. 09-02.

- Kroes, Neelie “Consumers at the Heart of EU Competition Policy” Speech at The European Consumers' Association (Strasbourg, April 2008), SPEECH/08/212 online at: http://europa.eu/rapid/press-release_SPEECH-08-212_en.htm?locale=en
- Lianos, Ioannis, “Some Reflections on the Question of the Goals of EU Competition Law” (2013) CLES Working Paper Series 3/2013
- Lowe, Philip, “Consumer Welfare and Efficiency – New Guiding Principles of Competition Policy?” (13th International Competition and 14th European Competition Day, Munich, March 1997)
- Mathewson, Frank & Winter, Ralph, “The Analysis of Efficiencies in Superior Propane: Correct Criterion Incorrectly Applied” (2000) 20 Canadian Competition Record 88
- Nachbar, Thomas B, “The Antitrust Constitution” (2013), Iowa Law Review, forthcoming; Virginia Public Law and Legal Theory Research Paper No. 2013-09.
- Rochet, Jean-Charles & Tirole, Jean, “Defining Two-Sided Markets” (2004) IDEI, Toulouse, France;
- Rochet, Jean-Charles & Tirole, Jean, “Platform Competition in Two-Sided Markets” (2003) 1:4 Journal of the European Economics Association 990-1209
- Rochet, Jean-Charles & Tirole, Jean, “Two-Sided Markets: A Progress Report” (2006) 35:3 The RAND Journal of Economics 645-667
- Rochet, Jean-Charles & Tirole, Jean, “Two-Sided Markets: An Overview” (2004) IDEI, Toulouse, France; Marc Rysman, “The Economics of Two-Sided Markets’ (2009) 23:3 The Journal of Economic Perspectives 125-43.
- Rochet, Jean-Charles and Tirole, Jean, “An Economic Analysis of the Determination of Interchange Fees in Payment Card Systems” (2003) 2:2 Review of Network Economics
- Ross Thomas & Winter, Ralph “The Efficiency Defence in Merger Law: Economic Foundations and Recent Canadian Developments” (2003), 72:2 Antitrust Law Journal 471-503
- Rybníček, Jan M & Wright, Joshua D, “Outside In or Inside Out: Counting Merger Efficiencies Inside and Out of the Relevant Market” in 2 *William E Kovacic: An Antitrust Tribute – Liber Amicorum* (Nicolas Charbit & Elisa Ramundo, ed., New York: Institute of Competition Law, 2014)
- Schmalensee, Richard “Payment Systems And Interchange Fees” (2002) 50(2) Journal of Industrial Economics

- Sykes, Alan, “Antitrust Issues in Two-Sided Network Markets: Lessons from in Re Payment Card Interchange Fee and Merchant Discount Antitrust Litigation” (2015) NYU Law and Economics Research Paper No. 14-45
- Trebilcock, Michael J, “The Great Efficiencies Debate in Canadian Merger Policy” (2004) 10:4 New Zealand Business Law Quarterly 298
- Trebilcock, Michael J, “The Lessons and Limits of Law and Economics” (2007) in *In the Eye of the Beholder*, (Pierre Nadeau, ed., Université de Montreal)
- Williamson, Oliver E “Economies as an Antitrust Defence: The Welfare Tradeoffs” (1968) 58 Am. Econ. Rev. 1, 18-36
- Wright, Julian “One-Sided Logic in Two-Sided Markets”, (2004) 3:1 Review of Network Economics
- Wright, Julian “The Determinants of Optimal Interchange Fees in Payment Systems”(2004) 52(1) Journal of Industrial Economics
- Wright, Julian “Why payment card fees are biased against merchants” (2012) 43:4 The RAND Journal of Economics

Secondary Materials: Books

- Bishop, Simon & Walker, Mike, *The Economics of EC Competition Law: Concepts, Application and Measurement* 3rd ed. (London: Sweet & Maxwell, 2010)
- Bork, Robert C, *The Antitrust Paradox: A Policy at War with Itself* (New York: Basic Books, 1978)
- Cooter, Robert D & Ulen, Thomas S, *Law & Economics*, 6th ed. (Boston: Pearson Addison Wesley, 2011)
- Geradin, Damien Anne Layne-Farrar & Nicholas Petit, *EU Competition Law and Economics* (Oxford: Oxford University Press 2012)
- Jones, Alison & Sufrin, Brenda, *EU Competition Law*, 5th ed. (Oxford: Oxford University Press, 2014) at 42
- Posner, Richard, *Antitrust Law*, 2nd ed. (Chicago: University of Chicago Press, 2001)
- Posner, Richard, *Antitrust Law; An Economic Perspective* (Chicago; University of Chicago Press, 1976)
- Townley, Christopher, *Article 81 EC and Public Policy*, 1st ed. (Oxford: Hart Publishing, 2009)

Trebilcock, Michael J, Iacobucci Edward M, Winter Ralph, A, Collins, P, *The Law and Economics of Canadian Competition Policy*, (Toronto: University of Toronto Press, 2002)

Secondary Materials: Others

European Commission, *Guidelines On The Assessment Of Horizontal Mergers Under The Council Regulation On The Control Of Concentrations Between Undertakings*, OJ 2004 C31/03

European Commission, *DG Competition Discussion Paper on the Application of Article 82 of the Treaty to Exclusionary Abuses* (Bruxelles, December 2005)

European Commission, *Guidelines on the application of Article 81(3) of the Treaty* 2004 OJ C 101/7

OECD Policy Roundtables, *Competition Policy and Efficiency Claims in Horizontal Agreements* (Paris, 1996), OCDE/GD(96)65

OECD Policy Roundtables, *The Role of Efficiency Claims in Antitrust Proceedings* (2012) DAF/COMP(2012)23

Office of Fair Trading, *Article 101(3) - A Discussion Of Narrow Versus Broad Definition Of Benefits* (Discussion Note for OFT Breakfast Roundtable, 2010)

US Department of Justice and Federal Trade Commission, *Commentary on the Horizontal Merger Guidelines* (2006)

US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (2010)

US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (1992, rev. 1997)