

TWO-SIDED MARKETS AND CARD PAYMENT SYSTEMS: NEW APPROACHES AND TRENDS UNDER ART. 101 TFEU

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*The paper aims at providing a thorough overview of the special nature of card payment systems that are a well-known example of two-sided markets. Indeed, card payment systems are an instance of two-sided market because they serve two different groups of customers or end-users (i.e. cardholders and merchants) with a joint demand, and they present network externalities in terms of the interconnected role exercised by end-users on those markets, so that the more cardholders there are the more they make the card payment system valuable for merchants, and the other way around. Therefore, the specific nature of card payment systems constitutes the ground for the analysis of two recent decisions in competition law, namely the case of *Groupeement des Cartes Bancaires* and the case of *MasterCard I*. The legal and economic reflections that are raised in this paper aim, therefore, to illustrate the interconnections and commonalities between these two cases in terms of constructing and providing a possible definition of two-sided markets under article 101 TFEU.*

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To Marie

1. Introduction

This paper aims at providing a thorough overview of the special nature of card payment systems that are a well-known example of two-sided markets. To this end, two-sided markets are especially analysed from the perspective of competition law in order to suggest how the European Commission and national competition authorities should construct the market definition of two-sided markets in order to assess anti-competitive agreements under article 101 of the Treaty on the Functioning of the European Union (TFEU).

In paragraph 2 after examining and trying to provide a specific definition of two-sided markets from a competition point of view, the paper illustrates two competition cases (paragraphs 3 and 4) in order to show how the features of two-sided markets can effectively influence the interpretation and, therefore, the application of article 101 TFEU. Ultimately, the legal analysis of the judgements aims at discovering common elements of understanding capable of providing useful interpretation guidelines to assess anti-competitive agreements in relation to two-sided markets.

Indeed, in September 2014 the Court of Justice of the European Union (CJEU) upheld the decision of two major cases, namely *Groupeement des Cartes Bancaires v Commission*¹ and *MasterCard v Commission* (the so called MasterCard I)². The first case shows, *inter alia*, that under law the market definition of a two-sided market is not necessarily connected to the existence of a virtual platform or in general to a platform tool. Indeed, as it is further explained in paragraph 2 of this paper two-sided markets can be identified by at least three principal features under a competition law analysis (namely, indirect network effects, price structure of the market and the diffusion factor), so that the simple legal agreement to set up a network and the determination of the price structure of the network in accordance to that agreement is sufficient to potentially affect the utility of consumers as well as operators of the network. In other words, the agreement can be anti-competitive. On the other hand, the case of MasterCard I is centred on the price structure of two-sided markets in relation to the imposition of multilateral interchange fees and its possibility of being justified through the pursuing of network externalities under the balancing test of article 101, paragraph 3 of the TFEU. It is argued that according to the MasterCard I case the efficiency exemption under article 101 (3) TFEU cannot be invoked in relation to two-sided markets. Indeed, objective advantages in the CJEU's

¹ *Groupeement des Cartes Bancaires v Commission*, C-67/13 P, EC:C:2014:2204.

² *MasterCard and Others v Commission* (Case C-382/2012).

view cannot be limited to one market side but shall occur on all market sides. This circumstance shows the interconnection of two-sided markets, their functioning through network externalities and at the same time differentiate them from one-side markets. Finally, consolidating arguments are exposed in the conclusions.

2. Card payment systems and the two-sided market nature

There is not an agreed definition of two-sided markets³. In particular the various definitions of two-sided markets are usually trying to move beyond the approach that “you know a two-sided market when you see it”⁴, namely they are more centred on studying the dynamic-functioning of two-sided markets instead of focusing on their mere structure. Indeed, the lack of an agreed definition is reflected also into the inconsistent terminology that is used in respect of two-sided markets (such as, platform industries, multisided platforms, etc.).

It seems that the simple acknowledgment that every market can be defined as two-sided, since any transaction requires the existence of at least two or more parties (for instance, a buyer and a seller or a landlord and a tenant) broaden the scope of the research. Therefore, to narrow this scope it is necessary to highlight that the simple interaction between two or more parties is not a sufficient requirement in order to define a market as two-sided. As well, the usage of a platform tool to link agents of different markets does not seem to be the principal feature of every two-sided or multi-sided market(s)⁵. These – as it will be further explained – are mere ancillary features at least from a competition point of view.

³ Organization for Economic Co-operation and Development (OECD), *Two-sided Markets Report*, 11, 2009, available at <<https://www.oecd.org/daf/competition/44445730.pdf>>; CHAKRAVORTI, ROSON, *Platform Competition in Two-sided markets: the case of payment networks*, Federal Reserve Bank of Chicago Working Paper 2004-09, 2.

HAGIU, WRIGHT, *Multisided Platform*, *Harvard Business School Working Paper*, 15-037, 4, 2015, available at <http://www.hbs.edu/faculty/Publication%20Files/15-037_cb5afe51-6150-4be9-ace2-39c6a8ace6d4.pdf>.

⁴ This approach is introduced in the seminal paper of Rochet and Tirole (see ROCHET, TIROLE, *Two-sided Markets: A Progress Report*, 37 *RAND Journal Economics*, 2006, 645).

⁵ EVANS, SCHMALENSEE, *The Industrial Organization of Markets with Two-Sided Platforms*, in *Competition Policy International*, 3, 1, 151. They propose a practical definition of two-sided or multi-sided markets through the existence of a platform that is the means of interconnection of different parties or agents. Nonetheless, this practical definition can be well imagined in the case of mobile payments such as the mobile digital wallet where a virtual

To this end, the real key element that two-sided markets share is their possibility to create network externalities or to better produce network effects, namely the discourse is centred on the well-known theory of network externalities⁶. According to the latter, network externalities are produced when the utility of a consumer in a certain market depends on the number of consumers of the same good or service.

Nonetheless, two-sided markets are markets with a special type of network externality, namely they produce indirect network effects. In particular, this externality does not depend on the number of agents in the same class (the number of consumers of a same product or service), but on the number of different and compatible agents on an opposite market side. For instance, the well-known example of a two-sided market is the card payment system. Here the issuers of credit cards are willing to issue them if there are merchants that are willing to accept them. In the same fashion, the cardholder, namely the consumers of the issuing side are willing to buy credit cards (*i.e.* usage cost) if there is a high number of merchants accepting the card for payment (*i.e.* diffusion). Indeed, in a two-sided market there is always a connection between costs and diffusion (namely, no cardholder would be interested in purchasing a cheap credit card if no merchant is willing to accept it).

Therefore, two-sided markets do not depend only on price, but also on diffusion. They are an instance of indirect network effects. In addition, the prices that are charged on both markets determine also the diffusion factor. Therefore, in relation to card payment systems a good balance of the price structure of the markets and the preservation of positive network externalities are vital to guarantee the two-sided functioning of the markets

platform consent different parties, namely merchants and customers in addition to advertisers and banks to join a network and sharing positive network effects through the common usage of a virtual device. To this end, is possible to think also to the e-commerce platforms and academic journals' platforms and so on. On the other hand, the virtual platform or simply a sort of platform tool can also be absent such as in some cases of payment card systems when the nature of two-sided market is only determined by the simple interaction between merchants and cardholders and between their banks who join a payment system created by banks' association that does not work necessarily by virtue of virtual platforms, but only by means of contractual agreements. Hence, other characteristics will be vital in order to determine the two-sided market structure such as the price structure and consumer utility at least from a competition point of view.

⁶ KATZ, SHAPIRO, *Network Externalities, Competition, and Compatibility*, in *American Economic Review*, 75, 1985, 424; FARRELL, SALONER, *Standardization, Compatibility and Innovation*, in *Rand Journal of Economics*, 16, 1985, 70. These are the principal authors who started to study network effects.

and at the same time to indirectly protect the utility of consumers or end-users.

Summing up in relation to two-sided markets, it seems that at least three main features can be pointed out, showing that two-sided markets are markets where the cumulative presence of the following elements are determinant factors:

- Network externalities or better indirect network externalities;
- Price structure of the market; and
- Diffusion factor that is dependent on the correct functioning of the first two elements.

The correct functioning of these features can make two-sided markets capable of maximizing consumer utility. Therefore, in the case of card payment systems the utility of cardholders and merchants. Specifically, network externalities are usually scrutinised by competition regulators and authorities in order to avoid potential market abuse of dominant position and guarantee that outside operators of the network are not discriminated or limited to join the set up network. This is particularly true in the case of mobile payment systems and digital mobile wallets⁷. On the other hand, this paper is more centred on studying the price structure of two-sided markets in order to assess how to avoid potential cartels or coordinated anti-competitive conducts that are likely to be carried out by network operators in order to protect consumers' interest. In the end, only by limiting these two possible anti-competitive behaviours, namely abuse of dominant position and cartels, the diffusion factor of the network can be affected and consequently the utility of consumers enhanced.

3. *Groupement des Cartes Bancaires*: the background

Groupement des Cartes Bancaires (the “Group”) is a French inter-bank network; an association of undertakings governed by French law and created in 1984. It is composed of the main credit institutions operating in France, to manage and guarantee the interoperability of the payment system for bank card payments and withdrawals. Under this payment system, efficiencies

⁷ The avoidance of market abuse of dominant position and the preservation of positive network externalities is particularly important in mobile payment solutions operated by virtue of digital mobile wallets. See D'ALVIA, *Mobile Payments and Merger Regulation: A Case Law Analysis*, in *Bitcoin and Mobile Payments: constructing a European Union Framework* (Gimigliano ed.), 251.

have been created by network effects that connect issuing banks to acquiring banks. Indeed, the system enables the use of bank cards for payments issued by Group members (*i.e.* issuing side) to affiliated merchants and withdrawals from automatic teller machine (ATMs) controlled by any of the members of the Group (*i.e.* acquiring side). As explained in the paragraph above, card payment systems are an instance of two-sided market. Specifically, the two-sided market nature of such industry is capable of giving rise to economic considerations that lead to new legal considerations, which – as it will be explained below – constitute part of the consolidating arguments and interpretation guidelines concerning a new application of article 101 (1) TFEU⁸ in relation to two-sided markets.

In particular, on the 10th of December 2002 the *Groupement des Cartes Bancaires* notified the European Commission, under Council Regulation n. 17/1962, a series of proposed new interchange fees that would be paid by the Group members when issuing cards or joining the group. Specifically, three pricing measures were advanced:

- A mechanism for regulating the acquiring function (the so called MERFA formula⁹) to determine the fees payable by card issuers in order to ensure that members that mainly issued cards (as compared to acquiring merchants and installing ATMs) would have paid higher fees;
- a change in the membership fee for the Group, namely in addition to a fixed sum of 50,000 Euro levied on membership, a further membership fee per card issued was established in the three years following the membership; and
- a fee for “dormant members” that were essentially members of the Group, which were inactive or not very active before the new pricing measures (the so called “wake up” fee).

The European Commission adopted two statements of objections in July 2004 (which later the European Commission withdrew) and July 2006 respectively. By which it concluded that the facts alleged were the expression of a secret anti-competitive agreement. By decision of 17 October 2007¹⁰, the European Commission concluded that the object of the pricing measures was to limit competition between banks that entered into

⁸ See further paragraph 3.2 below.

⁹ The acronym is for the French *Mécanisme de Régulation de la Fonction Acquéreur*.

¹⁰ European Commission, decision C (2007) 5060 final of 17 October 2007 relating to a proceeding under Article [81 EC] (COMP/D1/138606 – *Groupement des cartes bancaires* ‘CB’).

that agreement in terms of limiting the price reduction of bank cards, and to impede competition of new members (in particular, large retailers, online banks and foreign banks) by restricting their entrance to the market for the issue of payment cards in France. For these reasons, the European Commission required the Group to end immediately the infringement and to refrain from adopting any similar measure in the future.

The Group appealed such decision before the General Court for the annulment. In 2012 the General Court¹¹ dismissed the action due to the fact that the pricing measures contested by the European Commission effectively restricted competition due to their anti-competitive object. Indeed, the General Court found that it was not obliged to examine the effects of the pricing measures on the market. It was considered *sic et simpliciter* as an anti-competitive restriction by object.

Therefore, the Group brought a new appeal before the CJEU against the judgement of the General Court, and contested, *inter alia*, that the General Court had erred in law in the application of the concept of restriction of competition by object. Therefore, the following paragraph is dedicated to the examination of the decision of the Court of last instance.

3.1 The 2014 decision of the Court of Justice of the European Union

The appeal brought by the Group before the CJEU was based on three main legal grounds, namely:

- error in law in the application of the concept of restriction of competition by object;
- error in law in the application of the concept of restriction of competition by effect;
- failure of the General Court to make reference to the principle of proportionality in assessing the context of the pricing measures.

Before examining the judgement of the CJEU it is useful to further explain the interpretation of article 101 (1) TFEU. Under article 101 (1) TFEU agreements, decisions and concerted practices are prohibited if their object or effect is to restrict, prevent or distort competition. When an agreement has an anti-competitive object, it is not necessary for the European Commission or national competition authority to assess also its anti-competitive effects. In other words, a restriction by object can be found only after it is shown that the agreement, by its wording, objectives and

¹¹ CB v Commission T-491/07, EU:T:2012:633.

context¹², displays a sufficient degree of harm to competition, so that it is intended to change appreciably the structure of the market. For instance, a naked cartel or output limitations, and reductions in capacity are explicit agreements or practices that limit competition and effectively change the structure of the market. On the other hand, where anti-competitive behaviours do not reveal a sufficient degree of harm (*i.e.* by object restriction), the effects of the coordination must be considered and the European Commission or the national competition authorities have to show that competition has “in fact” been distorted to an appreciable extent (*i.e.* by effect restriction).

The decision of the CJEU in 2014¹³ has been extremely important at least¹⁴ to clarify certain aspects of its prior case law in relation to the concept of restriction of competition by object. Firstly, it has been outlined that a by object restriction does not have to be interpreted broadly, but it is necessary to adopt a restrictive interpretation of such concept. To this end, the CJEU distances itself from the expansive interpretation of previous cases decided by European Commission in relation to the notion of “by object” restrictions¹⁵.

Secondly, it clarifies that the essential criterion to establish a restriction of competition by object is to establish whether an agreement (or decision or concerted practice) in itself reveals “a sufficient degree of harm to competition” (see paragraph 49) such that it can be regarded “by [its] very nature as being harmful to the proper functioning of normal competition” (see paragraph 50). This circumstance can occur where it has the object of “changing appreciably the structure of the market” (paragraphs 84-85). It derives from this legal principle that the European Commission or national competition authorities must now show likely harmful effects on

¹² WHISH, BAILEY, *Competition Law*, Oxford University Press, Oxford, 2012, 82; MIDDLETON, *Blackstone's UK and EU Competition Documents (Blackstone's Statutes)*, Oxford University Press, Oxford, 2011, 502.

¹³ *CB v Commission* (Case C-67/2013).

¹⁴ Indeed, the case under examination is important also for the reiteration of the principle that the General Court must generally undertake a full judicial review and cannot therefore use the European Commission's margin of assessment for dispensing with an in-depth review of the law and facts.

¹⁵ For instance a broad interpretation of restriction by object was adopted by the European Commission in the following cases: *T-Mobile* (Case C-8/08 *T-Mobile Netherlands BV*, EU:C:2009:343, paragraph 31); *Allianz Hungaria* (Case C-32/11 *Allianz Hungaria*, EU:2013:160, paragraph 48); *Irish Beef* (Case C-209/07 *Beef Industry Development and Barry Brothers*, EU:C:2008:643); *GlaxoSmithKline* (Case C-501/06 *P GlaxoSmithKline Services Unlimited v Commission*, EU:C:2009:610).

competition unless it can clearly and easily show that the restriction at issue, by its very nature, harms competition.

Specifically on the facts, the CJEU found that the General Court excluded the assessment of the degree of harm of the pricing measures at issue with reference to their content, and considered only the subjective intentions of certain members of the Group. In other words, the General Court confirmed its view to the broad interpretation of object restrictions. Indeed, the members of the Group, as indicated in internal documents seized by the European Commission, intended to adopt the pricing measures to impede competition by new entrant card issuers and to protect revenues, so limiting reductions in card fees paid by consumers. This was considered as a sufficient parameter to determine a restriction of competition by object.

For this reason, the CJEU found that the General Court did not apply correctly the legal principles in confirming the decision of the European Commission in relation to the concept of restriction of competition by object. Indeed, the General Court failed to assess whether the pricing measures of the Group had by their very nature a sufficient degree to harm competition and applied a lower threshold of whether the measures were “capable (...) of preventing, restricting or distorting competition” (paragraph 57). Furthermore, the General Court had also upheld that the concept of an infringement by object did not have to be interpreted in a restrictive fashion (paragraph 58). Indeed, as anticipated above it has been a common practice of the European Commission and national competition authorities to seek to expand the concept of restriction by object to adopt infringement decisions without having to assess the actual effects of an agreement on competition. For this reason, the CJEU argued a narrower interpretation of the concept. Thus, a mere assertion of negative effects on competition is not sufficient to establish a restriction of competition by object and a proper analysis must be undertaken as to why this is the case based on the wording, objective and context of the agreement or coordinated practice.

Therefore, the CJEU upheld that the General Court did not explain how the wording of the measures imposed by the Group led to a restriction of competition. It merely inferred that the rules impeded competition by limiting new entrants to access the French market for issuing payment cards (paragraph 68), and thus constituted a restriction of competition by object. For this reason, the General Court did not assess the changing of the structure of the market (paragraph 85). Therefore, the fees charged by the Group did not constitute a measure in itself capable of restricting competition by object, and should be challenged by assessing their actual effects on competition based on factual explanations.

Following these legal considerations, the CJEU upheld in line with Advocate General Wahl's opinion to set aside the General Court judgement and to refer the case back to the same Court in order to carry out an analysis of the effects of the measures¹⁶.

3.2 Remarks on article 101 (1) TFEU: a new legal interpretation of two-sided markets

The *Groupement des Cartes Bancaires* case is important not only for the new perspectives that have been introduced within the definition of restriction by object, but especially for the new trends that have been established in relation to novel or complex economic settings, namely network industries or multi sided-markets. Indeed, according to the CJEU those markets are not subject to a by object analysis because the latter is not adequate for determining whether such measures are caught by article 101 (1) TFEU.

In particular, from a theoretical point of view the CJEU has confirmed that where an agreement concerns a two-sided market such as payment systems or other related markets, its ability to harm competition must be assessed on all such markets. Indeed, payment systems comprise of the card

¹⁶ Although the principal focus of this paper is on legal considerations in relation to two-sided markets in the application of article 101 (1) and (3) TFEU, it is important to highlight that generally considerable uncertainty still persists in assessing a restriction of competition by object or effect. Indeed, apart from general guidelines that have been offered by the CJEU in the *Groupement des Cartes Bancaires* case, it is not clear why measures that prevent market entry and expansion with a view to limiting price reductions, particularly where this is intended by the participants cannot change appreciably the structure of the market as much as hard-core price-fixing or output limiting cartels (namely, self-evident restrictions). Indeed, as the CJEU has pointed out the reason why those cartels are a self-evident restriction of competition by object is that "experience shows that such behaviour leads to falls in production and price increases, resulting in poor allocation of resources to the detriment, in particular, of consumers" (paragraph 51). However, behind these clear examples the question remains as to how to judge whether an agreement or practice has a "sufficient degree of harm to competition" to have the object of restricting competition. Relying on experience does not seem to be a sufficient parameter because it means that there is still a degree of judgment and, therefore, uncertainty and unclear requisites to assess a restriction by object or effect is still questionable. Furthermore, the *Groupement des Cartes Bancaires* case is unclear in relation to the depth or level of detail with which the context analysis should be undertaken. For instance, it has never been established a certain threshold for a reduction of outputs in order to be qualified automatically as a restriction by object. However, the real point is that it is welcomed that the CJEU has cautioned against an overly-expansive application of the concept of restriction by object.

issuing and merchant acquiring markets, with interactions between them leading to network effects¹⁷. Therefore, the CJEU concluded that when coordination concerns more than one market, a restriction of competition by object can be found only when that coordination is by its very nature harmful to competition on all markets to which it relates. In the case of two-sided markets, this must include an assessment of interactions between all the market sides (paragraphs 75 to 79).

Indeed, on the facts of the *Groupement des Cartes Bancaires* case the General Court examined only the issuing market for card payments and did not take into account also the acquiring market. For this reason, the simple exclusion of an effect analysis due to the fact that a free-riding measure is by its very nature anti-competitive in terms of limiting new entrants to the market is no more justifiable. In particular, although such pricing measures would have led some banks to change their contribution or prices, this change was precisely what the Group considered necessary to prevent the risk of implosion that was likely to occur due to the massive free-riding¹⁸ by those who, without having invested in the creation and development of the payment system were admitted to use it.

Thus, the General Court should have recognised that a restriction by object was ruled out because the pricing measures adopted by the Group had in reality the effect of stimulating the acquisition activity through the imposition of higher fees to the issuing side. Additionally, the measures were proportionate and balanced because the members of the issuing side of the Group were free to choose between paying the higher fees or limiting their issuing activity. Therefore, the measures were imposed due to the

¹⁷ See paragraph 2 above for further arguments on two-sided markets and payments systems.

¹⁸ The issuing side and the acquiring side involve contracts between the banks and the consumers/merchants. These contracts have different risk profiles and costs. Indeed, the contract between the issuing bank and the consumer is centred on the risk that the consumer is not able to repay the credit and the interest rate that the issuing bank will charge. On the other hand, the contract between the acquiring bank and the merchant is mainly centred on the promise of the bank to transfer the money to the affiliated merchant without a credit risk and concomitant interest rate. Therefore, financial intermediaries will try to focus their activities on the issuing side due to the attractive perspective of consumers buying on credit and thus having to pay interest rates. For this reason, the higher appeal of providing services on the issuing side can translate into a reduced incentive to invest in the acquiring side. This circumstance consequently can reduce network effects, because there will be less merchants who are willing to accept card payments. Therefore, there is a need for the card organisations to keep the banks on both sides active and prevent the free-riding problem.

possibility of enhancing positive network externalities, promoting diffusion of card payments and indirectly enhancing the utility of consumers.

Finally, the decision has also a practical significance for undertakings and regulators. Indeed, the narrow interpretation that has been imposed by the CJEU in assessing a restriction by object in practice means that the enforcer or challenger in novel situations or complex markets must now show anticompetitive effects for being able to claim that a particular agreement or coordination is caught by the prohibition of article 101 (1) TFEU.

4. The case of MasterCard I: the Background

On 19 December 2007, the European Commission found that MasterCard interchange fees on cross-border transactions within the European Economic Area (EEA) restrict competition between banks¹⁹. The decision of the European Commission was confirmed by the General Court by judgement uphold on 24 May 2012²⁰, subsequently upheld by the European Court of Justice decided on 11 September 2014²¹.

By definition interchange fees are fees charged by the cardholder's bank (*i.e.* issuing bank) to the merchant's bank (*i.e.* acquiring bank) for each transaction carried out at the merchant's outlet. They can be agreed either on a bilateral basis, *i.e.* between issuing and acquiring banks, or on a multilateral basis by means of a decision which binds all banks parts to a payment card scheme; in this latter case, they are referred to as multilateral interchange fees (MIFs). A MIF can take the form of a percentage, a flat fee or a combined fee (percentage and flat fee)²². To this end, it is interesting to understand the rationale of an interchange fee. The following passage is very interesting in order to better understand its *raison d'être*:

<<(...) The rationale for interchange fee is complex, controversial, and deeply rooted in economic theory. The original economic framework, first developed by William Baxter, one time law professor at Stanford University (...) argued that a payment system should be viewed from an economic perspective that takes into account the

¹⁹ Commission Decision C (2007) 6474 final of 19 December 2007.

²⁰ MasterCard and Others v Commission (T-111/08, EU:T:2012:260).

²¹ MasterCard and Others v Commission (Case C-382/2012).

²² BERGER, MOLYNEUX, WILSON, *The Oxford Handbook of Banking*, Oxford University Press, Oxford, 2009, 416.

demand and supply of payment services. The banks – issuers and acquirers – are the suppliers of payment services while the cardholders and the merchants are the consumer of payment services. The core argument in his theory is that the two banking entities jointly supply and the two consumers jointly consume payment transactional services. Joint supply means that one supplier cannot supply without the other and joint consumption means that one consumer cannot consume without the other. It follows that the demand for payment services by the consumers is joint and interdependent. (...) This is also referred to as the ‘network’ effect. [In the same fashion] the joint supply argument indicates that the costs of supplying payment services are also joint. The issuer’s costs and the acquirer’s costs, together, add up to the total cost of supplying payment services. (...) If there is an imbalance between the ratio in which costs are shared and the ratio of merchant and cardholder demand, it should be redressed and adjusted. (...) Baxter viewed the interchange fee as a primarily an adjustment fee to redress this imbalance.>>²³

This passage is extremely interesting in discovering how the card payment systems are one of the most important instances of two-sided markets. Indeed, there is a joint supply of the banks (*i.e.* issuing and acquiring side) connected to a joint demand of customers (*i.e.* cardholders and merchants). In this light, indirect network effects are vital and the diffusion of a payment card does not only depend as explained in paragraph 2 of this paper on the cost for the issue of the card, but on the acceptance of the card by merchants. For this reason, the multilateral interchange fee is viewed as a means of balancing divergent interests in order to make those same interests convergent and, therefore, to promote indirect network externalities while preserving the utility of consumers.

The decision of the European Commission in the MasterCard case related to the so called ‘inter-EEA fall-back interchange fee’, a MIF applied to virtually all cross-border card payments made with MasterCard or Maestro cards as well as to domestic payments in several EEA Member States. It is called fall-back because it applies when no other interchange fee has been agreed bilaterally between the issuing and the acquiring bank: in practice, such fee applies to all cross-border payments made with MasterCard or Maestro cards between Member States of the EEA and to domestic credit card transactions within eight Member States of the EEA (namely, Belgium,

²³ SLAWSKY, ZAFAR, *Developing and Managing a Successful Payment Cards Business*, Gower Publishing, Guildford, 2005, 136.

Ireland, Czech Republic, Latvia, Luxembourg, Malta and Greece) and to domestic debit card payments within Greece and the Czech Republic.

The European Commission found that such fees had the effects of setting a floor under the costs charged to merchants and thus constituted a restriction of price competition, since merchants were unable to negotiate a price below it. Moreover, the European Commission deemed that no efficiency exemption pursuant to Article 81 (3) EC (now Article 101 (3) TFEU) applied since, even though interchange fees could in theory help optimizing the utility of a card network to all of its users, they render payment card acceptance artificially more expensive. In addition, as to the second condition of Article 81 (3) EC (now Article 101 (3) TFEU), the European Commission stated that it cannot safely be assumed that by pursuing its member banks' aim of maximizing sales volumes, MasterCard's MIF has created efficiencies that benefit all customers, including merchants. Finally, as to the third requirements of the recalled rule, MasterCard did not make evidences in relation to the fact that MIFs were indispensable to achieve a maximized system output or any claimed related efficiencies. On reverse, the European Commission considered that, if MasterCard operated without a MIF, merchants would pay lower prices for accepting cards and, as a consequence, their customers should also face lower costs for shopping.

In light of this, the European Commission ordered MasterCard to cease applying its current intra-EEA fall-back interchange fees for consumer credit and debit cards and to refrain from adopting measures having a similar effect. No fine was imposed on MasterCard, because it notified the MIF agreements to the European Commission between 1992 and 1997, and therefore benefited from immunity.

In 2009, to comply with the European Commission's decision, MasterCard capped the intra-EEA cross-border interchange fees applied by its member banks to 0.20% for debit cards and 0.30% for credit cards, but they did not reduce their other interchange fees.

4.1 The 2014 decision of the Court of Justice of the European Union

MasterCard challenged the European Commission's decision before the General Court, which upheld the finding of the European Commission. Subsequently, MasterCard brought an appeal before the CJEU, which was dismissed on the 11st of September 2014. In particular, MasterCard argued that the General Court had failed to take into account efficiencies that the MIF created to both merchants and cardholders. Indeed, the appellant claimed that the General Court focused its attention only on the benefits to

merchants without considering that payment systems are an instance of related markets or better two-sided market that can create efficiencies for both sides, namely cardholders and merchants. Therefore, MasterCard pursued the recognition of a cross-market efficiency. In this regard, the CJEU held that the appellants failed to establish any such advantages in the merchant market and the restrictions that the MIF caused to the latter could not be offset by the advantages for cardholders in the related market²⁴.

In confirming the decision of the European Commission and the judgment of the General Court, the CJEU set forth the following significant principles:

- First of all, MasterCard could be classified as an association of undertakings: its decisions on MIF led to a coordination of conducts of the undertakings part of it and the collective interests of those latter coincided with those taken into account when the judgement was upheld;
- secondly, in relation to the question whether the MIF were objectively necessary for the MasterCard system, since their absence would supposedly have adverse consequences on the functioning of the system, the European Commission deemed that this did not mean that the MIF must be regarded as being objectively necessary: indeed, the General Court duly found that the system was still able to function without the application of these fees;
- thirdly, according to the European Commission and the General Court, some of the issues created by the elimination of the MIF could be hypothetically addressed by prohibiting *ex post* pricing (*i.e.* pricing effected after a purchase has been made by one of the issuing bank's cardholders from one of the acquiring bank's merchants and the transaction has been submitted for payment); the CJEU contested an error of law made by the General Court, since it should have ascertained whether that situation was likely to arise. However, the CJEU considered that such error did not affect the analysis on competitive effects of the MIF carried out by the General Court, which was in any case justified by its relying on the European Commission's hypothesis.

²⁴ See further paragraph 4.2 of this paper.

4.2 Remarks on article 101 (3) TFEU: the balancing test vs. two-sided market

As it has been explained above article 101 (1) TFEU provided a dichotomy between restriction of competition by object and by effect. In particular, a possible anti-competitive agreement can be exempted from being caught by article 101 (1) if its negative effects are balanced against its pro-competitive effects under article 101 (3) TFEU. Indeed, under article 101 (3) TFEU an agreement that would have been prohibited under article 101 (1) TFEU can be considered as valid if four cumulative and exhaustive conditions are satisfied, namely:

- The agreement must improve the production and distribution of goods or contribute to promoting technical or economic progress;
- consumers must receive a fair share of the resulting benefits;
- the restrictions must be indispensable to the attainment of these objectives; and
- the agreement must not afford the parties the possibility of eliminating competition in respect of a substantial part of the products in question.

Furthermore, under the article 101 (3) TFEU Guidelines²⁵ (the “Guidelines”) consumers must be compensated for any negative effects that the anti-competitive agreement creates. This means that consumers are allowed to a fair share of the benefits, so that the agreement has neutral effects and consumers are not directly or likely affected by it.

Consequently, in principle as a general rule the negative effects on consumers that are created in one product market cannot be compensated by the positive effects for consumers in another unrelated product market. Nonetheless, when product or geographic markets are related such as in the case of two-sided markets, article 101 (3) TFEU can be applied only if the <<the group of consumers affected by the restriction and benefiting from the efficiency gains are substantially the same>>²⁶. It is the so-called consumer commonality. Indeed, this rule is made in order to avoid subjective evaluations that entail comparisons across different consumers that are related to different product or geographic markets.

²⁵ Communication from the Commission – Guidelines on the application of Article 101 (3) TFEU (formerly Article 81 (3) TEC), OJ C 101 of 27.4.2004, paragraph 85.

²⁶ Id. paragraph 43.

In relation to the two-sided market nature of payments systems, the CJEU upheld an interesting conclusion in relation to the efficiency exemption under Article 81 (3) EC (now Article 101 (3) TFEU), namely the CJEU confirmed that it could not be applied in the present case. Indeed, in a two-sided system, it is necessary to take into account the effects of the contested measures on both sides of that system (*i.e.* the issuing and the acquiring side), especially when there is interaction between the two sides of the system in question. To that end, it is necessary to assess, where appropriate, whether such advantages are of such a character as to compensate for the disadvantages which that measure entails for competition; moreover, the objective advantages should occur on both sides of the market. In this regard, the CJEU held that:

<<(…) it is necessary to take into account the system of which that measure forms part, including, where appropriate all the objective advantages flowing from that measure not only on the market in respect of which the restriction has been established, but also on the market which includes the other group of consumers associated with that system.

(…) where restrictive effects have been found on only one market of a two-sided system, the advantages flowing from the restrictive measure on a separate but connected market also associated with that system cannot, in themselves, be of such a character as to compensate for the disadvantages resulting from that measure in the absence of any proof of the existence of appreciable objective advantages attributable to that measure in the relevant market, in particular where the consumers on those markets are not substantially the same. For these reasons, the General Court correctly did not need to evaluate the possible advantages enjoyed by cardholders, in light of the absence of any proof of the existence of appreciable objective advantages enjoyed by the merchants>>²⁷

This confirms that the absence of consumer commonality that is required by the Guidelines is not, in itself, an obstacle to assess cross-market efficiencies. Nonetheless, in a two-sided system when there are negative effects limited to one market, the separate advantages created on the other market cannot compensate such effects absent the evidence of “appreciable objective advantages” on the market concern.

²⁷ MasterCard and Others v Commission (Case C-382/2012), paragraphs 237 and 242.

5. Conclusions

The first remark that can be drawn from the examination of the decisions above is that two-sided markets are not only defined by their platform tool. Indeed, the platform tool can be an essential element to assess anti-competitive behaviours in the case of mobile payments and mobile digital wallets. Nonetheless, the platform is only a tool to connect two different types of consumers and apart from specific cases cannot be found so relevant in defining the nature of two-sided markets. This is only an ancillary feature.

For this reason, this paper has argued that the main features to assess anti-competitive behaviours in relation to two-sided markets are: the functioning of their indirect network effects (this especially in terms of assessing the application of article 101 (3) TFEU), the price market structure (in particular in terms of assessing the application of article 101 (1) TFEU) and the level of diffusion of the product or service between different markets with different consumers.

Specifically on the facts of the decisions that have been taken into account in this paper, several principles have been established in relation to two-sided markets, and concerning the application of article 101 TFEU. Firstly, the *Groupement des Cartes Bancaires* case has shown that the analysis of restriction of competition by object is not sufficient in the case of two-sided markets. For this reason, the possible anti-competitive effects must be evidenced on the facts and follow a possible restriction of competition by effect. Furthermore, the assessment of a potential anti-competitive agreement cannot be limited to only one market side, but shall concern all market sides. This confirms the idea that one of the main distinguishing features of two-sided markets is their production of indirect network effects. To this end, the necessary assessment of anti-competitive effects to be carried out on all the market sides indirectly confirms the idea that in two-sided market industries the European Commission or national competition authorities shall provide a product and/or geographical market definition for each market of the industry (*i.e.* sometimes two markets such as in the card payment systems, whereas other times more than two markets such as in mobile payments platforms).

Furthermore, the MasterCard I case confirms the importance of the assessment of indirect network effects in the case of the application of efficiency exemption under article 101 (3) TFEU. Indeed, according to the CJEU's view in MasterCard I there are at least three fundamental principles in relation to two-sided markets to be observed in order to invoke article 101

(3) TFEU: firstly, the assessment of efficiencies in two-sided markets must take into account all the objective advantages flowing from both sides of the market; secondly, it is important to establish a minimum of efficiencies (*i.e.* appreciable objective advantages) in relation to the market side in which negative restrictive effects of competition occur for the benefit of the other related market side; once the minimum is set, the benefits the cross-border efficiencies can be evaluated notwithstanding the absence of any consumer commonality.

Therefore, these landmark decisions have been examined together in order to show from a practical point of view, as well as to confirm from a theoretical perspective, the important features of two-sided markets, and how those peculiar features can limit today the application of article 101 (1) TFEU concerning the restriction of competition by object and article 101 (3) TFEU in relation to the application of the efficiency exemption.