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The role of the interchange fee in card payment systems

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The views expressed here are those of the authors and do not necessarily reflect the official view of the central bank of Hungary (Magyar Nemzeti Bank).

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The role of the interchange fee in card payment systems
(A bankközi jutalék szerepe a kártyás fizetési rendszerekben)

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Abstract

The interchange fee applied in four-party card systems transfers incomes in the payment card business from merchants to cardholders. Assessment of the interchange fee and the interpretation of its role have prompted serious professional debate in recent years. Beyond the professional debate, competition proceedings were also launched in connection with interbank agreements related to the interchange fee and the setting of the fee, but so far specific regulation has been adopted only in a few countries. The first part of the study describes the function of the interchange fee and the related economic theories, followed by a discussion of issues arising in connection with the interchange fee from the point of view of competition authorities and regulators. The second part of the study presents the results of analyses relating to the Hungarian payment card market and interchange fees. On the basis of these results, we conclude that prudent regulatory intervention, taking into account both primary and secondary market effects, may be justified in relation to the interchange fee, due to the structure and level of development of the Hungarian market.

JEL: D04, D23, D43, D52.
Keywords: interchange fee, merchant fee, payment card, merchant, cardholder, acquirer, issuer, competition law, competition authority, restrictive agreement, four-party card system.

Összefoglaló

A négyszereplős kártyarendszerekben alkalmazott bankközi jutalék (interchange-díj) a fizetésikártya-üzletágban a kereskedőktől a kártyabirtokosok felé csoportosít át jövedelmeket. Az elmúlt években a jutalék megítélése, szerepének értelmzése jelentős szakmai vita tárgyát képezte. A szakmai vita mellett több esetben versenyhatósági vizsgálatok is folytak a bankközi jutalékkel kapcsolatos bankközi megállapodások, illetve a jutalék mértékének meghatározásával kapcsolatban, konkrét szabályozásra azonban eddig csak néhány országban láthatunk példát. A tanulmány első része ismerteti a bankközi jutalék működését és a kapcsolódó közgazdasági elméleteket, majd pedig versenyhatósági és szabályozói szempontból mutatja be a jutalék kapcsán felmerülő kérdéseket. A tanulmány második része bemutatja a magyar fizetésikártyajátszó piacának és a bankközi jutalékukkal kapcsolatos elemzése értékeléseit. Ez alapján megállapítható, hogy a magyar piac szerkezete és fejlettségi szintje miatt indokolt lehet egy, a bankközi jutalékokkal kapcsolatos, körültekintő és mind az elsődleges, mind a másodlagos piaci hatásokat figyelembe vevő szabályozói beavatkozás.
1 Introduction

The interchange fee applied in relation to four-party card systems has been the object of intense debate recently and remains a contested issue in terms of regulation and competition law. The costs and price of the systems play an important role in relation to the competing payment systems in terms of both consumers and merchants using the systems and social welfare.

Payment with payment cards at a system level constitutes an electronic payment system which is likely to produce potential savings. Payment card payments can support the development of the payment system; aside from modernisation of the system, however, it is unclear whether the various incentives in place in the current payment system genuinely orient parties in the direction of a socially optimal payment instrument.

In the systems analysed, with the help of the interchange fee, the individual parties can choose to transfer costs, which may serve the interests of the entire system or the interests of particular parties. The interchange fee is the fee paid by the credit institution (acquirer bank) enabling the acceptance of payment cards to the credit institution issuing the card in the course of the card payment transaction. The interchange fee generates income transfer between card users, non-card users, merchants and banks, which may serve the optimisation of the system and also optimise the profit of the individual parties. Due to the high fees, the representative organisations of merchants who finance the system generally campaign to maximise or abolish the interchange fees. Numerous competition proceedings and regulatory initiatives have been launched in relation to the setting of the interchange fee. This study attempts to present the theoretical basis and the related regulatory and competition policy criteria regarding the interchange fee, and, after a brief description of the Hungarian card market, to discuss the development of these issues on this market.

In the first part of the study, following the description of the basic concepts and operation of the four-party card system, we present the major results of economic theory relating to card markets. By examining the role and effect of the interchange fee under various assumptions, the models provide information on its assessment from a competition point of view and its possible regulation.

In view of the fact that in addition to the many recently conducted competition proceedings, there are many such proceedings and lawsuits currently in progress in connection with the method of setting the interchange fee, it is essential to reference the relevant competition cases. There is special focus on proceedings conducted in the past and currently by the Directorate General for Competition of the European Commission against the major four-party card systems (Visa, MasterCard).

The externalities identified in connection with the interchange fee have raised the need for regulation in many legal systems, and we thus consider it important to address the key issues and dilemmas arising in relation to regulation. We describe in detail the example of Australian regulation, which plays a pioneering role in this area.

A brief overview of the market is necessary to understand trends observed on the Hungarian payment card market. Our study references the competition proceedings ending in 2009 (Vj-18/2008/341) and attempts at regulation in 2009 and 2010. The study ends with conclusions drawn from the above.

1 The four parties participating in the transaction are the merchant, the merchant’s bank (acquirer), the cardholder and the bank of the cardholder (issuer).
2 Development and operation of the interchange fee

The interchange fee functions as a special element of four-party payment card systems. Thorough knowledge of the operation of four-party card systems is necessary for the assessment of the interchange fee. This chapter discusses the parties of the system, features of the transaction, function of the interchange fee and the related regulations.

2.1 THE FOUR-PARTY CARD SYSTEM

Parties in the system. At the level of the basic transaction, the participants of the four-party card system are the customer (cardholder) initiating the card payment and the merchant accepting the card. Cards are accepted by the card acquirer bank on behalf of the merchant, while the card issuer bank provides the card to the cardholder. The card company is the fifth – indirect – party to the transaction, providing the platform necessary for the conducting of the transaction.

Chart 1 shows the payment process in the four-party card system and the direction of fee flows related to the transaction.

Transaction process. The cardholder initiates a payment transaction at the merchant, where the card is swiped through the POS terminal. An automatic authentication request message is launched from the merchant, indicating the amount of the purchase and data relating to the cardholder through the acquirer bank to the card company which forwards it to the issuer bank. The issuer (or its authorised service provider) checks whether there is sufficient funds on the account linked to the payment card and sends back the authorisation (or rejection) of the transaction to the merchant through the same route.

Usually, at the end of each day, the merchant sends data relating to all payment card transactions it conducted to its bank (acquirer bank), which forwards these to the clearing and settlement system operated by the card companies (e.g. MasterCard, Visa). The card companies calculate the net positions of the individual issuer and acquirer banks (the net debt or receivables of the bank), including the interchange fee and other card company fees. The interbank settlement of banks’ net positions provided by the card companies is settled on the accounts managed by the settlement agent.

2.2 MERCHANT AND INTERCHANGE FEES

In the four-party card system, various fees are charged for the transactions. Merchants typically pay a merchant fee for the acceptance of cards, which is generally determined as a certain percentage of the service. The transactions are generally free of charge for cardholders; they pay a payment card fee to the card issuers generally on an annual basis.

The interchange fee functions as a special element of the system, paid by card acquirer banks to the card issuer bank as a specific percentage of the given transaction, where some of the revenues are thus transferred from the card acquirers to the card issuers.

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1 The term ‘interchange fee’ is used not only in connection with payment card payments, but also in relation to cash withdrawal transactions (ATM interchange fee), for example. This study only examines the interchange fee related to card payments.

2 Thus, the four-party model is in fact a five-party one, but it is traditionally termed as a four-party model.

3 In Hungary, in the case of MasterCard, settlement is performed within the real time gross settlement system (VIBER) through the Magyar Nemzeti Bank, while MKB Bank is the settlement agent of Visa. While in the case of MasterCard, debit and credit positions are booked in VIBER by account transfer, in the case of Visa, each bank in a debit position sends the amount of debt by Giro credit transfer and similarly transfers amounts to be credited to banks in a credit position.
Chart 1
Payment process in the four-party card system

1. Payment card

Cardholder

2. Payment

Merchant

5. Net positions

Card company

4. Payment data

Settlement agent

6. Debit

Issuer

7. Credit

Acquirer

Chart 2
Flow of information and fees in the four-party card system

The cardholder pays with card at the merchant

Route of payment order and authorization

Fees

Card company (clearing)

Settlement agent

Merchant fee

Discount

Telecommunication fees

Interchange fee

Issuer

Acquirer

Merchant
The parties of the system also pay fees to the card company providing the platform; these are typically annual membership fees or transaction-based variable fees.5

2.2.1 Merchant fee

The merchant fee is the amount – commonly set as a percentage of the payment transaction – charged by the bank of the merchant to its card accepting customer. The rate is negotiated by the bank and its customer (the merchant), determined, for example, by the following:

- volume of turnover transacted by the merchant (for example, the fee charged for retailers and major retail chains or petrol stations varies),
- place of the transaction (personal or Internet card acceptance, in the latter case, the bank’s liability is greater in relation to fraud, and therefore the fee is also higher),
- merchant’s scope of activity (for example, high fees are charged by acceptance points at places of entertainment, gaming halls or ATM mobile phone top-up),
- trademark on the card: Visa, MasterCard (98% of domestic cards in Hungary) or American Express or Diners; the fee is much higher globally in relation to the latter, so-called T&E cards,6
- services covered by the bank in the merchant fee (for example, only its services relating to payment card transactions or POS terminal rental fees, maintenance, etc.).

2.2.2 Interchange fee

The interchange fee is the fee paid by credit institutions (acquirer banks), enabling the acceptance of payment cards, to the credit institution issuing the card in the course of the card payment transaction. The rate of the fee is generally determined by a bank community or card company on a mandatory basis for the participating banks (it can also be a bilaterally determined value between two banks). The interchange fee can be a fixed amount, a percentage of the transaction value, or a combination of both.

Multilateral interchange fee. The interbank agreements regulating the rate of the interchange fee can be bilateral (only governing the relationship between two parties) or multilateral (agreement is uniformly applicable to all parties). In the latter case, the interchange fee is called the multilateral interchange fee (MIF).8

Types of interchange fees based on regional distinction: domestic fee, regional fee and inter-regional fee. The domestic interchange fee is charged for inland transactions. The regional interchange fee is charged for transactions between countries situated in a given geographical region, that is, where the bank issuing the card and the merchant accepting the card are in different countries, but within the same region. The inter-regional interchange fee is applied when the issuing institution is based in a region other than the one of the card accepting merchant. In all cases, the regional and inter-regional interchange fees are set by the international card companies, while the fees charged for domestic transactions are set by an international card company or national bank community, or in some cases, by the authorities of a given country.

Rate of the interchange fee according to card type, cardholder, type of merchant and other criteria. The rate of the interchange fee may be determined by further criteria in all three cases: credit and charge card fees are commonly determined as a percentage of the purchase, while a fixed amount may also be charged for the use of debit cards (both

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5 The transaction-based fees paid to the card companies are generally low, fixed amounts.
6 Travel&Entertainment charge cards, typically offering special discounts.
7 See chapter entitled 'Solutions applied without the interchange fee'.
8 Card companies may also be party to such multilateral agreements.
rates can be as low as zero). The rate of fees may also vary according to whether the transaction was conducted with a consumer or corporate (business) payment card. Fees can also vary according to merchant types: the rate of the interchange fee is also generally much lower than average in relation to major retail chains and petrol stations, which are in a better bargaining position for setting the merchant fees. Other factors may also determine the rate of the fee: the applied technology (transaction conducted with magnetic strip or chip card, electronic POS terminal\(^9\) or imprinter\(^11\)), and whether the transaction is conducted between present or remote parties (personal, Internet, or possibly phone purchase).

### 2.2.3 Two important rules in the card business: the no-surcharge and honour-all-cards rules

Numerous rules are applied in card payment systems. The no-surcharge rule and honour-all-cards rule should be noted in connection with the interchange fee. These are generally set by the card companies.

**No-surcharge rule.** According to the no-surcharge rule, merchants may not discriminate between the applied payment instruments; they must charge the same price for the sold product or service whether it is paid for with a card or cash or by other means (e.g. credit transfer). Owing to the above, merchants cannot effect differences in the price of payment services in the consumer price.\(^12\)

**Honour-all-cards rule.** According to the honour-all-cards rule, the merchant is obliged to accept all types of cards issued by a given card company. This is of particular importance, as the cost of certain types of cards is not the same; there are card types supported with various incentive programmes, for example, where the cost of card acceptance may be much higher.

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\(^9\) Some experts question the justification of percentage-based fees, arguing that costs related to the processing of payment transactions are independent of the paid amounts.

\(^10\) Electronic POS (Point of Sale): electronic card accepting device operated at the cash registers of stores.

\(^11\) Imprinter: mechanical card swipe device (also called an 'iron'). It is generally used in Hungary if the electronic POS is out of operation for some reason, or payment card turnover is so low that the installation of an electronic POS would not be economical.

\(^12\) Subsequent chapters discuss the key issues relating to surcharging.
3 Economic background of the interchange fee

Major debates have emerged in connection with the rates and rate-setting method of the interchange fee and the application of rules relating to the operation of card systems. Economic theories and models relating to four-party card systems, including the application of the interchange fee, provide substantial assistance for the assessment of the interchange fee from the point of view of regulation and competition. These theories examine the operation of card systems and the role and effect of the interchange fee, primarily within a simplified framework, and attempt to provide a possible solution for the problems and market failures identified within the models.

The following section of the chapter describes in detail the key economic theoretical research related to the card market and the interchange fee and its results. The subsequent chapters discuss regulatory and competition measures based on these theoretical models.

3.1 TWO-SIDED MARKETS AND NETWORK EXTERNALITIES

Two-sided markets. With respect to two-sided markets, the demand-supply relationships of the market are affected by two interactive sub-markets; the market has two sides, two different consumer groups that enter into a transaction through a common platform. On the two sub-markets, demand and the applied price are not independent of each other; the number of transactions conducted on one sub-market is determined by the number of transactions on the other sub-market.\textsuperscript{13} To ensure that a two-sided market creates optimal added value, it is necessary to adequately coordinate demand on the two sides, as participation of the two consumer groups should be balanced within the system.\textsuperscript{14}

Four-party payment card systems. In relation to four-party card systems, the two sides are card acceptance and card issuance. The card company provides the platform that connects the two sides. To ensure the functionality of the system, adequate participation of the consumer groups on both sides – merchant demand on the acquirer side and cardholder demand on the issuer side – should be ensured within the system.

Network effect. The number of consumers is highly important, both in the area of card acceptance and card issuance. The motivation of cardholders to use card payment transactions will grow in proportion to the increasing acceptance of payment cards as payment instruments by merchants. Card acceptance on the merchant side, however, is encouraged if more cardholders, i.e. customers potentially paying with cards, are on the market. Thus, demand on the two sides mutually and positively affect each other, as both sides are interested in a large number on the other side.

A network effect arises if the value of a product increases for the consumer with a rise in the number of consumers using the product.\textsuperscript{15} As a unique aspect of the payment card market, these network effects do not arise separately on the sub-

\textsuperscript{13} Examples of two-sided markets: newspapers, where the two sides are represented by readers and advertisers; dating sites, where the two sub-markets are represented by the two sexes; video game consoles, where product-related decisions take into account the demands of game creators and players.


\textsuperscript{15} Evans (2002), p. 4.
markets, but between them. Accordingly, these are cross-side network effects and positive cross-side externalities between the two sides on the payment card markets.\textsuperscript{16, 17}

**Role of market maturity.** Network externalities may be more pronounced upon the launching of a system than during its continuous operation. The network effect poses a type of ‘chicken or the egg’ dilemma in relation to the introduction of a new product or service. This means the following in the context of card markets: how can we acquire cardholder customers without a card acceptor merchant network, and how can we contract with merchants for the acceptance of cards without a cardholder customer base? The launching of card markets may necessitate a balancing mechanism that supports the start-up of the system; the interchange fee may function as such balancing mechanism, potentially encouraging the development of the card issuer side.\textsuperscript{18}

The effect of network externalities generally declines in parallel with the increasing maturity of the network.\textsuperscript{19} Thus, although the legitimacy of interchange fees may be warranted at a lower level of development of the card market, they are less warranted in relation to mature card systems. It is particularly problematic to explain within a theoretical framework if in mature, widespread card systems there is a rise and not a decrease in interchange fees in parallel with the development of the systems.

**Optimal price structure and price level.** Owing to the unique properties of two-sided markets, in relation to pricing, not only the price level, but also the price structure – the ratio of prices paid by consumer groups with different demand on the two sides, relative to each other – is also an important issue.\textsuperscript{20} Both the price level and the price structure depend on costs arising in connection with the two sides, price elasticity of demand on both sides and network effects between the two sides. The price structure, maximising profit, is very asymmetric to the advantage of one side in the general model relating to two-sided markets. Thus, the system can be balanced to the disadvantage of one side through the appropriate price structure, to the support of the other side. Generally the side with higher price elasticity of demand should be supported; this is most likely to be cardholders on the card markets.\textsuperscript{21} Support is implemented through the interchange fee, that charges most of the arising costs to merchants. Obviously, in addition to a decision on the price structure, the specific price level also plays an important role in ensuring the adequate operation of the given market.

On the basis of the above criteria, the legitimacy of a ‘balancing’ mechanism on the market is possible, where the interchange fee – responsible for balancing – may have an optimal level in terms of welfare/society. The available theories and research, however, do not provide clear answers as to the direction and rate of the fee, as numerous uncertainty factors surround both the price level and the price structure.

On two-sided markets, the setting of the optimal price level in terms of society/welfare is made difficult, inter alia, by the above noted network externalities, because it is possible that an increase in issue on side A benefits side B which, however, does not appear in the demand curve of side A. Even in cases where one of the sub-markets (A) is in an optimal position in itself,\textsuperscript{22} a shift, increased issue on side A may be advantageous from a social point of view, due to the benefits arising on side B.\textsuperscript{23}

\textsuperscript{16} The market with the most network externalities is also a two-sided market (Rochet and Tirole, 2003b, p. 1).
\textsuperscript{17} There is debate in the economic literature as to whether the network effect is regarded as an externality (in all cases). For a negative view, see, for example, Liebowitz, S. J. and Stephen E. Margolis (1994): Network Externality: An Uncommon Tragedy. Journal of Economic Perspectives, vol. 8 no. 2, pp. 133−150.
\textsuperscript{18} There are many practical examples, where products and services with network externalities – card systems, among others – were successfully introduced without support or a ‘balancing’ mechanism.
\textsuperscript{19} Rochet 2003, p. 98.
\textsuperscript{20} Evans and Schmalensee (2005), p. 8.
\textsuperscript{21} It is widely argued in the theoretical literature that cardholders have higher price sensitivity than merchants. It is a matter of debate, however, as to which side should be ‘supported’ on the basis of elasticity. Rochet and Tirole, for example, conclude that the side with a higher price elasticity of demand pays the higher price in relation to a platform service provider in a monopoly position. Some question the result by arguing that this contradicts general economic intuition, while others accept the result as proven in relation to the management of elasticity as dependant on the price. For more details, see e.g. Krueger (2009).
\textsuperscript{22} For consumers on side A, the market price equals the marginal cost.
\textsuperscript{23} Evans and Schmalensee (2005), p. 12.
As regards the price structure of two-sided markets, most analyses focus on the comparison of profit maximising and welfare maximising price structures (welfare maximising prices are generally replaced with ‘Ramsay’ prices\(^{36}\)). On the basis of research, two solid conclusions may be drawn with respect to the conditions of the models. Firstly, neither the welfare maximising optimum, nor the one based on Ramsay pricing is exclusively cost based. The optimal price structure depends on price elasticities and externalities on both sides. This observation is particularly interesting in connection with models and regulatory attempts that justify the interchange fee on the basis of the cost of services provided by the issuer bank.\(^{35}\) According to the observation, the profit maximising price structure does not necessarily correspond to the welfare maximising price structure. This is because there seems to be no clear correlation between the profit maximising and the Ramsay price structure optimising welfare on a ‘second-best’ basis. While the two are rarely identical, the direction and rate of the difference also depend on costs, demand and externalities.\(^{26}\) In other words, if the maximisation of profit and maximisation of social welfare do not lead to the same result, as suggested by most models, it is difficult to determine the relationship between the two types of optimum and thereby difficult to manage the issue of the interchange fee from the regulatory side.

**Price setting participants.** With regard to the application of a ‘balancing’ mechanism, the party determining the direction and rate thereof is also an important factor. In the current form of four-party card systems, several parties do not have any say in setting the interchange fee. Merchants, which are important participants in the system, do not play any role in setting the interchange fee, notwithstanding the fact that they finance the interchange fee through the merchant fee paid to the card acquirers. Cardholders do not directly participate in setting the fee either, even though merchants may pass on to them the financing of the interchange fee through consumer prices.

### 3.2 Usage externalities and interchange fee models

**Usage externality.** In purchase transactions, buyers (cardholders) frequently choose the payment instrument for their purchase, while merchants cover the direct cost of such choice, depending on the payment instrument chosen. Literature defines this as usage externality.\(^{27}\) In theory, the interchange fee can be capable of internalising the usage externality,\(^{28}\) as it can also create it or make it more severe. The theoretical models below primarily analyse the handling of this externality.

#### 3.2.1 Baxter model

**The Baxter model.** A pioneering theoretical model was put forth in the 1983 study\(^{29}\) of William Baxter relating to the analysis of interchange fees. He argues that the interchange fee is capable of internalising the usage externality. In basic terms, according to the Baxter model, the interchange fee establishes an equilibrium between the costs and benefits of the card payment system. In the model, the revenue of issuer banks collected from cardholders does not cover the costs of average card issuers within the card systems, while the revenue of acquirer banks collected from merchants exceeds on average the costs incurred by acquirer banks.\(^{30}\) In Baxter’s framework, the interchange fee adjusts the balance deficit within costs by supporting the issuer side of the system. Under perfect competition conditions, the interchange fee determined at an optimal level internalises usage externality and ensures the efficiency of card use.\(^{31, 32}\)

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\(^{24}\) A price that maximises social welfare, while excluding the possibility of a negative profit.

\(^{25}\) This finding is essentially based on the argument that in the course of setting the optimal level of the interchange fee, it is not justified to exclusively consider the cost of the background services, but also other factors inherent to two-sided markets. In practice, Visa has proposed such a cost-based model for setting the interchange fee and the authorities of some countries (e.g. Australia) have also applied cost-based regulation. (For details, see the chapter entitled ‘Competition proceedings relating to the interchange fee’).

\(^{26}\) See e.g. Rochet (2003), p. 101.


\(^{28}\) Baxter (1983).

\(^{29}\) “...income from card holders is too small for the average card-issuing bank to cover its costs, whereas income from merchants is, on average, more than sufficient for merchant banks to cover their costs.” (Baxter, 1983, pp. 575-576)


\(^{31}\) According to Baxter, the size of a card system – and thereby the welfare of system participants – reaches a maximum if cardholders and merchants share the total marginal cost of issuers and acquirers in proportion to the value of services provided to them. If the interchange fee is too low, the efficiency of the system decreases due to losses arising on the issuer side, whereas if the interchange fee is too high, the additional costs incurred by the merchant lead to similar consequences.
Problems of the Baxter model. The Baxter model defines many conditions which, if suspended, lead to varying results in comparison to the basic version of the model. According to one of the key assumptions, the demand of merchants and cardholders is given and does not depend on each others’ behaviour. The assumption of perfect competition between banks and the homogeneous approach to the merchant side is also another highly restrictive condition. Furthermore, the model does not take into account the effect of card usage on downstream markets (e.g. a rise in retail prices).

In Baxter’s model, the willingness of merchants to pay for card acceptance through the interchange fee exclusively depends on their transactional benefits resulting from card acceptance. Analysts, however, agree that strategic elements also shape merchant behaviour; thus they would be willing to pay even more than the ‘Baxter price’ to avoid suffering a competitive disadvantage over other merchants.33

Upon suspension of the assumption relating to perfect competition and the assumption of all market power on the side of issuer banks, the equilibrium interchange fee of the Baxter model no longer maximises output in the system, and thus the welfare of the parties. This is attributable to the fact that by virtue of market power, issuer banks may gain positive profit through the interchange fee, which diverts the equilibrium value of the interchange fee from the equilibrium position existing in case of perfect competition.34

The interchange fee, as a cost element, may further result in increasing consumer prices. If merchants do not differentiate between individual payment instruments on the basis of the price, the interchange fee may be integrated in consumer prices due to more expensive payment instruments, possibly resulting in decreased welfare of both cardholders and merchants. In this respect, maximisation of the system’s output does not necessarily lead to the maximisation of the welfare of system participants (primarily merchants and cardholders).35

Due to the strong assumptions applied in the model and their abstraction from real market conditions, as well as the limited practical applicability of the model, analysts and the European Commission do not regard the Baxter model as an appropriate framework for determining the optimal rate of the interchange fee.36

3.3.2 Alternative theories

Equilibrium situations based on no-surcharge – neutral interchange fee. Since introduction of the Baxter model, several studies and theses have been published which find Baxter’s argument logically false and put forth different methods for the internalisation of usage externality.38 Remaining in a perfectly competitive environment and without transaction costs (no-surcharge), merchants may apply differentiated pricing based on payment instruments (i.e. they may set different prices depending on whether the customer pays with cash, card or by other means). Customers thus perfectly internalise the externality, and their cardholding and card usage decisions will be determined by costs and benefits arising on both sides of the card transaction. In the resulting two-price equilibrium, the effect of the interchange fee becomes neutral (i.e. it becomes unnecessary).41

33 See e.g. Rochet and Tirole (2002), p. 5. This strategic element of merchant behaviour is also confirmed by empirical research of the European Commission (Commission, 2007, p. 193, par. 704).
34 See e.g. Commission (2007), pp. 193-194; par. 706.
35 Ibid., par. 707.
36 For details on the deficiencies of the model, see e.g. Katz (2001), par. 90–91.; Rochet and Tirole (2002); COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 704-708.
37 The importance of the study and the model, however, is beyond dispute in terms of the development of subsequent research and analytical development in the area, and notwithstanding the obvious deficiencies of the model, the Baxter model is often referenced in arguments relating to exemption in proceedings launched by the European Commission (see below: chapter entitled 'Competition proceedings relating to the interchange fee').
40 For example, in the Carlton and Frankel (1995) model.
41 This basically means that due to perfect competition and no-surcharge, merchants pass on all benefits and costs of card transactions to cardholders on the one side, but on the other side, costs and benefits arising for issuers are also passed on to cardholders. Thus, whatever the rate of the interchange fee, it is entirely passed on by merchants to cardholders, and issuer banks do the same, only with a reversed sign, as the interchange fee arises as a cost for merchants, while it is revenue for issuer banks. Thus, the interchange fee is neutral.
Conclusions drawn from the alternative models. Model I of Rochet and Tirole, as well as Wright, analyses the effects of the interchange fee under no-surcharge. Rochet summarises the results of the Rochet-Tirole and Wright models by stating that with no surcharge, the interchange fee has a neutral effect on the market (profit maximising) equilibrium and card use is suboptimal. The no-surcharge rule increases card use and improves social welfare where merchants have a monopoly position; it also increases card use where there is competition between merchants, but its effect on social welfare is not straightforward. With perfect competition on the merchant side, the no-surcharge rule affects neither the volume of card use nor welfare. On the basis of conclusions drawn from the models, Katz notes that surcharging may function as a mechanism capable of establishing an equilibrium between the two sides of the card market in terms of costs and benefits; that is, the market can be capable of internalising externalities through surcharging. He also notes that on the basis of the models, market power on the issuer side is significantly responsible for a lower-than-optimal rate of card use, and thus the obstacles standing in the way of issuer market competition should be dismantled from a social perspective.

Criticism by Schmalensee. One of the major disadvantages of the Rochet and Tirole model I is that it assumes a homogeneous group of merchants, while the cardholder side is heterogeneous. This results in asymmetry between the two sides, whereas in practice, the system is probably characterised by a higher level of equilibrium. Richard Schmalensee proposes a more balanced model in which the volume of card transactions depends on two ‘quasi-demand’ functions. In this model, a transaction is concluded only if the customer wants to use his card and the merchant accepts it. Schmalensee allows an absence of perfect competition in the card system (on the issuer and/or acquirer side), but he regards other parts of the economy as being in perfect competition.

In this model, the interchange fee (similarly to Baxter’s model) transfers costs between the acquirer and issuer banks. Under special circumstances, where there is a single acquirer bank and a single issuer bank, and the demand curves are linear, the profit maximising interchange fee also maximises the output of the system and welfare. These relationships, however, are significantly more complex with more general specifications, even under strict assumptions relating to demand. Thus, the rate of the socially optimal interchange fee depends on demand conditions, costs, competition between issuer banks and between acquirer banks and externalities between merchants and customers. Therefore, the model is not capable of proposing a regulation of the interchange fee.

3.2.3 The tourist test

Rochet-Tirole model II – the tourist test. The second model of Rochet and Tirole, based on the so-called tourist test, represents major progress in comparison to previous models. The general assumptions of the basic model include price coherence, constancy of issuer margins, given number of issuers, perfect competition between acquirer banks and the homogeneity of merchants. The model also assumes that merchants are capable of internalising the surplus arising

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42 Rochet and Tirole (2003a) assume imperfect competition between card issuers and assume strategic behaviour by merchants. The model suggests that with strong merchant competition, the interchange fee determined by issuer banks, maximising their profit, is higher than desirable from a social welfare point of view.

43 Wright (2003) carries out analyses with alternative models of merchant behaviour. He analyses monopoly and perfectly competing merchant models. In this version of the model, merchants specialise, where merchants working with low prices only accept cash, while merchants in a higher price category only serve customers who pay with cards.


48 Schmalensee (2002).

49 In other words, Schmalensee establishes a greater equilibrium between the two sides through such dual specification of demand.


53 Rochet and Tirole (2007).

54 In the model, cardholders also face some price in the course of card transactions, but its amount may also be negative in the model (i.e. cardholders may receive discounts relating to the transactions). Since there is no perfect competition on the side of cardholders – that is, the authors assume issuer banks with certain market power over cardholders – the transaction fee paid by cardholders in the model equals the amount of net marginal cost of the issuer bank relating to the transaction and a certain margin. The margin represents positive profit earned by the issuer bank by virtue of market power.

from card use by cardholders, and are thus willing to accept a card transaction even if it entails a positive net cost for them.\textsuperscript{56}

In general terms, the tourist test assumes a customer who is a tourist,\textsuperscript{57} who also holds the cash value of the product to be purchased. The interchange fee passes the tourist test if the merchant is willing to accept card payment, that is, if card acceptance does not increase the operating cost of the merchant.\textsuperscript{58} Maximisation of the merchant fee based on the tourist test prevents card systems from forcing merchants to accept card transactions that they do not wish to accept.\textsuperscript{59} This basically functions as a balancing mechanism to ensure that merchants do not pay more for card transactions than the benefits generated by these transactions compared to cash payment. By applying the equilibrium fee, it will be irrelevant for merchants whether payment is made with cash or card.

The authors then examined the model as to whether it allows for conclusions to be drawn in relation to the rate of the interchange fee. According to the basic model, if the market of issuer banks is characterised by perfect competition, the highest interchange fee passing the tourist test corresponds to the socially optimal interchange fee. In this case, the method of payment is irrelevant for merchants.\textsuperscript{60} If, however, we assume certain market power on the side of issuer banks, the socially optimal interchange fee does not pass the tourist test. By contrast, the interchange fee which ‘only’ maximises consumer surplus corresponds precisely to the limit value of the tourist test.\textsuperscript{61} Thus, in the basic model, the tourist test is a perfect instrument to determine whether the interchange fee is excessive in terms of total consumer surplus (merchants and cardholders), but too restrictive in terms of total social welfare.\textsuperscript{62}

**Variable margins.** The basic model, however, is founded on many assumptions that are discussed above. The authors attempt to individually suspend the significantly restrictive assumptions. Firstly, they examine the model with variable issuer margins, followed by the enabled entry and exit of issuer banks from the market, and finally, with heterogeneous merchants. If we allow the issuer margin to change in proportion to costs, in some cases – namely, if the fee charged to cardholders does not change in proportion to the change in costs – the interchange fee maximising consumer surplus will not equal the interchange fee based on the tourist test.\textsuperscript{63, 64}

**Long-term consumer surplus.** The consumer surplus based analysis is regarded as adequate in the short term, but only if the welfare of merchants and cardholders is considered to be much more important. In the long term, however, entry and exit from the market may affect prices and product supply, and therefore Rochet and Tirole introduce the term of long-term consumer surplus, which is analysed with enabled market entry. Under the assumption of a homogeneous issuer market,\textsuperscript{65} the interchange fee which maximises the long-term consumer surplus falls between the earlier interchange fee which maximises consumer surplus and the socially optimal fee. By contrast, if we assume monopolistic competition between differentiated issuers on the issuer market, the interchange fee maximising the long-term consumer surplus does not pass the tourist test in any case.\textsuperscript{66}

**Merchant heterogeneity.** As a final step, the authors introduce heterogeneity on the merchant side. According to the results, the interchange fee, that adequately controls cardholders’ choice of payment instruments, should reflect an average merchant profit resulting from card payment, instead of a marginal utility.\textsuperscript{57, 68} In this case, the average merchant will be indifferent to the payment instrument chosen by the customer. Assuming that not all merchants are identical, it is likely that under such circumstances there are merchants who reject card payment in connection with a purchase. Thus, merchants realising the least profit from card payments are very likely not to be able to pass the tourist test.

\textsuperscript{56} Thus, the internalisation of the surplus of customers may compensate merchants for increased costs.
\textsuperscript{57} I.e. not a returning customer.
\textsuperscript{58} Rochet and Tirole (2007), p. 7.
\textsuperscript{59} In other words, cardholders will not be overly encouraged to use cards.
\textsuperscript{60} Rochet and Tirole (2007), p. 9.
\textsuperscript{61} In other words, the interchange fee resulting from the tourist test will equal the interchange fee that arises if instead of total social welfare, we ‘only’ maximise consumer welfare (i.e. that of merchants and cardholders).
\textsuperscript{63} Rochet and Tirole (2007), p. 12.
\textsuperscript{64} The interchange fee maximising social welfare does not pass the test in either case.
\textsuperscript{65} Where there is no perfect competition, i.e. market entry reduces the price, but does not increase the range of supply.
\textsuperscript{66} Rochet and Tirole (2007), p. 17.
\textsuperscript{67} Assuming that merchants are fully capable of internalising the surplus of cardholders from card payments.
\textsuperscript{68} Maximisation of merchant fee equalling average merchant profit from card transactions.
3.2.4 Conclusions

The interchange fee models described in economic literature clearly fail to provide a perfect answer to questions related to the justification of the fee and its appropriate rate, or offer a method with which the optimal interchange fee can be determined relatively accurately on a given market. The tourist test developed by Rochet and Tirole is perhaps most suitable for application in practice, although this theoretical framework, too, relies on strict assumptions which, if suspended, significantly weaken the strength of the model. In practice, card companies proposed the cost based approach. According to the method, the upper limit of the interchange fee is determined on the basis of costs related to the processing of card transactions, the interest-free period of credit cards and payment guarantees. The method has been applied in several countries with regulatory purposes. It is an issue of debate as to which cost elements should be considered in the calculations. Some authors judge the method to be faulty from a theoretical point of view which, in this form, cannot be applied to regulate the interchange fee. As pointed out by Rochet and Tirole, the cost based method implicitly assumes a vertical structure in which issuer banks provide a type of intermediary service to acquirer banks, and the acquirer banks provide an end service to merchants. In this structure, the interchange fee is a fee paid for a service. Rochet and Tirole argue that the vertical approach, however, is faulty, as it neglects cardholders as consumers of the card service, that is, that the card market is a two-sided market with network externalities on which the two types of consumer demand need to be balanced. Thus, the interchange fee not only affects the marginal cost of merchants, but also cardholders and card use.

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69 By Visa in the proceedings launched by the European Commission. For details, see the chapter entitled ‘Competition proceedings relating to the interchange fee’.
70 In Australia and Switzerland, for example. For details see the chapter entitled ‘Competition proceedings relating to the interchange fee’.
71 See e.g. Rochet-Tirole (2003a), p. 77, chapter 4.1.
72 Rochet and Tirole (2003a).
4 Competitive assessment of the interchange fee

The main goal of competition regulation is the maximisation of long-term consumer welfare through the effective operation of markets, which is guaranteed on most markets through effective competition.74

4.1 COMPETITION RELATED PROBLEMS IN CONNECTION WITH THE INTERCHANGE FEE

Several competition-related problems have emerged in connection with interchange fees and the application of related rules, that may potentially impede the effective operation of markets. Major problems include:

- effect causing a rise in consumer prices,
- effect related to the distortion of payment instruments,
- effect impeding market entry.

Effect on consumer prices. One of the main criticisms relating to interchange fees is that they negatively affect consumer prices, as they (unreasonably) increase them.

Merchants pay a fee to the card acquirer for enabling card payment (for the card acceptance service). The interchange fee is paid by the acquirer credit institution to the card issuer credit institution; as a result, this fee arises among the costs of card acceptance and it is typically charged to merchants. Thus, the interchange fee is a component, price element of the price of the card acceptance service that is set out in an agreement. Merchants thus face prices of card acceptance services applied on the market as the amount of a fixed price element (interchange fee) and a presumably competing price element (other fees charged for acceptance).76

If the rate of the interchange fee is set in a competitively restrictive manner (above the competitive price), the additional cost incurred by card accepting merchants will increase their total costs, and as a result, this is reflected by consumer prices on the competitive market. Thus, the setting of the rate of the interchange fee results in increased consumer prices through the rise in merchant costs.

Effect related to the distortion of payment instruments. Beyond the cost increasing effect of interchange fees, the most common criticism of the application of interchange fees is that consumer decisions relating to the use of certain channels in the payment system are distorted.

The effect related to the distortion of the payment system may arise if the fees paid for the use of certain payment channels (their price) do not reflect the cost of the given payment channel. This effect is particularly present if a rule (no-surcharge rule) prohibiting discrimination between certain payment instruments is applied in the given payment system, but its practical impact is probably also not negligible, where discrimination (and thereby more effective

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74 See, for example, principles applied by the Hungarian Competition Authority (GVH) relating to free competition; http://www.gvh.hu/gvh/alpha360=28&pg=95&n=3_doc=48200&n=24_act=1&art=16act1.

75 Effective competition is generally defined as a state in which market participants do not have significant market power. For details on effective competition, see Bishop and Walker (2010), pp. 15–50.

76 The fact that the interchange fee constitutes the lower limit of fees charged to merchants has been empirically evidenced by the Commission in the proceedings launched against MasterCard, COMP/34.579 MasterCard Commission decision 19 Dec 2007, points 425–436.
discounting) between certain payment instruments is permitted, as most sectors may show certain inertia towards uniformity of consumer prices.

Three potential negative welfare effects of the above practice are noted in literature.\textsuperscript{77} As a result of inadequate incentives, it is possible that consumers use their payment cards at an economically excessive rate. This is attributable to the fact that as a result of the no-surcharge rule, merchants lose the opportunity to affect consumer decisions relating to payment instruments through price signals, that is, to promote payment instruments that are more favourable and effective for them through prices.

As an additional effect, consumption may decline as a result of higher prices, as consumption of non-card payers decreases as a result of prices that are relatively higher for them. Thus, due to the ineffective operation of the payment system, presumably less than the optimal number of transactions are conducted.

The third such effect is the potentially lower level of acceptance of card payments by merchants. Because if the price of a card payment is set at level that is higher than justified by their actual costs, for some merchants card acceptance would be more effective at a competitive price, but not if set at a contractual rate, and thus they would possibly reject or suspend card acceptance. As a possible solution for such merchants, the merchant’s costs of card payment could be separately charged to cardholders.\textsuperscript{78}

According to certain economic theories, the economic effect of the interchange fee would be neutral in a hypothetical world where the merchant and card issuer market is characterised by perfect competition and the surcharge linked to payment instruments could be applied at no cost.\textsuperscript{79} Purely on the basis of such criteria, if the merchant and issuer markets were characterised by perfect competition, the abolishment of the no-surcharge rule would be justified according to the above argument. Many dispute this argument as well, due to transaction costs and the imperfect nature of markets.\textsuperscript{80}

Optimisation of the operation of the payment system: Output or profit optimisation? Four-party card companies frequently argue that any regulatory or official limits are unrealistic in connection with the operation of the system of interchange fees, as the basic purpose of the system is more effective operation compared to other financial systems, that is, the maximisation of transactions conducted through card payments. It follows that card systems should also have the aim of optimising the operation of card payment systems and ensuring the highest number of card payments possible by offering the service at the most favourable price (output optimisation).

If, however, efficiency advantages are in fact inherent to card payment, and card payment is cheaper than other competing payment instruments, the market is not necessarily the most profitable for participants of the card payment system if the highest possible number of transactions are conducted through card payments, as the number of transactions may decrease through increased prices only at a rate that is profitably feasible (profit optimisation). Thus, in relation to card payment, the social optimum and the optimum for system participants may vary.

The interchange fee as market entry barrier. In certain cases, the varying rate of the interchange fee may also constitute a barrier to market entry. If, for example, the interchange fees charged for cross-border services are higher than domestic interchange fees, this may significantly limit the market entry of foreign acquirers, and in extreme cases, even prevent it, as the foreign acquirer is forced to pay the higher fee in relation to transactions conducted with domestic cards, which make up the bulk of transactions.

\textsuperscript{77} See e.g. Katz (2001), pp. 38-40 (VII. A. Adverse welfare effects of no-surcharge rules).

\textsuperscript{78} The basic obstacle to merchant card acceptance would be eliminated.

\textsuperscript{79} In such a world, although cardholders pay a higher price for card purchases, they are returned this amount in the form of various discounts and support from their card issuer banks. See e.g. Carlton and Frankel (1995b), p. 912; Gans and King (2003); Frankel and Shampine (2006), p. 633.

4.2 SOLUTIONS OTHER THAN THE INTERCHANGE FEE

With the disadvantages listed above, the interchange fee system may be suitable for managing the externalities observed within the card payment system. Prior to the discussion of the competition practice related to the interchange fee, we provide a brief overview of alternative methods of operating a four-party card payment system. Several payment structures are defined in literature in connection with the card market, with which the multilateral determination of the interchange fee or the use of the fee itself could be avoided.\(^{81}\) We briefly summarise below the basic aspects, advantages and disadvantages of these alternative solutions.

**Without the interchange fee - par collection.** With par collection, the system operates without an interchange fee: the amount of the card purchase is settled at par value between parties to the settlement. In this system, the issuer and acquirer banks charge fees only to their own customers that are related to specific services used by the customers. The issuer and acquirer participants of the card system do not pay fees to each other, while they compete on the market on the basis of their own costs.

Some argue that the par system basically corresponds to a multilateral interchange system, where the interchange fee is set at a zero level.\(^{82}\) Others argue that a system in which no fees are paid between banks on the two sides of the transaction are not simply equivalent to multilateral interchange systems applying a zero interchange fee.\(^{83}\)

It is not proven that par collection is the socially optimal condition. As a potential disadvantage of par collection, it significantly increases costs charged to cardholders, which does not necessarily lead to optimal results. According to Frankel and Shampine (2006), if merchants would have realistic choices in terms of the settlement network and the method (and issuer banks would participate in several types of systems), the competitive equilibrium would possibly result in par settlement, or in at least lower interchange fees.\(^{84}\)

Finally, with regard to the par system, we should note that such settlement operated successfully in the paper-based payment systems (e.g. cheques) of the United States, and there are examples of application in card systems as well – such systems are currently operating in Canada (Interac Direct Payment), the Netherlands, Finland and in relation to certain transactions in Germany.\(^{85, 86}\)

**Decentralised fee setting – bilateral agreements.** The setup of a decentralised interchange fee system could offer an additional alternative to par collection. In such a system, the issuer and acquirer banks conclude bilateral agreements with each other in which they also set out, *inter alia*, the rate of the interchange fee.\(^{87}\)

Two solid counter-arguments are frequently put forth against the decentralised interchange fee system.\(^{88}\) According to one such argument, thousands of banks would need to conclude many agreements with each other in a decentralised system to ensure the operation of the system; this is more difficult to implement and less effective in comparison to the multilateral system. According to the other counter-argument, due to the honour-all-cards rule, the merchant is obliged to accept the cards of all issuer banks, irrespective of size, that basically puts banks in a position to apply monopolistic pricing against all acquirer banks.

The first counter-argument questions the basic feasibility of the bilateral system, although some authors consider this system to be feasible on the basis of experience. This is a legitimate argument, and in light of the problems, it is doubtful

\(^{81}\) See e.g. Frankel and Shampine (2006), pp. 637-645 (III. Alternative Payment Arrangements).

\(^{82}\) Primarily card companies subject to proceedings apply this argument in anti-trust cases. See e.g. Brief of Appellee Visa U.S.A., Inc. at 64, National Bancard Corp. (NaBanco) v. Visa U.S.A., Inc, 779 F.2d 592 (11th Cir. 1986) (No. 84-5818), 44. (‘Par is simply another price’).

\(^{83}\) See e.g. Frankel and Shampine (2006), p. 639.


\(^{85}\) The listed systems are all debit card systems.


\(^{87}\) As a special case of bilateral agreements, participants on one side (typically acquirers) unilaterally set the fee to which the issuers may adjust. There is no ‘genuine agreement’ in this case.

\(^{88}\) See e.g. Frankel and Shampine (2006), pp. 640-641.
whether an effective decentralised system can be established.\textsuperscript{89} The second counter-argument raises the problem of a hold-up particularly in relation to small issuers.

\textbf{Other alternatives – multi-branded cards.} In the current system of interchange fees, competition between card companies (networks) generally exerts upward pressure on interchange fees, as card companies are motivated to offer high interchange fee cards to issuer banks, which maximise revenue. It is also possible, however, that competition between networks produces a contrary effect on fees.

This requires that in the payment transaction, the acquirer and not the payer has the power of initiative; this is possible in relation to card use, if payment cards would be so-called multi-branded cards.\textsuperscript{90} In this case, merchants and their acquirer banks would freely choose the network (brand) they wish to use for the settlement of a given transaction, and the payable interchange fee would be set by the network (card company) conducting the given settlement. Leaving the decision with merchants would probably generate competition between networks, resulting in decreasing interchange fees.

\textsuperscript{89} Ibid. reference to the system of correspondent banks.

\textsuperscript{90} In other words, they would belong to several different networks (e.g. simultaneously Visa and MasterCard).
5 Competition proceedings related to the interchange fee

5.1 COMPETITION PROCEEDINGS OF THE EUROPEAN COMMISSION

The European Commission91 (Commission), carrying out competition regulatory duties in the European Union, has launched several proceedings against four-party card systems, particularly in relation to the interchange fee.

The proceedings conducted by the Commission were principally related to cross-border transactions conducted in the framework of four-party card systems. Although the importance of the Commission proceedings can hardly be overestimated in terms of card payment systems, we should note that such transactions in Europe only account for a low percentage of total transactions conducted with such cards.92

The proceedings of the Commission dealing with interchange fees can be divided into three stages in time; the Commission reviewed the fees in three successive proceedings. Its proceedings against Visa were concluded in 2002, the proceedings against MasterCard ended in 2007, and there are currently proceedings in progress against Visa. We first provide a short chronological overview of Commission proceedings, followed by a discussion of key issues in terms of competition assessment and changes in its evaluation.

Box 1
Basic concepts of competition law

Knowledge of the many legal institutions applied in the competition proceedings of the European Union is essential for the understanding of certain steps in the proceedings listed here. These legal institutions are generally adopted as regulations of the Member States of the European Union, but they do not necessarily have to fully match EU regulations.

Exemption. The issue of exemption, discussed in detail in the main text, is reviewed by the Commission in proceedings relating to restrictive agreements; the burden of proof lies with the subjects of the proceedings (in this case, the card companies) in relation to this issue. Thus, the card companies must prove that the interchange fee systems comply with the four conditions set out in Article 101 (3) of the Treaty on the functioning of the European Union (TFEU).

In the past, it was possible for parties to an agreement to notify the European Commission (report the agreement) and request an exemption for the agreement, if they were uncertain as to its competitive assessment. Due to an increased work load, the European Commission (and Member States) abolished this system in 2004; since then, the parties are responsible for assessing the possible competitive risks of the agreement.

Statement of Objections. The Statement of Objections constitutes a formal element of the European Commission’s proceedings, in which the Commission informs the parties of its position and the competition concerns arising against them. After sending the Statement of Objections, the Commission may assess whether the behaviour stated therein infringes competition regulations. In some cases, a supplementary (second) Statement of Objections is issued.

91 The directorate general of the European Commission responsible for competition affairs was formerly called DG IV and is currently DG Competition.
92 According to central bank data collection, these made up only 5% of total transactions in the case of the MasterCard proceedings.
Commitment. In its decision adopted in accordance with its rules of procedure, the European Commission may also accept and make mandatory commitments submitted by the undertakings concerned, complying with expectations put forth in the preliminary assessment. In such case, infringements are not determined and the proceedings are concluded.


Background. The European Commission first reviewed the rules of four-party card companies on the basis of notification given by the predecessor of Visa, Ibanco. Ibanco submitted the rules relating to its international payment card system to the Commission in January 1977 for the purpose of competitive assessment. Ibanco requested that the Commission determine that the submitted rules do not infringe competition regulations (negative clearance), or if the possibility of the infringement of competition regulations arises, it should determine their exemption from the legal consequence of annulment on grounds of legislative conditions (individual exemption).

The Commission did not adopt a formal decision in the case, but informally it informed the parties that it does not see grounds for conducting proceedings to assess any infringement of competition regulations. However, when the British Retail Consortium (trade association of British retailers) submitted a complaint relating to the interchange fee system to the Commission in December 1992, the Commission launched new proceedings and revoked the comfort letter.

Subject of the review. The review of the Commission covered the rules and regulations of the payment card system of Visa, particularly with respect to relationships between Visa, card issuer and acquirer banks. The review also extended to rules relating to the relationship between merchants and acquirer banks, including the no-surcharge rule, honour-all-cards rule and the issue of the interchange fee.

Visa decision I. In the course of the proceedings, in May 1999 the Commission sent a Statement of Objections to Visa in which it raised its objection to the no-surcharge rule and restrictions relating to cross-border card issues and card acceptance. After cross-border restrictions were significantly eased in October 2000, on the basis of its reviews, the Commission decided to issue a negative statement with respect to certain rules of Visa (including the honour-all-cards rule). It was issued in August 2001 and is commonly referred to as Visa I.

In addition to the issues reviewed in the previous decision, an independent decision was adopted in relation to the interchange fee. In this case, the Commission put forth competition concerns relating to the regional interchange fee system of Visa in its supplementary Statement of Objections issued on 29 September 2000.

Visa proposes modification of its MIF system (2001). In the course of the proceedings, in 2001 Visa made a proposal to modify its applied MIF structure. The previous system was characterised by a lack of transparency, as merchants

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93 Such type of application could be submitted according to procedural rules in force at the time of submission (Regulation (EC) No 17/62). The procedural rules currently in force (Regulation (EC) No 1/2003) do not enable either a negative clearance or individual exemption.
94 In case of negative clearance, upon request, the Commission could certify that on the basis of available data, there are no grounds for competition proceedings pursuant to relevant legislation (Regulation (EC) No 17/62, Article 2).
95 In case of individual exemption, the Commission could determine that although the assessed behaviour showed restrictive elements, it exempted the agreement on the basis of the fulfilled relevant criteria.
96 Such informal information was called a ‘comfort letter’, and obviously it carried less weight than a formal decision of the Commission and could even be revoked.
99 COMP/29.373 – Visa International 2001/782/EC.
100 COMP/29.373 – Visa International – Multilateral Interchange Fee 2002/914/EC par. (30).
were not aware of the MIF rate and it was basically arbitrarily determined by Visa. The modification had four main elements:

- **fee reduction**: Visa agreed to introduce a fixed fee for debit card transactions; their annual weighted average MIF rate decreased to at least 0.28 euro; it agreed to a gradual fee reduction over 5 years with respect to *ad valorem* fees related to the transaction value (credit cards, deferred debit cards), by which it wished to reduce the annual weighted average of these interchange fees to 0.7% by the end of 2007;

- **cost analysis**: Visa agreed to determine costs relating to transaction processing, the interest-free period and payment guarantees with regard to debit cards, credit cards and deferred debit cards in the framework of a cost study; the amount of such costs would set an upper limit for setting the MIF rate;

- **transparency**: Visa agreed to inform merchants of the specific MIF rates;

- **independent phone/post MIF**: Visa set separate MIF rates in relation to phone and postal orders.

**Visa II decision – decision of the Commission on the MIF system of Visa (2002).** On 24 July 2002, the Commission adopted the decision concluding the Visa case, granting individual exemption to the interchange fee system, that is commonly referred to as Visa II. The exemption applied to the structure of the regional interchange fee modified by Visa, that is, to cross-border consumer card transactions. In its decision, the Commission noted that the fixed five-year period exemption provides sufficient time to analyse and evaluate the operation and effects of the modified MIF structure, possibly subject to subsequent renewed intervention.

**5.1.2 Proceedings against MasterCard and follow-up (2002–2009)**

The proceedings against MasterCard in March 1992 were also launched upon a complaint of the British Retail Consortium, in which it objected to elements of the payment system applied by Europay International that it regarded as restrictive. The original complaint was subsequently withdrawn, as EuroCommerce submitted a complaint in 1997 that covered a wider scope of issues. Between 1992 and 1995, Europay independently notified the Commission of its various payment systems, requesting their competitive assessment.

The statements of objections of the Commission initially did not relate to the issue of interchange fees; official proceedings on this issue were only launched in 2002. The proceedings concluded in 2007 dealt with the so-called fall-back interchange fee (applicable if no separate agreement is concluded) applied in relation to cross-border transactions and the honour-all-cards rule.

**Determination of restriction of competition.** In conclusion of the proceedings, the Commission determined that the interchange fee system applied by MasterCard restricts competition between acquirer banks, as it increases the rate of fees charged to card accepting merchants by functioning as a lower limit.

**Corrective measures.** In addition to determining the infringement, the Commission obliged MasterCard to implement corrective measures; as one of the most important of such measures, MasterCard was ordered to annul interchange fees – constituting the object of the review – within six months. MasterCard met this obligation by withdrawing the interchange fee applied with respect to the given transactions effective as of 21 June 2008. MasterCard appealed the decision.

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102 These also include the ‘domestic’ interchange fees of countries that did not have separate agreements in place relating to interchange fees applicable to domestic transactions, and the regional interchange fees of Visa were automatically in effect in these countries.


104 Europay merged with MasterCard in 2002. Before that, it was the exclusive licence holder of the MasterCard and Maestro brands.

105 COMP/34.579 MasterCard Commission decision of 19 Dec 2007, par. 15–16.

106 COMP/34.579 MasterCard Commission decision of 19 Dec 2007, par. 118.

107 COMP/34.579 MasterCard Commission decision of 19 Dec 2007, Article 3. The Commission set out further obligations relating to the notification of customers concerned, informing of the Commission and disclosure.


109 Number of proceedings launched on the basis of MasterCard’s appeal: T-111/08.
The decision of the Commission adopted at the end of 2007 determined that the interchange fee system applied by MasterCard at the time is infringing; it did not, however, rule out the possibility of applying an interchange fee system that does not raise competition-related concerns and meets exemption conditions.

New MIF rates in April 2009. MasterCard set MIFs calculated according to a new methodology as of 1 April 2009 in relation to transactions reviewed by the European Commission. As a result, the weighted average of the MIF decreased significantly compared to the rate the Commission found to be infringing the anti-trust regulations of the EU. MasterCard committed itself to applying the so-called tourist test in relation to MIF calculation. In relation to the interchange fee, the tourist test results in a neutral, balancing fee rate, where merchants are indifferent to the applied payment instrument (card or cash or other). The calculation of the appropriate fee is based on the comparison of merchant costs in relation to cash payment and card payment.

Key elements of commitments submitted by MasterCard:

- maximisation of the weighted average MIF for credit cards at 0.3%;
- maximisation of the weighted average MIF for debit cards at 0.2%;
- abolishment of the acquirer bank fee structure introduced in October 2008, restoration of the previous structure;
- publication of cross-border interchange fees within the EEA and domestic interchange fees determined by MasterCard on the website of MasterCard;
- varying fees should be offered to merchants in relation to different card systems and card types (abolishment of blending);
- new rule that allows merchants to use several acquirer banks for managing transactions;
- further surcharging permitted for merchants;
- visual identifiability of commercial cards by the end of 2010.

On the basis of the commitments of MasterCard, the Commission did not deem it necessary to initiate competition proceedings against MasterCard either in relation to compliance with the 2007 decision or the infringement of competition regulations.

Box 2
The tourist test – merchant indifference test

The tourist test is an economic method worked out for determining an effective interchange fee. The so-called equilibrium fee resulting from the method strengthens benefits arising on the side of consumers (merchants, cardholders). This basically functions as a balancing mechanism to ensure that merchants do not pay more for card transactions than the benefits generated by these transactions compared to cash payments. Applying the equilibrium fee, it will be irrelevant for merchants whether payment is made with cash or by card. The effective choice of payment instruments for cardholders is ensured up to the rate of the fee passed on to cardholders. The method maximises the interchange fee at a level, where the payment system is unable to use the internalising effect of the MIF (internalisation of merchant cost savings arising from card use) to force merchants to accept payment instruments that involve higher costs.

For details on the tourist test, see Box 2 and the chapter discussing the theoretical background related to the assessment of the interchange fee.

The calculations were based on studies carried out by the Dutch, Belgian and Swedish central banks that compared the costs of payment instruments.

Antitrust: Commissioner Kroes notes MasterCard’s decision to cut cross-border Multilateral Interchange Fees (MIFs) and to repeal recent scheme fee increases – frequently asked questions, MEMO/09/143, Brussels, 1 Apr 2009.

This amounts to a significant decrease: in 2007, the cross-border multilateral interchange fees of MasterCard ranged between 0.8% and 1.9%, depending on the card (the cross-border MIF was between 0.4% and 0.75% in relation to Maestro cards).

Antitrust: Commissioner Kroes notes MasterCard’s decision to cut cross-border Multilateral Interchange Fees (MIFs) and to repeal recent scheme fee increases – frequently asked questions, MEMO/09/143, Brussels, 1 Apr 2009.


For details see Rochet and Tirole (2007).
5.1.3 Additional proceedings against Visa (Visa MIF case)

Following closure of the MasterCard proceedings, after the expiry of individual exemption at the end of 2007, the European Commission again launched proceedings against the other major international four-party card system, Visa, on 6 March 2008.\(^{117}\) Similarly to the proceedings launched against MasterCard, in these proceedings the honour-all-cards rule applied by Visa was also reviewed in addition to the MIF.\(^{118}\)

In the course of the proceedings, in its Statement of Objections dated 3 April 2009, the Commission put forth its preliminary view that Visa Europe infringed Community competition regulations with its MIF in relation to the reviewed transactions. In the Statement of Objections, the Commission 'expressed a concern that the MIFs have as their object and effect an appreciable restriction of competition.'\(^{119}\) With respect to other elements of the interchange fee system, it was determined that these further strengthen the restrictive effect observed on the acquirer markets.\(^{120}\)

Commitments of Visa. In the course of the proceedings, Visa Europe offered a commitment on the debit card market to resolve the competition-related concerns of the Commission. As the key element of the commitment, Visa Europe agrees to cap the annual weighted average of cross-border MIFs applicable to immediate consumer debit card transactions at 20 basis points (0.2%) after two months from notification of the commitment decision.\(^{121}\) The commitment will likely affect the Hungarian market as well, as the 'cap will also apply separately in each of those EEA countries for which Visa Europe directly sets specific domestic consumer immediate debit MIF rates and in those EEA countries where the cross-border MIF rates apply in the absence of other MIFs.'\(^{122}\)

In the course of the proceedings, Visa undertook other commitments primarily related to market transparency. Some of these set out the continuation of certain practices (discontinuance of blending, the honour-all-cards rule and the authorisation of several acquirers), while others are related to the registration of fee rates and the adequate identifiability of cards.\(^{123}\) In the course of testing the commitments published on 28 May 2010, market participants had one month to submit their observations. In the document issued in connection with market testing, the Commission emphasised that the commitments do not apply to credit cards and deferred debit cards, and thus continuation of the proceedings is expected in their case.

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**Box 3**

**EuroCommerce in proceedings related to the interchange fee**

EuroCommerce is the representative organisation of European retailers and wholesalers; it is frequently referred to as the trade lobby organisation of the European Parliament. It was established in 1993 and is based in Brussels. The over one-hundred member organisation includes the trade federations of 31 European countries, European and national associations representing individual trade sectors and companies (e.g. IKEA, Auchan, Tesco, H&M).\(^{124}\) EuroCommerce represents the interests of European merchants in the decision-making process of the European Union, on the one hand, and provides up-to-date information to member organisations on developments relating to decision-making on the other.\(^{125}\) The complaints of EuroCommerce submitted in 1997 played an important role in all three proceedings discussed here, and EuroCommerce supported the work of the European competition authority with numerous documents and participation at public events.

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\(^{117}\) Number of case: COMP/39.398 – Visa MIF.


\(^{120}\) Op. cit., point 11.

\(^{121}\) Ibid., point 9.

\(^{122}\) Ibid., point 11.

\(^{123}\) The Hungarian member organisations are the National Association of Entrepreneurs and Employers (VOSZ) and the Hungarian Trade Association (OKSZ).

\(^{124}\) Additional information on the organisation of EuroCommerce: http://www.eurocommerce.be/content.aspx?PageId=28193&lang=EN.
EuroCommerce welcomed the MasterCard decision, but disapproved of the Visa II decision and contested the Visa I decision in court. In April 2010, Xavier Durieu, secretary general of EuroCommerce, expressed his sincere disappointment in relation to the Visa MIF case:\footnote{126} “We are very disappointed that the Commission has opted for this marginal way out on Visa. Since EuroCommerce lodged the first complaints 13 years ago, neither Visa nor MasterCard have brought convincing justification for interchange fees on card transactions. (…) We find it odd that the Commission is, as in the 2009 settlement with MasterCard, accepting a solution based on a methodology – the ‘merchant-indifference test’ – which has not yet been tested. (…) Such a maximum figure will further undermine the efforts of the struggling third European card schemes: they will be quite unable to establish any system which offers a fairer pricing model.”

EuroCommerce also expressed its concern in connection with the introduction of SEPA and changes affecting card systems: “What merchants most fear is that SEPA will lead to cheap, efficient national debit schemes being taken over by Maestro and V Pay. These brands are more lucrative for banks but much more expensive for retailers and shoppers. This has already happened in several EU countries. If it becomes the rule, SEPA will bring a huge step backwards, at the expense of consumers. (…) SEPA for cards promised transparency, increased competition and better prices: in these crucial times for the EU economy, this is what our leaders must deliver.”\footnote{127}

On 8 December 2010, the European Commission approved the commitments of Visa, pursuant to which the annual weighted average of the cross-border MIF equals 0.20% on the debit card market as of 8 February 2011. As of the above date, an interchange fee of the same rate is applicable to domestic transactions in countries where the card company sets domestic interchange fees, or where cross-border MIF rates are automatically applied. These countries are currently: Hungary, Iceland, Italy, Luxembourg (only applied to prepaid cards), Malta, the Netherlands (only applied to prepaid cards) and Sweden.

5.1.4 Opinion of the Commission on the restrictive nature of the interchange fee

The main legal regulations governing the proceedings of the Directorate General for Competition of the European Commission are set out in the founding treaty of the European Union, in the Treaty on the Functioning of the European Union (TFEU) currently in force. Article 101 of the TFEU stipulates that agreements that have as their object or effect the restriction of competition shall be void.

Article 101

(ex Article 81 TEC)

‘1. The following shall be prohibited as incompatible with the internal market: 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, and in particular those which:

(a) directly or indirectly fix purchase or selling prices or any other trading conditions;

(b) limit or control production, markets, technical development, or investment;

(c) share markets or sources of supply;”


\footnote{127} Source: \url{http://www.eurocommerce.be/content.aspx?PageId=41682}. 

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(d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

2. Any agreements or decisions prohibited pursuant to this Article shall be automatically void."

In the view of the Commission, the agreement on the interchange fees constituted an agreement between undertakings, a decision of enterprise alliances that can restrict competition. While the Commission judged the agreement on interchange fees as having a restricting effect on competition in all proceedings discussed here, it issued varying opinions in the individual proceedings as regards the anti-competitive object.

The Commission on competition restriction in the Visa II case. In the Visa II decision, the Commission determined that the MIF constitutes an agreement between competitors that restrict banks in their pricing policies and distorts competition on the issuer and acquirer market of Visa cards. The Commission did not judge the anti-competitive object of the MIF to be substantiated in these proceedings, however, as it maintained that the MIF rather contributes to the stability and efficiency of the system and its competitiveness with three-party systems.128

Restrictive effect in the MasterCard case. In the MasterCard case, too, the Commission determined the restrictive effect of the MIF. It did not put forth an opinion in relation to the restriction by object, in view of the fact that such opinion is not necessary upon determination of a restrictive effect.129

The Commission determined a restrictive effect primarily on the card acquirer market, where the network effects of the interchange fee and their effects observed on the issuer market further strengthened the restrictive effect of the interchange fee.

Restriction by object and restrictive effect in the Visa MIF case. In its Statement of Objections adopted in April 2009, the Commission expressed a concern that the MIFs have as their object and effect an appreciable restriction of competition in the acquiring markets to the detriment of merchants and indirectly their customers’ (i.e. in this case, the European competition authority not only objected to the restrictive effect, but also the restriction by object).130 In view of the fact that the proceedings are very likely to continue in relation to credit cards and deferred debit cards, further developments are expected with respect to this issue.

5.1.5 Exemption of restrictive agreements

Although certain agreements have adverse, restrictive effects on competition, overall these are regarded rather as positive. Obviously, in such cases, the prohibition and annulment of the agreement is not justified. If an agreement is found to infringe competition regulations, it may be granted an exemption pursuant to European Union (and Hungarian) regulations, if the agreement meets the four conditions set out in legislation. Although in such cases it is established that the agreement has a restrictive effect or object, it is granted exemption in accordance with Article 101 (3) of the TFEU.

The four criteria of exemption are conjunctive conditions, that is, all must be met for the agreement to be exempted from the negative legal consequences. The criteria require improved efficiency, that consumers receive a fair share of benefits, the indispensability of restriction for the objective and the prohibition of the full prevention of competition. We briefly examine below the position taken by the Commission in its proceedings with respect to the criteria.

128 COMP/29.373 – Visa International) 2001/782/EC par. (64)–(69).
TFEU, Article 101

(...)

3. The provisions of paragraph 1 may, however, be declared inapplicable in the case of:

any agreement or category of agreements between undertakings,

any decision or category of decisions by associations of undertakings,

any concerted practice or category of concerted practices,

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:

impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;

afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.”

Technical and economic progress and the fair share of consumers. In the Visa II case, the Commission accepted the argument of Visa that the interchange fee system modified in the course of the proceedings contributes to technical and economic progress, as it is beyond doubt that payment systems similar to that of Visa do so. The question is, rather, does this happen without violating the interests of certain consumer groups concerned? The Commission therefore examined the progress criterion together with the issue of the fair share of consumers.¹³¹

The Commission distinguished two groups in connection with the fair share of consumers: end consumers and merchants. While the benefits are clear in relation to consumers paying with cards, with regard to merchants, the Commission concluded that the introduction of cost-based, transparent pricing carries substantial benefits for them as well through payment guarantees and increased sales.

In the MasterCard case, however, the Commission determined that on the basis of arguments put forth by MasterCard, it is not proven that the application of the interchange fee does in fact contribute to technological or economic progress. To prove efficiencies, it is necessary to determine efficiencies on the basis of a model based on realistic assumptions, in an objectively verifiable manner. In the view of the Commission, the general argument of MasterCard that the interchange fee helps balance demand and supply within the two-sided system is not substantiated.¹³²

With regard to the fair share of consumers, the Commission again maintained that the arguments of MasterCard are not substantiated. The Commission argued that MasterCard should have proven the fair transfer of efficiency benefits with respect to both end consumers and merchants. No such proof, however, was put forth; the Commission emphatically stated that the interest-free period and the current account costs related to debit cards do not necessarily provide benefits to merchants.¹³³

Indispensability of competition restriction. In the Visa II case, the Commission accepted the argument that the operation of the interchange fee is indispensable for the exploitation of positive network externalities existing within the system, as there are no international card payment systems that can operate with less restrictive interchange fees. In this decision

the Commission rejected bilateral agreements, as these would presumably result in even less transparent and more costly systems.\textsuperscript{134}

In the MasterCard case, with regard to indispensability, the Commission assessed the existence and operation of systems without interchange fees as evidencing the feasibility of such systems. In relation to this third condition, too, the Commission determined that the interchange fee does not meet the exemption conditions.\textsuperscript{135}

\textbf{Non-elimination of competition.} In the \textit{Visa II} decision, the Commission determined that the agreement relating to the interchange fee does not eliminate competition either among issuers or acquirers. Issuers, for example, can continue to apply different prices vis-à-vis their customers, and acquirers can compete on other components of the merchant fee apart from the interchange fee. In addition, Visa is intensively competing with the other major international card company.\textsuperscript{136} The Commission did not put forth an opinion on this issue in the MasterCard proceedings.

\textbf{5.1.6 On which markets is competition restricted?}

In competition proceedings, commonly two dimensions of the relevant market are distinguished: the product market and the geographical market.\textsuperscript{137} Both dimensions were analysed in detail in proceedings related to the interchange fee.

\textbf{Wide definition of the market by card companies – payment cards and other payment channels.} Card companies generally have an interest in defining the relevant product market in a wider sense. Accordingly, Visa argues\textsuperscript{138} that the \textit{relevant product market} covers all payment instruments – cheques and cash in addition to the different cards. Visa referenced two previous cases of the Commission relating to cheques, in which the Commission noted that substitutability may be possible between cheques and other payment instruments.\textsuperscript{139}

\textbf{Narrow definition of the market by the competition authority.} The Commission did not share the view of Visa that the relevant market covers all payment instruments. The Commission maintains that demand on the merchant and consumer side needs to be analysed to enable the definition of the relevant market. It follows that it is necessary to examine what merchants and consumers regard as a substitute. Owing to the properties of cash and cheques,\textsuperscript{140} the Commission is of the view that these do not belong to the relevant product market. With respect to payment cards, the Commission concluded that further segmentation is unnecessary in this market segment; the relevant product market covers all payment cards.

\textbf{Two-sided nature of the payment card market.} The theory of two-sided markets has come to play an important role in interchange fee proceedings, particularly in the MasterCard proceedings. According to the theory, on a two-sided market, pricing decisions on one side of the market affect demand on the related market (quantity of demand), which in turn affects demand on the original market. On two-sided markets, the price elasticity of demand, costs and other factors (e.g. related to the intensity of competition) jointly determine which demand side should be supported over the other demand side to generate a higher number of transactions. The service is more attractive for both sides if the number of users increases ‘on the other side’. As an additional unique feature, the demand properties of consumers on both sides of the market may vary.\textsuperscript{141}

\begin{itemize}
  \item \textsuperscript{134} Case No COMP/29.373 – Visa International – Multilateral Interchange Fee 2002/914/EC par. (96) (103).
  \item \textsuperscript{135} COMP/34.579 MasterCard Commission decision, 19 Dec 2007, point 751.
  \item \textsuperscript{136} COMP/29.373 – Visa International – Multilateral Interchange Fee 2002/914/EC par. (104) (106).
  \item \textsuperscript{137} For details see Commission notice on the definition of the Relevant Market for the purposes of Community competition law OJ C 372, 09 Dec 1997, p. 5.
  \item \textsuperscript{138} CoMP/29.373 – Visa International – Negative clearance decision, par. (32–33), Case No CoMP/29.373 – Visa International – Exemption without condition, par. (40–41).
  \item \textsuperscript{139} Commission decision of 10.12.1984 in Case IV/30.717 – Uniform Eurocheques (OJ L 35 of 7.2.1985, p. 43.).
  \item \textsuperscript{140} Cash: (1) larger amounts are more difficult to manage, (2) it may even be dangerous, (3) cash withdrawal has a cost, (4) the average purchase amount is lower in the case of cash payment than for card payment. Cheque: (1) regulation relating to cheques significantly varies among EU Member States, and (2) cheques have many special properties compared to cards, e.g. acceptance.
  \item \textsuperscript{141} Rochet and Tirole (2004).
\end{itemize}
Network effect. A network effect can also be observed in relation to card markets: the larger the size (number of users) of a network, the larger the value consumers attribute to it. Consideration of the network effect may significantly affect the optimal operation of a two-sided market.\(^{142}\)

Restriction of competition on the issuer and acquirer market. In the Visa II case, the Commission determined that the restrictive effects of the interchange fee system are present among Visa issuers, Visa acquirers, as well as in competition between card systems.\(^{143}\) In contrast, in the MasterCard case, the Commission maintained that the interchange fee distorts competition on the card acquirer market, the restrictive effect of which is further strengthened by issuer market and network effects.\(^{144}\)

5.1.7 Honour-all-cards rule (HACR)

According to the honour-all-cards rule (HACR), if a merchant accepts the cards of a card system, it must accept all cards belonging to the given card system (bearing the logo of the given card system).

Acceptance of the necessity of the HACR in the Visa I case. In the Visa I decision, the Commission shared the view of Visa, that the honour-all-cards rule supports the development of card payment systems, as it ensures the general acceptance of cards, regardless of the issuer bank.\(^{145}\) In its decision, the Commission emphasised that the honour-all-cards rule does not necessarily mean that the same conditions apply to cards belonging to the same card company, accepted by the merchant.\(^{146}\)

According to the Visa I decision, the HACR is necessary for the operation of the system, as it ensures that the cards of cardholders are accepted by merchants. Were merchants to decide which card to accept, they might reject a card linked to a higher interchange fee, raising uncertainty among buyers with cards as to which card could be used. In this case, the Commission was of the view that the rule according to which merchants are required to honour all cards issued by the given card company, regardless of the type of card or the related card fees, in accordance with the HACR, is not deemed to restrict competition.\(^{147}\)

The HACR strengthens the competition restrictive effect of the interchange fee in the MasterCard decision and the Visa MIF proceedings. In the MasterCard decision, the Commission determined that the honour-all-cards rule strengthens the restrictive effect of the MIF.

According to the rule, merchants are obliged to equally and indiscriminately accept all valid MasterCard cards and transactions. The application of the rule has two effects:\(^{148}\) firstly, it prevents merchants from rejecting MasterCard cards issued by a given bank (honour-all-banks), secondly, it prevents them from rejecting different types of MasterCard cards linked to higher interchange fees and costs for merchants (honour-all-products).

In the view of the Commission, this means that the bargaining position of merchants further weakens with respect to interchange fees set by issuer banks.

In the current Visa MIF proceedings, the Commission confirmed that the HACR strengthens the restrictive effect of the interchange fee on the card acquirer market.

\(^{142}\) The chapter entitled ‘Economic background of the interchange fee’ provides details relating to two-sided markets and network effects.

\(^{143}\) COMP/29.373 – Visa International – Multilateral Interchange Fee 2002/914/EC par. (44) and (61).

\(^{144}\) COMP/34.579 MasterCard Commission decision, 19 Dec 2007, point 400.

\(^{145}\) COMP/29.373 – Visa International – Negative clearance decision, par. (67).

\(^{146}\) COMP/29.373 – Visa International – Negative clearance decision, par. (66).

\(^{147}\) COMP/29.373 – Visa International – Negative clearance decision, par. (68).

\(^{148}\) COMP/34.579 – MasterCard – Decision, (508).
5.1.8 No-surcharge rule

In the proceedings launched against Visa in 1992, the Commission also reviewed, *inter alia*, the no-surcharge rule. According to the rule, merchants were not permitted to apply surcharges in their prices in relation to payments with Visa cards or provide discounts for the use of alternative payment instruments (e.g. cash).

In the proceedings against Visa, in the *Visa I* decision, the Commission did not find the no-surcharge rule to be infringing and eventually issued a negative clearance in relation to this rule.\(^{149}\) The Commission maintained that although the rule may produce a restrictive effect, its size is not significant on the basis of empirical evidence, thus it is not deemed to be restrictive.\(^{150}\)

Empirical evidence supporting the finding was based on market research conducted in two countries – the Netherlands and Sweden – where the rule was abolished. Market research established that:

- only few merchants applied a surcharge after the authorisation of surcharging, fearing the loss of customers; thus, surcharging may affect competition between card companies, but such effect is nevertheless negligible;
- according to most merchants, the merchant fee did not change, and in some cases, it even increased following the abolishment of the rule, that is, the measure did not significantly affect competition between acquirer banks, either;
- the abolishment of the rule did not have a measurable effect on competition between merchants, either, and price transparency did not improve.

The proceedings launched against MasterCard also extended to the network rules of the company, including the no-surcharge rule. The Commission did not adopt a decision in relation to the no-surcharge rule, as MasterCard repealed it in 2005 from its network rules. In its decision adopted in 2007, however, the Commission determined that the abolishment of the rule will probably not improve the ability of merchants to restrict the market power of member banks of the card system exercised through the interchange fee.\(^{152}\)

In the proceedings, MasterCard argued that the possibility of surcharging exerts strong competitive pressure on the merchant fee and thereby on the interchange fee. The Commission, however, did not find the argument of MasterCard convincing on several grounds. Firstly, merchants are frequently faced with so-called blended fees, that is, they are unable to distinguish the fees of the given card companies and are thus unable to effectively apply surcharging.\(^{153}\) The Commission also argued that surcharging is linked to high administrative costs, while market research referenced in the *Visa I* decision indicated the low presence of surcharging in countries where it is permitted.

So far, no decision has been adopted in connection with the no-surcharge rule in the Visa MIF proceedings. In the Statement of Objections sent to Visa, however, the Commission stated that certain network rules – including the no-surcharge rule – strengthen the restrictive effect of the MIF on the acquirer market.\(^{155}\)

5.1.9 Blending

As a method frequently applied by card acquirer banks, in contracts concluded with merchants, they do not discriminate between the cards of different card companies with respect to the merchant fee. In such cases, the acquirer bank charges the same merchant fee, irrespective of the card used for payment, and uniformly manages the cards of different card companies.


\(^{152}\) COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 511.

\(^{153}\) COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 517.

\(^{154}\) COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 518.

companies. This practice is defined as blending in the literature.\textsuperscript{156} It is also called blending if acquirer banks do not discriminate between cross-border and domestic transactions, for example, or between consumer and commercial cards, by applying the same merchant fee.

**Can it be a problem in surcharging?** The European Commission first dealt with the problem in greater detail in the proceedings launched against MasterCard. In the view of the Commission, blending is not of key relevance in terms of assessing the economic effect and restrictive effect of the interchange fee on prices,\textsuperscript{157} nor does blending modify the restrictive effect of the interchange fee on the acquirer market.\textsuperscript{158} Irrespective of whether the merchant pays the merchant fee in this form, acquirer banks pass on their costs to merchants, where most of such costs consist of the interchange fee.\textsuperscript{159} However, the Commission found the practice of blending to be a factor that may restrict the spread of surcharging upon the abolishment of the no-surcharge rule, as in this case, merchants are unable to distinguish the individual cards and their costs.\textsuperscript{160}

In the Visa MIF proceedings, the Commission put forth the preliminary view that blending constitutes one of the network rules and practices that strengthen the restrictive effect of the interchange fee on the acquirer market.\textsuperscript{161}

### 5.1.10 Position of the Commission and European debate relating to interchange fees applied to direct debits

As one of the key components of the SEPA (Single Euro Payments Area) initiative launched in 2002 and supported by European authorities and banking federations, the national direct debit models currently in place within the euro area are to be replaced with a single, common direct debit payment method. To this end, the European Payments Council (EPC), the European banking federation dealing with payments, worked out a detailed, new direct debit method that is called SEPA direct debit. In connection with the official launch of this payment instrument, however, debate flared up in relation to a problem that had remained unresolved: interchange fees are applied to national direct debit payment instruments in six member states of the euro area which transfer significant income for each transaction from the bank of the beneficiary to the bank of the payer (acquirer bank). In terms of the basic function of the interchange fee and the arguments made in favour of it, this is equivalent to the interchange fee applied within card systems. Since the single model needs to be regulated by common rules in the whole of Europe in relation to interchange fees as well, it was necessary to agree whether there should be an interchange fee in the new European direct debit model, and if so, in what form.

The European Commission, enforcing major competition measures in the payment card business, joined the debate between the national banking communities, indicating that it does not accept a multilaterally set interchange fee on a European level. The debate was temporarily resolved by an EU regulation regulating cross-border payments (Regulation (EC) No 924/2009 of the European Parliament and of the Council), pursuant to which a multilaterally set interchange fee may be charged for domestic payments until 2012, while the regulation set 8.8 euro cents as the maximum rate of such fee per transaction in relation to cross-border direct debits. The authorities, however, emphasised that they regard this to be only a temporary solution, and they generally maintain the view that a normal interchange fee per transaction is not applicable in the case of direct debit transactions.\textsuperscript{162}

The European Commission argues that while in the case of payment cards, frequently there is only a single relationship between the merchant and the paying cardholder (therefore, in theory, the application of the interchange fee within card systems is legitimate as an incentive), in the case of direct debits, this is a longer-term business relationship involving several payment transactions, where – in contrast to payment cards – it is possible to incentivise paying parties to use the

\textsuperscript{156} COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 249.

\textsuperscript{157} COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 442, par. 657.

\textsuperscript{158} COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 444.

\textsuperscript{159} COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 444.

\textsuperscript{160} COMP/34.579 MasterCard Commission decision, 19 Dec 2007, par. 517.


\textsuperscript{162} This is important to emphasise, as even the European Commission agrees that a separate interchange fee can be maintained in relation to incorrect, erroneous or rejected transactions.
payment instrument by other means (e.g. with discounts from the price of the product or service, refunds, etc.), and therefore an interchange fee set by non-market methods is unnecessary.

5.2 COMPETITION PROCEEDINGS IN MEMBER STATES OF THE EUROPEAN UNION

Proceedings were also launched in Member States of the European Union in connection with the interchange fee. National proceedings were primarily necessitated by the fact that the proceedings of the European Commission only covered cross-border transactions, but not domestic transactions that make up the bulk of turnover. The proceedings launched in the United Kingdom are regarded as very significant among Member State proceedings, but the proceedings conducted in Poland, Spain and currently in Italy also provide important information.

5.2.1 United Kingdom

The first MasterCard decision. According to the decision passed by the British Office of Fair Trading (OFT) in 2005, the agreement on interchange fees between MasterCard and banks issuing MasterCard cards infringed the competition regulations of the European Union and the United Kingdom.

In proceedings very similar to the proceedings of the European Commission, the OFT determined that the interchange fee restricted price competition, when it functioned as a bottom limit for setting the merchant service charge, the fee paid by the merchant to the acquirer bank (MSC). For most merchants, the interchange fee made up a significant portion of the merchant service charge: according to OFT estimates, an average 80% of the merchant service charge between 2001 and 2003. Furthermore, the agreement enabled the parties to cover costs that were not related to the operation of the MasterCard payment system (extraneous costs). This restricted competition between acquirers by leading to higher prices; the higher merchant service charge were passed on by merchants to consumers in the form of higher prices.

With respect to the possible exemption of the agreement, the OFT argued that the joint setting of the interchange fee may also be beneficial for consumers and meet exemption criteria if the fees are of an appropriate rate and are not higher than the cost of issuers arising in connection with the operation of the payment system. In view of the fact, however, that the interchange fee also covers costs not related to the operation of the system, the OFT concluded that the fees were not set at an appropriate rate and exemption criteria are not met.

In the course of the proceedings, MasterCard introduced a new system relating to the setting of interchange fees as of 18 November 2004; as a result, the fee-setting rights of the forum operated by MasterCard and the banks were abolished. The OFT did not assess the new system in these proceedings, but found the system operated until November 2004 to be infringing in its decision of 2005.

Appeal and repeal of the decision. In the course of the appeals proceedings held before the Competition Appeals Tribunal (CAT), the appeals court in the United Kingdom with jurisdiction in competition affairs, the OFT decided to repeal its 2005 decision.

New proceedings against MasterCard, proceedings against Visa. On 6 February 2006, the OFT launched new proceedings against MasterCard in connection with the arrangements applied as of 18 November 2004. In connection with the first MasterCard proceedings, the OFT decided to subject the arrangements of MasterCard applicable from 2004 to more rigorous review on the basis of conclusions drawn from the appeals proceedings held before the CAT. The rules of Visa
relating to the setting of the interchange fee also constituted the subject of proceedings launched in 2004. The proceedings focused on fees applied by MasterCard and Visa, and currently in effect, in relation to credit cards, charge cards and deferred debit cards. In February 2007, the OFT expanded the review to include fees applied to debit cards by both card companies.\textsuperscript{170}

**Suspension of proceedings.** With respect to the EU decision adopted in the MasterCard case and the related appeals proceedings, the OFT suspended its proceedings and otherwise supports the proceedings of the Commission and takes part in the appeals proceedings as an intervening party.\textsuperscript{171}

### 5.5.2 Poland

**Infringing agreement between banks and card companies.** Proceedings were launched in 2001 in Poland in relation to the interchange fee. The parties subject to the proceedings were 20 banks, Visa Europe and Visa International, MasterCard Europe and the Polish Bank Association. According to the competition concerns put forth by the Polish authority,\textsuperscript{172} the parties concerned jointly set the rate of the interchange fee in the framework of a restrictive agreement, with which they restricted competition between acquirer banks, and wilfully restricted entry to the relevant market through their concerted activity.

The interchange fee was set in Poland on the basis of the agreement since 1994. The Polish competition authority determined that the interchange fee is not set according to objective criteria, therefore the agreement – basically setting the minimum rate of fees payable by merchants for card payments – infringes EU and Polish competition regulations. The fine imposed by the Polish competition authority equalled approximately HUF 10 billion at the exchange rate at the time.\textsuperscript{173}

The Polish competition authority determined\textsuperscript{174} that the interchange fee sets a bottom limit for the merchant fee; as a result, the merchant fees applied by acquirer banks cannot adequately reflect actual costs. The consequence is an artificial increase of merchant fees, leading to a rise in end consumer prices. The Polish authority also concluded that the interchange fee system prevents the development of new – possibly more efficient and cheaper – payments systems, as banks are not motivated in changes due to the artificial profit generated by the system.

In their defence, the defendants of the proceedings emphasised the indispensable role of the interchange fee in the operation of the four-party payment card system. The Polish competition authority, however, did not accept this argument, firstly, because several payment card systems are successfully operated without an interchange fee system, and secondly, because the defendants were unable to put forth any empirical evidence that would have proven the fulfilment of exemption criteria.\textsuperscript{175} After 2006, representatives of the Polish Bank Association, Visa and MasterCard worked out and introduced a new, cost-based method to set interchange fees. The Polish competition authority concluded that this restrictive agreement also fails to fulfil the first and second criterion of exemption.\textsuperscript{176} In its decision adopted in December 2006, the authority determined that the method also passes on cost elements to merchants that are generally based on false and inadequate assumptions, and thus it obliged the defendants to repeal the restrictive agreement and pay the fine.

**Appeal.** The parties concerned successfully contested the same decision before the Polish competition tribunal that annulled the decision of the competition authority on grounds of the incorrect definition of the relevant market. The


\textsuperscript{172} Decision on determining the interchange fee in Visa and MasterCard systems, Office of Competition and Consumer Protection – UOKIK), press release, January 2007.


\textsuperscript{175} Decision on determining the interchange fee in Visa and MasterCard systems, Office of Competition and Consumer Protection – UOKIK), press release, January 2007.

appeals court (of second instance), however, upheld the decision of the competition authority and in April 2010 it obliged the competition tribunal (of first instance) to review its decision.\textsuperscript{177}

5.2.3 Spain

Among the several card systems operating in Spain, Sistema Euro 6000, consisting of bank members, was the first to submit an application to the national competition authority in September 2000 for exemption of its interchange fee setting system. The Spanish competition tribunal issued a report in 1999 in which three basic criteria for exemption of interchange agreements were defined:\textsuperscript{178}

- transparency;
- application of objective criteria for the setting of interchange fees;
- objective criteria best reflecting costs and risks should be applied for determining the various interchange fee rates, thus it is not sufficient to merely classify merchants into different sectoral categories.

Sistema Euro 6000 grouped merchants on the basis of their activities, then assigned an activity coefficient to each group on the basis of the sales revenue data of group members. As a general rule, interchange fees were determined with an algorithm, based on a coefficient; an elasticity component was also integrated within the system that enabled the adjustment of prevailing fees to the given market circumstances. Additional adjustments could be made in relation to special customers.\textsuperscript{179} In July 2001, the competition authority determined that the system of Sistema Euro 6000 fulfilled exemption criteria, it therefore granted individual exemption of the interchange agreement to the company for five years.\textsuperscript{180}

In December 2000, Visa España also submitted an application to the competition authority to secure exemption for its interchange fee agreement. In its notice issued in February 2001, the Spanish competition authority informed Visa that although the system of Visa España is likely to fulfil the aforementioned exemption criteria (objectivity, transparency) defined by the Spanish competition tribunal, the competition authority nevertheless wishes to wait for the decision of the European Commission in the Visa II case before adopting a decision. On the basis of the above, Visa España withdrew its application in March 2002.\textsuperscript{181}

In addition to Sistema Euro 6000, two other similar companies operate in Spain, providing services to their member banks related to the payment card system. The companies Sistema 4B and ServiRed applied for exemption by the Spanish competition authority in 2001 and 2002, respectively, in relation to their interchange fee system. The interchange setting system of both companies is very similar to the above system – exempted by the competition authority – of Sistema Euro 6000. The decisions of the European Commission adopted in 2002 in the Visa II case, however, defined new criteria with regard to the exemption of interchange agreements, which were recognised as governing by the Spanish competition authority as well.

Since neither Sistema 4B, nor ServiRed could prove that their interchange setting system fulfils the new criteria, in April 2005 the Spanish competition authority rejected the exemption applications of the two companies and ordered them to withdraw their interchange system.\textsuperscript{182} The tribunal decided to reopen the Sistema Euro 6000 case on the basis of the decision of the Commission in the Visa II case and the decisions of the Spanish competition tribunal adopted in relation to Sistema 4B and ServiRed, and also reviewed the individual exemption granted in 2001.\textsuperscript{183} The exemption of Sistema Euro 6000 expired before the tribunal was to pass a decision and it was not extended.

\textsuperscript{178} Proceedings in the case of amendment or revocation – Case no. A287/00 Euro 6000, court decision, Madrid, 11 Apr 2005.
\textsuperscript{179} Proceedings in the case of amendment or revocation – Case no. A287/00 Euro 6000, court decision, Madrid, 11 Apr 2005.
\textsuperscript{180} Proceedings in the case of amendment or revocation – Case no. A287/00 Euro 6000, court decision, Madrid, 11 Apr 2005.
\textsuperscript{183} Proceedings in the case of amendment or revocation – Case no. A287/00 Euro 6000, court decision, Madrid, 11 Apr 2005.
With the intervention of the Spanish Ministry of Industry, Tourism and Trade, in December 2005, merchants and card companies eventually agreed to reduce the maximum interchange fee in the country from 2.32% to 1.1% by 2008.184

5.2.4 Italy

The Italian competition authority (Autorità Garante della Concorrenza e del Mercato, AGCM) launched proceedings against MasterCard and its eight acquirer banks in July 2009. The Italian MasterCard MIF agreement was suspected of restricting competition through setting a bottom limit for the interchange fee.185

The competition authority adopted a decision in the case on 3 November 2010; as a result, it imposed fines in the total amount of over 6 million euros on the subjects of the proceedings.186 According to the decision, MasterCard and the banks subject to the proceedings concluded restrictive agreements with the aim of keeping the interchange fee of credit and debit card transactions high, where such fee was integrated into the merchant fee and thereby into consumer prices.

The Italian competition authority disapproved of MasterCard setting a multilateral interchange fee that lacked economic substantiation that takes account of the efficiency of the entire system. As a result of the decision, MasterCard was required to develop an interchange fee system that is substantiated from an economic and efficiency point of view within 90 days from the decision.

The competition authority also disapproved, and qualified as restrictive, the practice of banks with which they prevent the discrimination of the cards of different card companies in relation to the interchange fee through certain provisions of agreements concluded with merchants. This is the practice of so-called blending (discussed above), where the acquirer bank charges the same interchange fee rate, regardless of the card used for payment. In its decision, the competition authority obliged banks subject to the proceedings to accordingly modify the merchant agreements.

5.3 COMPETITION PROCEEDINGS AND LAWSUITS IN NON-EU STATES

5.3.1 United States

In the United States, the issue of the interchange fee commonly arises in the framework of private lawsuits; there are few precedents of a government supervisory authority initiating a competition lawsuit. The first major regulatory interventions were made in 2010.

NaBanco v. Visa case. The first competition case related to interchange fees was initiated by National Bancard Corp. (NaBanco) in 1986: NaBanco argued that Visa infringed relevant American competition regulations, the Sherman Act, with horizontal price agreements relating to the interchange fee. NaBanco argued187 that the interchange fees applied by Visa give a competitive advantage to banks that can conduct a large quantity of ‘on-us’ transactions, as they can offer lower fees to merchants.188

The courts eventually judged in favour of Visa, after the appeals as well, as NaBanco was unable to prove the infringement of anti-trust laws. According to the court judgments,189 all risks of loss resulting from non-payment, fraud

186 The decision of the Italian competition authority (Autorità Garante della Concorrenza e del Mercato) in the case is accessible on its website: http://www.agcm.it.
188 Two types of membership existed at the time within the Visa organisation: card issuers and card acquirers were proprietary members, who were members of the Visa board, while agent members were only card acquirers without voting rights. Although NaBanco was not a member of the Visa system, in terms of the case its status was equivalent to that of an agent member.
or any other reason fall solely on the issuer banks. Moreover, they frequently provide interest-free periods to credit card holders. Thus, the interchange fee is an instrument that enables the diversification of risk between the acquirer bank and issuer bank.

The court argued that the interchange fee is acceptable if its rate is in harmony with the legitimate, pro-competitive objectives of the system and it does not produce major restrictive effects. In this case, the price setting practice is also acceptable, that is it may be granted exemption. The court argued that on the basis of its properties, the Visa system is similar to an integrated corporation that can implement higher efficiency through its size. On the basis of the foregoing, the interchange fee is not a restrictive practice, but an important instrument for increasing efficiency.¹⁹⁰

Other interchange lawsuits. Merchants and different trade organisations filed over fifty interchange-related civil lawsuits before American courts in 2005 and 2006; most of these were brought against Visa and MasterCard. Most of the lawsuits were consolidated into class action¹⁹¹ in 2006 – this is currently in progress before the District Court for the Eastern District of New York.¹⁹²

Lawsuit relating to honour-all-cards rule – Wal-Mart. Another major case was filed in 1996, when merchants and retail associations filed several lawsuits against Visa and MasterCard in connection with the honour-all-cards rule. The cases were eventually consolidated into class action, resulting in the so-called 'Wal-Mart case', which was eventually concluded with settlement between the parties.¹⁹³ According to the settlement, the card companies paid a total of over 3 billion dollars in compensation to the plaintiffs and partially eased the honour-all-cards rule.¹⁹⁴

Regulatory initiative in the United States. In recent years the interest representation organisations of merchants put forth their arguments relating to the interchange fees and the network operation of card companies on several occasions to the US Congress. In reaction to the lawsuits and congressional hearings, there was a growing sense in the US that some of the problems need to be resolved through regulation. Pursuant to the 'Dodd-Frank Wall Street Reform and Consumer Protection Act' adopted on 21 July 2010, the regulation of interchange fees relating to debit cards came under the authority of the American central bank, the Federal Reserve Bank (Fed).¹⁹⁵ On the basis of the above, the Fed maximises interchange fees and enables merchants to differentiate payment instruments through consumer prices. According to the referenced law, the interchange fee charged for transactions conducted with electronic debit cards must be proportionate to the costs incurred by the bank in connection with the transaction. The Board is to draft the relevant regulation within nine months from the promulgation of the law. The Fed is holding public consultations on details of the regulation until June 2011, but it is certain that it will set a lower upper limit for applicable interchange fees compared to the current average rate. The regulation will also grant free network choosing rights to merchants, that is the right to freely choose the settlement network through which they accept the given card, if this is possible.

Anti-trust proceedings relating to the no-surcharge rule. The anti-trust division of the American Department of Justice (DoJ), functioning as one of the competition authorities in the US, filed a civil anti-trust lawsuit against Visa, MasterCard and American Express (AMEX) at the competent court. It argued that the network rules relating to consumer and commercial cards – preventing merchants from giving preference to cheaper payment instruments – infringe the Sherman Act (1890). The parties reached a settlement with the DoJ in the case of Visa and MasterCard; this needs to be approved by the court. According to the settlement, the two card companies should permit merchants to incentivise consumers in various forms to choose cheaper payment instruments (information, surcharging, other incentives).¹⁹⁶

¹⁹² Prager et al. (2009).
¹⁹³ Prager et al. (2009).
¹⁹⁴ As a result, merchants can freely choose which credit cards and signature debit cards to accept.
5.3.2 New Zealand

The competition authority of New Zealand launched proceedings against Visa, MasterCard and 11 credit institutions in November 2006 with respect to restrictive price setting related to interchange fees. The proceedings were concluded in October 2009 with a settlement between the parties.

The parties concerned agreed on the following commitments:

Table 1: Commitments concluding the investigation of the New Zealand competition authority

<table>
<thead>
<tr>
<th>Visa</th>
<th>MasterCard</th>
<th>Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>- right of card issuer to independently set interchange fee</td>
<td>- right of card issuer to independently set interchange fee</td>
<td>- significant decrease of average interchange fee</td>
</tr>
<tr>
<td>- Visa may only set public maximum rates</td>
<td>- MasterCard may only set public maximum rates</td>
<td></td>
</tr>
<tr>
<td>- abolishment of no-surcharge rule</td>
<td>- abolishment of no-surcharge rule</td>
<td>- unblended fees for merchants in relation to the cards of the two card companies</td>
</tr>
<tr>
<td>- other non-bank companies can also be acquirers if they meet certain criteria</td>
<td>- other non-bank companies can also be acquirers if they meet certain criteria</td>
<td>- possibility of unbundled merchant fee in relation to all Visa and MasterCard cards: variable interchange fee rates per card type</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- cancelation of no-surcharge rule from standard agreements</td>
</tr>
</tbody>
</table>

197 Commission alleges price-fixing in credit card interchange fees, press release, Commerce Commission, 10 Nov 2006.
6 Regulatory issues and attempts

6.1 REGULATORY DILEMMAS

In terms of economic efficiency, intervention in market processes is justified if it aims at correcting the inadequate distribution of resources from a welfare point of view. Regulation of prices on the market generally aims at confining price setting market participants within limits.

Price regulation is commonly applied on markets where competition is not likely to operate adequately; regulatory intervention may set prices in case of monopolies, certain oligopolies or market failures. In practice, this means that the price of a common service on the given market is fixed or maximised. Regulators generally apply price regulation only within a limited scope, as it is difficult to set an adequate price for a market by regulatory means: efficient transactions are not realised if the price is too high, while shortages caused by declining supply may arise if prices are too low.

Interchange fees constitute a special case in this area, as in this case, regulation is applied not to one market, but to a fee charged in relation to a special instrument linking two sides of a two-sided market. In this case again, obviously there is the risk that inadequate regulation can negatively affect the operation of the market.

Key questions to be answered with regard to regulation of the interchange fee: are there any market failures that should be remedied, and is the regulation of the interchange fee an appropriate method for this?

6.1.1 How can the regulation of the interchange fee be useful?

In four-party card systems there are incentives that motivate the operators of the system to maximise the number of transactions conducted through this platform. It follows from the above that it is possible for market participants to set up a system that enables the maximisation of card transactions. This, however, raises several issues from a welfare point of view.

**Transaction costs.** It is not clear whether a greater number of card transactions is better in all cases. Although natural intuition may imply that electronically conducted transactions are cheaper as a result of more developed technology, this probably does not hold true in all cases. The cost of payment card transactions, for example, may be much higher than the cost of other payment instruments in relation to transactions of small amounts. The maximum number of transactions does not necessarily mean that the system is operating optimally.

**Profit optimisation.** As an additional difficulty related to the application of the interchange fee, only some of the parties to the transaction may take part in setting the fee. This obviously raises the possibility of such parties aiming to optimise their own profits and not to maximise the level of welfare. They may justify the setting of a higher-than-socially-optimal interchange fee, which leads to a less-than-optimal number of card transactions.

On the basis of the foregoing and the theories discussed in Chapter III in relation to the setting of the interchange fee, purely on the basis of theoretical considerations there is probably no clear answer as to the direction and scope of interchange fee regulation, or even its necessity. This necessitates empirically supported analyses that fully measure the benefits and costs related to the particular payment instruments.

**Social marginal utility and marginal cost.** In the process of regulating the interchange fee of card transactions – constituting an important element of payments – it is necessary to take into account all issues arising in connection with
the optimisation of all payments. It is not possible to independently determine whether the volume of card transactions differs from a socially optimal level. The marginal utility and marginal costs of payment instruments need to be quantified in relation to all parties, and the party providing the platform is obviously no exception. In relation to cash payment, for example, most of the savings resulting from a decline in the number of transactions arise on the side of the state, which should not be disregarded in regulation. To our knowledge, comprehensive studies have not been undertaken on this issue so far, and we therefore believe that this study should provide a basis for adequate regulation.199

Is the regulation of the interchange fee appropriate for the development and optimisation of the system? Within the card payment system, the interchange fee may function as an appropriate instrument to optimise the output of the system, and therefore its regulation is possible. It is not clear, however, whether this instrument is essential and whether these objectives can be implemented by other means. The application of regulation is particularly difficult on account of the fact that only estimates with a wide margin of error, based on unclear terminology are available with respect to the rate of the fee, rendering the effects of regulation unpredictable.

6.1.2 Consequences of a simple reduction of the interchange fee

Fee cuts. As one of the main sources of debate relating to the four-party payment card models, merchants in many countries, which do not participate in setting the fees applied within the system, objected to excessively high fees. Therefore, it comes as no surprise that in recent years, intervention in the payment card business primarily targeted reduction of the interchange fee. The principal economic policy objective, however, should not simply be the reduction of interchange fees, but rather the development of a fee structure that results in a more efficient use (choice) of payment instruments.

Efficiency issues. Although a fee reduction can in itself lead to a decrease in merchant costs, its effect on the welfare optimum is unclear. If we assume that the optimal interchange fee can be determined through the comprehensive analysis of the payments system, the prior knowledge thereof is essential for taking suitable regulatory measures.

In practice, however, the determination of such a fee requires extremely large resources. As a result of this difficulty, the cost-based approach was applied in some countries (e.g. Australia) where the rate of the interchange fee is administratively regulated. The upper limit is set to enable the recovery of issuers’ costs, so that the reduction of the interchange fee does not result in increased cardholder fees. It is difficult, however, to determine which costs to consider and how to measure these costs (which, moreover, need to be recalculated from time to time). For the purpose of analysing practical examples, we provide below a detailed description of regulatory intervention implemented on the Australian card market.

Additional problems − migration. Isolated fee reduction, however, may result in payments shifting in an undesired direction. As a result of interchange fee cuts applied in four-party card systems, for example, it is possible that a larger issuer bank exits the card system and transfers its cardholder clientele to a three-party card system (such as American Express or Diners Club), where no such regulatory intervention is applied.

Other related regulation. Regulatory attempts have also been made in connection with other rules applied by card companies.200 Pursuant to the Directive on payment services in the internal market (PSD), Member States are obliged to enable distinction between individual payment channels (surcharging), but the directive allows Member States to deviate from such rule.201

In Hungary, regulation has been adopted not only in relation to the rate of the interchange fee, but also the rate of the merchant fee; it is discussed in connection with the analysis of Hungarian regulation.

199 The survey of the Magyar Nemzeti Bank relating to the social cost of payment instruments was conducted in parallel with the writing of this study (Turján et al., 2011).
200 These rules are described in detail in the chapter discussing the theoretical background and developments related to competition law.
6.2 EXAMPLE OF REGULATION – AUSTRALIA\textsuperscript{202}

Relatively few examples are available in connection with the regulation of interchange fees. Regulation implemented by the Australian central bank in the early 2000s is the most frequently referenced example which may provide useful information for other countries where interchange fee regulation arises as a problem.

The Australian central bank carries out the relevant regulatory duties in Australia. As a result of a review conducted in the 1990s, with regard to payments systems, the Australian central bank not only assumed responsibility for the prudential supervision of the system, but was also granted powers in connection with ensuring the efficiency of the systems. The Australian Payments Systems Council was established in parallel with the expansion of central bank duties and was granted legislative powers.\textsuperscript{203}

The Australian payment card market. A comprehensive, empirical study was prepared in 2000 on Australian card payment systems.\textsuperscript{204} The study concluded that the efficiency of the entire system may be improved if the relative price of various payment instruments would better reflect the relative costs of such payment instruments. The analyses emphasised that restrictions applied to merchants negatively affect competition.\textsuperscript{205}

Three types of card systems were operated on the Australian market in the reviewed period: credit cards, signature debit cards and PIN-based debit cards (EFTPOS). A high level of substitutability of cards in the different systems was observed from the point of view of consumers in terms of utility, but the relative costs of the systems and relative prices significantly varied.\textsuperscript{206}

The study determined that although the operating costs of the EFTPOS system were considerably lower than the costs of the other two systems, cardholders were charged the highest fee for use of this system.\textsuperscript{207} At the time of the review, buyers using cards through the EFTPOS system frequently paid 40-50 AUD cent fees per transaction, those paying with signature debit cards did not pay any fee, while much more favourable terms were offered to buyers using credit cards.\textsuperscript{208} Accordingly, the number of credit card transactions – a more costly payment instrument on a sector level – increased extremely fast, growing 20-30\% annually in the second half of the 1990s, while the increase only approximated 10\% in relation to the less costly EFTPOS system.\textsuperscript{209}

Upon analysis of the substantial differences in the relative costs and prices of payments systems, it was established that the differences are significantly attributable to the interchange fee. In relation to credit cards and signature debit cards, the average rate of the interchange fee amounted to 0.95\% of the transaction value, paid by the acquirer bank to the issuer bank. In contrast, the direction of the interchange fee was reversed within the EFTPOS system; it was paid by the issuer bank to the acquirer bank and its average rate equalled 20 cents per transaction.

The direction and rate of the interchange fee generally also determined consumer prices. In relation to purchases made with EFTPOS debit cards, the issuer banks charged transaction fees due to the interchange fee incurred by them, while surplus revenue arising on the side of the consumer encouraged purchases with credit cards. Thus, the card system with the lowest operating cost was the most expensive for consumers, resulting in efficiency loss. The interchange fee collected in connection with credit card payments, namely, was financed by merchants (and by consumers through the pass-through of costs). The no-surcharge rules of card systems prevented merchants from distinguishing payment instruments that were more costly for them.

\textsuperscript{202} The chapter is published with nearly identical content in an earlier publication of Surd Kovács entitled 'A bankkártyás fizetések versenyjogi megítélése és társadalmi költségei' (Competitive assessment and social costs of payment card payments) (Kováts, 2009, pp. 16–20).

\textsuperscript{203} The governor of the central bank heads the Council; it has a maximum of eight members, six of whom are non-central bank experts. The Council is responsible for monitoring risks underlying the payments systems and supporting efficiency and competition. The Council has powers to adopt mandatory rules for the market participants concerned.


\textsuperscript{205} Katz (2001).

\textsuperscript{206} Lowe and Macfarlane (2005).

\textsuperscript{207} Lowe and Macfarlane (2005).

\textsuperscript{208} Credit card consumers in Australia are also 'awarded' an interest-free credit period and in the form of other rebates.

\textsuperscript{209} Lowe and Macfarlane (2005).
Beyond the above outlined efficiency loss, as an additional problem, competition between the card companies drove the rate of the interchange fee upward. The higher the interchange fee, namely, the higher the level of support the issuer bank can provide to its customers for using the given card. The force driving fees up can basically only be stemmed if merchants terminate their acceptance of the given card. The situation in Australia was further complicated by the fact that the honour-all-cards rule – a general problem in relation to card systems – was also in effect; transparency was limited with respect to the payable fees, and this made choices and decisions more difficult for both merchants and consumers.

**Regulatory solution and the consequences.** The main components of Australian regulation were the abolishment of the no-surcharge rule, the abolishment of the honour-all-cards rule and the maximisation of the rate of the interchange fee. A major source of market distortion was eliminated through the allowance of surcharging because if merchants charge a surcharge to customers paying with credit cards, they pay for the actual costs of card use.

The new interchange fees took effect on 1 November 2003. As a result of regulation, the average rate of the interchange fee decreased to approximately 0.5% in relation to credit cards, 12 AUD cents in relation to signature debit cards and 4-5 AUD cents in relation to EFTPOS. As noted above, in the latter case the direction of fee payment is reversed (i.e. the issuer bank continues to pay to the acquirer bank).

**Aim of regulation.** The Australian central bank aimed at applying regulation to gradually shift fee rates in a direction it regarded as appropriate. We cannot claim, however, that the applied fee rates are definitely appropriate and considered as applicable under all circumstances. The central bank applied a cost-based approach in relation to all three types of cards.

**Consequences of regulation.** Perhaps the most important consequence of regulation is that card acceptance has actually become cheaper, and merchant fees also decreased in parallel with the interchange fees. This suggests that natural incentives of competition functioned effectively on the card acquirer market, that is, prices followed the decrease of costs. The chart below shows changes in merchant fees in Australia.

Chart 3 clearly shows the decline in merchant fees after the entry into force of the regulation in November 2003. It is interesting to observe the continuous decrease of fees after this date on the market of both four-party card systems and three-party systems that are not affected by regulation.

**Theoretical arguments substantiating concerns related to regulation.** As a frequently raised argument against such type of interchange regulation, the reduction of the interchange fee rate leads to decreasing revenues for card issuers and issuers are forced to collect lost revenue from cardholders. This leads to rising card fees (or the introduction of transaction based fees) which in turn results in declining demand for cards. If we also take into account the assumption that the price elasticity of cardholders is greater than that of card accepting merchants, it is possible that many cardholders will stop using cards, which in turn may lead to the destabilisation of the system, or in extreme cases, to its collapse, through network effects. Studies written on this topic commonly refer to this scenario as the 'death spiral'.

**Experience relating to regulation.** Australian data do not support fears related to the collapse of the payment card payments market; card use continuously increased at a roughly even rate between 2003 and 2009. Dramatic rearrangement among card companies did not occur on the market either. Although regulation did not affect the three-party model, and these systems operate with much higher merchant fees, a rearrangement on the market did not materialise; the market share of four-party card systems persistently approximated 90% with smaller fluctuations.

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210 Initially, the Australian central bank attempted to secure acceptance of the regulation in the form of self-regulation, but this effort was unsuccessful. In fact, the card companies filed suit against the central bank on grounds that the central bank had exceeded its powers. In the dispute the court eventually sided with the central bank.

211 In the course of consultations, the possibility of abolishing the interchange fee applied in connection with EFTPOS was raised, but it was successfully contested by merchants. With regard to credit cards and signature debit cards, eligible cost elements included costs related to processing, transaction authorisation, card fraud and costs of the interest-free period.

212 Frankel and Shampine (2006).
One of the key conclusions drawn from regulation is related to the allowance of surcharging. Until 2005, very few merchants were willing to apply a surcharge to customers choosing to pay with a card. After 2005, however, the number of merchants differentiating between payment instruments began to rapidly rise. Experience suggests that the larger the merchant, the more likely it will apply surcharging. According to a 2009 survey, 18-20% of surveyed small and medium-sized merchants, approximately 26% of surveyed large sized merchants and 35% of the largest merchant companies applied a surcharge. It is interesting to note that bank support paid to credit card users gradually decreased from 2003 in connection with credit card payments.

Review of regulation. In 2007 and 2008, the Reserve Bank of Australia carried out a comprehensive review that served the survey and evaluation of the results and effects of regulation and the outlining of new measures. In the course of the review, the central bank – in cooperation with banks and merchants – remeasured operating costs related to the different payment instruments with greater accuracy. The analysis confirmed the earlier results, and it was again determined that credit card transactions are more expensive than the EFTPOS system (with the separation of the credit function as well) and that cash is the cheapest payment instrument in relation to transactions of smaller amounts.

Opponents of regulation voiced their opposition again during the review, and thus the possibility of abolishing the regulation was considered. Some economists have argued that lower fee rates limit innovation and are therefore also responsible for the loss of returns expected within the sector. Empirical analyses, however, suggest the contrary: lower interchange fees can promote innovation, as most investments are necessary on the side of acquirer banks. The central bank decided to uphold regulation, and some stakeholders also demanded a further reduction of fee rates.
7 The Hungarian payment card market

7.1 CHARACTERISTICS AND DEVELOPMENT OF THE HUNGARIAN CARD BUSINESS

Payment card use in Hungary. In 2009, 98% of the 8.8 million payment cards in circulation bore the Visa or MasterCard trademarks.\textsuperscript{213} Chart 4 shows the distribution of domestic cash withdrawal and purchase turnover transacted with these cards in the past five years.

Chart 4
Ratio of purchases and cash withdrawals transacted with Visa and MasterCard cards

With the exception of stalling growth attributable to the global economic crisis, the number of cash withdrawal and purchase transactions conducted with payment cards, and the ratio of purchases, gradually increased each year.

The picture is less favourable in relation to transaction value: in 2009, total domestic transactions conducted with domestic cards amounted to HUF 6,530 billion, but only \textit{19\% of these were payment transactions}, while the rest were cash withdrawals.

Chart 5 shows the frequency of card use, highlighting the number of payment transactions per card on a semi-annual basis. Both Charts 4 and 5 clearly show that a shift occurred in 2007 H2, when the number of payment transactions first exceeded the number of cash withdrawals; the ratio was approximately 50/50 per cent in the preceding year.

While a card is used on average seven times by cardholders to withdraw cash every six months (roughly one transaction per month), the \textit{number of payment transactions per card} gradually increased from 2007 H2 and now approximates \textit{two transactions per month}.

\textsuperscript{213} The remaining cards were international cards with the American Express trademark and products used within the network of the issuer bank.
The number of transactions per card increased in parallel with the declining number of payment cards. The growth rate of the number of cards was first negative in 2007 H2, followed by moderate fluctuations in the number from early 2009, presumably attributed to the global economic crisis, and another decrease in the number of payment cards. The decline is particularly measurable in relation to credit and debit products: their number decreased by 2.5% in 2008 H2, by 9.1% and by 4.6% during the next two six-month periods, respectively. This is presumably attributable to the fact that banks subjected potential credit cardholder customers to more rigorous credit assessments resulting from a declining propensity to repay credit caused by worsening economic difficulties. Chart 6 shows the above trends in detail, indicating changes in card numbers over the past four years.

**Acquirer network.** In addition to the number of payment cards and the usage habits of cardholders, the number of stores where payment for products and services is possible with payment cards is also an important indicator of the development of the payment card business and the cashless use of cards. Charts 7 and 8 show the number of POS terminals operated in stores and in their cashiers, the latter including electronic terminals and mechanical imprinter s. (Only several hundred

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214 Firstly, as a result of activity rationalisation, the number of cards issued only with the trademark of the issuer declined by 47% over the previous year, and secondly, the issue of Diners cards was terminated in Hungary.
imprinters have remained in use; some of them are used in stores with small turnover, where installation of more expensive equipment is not feasible, while others are kept for back-up purposes, if the electronic terminal is out of operation for technical reasons.)

The number of acceptance points accepting cards bearing the trademarks of the two international card companies has increased at a relatively high rate each year. The annual rate of growth between 2005 and 2010 averaged 19% in relation to both card companies. Since the vast majority of merchants contracted to accept both trademarks, the above data are not addable and much of the data overlaps. The number of POS terminals also increased significantly in the past 5 years, with average growth of approximately 14% annually. According to CSO (Central Statistical Office) data, there were approximately 236,000 (physical) retail units in 2010; viewed in relation to the above data, this means that payment card payment is possible at 20% of physical retail units.

As an additional Hungarian characteristic, POS terminals are also operated in bank branches and post offices which, however, only enable cash withdrawals with payment cards during bank and post office business hours, in addition to 4,748 ATMs. As indicated by Chart 8, the number of the former is generally declining, amounting to 11,227 terminals in the middle of 2010.
Chart 9
Number of POS terminals operated at retail acceptance points

Chart 9 shows the geographical distribution of terminals operated in store cashiers. It is clearly visible that the terminals are concentrated mainly in Budapest, county capitals and in municipalities surrounding Lake Balaton, in places frequented by tourists. In terms of the population ratio, holiday destinations in towns and villages top the list.

7.2 DEVELOPMENT LEVEL OF THE HUNGARIAN CARD BUSINESS IN INTERNATIONAL COMPARISON

An international comparison of the Hungarian card business development indicators with levels in different countries of the European Union\textsuperscript{215} yields the following results.

\textbf{Chart 10}\hfill
Number of per capita payment cards with a payment function in countries of the European Union
(2008)

\begin{center}
\begin{tabular}{lcccccccc}
Romania & Poland & Hungary & Czech Republic & Slovakia & Bulgaria & Latvia & Austria & Lithuania & Estonia & EU & Euro area & Slovenia & Belgium & Portugal \\
0.63 & 0.79 & 0.89 & 0.97 & 1.06 & 1.11 & 1.12 & 1.26 & 1.37 & 1.46 & 1.47 & 1.67 & 1.76 & 1.9 \\
\end{tabular}
\end{center}

\textit{Source: European Central Bank.}

The data collection of the ECB distinguishes between cards with a payment and cash withdrawal function, but in practice most cards have both functions. Basically, 100\% of the 8.8 million cards circulating in Hungary can be used for payment (there are only 5,000 cards that can only be used for cash withdrawal). As indicated in Chart 10, the per capita card number in Hungary significantly falls short of both the European and the euro-area average, equalling only 61\% of both levels. According to a household survey\textsuperscript{216} conducted by GfK Hungária Market Research Institute on behalf of the MNB in 2010 H1, however, at least one person in 85\% of households has a payment card.

Hungary’s lag is even greater with respect to the availability of POS terminals enabling payment card payments, amounting to barely over one-third of the EU average and less than one-third of the euro-area average. This is so notwithstanding the fact that the Hungarian figures include POS terminals operated in post offices and bank branches (numbering 10,374 at the end of 2008, corresponding to 17\% of terminals).

The number of POS payments per card in Hungary approximates half of the EU average and moderately exceeds half of the euro-area average.

\textsuperscript{215} Comparison is made with countries simultaneously or directly subsequently joining the EU with Hungary and countries with populations similar to that of Hungary.

\textsuperscript{216} For the purpose of surveying the social costs of payment instruments, in 2010 the MNB launched a project in which it surveyed the costs of the payment service provider sector, companies and households related to different payment instruments.
Thus, with regard to the overall level of development of the card business in Hungary, we may conclude that

- the per capita card number and the frequency of card payments falls significantly short of the European average, and
- the same can be said of the number of POS terminals per one million inhabitants, and
- the number of payment transactions per card, and
- the lag is greater in the area of card acceptance than in relation to the per capita number of cards.
7.3 DOMESTIC INTERCHANGE FEES IN HUNGARY

Domestic interchange fees. A national card system did not emerge in Hungary; in 1995, upon launching of the multilateral settlement of payment card transactions, Hungarian banks joined the system operated by the international card companies. Initially they applied the European regional interchange fees of Visa and MasterCard in effect at the time. Later, however, the banks did not adopt changes in these fees (typically cuts), and as a result, domestic interchange fees significantly exceeded the fees of Visa and MasterCard within the European region until 2009. Domestic fees, depending on the type of product, equalled 0.3%-1.4% in relation to electronic POS terminals and even reached 1.6% in relation to mechanical terminals that were operated in higher numbers at the time.

Payment Card Forum. In the autumn of 2004, the then-operating Payment Card Forum made an attempt to reduce interchange fees in a specific merchant category, major store chains. Although the reduction was accepted by majority vote, some banks did not sign the notice of modification toward the card companies, and therefore the forum was dissolved.

GVH (Hungarian Competition Authority) investigation. At the end of July 2008, the banks cancelled the agreement relating to the interchange fee, presumably and mostly in reaction to the competition proceedings launched by the GVH in early 2008.

The investigation was still in progress, when MasterCard decided to independently set the interchange fees applicable to domestic payments in Hungary instead of the agreement between the banks, while regional fees applied to cross-border transactions automatically entered into force in relation to Visa. The table shows the fees of Visa International from January 2009 and MasterCard International from February 2009, indicating fees (as before ‘>’ data) applied in previous years for comparison.

Table 2
Domestic interchange fees of MasterCard and Visa

<table>
<thead>
<tr>
<th></th>
<th>General</th>
<th>Petrol</th>
<th>Other*</th>
<th>Low value payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MasterCard consumer (debit, credit, Electronic)</td>
<td>1.2% &gt; 0.8%+24 HUF</td>
<td>0.3% &gt; 0.5%+12 HUF</td>
<td>1.2% &gt; 0.5%+12 HUF</td>
<td>1.2% &gt; 0.7% (0.5%)</td>
</tr>
<tr>
<td>MasterCard Business</td>
<td>1.2% &gt; 1.35%+24 HUF</td>
<td>0.3% &gt; 0.5%+12 HUF</td>
<td>1.2% &gt; 0.5%+12 HUF</td>
<td>1.2% &gt; 0.7% (0.5%)</td>
</tr>
<tr>
<td>Maestro</td>
<td>1.2% &gt; 0.5%+12 HUF</td>
<td>0.3% &gt; 0.5%+12 HUF</td>
<td>1.2% &gt; 0.5%+12 HUF</td>
<td>1.2% &gt; 0.5%</td>
</tr>
<tr>
<td>Visa consumer – debit</td>
<td>1.2% &gt; 0.26 EUR</td>
<td>0.3% &gt; 0.26 EUR</td>
<td>1.2% &gt; 0.26 EUR</td>
<td>1.2% &gt; 0.26 EUR</td>
</tr>
<tr>
<td>Visa consumer – credit</td>
<td>1.2% &gt; 0.5%</td>
<td>0.3% &gt; 0.55%</td>
<td>1.2% &gt; 0.55%</td>
<td>1.2% &gt; 0.55%</td>
</tr>
<tr>
<td>Visa Business – debit</td>
<td>1.2% &gt; 0.6 EUR</td>
<td>0.3% &gt; 0.6 EUR</td>
<td>1.2% &gt; 0.6 EUR</td>
<td>1.2% &gt; 0.6 EUR</td>
</tr>
<tr>
<td>Visa Business – credit</td>
<td>1.2% &gt; 1.3%</td>
<td>0.3% &gt; 1.3%</td>
<td>1.2% &gt; 1.3%</td>
<td>1.2% &gt; 1.3%</td>
</tr>
</tbody>
</table>

* Lower fees are applied e.g. at educational, government and healthcare services.

Source: Dr Csaba Braun: from the presentation entitled ‘Effect of reduced interchange fees on the Hungarian payment card business’ held on 23 February 2009.

7.4 COMPARISON OF HUNGARIAN AND INTERNATIONAL INTERCHANGE FEES

In this section, we compare the rate of Hungarian interchange fees to the Visa and MasterCard fees of European countries that are published by the international card companies on their websites.

For the comparison we used general fees from the complex tables that contain the interchange fees and specifically fees relating to payment transactions conducted through POS terminals that accept EMV chip cards (86% of Hungarian terminals are of this type). The tables do not contain the following:

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217 Forum established in 1995 with the participation of Visa and MasterCard member banks to coordinate issues arising in the card business, affecting all members.
fees relating to merchant specific and small amount payments (HUF 3,000 in Hungary) and fees that are in some cases set at a much lower level than those in the table for various reasons (such fees are applied, for example, in the area of education, government, health care); and

fees relating to Internet commerce and certain special types of merchants (night clubs, casinos, gaming halls), which are higher than those contained in the table.

We separately analyse below the fees of the two international card companies applied to domestic payments in different countries.

7.4.1 Interchange fees of MasterCard International

Table 3 shows the interchange fees of MasterCard International charged within the European region (Intra-EEA) and for domestic POS transactions in different countries.

Table 3 reveals that the card company publishes its fees for Germany and Finland only in relation to cards bearing the Maestro trademark, but in Austria, Bulgaria, Denmark, Romania and Slovakia, for example, domestic banks set the fees of all card products.

Structure of the MasterCard interchange fees. It is important to note that the fees of retail debit and credit products are not entirely separated by MasterCard, and therefore two types of interchange fees are applied to retail debit products:

if the debit card bears a MasterCard (standard, silver, gold, platinum) or MasterCard Electronic trademark, the rate of the interchange fee is equivalent to that of credit cards;

if the card bears the Maestro trademark, the interchange fee charged for the payment transaction is lower than above (this trademark is related exclusively to debit schemes).

To better illustrate this problem, Table 4 shows the distribution of retail products based on trademarks, and within this category, debit/credit schemes in Hungary.

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MasterCard interchange fees</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Regional fees in EEA</strong></td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
</tr>
<tr>
<td><strong>Interchange fees in some European countries for comparison:</strong></td>
</tr>
<tr>
<td>Belgium</td>
</tr>
<tr>
<td>Czech Republic</td>
</tr>
<tr>
<td>Finland</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>Italy</td>
</tr>
<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>Poland</td>
</tr>
<tr>
<td>Slovenia</td>
</tr>
<tr>
<td>Sweden</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

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218 This is attributable to the fact that credit and debit products cannot be distinguished according to the BIN (Bank Identification Number). On the basis of information received from Hungarian MasterCard member banks, the card company is working on the problem.
Table 4 shows that the Maestro trademark typically symbolises debit products, while all other trademarks cover both debit and credit schemes. To further complicate the picture, the card bearing the MasterCard business trademark – where a separate interchange fee is applied – could also be a retail product.

In all three categories, the rate of domestic fees significantly exceeds fees applied to regional transactions; in comparison to other countries, although the fees are not the highest, they are among the highest after Poland and the Czech Republic.

7.4.2 Interchange fees of Visa Europe

Table 5 shows the regional interchange fees of Visa Europe and fees charged for domestic POS transactions in different countries.

**Domestic fees exceed regional fees** in relation to retail products, but are equivalent to rates applied in Belgium, the Netherlands and Sweden. Hungarian fees are thus among the lowest.

With regard to Germany, where exceptionally high fees are charged, we should note that several types of merchant and product specific fees are applied which are much lower than those indicated in the table, and therefore comparison of the 'general fees' is misleading.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Distribution of MasterCard retail products</th>
</tr>
</thead>
<tbody>
<tr>
<td>MasterCard products</td>
<td>Number of debit cards</td>
</tr>
<tr>
<td>MasterCard (standard, silver, gold, platinum)</td>
<td>1,467,044</td>
</tr>
<tr>
<td>MasterCard Electronic</td>
<td>88,695</td>
</tr>
<tr>
<td>Maestro (Cirrus/Maestro)</td>
<td>2,783,912</td>
</tr>
<tr>
<td>MasterCard business</td>
<td>3,974</td>
</tr>
<tr>
<td>MasterCard Total</td>
<td>4,343,625</td>
</tr>
</tbody>
</table>

Table 5

**Visa interchange fees**

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Visa interchange fees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consumer products</td>
</tr>
<tr>
<td></td>
<td>credit/charge</td>
</tr>
<tr>
<td>Regional fees in EEA</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>0.55%</td>
</tr>
<tr>
<td>Regional fees in some European countries for comparison:</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>1.00%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.40%</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.55%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.00%</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.75%</td>
</tr>
<tr>
<td>Finland</td>
<td>0.55%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.58%</td>
</tr>
<tr>
<td>Italy</td>
<td>0.55%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.55%</td>
</tr>
<tr>
<td>Poland</td>
<td>1.35%</td>
</tr>
<tr>
<td>Romania</td>
<td>1.00%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.70%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.10%</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.55%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.77%</td>
</tr>
</tbody>
</table>
The same fee is charged in Hungary as for regional transactions in relation to business products.

Upon comparison of the fees of the two international card companies applied to domestic payments in Hungary, we can observe that the fees of Visa are lower than the interchange fees of MasterCard. The same can be said of other countries.\textsuperscript{219}

### 7.4.3 Interchange fees relative to average transaction value

**Interchange fees applied to transactions of average value.** Tables 6 and 7 show that in some countries the interchange fee also includes a fixed amount in addition to a percentage value, or it may consist exclusively of a fixed amount in relation to debit products. For the purpose of further comparability, we projected these amounts to average transaction values and measured the rate of the interchange fee charged for a payment transaction.

For the calculation of the average transaction values of payment card payments, we used the payments tables published in the data warehouse of the European Central Bank as a basis, where the last data series – at the time of this study – relates to the year 2008. We therefore applied the foreign exchange middle rate of the MNB of 31 December 2008 for converting non-euro amounts.\textsuperscript{220} Some countries did not provide a breakdown of payments relating to debit and credit products; in relation to these, we calculated the average transaction values on the basis of total payment card payments (these are shown in green).

Since MasterCard applies the fee relating to the ‘MasterCard and MC Electronic’ card to both debit and credit cards, we projected this to the average transaction value of both debit cards and credit cards. We projected fees relating to products bearing the Maestro trademark to the average value of debit card transactions and to the average value calculated on the basis of total payments.

Comparing the interchange fees charged for an average transaction conducted with a MasterCard card in different countries, we can observe that the euro amounts in Hungary significantly exceed the regional average in Table 6, but these are ranked in the lower segment in comparison to other countries.

We carried out the same comparison in relation to Visa cards as well, and found that in comparison to other countries, the rate of interchange fees charged for domestic transactions is one of the lowest.

As a variation to the comparison applied in relation to MasterCard, since Visa distinguishes between credit and debit interchange fees within business cards, we projected these to the appropriate average transaction values.\textsuperscript{221}

Tables 6 and 7 clearly show that the higher the average transaction value in percentage of the interchange fee in a country, the higher the amount of the interchange fee per transaction. Table 7 highlights countries where the rate of the interchange fee is the same in a percentage rate, but its amount projected to the average transaction value shows major differences.

### 7.5 PROFITABILITY OF THE HUNGARIAN PAYMENT CARD BUSINESS

In the framework of the survey of the social costs of payment instruments referenced above, the MNB surveyed eleven banks and one savings co-operative (hereinafter ‘sample credit institutions’) on their payment card issuing and acquiring activity and their costs and revenues arising in the year 2009. In the framework of the same project, three hundred companies/merchants were also surveyed as to whether they enable payment card payments – if not, why, and if they do, what are their related costs. We summarise the relevant conclusions at the end of the chapter.

\textsuperscript{219} It is important to note that pursuant to the agreement concluded between Visa and the European Commission on 8 Dec 2010, Visa agrees not to raise the rate of the average interchange fee relating to debit cards over 0.2% in connection with European regional transactions. The direct effect of this agreement on the Hungarian domestic market remains unclear, but it may even suggest a further decrease of Visa fees. This would further increase the difference between fee rates applied by the two card companies in Hungary.

\textsuperscript{220} 1 EUR = 1.0286 GBP.

\textsuperscript{221} Since the data provision of the ECB does not contain data relating to business card payments, we projected the interchange fee of business cards to the average transaction value calculated on the basis of total payments.
### Table 6
**MasterCard interchange fees relative to average transaction value**

<table>
<thead>
<tr>
<th>Average transaction value (EUR)</th>
<th>Interchange fee based on average transaction value (EUR)</th>
<th>consumer products</th>
<th>business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MasterCard and MasterCard Electronic debit</td>
<td>Maestro debit</td>
<td>MasterCard and MasterCard Electronic credit (based on average card transaction value)</td>
</tr>
<tr>
<td>debit card</td>
<td>credit card</td>
<td>total turnover</td>
<td></td>
</tr>
<tr>
<td>Regional fees in EEA</td>
<td>51</td>
<td>75</td>
<td>57</td>
</tr>
<tr>
<td>Hungary</td>
<td>32</td>
<td>37</td>
<td>33</td>
</tr>
</tbody>
</table>

Interchange fees in some European countries for comparison:

<table>
<thead>
<tr>
<th>Country</th>
<th>Average transaction value (EUR)</th>
<th>Interchange fee based on average transaction value (EUR)</th>
<th>consumer products</th>
<th>business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>50</td>
<td>56</td>
<td>56</td>
<td>0.402</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>43</td>
<td>50</td>
<td>67</td>
<td>0.477</td>
</tr>
<tr>
<td>Finland</td>
<td>32</td>
<td>36</td>
<td>36</td>
<td>n. a.</td>
</tr>
<tr>
<td>France</td>
<td>51</td>
<td>51</td>
<td>51</td>
<td>0.290</td>
</tr>
<tr>
<td>Germany</td>
<td>63</td>
<td>76</td>
<td>68</td>
<td>n. a.</td>
</tr>
<tr>
<td>Italy</td>
<td>93</td>
<td>98</td>
<td>98</td>
<td>1.112</td>
</tr>
<tr>
<td>Netherlands</td>
<td>43</td>
<td>46</td>
<td>46</td>
<td>0.343</td>
</tr>
<tr>
<td>Poland</td>
<td>31</td>
<td>38</td>
<td>34</td>
<td>0.430</td>
</tr>
<tr>
<td>Slovenia</td>
<td>35</td>
<td>35</td>
<td>37</td>
<td>0.283</td>
</tr>
<tr>
<td>Sweden</td>
<td>35</td>
<td>19</td>
<td>46</td>
<td>0.281</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>58</td>
<td>80</td>
<td>67</td>
<td>0.468</td>
</tr>
</tbody>
</table>

### Table 7
**Visa interchange fees relative to average transaction value**

<table>
<thead>
<tr>
<th>Average transaction value (EUR)</th>
<th>Interchange fee based on average transaction value (EUR)</th>
<th>consumer products</th>
<th>business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>credit/charge</td>
<td>debit</td>
<td>credit/charge</td>
</tr>
<tr>
<td>debit card</td>
<td>credit card</td>
<td>total turnover</td>
<td></td>
</tr>
<tr>
<td>Regional fees in EEA</td>
<td>51</td>
<td>75</td>
<td>57</td>
</tr>
<tr>
<td>Hungary</td>
<td>32</td>
<td>37</td>
<td>33</td>
</tr>
</tbody>
</table>

Interchange fees in some European countries for comparison:

<table>
<thead>
<tr>
<th>Country</th>
<th>Average transaction value (EUR)</th>
<th>Interchange fee based on average transaction value (EUR)</th>
<th>consumer products</th>
<th>business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>50</td>
<td>111</td>
<td>62</td>
<td>1.115</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>76</td>
<td>81</td>
<td>78</td>
<td>0.326</td>
</tr>
<tr>
<td>Belgium</td>
<td>50</td>
<td>56</td>
<td>56</td>
<td>0.308</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>43</td>
<td>50</td>
<td>67</td>
<td>0.497</td>
</tr>
<tr>
<td>Denmark</td>
<td>48</td>
<td>84</td>
<td>51</td>
<td>0.631</td>
</tr>
<tr>
<td>Finland</td>
<td>32</td>
<td>36</td>
<td>36</td>
<td>0.198</td>
</tr>
<tr>
<td>Germany</td>
<td>63</td>
<td>76</td>
<td>68</td>
<td>1.200</td>
</tr>
<tr>
<td>Italy</td>
<td>93</td>
<td>98</td>
<td>98</td>
<td>0.539</td>
</tr>
<tr>
<td>Netherlands</td>
<td>43</td>
<td>46</td>
<td>46</td>
<td>0.253</td>
</tr>
<tr>
<td>Poland</td>
<td>31</td>
<td>38</td>
<td>34</td>
<td>0.510</td>
</tr>
<tr>
<td>Romania</td>
<td>53</td>
<td>43</td>
<td>51</td>
<td>0.432</td>
</tr>
<tr>
<td>Slovakia</td>
<td>63</td>
<td>54</td>
<td>62</td>
<td>0.379</td>
</tr>
<tr>
<td>Slovenia</td>
<td>35</td>
<td>35</td>
<td>37</td>
<td>0.386</td>
</tr>
<tr>
<td>Sweden</td>
<td>35</td>
<td>19</td>
<td>46</td>
<td>0.104</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>58</td>
<td>80</td>
<td>67</td>
<td>0.616</td>
</tr>
</tbody>
</table>
This study only takes into account the turnover, costs and revenues of domestic purchase transactions conducted with domestically issued payment cards. We do not cover the revenues and costs of cash withdrawal transactions.

7.5.1 Findings relating to the whole of the business

Profitability of the Hungarian payment card market. In the framework of the referenced survey, the questionnaire sent to banks requested the following revenue and cost data, separately in relation to credit and debit products on the issuer side, to acquirer activity and the whole of the business.

On the issuer side, the ratio of annual card fees and other items under the terms and conditions to purchase turnover and the interchange fee was considered as revenue; this was supplemented with interest income and fees related to lending in relation to credit cards.

On the acquirer side, revenue consisted of merchant fees and amounts collected from merchants under other titles.

On the issuer side, we requested banks to indicate the cost of the following activities in proportion to payment card purchases:

- customer acquisition and service contracts,
- risk analysis,
- card issuance,
- processing of non-payment transactions (including transaction authorisation),
- domestic interbank clearing and settlement costs,
- prevention and management of fraud,
- cost of auxiliary services provided to customers,
- international card company membership and other fees,
- customer service,
- management and monitoring activity,
- advertising and marketing costs,
- document management and archiving,
- monitoring and other activities related to money laundering.

With respect to credit cards, this was supplemented with net crediting loss (irrecoverable debt), debt collection costs and capital costs.

On the acquirer side, the only difference to the issuer side is that instead of card issuance, we took into account the costs of managing POS terminals and purchase transactions. The amount of the interchange fee paid by acquirer banks is indicated under the latter item as well.

Calculation methodology. At a sector level, we aggregated revenue and cost data in the sample received from the credit institutions on the basis of turnover data retrieved from central bank data collections.

We first compared the value of the domestic purchase turnover of credit institutions in the sample with sectoral domestic purchase turnover, with the following results: the turnover of sample credit institutions accounts for 97% of debit card turnover and 91% of credit card turnover and all of merchant acquirer turnover.

On the basis of these ratios, we calculated the value of on-us items at a sector level in relation to credit and debit products, deriving interbank turnover by deducting it from total turnover.

We then multiplied the revenues and costs of the sample credit institutions by the same ratios, receiving revenue and cost data relating to the entire sector.

With the same method we aggregated the revenues of issuer banks from interchange fees at a sector level.

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222 Credit products include charge cards, while debit products include debit schemes linked to a credit line and prepaid schemes.

223 MNB data collections with code P27 relating to issuer business data and P07 relating to acquirer data.
Average interchange fee in Hungary. On the basis of the foregoing, the total interchange fee between domestic banks, expressed in percentage of total domestic payment card payments turnover – irrespective of trademarks, card types and merchant types – equalled 0.75% for credit cards and 0.48% for debit cards. Thus, in 2009:

- interchange fee revenue from the HUF 200.4 billion in credit card turnover equalled HUF 1.5 billion;
- interchange fee revenue from the HUF 1,050.4 billion in debit card turnover equalled HUF 5.0 billion.

If interchange fee revenue is projected only to the value of actual interbank turnover (off-us items), we receive the following fees as a percentage:

- 0.96% of credit card interbank turnover equalling HUF 156.2 billion;
- 0.88% of debit card interbank turnover equalling HUF 567.2 billion.

Hereafter, we use the interchange percentage ratio relative to total domestic payment card payments turnover.

Profitability of the payment card business. We analysed the ratio of revenues and costs to each other and profitability to total sectoral turnover and to the issuer and acquirer side.

Chart 13 does not indicate (either among costs or revenues) the HUF 6.5 billion total amount of the interchange fee paid by merchants as part of the fee paid by acquirers to issuer banks. The revenue figures of issuer banks, however, contain the interchange fee transferred by acquirers in a breakdown of debit and credit schemes. We carried out the breakdown on the basis of information requested in the framework of the social costs of payment instruments survey; interchange revenues of banks issuing credit and debit cards are listed separately among revenues.

In terms of the absolute value of costs, costs (relating to both card types) incurred in the issuer branch relative to the same turnover are much higher than costs arising in the acquirer branch. Thus, the figures support the assumption that the distribution of costs between issuer and acquirer banks is uneven – the interchange fee may attempt to compensate for this.

Profitability without the interchange fee. With respect to the ratio of revenues and costs, we may also establish that the amount of income realised by banks on the issuer side of the payment card business – including the interchange fee – is higher in relative and absolute value than on the acquirer side. As indicated by Chart 14, total income on the issuer
side would be significantly lower without the interchange fee, although the business would overall remain profitable.

Chart 14 also shows that costs and revenues in the credit card issuer business are much higher, as the revenue side includes interest on overdue debt and other fees relating to lending, and on the cost side, losses incurred from irrecoverable

Chart 15
Profitability of debit card issuance with varying interchange fee rates

In this case, we obviously assumed that if there is no interchange fee, it is also excluded from the total merchant fee charged to merchants, therefore indicating reduced profit within the total sector. Thus, the difference between the two scenarios in terms of total sectoral profit would be incurred by merchants.
debt. If income realised in the credit card business is reduced with the amount of the interchange fee, the balance is still positive.

In the case of debit cards, however, the numbers show a different picture: the branch becomes unprofitable without interchange fee revenue. With regard to debit cards, we therefore examined the effect of a further decrease of the interchange fee on the profitability of the entire sector.

In Chart 15, we highlighted income relating to the current 0.48% turnover-proportionate interchange fee and examined the effect of higher and lower interchange fees on income. We can see that the overall debit card issuer business becomes unprofitable with a 0.13% interchange fee.

Market share of profitable issuers. We also analysed the percentage rate of the debit card market that would remain profitable with turnover-proportionate interchange fees of various rates. Chart 16 shows that with the current 0.48% interchange fee, the business is profitable for issuer banks that produce 82.3% of total domestic debit card turnover. It is interesting to note that the ratio of profitable debit card issue within turnover would remain the same with a zero interchange fee, and it would fall to 22% only with a −0.13% interchange fee.

Fee flow. Charts 17 and 18 show the flow of costs and revenues illustrated in Chart 13 in relation to debit and credit schemes operated between participants of the card sector. We distributed the costs and revenues of the acquirer bank between debit and credit cards on the basis of the transaction number.

Chart 17 shows the total amount of fees paid by merchants to their banks in 2009 in relation to debit schemes and the amount thereof paid by acquirers to issuers under the title of interchange fees. Issuers also realise revenue from cardholder fees. The difference between costs and revenues corresponds to the profit of banks, indicating the consolidated profitability of the entire debit card business.

We examined the same figures in relation to the credit card scheme. Beyond differences in the amount of costs, revenues and profitability, Charts 17 and 18 also differ in that revenues collected from cardholders in relation to credit cards schemes also include revenues arising in connection with credit provided to customers. The cost side also covers losses arising from irrecoverable debt, cost of debt collection and capital costs.
Chart 17
Profitability of the debit card business
(HUF billion)

Issuer costs: 16.64

Cardholder

Profitability of debit cards: 3.81

Acquirer costs: 7.94

Merchant

Interchange fee: 5

Chart 18
Profitability of the credit card business
(HUF billion)

Issuer costs: 57.05

Cardholder

Profitability of credit cards: 5.51

Acquirer costs: 1.30

Merchant

Interchange fee: 1.5
7.5.2 Findings relating to banks

Issuer business

We first examine changes in revenues and costs in the payment card issuer business – in its segment covering domestic payment transactions – in 2009 at selected banks in the issuer and acquirer branches.

With the exception of two banks, credit card issuance is profitable with a 0.85% turnover-proportionate interchange fee for banks participating in the survey, as their revenues exceed costs.

If we examine the same items in relation to the issuance of debit cards, costs exceed revenues at five banks, and thus the debit card business is in itself unprofitable for these banks, even with the current 0.48% interchange fee.

We analysed the weight of banks operating on the issuer side of the domestic payment card sector on the basis of domestic payments transacted with cards issued by them.

We observed that the debit card issuance business shows a very high level of concentration on the basis of turnover in payment card payments. Revenues exceed costs at three out of the ten surveyed banks, while the debit card branch is in itself unprofitable at one bank. Should the interchange fee further decrease, the five, currently unprofitable banks – accounting for one-fifth of turnover – would need to revise their debit card issuance division:

- or be forced to increase cardholder fees, which may entail customers going to another bank where fees are lower,
- or possibly consider the termination of debit card issuance activity.

Both eventualities would result in a further rise in concentration in the business, potentially leading to declining competition and presumably to increased cardholder fees.

Position of banks without the interchange fee. We also examined effects arising if the rate of the interchange fee is reduced to zero in relation to the five banks, where the issuance of debit cards is profitable with the current interchange fee. We found that the revenues of these credit institutions still exceed costs with an interchange fee rate of zero. This means that debit card issuance would remain profitable for the five credit institutions, accounting for 82% of debit card purchase turnover, with a zero interchange fee rate. By way of comparison, currently 24 credit institutions in Hungary have an interest in issuing debit cards (for the purpose of this study, debit schemes related to credit lines are included).

In the credit card issuance segment, the sectoral distribution of turnover per bank is significantly more even, and only two banks realise losses and these jointly account for 21% of credit card turnover. The rate of the interchange fee affects the profitability of the credit card branch by a much lower rate (15% of income), and therefore the reduction of the fee would presumably not be as critical as in relation to debit cards.225 If the fee were reduced to zero, the currently profitable seven banks – accounting for 68% of credit card purchase turnover – would remain profitable. Currently, there are 18 banks which issue credit cards in Hungary (for the purpose of this study, charge schemes are included).

Acquirer business

In the merchant acquirer business, revenues and costs are roughly the same in the case of one bank (with moderately higher revenues), two banks have a positive balance, but the payment card acceptance activity of three banks is unprofitable. Two of the three banks entered the acquirer market in recent years.

In this area again, we examined the development of acquirer turnover at different banks related to domestic purchases, and we also looked at the ratio of on-us items in relation to the above, as this plays an important role in competition for merchant acceptance points.

225 We have no information available on the profitability of banks accounting for 11% of turnover.
The acquirer branch also shows a high level of concentration: 93% of domestic card purchases are transacted through the merchant network of two acquirer banks.

We also looked at the ratio of on-us items at banks in the acquirer branch. The ratio of such transactions amounts to approximately 10% or less for all participants, with the exception of one bank, and is significantly higher in relation to another participant. Since the interchange component of the merchant fee is also collected by the acquirer bank (the issuer and acquirer are the same bank) in relation to on-us transactions, the higher the on-us ratio, the higher the revenue.

**Possible effects of reducing the interchange fee.** We analysed the consequences of an interchange fee cut and drew the following conclusions:

- two banks are currently in the process of developing their acquirer business; their share of turnover is presently negligible, at a total of 2.2%;
- the situation is different in the case of a major, but currently unprofitable participant within the acquirer business: in 2009 the acquirer turnover proportionate interchange fee equalled 0.77% – if it were reduced to 0.36%, the branch would break even.

Thus, the reduction of the interchange fee may improve the position of start-up and currently unprofitable banks in the acquirer business, but it similarly positively affects the business of already profitable banks. Thus, a bank in a dominant position can proportionately or to an even greater extent expand its acquirer network, as it remains in a better bargaining position vis-à-vis merchants even with lower interchange fees, as a result of the high ratio of its on-us turnover, than banks with lower interchange 'savings', with a smaller on-us ratio.

### 7.6 MERCHANT BEHAVIOUR RELATED TO CARD ACCEPTANCE

In the framework of the project by the MNB in 2010, surveying the social costs of payment instruments, in the first half of 2010, GfK Hungária surveyed three hundred merchants/collection companies on behalf of the central bank as to whether they enable payment card payment, and if they do, what was the interchange fee in 2009, and whether their bank charged any additional fees.

**Merchants rejecting payment card payment.** One-third of the three hundred merchants enable payment card payment in their stores (a total of 1,193 stores). Of merchants who do not accept payment cards, 16% replied that this is because they find it too expensive, as shown by Chart 19.

In comparison, according to the survey of the Hungarian Competition Authority conducted in 2007, serving the analysis of 'Merchant behaviour related to card acceptance', 14% of merchant respondents said that they would introduce card acceptance with lower merchant fees.

We identified the sectors where merchants find payment card acceptance 'too expensive' or 'unnecessary'. Charts 20 and 21 show the results.

Over one-fifth of merchants who consider payment card payment to be too expensive (and therefore reject it) are in the 'retail' sector, but the 'other services sector' and 'carriage and warehousing' also have high ratios. The other sectors individually account for a ratio of less than 10%.

One-fifth of merchants who say that there is no demand for payment card payment in their stores are in the 'other services' sector, but over 10% of stores in the 'manufacturing industry' and 'carriage and warehousing' also consider it unnecessary to introduce card payment.

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226 The interchange component of the merchant fee remains with the acquirer bank in relation to on-us payments.

227 The survey generally covered the use of payment instruments, including cash payment, credit transfer, direct debit, yellow cheques and payment cards.

The survey did not explore why respondents considered the introduction of payment card payment unnecessary, but informal information suggests that this motivated in some cases by tax avoidance. Some merchants do not accept payment cards because they would not only have to pay merchant fees, but also the amount of VAT on the product – since there is a ‘trace’ of payment – and this results in substantial additional costs over the cash sale of the product without an invoice.

Effect of a maximised merchant fee. In the survey we also wished to measure the effect of maximising the merchant fee at 2%229 – effective as of 1 May 2010 – on payment card acquirer business. We asked one hundred merchants accepting payment card payments as to the amount of the fee paid to their banks prior to regulation (i.e. in 2009). We filtered merchants who stated a zero merchant fee or did not state the amount of the fee; their number is high, as 57 merchants

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229 The next chapter discusses regulation in detail.
accepting Visa cards and 57 merchants accepting MasterCard cards remained after filtering (we also requested data in relation to American Express and Diners Club cards, where respondents stated higher fees; this study, however, principally focuses on four-party card systems). We received roughly identical responses in relation to the two card trademarks, as indicated by Chart 22.

The responses suggest that with respect to the two trademarks, the vast majority of merchants − 89% for MasterCard and 84% for Visa − paid a 2% fee or less even prior to regulation. Merchants paying a 1% merchant fee operate in the following sectors: fuel companies, daily consumer goods, accommodation and catering, apparel trade, arts and recreational activities. Merchants paying a fee of over 2% typically operate in sectors offering daily consumer goods, electronics/durable goods, home products and other services. Upon comparison of the two pie charts, there are overlapping segments, presumably attributable to the fact that Internet merchants, night clubs and gaming halls, for example, commonly pay higher fees, their activities involve higher risks in terms of secured payment.

Although this study does not deal with three-party card systems, for the sake of completeness, we wish to make note of the following: 23 responding merchants accepted American Express cards − 65% of them paid a 2% fee, while others paid 3-5%. Nine of the respondents accepted Diners Club cards − all of them paid a fee of 3-5%.

The survey substantiated the assumption that the increase in the number of stores accepting cards and POS terminals operating there is reversely proportionate to the rate of the fee.

Other fees. One-fifth of merchants paid various fees under other titles in addition to the merchant fee to the merchant’s bank; the distribution of these is indicated by Chart 23. We should note that this picture does not show the situation caused by the 2% regulation, but relates to the year 2009, when the merchant fee was not yet subject to a statutory upper limit.

Thus, most acquirer banks collected payment from merchants under the title of POS rental fee in addition to the merchant fee, affecting 12% of merchants. Obviously, this does not mean that the remaining 88% of merchants owned their POS terminals − according to our information, only 5% of merchants owned terminals − but that in 12% of the cases, the acquirer bank did not integrate the POS rental fee into the merchant fee.

Chart 21
Sectoral distribution of the ‘unnecessary’ category

![Chart 21: Sectoral distribution of the ‘unnecessary’ category](image)

230 The majority of merchants accept both cards, but there are some that only accept Visa or MasterCard cards for payment.
Chart 22
Merchant fees of Visa and MasterCard cards

- Visa
  - 5% paid
  - 3% paid
  - 4% paid
  - 2% paid
  - 1% paid
  - 1% paid
  - 21% paid

- MasterCard
  - 5% paid
  - 3% paid
  - 2% paid
  - 7% paid
  - 1% paid
  - 1% paid
  - 70% paid

Chart 23
Titles of fees paid to acquirer banks in addition to the merchant fee

- POS installation 15%
- POS maintenance 10%
- POS software update 5%
- POS internet connection 10%
- POS rental fee 60%
Subject of the inquiry. On 31 January 2008, the Hungarian competition authority launched competition proceedings against Hungarian payment card issuer banks and the card companies Visa and MasterCard on suspicion of a restrictive agreement. The inquiry primarily focused on the interchange fee applied in card payment systems, but also extended to the review of the honour-all-cards rule (HACR), the no-surcharge rule and the blending of the various cards of the card companies. According to the formulated suspicion, the interchange fee restricts competition between acquirer banks in that it functions as the lower limit (threshold value) of the fee paid by card acceptor merchants to acquirer banks without providing adequate compensation to merchants for the negative effects of restriction.

8.1 CONCLUSION OF THE AGREEMENT, PARTIES

Establishment of the Payment Card Forum. In the early 1990s, Hungarian card issuer banks established the Payment Card Forum that declared as its objective the implementation of market development related to the issue of payment cards, the resolution of the problems of banks in this area, the definition of the main directions of development and unified communication toward the card company – at the time, only Visa was present on the Hungarian market. The informal nature of the forum changed in 1995 and 1996; the active participants on the Hungarian payment card market developed multilateral forms of cooperation – banks operating in the area of the issue and acceptance of domestic cards and the two card companies concluded an agreement between each other in the framework of the forum.

In the framework of the forum, the participating banks set the rate of the interchange fee that generally determines fees payable by merchants (MSC). During the initial term of the agreement, the competitive assessment of its impact mechanism was not essentially necessary, as the market participants concluding the agreement also agreed on minimum fees to be charged to merchants which also constitutes a restrictive agreement on minimum prices.

Subsequent members of the Forum. Banks subsequently entering the card payments market essentially became parties to the agreement because if they wished to issue or accept Visa or MasterCard cards, as new issuer banks on the market they could charge an interchange fee in accordance with the agreement, and the new acquirer banks transferred the interchange fee to the issuer banks in accordance with the agreement, so they accepted the agreement by implied conduct.

Role of card companies. The decision-making body of the GVH, the Competition Council, deemed the infringement to be substantiated not only in relation to the signatories and subsequently joining banks, but also in the case of the card companies.
companies. With respect to the above, the Competition Council was of the view that the rules adopted by the card companies and the assistance provided by banks in developing the practice judged to be restrictive contributed to their competitive responsibility; moreover, the card companies were aware of the uniform fee rates set in relation to both companies. On the basis of the foregoing, the Competition Council was of the view that the card companies were aware of the method of setting the MIF and they contributed to setting fees applicable to domestic transactions in Hungary²³⁹ through their international fall-back fees.²⁴⁰

Termination of the agreement. As noted in connection with the Hungarian market, at the end of July 2008 the banks terminated the agreement relating to the interchange fee presumably in reaction to the effect of the GVH proceedings.

8.2 DECISION OF THE GVH

Decision of the GVH. In its decision dated 24 September 2009, the Competition Council determined that the card issuer banks and card companies subject to the proceedings "concluded a restrictive agreement not eligible for exemption from prohibition by setting a single interchange fee rate and structure applicable to the cards of both international card companies and all banks and by providing a framework and support for such an agreement."²⁴¹

Restriction by object and effect. The Competition Council judged the reviewed agreement to be restrictive both in terms of its object and its actual market effect. It argued that "the joint and uniform setting of interchange fees distorted competition. It was not possible for competition between Visa and MasterCard to have an effect in this area which simultaneously restricted competition between the acquirer banks as well. They thus affected the level of the merchant fee (that is, the fee paid by the merchant to the bank acquiring card payments) through the agreement, such fee constituting one of the key factors of competition between banks providing acquirer services."²⁴²

Box 4

Restriction by object and effect: With regard to restriction by object, the subject of inquiry is not the subjective intention of the parties, but whether the provisions of their agreement was aimed against competition on the basis of its nature. In certain cases – where the aim of agreements is restriction through the fixing of prices, restriction of output or the division of the market or clientele – the nature of cooperation between undertakings implies its negative market effects from the very beginning. Therefore, in these cases, it is not necessary to examine their actual effect on competition. Many agreements, however, do not aim at restricting competition, but may potentially adversely affect competition. It is therefore necessary to analyse the effects of the agreement in relation to such agreements.

In the course of the GVH proceedings, several pieces of evidence substantiated the fact that the agreement on the interchange fee was restrictive by object, as

(1) the joint treatment of the two card companies neutralised one of the key elements of price competition between the two companies,
(2) the credit institutions themselves, subject to the proceedings, also regarded it as reducing price competition between the acquirer banks, and
(3) irrespective of the above, the joint setting of the interchange fee realised at the level of the card companies constituted an agreement of a nature that necessarily affects competition between acquirer banks in relation to the merchant fee.²⁴³

²³⁹ For the detailed analysis, see Competition Council decision Vj-18/2008, points 173-178.
²⁴⁰ Regional fees applied where no domestic fees are determined.
²⁴² Competition Council decision Vj-18/2008/341, point 187.
²⁴³ Competition Council decision Vj-18/2008/341, point 188.
On the basis of the above argument, the Competition Council maintained that the setting of the interchange fee in the objected manner had the aim of affecting the rate of merchant fees and set a minimum value for them.\textsuperscript{244}

**Restrictive effect.** In addition to restriction by object, the Competition Council judged the restrictive effect to be also substantiated on the basis of the above argument, as ‘the artificially set single cost factor, the MIF constituted the lower limit of the price of the acquirer service, therefore the agreement relating to the interchange fee resulted in the restriction of price competition between acquirer banks on the market of acquirer services.’ The Competition Council underlined the adverse consequences of the joint treatment of the two card companies also when it stated that an earlier reduction attempt had failed, because the rules of one card company permitted majority decision making, while the rules of the other only permitted unanimous decision making.\textsuperscript{245}

The restrictive effect of the agreement was also substantiated by the fact that the rate of the fee did not decrease with the spread of card payment, either, and the rate of the fee also served as a bottom limit to the price of transactions where the payment of the interchange fee was not even necessary, as the card acquirer and card issuer were the same bank.\textsuperscript{246}

**Network rules.** In the view of the Competition Council, the restrictive effects of the MIF were compounded by other rules such as the honour-all-cards rule, blending and the no-surcharge rule. The Competition Council, however, did not put forth an opinion with respect to the independent illegality of such rules.

**Possibility of exemption.** A restrictive agreement – even if restricting by object – may be granted exemption from prohibition pursuant to both Community and Hungarian competition regulations. For exemption, however, it is necessary to prove that the objective benefits caused by restriction outweigh the disadvantages, and that the reasonable portion of benefits are enjoyed by consumers, where the agreement does not impose restrictions on the undertakings concerned that are not essential for the implementation of such objectives or which disable competition with respect to a substantial portion of the products concerned.

The Competition Council did not dispute that multilateral card payment systems can offer numerous efficiency benefits. It did not, however, judge as proven – principally due to distorted competition resulting from the joint treatment of the two card companies – that restriction only reached an essentially necessary level at all times or that a reasonable portion of benefits were enjoyed by cardholders and merchants. This is attributable to the fact that

a) the MIF rate remained unchanged for many years, while both sides of the market significantly changed and costs also declined,
b) a single MIF was applied to debit cards and more costly credit cards,
c) the setting of the MIF and its subsequent modifications were not preceded by cost analyses, and just as importantly, by consideration of the changing demands and properties of the two sides on the market.\textsuperscript{247}

With regard to exemption, the Competition Council noted that the undertakings subject to the proceedings should have first shown that the interchange fee is uniformly applied in relation to both card companies, the efficiency benefits resulting from the joint setting of the fee by banks (and thereby from the rate thereof), and whether such benefits outweigh disadvantages resulting from restricted competition. The defendants, however, did not submit any data or information relating to the above.

**Commitment proposal:** On 22 October 2008, the banks subject to the proceedings put forth a commitment package – with the intermediation of the Hungarian Banking Association – with a view to concluding the proceedings. Main objectives of the commitments:

\textsuperscript{244} Competition Council decision Vj-18/2008/341, point 205.
\textsuperscript{245} Competition decision Vj-18/2008/341, points 199-205; for more details on the reduction attempt see point 106 et al.
\textsuperscript{246} See on-us transactions in the section discussing the Hungarian market.
\textsuperscript{247} Competition Council decision Vj-18/2008/341, point 207.
• educational, awareness-raising campaigns;
• joining to the MasterCard Merchant Mentor Programme, strengthening of information supply to the acquirer side, integration of new market segments on the acquirer side (notaries, lawyers, etc.);
• further development of market standards, standardisation of payment card procedures, interfaces;
• development of government card acceptance.248

On the basis of the commitments, however, the Competition Council did not dismiss the proceedings by approval of the commitments, as the restrictive behaviour was of a nature that could not be sanctioned with forward-looking commitments, but rather with the determination of infringement and the imposition of a penalty. The commitments were inadequate to remedy past adverse effects attributable to over-pricing, resulting from the nature of the restrictive agreement.

Sanctions. The Competition Council judged it appropriate to also impose fines on parties who actively contributed to the conclusion of the distorting agreement, in view of the fact that the agreement affected relationships between competitors and its effects were persistent in the long term. The undertakings subject to the proceedings were found responsible to varying extents for the conclusion and operation of the restrictive agreement. Upon sanctioning of the infringement, the Competition Council considered such variation by not imposing a fine on banks that subsequently became parties to the MiF agreement, as such agreement constituted a condition for market entry.

The competition authority considered the total amount collected by all issuer banks under the title of interchange fee paid on a national level from 2004 to 2007 as the basis of the fine. As a mitigating circumstance, the Competition Council determined that the defendants themselves recognised the fact that they should have modified the rate of the interchange fee. The defendants were co-operative in the course of the proceedings. For example, they voluntarily submitted documents necessary for the investigation of the infringement, the clarification of historical events and the determination of their competitive responsibility, they actively cooperated upon launching of the proceedings, elaborated commitment proposals involving substantial financial burdens, and argued that the European Commission had not imposed fines on partially similar agreements at the time.

Legal remedy. The card companies and banks on which the competition authority imposed fines appealed the decision. On 29 October 2010, the Metropolitan Court of Budapest suspended the proceedings in the case in view of the MasterCard case investigated by the European Commission.

Box 5
We provide below an overview of the referenced provisions of the Competition Act (Act LVII of 1996 on the Prohibition of Unfair and Restrictive Market Practices).

Exemption: With regard to restrictive agreements, Hungarian law also regulates the possibility of exemption (Section 17). In accordance with EU competition regulations, pursuant to the Competition Act, the prohibition of a restrictive agreement does not apply to an agreement if (1) it contains facilities to improve economic development or competitiveness, (2) a fair part of the benefits arising from the agreement is conveyed to the consumer, (3) the concomitant restriction or exclusion of economic competition does not exceed the extent required for attaining the economically justified common goals, and (4) it does not contain facilities for the exclusion of competition in connection with a considerable part of the goods concerned.

Commitments: Pursuant to the Competition Act (Section 75), if with respect to conduct investigated by an ex officio competition control proceedings the client undertakes the commitment to proceed in a specific way to bring this conduct into conformity with the provisions of this Act, the acting Competition Council shall have powers to adopt a ruling to dismiss the proceedings and to oblige the client in question to undertake that commitment, without adopting an opinion regarding any infringement of the law. Pursuant to the Competition Act, the proceedings may be dismissed if the most effective protection of public interests can thereby be ensured. The advantage of concluding the proceedings in this manner – frequently applied by foreign competition authorities as well – is that the identified competition issue can be remedied faster and more effectively with the collaboration of the undertakings concerned. The

248 In March 2009, the defendants also submitted a modified, expanded commitment to the Competition Authority.
GVH verifies the fulfilment of commitments in a subsequent review. If the undertaking fails to fulfil its commitments, a substantial fine may be imposed on it.

Sanctions, fines: The Competition Act sets out various sanctions. As one of the most serious sanctions, the Competition Council can impose a fine on undertakings subject to the proceedings concurrently with the determination of infringing behaviour. The amount of the fine is maximised at 10 per cent of the net sales revenue of the undertaking realised in the previous financial year. The amount of the fine is determined on the basis of all circumstances of the case, particularly the severity of the infringement, period of infringement, advantages gained from the infringement, market position of the infringing parties, co-operative behaviour in the proceedings, repeated infringing behaviour.

Appeal: The card companies and banks on which the competition authority imposed fines appealed the decision. The case is currently before the Metropolitan Court of Budapest.
Several regulatory attempts were made in Hungary in 2009 and 2010 in connection with card payment. These principally focused on the rate of interchange fees and merchant fees, as well as the authorisation or prohibition of surcharging linked to legal harmonisation obligations.

9.1 REGULATION RELATING TO THE INTERCHANGE FEE AND MERCHANT FEE

Act CL of 2009 on the amendment of certain financial acts amended the Payment Services Act\textsuperscript{249} by setting upper limits to interchange fees, on the one hand, and to fees payable by merchants, on the other.

The regulation was initiated as an individual motion in parliament, adopted in parliament by a large majority, although professional organisations, regulatory authorities (HFSA, MNB) and government bodies generally responsible for drafting such legislation expressed their doubts in the course of consultations. Opponents of the regulation were of the view that without adequate preparatory materials and impact studies, it is impossible to determine the justification of the interchange fee or its socially efficient rate, and therefore they opposed premature regulation.

Regulation of the interchange fee rate. With regard to the rate of interchange fees,\textsuperscript{250} the regulation attempted to maximise the rate of the fee payable by acquirer banks to card issuer banks based on the type of transaction. On the basis of the above, the maximum fee chargeable for the credit card transactions of private individuals is 0.75\% of the transaction value or 0.3\% of the transaction value in relation to debit cards, but no more than HUF 100. A 0.8\% maximum rate would have been applicable in all other cases (e.g. in connection with business cards).

Regulation of merchant fee rates. In addition to the rate of interchange fees, the draft regulation aimed at setting an upper limit to merchant fee rates as well. Pursuant to the law, ‘the maximum fee charged for the use of POS terminals is 2 per cent of the transaction value,’\textsuperscript{251}

Problems with the regulation. The planned regulation would have entered into force on 1 March 2010,\textsuperscript{252} but serious problems arose in connection with the interpretation of the law. As a result, the regulation was again amended prior to its entry into force:

• sections relating to the regulation of the rate of the interchange fee were cancelled,
• the effective date was modified to 1 May 2010, and
• the rule relating to the rate of the merchant fee was clarified as follows.

Pursuant to Section 35 (3) of Act LXXXV of 2009 on the provision of payment services:

\begin{quote}
‘The rate of commission, fees and other costs charged by the payment service provider to the beneficiary, directly relating to payment transactions conducted with cash substitutive payment instruments, not including cheques and
\end{quote}

\textsuperscript{249} Act LXXXV of 2009 on the provision of payment services.

\textsuperscript{250} The term ‘interchange fee’ is not used in the regulation. The Act defined the scope of maximised fees as the ‘fee paid directly or indirectly by the acquirer payment service provider to the issuer payment service provider, if the acquirer payment service provider and the issuer payment service provider are not the same, upon the use of cash substitutive instruments, not including cheques and electronic money [Act CL of 2009, Section 165 (3)].

\textsuperscript{251} Act CL of 2009, Section 165 (5).

\textsuperscript{252} Act CL of 2009, Section 169 (5).
on the basis of the above, the rate of merchant fees was maximised at two per cent after the entry into force of the law, in relation to card payment services provided in the territory of Hungary, while the rate of the interchange fee was not regulated.

According to the survey conducted on behalf of the MNB, the regulation brought about change for only 10-15% of merchants contracting to accept Visa and MasterCard cards; other merchants paid a 2% or lower fee to their banks.

Effects of regulation. In reaction to the regulation, in cases where the rate of the previously applied fee exceeded the statutory limit, acquirer banks either simply reduced the rate of the fee to 2%, or in combination with the above, excluded costs not directly related to payment transactions – such as the cost of POS maintenance and rental – from the merchant fee and separately invoiced these to merchants as administrative costs in addition to the fee.

On the basis of central bank data collection relating to 2010 H1, the maximisation of the fee in the first half of the year did not yet result in a larger increase in the number of merchant acceptance points, although we should note that the regulation was effective only from the third third of the half-year. In the half-year prior to regulation, in 2009 H2, the number of POS terminals also increased by 7% over the previous half-year, similarly to 2010 H1.

Section 167 (1) g) of Act C/lX of 2010 eventually repealed the statutory provision relating to the maximisation of the merchant fee as of 1 January 2011.

Thoughts relating to the joint regulation of the interchange fee and merchant fee. The joint regulation of the interchange fee and merchant fee is possible in theory, but there are no practical examples of the application of this method. The general lack of dual regulation is presumably attributed to the fact that interchange fees are clearly considered to be responsible for a possible market failure on the acquirer side. It is also possible that card acquirer banks agree with each other on the rate of the merchant fee, although this is considered less to be a market failure than an obvious restrictive agreement or price cartel.

It is also possible that the set rate of the fee must also be reduced in relation to the interchange fee agreement as a result of the maximisation of final prices; thus, regulation would fulfil its objective by fixing the expected value of the final variable, but eventually this was not possible on the Hungarian market due to the annulment of the maximisation of the merchant fee.

The regulation in force from 1 May 2010 until 31 December 2010, the maximisation of acquirer fees, directly affected fees charged to merchants, while earlier regulation would have attempted to regulate the interchange fee, primarily resulting in the ineffective operation of market mechanisms. The problem of regulation, supported with adequate impact studies, is even more pronounced in relation to the maximisation of merchant fees, as this involves direct price regulation. With regard to maximised prices, final prices are frequently adjusted to maximised prices, and it is also possible that in the case of certain consumers, price regulation prevents contracting that is otherwise appropriate for both parties. These developments can even result in the inefficient operation of the payment systems.

It is extremely difficult to determine a rate supporting the efficient operation of the market in relation to the interchange fee. On the basis of the foregoing, it is possible that the fee rate resulting in optimal operation is not zero, but a positive number, and thus the interchange fee can function as a real method for managing externalities related to card payment. We should note, however, that this assumption is not supported by empirical evidence either on the international or on

253 In the framework of the project implemented by the MNB in 2010, surveying the social costs of payment instruments, GfK surveyed one hundred merchants accepting MasterCard and/or Visa cards on the rate of the fee paid by them in 2009.
254 For details, see Chart 22, entitled 'Merchant fee of Visa and MasterCard cards'.
255 There is a practical example of this: the Hungarian card acquirer banks concluded such an agreement in the early days of the card market. See section relating to the GVH proceedings and Competition Council resolution Vj-18/2008/341, points 170-171.
256 Weiner and Wright (2005), for example, provide a theoretical summary of the optimal rate of the interchange fee.
the Hungarian market. The subjective opinion of merchants, in a breakdown of individuals, seems to contradict this.\textsuperscript{257} It is likely, however, that the costs of card payment are lower in terms of the welfare effects of the entire payments system. Adequate research studies are necessary for comparing the different payments systems,\textsuperscript{258} appropriate social incentives can be developed on the basis of these to shift payments in the direction of the least costly payment instruments in a competitively neutral manner. It is in the fundamental interest of possible regulation that the rate of the interchange fee approximates an optimal level.

9.2 REGULATION RELATING TO SURCHARGING

Pursuant to the European Union directive on payment services in the internal market adopted in 2007, in the course of implementation of the directive, Member States are obliged to regulate the possibility for merchants to apply different prices in relation to different payment instruments. This enables merchants to favour payment instruments that are more advantageous (typically cheaper) for them. The directive allows Member States to deviate from this provision.

In the process of adopting the Payment Services Act in Hungary, legislation set out that ‘the beneficiary may charge fees, costs or other payment obligations, or provide discounts for the use of cash substitutive payment instruments.’\textsuperscript{259} Section 165 of Act CLIX of 2010, however, amended the earlier provision. Thus, as of 1 January 2011, ‘the beneficiary may not charge fees, costs or other payment obligations for the use of cash substitutive payment instruments’ (i.e. surcharging is currently not possible).

\textsuperscript{257} Because the costs of card payment are much more obvious for merchants, therefore these presumably play a larger role.

\textsuperscript{258} Such research is in progress on a European level on behalf of the Directorate General for Competition of the European Commission. See Allix (2009) presentation for the Payment Systems Market Expert Group. Similar research is conducted by the European Central Bank and the Magyar Nemzeti Bank.

\textsuperscript{259} Act LXXXV of 2009, Section 36 (4).
10 Conclusions

10.1 POSSIBILITY OF INTERCHANGE FEE REGULATION

**Necessity of the interchange fee.** On the basis of theory and practice relating to the interchange fee, we can conclude that the handling of externalities underlying the system may be necessary for the optimal operation of the system, therefore the application of a certain type of equilibrium mechanism may be justified. We should note, however, that the economic literature on the topic does not provide a clear answer as to whether the interchange fee is essential, although most models suggest that it offers a possible means of optimising the system.

**Competition concerns.** Interchange fees applied within four-party card systems raise serious competition concerns and these have been the subject of numerous competition proceedings. The fact that market participants deciding on the interchange fee do not represent all parties of the system leads to a conflict of interest and raises the possibility that the parties setting the fee do not necessarily aim at optimising the operation of the system, but rather at optimising their own profits. The interchange fee may be used to prevent entry into the acquirer market, and at profit-maximising levels, it may increase and distort consumer prices.

**Is regulation justified?** Since income distribution, represented by the equilibrium mechanism, may be necessary for the optimal operation of the system, but because system participants are not necessarily able to agree on this, it is possible that regulatory instruments may be required for the optimisation of the system.

10.2 FEW PRACTICAL EXAMPLES FOR THE TIME BEING, EU REGULATION IS NOT EXPECTED IN THE NEAR FUTURE

**Regulation in Australia, competition proceedings in Europe.** At this point, a comprehensive example of regulation can only be found in Australia. To the knowledge of the authors, there are no regulatory proposals, even in a drafting phase, before bodies of the European Union with regulatory competencies. At the same time, the proceedings launched by the Directorate General for Competition of the European Commission have a substantial effect on interchange fee rates, particularly in light of the fact that after the MasterCard proceedings and in the course of the Visa debit card proceedings, the card companies radically reduced fees applied to cross-border transactions. These developments are often regarded as a form of regulation particularly, but not exclusively by representatives of the card companies.

Accordingly, comprehensive European level regulation of this issue is not expected in the near future. It is possible, however, that fees related to Visa payment cards will further decline as a result of a settlement reached with the European Commission.

10.3 IMPORTANT ASPECTS OF THE HUNGARIAN CARD MARKET

**Less developed market.** The Hungarian card market is less developed than the European average, and the number of transactions is significantly lower than the European Union average. The lag is relatively larger in relation to card acceptance than in the case of card issuance.

**On-us transactions.** The Hungarian card market shows an extremely high number of on-us transactions, where the card issuer and card acquirer are the same. No interchange fee is paid in this case, but this may pose a major obstacle to market entry on the acquirer side and provide a significant competitive advantage for the major acquirer(s) already present on the market.
**Different treatment of card companies.** The commitments made in proceedings conducted by the European Commission will be governing in the case of Visa in relation to domestic interchange fees applicable on the Hungarian card market (because regional fees are still applicable in Hungary), but not in the case of MasterCard (because an independent Hungarian domestic interchange fee rate was set). MasterCard can offer a higher interchange fee, thus, in the view of card issuers, it has a major competitive advantage over the other card company as a result of regulatory/official intervention.

**10.4 COMPETITIVE EFFECTS ON THE ACQUIRER MARKET**

Models and official regulation related to the interchange fee generally do not clarify whether the card acquirer market in itself shows any qualities that would justify the regulation or special competitive management of this sub-market.

Analysis of this issue may also be important because this Hungarian market operated with basically only two participants for a long time, and despite the recent market entry of new participants, these two participants continue to dominate the market today.

An important reason for the limited number of participants is presumably the interchange fee itself. Card acquirers, who are also card issuers, can expect some of the transactions to be conducted with cards they issue (on-us transactions), where no interchange fee is charged. In these cases, on-us transactions provide a relative cost advantage for card acquirers who are also card issuers, which may pose a major obstacle to entry onto the card acquirer market, particularly as a result of the high ratio of on-us transactions.

It may also be necessary to examine whether the card acquirer market has any qualities (e.g. other entry barriers or network effects) that would justify its special treatment. In addition to the interchange fee, other major entry barriers are not likely; mainly barriers common in the financial sector are expected in connection with card acquiring. This is evidenced by the fact that many card issuer credit institutions recently entered this market in Hungary.

The network effect on the acquirer market does not in itself pose an entry/expansion barrier or competitive advantage. The different acquirers need to build a partial network and not an independent network; network membership is valuable because the merchant accepts the cards of a given company and not because the merchant belongs to the network of a given acquirer.

In the area of card acquiring, the competing offers of different acquirers would probably produce sufficient competitive pressure for the development of sufficient competition. With the exception of the interchange fee, no mechanisms on the acquirer market are known that would facilitate acquirer banks to behave in an anti-competitive manner, and therefore the traditional instruments of competition supervision are probably adequate on this market to ensure the efficient operation of the market.

**10.5 POSSIBLE MEASURES RELATING TO THE HUNGARIAN MARKET**

**Regulation in Hungary.** Upon an individual parliamentary motion in 2009, interchange fees and related merchant fees came under regulation in Hungary. The planned regulation did not enter into force with respect to the interchange fee; a 2% upper limit for the merchant fee was in force as of 1 May 2010, which was repealed as of 1 January 2011 with an additional amendment.

**Conclusions from regulation.** International experience is not available in connection with the regulation of merchant fees, as this is unique to Hungary. This is presumably also attributable to the fact that probable market failures arise in connection with the interchange fee; if it is successfully managed, straightforward regulatory demands cannot be identified solely on the basis of card acquiring. On the basis of experience available in connection with Hungarian regulation, this measure in itself affected a minor percentage of merchants in four-party card systems, as the fee paid by them was less than 2% in the past as well.

**Status assessment and impact study.** With regard to the interchange fee, however, on the basis of the above, we should not completely dismiss the idea that regulation could improve the operation of the market. Such regulation must be
essentially based on status assessment and impact studies; otherwise regulation may even be counterproductive. It is essential that the necessary studies take account of the social benefits and costs of all stakeholders, including the interests of system users and platform providers. Accordingly, the costs (and savings) of cardholders and card accepting merchants in relation to payment cards and the costs of the state, providing the platform in relation to cash, must be quantified. Such a study necessitates the preliminary resolution of numerous methodological issues, as currently there are no generally accepted methodologies on the issue.

**Optimisation of payments.** The consideration of social costs and benefits requires that efforts serving the optimisation of card payments are integrated in the framework of projects that aim at optimising all payments. The development and optimisation of different payment channels should not be implemented independently; incentives that ensure the effective operation of these markets can only be developed in a development plan relating to all payments.

**Competitively neutral intervention.** A development plan relating to the payments system should fundamentally apply the principle of competitive neutrality, as only this ensures that payments are directed to less costly payment channels through market conforming methods. Accordingly, fair regulation can contribute to establishing conditions for undistorted competition within and between the payment channels.
References

ANALYSES


BRADFORD, TERRY AND FUMIKO HAYASHI (2008), 'Developments in Interchange Fees in the United States and Abroad', Payments System Research Briefing, Federal Reserve Bank of Kansas City, April.


EDEY, MALCOLM (2010), Competition and regulation in the card payments market, (Cards & Payments Australasia conference 2010, Sydney, 15 March 2010).


KATZ, MICHAEL (2001), Reform of credit card schemes in Australia II., Reserve Bank of Australia, August.

KOVÁTS, SURD (2009), A bankkártyás fizetések versenyjogi megítélése és társadalmi költségei. (Competitive assessment and social costs of payment card payments).


RESERVE BANK OF AUSTRALIA (2008a), Merchant Service Fees and Market Shares for Credit and charge Cards.


RESERVE BANK OF AUSTRALIA (2008c), Regulation of Card Payment Systems.


References


Competition Authority Decisions


**LEGISLATION**


European Commission (2009), Summary of the decision of the Commission on proceedings defined under Article 81 of the Treaty establishing the European Community and Article 53 of the EEA Agreement (COMP/34.579, COMP/36.518, COMP/38.580). *HL C* 264, 06.11.2009, pp. 8–11.


**PRESS RELEASES, NEWS**


Commerce Commission (New Zealand), *Credit card settlements lower New Zealand business costs.* Press release. 5 October 2009.


European Commission, Antitrust: *Commissioner Kroes notes MasterCard’s decision to cut cross-border Multilateral Interchange Fees (MIFs) and to repeal recent scheme fee increases – frequently asked questions*, MEMO/09/143. Brussels, 1 April 2009.
REFERENCES


OFFICE OF FAIR TRADING (OFT), Mastercard agreement anti-competitive, rules OFT. Press release, 168/05, 06. 09. 2005.

OFFICE OF FAIR TRADING (OFT), OFT launches new Mastercard investigation. Press release, 20/05, 02. 02. 2006.

OFFICE OF FAIR TRADING (OFT), Statement regarding expansion of OFT investigation into interchange fees. Press release, 20/07, 09.02.2007.


UNITED STATES COURT OF APPEALS, Brief of Appellee Visa U.S.A., Inc. at 64, National Bancard Corp. (NaBanco) v. Visa U.S.A., Inc, 779 F.2d 592 (11th Cir. 1986) (No. 84-5818).
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