Mezitransakční poplatek – konkurenceschopnost platebních nástrojů

Interchange Fee – Competitiveness of Payment Instruments

Jitka Sládková, Tomáš Heralecký

Abstrakt:

Purpose of the article: This study describes the markets of payment instruments. It focuses mainly on the systems of credit and debit cards. Authors identify key moments in theory used in this dilemma, called Tourist Test. The market of credit cards and direct debit system is a side business, where the Interchange fee plays very important role.

Methodology/methods: In this paper was applied secondary research. The secondary research was based on analysis of papers and literature published about Interchange fee including European Commission together with polemic about payment instruments market competitiveness.

Scientific aim: The aim of this article is to identify the rules, conditions on the market of payment instruments - the system of credit cards and direct debit system. The authors try to recognize the problems on the demand and supply side. The authors focus on defying the cost-benefit approach, contributed with Tourist test. The Interchange Fee plays the key role.

Findings: The approach of the scientific literature pays attention to costs and benefits, its equilibrium, also talking about social utility and social welfare the author is missing the whole impact on end consumer welfare and satisfaction. The dilemma is even more complicated due to the fact that the end consumer does not know he or she is not maximizing his or her utility, apart from the merchant, who is under pressure of margin squeeze.

Conclusions: It is needed to start to measure the effectiveness and influence which the existence of Interchange Fee brings. Of course, confront the effectiveness and influence with benefits the Interchange Fee has.

Key words: interchange fee, Tourist Test, cards payment, Direct debit system, information asymmetry, competitiveness.

JEL Classification: G29
Introduction

Competitiveness is one of the biggest assumptions of functional market system. Regarding the IT development there are many payment instruments. In post-communist countries, ready cash are still the most popular payment instrument, but the importance of credit cards increases constantly. The credit or debit cards belong to the most used payment instrument concerning the small retailing and end consumer, even the total amount of all European payments are done by cash is close to 80%. The total number of non-cash payments in the EU, using all types of instruments, increased by 4.2% to 94.5 billion in 2012 compared with the previous year. Card payments accounted for 42% of all transactions, while credit transfers accounted for 27% and direct debits for 24%. The number of credit transfers within the EU increased in 2012 by 3.0% to 25.7 billion. The importance of paper-based transactions continued to decrease, with the ratio of paper-based transactions to non-paper-based transactions standing at around one to five.

However the amount and popularity of credit or debit cards is still increasing.

What are the influences of competitive markets? It is necessary to consider the industry. Besides the industry there are other aspects – mainly external ones: business environment, law conditions, level of country development, culture habits, closest and strongest competitors, geographical position together with sources needed etc.

The law regulations and action of antitrust authorities are not features of competitiveness market. Unfortunately, the market of payment instruments and the dilemma of interchange fee has those features. In 2002 the European Commission exempted Visa’s multilateral interchange fees from Article 81 of the EC Treaty that prohibits anti-competitive arrangements. However, this exemption has expired in December 31, 2007. In 2003, the Reserve Bank of Australia required that interchange fees were dramatically reduced, from about 0.95% of the transaction to approximately 0.5%. One notable result has been the reduced use of reward cards and increased use of debit cards. Following in November 2006, New Zealand consider similar actions, alleging price-fixing by Visa and MasterCard; merchants pay a 1.8% fee on every credit card transaction. In December 19, 2007, the European Commission issued a decision prohibiting MasterCard’s multilateral interchange fee for cross-border payment card transactions with MasterCard and Maestro branded debit and consumer credit cards. MasterCard has appealed the Commission’s decision before the EU Court of First Instance; while the appeal is pending MasterCard has temporarily repealed its multilateral interchange fees. In March 26, 2008, the European Commission opened an investigation into Visa’s multilateral interchange fees for cross-border transactions within the EEA as well as into the “Honor All Cards” rule (under which merchants are required to accept all valid Visa-branded cards). More over the antitrust authorities of EU Member States other than the United Kingdom such as Poland, Israel, Spain, Portugal, Belgium, and the Netherlands are also investigating MasterCard’s and Visa’s interchange fees.

There is a reason for those huge reactions of regulatory authorities. The aim of this article is the market of payment instruments does not work properly.

The company’s competitiveness is directly depending on competitive strategy. Definition of the competitive strategy should be “activities and approaches sequence to provide higher probability of

---

3 In the United Kingdom, MasterCard has reduced its interchange fees while it is under investigation by the Office of Fair Trading.
4 The Commission concluded that this fee violated Article 81 of the EC Treaty that prohibits anti-competitive agreements.
7 For example, on January 4, 2007, the Polish Office of Competition and Consumer Protection fined twenty banks a total of PLN 164 million (about $56 million) for jointly setting MasterCard’s and Visa’s interchange fees.
success in terms of achieving its goals in its field and moment” (Bartes, 1999, p. 93). It seems to be easier to define the company’s competitiveness instead of market competitiveness. But as it is known from theory, there are conditions for perfect competition. Theory differs from the real world. The real world economy is trying to get as close as possible to perfect competition conditions. Reaching it is impossible.

Can a company be competitive, meanwhile the market is not? Are the companies able to cope appropriately with their competitors on non-competitive market? Logically the competitiveness cannot be measured if the market is not competitive (or even one niche part of the market). The authors assume that the necessity for competitive environment is needed as a stepping stone. According to economic theory, the competitive environment may be such an environment where are not entry barriers; the entry costs are low; there is not only one or few big players on the market; all the companies on the market are selling their goods in price above the costs; the market is not too concentrated; the switching costs are low etc. The aspects described above can be measured in different ways, always connected to size of the market and other features.

According to U.S. Department of Justice and the Federal Trade Commission a market is defined as a product or group of products and a geographic area in which it is produced or sold such that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future producer or seller of those products in that area likely would impose at least a “small but significant and no transitory” increase in price, assuming the terms of sale of all other products are held constant9. A relevant market is a group of products and a geographic area that is no bigger than necessary to satisfy this test. The “small but significant and non transitory” increase in price is employed solely as a methodological tool for the analysis of mergers: it is not a tolerance level for price increases.

The competitive authorities are solving the interchange fee last decade. Surprisingly the end consumer uses its card, and do not care about the interchange fee. Why? The aim of this article is what does interchange fee mean, how the payment using credit card works and how it can be competitive with other payment instruments is.

1. Statement of Problem – Payment Systems

The market conditions changes. Nowadays, more than ever before, we are entering the information century and “e-money” is being used more and more in many different ways. Not only different e-money is occurring, but also together with IT development even lots of new types of payments too. Meanwhile cost of cash its bearer knows well, the conditions of payment through the electronic money (e-purses) are usually written on the page. The exact costs of payment with card the end consumer and carrier of the card have no idea about. This may be called as the information asymmetry. But it is too soon to say this.

In this article the author focuses mostly on e-payments. The market of payment instruments is not easy to define. Relinquish the geographical segmentation, and let focus on the different payment instruments commonly used by end consumer. They are:

- Cash.
- Credit transfer.
- Payment cards.
- Electronic money/e-purses.
- Cheques10.
- Direct Debit system11 (together with R-transactions12).

---


10 The cheques are not commonly used in Czech Republic.

11 Direct debit scheme is a set of functions, procedures, arrangements, rules and devices that enable an authorized debit of the payer’s payment account initiated by the payee, either as a single payment or a series of payments. The oversight framework covers the entire payment cycle, i.e. the initiation phase, the transaction phase and the clearing and settlement phase. It takes into account concerns relating to both the retail payment system and the payment instrument used (European Central Bank, 2009).

12 R-transactions is the umbrella term for the following terms: Refunds are claims by the payer for reimbursement of contested debits on the account. Refusals are instructions issued by the payer prior to settlement, for whatever reason, to the effect that the payer’s PSP should not make a direct debit payment. Reject is the result of a failed transaction whereby the payment has already been declined prior to interbank settlement. Possible causes include technical reasons, closed account, insufficient funds. Returns are direct debit collections that are diverted from normal execution following interbank settlement and are initiated by the payer’s PSP. Reversal is initiated by the payee after settlement in the event that a direct debit that has already been paid should not have been processed. Consequently, it is the reimbursement of funds by the payee to the payer.
The author focuses mostly on Payment cards and Direct Debit system. Meanwhile the payment cards are used personally by end customer, the Direct debit is a payment service for debiting a payer’s payment account, whereby a payment transaction is initiated by the payee on the basis of the payer’s consent which has been given to the payee, to the payee’s payment service provider or to the payer’s own payment service.

Banks throughout the Single Euro Payments Area (SEPA) are now gradually starting to deliver SEPA Direct Debit services to their customers. All branches of banks in the euro area must be reachable for SEPA Core Direct Debit by 1st November 2010 as mandated by the EU Regulation on cross-border payments in the Community13.

These days the European Central Bank provides an overview of the set of tools and instruments that the Euro system employs and underlines the fact that payment instruments are an essential part of payment systems. The risks involved in providing and using payment instruments have not generally been considered to be of systemic concern, but the safety and efficiency of payment instruments are important for both maintaining confidence in the currency and promoting an efficient economy.

SEPA Direct Debit services enable customers – for the first time ever – to make and receive both domestic and cross-border euro direct debit payments throughout the 32 SEPA countries, i.e. the 27 EU Member States, Iceland, Liechtenstein, Norway, Switzerland and Monaco. The direct debit is a major payment instrument widely used in many euro area countries.

SEPA offers significant benefits for bank customers. The implementation of innovative and competitive SEPA payment services based on global ISO standards translates into efficiency gains for businesses and public administrations, while consumers can rely on a single set of euro payment instruments covering 32 countries: one bank account, one bank card, one SEPA Credit Transfer, one SEPA Direct Debit.

1.1 Card Network Payment System

Focusing on payment cards system we recognize four different sides of the business actors. Firstly there is the end consumer, the holder of his or her card. Then to make a deal the merchant is needed. Merchant, who is provided with POS machine and is able to accept payment cards. Other business actors are banks. It is Issuer bank, the bank which provides to the end customer the card, and the Acquires bank, bank which transfer the payment to the merchant.

Another player is Smith’s invincible market hand. In this case it is the cost of the sold good to the end consumer. It is also the price of payment made by the payment card for the purpose of the purchase of the good. Here are specific fees. It is not only a fee between banks; there is a processing fee too. One of the fees, called Interchange fee seems to be the fee for interbank (acquiring and issuer bank) communication. But who pays this fee? Banks? Merchant? Or the end consumer? The situation and the role of interchange fee is demonstrated on the Figure 1.

The interchange fee (IF) paid by the merchant’s bank (acquires bank) to the cardholder’s bank (issuer bank) allocates the total cost of the payment service between the two users, end consumer and merchant; in payment cards systems Visa or MasterCard.

There are different successful competitive strategies, but as polemic of Interchange Fee reminds the margin squeeze at the merchant side.

After findings of competition authorities, courts of justice and banking regulators it has been seen that the IFs are set unacceptably high. The reason for this is the fact that system of paying using payment cards belongs to so called network business and there is information asymmetry. In a January 2007 survey of about 2,000 adults by polling service Harris Interactive, 32% had heard of interchange fees. Once the fees were explained to them, 91%
said Congress should compel credit card companies to better inform consumers about interchange fees\(^{14}\).

There do not work competitive rules due to end consumer information asymmetry and the existence of net business. What is happening is that merchant have to accept the cards because they do not want to impair their ability to attract customers; cards are “must-take cards”.


Schemes may exploit this by setting excessive MIFs and this may create rent extraction by banks. In that case payment cards become more costly compared to other payment instruments for merchants.

2. Interchange Fee in Credit Card and Direct Debit Structure

There are several models of interchange fee structure based on different assumptions. Baxter\(^{15}\) provides the seminal analysis of interchange fees in a payment scheme, an analysis that was used to defend the legality of competing banks collectively setting interchange fees in National Bancard Corp. vs. Visa USA.

Baxter\(^{16}\) analysis relies on three underlying assumptions:

1. Perfect competition between issuers and between acquirers.
2. Merchants that accept cards do not attract customers from rivals who do not.
3. All merchants get the same benefits from accepting cards.

According to Wright\(^{17}\) assumption (1) implies card schemes are indifferent to the level of interchange fees. Assumption (2) leads to biased welfare conclusions, given that business stealing is not accounted for. Assumption (3) leaves unanswered how interchange fees should be set given heterogeneity across merchants.

Recently, three papers have analyzed interchange fees, addressing these assumptions. Rochet and Tirole\(^{18}\) desist from assumptions (1) and (2), while Schmalensee\(^{19}\) desist from (1) and (3). In Wright\(^{20}\), Wright desist from (1)–(3) but without (1).

The authors do not rely on assumption (1) and after interviewing the merchants do not agree with assumption (3). Why? Rochet and Tirole explain

---


the payment with card on picture above. Apart from interchange fee the other important variables are costs and benefits. The costs usually differ concerning many factors, mainly the total among of sold goods. Both costs and benefits are divided to fourth-sided scheme. The authors says it is consumer who pays most of the costs created within the payment system. There are also benefits of merchant. But are there really? This paper brings the idea that parts of the system-costs that the customer does not pay, go straight to merchant and affect its margin. Even the literature says that the interchange fee is part of acquirers’ costs\textsuperscript{21}.

There is also the issuers and acquirers bank point of view. The competitive authorities enter into the interchange fee business last decade a lot. For example Australia removed the “no surcharge” rule to prevent merchants from charging a credit card usage fee to the cardholder. A surcharge would mitigate or even exceed the merchant discount paid by a merchant, but would also make the cardholder more reluctant to use the card as the method of payment. Australia has also made changes to the interchange rates on debit cards, and has considered abolishing interchange fees altogether.

2.1 Direct Debit Scheme

According to European Central Bank the Direct debit scheme can be regarded as a set of functions, procedures, arrangements, rules and device that enable the authorized debiting of the payer’s payment account, initiated by the payee either as a single payment or a series of payments\textsuperscript{22}.

A direct debit scheme can be broken down into six sub-systems:

1. overall scheme management,
2. direct debit use,
3. direct debit payee sub-system,
4. direct debit payer sub-system,
5. operational facilities,
6. clearing and settlement.

The direct debit use sub-system covers the relationships between the payer and the payee (mandates, information regarding transactions).

The direct debit payee sub-system includes, notably, accreditation and management of payees, monitoring of activity and fraud, verification, forwarding and execution of transactions (including R-transactions). These activities are generally assumed by the payee’s PSP.

The direct debit payer sub-system deals with the relationship with payers and the execution of transactions. These activities are generally assumed by the payer’s PSP.


Figure 3. Direct Debit Schemes. Source: European Central Bank, 2009.
The operational facilities sub-system represents technical and organizational services, for example, the telecommunication network enabling the exchange of data between the payee’s PSP and the payer’s PSP during the different phases, or other services such as the allocation of identifiers. These activities may be specific to the direct debit scheme or common with other services and may be performed by the same entities as clearing and settlement.

The clearing and settlement sub-system concerns all activities and infrastructures needed for the bilateral or multilateral clearing and settlement of direct debit transactions. Different forms of clearing and settlement may be used within the scheme.

The different sub-systems present in the direct debit scheme are described below. The subsystems are presented on the basis of the tasks they carry out, and not on that of the physical elements or entities that carry them out. It should be clarified that, within each sub-system, several entities may be involved in performing the related tasks.

The overall scheme management sub-systems are dedicated to governance. Its responsibilities include, for example, the definition and evolution of standards, rules and specifications or the selection and adoption of existing ones, as well as policies concerning access to the scheme, competition, pricing, fraud prevention, governance, monitoring of activities, compliance with the standards, dispute resolution, etc.

3. Discussion – Competition and Tourist Test

Wright23 says the level of interchange fee determines the relative fees faced by cardholders versus merchants. A higher interchange fee raises the costs of acquirers, who will charge merchants more, and lowers the effective costs of issuers, who will charge cardholders less (or in fact, provide them with rebates). MIFs increase the cost of acquiring banks and decrease the cost of issuing banks but the margin of the merchants is in account too.

Actually it is not wrong to have asymmetric price structures in two-sided markets indeed; asymmetric price structures are standard in most two-sided industries (e.g., media, software).

But there is one difference in payment card markets which is significant: on the merchant side, typically no price signals that would allow consumers to take the impact of their payment instrument choice on merchants into account are transmitted (those ones which can be positive or negative)!

Schemes may exploit this by setting excessive MIFs and this may create rent extraction by banks. The fees are “not a cost-based calculation, but a value-based calculation,” said Elizabeth Buse, Visa’s global head of product24. In that case payment cards become more costly compared to other payment instruments for merchants.

To examine the real competitiveness of credit cards payments between others payment instruments it is necessary to truly define the costs and benefits. The competitiveness of card payment instrument has been already established using Tourist Test25 which says that IF ≤ transactional benefits of card payments, which means by Baxter economic analysis26:

\[ b_B + b_S \geq c_B + c_S = c, \]  

which leads to assumption that

\[ p_B = c_B - a = c - b_S. \]  

That after calculations make

\[ p_S = c_S + a = b_S. \]  

So the usage of credit card as payment is when

\[ b_B \geq p_B = c - b_S. \]  

But what are those costs and benefits27 exactly for each different payment instrument?

3.1 Costs

Costs mentioned above refer to the costs incurred by the merchants in conducting a transaction with a specific payment instrument. Such costs include external costs (fees paid to external parties for effectuating a transaction, like merchant service charges) and internal costs (costs of the merchant

---


27 According to Zenger merchants’ willingness to pay for cards consists of two factors:

- Transactional benefits (e.g., immediate cost benefits compared to other means of payment).
- Additional spend (e.g., the competitive desire to accept cards to offer customers a good service).
for effectuating the transaction, like staff costs). For the calculation simplification in future the total costs provided is split into fixed costs (like the purchase of a terminal) and variable costs (like merchant service charges).

The different character of costs comes from different cost source:
- processing costs,
- financial costs (e.g. bank fees, POS terminal purchase),
- time investment (e.g. long transaction time between different accounts or weekend transfers),
- administrative and staff costs,
- organisational costs restructuring and other costs.

3.2 Benefits

Benefits can be expressed in the same format as costs (fixed, variable, etc.).

It is important to focus on transactional benefits of different means of payment. These are benefits deriving from the use of one payment instrument relative to another one.

Sources of transactional benefits:
- financial benefits,
- time savings,
- operational and processing savings,
- administrative and staff benefits,
- organizational restructuring and other benefits.

The aspect of collecting those data, verifying, sorting and analyzing them is challenging because all the costs and benefits differ a lot according to its bearer. Another market imperfection is that consumers may overuse costly payment instruments because they are not faced its impact on merchants.

Wright says the level of interchange fee determines the relative fees faced by cardholders versus merchants. A higher interchange fee raises the relative fees faced by cardholders versus acquirers that actually issue the cards than consumers who use them. Visa and MasterCard set the fees that merchants must pay the cardholder’s bank. And higher fees mean higher profits for banks, even in time of processing purchase they stand in front of each other.

In some other countries, it is usual that paying in cash the end consumer gets lower price or even for some type of goods it is even impossible to pay by cards. But is this the feature of competitive market, or is it a mark that something wrong is happening here? This sign reminds above mentioned margin squeeze. But thinking about margin squeeze, does that happened to every merchant with POS?

Not only in payment cards but also in case of Direct Debit System should all actors and potential actors are easily able to access relevant information. Only sensitive information should be disclosed on a need-to-know basis.

All actors (payees’ PSPs, payers’ PSPs, payees and payers) should have access to relevant information in order to evaluate risks affecting them, including financial risks. Moreover, sufficient information should be provided to the payers by other actors (e.g. payers’ PSPs and payees).

Competition forces lower prices. But for payment networks like Visa and MasterCard, competition in the card business is more about winning over banks that actually issue the cards than consumers who use them. Visa and MasterCard set the fees that merchants must pay the cardholders’ bank. And higher fees mean higher profits for banks, even if it means that merchants shift the cost to consumers.

Critics complain that Visa does not fight fair, and that it used its market power to force merchants to accept higher costs for debit cards. Merchants say

---

28 In particular, it should split them into variable costs per transaction and variable costs that increase with the value of a transaction.

they cannot refuse Visa cards because it would result in lower sales. 31
“A dollar is no longer a dollar in this country,” said Mallory Duncan, senior vice president of the National Retail Federation, a trade association. “It’s a Visa dollar. It’s only worth 99 cents because they take a piece of every one.”32

Conclusion

In most basic courses, a competitive market is described as a situation in which there are many buyers and sellers, the product is homogeneous, information is complete, and there is free entry and exit in the long run. Note that the first three properties are there to lead us to the assumption that firms are price-takers. The fourth property ensures that the long-run equilibrium price is equal to the unit cost of production and distribution.

Competitiveness on the market of payment instrument cannot be seriously measured while there are missing the price signals for end consumer. The system of IF and the whole structure of costs of one card transaction are split over four different parties together with no information for customer in advance about interchange fee. The transparency is absent here. The reason for this is the fact that system of paying using payment cards belongs to so called network business and there is information asymmetry.

The impact of SEPA, however, transcends monetary policy and payments services. The European Commission expects the legal and technical SEPA harmonization exercise to facilitate the dematerialization of business processes by replacing paper-based procedures with standardized electronic solutions such as e-invoicing.

On the other hand what invisible hand of market? Laissez-faire? Is the market with payment instruments working correctly enough to set certain level of competitiveness?

The Direct Debit Scheme should have effective, accountable and transparent governance arrangements which is one of five standards the European Central Bank have established. Effective, efficient and transparent rules and processes should be defined and implemented when:
- making decisions about business objectives and policies, including access policies,
- reviewing performance, usability and convenience of the direct debit scheme,
- identifying, mitigating and reporting significant risks to the scheme’s operation.

There should be an effective internal control framework, including an adequate and independent audit function. The correct signals can be made by publication of interchange fees, Honor-all-cards rule or no-surcharge rule.

Competitiveness on the market of payment instruments cannot be seriously measured while there are missing the end consumer price signals. The system of IF and the whole structure of costs of one card transaction are split over the four different parties together with no information for customer in advance about interchange fee. The transparency is absent here.

Anyway the approach of the scientific literature pays attention to costs and benefits, its equilibrium, also talking about social utility and social welfare the author is missing the whole impact on end consumer welfare and satisfaction. The dilemma is even more complicated due to the fact that the end consumer does not know he or she is not maximizing his or her utility, apart from the merchant, who is under pressure of margin squeeze. It is needed to start to measure the effectiveness and influence which the existence of Interchange Fee brings. Of course, confront the effectiveness and influence with benefits the Interchange Fee has.

Merchant lawsuits claim that interchange fees in the U.S. are out of line with falling technology costs and similar fees charged outside the United States, resulting in higher prices, lower profits and harm to the consumer. The lawsuits allege that these high fees represent collusion and price fixing among the bank card networks and their card issuing banks, in violation of antitrust laws. Bank card networks disagrees, claiming interchange fees represent an effort to balance incentives to issuing banks to issue more cards with better rewards against the need to bring an optimum number of card-accepting merchants into their credit card systems. They also claim that the interchange fees bring consumer benefits such as more rewards, reduced fraud, lower interest rates and system innovations33.

The structure of costs for each side of this network market is complicated and for certain reason there is

   r=0.
also the intention from banks for no simplification. Measure the benefits of merchants is disputable too.

But as long as price signals are absent, the competitiveness is absent too.

References


ARTICLE 81 OF THE TREATY ESTABLISHING THE EUROPEAN COMMUNITY, European Commission.


