

# Interchange Fee Economics

Jakub Górká

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To Regulate or Not to Regulate?

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# INTRODUCTION

The interchange fees have been, for many years now, the focal point for debate in the card industry, among competition authorities, policy makers as well as in the economic literature on two-sided markets and on the regulation of market failures (see e.g. works of Jean Tirole, the Noble Prize winner in Economic Sciences in 2014).

The book offers insight into the economics of interchange fees specific for four-party card schemes and explores the eternal question: *To Regulate, or Not to Regulate?* It discusses, from a multitude of perspectives, the effects of regulatory interchange fee reductions in various countries from all over the world. The discussion goes beyond the interchange fees and concentrates also on business rules, such as “no-honour-all-cards” or “no-surcharge” and other practices having impact on competition on the payment market and defending the market standing of the incumbent four-party card schemes, such as: reverse competition, blending, restrictions on access to schemes or on network switching.

The book’s objective is to assess the costs and benefits of interchange fee regulations for all stakeholders: issuers, acquirers, card organisations, merchants and consumers. The general research question extends into more questions, for which answers are sought to better understand the intervention process and its outcome. What were the consequences of capping interchange fees for stakeholders, for competition, innovation and security of the payments market? What lessons can be drawn from the interchange fee reforms? Did all go as planned, with reforms bringing only the intended consequences? What were the positives and

the negatives of the reforms in different countries? Is there a need to improve regulations or to regulate on an ongoing basis?

The study attempts to show implications of the dynamics of the impact of interchange fee regulations. For this purpose, an original framework is drawn up in Chapter 1. The framework addresses three areas of concern with respect to the transmission channels of interchange fee reductions (pass-through) and the card scheme domain:

- Area 1, transmission channel: acquirer → merchant → consumer (cardholder)
- Area 2, transmission channel: issuer → consumer (cardholder)
- Area 3, card scheme domain: payment organisation—issuer—acquirer

Area 1 considers network and monetary effects of the interchange fee decreases. Claim 1 and 2 describe causal mechanisms in accordance with the theory of two-sided markets. Lower interchange fees and corresponding merchant fees should result in broader card acceptance and intensified card usage. Claim 3 looks into the monetary effect, also consistent with the theory of two-sided markets, to examine whether savings from lower merchant fees are passed through by merchants in the form of lower prices for consumers. Area 2 focuses on the pass-through from issuers (banks) to consumers (cardholders). Claim 4 shows the flip side of the coin. Facing lower interchange fee revenues, issuers may try to raise card holder fees in order to keep profits the same. For the pass-through, competition in the issuer, acquirer and merchant markets is crucial. Consumer welfare depends on the magnitude of the monetary and network effects. The question is whether consumers gain more from the universality of cards and lower prices or they lose more from higher cardholder fees. What needs to be tested first, however, is whether the cardholder fee increases and the merchant price decreases take place or maybe the reality turns out more complex. Area 3 examines card organisations' policy adjustments coinciding with the interchange fee reforms. Claim 5 refers to the strategy of card organisations, which may see interchange fee reductions as neutral and choose not to redesign their scheme fees to compensate issuers for lower revenues at the expense of acquirers. However, the interchange fee reforms are likely to change market conditions and make issuers and other payment service providers more willing to innovate, develop cost-efficient payment instruments or support other

payment solutions. The interchange fee reforms are set in the wider context of competition and innovation game.

Five claims are verified in Chapters 2 and 3 based on country cases. In Chapter 2 three country cases are investigated: Australia, USA, Spain. Chapter 3 examines the Polish case. All cases are interlinked with cross-section references. The book consists of three chapters in total. Each of the chapters has its own introduction briefly outlining its structure, and contains specific sections, where concise findings and key take-aways are given. Chapter 1 is more theoretical than Chapters 2 and 3, which are strictly empirical. Still, Chapter 1 is empirically oriented as well, since it gives multiple market examples and refers to the results of empirical studies when discussing various card payment issues.

Chapter 1 is divided in two parts. The first one introduces the theory of two-sided markets/networks/platforms that create value (indirect network effect) by connecting two distinct groups of agents, e.g. card payers and card payees. Such market settings exist in many sectors of the economy. This part characterises conditions defining two-sided markets and market failures which can arise there. It ends by listing threats to competition and countervailing factors on two-sided markets. The second part deals exclusively with economics of interchange fees and card payments. It explains the *modus operandi* of four- and three-party card schemes, their business model, inherent fees, and how they are set. It illuminates the role of interchange fees according to the classical Baxter's model and its later refinements in the economic literature, which extend Baxter's model to include heterogeneity of consumers and merchants or such phenomena as "business stealing" (also called "must-take-cards"), reverse competition or "single- and multi-homing". This part includes discussion of the optimal level of interchange fees maximising the joint welfare of consumers and merchants. There are different methods used to determine this level: a cost-based issuer approach and the merchant approach based on the "tourist test", developed by Rochet and Tirole and preferred lately, *inter alia* by the European Commission, for its better theoretical underpinnings. The tourist test applications for Poland, the Netherlands, the USA and the European Union are presented. Moreover, the discussion goes beyond the interchange fees and also centres around scheme business rules: "no-surcharge", "honour-all-cards" and the blending practice. The final paragraph of Chapter 1 develops the framework for assessing the impact of interchange fee regulation, which is used in Chapters 2 and 3.

Chapter 2 offers a truly global outlook on public authorities' involvement in card payments. It starts with elaborating on actions taken against interchange fee setting mechanism, against exaggerated fee levels or against anti-competitive scheme practices in France, EU (competition cases), Mexico, Canada, Israel, India and China. Then, Chapter 2 studies in detail, according to the framework from Chapter 1, three country cases: Australia, USA, Spain. This section concludes with a comparison of all three country cases summarising the impact of interchange fee reforms on: merchant service charges, card acceptance, card usage, prices, bank revenues and cardholder charges, four-party card schemes, competition and innovation. Different aspects of the reforms are discussed, including transparency measures. The last section of Chapter 2 describes the recent Interchange Fee Regulation in the European Union and its provisions. It is too early to evaluate its influence on the card payment market, but a few preliminary remarks can be made.

Chapter 3 is devoted entirely to the investigation of the Polish interchange fee reform, which is interesting for a number of reasons. *Primo*, Poland was the country with the highest average interchange fee rates in Europe. In 2014 they were decreased drastically by a regulatory act and then once again, at the beginning of 2015, before the Interchange Fee Regulation entered into force for all EU member states. *Secundo*, the impact assessment for the Polish reform is undertaken based on data from many sources as well as with the help of diversified methods comprising financial, econometric and legal analysis. After explaining the history of interchange fee reductions, Chapter 3 continues with demonstrating the results of two subsequent merchant surveys that draw a clear picture of the process of passing through interchange fee reductions from acquirers to merchants. Next, the analysis is developed according to the framework from Chapter 1. Claims 1 and 2 on the impact of interchange fee reductions on card acceptance and card usage are verified. Then, a close look is taken at bank interchange fee revenues, fee-based income and card- and accountholder fees (claim 4). The next section provides a unique, detailed and business-oriented study of Visa and Mastercard<sup>1</sup> scheme fees and their strategy at the time of interchange fee reforms (claim 5). This section goes deeper, showing implications of

<sup>1</sup>In line with 2016 logo and brand identity adjustments at Mastercard, the “Mastercard” spelling is used throughout the book rather than the previous one, “MasterCard”.

the interchange fee reductions for competition, innovation and security on the Polish payment market. Finally, Chapter 3 ends with a summary section with a brief and clear recap of the impact assessment and a discussion of interchange fee reduction effects on the prices of goods and services in Poland (claim 3).

The last part, containing final remarks, reiterates some of the findings from Chapters 2 and 3 but more generally than in earlier summary sections. It links all the country cases studied. It addresses difficulties for public authorities in regulating interchange fees and card payments. Eventually, it gives recommendations for policy makers and stakeholders of the card and payments industry. The book puts the issue of interchange fees in the wider context of the entire payment system (innovation and competition, references to FinTechs, novel methods of payments, including digital wallets, bitcoins, real-time payments, etc.). There are examples from payment markets, references to the industry practice, and to other legal acts of paramount importance for the market such as the revised Payment Services Directive (PSD2) in the European Economic Area.

The book can be classified as literature on industrial organisation and financial economics. It is rooted in the theory of two-sided markets, but it constitutes an empirical study that, for Australian, American and Spanish country cases, relies partly on the findings of other researchers and central banks and partly on the author's own calculations and deduction. The analysis is, however, original and developed according to the framework for assessing the impact of interchange fee regulations from Chapter 1. Chapter 3 as a whole is the author's empirical work where different research methods are used, ranging from financial, legal and business analysis to sophisticated econometric modelling. In the book, the author relies mainly on public databases of central banks and supervisors, publicly available information of card schemes and banks, and on business and research reports. Chapter 1 contains an extensive literature study that helps understand the interchange fee economics, and further empirical studies developed in Chapters 2 and 3.

The author builds on his rich experience and expertise in the field, i.e. on:

- his research projects (he was three times the principal investigator of the research projects aimed at examining various aspects of interchange fee economics, including measurement of the pass-through rate of interchange fee reductions from acquirers to merchants or

the investigation of costs of card and cash acceptance for the purpose of tourist test application in the joint research project of the National Bank of Poland (NBP), Foundation For Development of Cashless Payments (FROB) and the Faculty of Management, University of Warsaw (FoM UW); earlier on, he was investigator in several other research projects on payments),

- his experience from consulting and preparing expert opinions for the National Bank of Poland, the Polish Ministry of Finance, Foundation For Development of Cashless Payments, commercial companies engaged in the card business,
- his experience as the European Commission's expert on payments (since 2012 he has been a member of the Payment Systems Market Expert Group assisting the European Commission in preparing legislation and policy initiatives for payment issues).

The book precedes the impact study of the Interchange Fee Regulation in the European Union which—according to the review clause—will have to be published by the European Commission in mid-2019. The studies and conclusions from this book may be of value for the European Commission and for all the parties interested in the modalities of the interchange fee economics. The target audience is policy makers, card and payments industry people, academics and students.

The author wants to thank all those who have helped him in his studies by providing consultation, assistance and comments or simply wished him good luck with succeeding in publication.