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Ex Post Assessment of European Competition Policy in the Payment Sector:

The *Visa Europe* 2010 Commitments Decision

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1. Introduction

The payment sector has been subject to many European Union (EU) competition law decisions over the past twenty years. The decisions cover a wide range of competition law issues, from antitrust concerns (such as the European Commission's (EC) 2007 prohibition decisions against the GIE Cartes Bancaires about the so-called "MERFA" fee and against Visa Europe for having refused to grant a license to Morgan Stanley) to the review of proposed concentrations by the EC (amongst others in 2016 M.7873 Worldline / Equens / Paysquare; in 2018 Case M.9089 – Hellman & Friedman / Concardis Payment Group, in 2019 Case M.9452 - Global Payments / TSYS or in 2020 Worldline/Ingenico and Mastercard/Nets).

A particular focus of competition enforcement in the payment sector has concerned interchange fees (IF). Several competition law decisions by the EC and various national competition authorities (NCAs), as well as judgments from the EU courts, have sought to reduce IFs, before subjecting them to caps with the entry into force of the EU Interchange Fee Regulation (IFR) on 9 December 2015.[1]

This report ambitions to provide an *ex-post* assessment of the EC's efforts to reduce IFs through competition enforcement. In particular, we focus on enforcement initiatives against Mastercard and Visa (Visa Inc. and Visa International, as well as Visa Europe) concerning IF. We study the economic impact of the EC Visa Europe 2010 commitment decision (the decision) with the support of a methodology known as Difference-in-Difference analysis. Our ultimate goal is to get a first empirical sense of the decision's consequences on consumer welfare, and in turn to draw lessons for law and policy from this exercise.

A word on method. The report uses the Visa Europe 2010 commitments decision as the basis for an ex-post economic analysis. The choice of this decision is based on the fact that it **covers both the IF applicable to cross-border transactions** within the European Economic Area (EEA), i.e., card issuer located in one EEA Member State and merchant located in another EEA Member State, **as well as the IF applicable to domestic transactions in nine EEA Member States (debit)**. In this, the Visa Europe 2010 commitments decision provides a better target than other decisions like the Visa 2002 and Mastercard 2007 decisions which only impacted the IF applicable to cross-border transactions within the EEA (which, at that point in time, only represented a very limited share of total payment transactions). Admittedly, the next EC decision of February 2014 regarding Visa Europe could have also been included in our ex-post evaluation. But we considered that studying this last decision would create too much noise, given the then imminent implementation of the IFR (9 December 2015) and the inability to separate its impact from the latter event.[2]

[1] Regulation (EU) 2015/751 of the European Parliament and of the Council of 29 April 2015 on interchange fees for card-based payment transactions, OJ 19.5.2015, L 123/1.

[2] Visa Europe committed to a reduction of the IF applicable to cross-border acquired transactions, but this commitment was only effective as of 1 January 2015. Visa Europe also committed to a reduction of IF applicable to domestic credit card transactions in a number of EEA Member States, but those commitments were only meant to become applicable in approximately February 2016 and were therefore preceded by the IFR IF caps that became applicable as of 9 December 2015.

Besides, we take a broad understanding of consumer welfare, not limited to price reductions towards customers. Instead of focusing on whether payment fees towards/single costs charged to merchants and subsequently cardholders have declined following enforcement, our analysis measures efficiency as a whole. Drawing on the premise that electronic payments constitute socially efficient and welfare-enhancing services[3], several additional metrics can be used as proxies to measure the consumer welfare impacts of competition enforcement by the EC, namely size of card transactions and volumes, merchant acceptance, card issuing and the displacement of cash. With this background, our report thus aims to test whether the following hypothesis is true or not:

> The EC's competition enforcement has had a positive, statistically significant causal effect on the usage of consumer card payments, card issuance, merchant acceptance and cash displacement.

The report is structured as follows. Section 2 provides a brief introduction on the functioning of four-party card schemes (e.g., Mastercard, Visa, Cartes Bancaires, Bancontact), thereby highlighting the role of IFs. Section 3 provides a high level and selective review of the rich economic literature on two-sided markets. Section 4 offers a chronological overview of EU competition cases in relation to card payments between 2002 and 2019, highlighting the long-term evolution of the EC's thinking about IFs. This section also helps to lay down the factual background of the EC Visa Europe 2010 commitment decision, which forms the essence of our empirical analysis. Section 5 describes the data set and methodology used to perform our ex-post evaluation of the decision. Section 6 presents our empirical results. Sections 7 and 8 discuss economic implications, and look back in hindsight on the EC's 2002-2019 competition effort against IF. Section 9 concludes.

2. The functioning of four-party card schemes

A transaction within a four-party card payment scheme involves five different parties: (1) the cardholder who uses a card to conduct a purchase; (2) the merchant (or retailer) who provides the goods or services, and accepts the card as a means of payment; (3) the card issuer (issuer) who issues the card to the cardholder, and is in charge of transferring funds for the purchased goods to the acquirer; (4) the acquirer who provides technical support to the merchant to allow it to accept card payments and thereupon receives the funds from the issuer, and passes those funds on to the merchant; and (5) the card scheme (e.g. Visa, Mastercard, Bancontact in Belgium, GIE Cartes Bancaires in France, Pagobancomat in Italy, Multibanco in Portugal, Dankort in Denmark, etc.) that, in particular, provides licenses to issuers to issue cards with its brand, and to acquirers for the acquisition of transactions under its scheme/ brand.

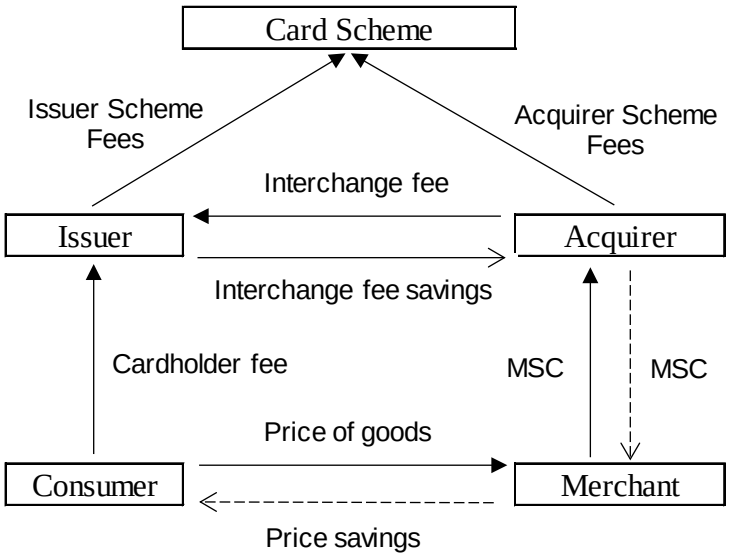
The IF is a fee paid by the acquirer to the issuer on every single transaction. In the period preceding the regulation of the IF, fees could (i) either be determined by the card schemes, (ii) collectively by issuers and acquirers in a given country, or (iii) bilaterally between one issuer and one acquirer (although the

[3] European Commission (2013) 'Proposal for a Regulation of the European Parliament and of the Council on interchange fees for card-based payment transactions', available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52013PC0550 (accessed 19th January, 2021).

cases of bilaterally agreed IF were relatively rare due to the arising complexities, in particular in a cross-border context where the issuer and acquirer were located in different countries). With this background, EC's enforcement only targeted the IF set by the schemes (rather than by issuers and acquirers, whether multilaterally or bilaterally). The fee set by the schemes have been referred to as multilateral IF (MIF), or fallback IF, or default IF. We call it the (default) IF.

The acquirer charges a fee to the merchant in relation to every transaction that it acquires for that merchant, typically referred to as the merchant service charge (MSC). The MSC typically includes (1) the IF paid by the acquirer to the issuer, (2) the scheme fees paid by the acquirer to the card scheme, and (3) a service fee resulting in revenue/ a margin for the acquirer. The MSC is typically either a blended price (e.g., 2% of the amount of each transactions) or an "IF plus plus" MSC (i.e., IF plus scheme fees plus an acquirer fee). The diagram below summarises the above.

It is noteworthy that, whilst interchange fee savings arising from reductions of the default IF by the schemes are automatically passed on by issuers to acquirers, it cannot be taken for granted that reductions of the default IF will be passed-through by acquirers to merchants, and by merchant to their customers (e.g., consumers) in the form of lower (retail) prices. Multiple other factors (e.g., the scheme fees and the MSC) influence the intensity of pass through from acquirers to third parties.



Two types of payment transactions can be distinguished: (1) domestic transactions which, at the time, were transactions where the issuer and the merchant were located in the same country and (2) cross-border transactions which were transactions where the issuer and the merchant were located in two different countries. We refer to transactions involving an issuer located in one EEA Member State and a merchant located in another EEA Member State as Intra-EEA transactions. Transactions where the issuer is located outside of the EEA and the merchant located within an EEA Member State are referred to as inbound inter-regional transactions. The default IF set by Mastercard/ Visa for Intra-EEA transactions applied to Intra-EEA transactions, but also as default for domestic transactions in EEA Member States unless a different domestic IF was applicable (either set by the scheme itself, or agreed

bilaterally between an issuer and an acquirer, or agreed multilaterally by several issuers/ acquirers in that country).

To date, the entire body of EC enforcement initiatives against IF concerns consumer cards (cards issued to private individuals for personal expenses) at the point-of-sale.[4] The EC never issued any decision in relation to commercial cards (also known as corporate cards).[5] To our knowledge, the EC never publicly explained why it never issued a decision against the IF applicable to commercial cards. Some explanations may be drawn from the following facts. Commercial cards are less prevalent than consumer cards and therefore represent a lower amount of IF paid by acquirers (and often merchants) to issuers. In addition, American Express (Amex) is a significant player in the commercial card space, but the EC always took the view that competition law and in particular Article 101 TFEU (previously Article 81 EC) could not be enforced against Amex and its IF or equivalent fee arrangements since Amex was an independent company (Article 101 TFEU requires establishing existence of an "association of undertakings", "agreement", or "concerted practice"). Therefore, a concern to maintain a level-playing field between Mastercard/ Visa on the one hand and Amex on the other, in the commercial card space, might explain the EC's forbearance towards Mastercard/ Visa in relation to commercial cards IF.[6]

3. Literature Review

The economic literature looks at card payment systems as a textbook model of "two-sided market". The model studies how platforms – here card payment systems – overcome the challenge of finding a "viable business model" to bring distinct user groups – here merchants and cardholders – "on board".[7] A key insight from the economic literature is that the structure of prices on various sides of the market, rather than the (overall) price level, is what creates a possibility of economic exchange.

In the card payment case, systems that provide services to acquirers and issuers must set fees that allow simultaneous interactions between user groups. The platform can set a balancing mechanism, in our case an *interchange fee*, and thereby attempt to sponsor consumers' card usage with a cross subsidy bearing on acquirers.[8] The impact of changes in the size and structure of the interchange fee will in turn depend on the pass-through behaviour of acquirers, merchants and issuers is thus closely related to the competitive characteristics of the industry segment under consideration.[9] All network

[4] Not ATMs.
[5] Essentially (pre-IFR) cards issued to companies (for onward distribution to their employees) or self-employed professionals for business expenses.
[6] Throughout this report, we refer to credit/ debit/ prepaid cards for consumer cards, not for commercial cards.
[7] Tirole, J. (2015). Market failures and public policy. *American Economic Review*, *105*(6), 1665-82.
[8] Rochet, J.-C. and Tirole, J. (2003) 'Platform competition in two-sided markets', *Journal of the European Economic Association*, Vol. 1, No. 4, pp. 990–1029.
[9] Veljan, Alen (2019): Influence of intra-and inter-system concentration on the pre-regulated setting of interchange fees within cooperative card payment networks. In Journal of Banking Regulation. DOI: https://doi.org/10.1057/s41261-019-00103-2.

markets[10] exhibit externalities.[11] The most prominent externalities in payment networks are adoption (card holding) and usage (card payment) externalities.[12] The value of membership to one user is affected by the addition or the loss of a marginal user. The demand for a network good is therefore a function of **both its price and the expected size of the network**. This is different from the demand for a standard good which is only a function of price.[13]

In a two-sided market, the platform sets prices in light of the demand elasticities of the various use groups. In card payment networks, the price will typically be set to maximise the overall profits to network participants, recover common costs, and provide the service to the largest possible number of members.[14] Economists and policymakers generally consider that a single interchange fee is more efficient to equilibrate payment markets than bilaterally negotiated agreements.[15] Accordingly, socially efficient pricing may result in fees for participants on a particular side (in our case card issuers) below marginal costs.[16] The economic literature suggests that this is not problematic even under an antitrust eye. In his Nobel Prize address, Jean Tirole cautioned against "*misleadingly complain about predation*" and called regulators to refrain from "*applying standard antitrust ideas where they do not belong*".[17] The EC has followed Tirole's admonition by not raising a categorical objection against IF.[18]

Merchants' lower price elasticity relative to cardholders explains the allocation of IF costs to the acquirer side. Strong competition within the merchant sector and the convenience benefits cardholders reap when using card payments create strong incentives on merchants to accept card payments. Additionally, when cardholders collect rewards on certain cards, their willingness to pay with different means like cash or checks is even lower.[19] This signals that merchants *must take* cards and lack power to refuse card payments.[20] Some studies suggest that merchants might even accept cards in instances where

[10] Further examples include videogame platforms, newspapers and marketplaces. Rochet, Jean-Charles; Tirole, Jean (2004): Two-Sided Markets: An Overview. Massachusetts Institute of Technology. Available online at https://web.mit.edu/14.271/www/rochet_tirole.pdf, checked on 3 March 2020.
[11] M L Katz and C Shapiro, 'Systems Competition and Network Effects' (1994) Journal of Economic Perspectives Vol. 8, No. 3.
[12] Chakravorti, S. (2009) 'Externalities in payment card networks: theory and evidence', Policy Discussion Paper No. 8, available at: https://www.chicagofed.org/publications/policy-discussion-papers/2009/pdp-8 (accessed 9th August, 2018).
[13] Katz, Michael L.; Shapiro, Carl (1994): Systems Competition and Network Effects. In Journal of Economic Perspectives 8 (2), pp. 93–115. DOI: 10.1257/jep.8.2.93.
[14] Wright, J. (2004) 'The determinants of optimal interchange fees in payment systems', *Journal of Industrial Economics*, Vol. 52, No. 1, pp. 1–26.
[15] Baxter, William F. 1983. Bank Interchange of Transactional Paper: Legal and Economic Perspectives. The Journal of Law and Economics 26(3): 541–588. In addition, an IF avoids the free-rider problem that arises when the number of participants within a network increase.
[16] Evans, David S. (2003): The Antitrust Economics of Multi-Sided Platform Markets. In Yale Journal on Regulation 20 (2), pp. 327–379.
[17] Tirole, 2015, above.
[18] See the EC's legal interpretation in the Visa International case from 2002 (29373) in European Commission (2002): Commission Decision of 24 July 2002 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Visa International – Multialteral Interchange Fee). In Official Journal of the European Communities Vol. 318, pp. 17-36. Available online at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002D0914&from=EN, accessed 22 December 2020.
[19] J-C Rochet and J Tirole, 'Cooperation among Competitors: Some Economics of Payment Card Associations' (2002) The RAND Journal of Economics, Vol. 33, No. 4.
[20] Vickers, J. (2005) 'Public policy and the invisible price: competition law, regulation and the interchange fee', *Competition Law Journal*, Vol. 4, No. 1, pp. 5–21.

the marginal costs exceed the marginal benefits of the card payment.[21] Last, demand elasticities of network participants are inversely related to the size of the platform. As the platform share of market output grows, network participants become more dependent to the payment system and less elastic to pricing changes.[22]

Another important insight from the economic literature stresses the ambiguous contribution to social welfare of increased competition between payment schemes. When antitrust decision makers first laid their eyes on payment markets, they understandably hypothesized that blunted competition between card schemes was a possible cause for high (and above socially optimal) IF. Guthrie and Wright however showed that the reverse conclusion was plausible. As card schemes compete for partnerships with issuing banks, they increase benefits towards issuers. With increasing scheme competition, all things equal, interchange fees rise, leading to inflated costs of card processing for merchants. Due to this dysfunctional competition, scheme competition can increase rather than decrease – as would be the predictable outcome with most industries – consumer prices. Further, the risk of a differentiated treatment of proprietary card schemes that are not utilising interchange fees to achieve a desired fee structure and cooperative card schemes can ultimately result in a competitive advantage.[23]

Of course, the efficiency of the IF at "bringing all sides on board" can be defeated in two sets of circumstances. First, the IF will not raise scheme output in instances where merchants can perfectly (without friction) surcharge consumers for the use of costly payment cards.[24][25] Second, the IF ends up being paid fully by consumers in all instances where perfectly competitive issuing, acquiring and merchant markets result in full pass-through of any interchange increases or decreases.[26] Leaving aside these mostly hypothetical scenarios, scholars and practitioners have spilled much ink trying to determine private and socially optimal IF levels. Initially, the EC endorsed an issuer cost methodology as a benchmark for compliant IF. The EC abandoned this approach after the Mastercard 2007 decision and adopted a new methodology known as the *tourist test* or *merchant indifference test*.[27] Based upon the marginal costs and benefits of accepting a card payment, and under consideration of the applicable externalities, a level of IF is identified that makes the merchant indifferent between accepting card payments versus other payment instruments. When the tourist test is retained, any change in pricing within one side of the market will cause spill-over effects on the other.[28] Due to the presence of multiple cost components within the network in addition to the interchange fee (such as scheme fees and acquirer

[21] Rochet, J.-C. and Tirole J. (2011) 'Must-take cards: merchant discounts and avoided costs', Journal of the European Economic Association, Vol. 9, No. 3, pp. 462–495.
[22] Rochet, Jean-Charles; Wright, Julian (2009): Credit Card Interchange Fees. In *ECB Working Paper Series* (1138), pp. 4–30.
[23] Guthrie, Graeme, and Julian Wright. 2007. Competing Payment Schemes. *The Journal of Industrial Economics* 55(1): 37–67.
[24] Rochet, J.-C., Tirole, J., 2002. Cooperation among competitors: Some economics of payment card associations. RAND Journal of Economics 33, 549-570.
[25] Gans, J. S., King, S. P., 2003. The neutrality of interchange fees in payment systems. Topics in Economic Analysis & Policy 3, 1-16.
[26] Schmalensee, Richard and Evans, David S., The Economics of Interchange Fees and Their Regulation: An Overview (May 23, 2005). MIT Sloan Working Paper No. 4548-05, Available at SSRN: https://ssrn.com/abstract=744705 or http://dx.doi.org/10.2139/ssrn.744705
[27] Rochet, Jean-Charles; Tirole, Jean (2011): MUST-TAKE CARDS: MERCHANT DISCOUNTS AND AVOIDED COSTS. In Journal of the European Economic Association 9 (3), pp. 462–495. DOI: 10.1111/j.1542-4774.2011.01020.x.
[28] Weyl, E Glen. 2010. "A Price Theory of Multi-sided Platforms." *American Economic Review*, 100 (4): 1642-72.

processing fee that both typically form part of the MSC charged by the acquirer to the merchant as well as a cardholder fee that the issuer may charge to the cardholder), an alteration of other cost components can potentially neutralise any alterations of the interchange fee in terms of final pricing towards merchants and/ or cardholders.[29]

4. Overview of EU competition cases in relation to card payments: the interchange fee "saga"

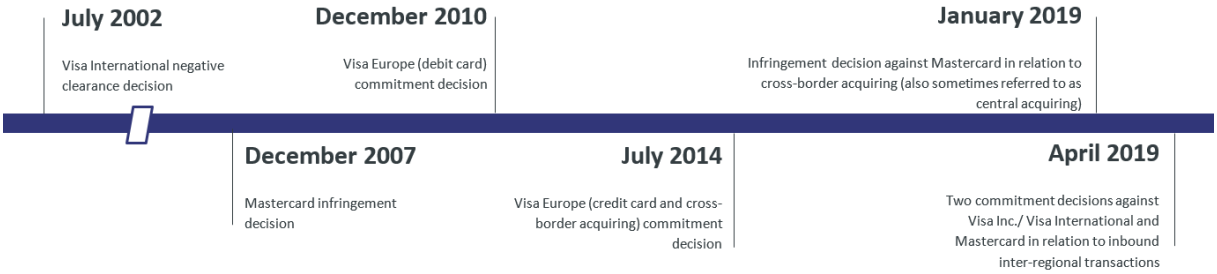
The EC policy towards IFs has followed six consecutive "waves". Whilst our report seeks to evaluate the 2010 Visa Europe commitment decision, a brief summary of the other decisions adopted by the EC helps apprehend the context of the decision, and the developmental path of competition policy towards IF. This section is likely to be of most interest to law minded readers.

1. July 2002 - Visa International negative clearance decision[30]
2. December 2007 - Mastercard infringement decision[31]
3. December 2010 - Visa Europe (debit card) commitment decision[32]
4. July 2014 - Visa Europe (credit card and cross-border acquiring) commitment decision[33]
5. January 2019 - infringement decision against Mastercard in relation to cross-border acquiring (also sometimes referred to as central acquiring)[34]

[29] Veljan, Alen (2020): Regulating the uncontrollable: The development of card scheme fees in payments markets in light of recent policy intervention. In Research in Law and Economics 29.
[30] Commission Decision of 24 July 2002 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Case No COMP/29.373 — Visa International — Multilateral Interchange Fee) (2002/914/EC), OJ 22.11.2002, L 318/17.
[31] COMMISSION DECISION
of 19 December 2007 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement - Cases COMP/34.579 – MasterCard, COMP/36.518 – EuroCommerce, COMP/38.580 – Commercial Cards – available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/34579/34579_1889_2.pdf . Earlier in 2007, the EC adopted an infringement decision against Visa in the Morgan Stanley / Visa International and Visa Europe case (COMMISSION DECISION
of 3.10.2007 relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA
Agreement in case COMP/D1/37860
MORGAN STANLEY / VISA INTERNATIONAL AND VISA EUROPE. The decision is available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/37860/37860_629_1.pdf . That decision addressed the fact that Visa Europe had refused to grant Morgan Stanley a license to participate in the Visa scheme as acquirer due to the fact that Morgan Stanley was operating a competing card scheme in the US, called Discover. And a few dates later, the EC adopted another decision in the payment sectors involvement the French domestic card scheme, GIE Cartes Bancaires (**CB**), and more particular a fee called "MERFA" that some CB members were required to pay to other CB members (COMMISSION DECISION of 17 October 2007 relating to a proceeding pursuant to Article 81 of the EC Treaty in Case COMP/D1/38606 – GROUPEMENT DES CARTES BANCAIRES "CB" – available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/38606/38606_611_1.pdf). For the sake of (relative) brevity, we do not address those two decisions in the report.
[32] Commission Decision of 8.12.2010 relating to proceedings under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement - Case COMP/39.398 - Visa MIF. Available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_6930_6.pdf. The commitments are available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_6186_3.pdf
[33] Commission Decision of 26.2.2014 addressed to Visa Europe Limited, relating to a proceeding under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement - Case AT.39398 – VISA MIF. Available here:https://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_9728_3.pdf. The commitments are available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_9729_3.pdf
[34] Commission Decision of 22.1.2019 relating to a proceeding under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement - AT.40049 – MasterCard II. Available here: https://ec.europa.eu/competition/antitrust/cases/dec_docs/40049/40049_4093_3.pdf

6. April 2019 – two commitment decisions against Visa Inc./ Visa International and Mastercard in relation to inbound inter-regional transactions[35]

Overview of EU competition cases in relation to card payments: the interchange fee "saga"



4.1. The background to the EC's competition law enforcement

The history of the EC's enforcement against card schemes started in 1977, when Visa International notified its rules, including rules on IF, to the EC seeking prior approval of its IF arrangement. At the time, business and economic organisations participating in agreements with other firms could seek from the EC a negative clearance or, in the alternative, an exemption from antitrust liability under Article 101 TFEU (at the time, Article 81 EC). In 1985, the EC issued a comfort letter to Visa International. However, a complaint by the British Retail Consortium (BRC) against Visa's and Mastercard's default cross-border IFs in 1992 prompted the EC to re-open its investigation into Visa International. The comfort letter was withdrawn later that year. Between 1992 and 1995, Mastercard also made various notifications to the EC in relation to various schemes rules, including its IF arrangements.

In 1997, EuroCommerce lodged a competition law complaint against various aspects of the Visa and Mastercard scheme rules. The complaint focused on a range of issues including IFs but also the "honour all" cards rule (HACR), the no discrimination rule (NDR), etc. EuroCommerce alleged that the IF paid by the acquirer to the issuer was passed on by the acquirer to the merchant, thereby artificially inflating the level of MSC. The MSC overcharge was then typically passed on by the merchant to their customers (e.g. consumers) in the form of higher (retail) prices, ultimately resulting in consumers having to pay for an allegedly "excessive" level of IF.

[35] Commission Decision of 29.4.2019 relating to a proceeding under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement - Case AT.40049 – MasterCard II, available here https://ec.europa.eu/competition/antitrust/cases/dec_docs/40049/40049_4172_3.pdf; the commitments are available here:https://ec.europa.eu/competition/antitrust/cases/dec_docs/40049/40049_4173_3.pdf. Commission Decision of 29.4.2019 relating to a proceeding under Article 101 of the Treaty on the Functioning of the European Union and Article 53 of the EEA Agreement, Case AT.39398 – Visa MIF, available here https://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_14153_3.pdf; the commitments are available here:https://ec.europa.eu/competition/antitrust/cases/dec_docs/39398/39398_14155_4.pdf.

The complainant wanted EC to enforce its competition law powers to reduce the IF paid by acquirers to issuers, ideally to zero in the expectation that (1) acquirers would pass-on to merchants this reduction of IF in the form of a lower MSC, and (2) in turn merchants would pass-on the reduction of the MSC to consumers in the form of lower retail prices. To that end, EuroCommerce argued before the EC that the IF was akin to a price fixing cartel:

> *"[…] the interchange fee as a mechanism to shift onto merchants (and indirectly onto customers who pay by means other than Visa card) the costs of free advantages offered to cardholders. Since the level of the fee is said to be agreed on between the banks without any pressure from the market, the setting of the MIF amounts, according to EuroCommerce, to a price-fixing cartel. EuroCommerce considers that the MIF is not indispensable for the Visa scheme to function successfully, and has provided examples of payment card schemes, which, it claims, function without a MIF"*[36].

In turn, EuroCommerce requested that the EC impose on Visa and Mastercard to set the default Intra-EEA IF to zero. In 1999, the Commission launched proceedings against Visa International.

4.2. Visa International 2001 – negative clearance decision

In 2001, the EC left the issue of IF on the backburner, and issued a negative clearance decision covering the other rules contained in the Visa International scheme rules and subject to the EuroCommerce complaint, such as the HACR[37] , the NDR[38] , territorial licensing[39] , modified rules on cross-border issuing and cross-border acquiring[40], and the No Acquiring Without Issuing (NAWI) rule.[41] The EC concluded that those various rules did not restrict competition and therefore did not fall foul of Article 101(1) TFEU (previously, article 81(1) EC); the only exception being the NDR which, according to the EC, did restrict competition, but not to an appreciable extent and therefore did not fall foul of Article 101(1) TFEU either.

In December 2001, EuroCommerce started annulment proceedings against the EC decision before the General Court (previously, the Court of First Instance)[42], which it later withdrew (the removal from the Court's register happened in March 2003[43]).

[36] Paragraphs 27-28.
[37] The Visa HACR required merchants to accept all valid Visa-branded cards, irrespective of the identity of the issuer, the nature of the transaction and the type of card being issued.
[38] The NDR prevented merchants from surcharging card transactions or discounting for cash payments.
[39] The licenses granted by Visa International to issue cards or acquire transactions were granted country-by-country.
[40] Initially, the Visa International rules did not allow Visa member banks to issue cards to cardholders outside their country of establishment or to acquire merchants in other Member States, except in very limited circumstances. However, Visa International had significantly increased the possibilities for cross-border issuing of Visa cards and cross-border acquiring of Visa transactions. Following the latest amendments, Visa International allowed cross-border issuing and cross-border acquiring without the prior establishment of a branch or subsidiary in the country concerned.
[41] The NAWI rule required a financial institution to first issue a significant number of Visa cards before it would potentially be allowed to also acquire Visa transactions. This rule was there to promote the development of the system by ensuring a large cardholder base, thereby making the system more attractive for merchants.
[42] https://op.europa.eu/en/publication-detail/-/publication/77e86aa0-87e0-49e1-af62-76eac3b527fa/language-en
[43] https://op.europa.eu/en/publication-detail/-/publication/6cfd34f1-93d9-4bf0-a170-b9d9c143e253

Whilst there is no need to discuss further the EC 2001 decision since it did not deal with IF, it is interesting to see that all the scheme rules under consideration were either amended and/or abolished by the card schemes as part of the EC's further competition law enforcement, and/or further to EU legislation proposed by the EC. This shows a clear evolution in the EC's position in relation to those rules over the years. For example:

- effective 1 January 2005, both Visa and Mastercard repealed their NAWI rule in the EEA.
- effective 1 January 2005, Mastercard also abolished the NDR in the EEA. Visa did not abolish that rule until EU legislation proposed by the EC, namely the 2007 Payment Services Directive (PSD1) allowed merchants to surcharge or discount for the use of a given payment instrument (unless prohibited or limited by each Member State's national legislation)[44].
- following a request from the EC, Mastercard also introduced a new cross-border acquiring license for its debit card 'Maestro'. As will be described below, the Visa and Mastercard rules on cross-border acquiring in particular were later on subject to further enforcement (resulting in the Visa Europe 2010 and 2014 commitment decisions, and an infringement decision against Mastercard in 2019 with a fine of approximately €570 million).
- the 2015 IFR, as proposed by the EC in 2013, relaxed the HACR (more specifically the so-called "honour all products" aspect of the HACR therefore allowing merchant to, for example, only accept Visa/Mastercard debit cards but not Visa/Mastercard credit cards, etc), and prohibited territorial licenses as well as any restrictions on cross-border issuing and cross-border acquiring.

4.3. Visa International 2002 exemption decision

The EC position on IF became clearer in the course of events leading to the granting of an exemption to Visa International in 2002. During the procedure, the EC hinted that IFs could not be categorically deemed restrictive of competition, and **that this was a factual question requiring economic analysis**.[45]

In its decision, the EC concluded that the default Intra-EEA IF was not "*technically necessary for the operation of the Visa payment scheme. […] The only provisions necessary for the operation of the Visa four-party payment scheme, apart from technical arrangements on message formats and the like, are the obligation of the creditor bank to accept any payment validly entered into the system by a debtor bank and the prohibition on (ex post) pricing by one bank to another."* [46]

[44] Article 52(3) of Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC (Text with EEA relevance), OJ L 319, 5.12.2007, p. 1–36.
[45] In a supplementary statement of objections as summarised in its 2002 decision, the EC defined the relevant markets, thereby hinting that an effects analysis was needed. The EC stated that the relevant markets (to be considered as part of the breach related to Article101(1) TFEU were (1) the markets for systems/ networks where Visa International and Mastercard compete, as well downstream markets, i.e. (2) the intra-system market on the issuing side (where card issuers compete) and (3) the intra-system market on the acquiring side (where card acquirers compete). The geographic scope, while historically national, was left open by the EC.
[46] Paras 59-60.

As regards the restriction of competition, the EC concluded that:

> *"64.* […] *the MIF has a* ***restrictive effect*** *on competition among Visa issuers and among Visa acquirers.* […]
>
> *67.* […] *Issuing banks are required to charge acquiring banks a certain fixed fee and are therefore prevented from developing at wholesale level an individual pricing policy vis-à-vis acquiring banks in so far as they provide services to them (for example a "payment guarantee" for most transactions).*
>
> *68. The MIF moreover has as its effect to distort the behaviour of acquiring banks vis-à-vis their customers (at resale level), because it creates an important cost element (according to EuroCommerce on average approximately 80 % of the merchant fee) which is likely to constitute a de facto floor for the fees charged to the merchants they acquire, since otherwise the acquiring bank would make a loss on its acquiring activity.*
>
> *69.* ***However, the Commission does not consider the MIF agreement to be a restriction of competition by object, since a MIF agreement in a four-party payment system such as that of Visa has as its objective to increase the stability and efficiency of operation of that system (see section 8.1.1 below), and indirectly to strengthen competition between payment systems by thus allowing four-party systems to compete more effectively with three-party systems****."*[47]

The EC held that the restrictive effect of the IF was enhanced by the implementation of other schemes rules and practices such as the HACR, the NRD and blended MSCs agreed between acquirers and merchants (instead of "IF plus plus" MSCs) which hinder the merchants' ability to manage their payment costs. The restrictions of competition were appreciable and there was at least potentially an effect on trade between Member States.

Turning to the question whether the default cross-border IF could benefit from an exemption under Article 101(3) TFEU (previously, Article 81(3) EC), the EC considered that a market analysis on a case-by-case basis was necessary:

> *"As a preliminary remark, it is not the case that an agreement concerning prices is always to be classified as a cartel and thus as inherently non-exemptible. Examples exist of agreements on prices which can meet the conditions for an exemption. Furthermore, a MIF is not a price charged to a consumer, but a remuneration paid between banks who must deal with each other for the settlement of a card payment transaction and thus have no choice of partner. The absence of some sort of default*

[47] Paragraphs 64 and 67-69.

> *rule on the terms of settlement could lead to abuse by the issuing bank, which is in a position of monopsony as regards the acquiring bank for the settlement of an individual payment transaction. Thus**, some kind of default arrangement is necessary, but the question of whether it qualifies for exemption or not will depend on the details of the arrangement**."*[48]

In response, Visa International proposed a new (cost-based) methodology to determine a maximum level for its Intra-EEA IF, as well as maximum amounts. The EC found the proposed revisions to meet the conditions for an exemption.

Let us look closer at the changes introduced by Visa International. First, Visa International committed to reduce its cross-border credit IF from approximately 1.1% to reach a weighted average of **0.7%** by 2007. In addition, Visa International committed to reduce its cross-border debit IF to a yearly weighted average of **EUR 0.28** before the end of 2002. The average debit card transaction value in 2019 was EUR 57[49], meaning that the average debit IF accepted by the EC was almost **0.5%**

Second, Visa International offered to introduce more objectivity in its Intra-EEA IF setting. To that end, Visa International committed to set the default Intra-EEA IF by sole reference to three costs components borne by issuers and that were considered by EC as benefitting merchants, i.e. (1) the cost of processing transactions; (2) the cost of providing the 'payment guarantee' to the merchant, and (3) the cost of the free-funding period extended by the issuer to the cardholder (for transactions related to credit cards).

Third, Visa International allowed acquirers to disclose the level of the IF and the cost components used for calculating the IF cap to merchants[50].

The exemption was valid until 31 December 2007.

4.4. Mastercard 2007 infringement decision

Following the Visa International 2002 decision, Mastercard informed the Commission in July 2003 of its intention to initiate proceedings against the EC under Article 232 EC (failure to act), unless the EC took a formal position with respect to Mastercard's Intra-EEA fallback interchange fees. The EC then issued two SOs (2003, 2006) and a letter of facts (2007). There was no commitment in the Mastercard case – instead the EC reached an infringement decision against Mastercard Incorporated, Mastercard International Incorporated and Mastercard Europe SPRL (together Mastercard) in December 2007. The main conclusions reached by the EC are summarised hereafter.

First, the definition of relevant market was identical to the Visa 2002 decision.

Second, the EC concluded that Mastercard remained an association of undertakings subject to Article 101 TFEU (previously Article 81 EC). This conclusion was not a given, because Mastercard had gone

[48] Paragraph 79.
[49] European Central Bank - Statistical Data Warehouse (https://sdw.ecb.europa.eu).
[50] After the Visa 2002 decision, both Visa and Mastercard agreed to publish their intra-European cross-border interchange fees on their respective website (but not yet domestic IF).

through an IPO in May 2006 so that issuers and acquirers no longer had ownership and control over Mastercard and in particular were no longer involved in the process of determining the level of the default Intra-EEA IF.

Third, since the Intra-EEA IF constituted an artificial, common de facto floor for the MSC charged by acquirer to merchants, it had the **effect** of restricting competition between acquirers; and that restrictive effect was appreciable and had at least a potential effect on trade between Member States. The EC left open the possibility of a restriction by object: *"[…] given that it can be clearly established that the MasterCard MIF has the effect of appreciably restricting and distorting competition to the detriment of merchants in the acquiring markets it is not necessary to reach a definite conclusion as to whether the MasterCard MIF is a restriction by object […].*"[51].

Fourth, the Intra-EEA IF was not objectively necessarily to the operation of the Mastercard scheme and therefore could not be absolved as an "ancillary restriction" of competition. The scheme could function on the basis of the remuneration of issuers by cardholders, and of acquirers by merchants. Unlike restrictions which are necessary for implementing a main operation, restrictions which are merely desirable for the commercial success of that operation, or which offer greater efficiency, can be examined only within the framework of Article 81(3) EC.

Fifth, Mastercard therefore had to demonstrate that the level of the Intra-EEA IF met the conditions for an exemption under Article 101(3) EC. In the MEMO that accompanied the EC decision, the EC stated that "*The Commission sought to find an agreement with MasterCard on an acceptable MIF. However, the modifications proposed by MasterCard were not appropriate to bring its MIF in line with Article [101] 81 (3) of the EC Treaty. The Commission therefore continued its investigation*"[52]. The EC concluded in its decision that Mastercard had failed to demonstrate that its default Intra-EEA IF met the conditions for exemption, and therefore that it was in breach of Article 101 TFEU.[53]

Mastercard nonetheless benefited from an immunity from fines because it had notified its IF arrangements to the EC between 1992 and 1997. However, the EC requested that Mastercard brought the infringement to an end within six months of the notification of the decision, on threat of a daily penalty payment of 3.5% of Mastercard's daily consolidated global turnover in the preceding business year, which represented approximately USD 450,000 per day.

In the absence of guidance from the EC as to what level of default Intra-EEA IF it would consider exemptible, Mastercard first reduced the Intra-EEA IF to zero in June 2008[54]. Mastercard and the EC then started a dialogue as to the level of default Intra-EEA IF that the EC would consider exemptible.

[51] Paragraph 407.
[52] https://ec.europa.eu/commission/presscorner/detail/en/MEMO_07_590
[53] Note that the scope of the Mastercard 2007 decision was the same as the 2002 Visa International decision, i.e. the default IF applicable to Intra-EEA transactions. The EC 2007 decision states that it concerns the Mastercard default Intra-EEA IF as it applies not only to Intra-EEA transactions, but also to domestic transactions in a number of EEA Member States. However, in practice, and contrary to what the EC stated in its 2007 decision and its contemporaneous press release, by the time the EC decision was adopted in December 2007 the Mastercard-set default Intra-EEA IF did not apply to domestic transactions in any EEA Member State; therefore, the practical scope of the decision was the same as the Visa 2002 decision: only Intra-EEA transactions.
[54] https://ec.europa.eu/commission/presscorner/detail/en/MEMO_08_397

The EC requested that the IF be set on the basis of the *tourist test* methodology, which was later on renamed and referred to as the *merchant indifference test* (MIT). The test seeks to set the IF at a level at which merchants are indifferent as to whether a payment is made by a card or by cash[55]. The discussions between the EC and Mastercard resulted in Mastercard offering "*Unilateral Undertakings*" to the EC in 2009[56], including a weighted average default Intra-EEA IF level of **0.2%** for debit and prepaid cards and **0.3%** for credit cards. Those levels became the benchmarks for the future EC competition law enforcement (see below) as well as the enforcement by most (but not all) NCAs, as well as the levels that were proposed by the EC in the draft IFR that it published in July 2013 (and, which became applicable in December 2015 as far as IF are concerned).

In the meantime, Mastercard had appealed the EC's 2007 decision to the General Court, but the General Court upheld the EC's decision in its entirety in 2012. Mastercard then appealed the EC 2007 decision, as confirmed by the General Court, to the Court of Justice, which again upheld the EC's 2007 decision in its entirety in 2014.[57] The Courts upheld in particular the EC's finding that despite its 2006 IPO, Mastercard remained an association of undertakings because (1) the banks had retained certain decision-making powers on some key issues and (2) Mastercard, issuers, acquirers and Mastercard's new shareholders all had an interest in a high default Intra-EEA IF. The Courts also upheld the existence restriction of competition by effect, and the absence of objective necessity of the default Intra-EEA IF

The EC's 2007 decision, as upheld by the EU Courts, is the decision that a number of merchants have relied upon since 2012 to seek damages from Mastercard and Visa as part of on-going follow-on litigations, primarily (but not solely) in UK Courts. It also forms the basis for a consumer class action that is currently on-going in the UK against Mastercard for an amount of GBP 14 billion[58] .

4.5. December 2010 – Visa Europe (debit card) commitments

After the Mastercard 2007 decision, the EC "turned back" once again to Visa. In 2009, the EC issued an SO against Visa Europe, which based on the statements in the 2010 Visa Europe commitment decision, found that (1) the relevant market in scope was the market for card acquiring services, and that those markets were still to be regarded as national; (2) Visa remained an association of undertakings (unlike Mastercard, Visa Europe was still owned and controlled by issuers and acquirers, so this qualification was not contested by Visa Europe); (3) Visa Europe's default debit IF, both for Intra-EEA as well as domestic debit card transactions in EEA Member States, restricted competition **by object** and effect; (4) those default IF were not objectively necessarily to the operation of the Visa Europe scheme; (5) they were capable of appreciably and negatively affecting cross-border trade between EEA Member States and; (6) Visa Europe had not demonstrated that the conditions for an

[55] Despite paragraph 38 of the Visa 2001 decision: "The costs of accepting cash are largely administrative costs, and hard to compare with the cost of accepting cards."
[56] Press release https://ec.europa.eu/commission/presscorner/detail/en/IP_09_515 and FAQ https://ec.europa.eu/commission/presscorner/detail/en/MEMO_09_143.
[57] Anecdotally, the hearing in the Court of Justice took place on 4th July, and the judgment was rendered on 9/11 (on the same day as the judgment in the *Cartes Bancaires* case - C 67/13 P), which are obviously dates that can make a US company wonder if the choice of dates by the Court is entirely accidental…
[58] See here for example: https://www.reuters.com/article/britain-mastercard-court/uk-supreme-court-enables-18-5-billion-class-action-against-mastercard-idUSKBN28L16J

exemption were met which, while not specifically addressed in the commitment decision, implicitly means that EC no longer considered the levels of default debit card cross-border IF set out in the 2002 Visa International decision exemptible (presumably the EC was of the view that only the 0.2% weighted applied by Mastercard since 2009 was exemptible).

Like Visa International earlier, Visa Europe offered commitments to the EC that were made binding in an EC decision dated 8 December 2010. Visa Europe committed to reduce the debit/prepaid Intra-EEA IF to 0.2% weighted average as it applied to cross-border transactions (thereby ensuring a level-playing field with the Mastercard 2009 *Unilateral Undertakings* as far as debit/ prepaid cards are concerned) but also potentially to domestic transactions in some EEA countries (although that was not the case in practice).

However, Visa Europe also committed to reduce to the same level debit IF applicable to **domestic** transactions in nine EEA countries where Visa Europe was in charge of setting the default domestic debit IF at the time.[59] This was a new approach since the EC had never before requested Visa Europe or Mastercard to reduce the levels of domestic IF (it had left the issue of domestic IF entirely to NCAs). The EC reported that this represented a reduction of about 60% on average.[60] Visa Europe also committed to a few other measures reflecting what Mastercard had offered in its 2009 *Unilateral Undertakings*, however we refrain from addressing those in detail here. The commitments were applicable for a period of 4 years from the notification of the decision (i.e., until approximately December 2014).

Interestingly, Visa Europe subsequently requested the EC to amend (i.e., to increase) the level of the above debit card IF caps that it had committed to, but the EC rejected Visa Europe's request by decision of 31 July 2012. Visa Europe initially sought the annulment of that EC decision before the General Court on 10 October 2012. It would appear from the main pleas and arguments[61] that Visa Europe had submitted an economic study that resulted in higher levels of debit IF on the basis of the tourist test or MIT than the 0.2% weighted average that it had committed to – and, as a result, it sought an increase of those levels; which the EC refused. Visa Europe eventually discontinued its appeal in March 2014.[62]

4.6. February 2014 – Visa Europe commitments

In July 2012, the EC issued a new SO against Visa Europe in relation to its default credit IF, as well as its rules on which IF applies to domestic transactions that are processed by an acquirer located in another EEA country than the country where the merchant and issuer and located (i.e., cross-border acquired transaction). The SO apparently stated that (1) Visa Europe was an association of undertakings (again, this was not disputed by Visa Europe); (2) its default cross-border and domestic credit card IF restricted competition by object and effect; same for the Visa Europe rule that stated that a cross-border

[59] Greece, Hungary, Iceland, Ireland, Italy, Malta, Sweden, Luxembourg, Netherlands (in the last two countries, only Visa prepaid cards were issued by then – no Visa debit cards).
[60] https://ec.europa.eu/commission/presscorner/detail/en/IP_10_462
[61] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62012TN0447
[62] http://curia.europa.eu/juris/document/document.jsf?text=&docid=152581&pageIndex=0&doclang=en&mode=lst&dir=&occ=first&part=1&cid=21140488

acquirer should pay the IF of the country where the merchant and the issuer are located (it is not clear from the EC decision what the counterfactual is); (3) those default credit IF and the rule determining which IF should apply to a cross-border acquired transaction were not objectively necessary to the operation of the Visa Europe scheme; (4) while not specifically addressed in the commitment decision, implicitly it is clear that the EC no longer considered the level of default credit cross-border IF set out in the 2002 Visa International decision (i.e. 0.7%) exemptible. Visa Europe offered commitments to the EC, which were made binding in an EC commitment decision dated 26 February 2014. As part of those commitments, Visa Europe agreed essentially to the following (in chronological order).

First, Visa Europe committed to reduce its default Intra-EEA credit IF to a weighted average of 0.3% (i.e., the same level applied by Mastercard since its 2009 "Unilateral Undertakings", therefore ensure a level-playing field between the two competing schemes in relation to cross-border credit transactions).

Second, as from 1 January 2015, Visa Europe committed to a rule change in relation to cross-border acquiring. In the 2010 (debit card) commitment decision, Visa Europe had committed "*to continue to require Visa Europe members to register all MIF rates and apply them to cross-border issued and cross-border acquired transactions*" - i.e., the domestic IF of the country of the merchant/ issuer should apply to domestic transactions irrespective of whether the acquirer is a local/ domestic acquirer or a foreign/ cross-border acquirer[63]. Visa Europe committed to a change: in the case where a merchant relied on a cross-border acquirer, the applicable IF would be either the domestic IF of the country of the merchant/ issuer (as was the case until now) or 0.2/0.3% (knowing that, in practice, the latter would almost always be lower). This commitment was meant to encourage merchants to get connected to acquirers in other EEA countries than their own.

Third, as from 1 January 2015, Visa Europe accepted a reduction of the (credit and debit) IF paid by the acquirer of an EEA merchant to an issuer located in some select non-EEA countries (including Switzerland, Turkey and Israel), therefore giving the commitment decision a form of extra-territorial effect outside of the EEA.

Fourth, Visa Europe adopted a few other measures, including some that never became effective in practice with the IFR superseding them as from December 2015, including a reduction by Visa Europe of default domestic credit IF in ten EEA countries where Visa Europe set the rates (as opposed to local issuers or acquirers (either bilaterally or multilaterally) that should have happened approximately around February 2016.

The duration of commitments was 4 years from the notification of the decision (i.e., approximately December 2014).

[63] "The Commission's concern that certain cross-border acquirers could be foreclosed from competition with local acquirers due to different MIF rates applicable to the two groups has, however, been removed by the mandatory registration and application of domestic MIFs agreed by local acquirers. As regards the obligation for a cross- border acquirer to pay the MIF of the place of the transaction, the Commission has not investigated that point fully and reserves its right to investigate it further in the future." (paragraph 49).

4.7. January 2019 - Mastercard II infringement decision (cross-border acquiring)

We saw above that in the EC commitment decision dated 26 February 2014, Visa Europe had given a commitment to the EC that allowed merchants to use an acquirer located in another country (i.e., a cross-border acquirer) and pay cross-border IF of 0.2%/0.3% which was lower than most domestic IF, therefore allowing merchants to normally pay lower IF as part of their MSC. Since Mastercard did not pro-actively offer the same commitment to the EC (despite the fact that the issue was going to be regulated by the, then, forthcoming IFR), in July 2015 the EC issued a SO to Mastercard which, based on the ultimate fining decision, apparently stated as follows, in summary.

First, despite its 2006 IPO, Mastercard remained an association of undertakings in relation to its scheme rules on cross-border acquiring [64]

Second, "*Mastercard's cross-border acquiring rules meant that acquirers offering card payment transaction acquiring services in Member States where the domestic MIFs were lower were prevented from seeking to offer cheaper services based on the MIFs in their "home" countries in Member States where the domestic MIFs were higher. The merchants were also prevented from taking advantage of the internal market and benefiting from less expensive services from card acquirers established in low-MIF Member States. Therefore, the Commission concludes that Mastercard's cross-border acquiring rules created an obstacle to cross-border trade in the market for acquiring card payment transactions in the EEA. The rules shielded national markets from cross-border competition from acquirers established in other Member States. The rules reveal in themselves, and by their very nature, a sufficient degree of harm to competition to be considered a restriction of competition "by object"*".[65]

Third, the infringement period was 27 February 2014 (i.e., the day after the adoption of the Visa Europe commitment decision on i.a. cross-border acquiring) to 8 December 2015 (i.e. the day before the relevant IFR provisions became applicable). "*At least with the adoption of the Commission's 2014 Visa Europe Decision, Mastercard was aware, or should have been aware, that the cross-border acquiring Rules infringed the competition rules and it was reasonably foreseeable for Mastercard that it should be held responsible for an infringement if it continued to apply its cross-border acquiring rules. The Commission therefore concludes that as of that point in time Mastercard commitments an infringement intentionally, or at least negligently*".[66]

After having responded to the SO, Mastercard submitted a formal offer of cooperation to the Commission ("Settlement Submission") in December 2018, in which it acknowledged in particular the breach of Article 101 TFEU. As a result, on 22 January 2019, the EC adopted an infringement decision against Mastercard imposing a fine of EUR 570,566,000 on Mastercard.[67]

[64] Interestingly enough, the justification for Mastercard remaining an association is slightly different than in the January 2019 fining decision adopted just three months earlier. In the April 2019 Mastercard commitment decision, the EC relied on the 2 criteria as confirmed by the EU courts on appeal of the EC 2007 decision – whereas, as mentioned above, three months earlier, in January 2019 fining decision, the EC referred to Mastercard "listening to its customers/ the market", etc.
[65] Paragraphs 62-63.
[66] Paragraph 94 of the decision.
[67] Interestingly, consumer prepaid cards are not covered by the decision (see paragraph 22 of EC decision), unlike all previous, and future, EC comp enforcement that always treated consumer debit and prepaid together.

4.8. April 2019 - Visa International and Mastercard commitments on inbound inter-regional IF

In parallel to the above, the EC had opened investigations against Visa Inc. and Visa International Services Association (together Visa International), as well as three Mastercard legal entities (together Mastercard) in relation to the default IF applicable to inbound inter-regional transactions, i.e., transactions where the card issuer is located outside of the EEA and the merchant is located within the EEA. In essence, these investigations can be seen as complements to the IFR that had become applicable (in part) on 9 December 2015. Indeed, the IF caps set in the IFR only apply to transactions where the issuer as well as the acquirer and the merchant are located within the EEA – but not to in-bound interregional transactions.

The EC issued several SOs against Visa International (in 2009, 2013 and 2017) and one SO against Mastercard (in 2015). The main allegations are as follows. First, Visa International and Mastercard, despite their respective IPOs, remain associations of undertakings as the two conditions mentioned in the CJEU 2014 Mastercard judgment were met, i.e. (1) issuers and acquirers retained important decision-making powers in respect of essential aspects of the operation of the scheme and (2) the existence of a commonality of interest between the scheme and issuers/ acquirers on the issue of IF (read: a commonality of interest in a "high" default IF).

Second, the inter-regional IF "*amount to **horizontal price-fixing** […] Such **price fixing** is by its very nature harmful to competition and reveals in itself a sufficient degree of harm to competition to be considered a restriction of competition 'by object'*."[68] The Visa and Mastercard inbound inter-regional IF are not objectively necessary to the operation of the Visa and Mastercard schemes.

Third, The Visa and Mastercard inbound inter-regional IF did not meet the conditions for an exemption.

Visa International and Mastercard both offered commitments to the EC. Both schemes proposed to reduce the default IF applicable to inbound inter-regional transactions. The EC accepted the commitments and made them binding in two decisions dated 29 April 2019. More specifically, Visa International and Mastercard both gave identical commitments, including reductions of IF for:

- card-present (CP) transactions: the same level of IF as those applicable under the IFR since December 2015, i.e., 0.2% for consumer debit/ prepaid, 0.3% for consumer credit.
- card-not-present (CNP) transactions (e.g., online transactions): **1.15%** for consumer debit/ prepaid and **1.50%** for consumer credit. Those higher levels had generated critical comments from merchants and merchant associations during their market testing, but the EC accepted those levels and, in its press release, justified those higher levels as follows: "[…] the Commission concluded that, with the proposed inter-regional MIFs caps, the cost for retailers of accepting inter-regional consumer card payments does not exceed the cost of accepting alternative means for such payments, such as cash for Card Present Transactions and e-wallets (digital wallets) funded via bank transfers for Card Not Present Transactions". Reading

[68] Paragraph 33 of Mastercard commitment decision and paragraph 34 of the Visa International commitment decision.

between the lines, it would appear that the costs imposed by digital wallets, perhaps such as Paypal, to EEA based merchants played a role in the EC accepting that the MIT resulted in higher levels of IF than the usual 0.2%/ 0.3%.

The commitments are valid for a period of, effectively, 5 years – which, depending on when the decisions were formally notified to Visa International and Mastercard, we expect to be approximately until May 2024. These two decisions mark the second time that the EC obtained commitments with an extra-territorial effect. The first time, as mentioned above, was in the Visa Europe 2014 commitments.

5. Data and Methodology

The data set consists of 10,072 valid points, associated to 21 different variables. A total of 27 member states of the European Union (EU) is covered over a time span of 20 years (2000-2019). The data is collected on an annual basis and all absolute variables are transformed to relative variables (*per capita* for instance) in order to reduce the impact of outliers and achieve a higher degree of normalisation with regard to distribution.[69] In addition to the two main data sources, namely the European Central Bank's statistical data warehouse (https://sdw.ecb.europa.eu) and Eurostat's statistical database (https://ec.europa.eu/eurostat/data/database), interchange fees are obtained from Veljan (2018)[70]. A total of five outcome variables is tested. In addition to the descriptive variables *Country* and *Year* as well as the dummy variables required to conduct the Difference-in-Difference analysis (*Treatment period; Treated market; Treatment period and Treated market*), a mixture of nine control variables are considered for the analysis.

Outcome variable	Label	Period
Size (by number)	Number of total card payments per capita	2000-2019
Size (by value)	Value of total card payments per capita [€]	2000-2019
Acceptance	Number of terminals installed per 1 million inhabitants	2000-2019
Issuance	Number of cards issued per capita	2000-2019
Displacement	Number of ATM cash withdrawals per capita	2000-2019

Due to the aforementioned characteristics of card payment markets and the ineffectiveness of assessing a single cost element in isolation, we deliberately depart from a monetary and one-sided analysis and focus on metrics that act as proxies for the success and efficiency of the network as a whole. We assume that increases in overall market size in terms of transaction numbers and volumes, as well as market participants (merchants on the acceptance and cardholders on the issuance side) and a displacement of cash are deemed favourable by the network participants. Further and disregarding the cost structure of card payments, electronic payments are regarded to be socially efficient and welfare optimising.[71]

[69] Outliers are not subsequently removed; data is not normalised further; in cases of missing values these are not replaced.
[70] A Veljan, 'A critical review of the European Commission's Multilateral Interchange Fee Regulation' (2018) Journal of Payments Strategy & Systems Vol. 12, No. 3.
[71] European Commission (2013) 'Proposal for a Regulation of the European Parliament and of the Council on interchange fees for card-based payment transactions', available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52013PC0550 (accessed 9th August, 2018).

Based on these two premises, above variables can be utilised to assess the causal effects of the competition enforcement conducted by the EC by applying the Difference-in-Difference (DiD) approach.

Control variable	Label	Period
Productivity	Compensation of employees [€/ hour][72]	2004-2015
Poverty	People at risk of poverty or social exclusion [%]	2004-2015
Internet	Share of households with broadband access [%]	2004-2015
ATM	Number of ATMs installed per 1 million inhabitants	2000-2019
Inflation	Harmonised index of consumer prices [%]	2000-2019
Interchange	Weighted average interchange fee [%]	2007-2015
GDP	Gross Domestic Product per capita [€]	2000-2019
eCommerce	Online purchases made by individuals in the last 3 months [%]	2004-2015
Tourism	Nights spent at tourist accommodations [per capita]	2000-2019

The selection of control variables represents the degree of digitalisation within a country, the economic performance, stability and welfare distribution as well as access to banking and payment products. Whilst numerous initiatives have driven a harmonisation of the European card payment market, prevalent differences between the countries continue to exist. The selection of variables aims at identifying and controlling for these within the analysis.

We focus our analysis on the EC competition enforcement that led to the Visa Europe 2010 commitment decision. The period analysed spans from 2004-2015, with the exclusion of 2010 as this year can neither be classified as pre- nor post-enforcement.[73] The infringement period covers the years 2004-2009; the post-intervention period ranges from 2011-2015. Further, any confounding effects stemming from previous cases (34579: Mastercard 2007) or the IFR can be minimised. Whilst the Mastercard 2007 case only applied to Intra-EEA[74] card transactions that, at the time, accounted for less than 5% of total card transactions across Europe[75], the IFR came into effect on 9 December 2015 and should thus have not had any major impacts on the data either. The only remaining antitrust enforcement relates to Visa Europe's Intra-EEA and domestic fallback credit IF, which were amended on 14 May 2013. However, at this point in time, only a fraction (23%) of European card transactions is completed using credit cards.[76]

During this period data availability is warranted for all countries; the variable *interchange* represents an exception. As part of the enforcement, the debit interchange fee was amended for all Intra-EEA card transactions within the EEA. The enforcement also applied to countries where Visa Europe was in charge of setting the domestic debit interchange fee. At the point in time, Visa Europe set the domestic debit interchange fee in Greece, Hungary, Iceland, Ireland, Italy, Malta, Sweden, Luxembourg and

[72] Under consideration of purchasing-power-parity.
[73] On 26 April 2010 Visa agreed to trial the proposed interchange rate (0.2%) for debit card payments. On 8 December 2010 the EC makes Visa's commitments legally binding.
[74] Intra-EEA transactions are transactions initiated with a card issued in country A within the EEA and utilised in country B. Card issuer and merchant are located in different countries but both within the EEA.
[75] European Commission, European Commission Decision of 12/19/2007, case number 34579.
[76] European Central Bank - Statistical Data Warehouse (https://sdw.ecb.europa.eu).

Netherlands. As these countries would have experienced a far greater impact of the enforcement, they are classified as the treated group, with all remaining countries representing the control group. This way cross-country variations can be exploited to provide insights on the effects of antitrust involvement.

In its simplest form, the DiD approach calculates the difference between the infringement and post-intervention periods for an outcome variable within the treated group and compares this with the obtained results for the same outcome variable within the control group, thereby enabling an assessment of the impacts.[77] The underlying methodology is a linear regression (OLS)[78]; in our case conducted with the *Enter* method within the program *SPSS*. Initially all input variables are selected and subsequently removed stepwise based on their significance. Significance is assessed via the t-test value and a confidence level of 95% defined. In order to control for collinearity, the Variance Inflation Factor (VIF) is always kept below 5.5. The behaviour of the outcome variable prior to the intervention needs to be assessed in order to establish a potential common trend. The common trend hypothesis can be accepted if the variable of interest is not statistically significant, i.e. different from 0. The significance of the enforcement can be visually interpreted and statistically assessed so as to complement the causal interpretation. For the sake of robustness, a separate analysis has been run whereby the pre-treatment period is extended by four years to cover the timespan 2000-2009. The results of this analysis do not yield significantly different results.

6. Results

The three variables Size (by number/ value) and Acceptance vary significantly across Europe. On the contrary, Issuance and Displacement exhibit a comparatively lower standard deviation. Both Size metrics are characterised by a positive/ right-skewed distribution, whereas Acceptance, Issuance and Displacement have a relatively symmetric distribution. A constant growth can be recorded for all outcome variables across the years (including infringement phase), except for Displacement which has remained relatively stagnant. This in itself requires a more profound investigation in order to enable an assessment if and to what extent the development of these variables was impacted by the competition enforcement.

[77] A total of 5 regression analyses are run for the outcome variables. Additionally, 5 analyses are run to test the common trend hypothesis.
[78] Ordinary Least Squares.

Size (by number)[a]

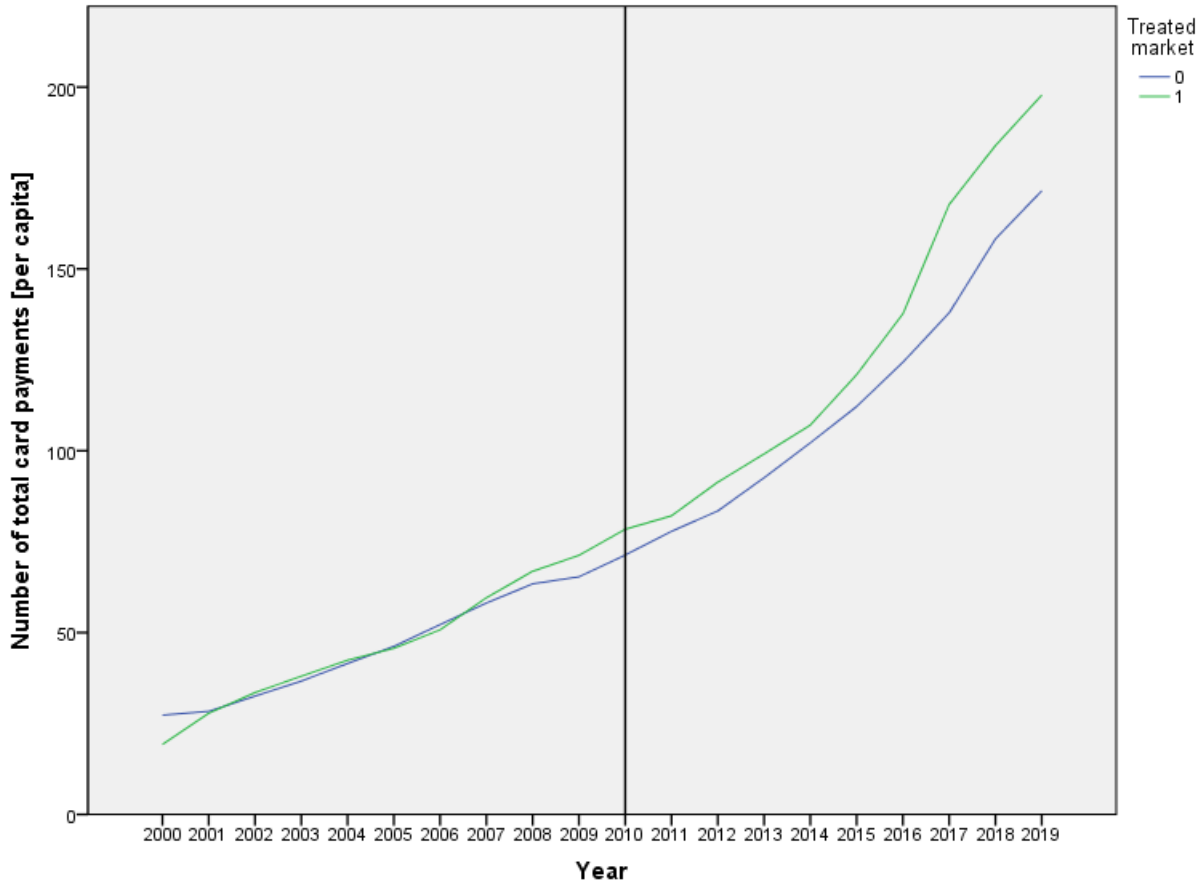
R^2 0.843	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	108.600	14.237		7.628	.000
Compensation of employees under consideration of PPS [€/ hour]	-1.800	.422	-.201	-4.271	.000
People at risk of poverty or social exclusion [%]	-2.087	.337	-.237	-6.195	.000
Number of cards issued [per capita]	-18.146	7.240	-.136	-2.506	.013
Number of ATM cash withdrawals [per capita]	-.078	.270	-.013	-.288	.774
Number of terminals installed [per 1m inhabitants]	.001	.000	.194	5.328	.000
Online purchases made by individuals in the last 3 months [%]	.674	.221	.185	3.046	.003
Nights spent at tourist accommodations [per capita]	-12.356	2.796	-.222	-4.420	.000
Value of total card payments [per capita]	.020	.001	.887	14.984	.000
Treatment period	1.987	4.984	.016	.399	.691
Treated market	-9.874	5.559	-.071	-1.776	.077
Treatment period and treated market apply	16.346	7.701	.088	2.122	.035

a. Dependent Variable: Number of total card payments [per capita]

The findings show that the **number of card payments per capita has significantly increased (by an average of 16 payments) as a result of competition enforcement**. Given that the mean (median) lies at 73 (49) payments per capita, this results in a 22% uplift. The model has a relatively strong explanatory power, characterised by a coefficient of determination of 0.843. Also, we can confirm a common trend in the development of the variable prior to the event date (2010).[79] A visual assessment of the trend confirms above findings. Whilst the treated and control groups exhibit a common trend prior to the competition enforcement in 2010, a discrepancy in developments is observable subsequently. A partial impact by the 2007 Mastercard decision, whereby a reduction of the Mastercard Intra-EEA interchange fees to zero in April 2018 was followed by an increase to 0.2% for debit and 0.3% for credit cards as of July 2009, cannot be excluded. Also, it is observable that the positive trend was further amplified by the IFR which came into force on 9 December 2015. We can confirm a causal and positive, statistically

[79] The analysed coefficient was significant at the 95% confidence level so that a common trend cannot be assumed per se. However, although there was a significant divergence between the trends in the number of card payments per capita for the treated and control groups prior to the competition enforcement, this divergence was very small and close to zero (-0.005) so that the common trend assumption is (presumably) satisfied.

significant relationship between the size of the European card payment market (measured by number of transactions) and the EC's market intervention.



The majority of above findings hold for the second variable to be assessed, namely *Size (by value).* Logically, one can assume that these two metrics will follow a similar trend as an increase in the number of transactions will, *ceteris paribus*, lead to an increase in card volume. However, whilst the number of total card payments is an evident proxy for payment card utilisation, card volumes can be impacted by confounding factors such as wealth, spending behaviour or other macroeconomic developments. A risk of misinterpretation is especially prevalent when analysing monetary values. In our model, we have tried to control for this by including control variables such as productivity (Compensation of employees under consideration off PPS) or GDP per capita. The final model (shown below) only contains the aforementioned variable due to its comparatively higher explanatory power. The control variable GDP per capita has been removed due to collinearity issues.

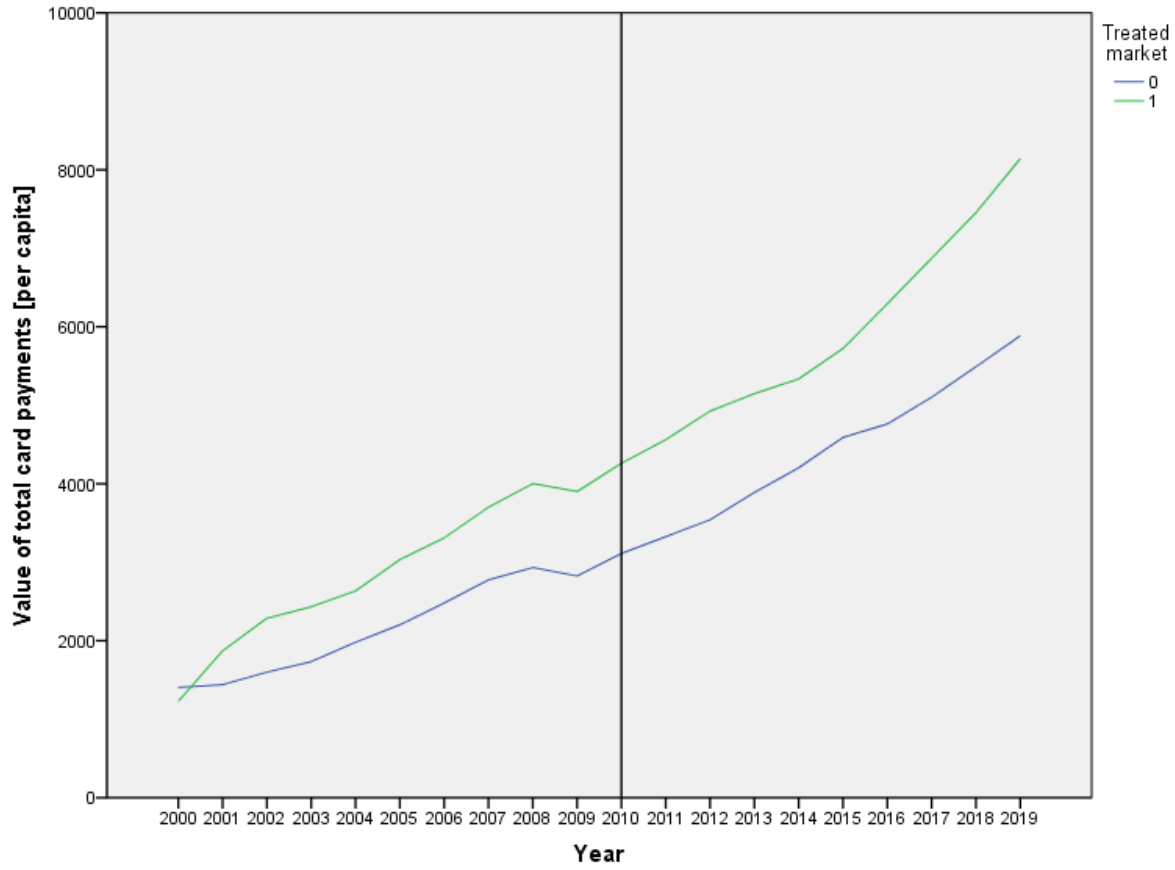
Size (by value)[a]

R^2 0.911	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-3,134.403	473.121		-6.625	.000
Compensation of employees under consideration of PPS [€/ hour]	68.755	13.681	.166	5.026	.000
People at risk of poverty or social exclusion [%]	34.774	10.053	.093	3.459	.001
Share of households with broadband access [%]	-27.455	5.497	-.210	-4.994	.000
Number of cards issued [per capita]	2,006.217	182.115	.357	11.016	.000
Number of total card payments [per capita]	27.470	1.540	.547	17.836	.000
Online purchases made by individuals in the last 3 months [%]	42.655	7.280	.242	5.859	.000
Number of ATM cash withdrawals [per capita]	-9.401	7.791	-.031	-1.207	.229
Treatment period	302.060	211.494	.049	1.428	.154
Treated market	270.099	182.396	.040	1.481	.140
Treatment period and treated market apply	-550.065	257.737	-.063	-2.134	.034

a. Dependent Variable: Value of total card payments [per capita]

The model exhibits even stronger goodness of fit and is able to explain 91% of the total variance. Similarly, our findings show that the value of card payments is mainly driven by the number of card payments and vice-versa. However, whilst the above results hint towards a positive impact of competition enforcement, the opposite is true with regard to the *Size (by value).* In fact, the average cardholder spending has decreased of approximately 550 Euro annually subsequent to the market intervention. In comparison to the mean of 3,469 Euro, this is equivalent to a reduction of 16%. This inconsistency can potentially be explained by the macroeconomic occurrences that have shaped the economy during the intervention period. The financial crisis and the subsequent credit crunch started in 2007 in the United States and spilled over to Europe in late 2009. With increasing debt-to-GDP ratios and unemployment as well as significant drops in GDP and productivity rates, the overall spending had been impacted, which will – to a large degree – have impacted card spending as well.[80]

[80] Sinn, Hans-Werner (2014). "The Euro Trap – On Bursting Bubbles, Budgets, and Beliefs." Oxford University Press.



The above graph shows that whilst the growth momentum has continued for both the treated and control groups (driven by the other explanatory variables, rather than the policy intervention) subsequent to the downturn in 2009, the slope of the control group has increased, i.e., it has become steeper especially in the period between 2010 and 2015, whereas the slope for the treated markets has decreased, i.e. flattened, thereby resulting in a slower growth post-intervention. This is only the case between 2010 and 2015 which is the analysed period. Afterwards, and certainly post- IFR, the slope steepens significantly for the treated group whereas it remains relatively constant for the control group. A common trend between the control and treated groups cannot be confirmed for the infringement period.

The following two variables (*Issuance* and *Acceptance*) aim to assess in further detail the drivers of above findings. We look at whether the size of the network has increased and card payments are utilised in larger numbers and more often post-intervention. We seek to understand if this is driven either by an increased card issuance, by an increase in card acceptance, or by a mixture of both.

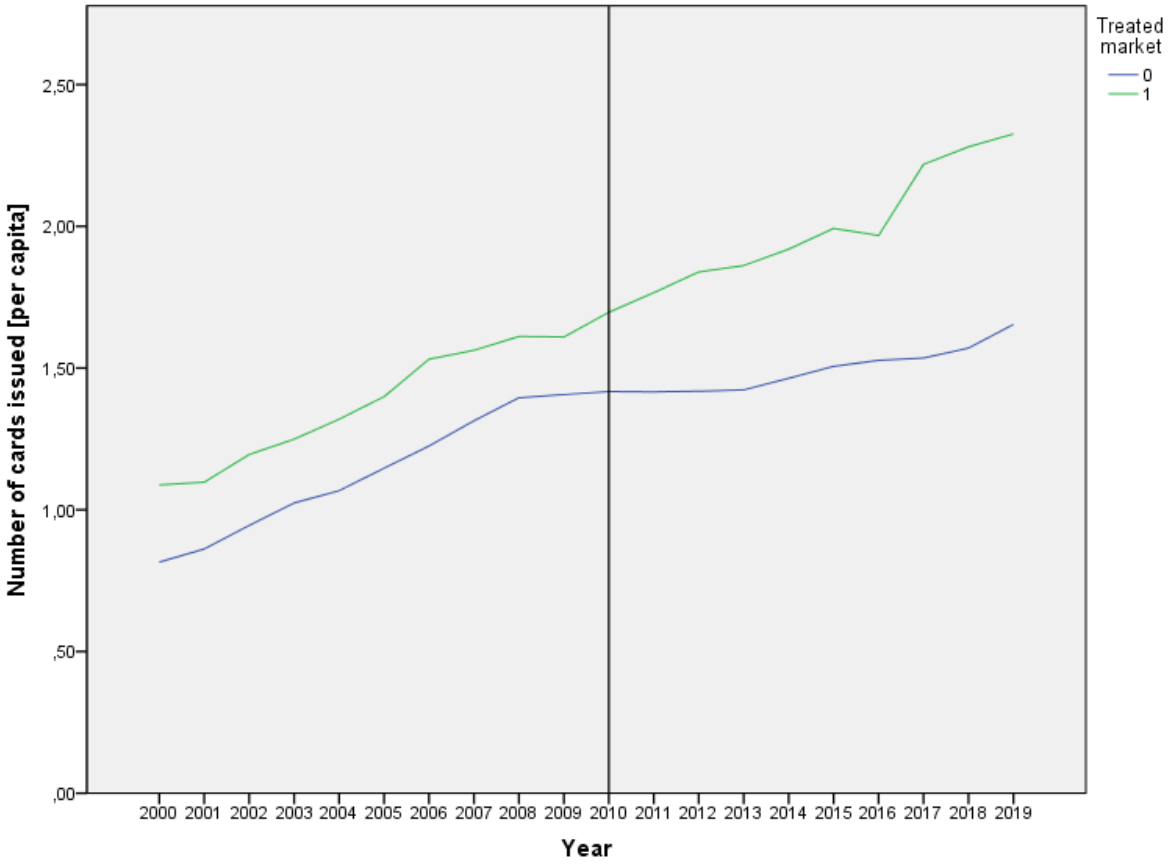
Issuance[a]

R^2 0.784	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.498	.063		7.951	.000
Number of ATMs installed [per 1m inhabitants]	.000	.000	.460	13.808	.000
Number of ATM cash withdrawals [per capita]	.008	.002	.148	3.933	.000
Number of total card payments [per capita]	.002	.000	.241	5.257	.000
Online purchases made by individuals in the last 3 months [%]	.020	.002	.613	10.905	.000
Nights spent at tourist accommodations [per capita]	-.121	.017	-.249	-7.160	.000
Share of households with broadband access [%]	-.004	.001	-.191	-3.066	.002
Treatment period	-.127	.056	-.113	-2.257	.025
Treated market	.273	.049	.225	5.519	.000
Treatment period and treated market apply	.225	.070	.141	3.212	.001

a. Dependent Variable: Number of cards issued [per capita]

The results obtained for the variable *Issuance* display a significant, positive impact of the market intervention on the number of cards issued per capita. Recall that a common belief was that card issuance would decrease as issuers would be less incentivised to invest in cards due to decreasing revenues stemming from a lower IF. In addition, it was also believed that increases in annual card fees or reductions in rewards programs would cause a deterioration in card payments. Our analysis suggest that the opposite is in fact the case. **Card issuance has continued to grow, and growth has actually been amplified by the EC antitrust intervention**. Although this could have manifold reasons, according to our model it is driven mainly by the emergence and growth of e-commerce and online purchases as well as continued card usage in relation to ATM withdrawals. The fact that several European countries continue to rely on domestic (debit) card schemes for domestic transactions (e.g., Cartes Bancaires in France, Bancontact in Belgium, Girocard in Germany, PagoBancomat in Italy, Multibanco in Portugal, Dankort in Denmark, BankAxept in Norway), rather than Visa and Mastercard shall not be disregarded.[81] The model's overall goodness of fit is relatively strong with an $R^2$of 0.784. On average an increased issuance of 0.225 cards can be recorded for the post-intervention period. This equates to an increase of 16% when compared to the average (mean) of 1.44 cards per capita.

[81] For a number of European economies, domestic debit card schemes continue to play a dominant role in terms of payment but also cash withdrawals. Visa and Mastercard hold a marginal share related to debit card circulation in several markets including Belgium (0%), Norway (0%), Portugal (0%), Germany (9%) and Italy (34%).



A visual representation of our results confirms our interpretation. A common trend prior to the event date can be observed and statistically confirmed. During the post-intervention phase, the slope for control markets flattens and even stagnates for a period, whilst a continued growth momentum can be observed for the treated group. A further anomaly is the slight dip in 2016 which may in fact be somewhat related to the IFR. However, this is overturned in 2017 where the growth is actually highest across all years. We can confirm that the increase in card payments has been (to a large extent) driven by an increase in average cardholding. From the set of outcome variables, *Acceptance* is the only one where a statistically significant impact of the intervention is not observable. Thus, we can conclude that *Issuance* has been the major driver of increased card usage, alongside a mixture of potential other explanatory variables.

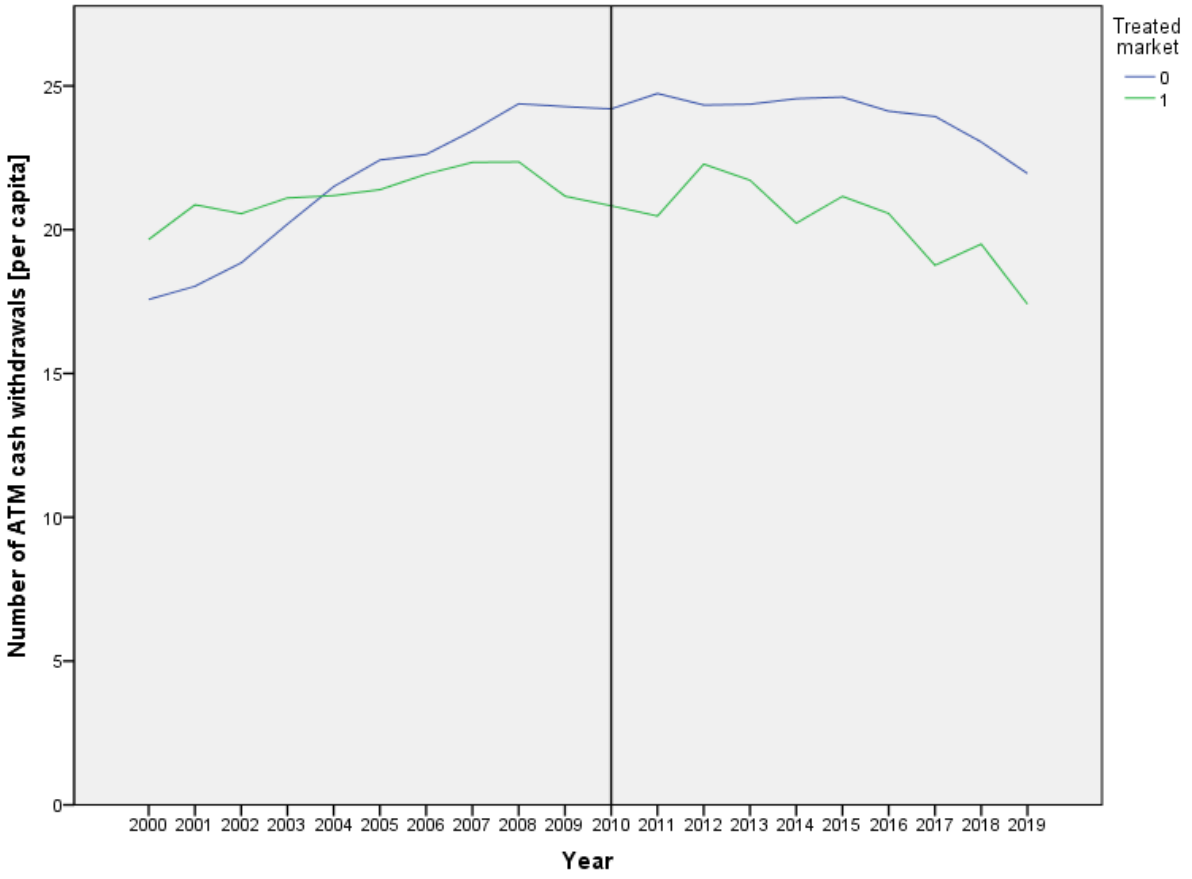
Displacement[a]

R^2 0.514	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	8.691	1.431		6.073	.000
Number of ATMs installed [per 1m inhabitants]	.000	.000	.260	4.233	.000
Number of total card payments [per capita]	.068	.011	.408	6.262	.000
Compensation of employees under consideration of PPS [€/ hour]	-.553	.095	-.410	-5.825	.000
Number of cards issued [per capita]	8.282	1.383	.460	5.989	.000
Nights spent at tourist accommodations [per capita]	1.589	.461	.181	3.451	.001
Treatment period	-1.791	1.079	-.087	-1.660	.098
Treated market	-.845	1.399	-.038	-.604	.546
Treatment period and treated market apply	-3.811	1.892	-.130	-2.014	.045

a. Dependent Variable: Number of ATM cash withdrawals [per capita]

Finally, we try to assess whether we can see a displacement of cash usage in exchange for more sophisticated, electronic payment methods (including card payments). Our regression model is characterised by a medium goodness of fit, explaining 51% of total variance. A statistically significant, negative impact is observable with regard to the number of ATM cash withdrawals per capita, resulting in an average decrease of 4 withdrawals across the treated group. Considering an average (mean) cash withdrawal of 23, this results in a decrease of 17%. Further, cash usage seems to be positively related to the number of cards in circulation and the total number of payments, whereas an inversed relationship is observable with the productivity ratios within the market. This is in line with common belief that the level of productivity as well as other aspects of innovation and technological affinity will impact cash versus electronic payment usage. A common trend during the abuse period is also observable and statistically confirmed.[82]

[82] To reiterate in case of confusion: whilst the graphic depiction ranges from 2000-2019 to as to provide a longer-term view of the development of the metrics, the analysed period is defined from 2004-2015.



7. Discussion of economic findings

The focus of research in this paper differs from existing ex-post impact assessments in relation to the IF. The vast majority of previous research[83], including the EC's study on the application of the IFR[84], predominantly focus on monetary redistribution effects, thereby aiming to assess the total impacts on the network, whilst facing the problem of limited empirical data for all market participants, in order to conduct a final interpretation. This problem is especially prevalent in two-sided markets as pass-through and pricing elasticity of participants becomes key. As a result, most research lacks a holistic assessment of the market or aims to bypass the problem with the usage of proxies or interviews; all of which are suboptimal and can in fact lead to detrimental policy decisions.[85] We deliberately depart from this approach and try to assess the impacts of antitrust intervention based on a set of metrics that represent overall network success. In this respect, our ambition is more in the line with traditional multisided market

[83] See D S Evans, H H Chang, and S Joyce, 'THE IMPACT OF THE U.S. DEBIT-CARD INTERCHANGE FEE REGULATION ON CONSUMER WELFARE' (2015) Journal of Competition Law & Economics, Vol. 11, No. 1 and A Veljan and A Roaidi, 'An Event Study Analysis of the Impacts of the European Interchange Fee Regulation' (2020) Journal of Competition Law & Economics, available at https://doi.org/10.1093/joclec/nhaa019 (accessed 23 December 2020).

[84] European Commission, 'Study on the application of the Interchange Fee Regulation' (2020) <https://ec.europa.eu/competition/publications/reports/kd0120161enn.pdf> accessed 24 April 2020.

[85] Katz, Michael L., and Shapiro Carl. 1994. Systems Competition and Network Effects. *Journal of Economic Perspectives* 8(2): 93–115.

literature, which focuses on establishing functional relationships between price structures and output, leaving aside distributional concerns.

Importantly, our analysis also operates on the assumption that card payments increase social welfare in comparison to non-digital payments such as cash. Put differently, we postulate that a larger utilisation of the service, driven by a mixture of increased merchant acceptance and/ or cardholding, as well as an ultimate displacement of cash payments is beneficial. We ground this assumption on the widely documented inefficiencies and risks related to cash payments[86] but also on the overall digital finance strategy by the EC which includes payment services.[87]

Given the above, and from the perspective of overall market output, **our results are supportive of the policy expressed in enforcement initiatives like the Visa 2010 decision**. The hypothesis can only be partially confirmed as the variables Size (by number), Issuance and Displacement are significantly and positively impacted, whereas no confirmatory evidence can be obtained for Acceptance and Size (by value). This is of particular relevance, especially because prior to the IFR becoming applicable, the EC anticipated that issuer losses caused by the decrease in IF would in fact be compensated by increases in card spending, mainly driven by a growing acceptance rate on the merchant side.[88] In the case of the Visa 2010 enforcement initiative, this has not been the case.

Furthermore, and from a methodological perspective it is important to note that for the majority of tested outcome variables, only a relatively limited and specific set of explanatory variables led to above results. In many cases, the significance of findings depended on specific explanatory variables. Only in the case of Issuance was a vastly stronger robustness given. Also, one cannot fully exclude the potential impact of confounding events such as the Mastercard 2007 decision or the (amplifying[89]) impact of the IFR. Whilst we cannot with certainty state that the competition enforcement related to the Visa 2010 decision was the single and most significant driver of the observable impacts in relation to the outcome variables (an overall development trend is observable across the European payment landscape prior to this), we can state that the antitrust actions taken did not have a negative impact on welfare (measured by efficiency metrics such as total market output) and most likely amplified the previously observable positive trend.

[86] Transportation and security expenses as well as check-out times for cashiers at the end of the day are only a few examples. For further detail see Tirole, Jean (2011): Payment Card Regulation and the Use of Economic Analysis in Antitrust. In Competition Policy International 7 (1), pp. 137–158.

[87] See https://ec.europa.eu/info/publications/200924-digital-finance-proposals_en and https://ec.europa.eu/info/business-economy-euro/banking-and-finance/consumer-finance-and-payments/payment-services/payment-services_en

[88] See European Commission (2015) 'Survey on merchants' costs of processing cash and card payments', available at: http://ec.europa.eu/competition/sectors/financial_services/dgcomp_final_report_en.pdf (accessed 9th August, 2018) and European Commission (2013) 'Proposal for a Regulation of the European Parliament and of the Council on interchange fees for card-based payment transactions', available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52013PC0550 (accessed 9th August, 2018).

[89] Due to its scope (all domestic and cross-border credit and debit transactions) as well as its size (IF were reduced in some regions by up to 80%).

Whilst our findings conform to standard cause-and-effect theories[90], two prevalent sources of scepticism need to mentioned. The first is related to issues arising out of cross-country examinations, namely reverse causality and omitted causal factors.[91] The second, inescapable in any ex-post assessment, concerns the counterfactual. Would the growth momentum, observable for most countries during the infringement phase have continued (potentially at a slower rate) but for the policy intervention? What impacts did the progressive reduction of IF have on innovation?[92] How has the reduction in interchange fees, alongside other provisions and changes to (acquiring) rules, impacted market concentration? Would the development of scheme fees (charged by the card schemes to issuers and acquirers – i.e., the revenue of the card scheme) have been different in the absence of competition enforcement, and ultimately regulation, of interchange fees?[93]

In light of the above, let us now say a word about some of the controversies that have been associated with the IF "saga". Whilst contradicting views exist in terms of certain nuances of the tourist test/ merchant indifference test (MIT) methodology, a rather common agreement amongst scholars and practitioners is that cost-based approaches are suboptimal when determining IF.[94] What is more problematic is the non-transparent manner in which the EC has applied the methodology to determine the benchmark rates of 0.3% for credit and 0.2% for debit/ prepaid cards. From an economic perspective, these deviate from the results provided in the EC's official publication on the costs within European card payment markets.[95]

Further, the initial scope of antitrust intervention targeted only on a minimal fraction of total payments made, i.e., less than 5%.[96] It took a decade to enlarge the scope of transactions that would fall under antitrust actions. A benefit of this is a rather incremental market impact, that minimizes the costs of policy error, including by limiting the costs of reversibility. Moreover, **this suggests that the EC followed a pragmatic and evidence-based policy spirit based on learning from experience**. A downside for researches lies however in the fact that the market interventions (up to the IFR) could not be evaluated accurately as the reductions in cross-border (and in certain countries domestic fallback) IF did not vastly impact the total costs of card acceptance. This is visible in below table whereby concrete IF reductions subsequent to the Visa Europe 2010 decision have been compared to the overall impact on the weighted average IF. In fact, within our models the variable Interchange was insignificant at all times. Other unintended consequences primarily stem from the characteristics of two-sided markets

[90] It is noteworthy that whilst the utilised methodology by the EC to assess optimal interchange fees was developed by Rochet and Tirole, both authors clearly state that due to spill-over effects, diverging demand elasticities and market power it is not in the interest of card associations to set interchange fees that deviate markedly from the social optimum. See Rochet, Jean-Charles, and Jean Tirole. 2003. Platform Competition in Two-Sided Markets. Journal of the European Economic Association 1(4): 990–1029.
[91] Abhijit V. Banerjee and Esther Duflo, *Good Economics for Hard Times: Better Answers to Our Biggest Problems*. New Delhi, Juggernaut Books, 2019.
[92] Weiner, Stuart E.; Wright, Julian (2005): Interchange Fees in Various Countries: Developments and Determinants. In Review of Network Economics 4 (4), p. 321. DOI: 10.2202/1446-9022.1078.
[93] Veljan, Alen (2020): Regulating the uncontrollable: The development of card scheme fees in payments markets in light of recent policy intervention. In *Research in Law and Economics Vol.* 29.
[94] GUTHRIE GRAEME; WRIGHT JULIAN (2007): COMPETING PAYMENT SCHEMES*. In *The Journal of Industrial Economics* 55 (1), pp. 37–67. DOI: 10.1111/j.1467-6451.2007.00302.x.
[95] See European Commission (2015) 'Survey on merchants' costs of processing cash and card payments', available at: http://ec.europa.eu/competition/sectors/financial_services/dgcomp_final_report_en.pdf (accessed 9th August, 2018).
[96] European Commission, European Commission Decision of 12/19/2007, case number 34579.

which are based on elements such as spill-over effects, intra-and inter-system competition[97] as well as an inverted competition with regard to card schemes[98].

INSERT TABLE WITH WEIGHTED AVERAGE IC FEES AND VISA DEBIT DECISION IC FEES.

When focusing on a single price component within card networks, we are confronted with two main limitations. One the one hand, reductions in IF can lead to (disproportionate[99]) increases in other fee components. Put more graphically, the various fees charged to merchants might be substitutes to each other, a problem known as the waterbed effect. On the other hand, the ultimate cost decrease for merchants and in turn for cardholders is dependent on the pass-through within acquiring as well as merchant sectors. This, again, is an empirical question.

One way to think about it is that competition in merchant markets plays a key role to ensure that reductions in IF fees are transferred to end users. With this background, a historical analysis of industry concentration in merchant markets can provide as a proxy for changes in demand elasticities, and in turn give informative indications on changes in pass-through rates. We try to shed light on this matter by analysing (1) the relationship between concentration and pass-through within the US acquiring market pre-and post-regulatory involvement and (2) the profitability of European acquirer's pre- and post-competition enforcement and regulation.

For the U.S. acquiring market, the Herfindahl-Hirschman Index (HHI) did not significantly change between 2004 and 2016. HHI levels ranged between 1,046 in 2011 and 1,531 in 2005 and no trend development, apart from a relatively equal dispersion around the mean of 1,206 is observable during this period. What is interesting is the fact that the pass-through rates significantly decreased post implementation of the Durbin Amendment on 1 October 2011.[100] During the three years preceding the regulation the pass-through rate was on average 91%, whereas in the 5 years post-regulation it averaged 81%.

[97] Veljan, Alen (2019): Influence of intra-and inter-system concentration on the pre-regulated setting of interchange fees within cooperative card payment networks. In Journal of Banking Regulation. DOI: https://doi.org/10.1057/s41261-019-00103-2.
[98] Guthrie, Graeme, and Julian Wright. 2007. Competing Payment Schemes. *The Journal of Industrial Economics* 55(1): 37–67.
[99] Fee amendments can follow an asymmetric development, meaning that scheme fees can increase on the acquirer side whilst potentially stagnating or even being reduced on the issuer side. This poses a risk to the effectiveness of the market involvement. This risk was ultimately recognised and circumvention prohibited as part of the IFR. See Council of the European Union; European Parliament (2015): REGULATION (EU) 2015/ 751 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL - of 29 April 2015 – on interchange fees for card-based payment transactions. In Official Journal of the European Union 123, pp. 1–15. Available online at https://publications.europa.eu/en/publication-detail/-/publication/62bab217-fdf3-11e4-a4c8-01aa75ed71a1. Also, cardholder fees on the issuing side as well as benefits associated to card usage can disproportionately deviate, i.e., increase due to interchange reductions so that the net cardholder impact may in fact be negative.
[100] Directed by the Durbin Amendment of the Dodd-Frank Act, the Federal Reserve Board caps interchange fees charged by financial institutions with more than $ 10 billion in assets for debit card payments. For further information see Federal Reserve System. 2011. *Debit Card Interchange Fees and Routing*. Washington, DC: Federal Reserve System.

Year	HHI	MSC Debit	IC Fee Debit
2009	1150	1.63%	1.49%
2010	1078	1.59%	1.40%
2011	1046	1.39%	1.31%
2012	1062	0.78%	0.65%
2013	1071	0.76%	0.60%
2014	1153	0.75%	0.60%
2015	1152	0.74%	0.60%
2016	1229	0.73%	0.59%

As far as the European acquiring landscape is concerned, HHI levels ranged between 252 and 356 over the period 2004-2019.[101] Contrary to media reports[102] and large merger and acquisition (M&A) announcements, we do not observe clear concentrative trends in merchant markets. This can be attributable to the fact that the majority of M&A activity has spanned over multiple countries or even continents (Nets acquisition of Concardis; FIS acquisition of Worldpay) and involved companies with different roles within the payment chain (ACI acquires SpeedPay; Ingenico acquires Bambora and B+S Card Services).

That said, statistically significant results can be obtained in relation to the profitability of European acquirers. We have looked at a data set of three acquirers (two German acquirers and one pan-European acquirer; all within the top 30 European acquirers by volume during the last two decades). While this sample cannot be regarded as representative, we have been unable to gather a larger sample due to changes in ownership and corporate structure across the time span of 15 years (2005-2019) and/ or the majority of acquiring firms either acting as card issuers simultaneously (see Crédit Mutuel or Barclays) or having a strong(er) presence in adjacent markets such as technical gateway services (see Ingenico or Adyen).

With these limitations in mind, our analysis suggests that the profits of every firm in the sample have significantly increased in both 2012 (post enforcement related to Visa Europe 2010 decision) as well as 2016 (post- IFR). For the two German acquirers, profits averaged € 12.9 million and € 4.7 million from 2005 (2006) to 2010. In 2011 these were € 19.5 and € 14.3 million respectively, i.e., 51% and over 300% higher. Similar results can be seen for the pan-European acquirer which averaged negative profits of € 9 million between 2006 and 2010 and recorded profits of € 14.6 million in 2011. A similar trend is observable for the first-year post IFR implementation. Profits for the two German acquirers averaged € 89.6 and € 19.1 million respectively during the years 2012 to 2015. In 2016 these were € 115.6 million and € 89.6 million; up by 29% and 470%. The pan-European acquirer averaged profits of € 76.2 million

[101] For a detailed overview of in-market concentration within acquiring markets, please see Veljan, Alen (2019): Influence of intra-and inter-system concentration on the pre-regulated setting of interchange fees within cooperative card payment networks. In Journal of Banking Regulation. DOI: https://doi.org/10.1057/s41261-019-00103-2.
[102] See Ernst & Young Global Limited, 'Three M&A waves reshaping the banking payments acceptance segment' (2019) Payments Vol 23. <https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/banking-and-capital-markets/ey-global-bankingand-capital-markets-global-payments-newsletter-volume-23-final.pdf>.

during the four years preceding the IFR and € 305 million in 2016; an increase of 400%.[103] These findings suggest areas for future research. Our findings hint that **competition enforcement led to distributional effects favouring acquirers over merchants and subsequently end users, ie consumers**. It would thus be helpful to assemble a more representative sample, to test whether this effect can be observed at a larger scale. Though the General Court in *Glaxo* confirmed that the benefits of enforcement under Article 101(1) TFEU need not accrue to end users, it is always helpful to understand which categorical interests the policy tends to favour.

8. Discussion of legal considerations

In this section, we provide some legal comments on the EC's enforcement of competition against IF between 2002 and 2019. We address in particular the fact that the baseline theory of harm changed from a restriction of competition by effect to a restriction by object (which is not unusual per se), but also the manner in which the benchmark for setting the exemptible level of IFs (i.e. the tourist test of MIT) has left room for improvement (as well as other points – in no particular order).

8.1. No specification of pass-through mechanisms

None of the above EC decisions contained a mechanism seeking to induce acquirers to pass on IF reductions (in whole) to merchants (whether in the form of a commitment in the Visa/ Mastercard commitment decisions, or a remedy in relation to the Mastercard infringement decisions). One exception though is the Visa Europe 2014 commitments decision in which Visa Europe committed to change its scheme rules so that an acquirer would be forced to charge a merchant an MSC on an "IF plus plus" if that merchant requested such an MSC (as opposed to a blended MSC).

It is surprising that the EC did not require (in commitment decisions) or impose (as a remedy in infringement decisions) the card schemes to implement a rule change forcing acquirers to pass-on the reduction of IF to merchants, much like in the Visa Europe 2014 commitments. The EC might have believed that market forces, and in particular, competition between acquirers would be enough to ensure a sufficient level of pass-through by acquirers to merchants?

With the benefit of hindsight, it would probably have been more effective for the EC to mandate such a requirement in all its decisions.[104]

As regards the reduction of MSC perceived by merchants, the EC never imposed a mechanism to ensure that merchants would in turn pass-on that reduction of costs to their customers (e.g., consumers)

[103] Above profits may be slightly inflated due to the windfall from Visa Inc's acquisition of Visa Europe, which at the point in time was owned by more than 3,000 banks and payment firms. We tried to reduce this impact by avoiding the top acquirers (British banks alone would have accounted for 40% of the kick-back; much of the rest residing with French, Italian and Spanish payment providers) whilst selecting firms that would have been impacted by the regulatory enforcement. See https://uk.reuters.com/article/uk-visa-europe-banks/european-banks-set-for-windfall-from-visa-europe-deal-sources-idUKKCN0SA26M20151016.

[104] Further to the IFR (rather the competition law enforcement against IF), it would appear from the EY study on the IFR commissioned by the EC (available here) and the EC report on the IFR (available here) that a significant proportion of the IF reduction caused by the IFR effective 9 December 2015 was not passed on to merchants: "Acquirers have gained revenue of EUR 1,200 million per year coming from lower interchange fee savings and offset by larger scheme fees and pass-through to merchants, the latter likely to increase over time (gains to acquirers were calculated indirectly)." (page 6).

in the form of lower (retail) prices. This makes sense since this would probably have been an impossible task for the EC to monitor. The EC assumed that the intensity of the competition between merchants would be enough to ensure a pass-through to consumers.[105]

8.2. Mixed, but non-simultaneous enforcement

The chronological summary shows that the EC's policy towards payment systems has consisted in a mix of commitment decisions (against Visa and Mastercard), and of infringement decisions (against Mastercard only). This approach can be an efficient way for policymakers to reduce consumer harm due to competition law violations: infringement decisions provide clarity on the law and set a precedent, while commitment decisions enable the EC to shape markets going forward and suggest safe harbours for market participants.

At the same time, the main feature of the Commission's policy is one of asynchronous enforcement. Expecting that its decisions would generate industry level guidance and compliance, the EC enforced competition law one market player at a time, anticipating that the other market player would do the same. The facts at our disposal subject that this is not the case. Visa and Mastercard pursued distinct legal strategies. In reality, we see here that the case specific nature of competition enforcement produces limited effects on third parties.

More importantly, the fact that the EC never dealt with Visa and Mastercard at the same time (except in the April 2019 commitment decisions) means that the two competitors were never subject to the same "rules of the game" and therefore to a level-playing. Instead, since 2002, one organisation was always required to do more than the other – and it typically required quite a few years from the EC to get the competitor do so the same, but then even more than its competitor – before turning back (again) to the first competitor:

- Visa was at a competitive disadvantage between 2002 and July 2008 in relation to the level of its cross-border IF.
- Then Mastercard was at a competitive disadvantage between July 2008 and, respectively, 2010 for debit and 2014 for credit in relation to cross-border IF.
- And Visa was at a competitive disadvantage in relation to domestic IF since 2010, first in relation to debit only in 9 EEA countries, then in relation to all cards (credit and debit) as from January 2015 further to its commitment on cross-border acquiring. Clearly the commitments on cross-border acquiring put Visa Europe at competitive disadvantage as from 1 January 2015 since a Visa cross-border acquired transaction would attract less IF for the issuer (i.e. 0.2%/ 0.3%) than

[105] In relation to the IFR: "For information, the EC's conclusion under the IFR is as follows: "A key yardstick for the assessment of the effects of the IFR is its impact on retail prices for consumers. As the change in interchange fees induced by the caps of the IFR results in a very small impact per transaction, it makes it notoriously challenging to determine pass-through rates, which is the share of interchange fees reductions which are passed on as reductions of final consumer prices. However, since interchange fees transmitted through MSCs are one of several cost factors for merchants, competition between merchants should result - **in the longer run -** in interchange fee reductions being reflected in lower prices or improvement of services on the consumer side" (EC report, 29 June 2020, page 6).

> a Mastercard cross-border acquired transaction (that would attract the IF of the country of the merchant/issuer).

One can question whether this is optimal competition law enforcement. Arguably, the EC should have enforced competition law at the same time against both competitors, as it did in relation to the 2019 commitments on inbound inter-regional transactions. Moreover, this is potentially unfair. As mentioned above, there has been no competition law enforcement against the IF, or equivalent fees to IF, that were being applied by three party schemes like American Express (and a fortiori no private actions for damages against American Express, at least as far as we are aware). This situation is recognized today in the IFR, which seeks to ensure a level-playing between traditional four-party card schemes such as Visa, Mastercard, Cartes Bancaires, Bancontact, etc, and three-party schemes sometimes operating as a four-party scheme.

8.3. On default IF as restrictions "by object"

As was also hopefully clear from the above chronological summary, the EC's thinking, and indeed the EU Court's case law, has evolved over the years in relation to several issues, including the issue of restriction by object or by effect.[106]

Although the EC has relied on the same counterfactual for the default IF since 2002 (i.e. no default IF to be paid by acquirer to issuer, coupled with a prohibition of ex post pricing), the EC has evolved from "no object - only effect" in its Visa International 2002, to "effect – and perhaps object?" in its Mastercard 2007, to "object and effect" in its Visa 2010 (which was before the EC won before the General Court, in 2012, in the Mastercard case) and Visa 2014 decision – to ultimately reach the qualification of "horizontal price-fixing" arrangement in the Visa/ Mastercard 2019 commitment decisions[107].

It is of course legitimate for the EC to change its policy over time, in particular in relation to complex topics such as the legal and economic assessment of IF in competition cases. However, when policy change occurs, one would expect the EC to (1) explicitly acknowledge in its decision a change in position and (2) to explain in its decisions what justifies the evolution in its position. This is not only a good rule of practice, but the case law of the CJEU actually requires accountability from the EC when it incrementally develops its decisional practice over a series of cases:

> "*Although a decision which fits into a well-established line of decisions may be reasoned in a summary manner, for example by a reference to those decisions, if it goes appreciably further than the previous decisions, the Commission must give an account of its reasoning*".[108]

[106] Not to mention that the EC seems to have steadily changed its position on the acceptable level of IF.
[107] In 2018, as part of an *amicus curiae* submission made as part of the merchant lawsuits against Visa and Mastercard in the UK, the EC already stated that "*As such, it is appropriate to draw an analogy with a cartel between all acquiring banks to charge their customers a substantially inflated fee.*" (European Commission's written observations of 21 February 2018, paragraph 28 – available at https://ec.europa.eu/competition/court/visa_mastercard_commission_observation1_en.pdf).
[108] Judgment of the Court of 26 November 1975. - Groupement des fabricants de papiers peints de Belgique and others v Commission of the European Communities. - Case 73-74 - European Court reports 1975 Page 01491, paragraph 31.

In so far as IF are concerned, the EC has not observed this rule of practice. There is no explanation in the various EC decisions as to what justified the evolution from effect to object (and in particular price-fixing).

Any antitrust observer looking at the latest EC pronouncement on IF will come away with more questions than answers. In 2019, the EC reached the somewhat puzzling finding that the default IF under investigation were tantamount to "horizontal price-fixing" / "price fixing"[109] arrangement , but that they met the conditions for an exemption (again, after a committed reduction of the level).

Of course, it is not impossible in theory for a restriction by object to meet the conditions for an exemption under Article 101(3).[110] The Court has actually confirmed this in its 2020 judgment in *Budapest Bank*.[111] The hard question is, however, that the narrow circumstances in which a horizontal price-fixing arrangement can be found to meet the Article 101(3) TFEU conditions are left entirely underspecified in practice, leading to genuine legal uncertainty.

In effect, the EC granted exemptions on several occasion. In the Visa Europe 2010 and 2014 decisions, the EC found that a restriction of competition by object had met the conditions for an exception (albeit after a committed reduction of the level). And in its Mastercard/ Visa 2019 commitments decisions, the EC even concluded that a price-fixing arrangement had made the conditions for an exemption (albeit, again, after a committed reduction of the level).

What is more important, however, is that the substantial recourse to Article 101(3) TFEU begs the question whether the qualification of restriction by object is really adequate in the first place – in particular after the Court of Justice judgments in *Cartes Bancaires* (2014) and *Budapest Bank* (2020).

In its 2010 and 2014 Visa Europe commitment decisions, the EC stated that the default IF is a restriction of competition by object because "*The MIFs appeared to inflate the base on which acquirers set the MSCs by creating an important cost element common to all acquirers*".[112]

In 2019, the EC went further by saying that:

> "[…] *rules on inter-regional MIFs amount to horizontal price-fixing. The inter-regional MIFs fix a significant component of the price charged to merchants for acquiring services through the MSCs. The Commission came to the preliminary conclusion that the restriction of competition on price follows from the very substance of [the] rules on inter-regional MIFs. The Commission also came to the preliminary conclusion that the objective of* [the] *rules on inter-regional MIFs is to fix a part of the*

[109] Mastercard decision, paragraph 33. Visa decision, paragraph 34.
[110] See for example the EC's Guidelines on the application of Article 81(3) of the Treaty (2004/C 101/08), OJ 27.4.2004, C 101/97, paragraph 46. See also the EC Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, 2011/C 11/01, OJ 14.1.2011, C11/1. See also COMMISSION STAFF WORKING DOCUMENT - Guidance on restrictions of competition "by object" for the purpose of defining which agreements may benefit from the De Minimis Notice - Accompanying the document COMMUNICATION FROM THE COMMISSION Notice on agreements of minor importance which do not appreciably restrict competition under Article 101(1) of the Treaty on the Functioning of the European Union (De Minimis Notice) - {C(2014) 4136 final} - 25.6.2014 - SWD(2014) 198 final – page 4.
[111] JUDGMENT OF THE COURT (Fifth Chamber), 2 April 2020, Case C 228/18, paras 41 and 42.
[112] Paragraph 21 of 2010 decision and paragraph 23 of 2014 decision.

> *price charged to merchants and to restrict competition to the benefit of* [the card scheme] *Mastercard and its members/licensees, primarily the issuers. Such price fixing is by its very nature harmful to competition and reveals in itself a sufficient degree of harm to competition to be considered a restriction of competition 'by object'.*"[113]

However, it appears from the *Budapest Bank* judgment that the mere fact that Hungarian issuers and acquirers had agreed to a multilateral IF applicable to domestic transactions in Hungary, "*even assuming that the MIF Agreement had inter alia as its objective the fixing of a minimum threshold applicable to the* [MSC]", was not be enough to qualify the restriction of competition between acquirers as a restriction by object. In other words, the justifications provided by the EC in its 2010, 2014 and 2019 decisions are (in our view) not sufficient, in light of *Budapest Bank*, to justify the existence of a restriction by object. Rather than paraphrasing, we think that a (fairly long) quote from the judgment is helpful:

> "51. […] *in order to determine whether an agreement between undertakings or a decision by an association of undertakings reveals a sufficient degree of harm to competition to be considered a restriction of competition 'by object' … regard must be had to the* ***content*** *of its provisions, its* ***objectives*** *and the* ***economic and legal context*** *of which it forms a part.* […]
>
> *54.* […] ***the concept of restriction of competition 'by object' must be interpreted restrictively.*** *The concept of restriction of competition 'by object' can be applied only to certain types of coordination between undertakings which reveal a sufficient degree of harm to competition for it to be found that there is no need to examine their effects, as otherwise the Commission would be exempted from the obligation to prove the actual effects on the market of agreements which are in no way established to be, by their very nature, harmful to the proper functioning of competition*. […]
>
> […]
>
> *65. Although it is clear from the documents before the Court that specific percentages and amounts were used in the MIF Agreement for the purposes of fixing the interchange fees, the* ***content*** *of that agreement does not, however, necessarily point to a restriction 'by object', in the absence of proven harmfulness of the provisions of that agreement to competition.* […]
>
> 71. […] *certain information contained in the documents before the Court tends to indicate that* ***one objective*** *of the MIF Agreement was to ensure a degree of balance between the issuing and acquisition activities within the card payment system at issue in the main proceedings.*
>
> […]

[113] Paragraph 33 of Mastercard 2019 decision paragraph 34 of Visa decision.

73. *It cannot be ruled out that such information points to the fact that the MIF Agreement was pursuing* ***an objective*** *consisting not in guaranteeing a minimum threshold for service charges but in establishing* ***a degree of balance between the 'issuing' and 'acquisition' activities*** *within each of the card payment systems at issue in the main proceedings in order to ensure that certain costs resulting from the use of cards in payment transactions are covered, whilst protecting those systems from the undesirable effects that would arise from an excessively high level of interchange fees and thus, as the case may be, of service charges.*

[…]

76. *Indeed, as the Advocate General has stated in points 54 and 63 to 73 of his Opinion, in order to justify an agreement being classified as a restriction of competition 'by object', without an analysis of its effects being required, there must be sufficiently reliable and robust experience for the view to be taken that that agreement is, by its very nature, harmful to the proper functioning of competition.*

[…]

78 Second, as regards the acquiring market in Hungary, ***even assuming that the MIF Agreement had inter alia as its objective the fixing of a minimum threshold applicable to the service charges*** [read: the MSC]*,* ***the Court has not been provided with sufficient information to establish that that agreement posed a sufficient degree of harm to competition on that market for a restriction of competition 'by object' to be found to exist.*** *It is, however, for the referring court to carry out the necessary verifications in that respect.*

79 In particular, in the present instance, subject to those verifications, ***it is not possible to conclude on the basis of the information produced for this purpose that sufficiently general and consistent experience exists for the view to be taken that the harmfulness of an agreement such as that at issue in the main proceedings to competition justifies dispensing with any examination of the specific effects of that agreement on competition.*** *The information relied on by the Competition Authority, the Hungarian Government and the Commission in that connection, that is to say, primarily, that authority's decision-making practice and the case-law of the Courts of the European Union, specifically demonstrates, as things currently stand,* ***the need to conduct an in-depth examination of the effects of such an agreement in order to ascertain whether it actually had the effect of introducing a minimum threshold applicable to the service charges and whether, having regard to the situation which would have prevailed if that agreement had not existed, the agreement was restrictive of competition by virtue of its effects.***

> *80. Finally, with regard to* ***the context of which the MIF Agreement formed a part****, in the first place, it is true that, as the Commission maintains, the complexity of the card payment systems of the type at issue in the main proceedings, the bilateral nature of those systems in itself and the existence of vertical relationships between the different types of economic operators concerned are not, in themselves, capable of precluding classification of the MIF Agreement as a restriction 'by object'* […]*. That said, the fact remains that such an anticompetitive object must be established*.
>
> […]
>
> *82 In the event that the referring court were also to find there to be, a priori, strong indications capable of demonstrating that the MIF Agreement triggered* […] *upwards pressure* [on the level of IF] *or, at the very least, contradictory or ambivalent evidence in that regard, such indications or evidence cannot be ignored by that court in its examination of whether, in the present instance, there is a restriction 'by object'.* ***Contrary to what it appears may be inferred from the Commission's written observations in this connection, the fact that, if there had been no MIF Agreement, the level of interchange fees resulting from competition would have been higher is relevant for the purposes of examining whether there is a restriction resulting from that agreement,*** *since such a factor specifically concerns the alleged anticompetitive object of that agreement as regards the acquiring market in Hungary, namely that that agreement limited the reduction of the interchange fees and, consequently, the downwards pressure that merchants could have exerted on the acquiring banks in order to secure a reduction in the service charges.*
>
> *83 In addition,* ***if there were to be strong indications that, if the MIF Agreement had not been concluded, upwards pressure on interchange fees would have ensued, so that it cannot be argued that that agreement constituted a restriction 'by object' of competition on the acquiring market in Hungary, an in-depth examination of the effects of that agreement should be carried out,*** *as part of which, in accordance with the case-law recalled in paragraph 55 of the present judgment, it would be necessary to examine competition had that agreement not existed in order to assess the impact of the agreement on the parameters of competition and thereby to determine whether it actually entailed restrictive effects on competition*."

Put another way: if the above commitment decisions (2010, 2014 and two in 2019) had been infringement decisions rather than commitments decisions, and had been challenged by Visa and/or Mastercard before the EU Courts, we believe that the that the EU Courts , based in particular on the *Budapest Bank* judgment, would have concluded that the mere fact that the IF (as set by Visa or Mastercard) sets a common *de facto* floor for the level of the MSC is not , in itself, sufficient evidence by the EC of the existence of a restriction of competition by object.

At the same time, *Budapest Bank* insists on the fact that an agreement can be named "a restriction of competition '*by object*'" if there is "*reliable and robust experience for the view to be taken that that agreement is, by its very nature, harmful to the proper functioning of competition*".[114] Our report shows that this might be the case today. Yet again, the EC did not produce, in the context of the proceedings, evidence showing that its own experience leaned in this direction.

Given the fact that IF are now regulated by the IFR in relation to consumer cards, the only way for the qualification of default IF as restriction by object to be tested would be a legal challenge in relation to the IF applicable to commercial cards (which are not subject to caps under the IFR). However, to our knowledge there is no on-going competition law enforcement against Visa or Mastercard (or domestic schemes') commercial card IF. This begs the question whether more frequent ex post assessment, and disclosure by the EC, might raise legal certainty, by providing competition law subjects with a better understanding of what "experience" teaches, and whether their agreement leans towards falling within the object box, or will be subject to a thorough market inquiry of "effects".

8.4. Evolution in the EC's thinking regarding the methodology to set the exemptible level of IF

Another evolution in the EC's approach concerns the methodology deemed suitable to set the level of exemptible IF. Whilst the EC initially considered some of the costs borne by issuers in 2002, it moved in 2009 to an evaluation based on the costs borne by merchants (in particular their cost of cash) under the so-called tourist test/ MIT. Interestingly, the EU had explicitly discarded the cost of cash as a relevant benchmark in 2002, noting that "*… as concerns cash and cheques, neither of these can be considered as substitutable with payment cards, either from the point of view of merchants or that of consumers. For merchants first of all, such non-card payment instruments are not at all substitutable with cards, since the loss of revenue for merchants from ceasing to accept all cards would be far greater than the loss of revenue from increasing their general level of prices by the amount of any small but sustained increase in merchant fees for all cards. …*".[115]

The EC's methodological evolution has also been accompanied by an evolution of the IF levels of deemed exemptible: from **EUR 28** cents (approximately 0.5%) for debit/ **0.7%** for credit in 2002, down to **0.2%** for debit and prepaid/ **0.3%** for credit since 2009, and more recently in 2019 0.2%/ 0.3% for card-present debit (including prepaid) and credit respectively and **1.15%/ 1.50%** for card-not-present debit (including prepaid) and credit.

For CNP transactions, the fact that the EC accepted that cash is not an appropriate comparator for inbound inter-regional CNP (e.g., online) transactions, but instead e-wallet transactions with higher costs such as Paypal for example were an appropriate comparator, and therefore, on the basis of the MIT, allowed higher levels that 0.2%/0.3% is an interesting evolution. Surely cash was already not an appropriate comparator for CNP transactions in 2008 in relation to Intra-EEA transactions, whereas e-

[114] Paragraph 76 of the judgment.
[115] Paragraph 48.

wallets (e.g., Paypal) was. It therefore begs the question why the higher levels of 1.15%/ 1.50% were not already accepted in the 2009 Mastercard Unilateral Undertakings and/or in the 2015 IFR.

This problem of time inconsistency shines a bright light on the challenges of determining IF levels that are exemptible under Article 101(3) TFEU, and more generally, on the incredible level of uncertainty, discretion and subjectivity involved in any such exercise. It also highlights the risk of competition law potentially being use to regulate the level of fees.

Make no mistake. There is no suggestion here that the EC should stick to a given methodology. Rather, the point is that changes in methodology should be (1) explicitly acknowledged and (2) reasoned. Absent this, the evolution in the EC's position leaves itself open to an interpretation whereby the EC was in reality using its competition law powers to directly regulate fee levels (which is something that EuroCommerce itself was claiming in relation to the proposed Visa 2002 exempted levels, but which the EC denied in its 2002 decision – as well as later in the MEMO that accompanied the Mastercard 2007 decision[116]), which is an activity traditionally reserved to regulation/ legislation.

8.5. Legal uncertainty

It is not an understatement to say that there has been substantial legal uncertainty for a very long time about the levels of IF deemed legal under competition law. The various points discussed above (e.g. no simultaneous enforcement, the evolution in the EC's thinking on restriction, evolutions on the EC's thinking on exemption), as well as other factors such as the enforcement by NCAs in some EEA countries (but not all) which lead to different results and in particular different exemptible levels (e.g. 0.28% in France), have all combined to create an environment of considerable fluidity, complexity, and instability.

By contrast, it is harder to ponder about the consequences of legal uncertainty in relation to IFs. One conjecture, however, is that the ever-changing competition policy environment might have prevented markets to produce clear price signals that would have been needed to support the creation of a European version of Visa or Mastercard, despite various EC and ECB calls for the creation of such a European scheme.[117] This issue is very topical at the moment with the renewed proposal to create a European Visa/ Mastercard, referred to as the European Payment Initiative (EPI).

In addition, despite the above legal uncertainty that the EC competition law enforcement created for a number of years, Mastercard and Visa are facing very significant private actions for damages for hundreds of millions of pounds, and Mastercard a very significant consumer class action in the UK for

[116] "The Commission considers that MIF's must be examined under Articles 81(1) and 81(3) of the EC Treaty on a case by case basis. However, like any other agreement that restricts competition, interchange fee agreements must fulfil the four cumulative conditions of Article 81 (3) of the EC Treaty. This also holds for an entirely new (that means materially different) MIF in the MasterCard scheme should MasterCard choose to continue operating with this mechanism. Otherwise, the MIF is illegal. If the criteria of Article 81(3) of the EC Treaty are not met, the Commission would adopt a cease and desist order and, if appropriate, impose fines. **However, the Commission could not set a different level of interchange fee. The Commission does not apply competition rules to regulate the level of interchange fees**." - https://ec.europa.eu/commission/presscorner/detail/en/MEMO_07_590

[117] See e.g. here "The Commission, like the ECB, would welcome the emergence of new pan-European schemes that would compete with international schemes such as MasterCard and Visa. This will require a level playing field between the potential newcomers and the incumbent schemes." - https://ec.europa.eu/commission/presscorner/detail/en/MEMO_07_590

GBP 14 billion (as well as apparently in Portugal, as was recently announced in the press). It would seem that Visa and Mastercard are essentially being treated by claimants as if it had always been clear that they were acting in breach of competition law, and in particular were involved in a so-called "price-fixing" to use the EC's 2019 terminology – whereas, as mentioned above, this was of course not the case. There was genuine legal uncertainty in the market, for many years, as to the legality, or not, of IF up to certain, then undefined, levels.

8.6. Evolution in the EC's thinking regarding cross-border acquiring

In the early days, the EC considered acceptable the coherence rule that required similar IFs be charged to foreign/ cross-border acquirers and domestic acquirers. After exempting the Visa International rules on cross-border acquiring in 2002, in 2010 the EC blessed again the Visa Europe rule that required that a cross-border acquirer paid the same IF as a domestic acquirer, i.e., the IF of the country where the merchant and issuer are located.

Fast forward to 2014. The EC considered the same rule restrictive of competition by object, and required that a cross-border acquirer paid either the domestic IF of the country of the merchant/ issuer or 0.2%/ 0.3% (in practice, the latter was generally lower). The EC did not acknowledge the change in its position. Nor did it explain the reason for the change in its position.

The EC's intervention sought to encourage merchants to "shop around" to get connected to an acquirer outside their own Member States in order to get access to lower IF (i.e., 0.2/ 0.3%). The EC hoped this would increase competition between domestic and cross-border acquirers. Instead of this, we have seen a number of large acquirers re-locate to other EEA Member State and continue to serve merchants from that/ those other Member States. For example, a number of UK merchants that were until then relying upon the acquiring services of WorldPay UK were suddenly acquired by WorldPay Netherlands, paying 0.2/ 0.3% IF rather than UK domestic IF as they would have if they were still acquired by WorldPay UK. It is therefore not entirely clear to what extent merchants have really connected to new cross-border acquirers, rather than continued with the same acquirer but located in another EEA country.

However, in 2019, at the time of the Mastercard II decision, it would appear that the EC's counterfactual was no longer the same as in the Visa Europe 2014 decision – but instead was a counterfactual where the acquirer pays the domestic IF of its "home" country. Again, this is a change in the EC's position without the EC (1) acknowledging it and (2) justifying it. But this decision also raises a number of other comments; we only address a few below for the sake of (relative) brevity.

First, since December 2015 and the IFR becoming applicable, the principle is that the cross-border IF and domestic IF are identical at 0.2%/0.3%, meaning that cross-border acquirers and domestic acquirers in principle pay the same IF. Therefore, given that regulatory position, it is curious that the EC identified as restrictive of competition (by object) a Mastercard rule that was essentially the same as the IFR regime. In other words, given that the Mastercard (and before it the Visa) rule on cross-border acquirer was found by the EC as restrictive of competition by object, this means that the IFR is always restrictive of competition by object and therefore the EC should propose an immediate legislative change to the

IFR. But the EC recently announced, as part of a report on the IFR, that it was not going to propose changes to the IFR for now.[118] This seems contradictory on the part of the EC.

Second, the IFR allows a Member State to set lower domestic IF, a possibility that some Member States have used (e.g. Ireland has set a maximum debit IF cap for Irish domestic transactions at 0.1% rather than the standard 0.2% under the IFR). Domestic acquirers have access to those lower levels, whereas a cross-border doesn't have access to those but instead always pays the 0.2/ 0.3% cross-border IF. For example, an acquirer located in Ireland acquiring an Irish domestic transaction (i.e. merchant and issuer both in Ireland) will pay a 0.1% IF, whereas an acquirer located in another Member State (e.g. a German acquirer) will pay cross-border IF, i.e. 0.2%, to acquire that same Irish domestic transaction - i.e. a higher level of IF than the local Irish acquirer This puts the German acquirer at a competitive disadvantage versus the local Irish acquirer.[119] Under the EC's logic, the IFR is even more restrictive of competition than the Mastercard rule (and before it the Visa rule) was . Again, this means that the EC should hurry to propose a chance to the IFR to fix this issue… but as mentioned above, the EC has recently announced it was not minded to change the IFR for now. Again, this seems inconsistent.

Third, in its 2019 decision, the EC used a counterfactual ("home" IF of the country of the cross-border acquirer) that was different not only from the commitment given by Visa Europe effective 1 January 2015 (i.e. domestic IF of the country of merchant/ issuer or 0.2/ 0.3%), but also different from the regulatory solution that the EU legislation had put in place since December 2015 under the IFR (i.e. cross-border acquirer pays cross-border IF). Shouldn't the EC have used as counterfactual the regime adopted by the EU legislator to assess Mastercard's practices on cross-border acquiring? Granted, the infringement period in the EC 2019 decision relates to the period between February 2014 and 8 December 2015, i.e. pre-IFR. Granted too that the EC is given quite some flexibility in terms of determining what the relevant counterfactual, or one of the relevant counterfactuals is [120]. But if the EU legislator, after having analysed various possible avenues during the legislative process including the counterfactual used by the EC in its 2019 decision (i.e. having the cross-border acquirer pays its "home" domestic IF) decided not to follow that approach, but instead to regulate in a different way (i.e. cross-border acquirer pays cross-border IF), should the EC be allowed, more than 3 years after that regulation became applicable, to adopt a decision, even for past conduct pre-legislation, to (1) use a counterfactual different from what

[118] https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1217
[119] Interestingly, the EC had already indicated in its Visa Europe 2010 commitment decision that a mechanism that forced cross-border acquirers to pay higher IF than local acquirers "[…] *was considered as increasing the anti-competitive effect* […] *since it puts cross-border acquirers at disadvantage vis-à-vis their domestic competitors in case the* […] *domestic MIFs are lower than the Intra-Regional MIFs*" – footnote 8.
[120] See for example the EU Courts in the Mastercard 2012 and 2014 judgments: when Mastercard was arguing that the counterfactual used by the EC (i.e. no default IF and a prohibition of ex-post pricing) was not one that would have resulted from market forces, but instead was merely the EC's preferred regulatory outcome, the Court of Justice stated that "[…] *the alternatives on which the Commission may rely in the context of the assessment of the objective necessity of a restriction are not limited to the situation that would arise in the absence of the restriction in question but may also extend to other counterfactual hypotheses based, inter alia, on realistic situations that might arise in the absence of that restriction. The General Court was therefore correct in concluding, in paragraph 99 of the judgment under appeal, that the counterfactual hypothesis put forward by the Commission could be taken into account in the examination of the objective necessity of the MIF in so far as it was realistic and enabled the MasterCard system to be economically viable.*" – paragraph 111 of Court of Justice judgement. General Court: "while the terms of that comparison must be realistic … [the EC] was not, however, obliged to demonstrate that market forces would compel the issuing and acquiring banks themselves to decide to adopt [that counterfactual]" (paragraph 99 – see also paragraph 132 where rather than "realistic" the GC referred to "economically viable")

the legislation requires and (2) that results in the EU legislation being considered anti-competitive/ putting in place a restriction of competition even more severe than that allegedly put in place by the (association of) undertaking(s) under investigation? Should the EC not instead be required to enforce competition law for pre-legislation conduct in a way that makes it aligned with the legislation / that doesn't result in the legislative work of the Council and the EP being suddenly considered as anti-competitive and even more anti-competitive that the conduct pre-legislation?[121]

9. Conclusions

In summary, we find that the policy intervention in relation to the Visa 2010 case has significantly impacted card payment markets across Europe. Whilst all markets were in scope in terms of the interchange fee reduction for Intra-EEA transactions, a subset of nine countries (eight of which form part of our analysis; Iceland has been omitted due to limited data) have also experienced reductions for domestic debit transactions. These countries have benefited from a comparatively higher card usage in terms of network size (by number), predominantly driven by an increased cardholding. Also, the displacement of cash by electronic payment methods (including card payments) has been expedited. Our findings are summarised in the table below.

Outcome variable	Significantly impacted	Common trend confirmed
Size (by number)	Yes, by 16 payments per capita (22%)	(Yes)
Size (by value)	Yes, by 550 Euro per capita (-16%)	No
Issuance	Yes, by 0.225 cards per capita (16%)	Yes
Acceptance	No	Yes
Displacement	Yes, by 4 withdrawals per capita (-17%)	Yes

Notwithstanding some methodological imperfections and seemingly contradictory findings (insignificant impact on variable Acceptance) our hypothesis that the EC's competition enforcement has had a positive, statistically significant causal effect on the usage of consumer card payments, card issuance, merchant acceptance, and cash displacement can be partially confirmed. From the perspective of overall market output, **our results are supportive of the policy expressed in enforcement initiatives like the Visa 2010 decision**. Whilst we cannot affirm with certainty that competition enforcement was the single and most significant driver of the observable impacts in relation to the outcome variables (an overall development trend is observable across the European payment landscape before this), we can state that the antitrust actions taken did not have a negative impact on welfare and most likely amplified the previously observable positive trend.

[121] Other aspects of the Mastercard 2019 decision that we do not address her, again for the (relative) brevity, are the fact that the EC used 27 February 2014 as the beginning of the infringement period, where Visa Europe was allowed to continue to operate with the same rule until 1 January 2015 – this does not seem to ensure a level-playing field between the two competitors? The Mastercard rule on cross-border acquiring was found to be in breach of Article 101 for partitioning the internal market by preventing merchants from working with acquirers in another EEA Member State, but a number of domestic card scheme (e.g., Bancontact in Belgium, Cartes Bancaires in France), to our knowledge, either did not allow cross-border acquiring at all, or if they did also apply the same IF to foreign/ cross-border acquirers and domestic acquirers.

From a legal standpoint, evidence suggests that the **EC followed a pragmatic and evidence-based policy spirit based on learning from experience.** However, the unstable ebb and flow of competition policy towards payment systems might have come at the price of substantial legal uncertainty, disincentivizing entry from one or more European wide schemes.

With the benefit of hindsight, the clear consumer welfare benefits arising from antitrust intervention might have **justified faster regulation**. Although price regulation should only be a last resort, generalizing the benefits of bilateral enforcement in a broadly applicable instrument would have avoided some of the potential legal issues that we flagged above. To draw a comparison, the EC moved much more quickly to regulate roaming charges in communications markets.[122] In relation to interchange fees, the draft IFR proposed by the EC in July 2013 "*builds on 20 years of experience in competition cases*".[123] 20 years is obviously a very long time…

[122] With SOs sent to mobile network operations (MNOs) in 2005 and 2006, and a proposed regulation already in 2006.
[123] https://ec.europa.eu/competition/publications/factsheet_interchange_fees_en.pdf