

Regulating Payment-Card Fees: International Best Practices and Lessons for Costa Rica

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Executive Summary

In 2020, the Legislative Assembly of Costa Rica passed Legislative Decree 9831, which granted the Central Bank of Costa Rica (BCCR) authority to regulate payment-card fees. BCCR subsequently developed a regulation that set maximum fees for acquiring and issuing banks, which came into force Nov. 24, 2020. In BCCR's November 2021 ordinary review of those price controls, the central bank set out a framework to limit further the fees charged on domestic cards and to introduce limits on fees charged on foreign cards.

This brief considers the international experience with interchange and acquisition fees, reviewing both theoretical and empirical evidence. It finds that international best practices require that payment networks be considered dynamic two-sided markets, and therefore, that assessments account for the effects of regulation on both sides of the market: merchants *and* consumers. In contrast, BCCR's analysis focuses primarily on static costs that affect merchants, with little attention to the effects on consumers, let alone the dynamic effects. Consequently, BCCR's proposed maximum interchange and acquisition fees would interfere with the efficient operation of the payment-card market in ways that are likely to harm consumers. Specifically, losses by issuing and acquiring banks are likely to be passed on to consumers in the form of higher banking and card fees, and less investment in improvements. Less wealthy consumers are likely to be hit hardest.

Based on the evidence available, international best practices entail:

- As far as possible, allowing the market to determine interchange fees and acquisition fees;
- Acknowledging that payment networks are two-sided markets in which one side (usually merchants) typically subsidizes the other side, thereby increasing system effectiveness;
- Not benchmarking fees, especially against countries that have price controls in place; and
- Not imposing price controls on fees on foreign cards.

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I. Introduction

Issued March 24, 2020, Costa Rica Legislative Decree No. 9831 created a mandate to regulate fees charged by service providers on “the processing of transactions that use payment devices and the operation of the card system.”¹ The legislation’s stated objective was “to promote its efficiency and security, and guarantee the lowest possible cost for affiliates.”

Implementation was delegated to the Central Bank of Costa Rica (BCCR), which was tasked with responsibility to issue regulations and monitor compliance; ensure that the rule is “in the public interest”; and guarantee that fees charged to “affiliates” (i.e., merchants) are “the lowest possible ... following international best practices.” Starting Nov. 24, 2020, BCCR set maximum interchange fees for domestic cards at 2.00% and maximum merchant-acquisition fees at 2.50%.

Article 14 of the Legislative Decree requires the BCCR to undertake “ordinary reviews” of the price controls at least once annually, with BCCR publishing its first ordinary review in November 2021.² Among other things, it:

- Reviewed the effects of the regulation on issuers, acquirers, and cardholders during 2020;
- Undertook a benchmarking exercise that sought to identify appropriate boundaries for interchange fees and acquiring fees in Costa Rica, based on an econometric analysis of fees charged in other jurisdictions;
- Made recommendations regarding maximum interchange and acquisition fees to be charged both for domestic cards and for foreign-issued cards;
- Set maximum acquisition and interchange fees (see table below); and
- Set maximum fees for point-of-sale terminals and card-not-present transaction devices.

TABLE 1: BCCR PROPOSED MAXIMUM INTERCHANGE FEES AND MERCHANT ACQUISITION FEES³

Implementation Date	Maximum Interchange Fee (%)	Maximum Merchant Acquisition Fee (%)
Nov 2020	2.00	2.50
Jan 2022	1.75	2.25
Jan 2023	1.50	2.00
Jan 2024	1.25	1.75

¹ Note, translations from the Spanish original are approximate.

² *Fijación Ordinaria de Comisiones Máximas del Sistema de Tarjetas de Pago 2021*, BANCO CENTRAL DE COSTA RICA, (November 2021).

³ *Id.* at 3.

This brief seeks to offer a constructive critique of Decree No. 9831, BCCR's implementation of the decree, and its recent ordinary review of payment-system regulation, while drawing on a combination of economic theory and international evidence. Section II puts BCCR's methodology into context, offering insights from the economics of payment systems. Section III reviews the international evidence regarding the effects of interchange-fee price controls. Section IV considers the effect of price controls on merchant-acquisition fees. Section V draws inferences regarding the consequences of capping payment-card fees on foreign cards. Finally, Section VI concludes.

The brief focuses on international best practices regarding the regulation of payment systems. This is interpreted both in terms of the effect of a particular form of regulatory intervention and its frequency. On both counts, it is noteworthy that the BCCR is unique among payment system regulators in seeking to impose price caps on cross-border interchange fees; it is essentially conducting an experiment on the banks and merchants of Costa Rica that has not been attempted elsewhere.

II. The Economics of Payment Systems

Legislative Decree 9831 seeks to ensure that the fees paid by “affiliates” (i.e., merchants) “guarantee efficiency, security, and ... the lowest possible cost of transactions with payment devices, following international best practice.” BCCR appears to have interpreted this charge as justifying setting maximum interchange-fee rates and merchant-acquisition rates such that they only recover static system and operational costs (taking into account various factors that vary from jurisdiction to jurisdiction).⁴

Any proper economic assessment of a payment system must account for the fact that, for such a system to be successful, both merchants *and* consumers must perceive it as beneficial. If too few merchants accept a particular form of payment, consumers will have little reason to obtain it and issuers will have little incentive to issue it. Likewise, if too few consumers possess a form of payment, merchants will have little reason to accept it.

Conceptually, economists describe such situations as “two-sided markets.” Consumers are on one side of the market, merchants are on the other, and the payment network acts as the platform that

⁴ *Id.* at 24 (“La base de datos también contiene información sobre una gama de variables de control, tales como la densidad de población, el índice de desarrollo humano, el número de cajeros automáticos y la posesión de cuentas en entidades financieras, que permite capturar información sobre la demanda de los pagos con tarjeta y las economías de escala que pudieran estar presentes en el ofrecimiento de los servicios de emisión y adquisición, pero también otras variables como los homicidios intencionales, que inciden sobre las pérdidas que podrían experimentar los afiliados producto de la actividad delictiva (este es un costo reconocido por el regulador del EEE en la prueba de indiferencia).”).

facilitates interactions between them.⁵ Other examples of two-sided markets include newspapers, shopping malls, social-networking sites, and search engines.

All platforms that facilitate two-sided markets face essentially the same challenge: how to structure incentives that encourage participation on each side of the market in ways that maximize the *joint net benefits* of the platform to all participants—and to allocate system costs accordingly.⁶ Among the means they employ to achieve this balance is by setting prices charged respectively to participants on each side of the market.⁷ In the case of payment networks, if the operator sets the price too high for some consumers, they will be unwilling to use the platform; similarly, if the operator sets the price too high for some merchants, they will not be willing to use the platform.

Ultimately, the costs of operating the platform must be covered by merchants, by consumers, or by some combination of the two.⁸ In many cases, this involves one side paying disproportionately more of the costs than the other side. Consider newspapers, for example, where advertisers are on one side of the market and consumers on the other. Newspapers publish stories to attract readers. While some of the costs of operating a newspaper may come from the subscription or newsstand price paid by readers, it is often the case that much and sometimes all of the costs are covered by advertisers. Participants on one side of the market—the advertisers—thus effectively subsidize the production of content that is of interest to participants on the other side of the market, the readers.

In general, the costs of operating a platform will tend to fall on the party who is least sensitive to such costs—in the language of economics, the party with the lower price elasticity. In the case of newspapers and search engines, that is advertisers. In the case of payment cards, it is merchants.⁹ Merchants often pay, through transaction fees, not only all the costs of operating the network but also effectively subsidize participation by consumers—e.g., through cashback and other rewards programs, insurance, fraud protection, and other cardholder benefits that serve as incentives to card usage.

⁵ Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. ECON. 645 (2006); See also Todd J. Zywicki, *The Economics of Payment Card Interchange Fees and the Limits of Regulation*, INTERNATIONAL CENTER FOR LAW AND ECONOMICS, ICLE Financial Regulatory Program White Paper Series, (Jun. 2, 2010), available at http://laweconcenter.org/images/articles/zywicki_interchange.pdf

⁶ Bruno Jullien, Alessandro Pavan, & Marc Rysman, *Two-Sided Markets, Pricing, and Network Effects*, in HANDBOOK OF INDUSTRIAL ORGANIZATION (VOL. 4), 485-592, (2021).

⁷ Thomas Eisenmann, Geoffrey Parker, & Marshall W. Van Alstyne, *Strategies for Two-Sided Markets*, HARV. BUS. REV. (October 2006).

⁸ See Zywicki, *supra* note 5, at 31-32.

⁹ *Id.*, at 33.

By focusing narrowly on the costs incurred by merchants through interchange and acquiring fees, BCCR fails to account adequately for the offsetting benefits that accrue to consumers—and the costs to provide those benefits. Legislative Decree 9831, however, permits BCCR to take into consideration “[a]ny other element that reasonably allows the Central Bank of Costa Rica to guarantee the efficiency and security of the card systems.”¹⁰

As such, BCCR should revise its methodology to account for the two-sided nature of the payment-network market and thus expand the range of costs— including the loss of benefits to consumers— that it considers when setting maximum interchange and acquiring fees.

Among other things, BCCR should consider the following:

- Investments in new technologies, including EMV chips (a standard whose initialism stands for "Europay, Mastercard, and Visa"); EMV contactless; EMV 3D Secure; and associated point-of-sale (POS) and remote-transaction devices. These technologies have resulted in faster, safer payments, thereby reducing the total cost of card and associated mobile payments relative to alternative payment methods, such as cash and checks. (Studies show that cards now generally have lower total per-transaction costs than cash.¹¹) These investments have been made possible by the fees charged to merchants. The imposition of price controls on such fees would imperil future investments, likely making card payments less efficient, less secure, and less cost-effective than would otherwise be the case.
- Cardholder benefits such as low or zero card maintenance fees, cashback, non-cash rewards, insurance, fraud protection, and online card management, all of which serve as incentives for consumers to adopt and use payment cards. These cardholder benefits, which are provided by issuer banks and networks, are typically financed by interchange fees. Price controls on interchange fees reduce issuer revenue, causing issuers to reduce cardholder benefits, which in turn reduces the incentive to use cards.¹²

¹⁰ La Asamblea Legislativa de la República de Costa Rica, Decreta: Comisiones Máximas Del Sistema De Tarjetas, No. 9831, Art. 15(j) (“Cualquier otro elemento que razonablemente permita al Banco Central de Costa Rica garantizar la eficiencia y seguridad de los sistemas de tarjetas.”) available at http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm_texto_completo.aspx?param1=NRTC&nValor1=1&nValor2=90791&nValor3=119755&strTipM=TC.

¹¹ Claire Wang, *Cash Me If You Can: The Impacts of Cashless Businesses on Retailers, Consumers, and Cash Use*, FEDERAL RESERVE SYSTEM CASH PRODUCTS OFFICE (Aug. 19, 2019), <https://www.frbsf.org/cash/publications/fed-notes/2019/august/cash-me-if-you-can-impacts-of-cashless-businesses-on-retailers-consumers-cash-use>.

¹² Julian Morris, Todd J. Zywicki, and Geoffrey A. Manne, *The Effects of Price Controls on Payment-Card Interchange Fees: A Review and Update*, INTERNATIONAL CENTER FOR LAW AND ECONOMICS, ICLE White Paper 2022-03-04 (Mar. 4, 2022).

- In the case of debit cards, low or zero bank-account fees are often made possible, at least in part, by interchange fees. Price controls on debit-card interchange fees reduce issuer revenue, which tends to lead banks to raise the cost of bank accounts.¹³

In fact, the BCCR has made a start in this direction, since Section 1.4 of the central bank's report discusses the impact the regulation has had on issuers and acquirers in terms of reduced revenue in 2020. Issuers responded by reducing rewards and other card benefits. Likely in part in response to these reduced benefits, the number of credit cards held by Costa Rican consumers fell by nearly 20%. As the regulation only came into force in late November of that year, however, its effects on 2020 revenues were probably minimal. As BCCR notes, the COVID-19 pandemic and the interest-free price controls introduced under the Law Against Usury probably had a bigger impact in 2020. At the very least, this suggests that BCCR should hold off on any further restrictions on interchange and acquisition fees until it has assessed more thoroughly the effect of the current fee caps.

III. Evidence on the Effects of Interchange-Fee Price Controls

BCCR is not alone in failing to take into consideration the dynamic, two-sided nature of payment networks. Regulators in more than 30 countries have imposed price controls on interchange fees.¹⁴ Typically, these price controls have been put in place at the behest of merchants who complain about payment-card fees, which they claim they are forced to pass on to consumers.¹⁵ While these regulations may have benefitted some larger merchants, they have imposed significant costs on consumers and many smaller merchants. In a recent review of the literature, I and my co-authors concluded that:

1. Interchange-fee caps have harmed consumers—and especially those on lower incomes, that is to say, the very people they were supposed to help. This is because they have reduced revenue for issuing banks, which have responded by increasing fees for consumers, either on bank accounts,

¹³ Todd J. Zywicki, Geoffrey A. Manne, & Julian Morris, *Unreasonable and Disproportionate: How the Durbin Amendment Harms Poorer Americans and Small Businesses*, INTERNATIONAL CENTER FOR LAW AND ECONOMICS, (Apr. 25, 2017); Todd J. Zywicki, Geoffrey A. Manne, & Julian Morris, *Price Controls on Payment Card Interchange Fees: The U.S. Experience*, GEORGE MASON LAW & ECONOMICS RESEARCH PAPER NO. 14-18, (Jun. 6, 2014).

¹⁴ Morris, Zywicki, & Manne, *supra* note 12. See also: Fumiko Hayashi & Jesse Leigh Maniff, *Public Authority Involvement in Payment Card Markets: Various Countries, August 2020 Update*, FEDERAL RESERVE BANK OF KANSAS CITY (August 2020), available at https://www.kansascityfed.org/documents/6660/PublicAuthorityInvolvementPaymentCardMarkets_VariousCountries_August2020Update.pdf.

¹⁵ *Id.*

on credit cards, or both.¹⁶ These fee increases have in general been highly regressive, hurting those with lower incomes the most.

2. In some cases, such as with the Durbin amendment in the United States, higher bank account fees and reduced free checking accounts have resulted in many people leaving the banking system.¹⁷
3. In nearly all cases, issuers have reduced the rewards on payment cards. But those with higher incomes and/or better credit records have often been able to switch to alternative payment cards that are not subject to the caps. So, the reductions in rewards have mainly harmed the poor and those with poor credit records.¹⁸
4. Merchants have typically passed through reductions in costs associated with lower interchange fees, in the form of lower-priced goods, at a lower rate than banks have passed through losses in fee revenue, in the form of higher-priced accounts, cards and services, and reductions in rewards. As such, consumers have lost out on net.¹⁹
5. By reducing revenue associated with price-controlled payments, investments in those modes of payments has been reduced. Thus, the Durbin amendment, which exclusively affected debit, led to a shift in payments toward credit and impeded investment in debit-related payment technologies (until fintech companies realized they could partner with exempt financial institutions). By contrast, the caps in Australia and the EU were effectively tighter for credit than for debit (since the difference between the interchange-fee rates before the caps and after the caps was greater for credit than debit), which led to shifts away from credit and toward debit. However, the caps

¹⁶ Juan Iranzo, Pascual Fernández, Gustavo Matias, & Manuel Delgado, The Effects of the Mandatory Decrease of Interchange Fees in Spain, MUNICH PERSONAL REPEC ARCHIVE, MPRA Paper No. 43097, (October 2012), available at https://mpra.ub.uni-muenchen.de/43097/1/MPRA_%20paper_43097.pdf; Benjamin S. Kay, Mark D. Manuszak, & Cindy M. Vojtech, *Competition and Complementarities in Retail Banking: Evidence From Debit Card Interchange Regulation*, 34 J. FIN. INTERMEDIATION 91, 92 (2018); see also Vladimir Mukharlyamov & Natasha Sarin, *Price Regulation in Two-Sided Markets: Empirical Evidence From Debit Cards*, working paper (December 2019) (estimating \$5.5 billion annual revenue loss to banks from interchange-fee reductions); Bradley G. Hubbard, *The Durbin Amendment, Two-Sided Markets, and Wealth Transfers: An Examination of Unintended Consequences Three Years Later*, working paper (May 20, 2013), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2285105, at 20 (estimating annual revenue loss of \$6.6 billion to \$8 billion from the Durbin amendment); *Interchange Fee Regulation Impact Study*, EDGAR DUNN & CO., (April 2020), available at <https://edgardunn.com/wp-content/uploads/2020/04/Interchange-Fee-Regulation-Impact-Study-EDC-v1.1.pdf>.

¹⁷ Mukharlyamov & Sarin, *id.*, at 30.

¹⁸ Morris, Zywicki and Manne, *supra* note 12 at 16-19.

¹⁹ Iranzo, *et al.*, *supra* note 16 at 34-37; Ian Lee, Geoffrey A. Manne, Julian Morris, & Todd J. Zywicki, *Credit Where It's Due: How Payment Cards Benefit Canadian Merchants and Consumers, and How Regulation Can Harm Them*, MACDONALD-LAURIER INSTITUTE (2013), at 27; Morris, Zywicki and Manne, *supra* note 12 at 23-29.

were so low that investment in domestic debit systems seems to have been impaired, especially in Australia.²⁰

There are, to be sure, differences among countries' payment systems, owing to differences in circumstances and history. As such, attempting to use other countries' interchange fees as a basis to set fees in Costa Rica is likely to be highly imprecise, even when taking into consideration many other factors.

BCCR's econometric analysis of interchange fees effectively benchmarks those fees against many jurisdictions that have imposed price caps. By using those benchmarks as the basis for Costa Rica's interchange fee caps, BCCR risks importing the pernicious consequences of such price caps. To avoid these biases, if BCCR seeks to benchmark its interchange fees, it should limit its analysis to cases where these fees are not subject to price controls and related restrictions.

A better approach, however, and one that is more consistent with international best practices—given the harm done by price controls on interchange fees—would be for BCCR to permit interchange fees to be set by the market.

IV. Price Controls on Merchant-Acquisition Fees

While many countries have imposed price controls on interchange fees (with negative consequences), very few countries have sought to regulate merchant-acquisition fees. As such, there is relatively less experience to draw from to assess the impact of such controls, although it is reasonable to predict they are likely to exacerbate the negative effects of price controls on interchange fees. Price controls on merchant-acquisition fees would reduce revenue to acquiring banks, which in turn would predictably reduce investments in the payment networks and lead to lower levels of system efficiency and speed, and possibly to increased fraud.

It is also worth noting that both interchange fees and merchant-acquisition fees vary according to merchant type and location, in large part because the risk of fraud varies among different types of merchants. There is a danger, therefore, that imposing price controls on both acquisition fees and interchange fees could make it unprofitable for acquirers to process payments for some riskier merchants. In other words, in its attempt to reduce merchant costs, BCCR may inadvertently (but predictably) prohibit some merchants from being able to accept payment cards. This is neither efficient nor is it in the public interest.

²⁰ Todd J. Zywicki, *Durbin's Innovation Killer: The Durbin Amendment Would Raise Costs for Consumers, Increase Fraud, and Kill Innovation*, THE AMERICAN (Jun. 11, 2011), <https://www.aei.org/articles/durbins-innovation-killer>; Jonathon Reinisch, *Swipe Freeze: How the Durbin Amendment Is Preventing Your Mobile Phone from Replacing Your Wallet*, 63 DEPAUL L. REV. 123 (2013), at 137; Morris, Zywicki and Manne, *supra* note 12 at 29-32.

V. Applying Price Controls to Foreign Cards

Nearly all countries that cap payment-card fees apply those price controls only to domestic cards. A primary reason is that foreign transactions entail higher costs for issuers and payment networks, due to increased fraud risks. For example, between 2012 and 2016, cross-border transactions represented between 7% and 10% of all transactions in the Single Euro Payments Area (SEPA) but accounted for more than 50% of fraudulent transactions.²¹

As a result, agreements between card issuers and cardholders typically include specific arrangements for international card use. These arrangements are made possible through the revenues generated by interchange fees. For example, issuers of standard credit cards typically charge their cardholders a foreign-transaction fee of between 1% and 4%.²² In order to encourage cardholders to use their cards when traveling, some issuers do not charge any fee on some or all of their cards.²³ But to make such commitments, issuers must be able to recoup the actual cost of foreign transactions via the interchange fee.

Any jurisdiction that imposes price controls on interchange fees charged on foreign cards puts in jeopardy issuers' ability to meet their commitments. Rather than remove such commitments entirely, issuers might well simply carve out restrictions for jurisdictions with such controls in place, notifying customers that they will be subject to foreign-transaction fees in those jurisdictions.

This could mean, for example, that cardholders will receive prominent notifications that their cards will be subject to foreign-transaction fees of, say, 3% when traveling in Costa Rica. At the margin, this could reduce the number of tourists who travel to Costa Rica and, perhaps more importantly, reduce the amount that tourists spend in the country.

It could also result in some tourists making purchases with cash instead of by card, especially at establishments that offer additional discounts for cash transactions. This, in turn, could lead to reduced tax receipts. Given that tourists were responsible for about 16% of the value of credit-card transactions in Costa Rica in 2019,²⁴ the effect could be significant.

²¹ *European Fraud Report—Payments Industry Challenges*, NETS GROUP (2019), available at <https://www.nets.eu/solutions/fraud-and-dispute-services/Documents/Nets-Fraud-Report-2019.pdf>

²² Jacquelline DeMarco, *A Guide to Foreign Transaction Fees*, BANKRATE (Mar. 31, 2022), <https://www.bankrate.com/finance/credit-cards/a-guide-to-foreign-transaction-fees>.

²³ *Best No Foreign Transaction Fee Credit Cards of May 2022*, NERDWALLET (May 20, 2022), <https://www.nerdwallet.com/best/credit-cards/no-foreign-transaction-fee>.

²⁴ *Fijación Ordinaria de Comisiones Máximas del Sistema de Tarjetas de Pago 2021*, BANCO CENTRAL DE COSTA RICA (November 2021), at 32.

Other countries are clearly aware of the dangers of imposing price controls on cross-border interchange fees, which is why no other country currently has a formal regulatory cap on those fees. The examples of jurisdictions BCCR gives in its discussion of cross-border caps, namely Argentina, Jordan, Paraguay, and Pakistan, all have caps on merchant acquisition fees, not interchange fees. That said, the intrinsically higher cost of cross-border transactions means that price controls on cross-border merchant acquisition fees would cause similar distortions to those caused by cross-border interchange fee caps and should not be considered best international practice. The fact that cross-border price controls on acquisition fees have so far been imposed by so few countries simply reinforces this point.

VI. Conclusion

Legislative Decree 9831 delegates authority to BCCR to ensure that the fees paid by merchants “guarantee efficiency, security, and ... the lowest possible cost of transactions with payment devices, following international best practice.” The evidence presented in this brief demonstrates that international best practices are to permit the market to determine interchange and acquisition fees. This would enable the most effective allocation of costs across the two-sided payment market, ensuring optimum participation by both merchants and consumers, as well as dynamic investments in new technologies that improve performance and reduce fraud

To date, BCCR has interpreted Legislative Decree 9831 more narrowly. Specifically, it appears to have equated “international best practice” with benchmarking against rates charged in other jurisdictions. Given the idiosyncratic conditions that pertain to each jurisdiction’s payment system, such benchmarking is vastly inferior to market prices. Moreover, many of the benchmarked countries have already imposed price controls on payment-card fees and, as a result, the benchmark rates estimated for Costa Rica are heavily biased downward. Despite these biases, BCCR seeks to use these benchmarked rates as the basis for further reductions in controlled interchange and acquisition fees in Costa Rica. The international experience with such price controls suggests that such restrictions will have pernicious effects, including:

- Reduced revenue for acquirers, which will mean lower investments in system upgrades, such that payments will not improve as quickly as they otherwise might, which would harm both merchants and consumers. Some merchants may find that they are no longer able to find an acquirer that will process payments for them.
- Reduced revenue for issuers, which will mean reduced rewards and increased fees for bank accounts and cards. This, in turn, will mean reduced card usage, which will likely reduce merchant revenue and could also cause an increase in tax evasion. Increased bank-account fees could also result in a reduction in the number of people who use the formal banking system.

Based on the evidence presented in this brief, it is essential that BCCR seeks to understand better the effects of the price controls it has already put in place before contemplating further restrictions.