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Evidence from Uruguayan Financial Inclusion Program

Néstor Gandelman
Flavia Roldán
Sofía Viera

Inter-American Development Bank
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Néstor Gandelman
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Abstract[1]

This paper examines the transition from exclusive card network-acquirer relationships to a multi-acquiring model. Using the case of Uruguay's adoption of multi-acquiring in 2022, as part of a broader financial inclusion program. We document significant market dynamics, including restructured relationships among incumbents and new market entrants. Our analysis, leveraging the Herfindahl-Hirschman Index, reveals decreased market concentration across all payment segments. While fee reductions were initially driven by a government-sponsored price agreement, the increased competition fostered by multi-acquiring stabilized these rates even after the agreement was no longer in effect. Large merchants benefited from enhanced efficiency, but small merchants faced adaptation challenges. These findings underscore the complexities of regulating two-sided payment markets and emphasize the need for balanced interventions to ensure a competitive payment ecosystem.

JEL classifications: G21, L51, G28, L11
Keywords: Multi-acquiring, Payment systems, Financial inclusion, Competition, Uruguay

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Corresponding author: Néstor Gandelman. Address: Universidad ORT Uruguay, Bulevar España 2633, Montevideo Uruguay. gandelman@ort.edu.uy

1. Introduction

Efficient payment services are pivotal for an economy's proper functioning. This paper investigates the effects of transitioning from exclusive relationships between card networks and acquirers to a multi-acquiring model. In 2022, Uruguay introduced multi-acquiring in its payment market, marking a shift from the previous exclusive-acquiring model. This change allowed acquirers to process transactions for multiple card brands, rather than being limited to a single brand. Before that, there was only one acquirer that could process payments for Visa and only one acquirer that could process payments for MasterCard. Merchants that wanted to accept both payments with Visa and MasterCard had to negotiate independent agreements with the respective exclusive acquirer. Multi-acquiring implies that these former exclusive acquirers, and any other, can all process payments of both Visa and MasterCard. Thus, any merchant interested in accepting payments with Visa or MasterCard have now a variety of suppliers that could offer the service. This shift aims to enhance competition and reshape the market structure of payment services. Notably, this change occurred within the context of a broader financial inclusion program.

Our analysis yields several key findings. Following the introduction of multi-acquiring, we observe significant market dynamics, including new entrants and restructured relationships among incumbents. The Herfindahl-Hirschman Index reveals decreased market concentration in the acquirer market. Merchant discount rates have generally declined, though this trend began before the implementation of multi-acquiring driven by a government-facilitated horizontal fee agreement among market participants. Nevertheless, the increased competition introduced by multi-acquiring helped sustain this downward trend and prevent subsequent price increases.

We also find evidence of growing vertical integration, with acquirers expanding into POS services and other players in the payment system merging with acquirers. Stakeholder interviews revealed increased competition in some non-tariff dimensions with acquirers introducing new and improved customer services (e.g., faster settlement platforms, anti-fraud systems, conciliation services). They also revealed heterogeneity in the way firms were affected. Large merchants benefited from improved efficiency and negotiating power, while small merchants faced challenges in adapting to this new landscape.

These findings highlight the complexities of regulating two-sided payment markets and underscore the need for balanced interventions to ensure a competitive payment ecosystem. Our study contributes to the literature on payment methods and financial inclusion impacts by examining the shift towards multi-acquiring in Uruguay's payment card market within the broader context of the country's financial inclusion initiatives and payment system modernization efforts.

In recent years, several Latin American countries have taken steps to open their payment-acquiring markets. For instance, in Argentina, the antitrust regulator ordered the breakup of Prisma Medios de Pago's (Visa) monopoly in 2017, followed by a 2019 regulatory push to allow new players to enter the market. Similarly, Chile began transitioning towards multi-acquiring in 2020, ending Transbank's dominance in the market, but the process remains gradual. In 2019 Peru began a process and put efforts into introducing interoperability between Visa and Mastercard processors. Brazil, on the other hand, stands as a more advanced market in this regard, with several acquirers competing freely across multiple card networks.[2]

Despite these recent developments in multi-acquiring in Latin America, the transition from exclusive acquiring relationships to a competitive system remains relatively underexplored in the literature, particularly regarding its empirical impacts. Our paper based on Uruguay's case offers an opportunity to address this gap. Unlike other Latin American countries, where regulatory mandates were the primary drivers of change, Uruguay's shift occurred without a direct mandate from the regulatory authority, making it a valuable case for examining the role of market forces in restructuring payment systems. Furthermore, the integration of multi-acquiring within a broader financial inclusion initiative allows for an exploration of its overall impacts.

The paper continues as follows: Section 2 briefly describes two-sided markets and their application to payment systems. Section 3 outlines Uruguay's payment market and the shift to multi-acquiring. Section 4 presents our data and describes the impacts of multi-acquiring. Section 5 concludes.

2. Two-Sided Markets and Payment Systems

Two-sided markets represent an economic environment where platforms facilitate interactions between two distinct and interdependent groups of participants.[3] The payment card industry exemplifies this structure, with platforms enabling transactions between cardholders and merchants.

[2] See OECD (2021), Fantoni and Bucher (2023), CNDC, Argentina (2016), INDECOPI, Perú (2020).

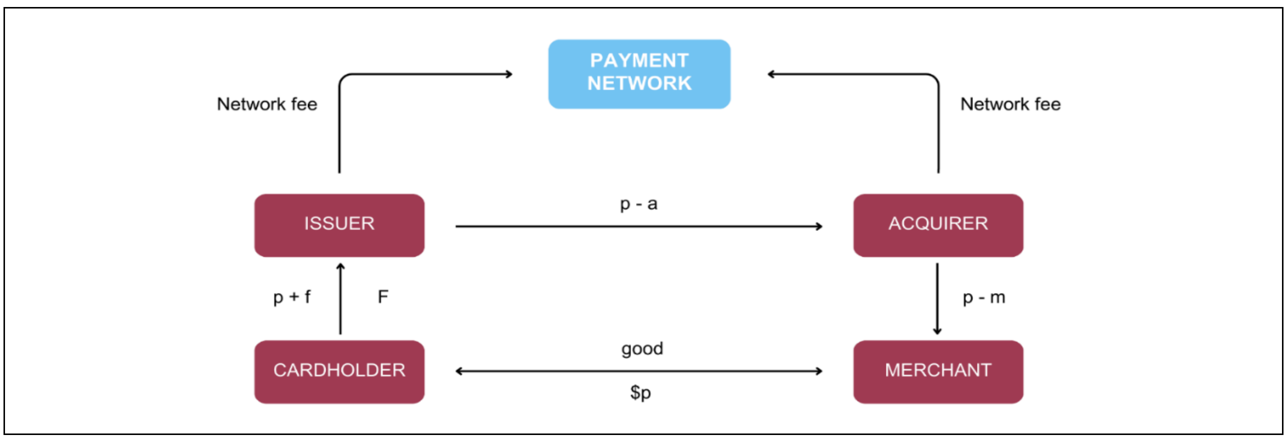
[3] The literature on two-sided markets has its roots in the pioneering work of Caillaud and Jullien (2003), Rochet and Tirole (2003, 2006), Armstrong (2006), and Weyl (2010).

A key characteristic of two-sided markets is the presence of cross-network externalities, where the value for one group depends on the participation of the other. For example, cardholders benefit from more merchants accepting cards, and vice versa. These markets also feature differentiated user groups, each with distinct preferences and demands, requiring platforms to balance disparate needs. Pricing in two-sided markets is often asymmetric, with platforms frequently subsidizing one side to drive overall network value, carefully balancing charges to maintain attractiveness to both sides.[4] As the user base grows on one side, it attracts more users on the other side, creating a positive feedback loop known as network effects.

These characteristics lead to challenges in competition and regulation.[5] The presence of network effects often results in market concentration, with a few major players dominating. Regulators face the complex task of distinguishing between beneficial competitive strategies and predatory practices while ensuring market innovation and efficiency.

In the payment card market the main organization model is the Four-Party Model (4PM). Despite its name, this model comprises five components: cardholders, merchants, card issuers, acquirers, and the platform. It separates the issuing and acquiring functions (see Figure 1). [6]

Figure 1. Four-Party Model (4PM)



Source: Authors' formulation.

[4] For a review of different aspects of this issue, see Hagiu (2006); Armstrong (2006), Rysman (2009), and Jullien, Pavan, and Rysman (2021).
[5] Among others, see Rysman (2009); Evans and Noel (2005); Alexandrov, Deltas, and Spulber (2011); Filistrucchi, Geradin, Van Damme, and Affeldt (2014).
[6] The other less prevalent model is the Three-Party-Model (3PM) which involves only merchants, cardholders and an intermediary platform. The platform performs both issuing and acquiring roles directly connecting cardholders and merchants.

In the 4PM, issuers (typically banks) provide cards to cardholders, while acquirers affiliate merchants and facilitate payment processing. The platform enables interaction between issuers and acquirers, indirectly connecting cardholders with merchants. Merchants pay a discount (m) to acquirers for connection services. The acquirer's margin is the difference between this discount and various fees: the interchange fee (a) paid to the issuer, network fees paid to the platform, and interconnection fees paid to POS providers. On the other side, the cardholder pays the issuer the price of the good (p), plus an additional service fee f, if applicable. Additionally, the issuer charges the cardholder a fixed fee F for providing the card services.

3. Multi-acquiring within Broader Changes in the Uruguayan Payment System

The introduction of multi-acquiring in the payment market is not an isolated change, but rather an important shift aligned with the country's broader Financial Inclusion Program. This comprehensive program aimed to achieve two primary objectives: i) universalizing access to the financial system, with a particular focus on lower-income households and micro and small firms; and ii) modernizing the payment system by fostering competition, efficiency, and the adoption of advanced, secure payment methods.

3.1 From the Exclusive Relation to the Multi-Acquiring Change

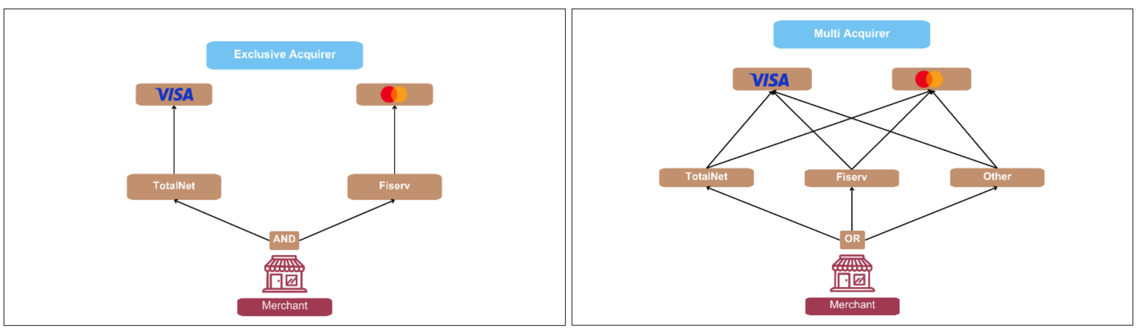
The concept of multi-acquiring is a departure from the exclusive-acquiring model where an acquirer had an exclusive relationship with a specific card brand. In the Uruguayan case, for example, TotalNet (formerly VisaNet) was the exclusive acquirer for Visa, while Fivserv (formerly FirstData) was the exclusive acquirer for Mastercard. Under this exclusive-acquiring model, merchants had to work with multiple acquirers to accept different card brands, as illustrated in Panel A of Figure 2.

Interestingly, these exclusive relationships between acquirers and card brands emerged as the payment market developed, rather than through Central Bank regulation. In 2022, a Central Bank press release (*Comunicación* 2022/171) announced the implementation of multi-acquiring starting in September 2022, which would end the exclusive rights for Visa and Mastercard. While the Central Bank announced this change, it did not mandate it through formal regulation.

Thus, multi-acquiring allowed any acquirer to sign agreements with multiple card brands and process transactions for all of them. This means that acquirers like Fiserv and TotalNet, which were previously limited, by the presence of exclusive agreements, to processing Mastercard and Visa respectively, could now offer merchants the ability to accept payments from other card brands as well. Figure 2 presents a graphical representation of market links before and after multi-acquiring.

Figure 2. Exclusive and Multi-Acquirers Schemes

Panel A Panel B



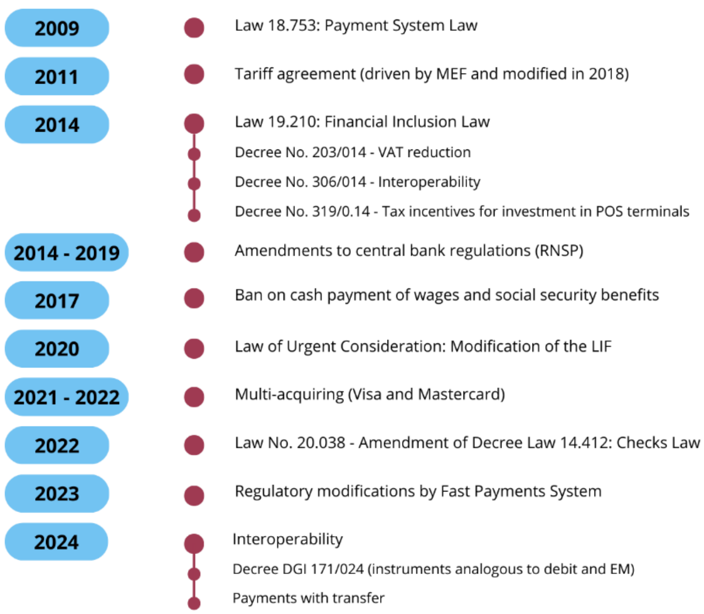
Source: Authors' formulation.

The introduction of multi-acquiring significantly enhances convenience for merchants by allowing them to work with a single acquirer capable of processing transactions for multiple card brands. This shift simplifies the payment acceptance process, reduces administrative overhead, and improves operational efficiency. Previously, merchants faced a fragmented system where they had to establish contracts with exclusive acquirers for each card brand, leaving them with limited bargaining power. While cardholders could choose among multiple issuing agents for Visa or Mastercard, merchants were compelled to negotiate with monopolistic acquirers for each brand, often on unfavorable terms. With multi-acquiring, merchants gain the flexibility to consolidate their arrangements or, if preferred, maintain existing affiliations with multiple acquirers, offering a balance between simplicity and choice.

3.2 Market Overview and the Regulatory Framework

Figure 3 presents a time diagram with the main legal and regulatory changes.

Figure 3. Main Regulatory Changes Implemented in the Uruguayan Payment Market



Source: Central Bank of Uruguay.

The Financial Inclusion Law (LIF, "*Ley de Inclusión Financiera*"), enacted in April 2014, marked a crucial regulatory milestone for the financial inclusion program. It catalyzed the implementation of a series of instruments and strategies designed to realize the goals of financial inclusion and impacted the payment card market.[7]

Recognizing the two-sided nature of that market, those instruments and strategies have addressed both consumers and merchants, as well as the horizontal and vertical relationships within each side of the market.

On the consumer side, starting in 2017 the LIF banned cash payments of wages and social benefits. This sharply incorporated into the financial system a sizable share of private sector workers (public workers were already banked). The LIF regulates the conditions of these wage accounts. They cannot have any opening, acquisition, maintenance, or closing costs, nor can they

[7] Recent empirical evidence from Asia-Pacific countries shows that financial inclusion initiatives can significantly impact economic growth, though these effects are non-linear and vary based on existing levels of financial development, Basnayake, Naranpanawa, Selvanathan, and Bandara (2024).

require minimum balances. They must allow the extraction of funds at any time, without the need for prior notice or minimum duration requirements. They must be associated with a debit card that should enable their holders to make cash withdrawals and electronic payments in stores at no cost to them. They must allow unlimited and free-balance inquiries, as well as five or more withdrawals on an ATM network without costs.[8]

Competition on this side of the market was introduced by allowing active or retired workers to choose their preferred bank to receive their remuneration and permitting the establishment of electronic money issuers (IEDE) that compete with banks.

Likewise, and to encourage the use of electronic payment methods, various tax reduction schemes were implemented for transactions made through electronic means (Decree No. 203/2014).

On the merchant side, incentives were provided to promote the acceptance of electronic payments, such as subsidies and tax exemptions for point-of-sale (POS) terminal installation.

The interoperability of POS networks was crucial in consolidating the efficiency associated with the high penetration of electronic payment methods. This allowed the interconnection of existing and future networks, simplifying transaction processing with all debit and credit cards (Decree N0. 306/014).

Regarding the vertical relationships between merchants and acquirers, in 2011, before the LIF, a first step was taken to reduce the fees charged by acquirers (merchant discount). Debit card transaction fees were lowered from 7 percent to 2.5 percent, and credit card transaction fees were reduced from 7 percent to 4.5 percent. These fee reductions were promoted by the Ministry of Economics in dialog with the acquirers. A second fee reduction occurred in 2018 through a publicly available signed agreement among market participants, involving a scheme of gradual reductions based on the growth of electronic payment transactions.

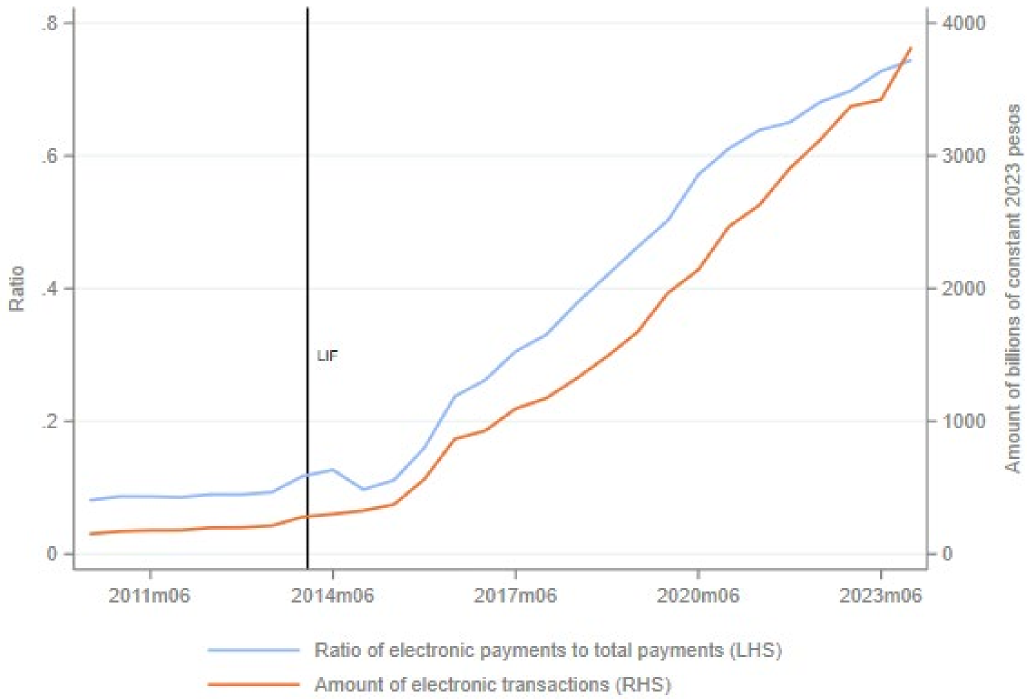
Additionally, relationships between different market agents in the payment card market were regulated (Law 19,731/2018), and to enhance transparency, the Central Bank was mandated to publish the fees charged by each acquirer to merchants (Law 19,732/2018).

The impact of these progressive measures on the payment card market is clear. Figure 4 shows a steady increase in the share of electronic payments, which grew from a low baseline to

[8] For recent papers that study the impact of Financial Inclusion Law in Uruguay, see Olivieri et al. (2022), Gandelman et al. (2023), and Brockmeyer and Saenz (2024).

over 70 percent of total transactions by 2023. This trend highlights a decisive shift from traditional to electronic payment methods, reflecting widespread adoption over time.

Figure 4. Ratio of Electronic Payments to Total Payments

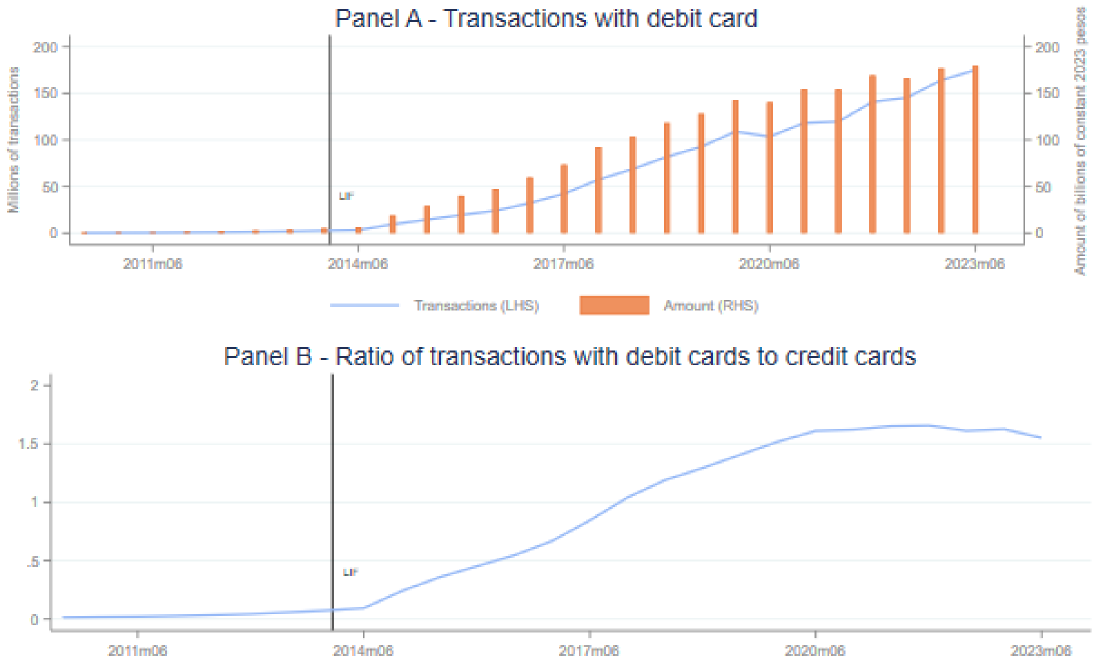


Source: Authors' formulation based on the Central Bank of Uruguay's Retail Payment Report.

Within card-based payment methods, tax incentives (VAT reduction) have favored the use of debit cards, which is evident in the uninterrupted growth in both the number of transactions (increasing by 5,000 percent) and their amount (rising by 2,700 percent) between June 2014 and June 2023, see Figure 5, Panel A. Also, the ratio of transactions using debit cards to credit cards has consistently increased over time, indicating a stronger preference for debit card usage among consumers. Panel B of Figure 5 shows a significant shift in 2014, corresponding to enacting the Financial Inclusion Law (LIF).[9]

[9] This shift in payment preferences aligns with recent research showing that electronic payment systems can significantly influence consumer transaction patterns and spending behavior (Li, Wang, and Zhou, 2023).

Figure 5. Transactions with Cards



Source: Authors' formulation based on the Central Bank of Uruguay's Retail Payment Report.

By June 2014, debit card transactions accounted for approximately 20 percent of the card payment market, while credit card transactions made up 80 percent. However, by June 2023, the landscape had shifted significantly. Debit card transactions now constitute 54 percent of the card payment market, credit card transactions account for 35 percent, and the remaining 11 percent correspond to electronic money transactions.

To summarize, the card payment market has experienced substantial growth since the implementation of the Financial Inclusion Law, with a 700 percent increase in the number of transactions and a more than 300 percent rise in the total amount transacted in real terms. The revenue of acquirers, like any other firm, is determined by both the quantity and price of their services. Thus far, we have shown evidence that the quantity of business has skyrocketed.

4. Analyzing the Impact of Multi-Acquiring

In what follows we aim to examine the impact of multi-acquiring in the payment card market. The literature on the two-sided market suggests some potential impacts after the introduction of such kind of change. One of them is the impact on merchants. It simplifies their experience regarding payment acceptance and management, as it centralizes the processing and settlement of sales conducted.

Moreover, the overall expected outcome of multi-acquiring is increased competition. A more competitive environment could indeed exert downward pressure on the fees charged to merchants. However, this effect is not immediate nor the sole possible effect. Increased competition may also result in a commitment to enhancing the services offered by acquirers. As a means of differentiation, acquirers may introduce technological innovations, improve customer service, provide additional financial services, or add other solutions that may be of interest to merchants (such as generating operational reports), and more.

Competition may unfold among existing acquirers, but the framework also paves the way for new entrants or players entering the market under this framework or some reconfiguration through the establishment of new horizontal and vertical relationships. Furthermore, another key impact is that the multi-acquiring may increase the acquirer's commercial efforts in onboarding new merchants (such as small business micro-firms and professionals offering services) into the system.

To address the complexities of this change, our analysis draws on a dataset covering three key dimensions: i) the impact on prices (merchant discount rates), ii) market entrants and the reconfiguration of horizontal and vertical relationships, and iii) the non-tariff dimension of competition and the perspectives of acquirers and merchants.

4.1 Data Sources

One crucial aspect to track due to the change brought about by multi-acquiring is the changes on prices. Every quarter, the Central Bank provides a comprehensive report on the tariffs imposed by acquirers on merchants (merchant discount rates), detailed in the "*Aranceles Vigentes cobrados por los adquirientes*" (Current Tariffs Charged by Acquirers) report, which has been available since 2019. Our analysis leverages these reports to study the pricing dynamics within the payment ecosystem.

In addition to pricing changes, it is equally important to study the broader market dynamics. This includes studying the entry of new market players and the potential restructuring of horizontal and vertical relationships within this evolving payment market. Through its website, the Central Bank publicly announces authorizations or changes in the operations of agents within the Payment

System ("*Resoluciones*"). This data provides a dynamic portrayal of the competitive landscape, capturing not only the competitive maneuvers among existing acquirers but also the transformative impact of new entrants.

We have also obtained additional data through a public information access request to the Central Bank, in accordance with national policy on information accessibility. This data includes anonymized information on the number of operations and transaction amounts disaggregated by card brands, as well as by acquirer and type of card (debit, credit, or electronic money).

Lastly, we incorporate information gathered from semi-structured interviews conducted with acquirers and merchants between May and June 2024. These interviews provide stakeholder perspectives and allow us to consider the impact of multi-acquiring on dimensions beyond merchant discount rates, offering a more comprehensive view of how multi-acquisition might have affected the market.

4.2 The Impact on Prices: Merchant Discount Rate

An important dimension to examine is the impact of the multi-acquiring shift on the pricing that merchants pay to accept electronic payments. This is reflected in the merchant discount rate—the percentage of each card transaction that merchants pay to their acquiring institution.

As stated above, the merchant discount rate is not the acquirer's net margin since it must pay an interchange fee to the issuer, it must pay a network fee to the platform, and an interconnection fee to the POS provider (see Figure 2). As competition increases, the acquirer's margins are expected to decrease. This means the merchant discount rate will tend to the level of interchange plus network fees plus POS fees.

The interchange fee is a key component of the overall merchant discount rate, often accounting for 70-80 percent of the total.[10] In turn, the interchange fees are set by the card networks themselves, and in some countries, they are subject to regulation. This gives the card networks influence over the pricing that merchants finally pay. Unfortunately, we do not have information on these fees.

In September 2018, following negotiations facilitated by Uruguay's Ministry of Economy and Finance (MEF), a key agreement was reached among the market participants, i.e., issuing banks, acquirers, and trade associations representing the retail and transportation sectors. This

[10] See Cricco (2017) for the decomposition of merchant discount rates in several South American countries.

agreement addressed the tariff (merchant discount rate) structure and terms of use for electronic payment methods.

The key points of this agreement included a gradual reduction of the maximum merchant discount rates applied to debit and credit cards. This reduction was tied to increasing the overall transaction volumes processed through these electronic payment methods, with an initial reduction (not tied to the growth of transactions) for small merchants. Additionally, the agreement aimed to gradually reduce the gap between the highest and lowest discount rates charged by each acquirer within the same merchant sector, thereby minimizing the dispersion in rates applied. The following figures illustrate trends in the merchant discount rates for debit cards, credit cards, and electronic money across the five biggest acquirers:

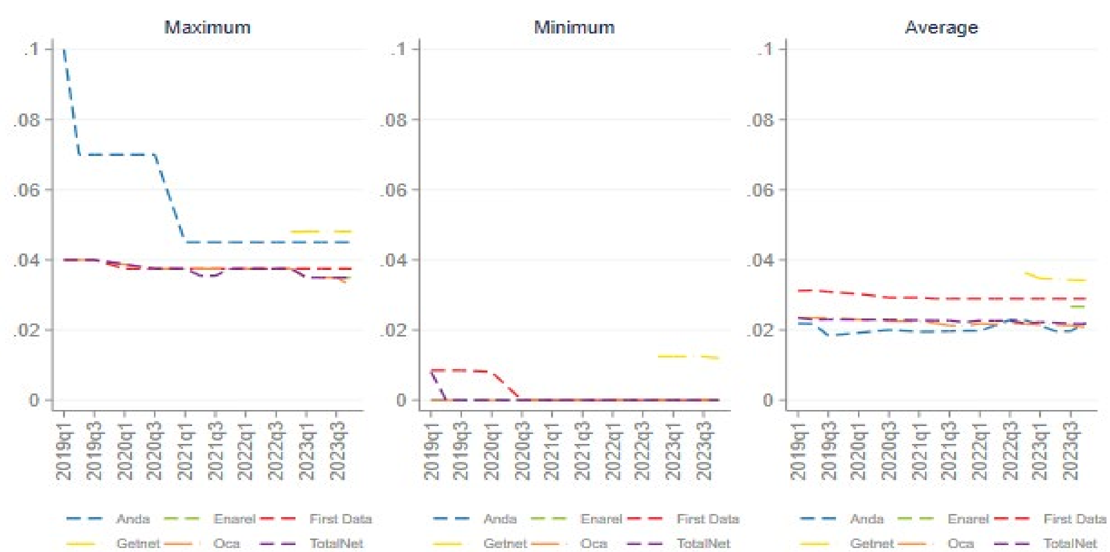
Figure 6 shows a general decline in merchant discount rates for debit cards, with the average rate falling steadily from around 1.5 percent to 1 percent. Notably, there has been a narrowing in the spread between the maximum and minimum rates charged by different acquirers, indicating increasing competition.

Figure 7 reflects the discount rates for credit cards, which historically have been higher than debit cards due to the additional risks involved. The maximum rates show significant variation among acquirers, with one notably higher than the others, decreasing from about 10 percent to 5 percent over the period. Other acquirers maintain maximum rates between 3-5 percent. The average rates show slight convergence over time, with most acquirers charging between 2-3 percent by the end of the period. The dispersion in rates across acquirers remains larger than in the debit card market, suggesting more variability in credit card fee structures.

Figure 6. Merchant Discount: Debit Cards

Source: Authors' formulation based on Current Tariffs Charged by Acquirers, Central Bank of Uruguay.

Figure 7. Merchant Discount: Credit Cards



Source: Authors' formulation based on Current Tariffs Charged by Acquirers, Central Bank of Uruguay.

Several issues arise from this analysis. First, there was partial compliance with the September 2018 Tariff Agreement. The current figures show that the gradual reductions in maximum merchant discount rates and rate dispersion, as stipulated in the 2018 Tariff Agreement, were not fully achieved. Upon further investigation (interviews with key participants), there were no clear mechanisms or enforcement provisions to ensure compliance by the parties that signed the Agreement. Furthermore, there were no provisions in place for market entrants to comply with the Agreement.

Second, it seems at least paradoxical that a public price agreement between competing suppliers (acquirers) is aimed at improving market conditions for customers (merchants).

Third, there are at least two implications of reducing rate dispersion: i) preventing third-degree price discrimination, and ii) exerting upward pressure on the minimum discount rates. Specifically, minimizing the dispersion of rates charged by acquirers within the same merchant sector ultimately implies preventing third-degree price discrimination practices. Additionally, reducing the gap between the maximum and minimum rates must have also led to an increase in the minimum discount rates charged.

These observations highlight some of the inherent challenges in regulating and antitrust issues in two-sided payment markets, where the interests of merchants and consumers/cardholders must be carefully balanced. The partial compliance with the agreement and the potential unintended consequences of the rate dispersion reduction point out the complexities involved in designing effective payment market interventions.

4.3 Market Entrants, Market Concentration and Vertical Relationship Reconfigurations

The shift towards multi-acquiring can be better understood by examining key characteristics of the acquiring market, particularly the technological requirements and the presence of scale economies that shape this market segment's dynamics.

In the acquiring activity, merchant acquirers are responsible for signing up merchants to accept payment cards. Acquirers often also arrange the processing services necessary to handle electronic transactions.[11] While some acquirers perform processing activities in-house, others resell the services of a third-party processor. Regardless of the specific arrangement, the acquiring activity is fundamentally driven by data processing capabilities.

The nature of payment processing needs significant technological infrastructure and systems to secure electronic transactions, resulting in high fixed costs. It is a scale-oriented activity

[11] See, for instance, Kjos (2007), De Gennaro (2008), Welte and Molnar (2021), and Payment Systems Regulator (2021).

where size and transaction volume are key drivers of profitability. These structural characteristics, coupled with the network effects inherent in payment systems, typically lead to economies of scale.

Given these factors, an oligopolistic market structure often emerges in the acquiring industry. This typically results in a small number of large players dominating the market, which can have implications for the competitive dynamics of the payment market.

With this context in mind, we can now examine how the introduction of multi-acquiring has reshaped the competitive landscape and realigned the horizontal and vertical relationships within Uruguay's payment market.

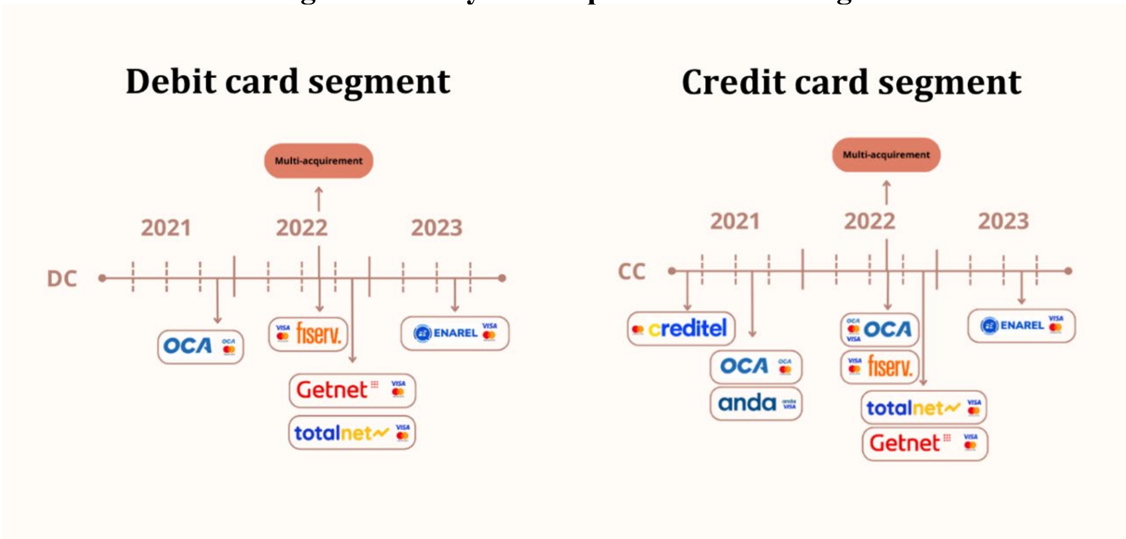
We distinguish two market segments debit cards and credit cards (Figure 8).

The debit card segment currently has six active acquirers. Three of these players entered the market around the time multi-acquiring was introduced. One firm (OCA) joined in the last quarter of 2021, offering its own brand as well as Mastercard. The other two acquirers entered in the latter half of 2022 and 2023, both offering Visa and Mastercard. Additionally, the former exclusive acquirees of Mastercard began offering Visa and vice versa. This market is now characterized by acquirers offering the same major card network brands (Visa and Mastercard), suggesting increased alignment and competition within this market segment.

The credit card segment currently has 12 active acquirers. Within this credit card market, we observe three key changes. First, we observe the entry of two new acquirers, both offering the two major card networks, Visa and Mastercard. Second, four existing acquirers that previously operated with their own card brands or other brands have now expanded to offer Visa and/or Mastercard, generally maintaining their previous brand offerings as well. This has increased the variety of card brand choices available to merchants. Finally, the former exclusive acquirees of Visa and MasterCard began offering the other major brand (Fiserv in in Q3 2022 and TotalNet in Q4 2022)

Besides these larger card network brands, the credit card segment also continues to have a presence of acquirers serving niche markets with regional or other specialized card brands. Nonetheless, it is noteworthy that eight out of the 12 total acquirers in this segment now offer both major global card network brands.

Figure 8. Entry and Expansion of Coverage



Source: Authors' formulation based on Central Bank of Uruguay reports.

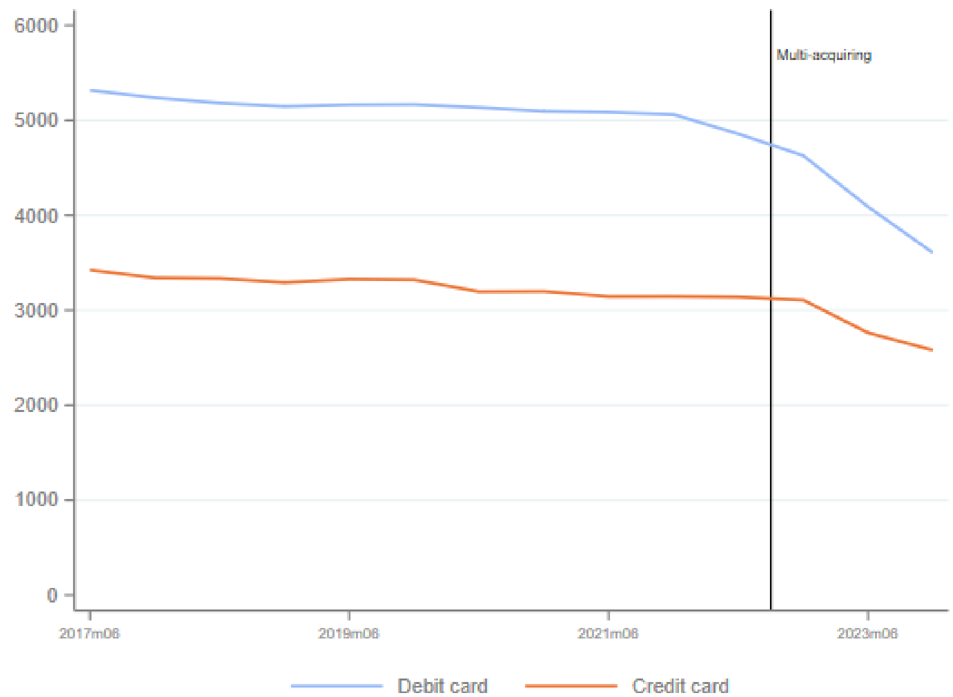
Summarizing the key qualitative changes in the payment acquirer market, two broad groups can be distinguished. The first group consists of acquirers maintaining existing positions: seven of the 15 active acquirers have remained unchanged, continuing to offer their own brands and serve specialized market niches, particularly in the credit card segment. The second group includes acquirers adapting to the multi-acquiring model. Among these, incumbents like FivServ and TotalNet have expanded their offerings, now providing both Visa and Mastercard across all market segments, including debit and credit cards. Additionally, two new entrants have emerged, offering the two major card network brands and providing a similar product bundle to these incumbents across various payment instrument categories. Lastly, three existing acquirers broadened their brand offerings by adding Visa and Mastercard alongside their proprietary brands.

Using data obtained through public information access request to the Central Bank, we can now analyze the dynamics of the acquirer's market concentration, providing quantitative evidence.

Figure 9 illustrates market concentration across the two market segments. Using the Herfindahl-Hirschman Index (HHI) based on the value of transactions, the graphs reveal a sharp decrease coinciding with the introduction of multi-acquiring, marked by a vertical line in each chart. The debit card segment, initially highly concentrated with HHI values above 5,000, experienced a decrease in concentration following the implementation of multi-acquiring, with the HHI dropping to around 2,500. Similarly, the credit card market, which had already been showing a gradual decline in concentration, saw an accelerated decrease after multi-acquiring, with the HHI falling from about 3,000 to 2,000.

Thus, the decreases in HHI across both segments mirror the earlier discussed market dynamics, particularly the entry of new players and the expansion of services by existing acquirers. This quantitative evidence reinforces the qualitative observations, showing how the multi-acquiring has reshaped the competitive landscape of Uruguay's payment market.

Figure 9. Acquirer's Market Concentration (HHI transaction volumes)



Source: Authors' formulation based on data from Central Bank of Uruguay, 2017-2023.

The multi-acquiring transition has triggered significant vertical integration dynamics, with acquirers expanding into POS services and banking institutions merging with acquirers. For example, one major acquirer formed a strategic alliance with a POS provider to enter that market while maintaining its acquiring position; a prominent bank expanded from POS operations into acquiring services; and a POS provider entered the acquiring market through a new subsidiary.[12] This vertical consolidation creates potential competitive concerns: while the HHI suggests

[12] Specific examples include Fiserv's alliance with Geocom, Banco Santander's expansion through Getnet, and Scanntech's entry through Enarel.

increased competition horizontally among acquirers, the vertical integration could create bottlenecks in the payment processing chain. An illustrative case emerged in 2023 when one acquirer alleged that a vertically integrated competitor was blocking merchants from choosing alternative acquirers, requiring regulatory intervention to ensure open routing of payment transactions.[13]

Figure A1 in the appendix portrays the current vertical structure of Uruguay's payment card-acquiring market. We construct it using public information from the Central Bank's website, specifically from the Payment System - Institutional Registry section. This registry provides details on the authorizations granted to various institutions to operate within the system. While in some cases we do not have precise percentages indicating the extent of one company's ownership or control over another, we can confirm that a link or relationship exists between them.

4.4 Stakeholders' Perspectives

This section presents qualitative evidence that we gathered through semi-structured interviews conducted between May and June 2024 with key stakeholders in the electronic payment market. Participants shared their experiences and perspectives on how this change affected pricing, services, and merchant relationships.

4.4.1 Acquirers' Perspective

We were able to interview 9 of the 15 acquirers operating in the market. We have structured the feedback as follows:

Market dynamics and competition. The introduction of multi-acquiring has led to significant changes in the market dynamics for acquirers. Regarding the merchant discount rate, the acquirers interviewed said that the decline in fees charged to merchants has mainly been driven by the dynamic imposed by the 2018 Tariff Agreement and not only due to multi-acquiring changes.

[13] The dispute involved Getnet (a firm of the Santander group) and Fiserv. Getnet is authorized to operate as a payment acquirer, while Geocom/Fiserv are registered as POS and as acquirer. Getnet alleged that Geocom/Fiserv unjustifiably blocked and inhibited merchants from choosing Getnet as their acquirer. The Central Bank intervened, reminding that in the context of multi-acquiring, POS must route payment transactions received by merchants to the acquirer of their choice. Geocom/Fiserv argued that there were security standards and technical requirements that Getnet did not meet. Ultimately, the Central Bank stated that it is the acquirer, not the POS provider, who has the authority to define interconnection requirements.

Nonetheless, in response to the dynamic imposed by the market changes, acquirers have adopted varying strategies. After multi-acquiring, some acquires focus on offering the lowest possible fees to merchants, while others concentrate on enhancing their service offerings at competitive prices.

Adaptation to multi-acquiring. The shift to multi-acquiring has prompted significant changes in brand strategies within the acquiring market. Some acquirers said that they have transitioned from having a single acquiring brand to offering several, providing more payment options to merchants. However, some others have decided to maintain a single card brand, typically their own, due to the high development and technological costs associated with incorporating Visa and Mastercard.

This diversification has needed adaptations in contracts between acquirers and merchants. These changes not only include the incorporation of new card brands' services and requirements but also provide greater flexibility and mobility for merchants to switch between acquirers. Some acquirers express concern about this increased mobility, as it has diminished their ability to retain merchants compared to the pre-multi-acquiring period.

Service innovation and merchant retention. Competition driven by multi-acquiring has compelled established acquirers to innovate and enhance their customer services. Many now offer faster and more user-friendly settlement platforms, improved account reconciliations (often at an additional cost), anti-fraud systems, and other technological solutions. These improvements not only facilitate sales and payment management for businesses but also aid acquirers in customer retention.

A notable strategy emerging from the multi-acquiring landscape is vertical integration among various market players. Since the announcement of multi-acquiring in September 2022, acquirers have been buying, merging with, or developing their own POS firms to offer combined POS and acquirer services. Furthermore, banks have started merging with acquirers, a strategy that benefits both parties substantially. This integration allows acquirers to improve their profitability through value-added products, sometimes even offering services at lower prices, and as the acquirers interviewed said, with costs covered by the fees merchants pay to the banking institution.

Market impact. In terms of client numbers, the largest established acquirers have not perceived significant changes in their client base. Instead, they have maintained their clientele, with some reporting a focus on higher-quality merchants. Some acquirers have chosen to concentrate on specific market niches, such as large merchants rather than small ones. Concurrently, new acquirers have successfully entered the market, captured a significant number of merchants, and emerged as competitors to established players.

Overall impact. Generally, multi-acquiring has been perceived as beneficial by all acquirers. Acquirers interviewed perceived as positive being able to offer their clients better services and view the constant pressure to improve as a positive aspect of the new market dynamics. Even acquirers who previously held a monopoly over Visa or Mastercard acknowledge that, while they have lost their brand advantage, they can now compete more effectively across a broader spectrum of services.

4.4.2 Merchants' Perspective

To capture the merchant's perspective, we conducted interviews with representatives from key merchant associations in Uruguay. These included the Uruguayan Supermarket Association (Asociación de Supermercados del Uruguay), the National Association of Road Transport Companies by Bus (ANETRA: Asociación Nacional de Empresas de Transporte Carretero por Autobuses), the Association of Kiosks, Salons and Sub-Agents of Lotteries of Uruguay (AKISAQU: Asociación de Kioscos, Salones y Sub-Agentes de Quinielas del Uruguay), and the Center for Grocers, Retailers, Baristas, Self-Service Stores and Related Businesses of Uruguay (CAMBADU: Centro de Almaceneros Minoristas, Baristas, Autoservicistas y Afines del Uruguay). Notably, some of these associations were signatories to 2018 Tariff (merchant discount rate) Agreement. They represent a diverse range of merchant types, from large supermarket chains to small grocers, kiosks, and lottery vendors, as well as transportation services, providing insights across various sectors of the retail, service, and transport industries.

Merchant discount rate structure and pricing. From the merchant perspective, the impact of multi-acquiring on fees and pricing has been mixed. While there has been a reduction in merchant discount rates, which began with the 2018 Tariff Agreement, many merchants report not experiencing significant price changes. It is important to note that this perception can be influenced by the inclusion of POS and other services in their overall costs.

Sales and payment methods. Regarding sales, merchants have not observed a noticeable increase attributable to the acceptance of additional card brands or due to multi-acquiring in general. Some merchants report that incorporating electronic payment methods has been beneficial for customer retention, while others have perceived no significant impact. Generally, there has been a predictable increase in the use of electronic payment methods, but this has not been accompanied by an increase in sales. Large merchants typically remain indifferent to the payment method.

Some small merchants said that they often prefer payment facilitators[14] instead of acquires, which offer early payment options although at a higher cost.

Services and technology. The impact of multi-acquiring on services and technology has varied significantly between large and small merchants. With the introduction of new technologies, large merchants have generally been able to implement more organized payment systems. Some large merchants, such as supermarkets, mention that multi-acquiring has allowed them to negotiate fees and services with acquirers.

The new services associated with technological advancements have enabled some merchants, particularly in sectors like transport services, to process transactions more effectively, leading to an increase in revenue.

Regarding conciliation services, there is a notable disparity in awareness and utilization between large and small merchants. Many small merchants indicate a lack of awareness about these services, presumably due to their inability to afford them. Conversely, larger merchants have noted improvements, stating that conciliation services facilitate financial management and ensure more accurate accounting.

Overall impact. The overall impact of multi-acquiring appears to vary significantly based on the size and scope of the merchant. Small merchants have stated that adapting to this technological change is challenging. On the other hand, large merchants have found multi-acquiring beneficial, as their administration is now more efficient, they can deal with only one acquirer, and they even have the power to negotiate terms with acquirers.

5. Conclusion

This study has examined the changes in the payment system introduced through multi-acquiring, a significant shift in market structure within the context of broader financial inclusion initiatives. The analysis reveals several key findings and implications that extend beyond the specific case studied, offering insights into the impacts of market structure changes on competition, pricing, and service quality in payment systems.

[14] A payment facilitator is a firm that enables merchants to accept electronic payment by processing on their behalf. A payment facilitator acts as intermediary between the merchant and the acquirer, simplifying the process of getting approved for payment acceptances.

The financial inclusion program, which included fiscal incentives (tax rebates and POS installation subsidies) and mandatory salary payments through financial institutions, has led to a remarkable increase in electronic payment transactions. By 2023, electronic payments accounted for over 70 percent of total payments, reflecting a significant shift in consumer behavior and market structure. This transformation has been accompanied by substantial market dynamics following the transition to multi-acquiring. Incumbent firms have expanded their offerings to process payments from multiple card brands, while new entrants have entered the market with similar payment processing capabilities. This has resulted in a simplified process for merchants, who can now choose to centralize their payment processing with a single acquirer without losing the ability to accept various card brands.

Regarding pricing impact, while there has been a general reduction in merchant discount rates, our analysis shows that this decline began with the September 2018 Tariff Agreement and should not be solely attributed to multi-acquiring. The rates have not decreased as much as the agreement initially implied, partly due to the agreement becoming ineffective and lack of enforceability. However, the advent of multi-acquiring and the entry of new market players have prevented price increases to their pre-agreement levels. Our analysis of the Herfindahl-Hirschman Index (HHI) reveals a significant decrease in market concentration across debit card, credit card. This decline in concentration indicates a more competitive landscape in the acquiring market, driven by the introduction of multi-acquiring and the entry of new players.

The market has also witnessed a trend towards vertical integration, with acquirers buying, merging with, or developing their own POS firms to offer combined services. This strategy allows for improved profitability through value-added products and potentially lower prices for merchants. Moreover, the competition driven by multi-acquiring has compelled established acquirers to innovate and enhance their customer services. Many now offer faster and more user-friendly settlement platforms, improved account reconciliations, anti-fraud systems, and other technological solutions.

Interviews with acquirers and merchant associations revealed mixed impacts of these changes. Large merchants generally found multi-acquiring beneficial, citing improved efficiency and negotiating power. However, some small merchants stated that they face challenges in adapting to these changes.

Our study highlights the complexities of regulating two-sided payment markets. The introduction of multi-acquiring, coupled with the broader financial inclusion program, has significantly reshaped the payment landscape. While it has fostered increased competition and market efficiency, it has also presented challenges, particularly for smaller market participants.

As the market continues to evolve, policymakers and regulators will need to carefully monitor these dynamics to ensure a balanced and competitive payment ecosystem.

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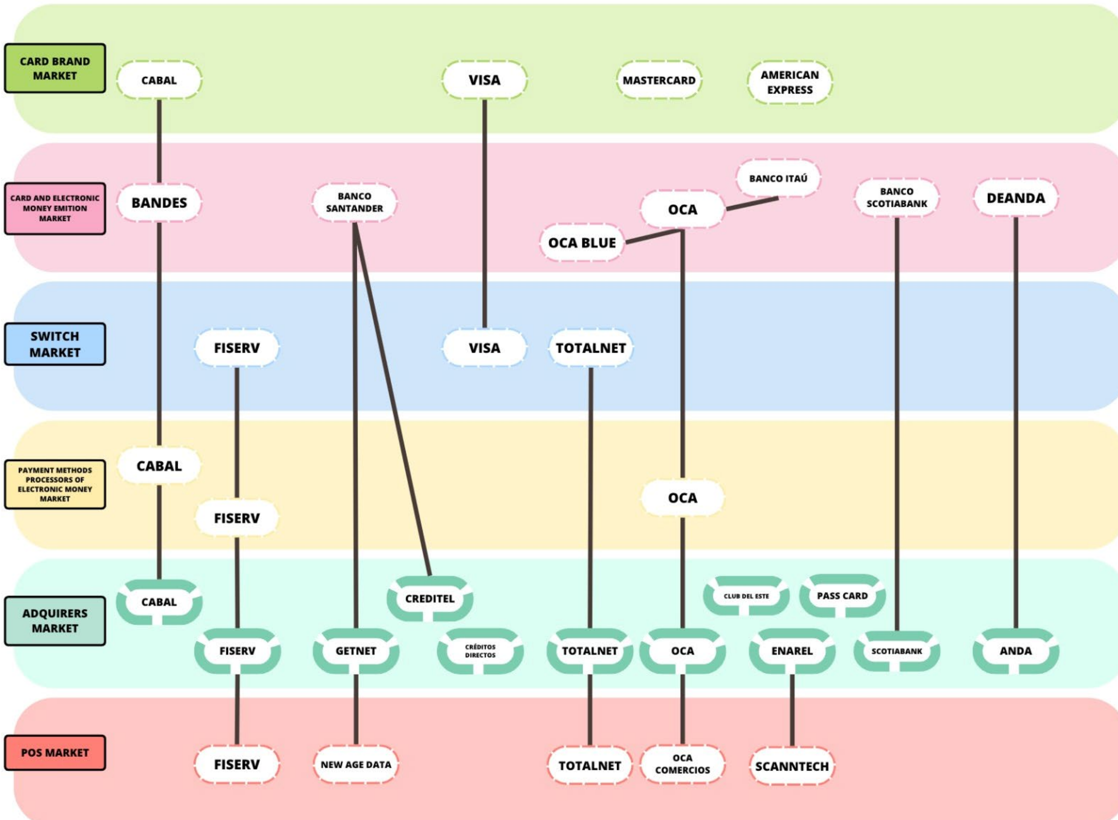
Appendix

A1. Vertical Integration in the Payment Industry Ecosystem



Source: Authors' formulation based on Central Bank of Uruguay data.