

Welte, Angelika; Molnar, Jozsef

**Working Paper**

## The market for acquiring card payments from small and medium-sized Canadian merchants

Bank of Canada Staff Discussion Paper, No. 2020-5

**Provided in Cooperation with:**

Bank of Canada, Ottawa

*Suggested Citation:* Welte, Angelika; Molnar, Jozsef (2020) : The market for acquiring card payments from small and medium-sized Canadian merchants, Bank of Canada Staff Discussion Paper, No. 2020-5, Bank of Canada, Ottawa, <https://doi.org/10.34989/sdp-2020-5>

This Version is available at:

<https://hdl.handle.net/10419/227816>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

**Staff Discussion Paper/Document d'analyse du personnel —  
2020-5**

Last updated: June 4, 2020

# The Market for Acquiring Card Payments from Small and Medium-Sized Canadian Merchants

---

by Angelika Welte and Jozsef Molnar

Currency Department  
Bank of Canada, Ottawa, Ontario, Canada K1A 0G9  
[awelte@bank-banque-canada.ca](mailto:awelte@bank-banque-canada.ca)



Bank of Canada staff discussion papers are completed staff research studies on a wide variety of subjects relevant to central bank policy, produced independently from the Bank's Governing Council. This research may support or challenge prevailing policy orthodoxy. Therefore, the views expressed in this paper are solely those of the authors and may differ from official Bank of Canada views. No responsibility for them should be attributed to the Bank.

ISSN 1914-0568

©2020 Bank of Canada

## Acknowledgements

We thank Walter Engert, Ben Fung, Fumiko Hayashi, Kim P. Huynh, Sajjad Jafri, Charles Kahn and Alex Shcherbakov for helpful discussions, comments and suggestions. Jozsef Molnar acknowledges the hospitality of the Bank of Canada for his one-year assignment when this paper was written.

## Abstract

This note uses industry data and a unique dataset of small and medium-sized merchants to provide insights into the acquirer-merchant market in Canada. Three main findings are presented. First, smaller merchants pay their acquirer more for every dollar of card payment than larger merchants. Second, this finding is mainly explained by high fixed costs. Third, the acquiring market in Canada is concentrated and has remained fairly stable since 2010.

*Topics: Financial services; Market structure and pricing; Payment clearing and settlement systems*

*JEL codes: C, C2, D, D2, E, E4, E42*

## Résumé

Dans cette note, nous utilisons des données sectorielles et un ensemble de données unique provenant de commerçants de petite ou moyenne taille pour mieux comprendre le marché des commerçants et des acquéreurs au Canada. Nous présentons trois grandes constatations. Premièrement, les petits commerçants versent davantage d'argent à leur acquéreur pour chaque dollar de paiement par carte que les commerçants de moyenne taille. Deuxièmement, cette situation s'explique surtout par des coûts fixes élevés. Troisièmement, le marché de l'acquisition au Canada est concentré, et il est demeuré assez stable depuis 2010.

*Sujets : Services financiers; Structure de marché et fixation des prix; Systèmes de compensation et de règlement des paiements*

*Codes JEL : C, C2, D, D2, E, E4, E42*

## Introduction

The Bank of Canada is the sole issuer of bank notes in Canada and has an ongoing interest in the evolution of retail payments. Card payments are displacing cash at the point of sale (POS), and the role of the Bank of Canada in overseeing retail payments might be expanding. Given these changes, the economics of the card ecosystem has become an area of research for the Bank.<sup>1</sup> The participants in the card ecosystem are the card networks, cardholders, issuers, merchants and acquirers. Acquirers are payment service providers that offer merchants access to the card networks.<sup>2</sup> The Bank's previous research has focused on cardholders, merchants and issuers (Kosse et al. 2017). The purpose of this note is to describe the acquirer-merchant relationship and the acquiring market structure in Canada. In 2018, acquirers provided debit card services to almost 500,000 merchants and credit card services to about 1 million merchants in Canada.<sup>3</sup> Acquirers enable merchants to accept card payments; thus, they play a key role in card payments.

Although the literature (Rochet and Tirole 2002, for example) and industry experts (Van Duynhoven 2010) seem to imply that the Canadian acquiring market is efficient and even competitive, empirical work on fees merchants pay to acquirers and on market structure in Canada is lacking. A report by the European Commission (2006) looks at the acquiring market in the EU-25 group of countries before the creation of the Single Euro Payments Area. Kjos (2007) discusses the US acquiring market, and Ho, Xu and Zhang (2019), using data on Chinese merchants, study a monopolistic acquiring market.

Kosse et al. (2017) compute resource costs of providing cash and card payments in Canada. They use a representative sample of small and medium-sized businesses (SMBs) that responded to the 2015 Retailer Survey on the Cost of Payment Methods (RSCPM). They assume that acquirers' costs are equal to the fees they charge merchants. These fees blend fees remitted to other payment system participants with the acquirers' own fees. In subsequent work, Fung et al. (2018) find heterogeneity in merchant fees. These studies motivate us to analyze acquirer prices by size of business.

Three main findings contribute to our understanding of the Canadian acquiring market:

1. Based on the representative sample of SMBs in Kosse et al. (2017), we find that smaller merchants pay their acquirer more for every dollar of card payment than larger merchants.
2. Monthly fixed fees paid to the acquirer are proportionally more significant for merchants with lower card sales.
3. Four large acquirers process about 85 percent of card transactions in Canada. While we discuss potential drivers of the observed market structure, further research and

---

<sup>1</sup> For more on this, see Annex 4 in the Government of Canada's [Budget 2019](#).

<sup>2</sup> In this note, "acquirer" also includes independent sales organizations (ISOs), unless the distinction is important. ISOs can act as sales agent for full services or offer partial services to merchants who also have an agreement with an acquirer. ISOs do not have direct access to the card network. See "[Payment card industry: the basics for merchants](#)."

<sup>3</sup> See [Interac](#) and [Canadian Bankers Association](#). Our data focus on small and medium-sized POS merchants, which explains why debit and credit card acceptance rates are both in the range of 60 to 70 percent. In contrast, the network data imply that credit cards are accepted by twice as many merchants as are debit cards.

empirical evidence, which are beyond the scope of this note, are needed to assess the efficiency of the Canadian acquiring market.

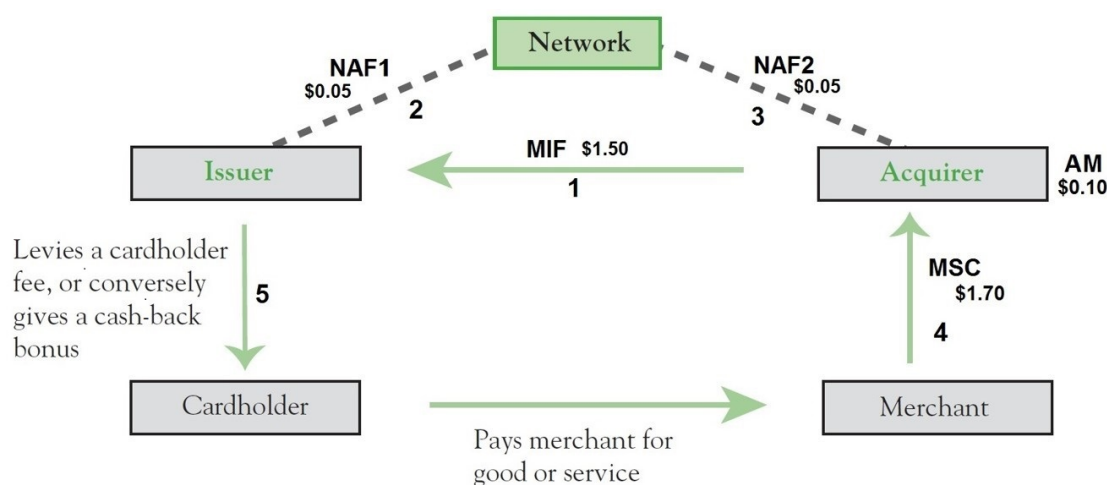
## The role of acquirers in a four-party card system

Most card payments in Canada go through one of two major credit card networks, Visa and MasterCard, or the domestic debit card network, Interac. These card payment systems use a four-party model, where the acquiring, issuing and network operations are separate (**Figure 1**).<sup>4</sup>

Acquirers in the four-party system generally offer three types of service:

- signing up merchants for card networks and supplying them with the necessary equipment;
- authorizing, processing and settling card payments and providing dispute resolution; and
- providing merchants with monthly statements and services such as consulting or integration with accounting systems.<sup>5</sup>

Figure 1: Four-party card payment system



Note: Adapted from Tirole (2011). Amounts and fees are illustrative and reflect only transaction-level charges. MIF is the merchant interchange fee; NAF is the network access fee; AM is the acquirer margin; and MSC is the merchant service charge.

<sup>4</sup> An example of a three-party system is American Express, in which the network acquires merchants and issues payment cards.

<sup>5</sup> A fourth service that can be provided in a four-party card system is the provision of consumer credit. In Canada, Caisse Desjardins provides consumer financing for retail purchases through acquired businesses under the Accord D program.

Canadian acquirers typically charge merchants monthly. The charges consist of fixed and transaction-based fees. The latter are called merchant service charges (MSCs).<sup>6</sup> This price structure, a two-part tariff, is common for service industries (Tirole 1988). **Figure 1** shows how the MSC is distributed across the participants in the card payment system. The MSC usually has three components:

- the multilateral interchange fee (MIF) paid to the card issuer;
- the card network access fee (NAF), which the acquirer must remit to the network;
- the acquirer margin (AM), which is the MSC net of NAF and MIF.<sup>7, 8</sup>

For most credit card payments, all three components are a percentage of the transaction amount. For most PIN debit card transactions, the MSC is a fixed fee per transaction and the MIF is equal to zero.<sup>9</sup> In sum, the merchant's cost is the total of fixed charges and the MSC, while the acquirer's revenue (net of MIF and NAF) is the total of fixed charges and the AM.

The 2015 RSCPM data are a representative sample of small and medium-sized brick-and-mortar merchants that accepted payments at a physical POS. The data show that economies of scale exist for these merchants. With the two-part tariff structure consisting of a fixed monthly charge and per-transaction MSC, merchants with higher sales have a lower acquiring cost per dollar.

**Table 1** breaks down acquirer charges by sales. We find that total acquirer charges in 2014 were around \$539 per month on average, representing 1.8 percent of the processed card sales. Of those charges, on average, fixed charges account for \$56 a month, or just under 0.5 percent of the total processed card sales. MSCs account for \$483 or 1.3 percent of the total processed card sales. SMBs with less than \$250,000 in annual sales are considered small, those with sales between \$250,000 and \$850,000 are considered medium, and those with sales above \$850,000 are considered large.<sup>10</sup> Small businesses have the highest relative cost (3.8 percent of processed card sales), while large businesses have the lowest relative cost (1.3 percent). This difference is explained mainly by the share of fixed charges. For a typical small business, fixed charges make up about one-third of their monthly charges (\$47 out of a total of \$131), while they are just 4 percent for a larger SMB (\$68 out of a total of \$1,594). Almost half of businesses with annual sales below \$250,000 report higher fixed charges than variable fees (MSCs) in a typical month. In contrast, only 17 percent of mid-range SMBs and

---

<sup>6</sup> This price structure has been confirmed by more than 100 merchant statements submitted by respondents to the 2015 RSCPM.

<sup>7</sup> See [Moneris](#). Different systems refer to the NAF in different ways: Visa calls it the Acquiring Assessment Fee, MasterCard uses the term Acquiring Network Assessment Fee, and Interac uses the term Switch Fee.

<sup>8</sup> Before 2015, the average MIF for a consumer credit card was 1.7 percent, and MasterCard MIFs were somewhat higher than Visa MIFs (Hayashi, Cuddy and Hanson 2014). [MasterCard](#) contactless card payments below a certain threshold have a fixed-fee MIF instead of a percentage. According to [Moneris](#), MasterCard set its NAF at 0.077 percent and Visa at 0.08 percent for processing Canadian ("domestic") credit cards.

<sup>9</sup> We focus here on Interac debit card transactions. (Contactless Interac Flash transactions, which are growing quickly, have an interchange fee.)

<sup>10</sup> The boundaries for small, medium and large businesses line up with revenue quartiles published by [Innovation, Science and Development Canada](#) for SMBs in the retail, restaurant and service industries.

6 percent of the larger SMBs report this. Therefore, fixed charges are a significant factor for smaller SMBs but are less important for larger ones.

The relative impact of fixed charges could explain why 41 percent of the small brick-and-mortar businesses in our sample accept only cash. In our sample, the variable fees (MSCs), as a share of card sales, are also higher for the smaller SMBs, at 1.8 percent, compared with 1.2 percent for the larger SMBs. We do not break down the MSC further into its three components. However, Cohen (2010) states that the AM varies with merchants' turnover. Further, interchange fees (MIFs set by the network) vary across merchant categories and with the technology used for processing transactions.<sup>11</sup> On one hand, the effect of these variations appears to be that the combined MSCs for debit and credit cards are higher for smaller merchants in the data. On the other hand, a different mix of debit and credit card transactions or lower average sales amounts at smaller businesses could also explain the difference in relative MSCs.

**Table 1: Breakdown of acquirer charges borne by small and medium-sized businesses**

	Monthly acquirer charges				Percent of card sales			
Merchant revenue	Fixed charges	MSC	Total charge	Fixed charges exceed MSC	Fixed charges	MSC	Total charge	Cash only
< 250K	\$47	\$84	\$131	0.47	2.04	1.78	3.82	0.41
250K–850K	\$57	\$322	\$379	0.17	0.28	1.22	1.51	0.04
>850K	\$68	\$1,526	\$1594	0.06	0.06	1.20	1.26	0.04
All	\$56	\$483	\$539	0.26	0.50	1.34	1.84	0.24

Note: Rows represent business categories by total sales in cash and cards. The first three columns report acquirer charges in dollars. The fourth column reports the share of merchants that bear fixed charges higher than MSCs. The next three columns report charges as a percentage of processed card sales. The last column reports the share of businesses that accept cash only and do not accept debit or credit cards. The table is based on 801 respondents; however, sample sizes vary in each cell. Estimates are computed after dropping the highest 5 percent of entries from the respective subsamples and taking the weighted sample mean. We drop the highest 5 percent since these businesses had low card volumes in the reporting period, resulting in higher proportional charges. Qualitatively, including all businesses does not change the relative size of the estimates when comparing across revenue categories. Untrimmed results are available upon request. Survey weight used (Chen and Shen 2017).

<sup>11</sup> MIFs are set by the network and also vary with merchant sales. In 2014, lower MIFs were available to merchants with at least \$400 million in sales (MasterCard) or least \$850 million in sales (Visa). The merchants in our sample are below this threshold. Our merchant data are for the year 2014. As announced by the [Department of Finance](#), Visa and MasterCard adjusted their interchange fees with the aim of "levelling the playing field in the latter half of 2014 and in 2018.



## Market structure

This section describes market shares in the Canadian acquiring market. The market shares are computed from industry data and from the 2015 RSCPM.<sup>12</sup> While industry data paint a broad picture over time, the RSCPM data shed light on how the overall market shares might be driven by, for example, merchants' locations or their other banking choices.

Before describing the acquiring market structure, we provide some context for the acquiring market in Canada. While acquirers in Canada need not be banks, most acquirers have historical ties to banks or other deposit-taking institutions, and those links can influence merchants' choice of acquirer.<sup>13</sup> Until 2008, competition authorities required a non-duality framework, meaning one financial institution could not be a member of both Visa and MasterCard associations.<sup>14</sup> Financial institutions generally issued and acquired for the credit card network they were a member of. The non-duality rule was to prevent a single financial institution from dominating the issuing or acquiring markets. Before the non-duality rule was dropped in 2008, some Canadian banks had already transferred their acquiring operations to other, non-bank, entities. In 2000, the Royal Bank of Canada (RBC) and the Bank of Montreal (BMO), under joint investment, created Moneris Solutions, while the Canadian Imperial Bank of Commerce (CIBC) sold its acquiring operations and bought part of the acquirer Global Payments. In 2002, Scotiabank sold its acquiring business to Chase Paymentech Solutions. As of 2019, CIBC and Scotiabank refer their business customers to Global Payments and Chase Paymentech Solutions, respectively.<sup>15</sup> A similar relationship exists between National Bank of Canada and the acquirer First Data Corporation. When the RSCPM sample was collected, TD Canada Trust and Desjardins Group still ran their own acquiring businesses. In November 2019, Global Payments bought Desjardins Group's Canadian acquiring business. As part of this transfer, Desjardins agreed to refer its clients exclusively to Global Payments for a period of 10 years.<sup>16</sup>

**Chart 1** shows that from 2010 to 2018 five companies provided most acquiring services in Canada in terms of the number of transactions. Based on these estimates, from 2010 to 2018 Moneris Solutions was the largest acquirer in Canada, with a market share around 30 to 40 percent. Global Payments and Chase Paymentech Solutions followed with around 20 percent of the market each, and TD Merchant Solutions had 10 to 15 percent. Desjardins was the fifth-largest acquirer with a market share just under 10 percent. All other acquirers contributed smaller shares. These top five acquirers covered about 85 to 90 percent of card transactions in Canada and maintained stable market shares from 2010.

---

<sup>12</sup> See Kosse et al. (2017) for a detailed description of the study design.

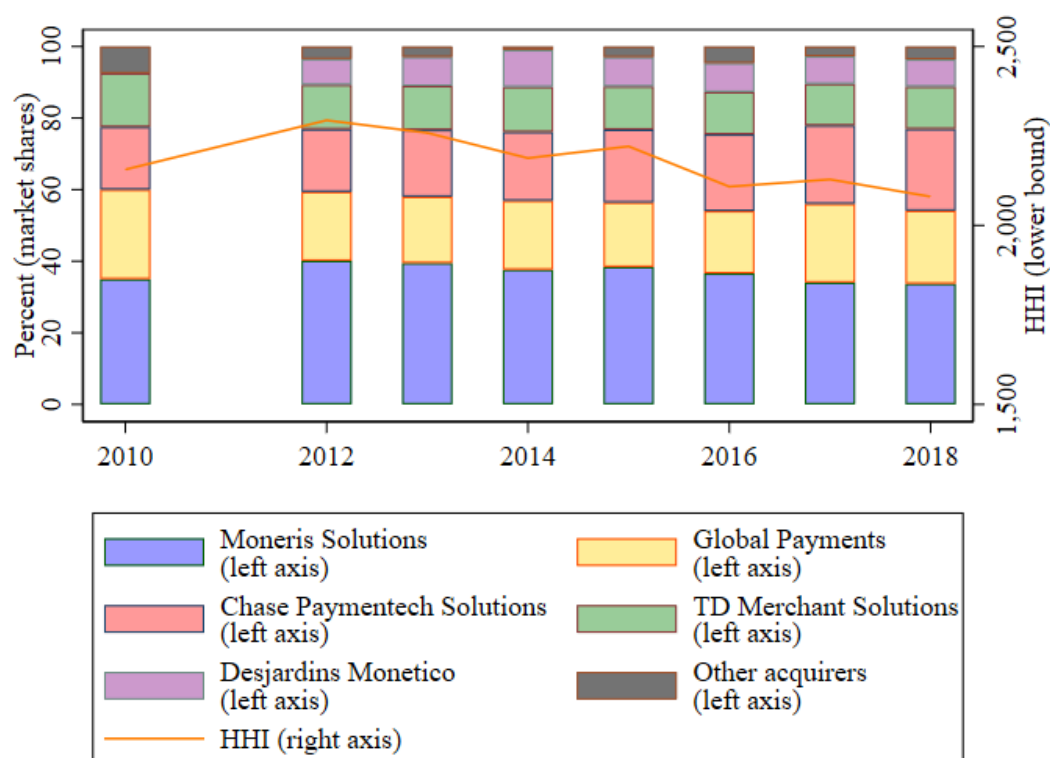
<sup>13</sup> Acquirers' relationships with merchants, networks and issuers fall under the [Code of Conduct for the Credit and Debit Card Industry in Canada](#). The code of conduct was set up in 2010 and updated in 2015.

<sup>14</sup> See the [Competition Bureau](#).

<sup>15</sup> See [CIBC](#) and [Scotiabank](#).

<sup>16</sup> See, for example, this Global Payments [news release](#).

Chart 1: Acquirers' market shares, 2010 to 2018

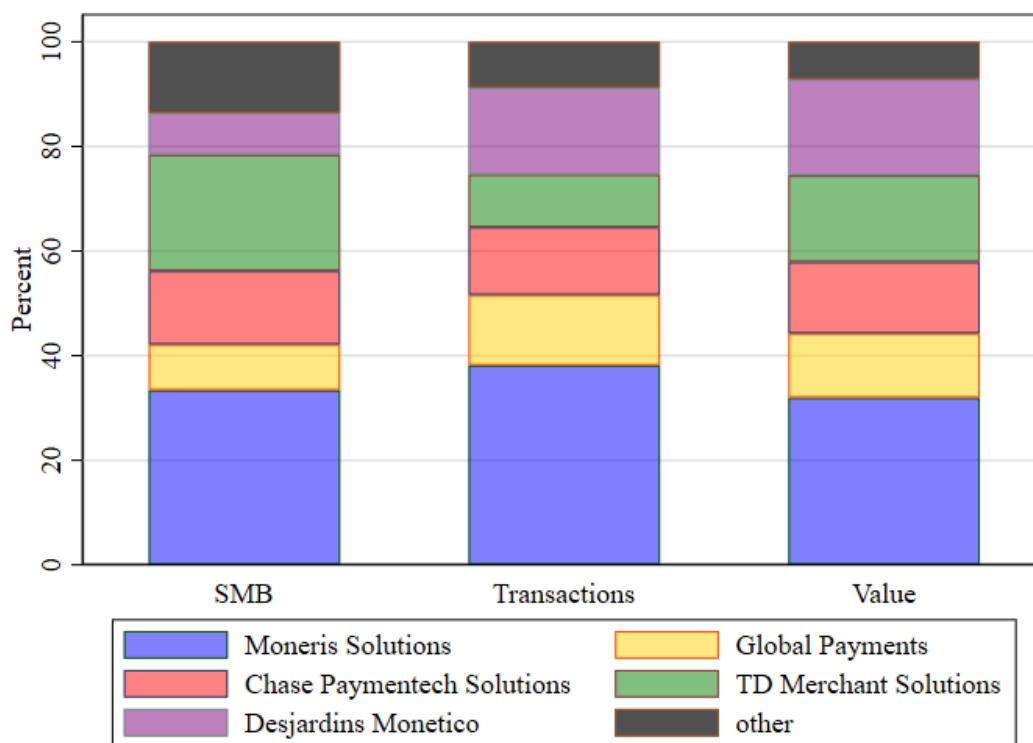


Note: This figure was generated from multiple data sources: for 2010, it draws on a report by Deloitte (2010); for subsequent years, it draws on The Nilson Report as well as data reported by the Canadian Bankers Association and Interac. No data were available for 2011. The following assumptions were made to compute market shares for Canada: The total volume of Visa and MasterCard transactions is from credit card statistics compiled by the Canadian Bankers Association. Data for Amex transactions are from The Nilson Report, and debit-transaction volumes are reported by the Interac association. Moneris, Global Payments and TD Canada volumes are global volume minus US volume, Europe volume and Asia-Pacific volume. Chase Paymentech Solutions volume is assumed to grow at the same rate as Chase US because no separate numbers are available. Desjardins is taken as reported by The Nilson Report. To compute the share, estimated processed volume for each acquirer (from The Nilson Report) is divided by the estimated total volume of card transactions (Canadian Bankers Association, Interac and Amex). The Herfindhal-Hischmann Index (HHI) is computed as the sum of squared market shares (in percent). The highest possible HHI is 10,000 and corresponds to a monopoly.

**Chart 2** shows the estimated market shares of acquirers in 2014 for SMBs according to three different measures from the RSCPM data: number of merchants (SMBs), number of transactions and transaction value. In these data, the top five acquirers also account for 85 to 90 percent of the transactions, but the share of Desjardins and smaller acquirers outside the top five is larger than in the Nilson data discussed above.<sup>17</sup>

<sup>17</sup> Other, smaller acquirers in these data include Elavon and First Data.

Chart 2: Acquirers' market shares in 2014 (RSCPM)



Note: The chart shows market shares of acquirers. Market shares are expressed in terms of the number of small and medium-sized businesses, the number of processed transactions and the value of processed transactions. Source: 2015 RSCPM data, survey weight used (Chen and Shen 2017).

Several factors could explain the differences between the two sources. First, the RSCPM sample covers SMBs with a physical POS that operate in three industries: retail, food and accommodation services, and personal services. If an acquirer focuses on other industries, large businesses and chains, or online merchants, the RSCPM will underestimate its share. Finally, the accuracy of the market shares in **Chart 1** (computed from The Nilson Report data) is limited because we have to estimate the volumes processed for Canada. The Nilson Report does not always report separate numbers for Canada even though some acquirers have multinational operations.

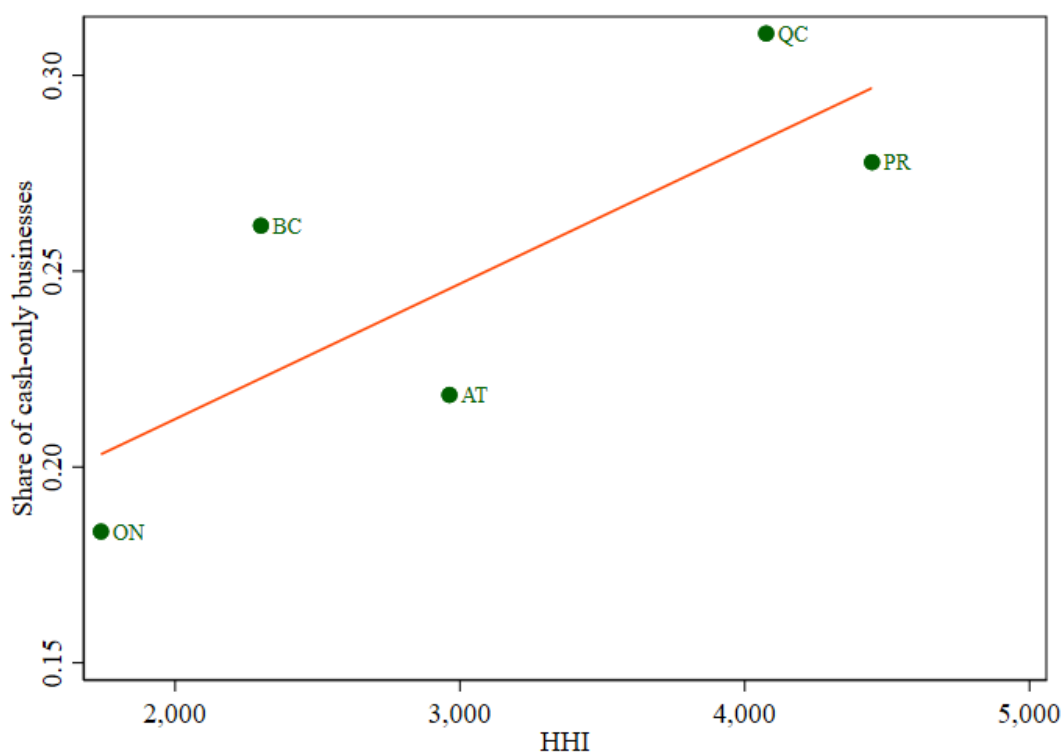
The recent transfer of Desjardins's acquiring portfolio to Global Payments further emphasizes the role of the remaining four large acquirers. The joint market share of the four largest firms provides a straightforward measure of concentration. Our data sources suggest a concentrated and stable acquiring market by Canadian standards, since four companies supply more than two-thirds of acquiring services.<sup>18</sup> A different concentration measure, the Herfindhal-Hirschmann Index (HHI), also indicates that the market is concentrated.<sup>19</sup>

<sup>18</sup> [Competition Bureau Canada's Merger Enforcement Guidelines](#) characterize a market as concentrated if the four largest firms have more than 65 percent of the market.

<sup>19</sup> The HHI is computed as the sum of the squared market shares in terms of transactions and then multiplied by 10,000. The HHI was used by the European Commission (2006) to study the structure of the acquiring market in various European Union member states.

The RSCPM and other surveys have found that cash and card use vary across regions in Canada. For example, businesses and consumers rely more on cash in Quebec than in other regions (Henry, Huynh and Welte 2018). We also find regional variation in market concentration. The acquiring market appears to be most concentrated in the Prairies and Quebec and least concentrated in Ontario (**Chart 3**).

Chart 3: Concentration in the acquiring market and cash preference



Note: This chart plots the share of cash-only businesses against the Herfindhal-Hirschmann Index (HHI) for five regions of Canada: Ontario (ON), British Columbia (BC), Atlantic provinces (AT), Quebec (QC) and Prairie provinces (PR). The orange line shows how much of the increase in the cash share is correlated with the increase in the HHI.

## Potential drivers of market structure

A concentrated market has often been associated with high fixed set-up and operating costs (Tirole 1988), brand loyalty (consumer “stickiness”) or regulation (Bain 1959). These features, in turn, could generate barriers to entry that lead to a concentrated market structure. In this section, we explain how the costs of doing business and brand loyalty appear to be relevant factors for the acquiring market in Canada.

Acquirers incur ongoing fixed costs and variable costs (Cohen 2010). Fixed operating costs are incurred regardless of how many merchants are acquired; that is, these costs prevail whether the acquirer signs up 10 or 10,000 merchants. Variable costs, however, vary directly with the number of merchants acquired and with the number and value of transactions processed.

Acquirers bear large fixed costs for setting up, running and modernizing their payment infrastructure. Furthermore, there are costs for every signed-up merchant. These include customer service and recruitment, preparation and provision of statements, and maintenance and technical support for POS terminals. These costs appear as fixed charges to the merchant (as statement fees or equipment rental costs), but they are variable for the acquirer according to the number of merchants served. Variable costs for the acquirers also include the fees they pay to the card issuers (MIF) and card networks (NAF). The acquirer does not set these fees and must remit them to card issuers and networks.<sup>20</sup> Other variable costs come from disputed card transactions and “float fees” related to MIF and AM. These pose financial risks for acquirers that increase with the transaction volume and amount. According to guidelines published by Mastercard and Visa, the acquirer might have to cover a disputed, previously authorized transaction when the merchant is found liable but does not have the funds to cover the loss.<sup>21</sup> Financial risks due to float fees are incurred because the acquirer deposits funds into the merchant’s account shortly after a purchase but receives the MSC only later, typically after the monthly statement has been issued.

Merchant charges in a concentrated and stable acquiring market are not necessarily higher than they would be in a more fragmented market. Similar to Allen and Engert’s (2007) work on concentration and efficiency in the Canadian banking sector, we see three main reasons why merchant charges would not decrease in a less concentrated market. First, in the presence of high fixed costs, the market would also face trade-offs between concentration and efficiency. While a less concentrated market with many small acquirers could be more competitive, prices charged to merchants would not necessarily be lower because each small acquirer would have a large fixed cost to distribute among fewer subscribing merchants. Second, stability in the acquiring market also means that existing acquirers are reliable. Merchants usually want to be sure that transactions settle without problems or frictions and that they can access their funds as soon as possible after supplying the good or service to the cardholder. Third, even in a concentrated market, large acquirers might not be able to charge excessive prices or provide poor service if there is a credible threat from existing competitors, or from potential entrants (“contestability”), where a new firm would take up the dissatisfied consumers.

In summary, since participating in the acquiring market requires a large investment, to operate profitably an acquirer must attract and retain many merchants and large transaction volumes. High fixed costs, therefore, could be part of the explanation for why the acquiring market in Canada and elsewhere is concentrated and stable.

Indeed, the structure of the Canadian acquiring market is similar to that of acquiring markets in other countries with mature card payment systems. The Nilson Report states that the five largest acquirers in the US market accounted for about 80 percent of the transactions processed in 2018 and that their share had increased from 70 percent in 2008. Likewise, the Australian market has been dominated by four acquirers (Katz 2001 and The Nilson Report). Evans and Schmalensee (2005) conclude that the US acquiring market is concentrated and yet competitive. First, they argue that the AM portion of the MSC is generally much smaller than the MIF portion and has been falling over time. For Canadian merchants, the AM is also much lower than the MIF, but our data show that conclusions about acquirer pricing need to

---

<sup>20</sup> For more details, see Moneris: [“Interchange 101: What It Is and How It’s Determined.”](#)

<sup>21</sup> See MasterCard’s [“Chargeback Guide”](#) and Visa’s [“Dispute Management Guidelines for Visa.”](#)

consider both AM and fixed charges. Thus, it is not clear how and whether Evans and Schmalensee's reasoning can be applied to the Canadian market.

The second part of their argument is that merchants can obtain quotes from several acquirers and switch quite easily. The cost of switching in the Canadian acquiring market is an open question. To address it, we would need to understand how often and under what circumstances Canadian merchants switch acquirers. The Code of Conduct for the Credit and Debit Card Industry in Canada specifies that merchants' fixed-term contracts with acquirers can be extended only for a period of six months after the initial fixed term, thus giving merchants the option to switch after the initial contract expires.<sup>22</sup> However, this rule came into effect only in 2015, after the 2015 RSCPM was conducted.

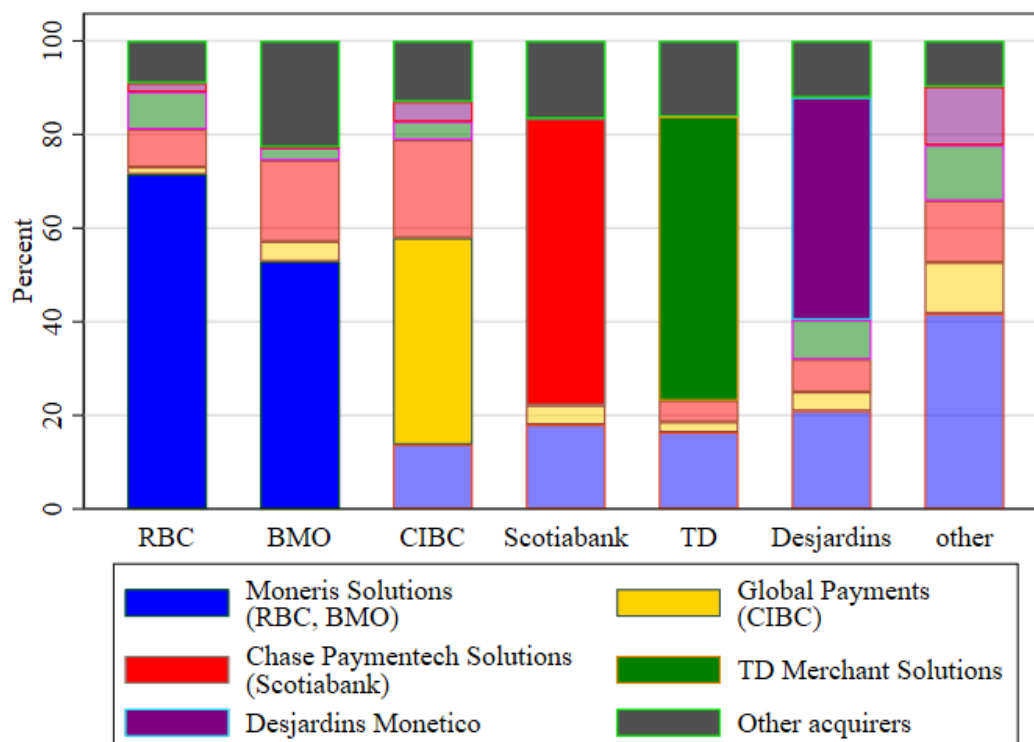
At the same time, we find that at least half the merchants in our dataset appear to bundle acquiring services with their main bank account, which could make switching more difficult. **Chart 4** shows the percentage of merchants in our study whose acquirer is related to their main bank. We see that each financial institution's affiliated acquirer is the dominant acquirer for each financial institution's customers. Put differently, the share of the affiliated acquirer is larger in each column than it is overall, and these differences are statistically significant.<sup>23</sup> For example, around 55 percent of combined RBC and BMO customers use Moneris as their acquirer, while only 20 percent of the clients of other banks use Moneris. This means that a business banking with RBC or BMO is more than twice as likely to use Moneris as its acquirer than are businesses that bank with other financial institutions.

---

<sup>22</sup> See [Code of Conduct for the Credit and Debit Card Industry in Canada](#).

<sup>23</sup> This is based on a chi square test, available upon request.

Chart 4: Acquirers' market shares in RSCPM conditioned on merchant's main bank



Note: The chart shows market shares of acquirers among the clients of a particular financial institution. Market shares are expressed in terms of the number of processed transactions. Source: 2015 RSCPM data, survey weight used (Chen and Shen 2017).

While large merchants could sponsor a new, lower-cost entrant, typically the larger merchants also negotiate favourable rates with their existing acquirer.<sup>24</sup> Smaller merchants, however, may have limited bargaining power in the acquirer-merchant relationship. One way for an acquirer to attract small merchants and for smaller merchants to obtain more favourable pricing would be exclusive member pricing for small business and industry associations. Examples include the partnerships between Chase Paymentech and the Canadian Federation of Independent Business and between Elavon and Costco.<sup>25</sup>

Square is a relatively new entrant in the Canadian payment processing market. It offers services without monthly fixed charges; that is, the merchant pays only the (variable) MSC. Square uses the infrastructure of other acquirers to route its transactions.<sup>26</sup> As advertised on the Square website, its fees are 2.65 percent of PIN credit card transactions and 10 cents per Interac debit card transaction.<sup>27</sup>

<sup>24</sup> See, for example, paragraph (35) in De Armas (2010).

<sup>25</sup> For more details, see [Canadian Federation of Independent Business](#) and [Costco](#).

<sup>26</sup> See [Square's legal terms](#).

<sup>27</sup> See [Square's pricing](#).

As this market is two-sided (Rochet and Tirole 2002, Fung, Huynh and Kosse 2017), the economic interpretation of the acquirer-merchant market must also consider the issuer-cardholder side. On the one hand, as **Chart 3** shows, the share of cash-only businesses seems to increase with concentration. In this regard, the Prairies and Quebec have the highest concentration in these data and the highest cash-only (lowest card acceptance) rates. Ontario has the lowest concentration with the highest card acceptance rate. Given these results, the acquiring market might be seen as less competitive in the Prairies and Quebec. This could lead to high acquiring fees that might discourage smaller merchants from accepting cards.

On the other hand, influences on the cardholder side of the market could also explain this pattern. Huynh, Nicholls and Shcherbakov (2019) show empirically that merchant acceptance responds to consumer payment preferences, and Henry, Huynh and Welte (2018) find that consumers in Quebec have a greater relative preference for cash over cards. In this case, the demand for acquiring services could be lower in Quebec, and acquirers might choose not to invest as much, given local preferences. Also, note that British Columbia and the Prairies have similar levels of card acceptance, but the acquiring market in British Columbia is significantly less concentrated than in the Prairies. Clearly, more data from both the acquirer-merchant and issuer-consumer sides are needed to assess the statistical and economic relationship between concentration and cash preference.

## Concluding remarks

This note describes the card acquiring market in Canada. We use the 2015 RSCPM and industry sources to shed light on market shares, prices and costs. We find that five participants supplied the majority of acquiring services between 2010 and 2018. The market appears to be stable and mature, and new entrants would face challenges, including economies of scale and merchants' preference to bundle acquiring with other banking services. Furthermore, acquirers use two-part tariff pricing, and fixed acquirer charges might affect card acceptance for small merchants to the same extent as transaction-level charges. This work complements Fung et al.'s (2018) work on the latter type of charges. Finally, in the data, market structures and card acceptance differed across regions.

We point out several areas for future research. First, the analysis is based on survey data for 2014. Since the Code of Conduct for the Credit and Debit Card Industry in Canada was updated in 2015 and interchange fees were voluntarily reduced after the period covered by the survey, the fee structure may have changed.<sup>28</sup> The exit of Desjardins from the acquiring market might also affect the market structure. We need more recent data to understand how and whether these developments also changed the market shares and pricing of acquirer services.

Second, this analysis of acquirer fees applies to small and medium-sized businesses. Each large business or chain would contribute a considerable number of transactions to the market share of their chosen acquirer. Based on our analysis, large firms probably pay less per dollar of processed card payment than the businesses in our sample. However, simple numerical extrapolation would likely not be accurate. Jiongo (2017) discusses this issue further. A related caveat is that smaller businesses have high fixed costs compared with their revenue for cost items other than payment processing.<sup>29</sup> Also, although economic theory usually discusses

<sup>28</sup> See this backgrounder from the [Department of Finance Canada](#).

<sup>29</sup> See, for example, the financial performance indicators published by [Innovation, Science and Economic Development Canada](#).



two-part tariffs in relation to market power, many service industries use this type of pricing, and the relationship between pricing structure and competition is an active area of research (Lambrecht et al. 2012). Combining insights from this area with research on two-sided card payment systems would therefore be valuable.

Further, and perhaps more relevant in terms of the economic interpretation, a concentrated and stable acquiring industry could function in an efficient and reliable manner. Card ecosystems around the world have seen the involvement of public authority (Hayashi and Maniff 2019). However, we caution that our analysis cannot assess the efficiency and degree of competition in the Canadian acquiring industry. We leave this assessment as an open research question.

---

## References

- Allen, J. and W. Engert. 2007. "Efficiency and Competition in Canadian Banking." *Bank of Canada Review* (Summer): 33–45.
- Bain, J. S. 1959. *Industrial Organization*. New York: Wiley.
- Chen, H. and R. Shen. 2017. "The Bank of Canada 2015 Retailer Survey on the Cost of Payment Methods: Calibration for Single-Location Retailers." Bank of Canada Technical Report No.109.
- Cohen, J. 2010. "Witness Statement of Jordan Cohen." Available at <https://decisions.ct-tc.gc.ca/ct-tc/cdo/en/item/463342/index.do>.
- De Armas, M. 2010. "Witness Statement of Mario De Armas." Available at <https://decisions.ct-tc.gc.ca/ct-tc/cdo/en/item/463361/index.do>.
- Deloitte. 2010. "Canadian Payments Landscape." Prepared for the Task Force for the Payments System Review.
- European Commission. 2006. "Interim Report I: Payment Cards—Sector Inquiry under Article 17 Regulation 1/2003 on Retail Banking." Available at [https://ec.europa.eu/competition/sectors/financial\\_services/inquiries/interim\\_report\\_1.pdf](https://ec.europa.eu/competition/sectors/financial_services/inquiries/interim_report_1.pdf).
- Evans, D. S. and R. Schmalensee. 2005. *Paying with Plastic: The Digital Revolution in Buying and Borrowing*. Second edition. Cambridge: MIT Press.
- Fung, B., K. P. Huynh and A. Kosse. 2017. "Acceptance and Use of Payments at the Point of Sale in Canada." *Bank of Canada Review* (Autumn): 14–26.
- Fung, B., K. P. Huynh, K. Nield and A. Welte. 2018. "Merchant Acceptance of Cash and Credit Cards at the Point of Sale." *Journal of Payments Strategy & Systems* 12 (2): 150–165.
- Hayashi, F., E. Cuddy and J. Hanson. 2014. "Credit and Debit Card Interchange Fees in Various Countries: August 2014 Update." Payments System Research Department, Federal Reserve Bank of Kansas City.
- Jiongo, V. D. 2017. "The Bank of Canada 2015 Retailer Survey on the Cost of Payment Methods: Estimation of the Total Private Cost for Large Businesses." Bank of Canada Technical Report No. 110.
- Hayashi, F. and J. L. Maniff. 2019. "Public Authority Involvement in Payment Card Markets: Various Countries. August 2019 Update." Payments System Research Department, Federal Reserve Bank of Kansas City.
- Henry, C. S., K. P. Huynh and A. Welte. 2018. "2017 Methods-of-Payment Survey Report." Bank of Canada Staff Discussion Paper No. 2018-17.

Ho, C.-Y., L. L. Xu and D. Zhang. 2019. "Acquirer-Merchant Bargaining in the Payment Card Industry." Working paper.

Huynh, K. P., G. Nicholls and O. Shcherbakov. 2019. "Explaining the Interplay Between Merchant Acceptance and Consumer Adoption in Two-Sided Markets for Payment Methods." Bank of Canada Staff Working Paper No. 2019-32.

Katz, M. 2001. "Reform of Credit Card Schemes in Australia II." Report commissioned by the Reserve Bank of Australia.

Kjos, A. 2007. "The Merchant-Acquiring Side of the Payment Card Industry: Structure, Operations, and Challenges." Payment Cards Center discussion paper. Federal Reserve Bank of Philadelphia.

Kosse, A., H. Chen, M.-H. Felt, V. D. Jiongo, K. Nield and A. Welte. 2017. "The Costs of Point-of-Sale Payments in Canada." Bank of Canada Staff Discussion Paper No. 2017-4.

Lambrecht, A., K. Seim, N. Vilcassim, A. Cheema, Y. Chen, G. S. Crawford, K. Hosanagar, R. Iyengar, O. Koenigsberg, R. Lee, E. J. Miravete, and O. Sahin. 2012. "Price Discrimination in Service Industries." *Marketing Letters* 23 (2): 423–438.

The Nilson Report. 2013–2019. Issues 1013,1029,1036, 1049,1059, 1065, 1071,1073,1082, 1087, 1094, 1095, 1105,1110,1116, 1117, 1127,1132, 1139, 1149, 1153, 1159 and 1161.

Rochet, J.-C. and J. Tirole. 2002. "Cooperation among Competitors: Some Economics of Payment Card Associations." *RAND Journal of Economics* 33 (4): 549–570.

Tirole, J. 1988. *The Theory of Industrial Organization*. Cambridge: MIT Press.

Tirole, J. 2011. "Payment card regulation and the use of economic analysis in antitrust." *Competition Policy International* 7 (1): 136–158.

Van Duynhoven, J. 2010. "Witness Statement of Jeff Van Duynhoven." Available at <https://decisions.ct-tc.gc.ca/ct-tc/cdo/en/item/463437/index.do> (accessed April 29, 2020).