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Debit, Credit and Cell: Making Canada a Leader in the Way We Pay

To meet the needs of an evolving global economy, Canada must modernize its payment technologies and payment system governance infrastructure. Restrictions on competition and risk-taking must be eliminated

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The Study In Brief

Canadians are avid users of debit and credit cards and other electronic payment options. Compared to consumers in other countries, they are among the heaviest users of debit cards to make purchases at retail stores. They appreciate the convenience and relative safety that electronic payments offer. Merchants also see important benefits, including instantaneous access to funds without the processing time, clearance delay, physical limitations and non-payment risk associated with cheques.

But Canada's payment system has fallen behind – cell phones with payment capabilities have been around for years in some countries, but are only starting now to make inroads in Canada. Cheques, which are relatively costly and slow to clear, are still widely used, with about one billion of them written annually in Canada. And Canadian debit cards lack features taken for granted in other parts of the world, such as the ability to use them for many online transactions and at stores located abroad.

In this *Commentary*, we argue that the country's current payment technologies and governance infrastructure must change. In particular, we must remove barriers to competition and risk-taking: the nation's main debit network, the Interac Association, operates as a cooperative under a Competition Bureau consent order; it should be allowed to compete on a for-profit basis. Also, limits on the number of networks that can coexist on debit cards should be removed—such bans are detrimental to effective competition and innovation.

We argue that potential market failures open the door for a government role in establishing a regulatory and governance framework in the payments sphere. In particular, this framework should address the need to guard against systemic risks and to ensure appropriate levels of information and disclosure As such, it is appropriate for the Bank of Canada to have responsibility, under the *Payment Clearing and Settlement Act*, for the oversight of systemic risk in clearing and settlement arrangements.

For similar reasons, the Canadian Payments Association's role should be focused on operating the systemically important parts of the Canadian payments system. Finally, the Department of Finance is well placed to establish a coherent regulatory framework, one based on clear principles applied equally, such as uniform disclosure standards.

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Over the past 30 years, Canada's homegrown Interac debit card system helped facilitate the spread of credit and other payment cards. However, according to the final report of the federal Task Force for the Payments System Review, "Canada is falling behind" in the adoption of new electronic payment technologies.[1]

Unlike consumers in some other countries, most Canadians can't use their cellphones to make payments, and paper cheques are still widely used among governments, businesses and consumers, with about one billion cheques written annually.[2] As well, Canadian debit cards lack features taken for granted in other parts of the world, such as the ability to use them for many online transactions and at stores located abroad.

To meet the needs of an evolving global economy, Canada must modernize its payment technologies and payment system governance infrastructure. In particular, restrictions on competition and risk-taking must be eliminated: the Interac Association, a diverse group including banks and payment-related companies that operates as a cooperative under a Competition Bureau consent order, should be allowed to operate on a for-profit basis. Limits on the number of networks that can coexist on debit cards should be removed—such bans are detrimental to effective competition and innovation.

Furthermore, we question recent calls, notably from the government's Task Force, for additional regulations and a broader governance structure for the Canadian payments market. In this *Commentary*, we review the conditions under which regulatory intervention might be warranted, with a focus on the retail payments market. According to principles of sound regulation, policing an economic sector is justified only if (a) there is a substantial market failure and (b) the market failure it is intended to address is more costly than the impact of the regulation.

Much of the impetus for further regulation of the payments market rests on the concept of "fairness," or the lack thereof. For instance, some argue that fees imposed on merchants do not reflect marginal costs and are therefore unfair to them; or that there is an unfair cross-subsidization among classes of consumers, such as between cash-paying and card-paying consumers. Neither argument is, in our opinion, well grounded.

Our analysis nonetheless identifies potential market failures that open the door for a government role in establishing a regulatory and governance framework in the payments sphere. In particular, the

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1 The December 2011 final Report of the Task Force, *Moving Canada into the Digital Age*, and its interim report, *The Way We Pay: Transforming the Canadian Payments System* are available at www.paymentsystemreview.ca.

2 It is worth noting however that in May 2012, Canadian banks and credit unions announced a set of voluntary guidelines that should help support the development of mobile payments in Canada.

need to guard against systemic risks and to ensure appropriate levels of information and disclosure for market participants are appropriate public policy objectives. As such, the Bank of Canada should retain the responsibility, under the *Payment Clearing and Settlement Act*, for the oversight of systemic risk in clearing and settlement arrangements. For similar reasons, the Canadian Payments Association's role should be focused on operating the systemically important parts of the Canadian payments system. Finally, the federal Department of Financet is well placed to establish a coherent regulatory framework, one based on clear principles applied equally, such as uniform disclosure standards.

1. The Economics of Electronic Payment Systems

The growing use of electronic payments – mainly through payment cards such as debit and credit cards – by consumers and their acceptance by merchants generate important benefits. While many transactions can be conducted efficiently with paper, electronic payments provide benefits for many merchants that other payment methods can't match, including instantaneous access to funds without the processing time, clearance delay, physical limitations and non-payment risk associated with cheques. Furthermore, electronic payments limit the costs of handling, storing, securing and transporting cash (Zywicki 2010).

Electronic payments also facilitate economic efficiency by relaxing liquidity (cash) constraints on consumers, providing flexibility that benefits both consumers and merchants. An efficient, secure electronic payment network is also important for e-commerce and online shopping, which can be especially valuable for small start-ups.

Electronic payments relieve consumers of the risk and inconvenience of obtaining and carrying cash. Indeed, widespread use of electronic payments makes it easier for consumers to manage their finances by providing an itemized record of their purchases. As well, these accessible records facilitate consumers in returning defective or unsatisfactory products.

While benefits come with corresponding costs, the global use and acceptance of electronic payments suggests that their benefits outweigh their costs. At the same time, the growing move from paper to various electronic payments suggests that their net benefits outweigh those of their paper alternatives.

Efficiency and the Particularities of Two-Sided Markets

The purpose of payment systems is to coordinate the interactions of buyers and sellers. Such systems are sometimes referred to as "two-sided markets," of which there are many examples (Rochet and Tirole 2003).

Shopping malls, for example, are two-sided markets in that they provide a platform to facilitate the interaction of consumers and retailers. Newspapers offer another example, with the paper acting as a platform for interactions between advertisers and consumers. These markets have network characteristics, in that the more potential consumers they reach, the more valuable they are. In the case of payment cards, the larger the number of merchants who accept a particular card, the more consumers will be attracted to holding such a card, which in turn makes the card more attractive to merchants to accept.

Because of their two-sided nature, payment systems and other two-sided markets have economic characteristics that distinguish them from traditional economic markets and, therefore, present unique challenges for regulatory intervention.

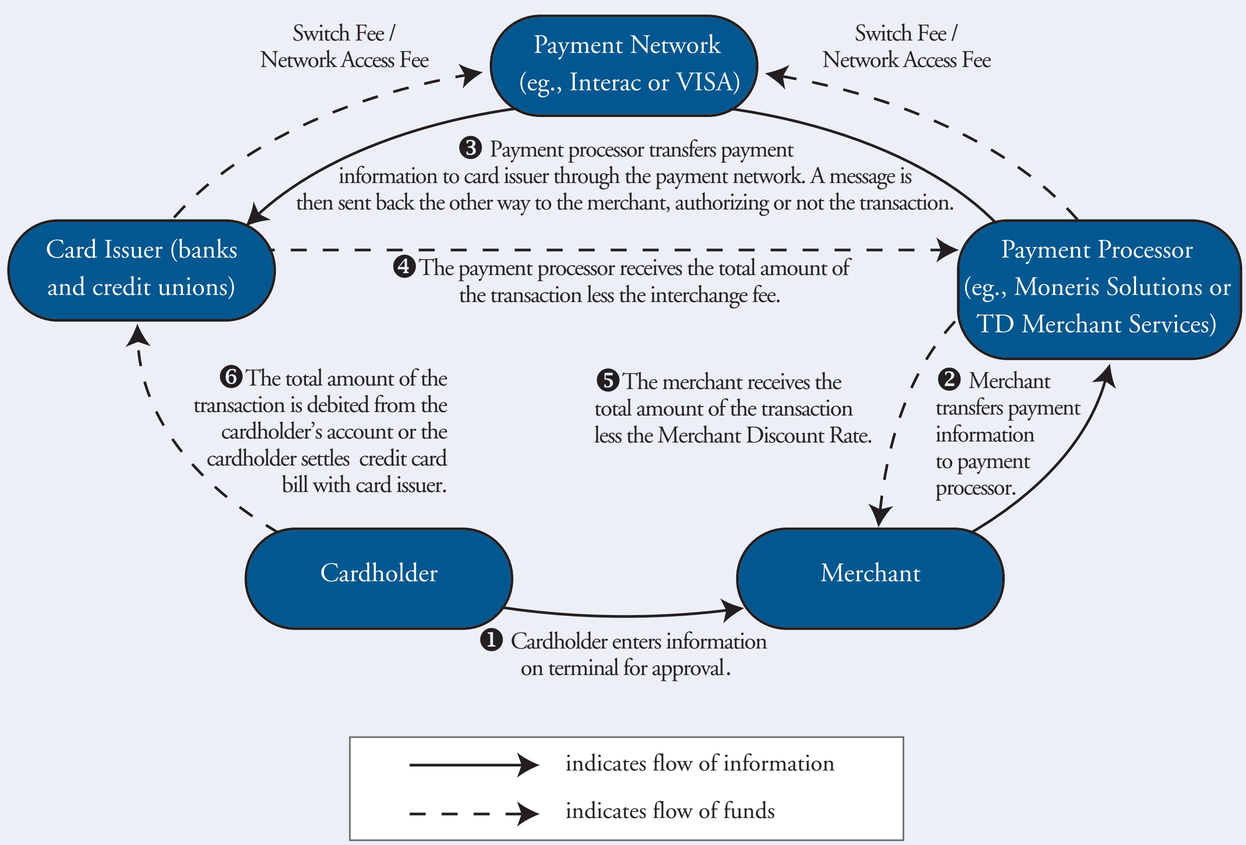
Pricing in two-sided markets is not necessarily a reflection of marginal costs – consumers on one of the sides might pay a price below marginal cost, or even below zero, whereas consumers on the other

Box 1: A Primer on the Canadian Payments Industry Landscape

The Canadian payments market makes possible the transfer of value among individuals and businesses. At the business level, most transactions are done by cheques, with electronic fund transfers coming in second place. At the retail level, about one-half of all transactions are cash, while the other half is made up almost entirely of credit and debit card payments. The share of card transactions has been growing steadily over time (BIS 2012).

The card payment system is comprised of five main types of participants, namely cardholders, merchants, payment processors, payment networks and card issuers. Payment processors, such as Moneris Solutions Corp., are responsible for providing point-of-sale terminals to merchants and acting as the middleman between merchants and the rest of the payment system. Payment networks, such as Interac and VISA, are mainly responsible for the development and operations of the networks that allow payment processors and card issuers to communicate with each other to authorize payments. Card issuers, as the name implies, are the financial institutions such as banks or credit unions that issue the cards. A typical transaction is described in Figure 1.

Figure 1: An Illustration of a Card Payment Transaction



Source: Adapted from Bergevin 2010.

Box 1 Continued

In this process, the payment processor, the payment network and the issuing bank all charge a fee for their services. The payment processor collects from the merchant what is referred to as a merchant discount rate or merchant fee. This charge covers, among other things, the costs of processing the payment and the fees that the payment processor must pay to other participants in the network.

The payment processor pays both an interchange fee to the card issuer and a switch fee to the payment network. The interchange fee – a fee that is usually set by the payment network – can be used to compensate financial institutions for the cost of issuing debit cards. For credit cards, the interchange fee is typically about 1.5 percent of the purchase amount but can vary depending on factors such as the type of card and the industry in which the retailer operates. For debit cards – interchange fees are lower or nonexistent.

The switch fee (or network access fee) is paid to payment networks to compensate them for the use of their network. Payment networks typically collect a switch fee from the issuing bank as well. When viewed on a per-transaction basis, such fees are low – for instance, the Interac network currently sets its switch fee at $0.007019 per transaction.

Policymaking and oversight responsibility for the payments market is primarily shared by the Department of Finance and the Bank of Canada. The Department of Finance, through the *Canadian Payments Act*, has directive and oversight powers over the Canadian Payments Association (CPA), which includes banks and other financial institutions, as well as any payment system that it designates for oversight.

Under another piece of legislation, the *Payments Clearing and Settlement Act*, the Bank of Canada is responsible for reviewing all eligible payment systems for their potential to pose systemic risk. Furthermore, the CPA operates and maintains systems for the clearing and settlement systems that allow financial institutions to determine how much they owe each other as a result of their customers' transactions and to transfer funds to settle those obligations.

The steady growth in electronic payments has resulted in a number of regulatory developments. In 2010, the Department of Finance released a Code of Conduct intended to promote fair business practices in the credit and debit card markets and to ensure merchants and consumers clearly understand the costs and benefits of such cards. In the same year, the Minister of Finance established the Task Force for the Payments System Review to help guide future public policy in the payments sphere.

The Task Force's final report, which was made publicly available in March 2012, recommended notably that the government establish a public oversight body for the payments industry, create a self-governance organization to develop and implement strategy and standards for the payments industry, and amend the CPA's objects, governance, powers, business model and funding. To date, the government has responded by announcing the establishment of a senior-level advisory committee comprised of public- and private-sector stakeholders to meet regularly with the Department of Finance to discuss potential CPA changes and by vowing to review the Code of Conduct and the overall governance framework.[a]

a See Department of Finance Canada, "Minister of Finance Welcomes Findings of the Task Force for the Payments System Review," News Release, March 23, 2012.

side could pay considerably above marginal cost (OECD 2009).[3] Instead, prices in these markets are set to achieve a balance between the two sides. If the costs to merchants of using a payment card are set too high, they will not accept the card and, in turn, consumers will not use it. If prices are set too high for consumers, they will refuse to carry a card and merchants will have no reason to arrange to use it.

In two-sided markets, cross-subsidies among groups on the two sides of the market are common, perhaps essential to their functioning. For instance, those who pay to purchase Adobe's software products to create pdf documents subsidize those who use the free Adobe Reader to read those documents.

Similarly, shopping malls often provide free parking to customers, and the costs are shared by all mall customers through their purchases, irrespective of whether they park. This differential pricing is an inherent part of the process of maximizing the overall value of a given mall. Moreover, this differential pricing and cross-subsidization is voluntary—no one is forced to go to the mall—but everyone who buys there presumably benefits from so doing. Newspapers provide a useful analogy—those who pay a higher price at the newsstand subsidize those who take home delivery, even though home delivery requires the maintenance of a costly distribution infrastructure.

Efficient pricing in a two-sided market, therefore, requires balancing the prices charged to different participants. With respect to payment cards and other payment devices, this balancing is typically done through the interchange fee (see Box 1), which mediates the relationship between consumers (or their banks) and merchants (or their banks) across the payment network. Finding the efficient price structure is a discovery process that varies over time according to developments within related markets along with consumer and merchant preferences.

The payment network seeks to set prices on the market's two sides in such a way as to expand the number of participants and to provide value to individual participants. Only the operator of the platform, the payment network, has the proper incentives to maximize the net value of the overall platform. For their part, merchants and consumers seek to maximize individual benefits from the platform, or to shift costs to other market participants.

2. Reasons for Regulation

Much of the impetus for new regulation in the payments market rests on concepts of "fairness" or the lack thereof. For instance, the Task Force's Interim Report – *The Way We Pay* – identified four challenges that must be addressed for Canada to become a global leader in payment systems, the first being: "Increasing fairness in credit and debit card networks." Fairness in this context refers to two alleged concerns: first, that pricing does not reflect marginal cost, to the detriment of merchants; and second, that there is unfair cross-subsidization among various identifiable classes of consumers.

a. Are Merchants' Costs Unfair?

As noted above, payment card participants operate in a two-sided market. In two-sided markets there is no reason to believe that the prices charged on one side should reflect marginal costs – mechanisms such as interchange fees allow for shifting fees from one side of the market to the other. The fact that merchants may end up paying higher direct fees

3 According to standard economic theory, in conventional, non-two-sided markets prices are equal to marginal costs in perfectly competitive markets. This is not the case, however, for two-sided markets.

than suggested by marginal costs says nothing about the fairness of a given price allocation or, more importantly, if this allocation is optimal from an economic perspective.[4]

It is difficult to establish as a matter of economic theory an optimal, let alone fair, interchange fee. A review of the theoretical economic literature reveals no consensus on whether current fees are too high, too low or just right, once social costs and benefits are taken into account.[5] More generally, there is no consensus that permitting interchange rates and other terms and attributes of payment cards to be set by market forces will produce a market failure. In fact, the market process brings experimentation and free choice that enable market actors to discover the best set of prices and other attributes, and to adjust as circumstances change.

Furthermore, when payment system costs are reciprocal, arising from the interaction of parties agreeing to use a certain type of payment, there is no reason to believe that one cost allocation is fairer than another. Parties are assumed to voluntarily engage in an exchange that is presumed to be mutually beneficial, whatever the precise allocation of costs.

Meanwhile, many retailers have simply come to the conclusion that some types of payments are not worth the benefits. For instance, many businesses refuse to accept cheques, although many consumers would like to pay by cheques. Similarly, some large retailers operating in Canada such as Costco or No Frills, do not accept VISA, the most widely used credit card in the country.

In short, it is difficult, and even misguided, to assess the "fairness" of various allocations of costs between consumers and merchants and, therefore, to base regulatory actions on those assessments.

b. Do Consumers in General Subsidize Card-Paying Consumers?

Cross subsidies, as we have shown, are common in well-functioning markets, especially two-sided markets, and are not unique to payment systems. Indeed, they are common in retail banking markets just as in other retail markets. Cross subsidies, say from cash-paying consumers to holders of rewards cards, persist and are perfectly consistent with—even necessary for—a well-functioning payments system.

Contrarily, some analyses (Schuh, Shy and Stavins 2010) propose that lowering interchange fees would increase social welfare and fairness by transferring wealth from card-paying households to cash-paying households and from high-income to low-income earners. The reasoning is that because (a) merchants charge all consumers the same price and (b) pass through[6] to consumers the full cost of interchange fees in their retail prices, then (c) cash users, who, on average, are likely to be poorer than credit card users, subsidize credit card users because the latter do not bear the full cost of their transactions.

Moreover, (d) the interchange fees thus charged by merchants to their consumers and ultimately passed along to issuing banks pay for the rewards programs that issuers use to attract high-value consumers. And because these cardholders also tend to be wealthier than cash- and non-rewards-card-paying consumers, the regressive transfer is exacerbated.

4 We refer here to direct fees because merchants can always pass on some of these to consumers in the form of higher prices.

5 "The conclusions of the theoretical literature [on interchange fees] vary substantially depending on the assumptions underlying the models. Assumptions about the degree of market power for acquiring banks, issuing banks, merchants, or networks, and the elasticities of demand for card services and final goods all influence the results." (Prager et al. 2009, p. 21).

6 Pass through refers to the extent to which changes in costs to merchants and banks are absorbed by them or shared with their customers (Evans and Mateus 2011).

However, Schuh et. al, whose work is featured preeminently in the Task Force's interim report, assume that interchange fees pay directly for card rewards, even though there is no inherent economic connection between the two: rewards can exist without interchange fees, an example being credit cards that offer rewards on revolving balances. And interchange fees predate rewards—Diner's Club charged a merchant discount of 7 percent when it was first introduced in the mid-1950s.

There are numerous examples of retail markets in which there are no interchange, or similar, fees, but loyalty points and perquisites are common features, including airline frequent flyer cards, grocery store and hotel loyalty programs, along with sandwich shops. In many markets, loyalty rewards are used to lure customers to use certain products or services. The fact that payment cards offer a rebate program that benefits some customers more than others says little about the market's functioning. Furthermore, pass-through is seldom 100 percent.[7] Schuh et al. acknowledge that their conclusions reverse if retail pass-through is less than 50 percent.[8]

In short, cross-subsidies are perfectly consistent with well-functioning markets and their existence is not, by itself, a valid condition for government intervention.

C. Assessing Market Failure

While basing regulatory actions on the concept of fairness is misguided, there is, however, a case for government intervention when markets fail. Market failure here refers to situations where open markets do not deliver an efficient allocation of economic resources. The potential market failures that could be relevant for payments markets are related to natural monopolies, externalities or information asymmetries.[9]

Because of economies of scale and network effects – large networks tend to be more valuable and efficient – payments markets are often concentrated and may share similarities with so-called natural monopolies.[10] However, while a payment system may be controlled by a few organizations, it does not necessarily follow that they have market power, or can abuse a dominant position by, for example, charging higher prices and generating monopoly rent.

A payment system that is dominant today may not be tomorrow, and the threat of new entrants puts important limits on what payment systems can do. Payments markets are contestable; for instance, the Internet facilitates the emergence of new payments networks, such as PayPal. And consumers

7 Empirical studies suggest that, on average, pass-through is 50 percent (Evans and Mateus 2011), meaning in this instance that competition would induce retailers to pass on about half of their cost savings or increases, with the rest being windfall profits or losses. In the long run, and under certain circumstances such as perfect competition with constant unit costs, the pass-through may be higher.

8 A proposal to reduce or eliminate interchange fees would need to account for the ways card issuers may respond, such as through higher interest rates or annual fees, or lower risk-taking. The incidence of such responses would be uncertain. For example, annual fees on credit cards and monthly bank maintenance fees tend to be unrelated to the volume of purchases a consumer makes. Indeed, low-income consumers are more likely to be forced to pay monthly bank fees because high-income consumers are more likely to be able to carry the required minimum balance or use other bank services that will enable them to avoid monthly fees.

9 Another important potential market failure is associated with so-called public goods, which are non-rival and non-excludable – i.e., the consumption by one individual does not reduce the overall availability of the good and no one can be effectively excluded from consuming the good. Payments systems do not fit this description.

10 Arguably, the core payments infrastructure, which includes networks to clear and settle payments, have more commonalities with the theoretical description of natural monopolies than other payment networks, such as VISA or Interac, at the retail level. Core networks are usually more subject to economies of scale and network effects.

increasingly use different types of payments interchangeably – debit versus credit, for instance.

Given the large number of available payment options, it is hard to argue that one type of payment has monopoly power. Notably, customers and merchants can usually fall back on cash. Nevertheless, in the short term, it is possible that a dominant player in a particular segment of the payments market may charge prices higher than it would under a perfectly competitive environment.

As a general rule, payment networks get remunerated a few cents per transaction and, to our knowledge, these fees have not been subject to criticism or used as the basis for potential regulatory actions. Interchange fees are, on the other hand, the target of much criticism but, as we have explained, such fees are simply used to shift costs from costumers to merchants and are not necessarily a reflection of high prices, let alone monopoly rents. In short, simply because payments systems tend to be large and concentrated, it does not necessarily follow that they are anticompetitive, and it is not a sufficient condition for regulation.

The second potential cause for market failure relates to externalities—a cost or a benefit that is not internalized (i.e., paid for) by the person responsible for it. In financial markets, systemic risk emanates to some extent from an externality. For example,the costs associated with institution failure are not fully internalized by that institution and can have important impacts on other elements in the system. Large clearing and settlement systems, which are the plumbing that supports payment transactions, are major channels through which shocks – for example, the failing of an institution – can be transmitted across domestic and international financial systems and markets.[11] The avoidance of systemic risk, or the risk of failures of all or entire parts of the financial system, is a well-established public policy objective, and all industrialized countries have developed mechanisms to address such risks in the context of clearing and settlement system arrangements.[12]

Finally, information asymmetry refers to the situation where one party in a transaction has more or better information, typically the seller of a good or service. The fact that some market participants may not have access to all the information necessary to make the best market decision can, in some instances, cause markets to become inefficient.

Some government regulations are aimed at addressing this asymmetry. For example, companies issuing securities in public markets must disclose certain information to investors. In the payments

11 The failings of The Canadian Commercial Bank and the Northland Bank of Canada in 1985 show how such shocks can be transmitted with serious consequences. In the case of Northland, which was an indirect clearer through the Royal Bank, all its payment items that had been drawn over the course of a week had to be returned. James F. Dingle, in an historical account of these events, describes that: "For example, payors (who had written cheques on the Northland and assumed that their funds had been successfully transferred to the relevant payees) now received unexpected communications from payees to the effect that the payments had failed and that replacement cheques had to be delivered. Payees were informed by their deposit-taking institutions that the accounting credits of the preceding business day had necessarily been reversed; in some cases unexpected overdrafts were the result. In summary, the reversals required by the default-sharing procedure had the effect of widely redistributing the financial burdens associated with the event—often in unforeseen ways" (Dingle 2003, p 29).

12 For instance, the Bank for International Settlements in 2001 issued the "Core Principles for Systemically Important Payment Systems," which are intended for use as universal guidelines to encourage the design and operation of safer and more efficient systemically important payment systems worldwide. New international standards are currently under review and are expected to be released later in 2012. At the same time it should be noted that although the idea of systemic risk creates a theoretical basis for regulation, the concept has proven difficult to define and address in practice.

sphere, the Department of Finance's Code of Conduct[13] is, among other things, appropriately aimed at increasing levels of transparency and disclosure by payment card networks and acquirers to merchants.[14]

It is sometimes argued that government intervention in the payments market is warranted because the adoption of standards is subject to a coordination problem, a situation where market participants can realize gains only when they all make mutually consistent decisions.[15] We agree that such coordination is difficult, and that competition sometimes leads to the adoption of different standards and to wasted resources.

Governments could, in theory at least, single-handedly impose uniform standards, which could potentially facilitate the adoption of some technology in the short term. But such government intervention comes at a great cost to dynamic economic efficiency, where market participants try different standards and technologies over time, a process that is at the very foundation of competitive and innovative markets.

3. The Way We Should Pay: Proposals for Change

As noted, Canada is falling behind globally in terms of development and adoption of new payment technologies. These concerns are particular to 1) debit cards and 2) electronic invoicing and payment.

Although Interac has had some clear successes in the past—Canadians are among the world's heaviest users of debit cards—the system is showing its age and proving ineffective in keeping up with market developments. Interac faces important regulatory hurdles in bringing new payment technologies to market as it must operate under a cumbersome governance structure imposed by competition authorities, and must conform to CPA rules and standards. In addition, the recently adopted federal Code of Conduct has erected a barrier to new debit-market entrants by imposing limits on the number of networks that may coexist on a given debit payment card.

These impediments to competition have contributed to Canadian debit cards lacking many important features taken for granted in other parts of the world. For example, until 2004 Canadian consumers could use their national debit network at point-of-sale only in Canada. Starting in 2004, they could also do so in the United States, but only at merchants that accept the NYCE debit card system. But today, eight years later, Canadians still cannot use Interac's network outside of North America for point-of-sale purchases (Evans et al. 2011).

Meanwhile, using Interac debit cards for e-commerce and online transactions remains relatively cumbersome. Canadians can use their debit cards only for some 800 Internet merchants, and the process is cumbersome. Unlike in the United States where customers need only enter

13 The Code of Conduct is available at: http://www.fin.gc.ca/n10/data/10-049_1-eng.asp.

14 Merchants had complained for instance that the information associated with the new products being offered to them sometimes lacked clarity and that they are not always made aware of all the impacts associated with these products. See, for example "Debit Card Processing Commentary: Visa and MasterCard Debit: A Major Threat to Interac and Canadian Merchants." http://www.cfib-fcei.ca.

15 For example, in an analysis by the Federal Reserve Bank of New York on difficulties associated with the implementation of electronic billing, it is argued that, "If a biller or a customer believes that most other billers or customers will not adopt new Electronic Bill Presentment and Payment (EBPP) solutions, it will not adopt them either. The spread of EBPP systems thus depends largely on a coordinated response among billers and customers. It is precisely the lack of such coordination that appears to account for the failure of the new billing and payment technology to take hold" (Stefanadis 2002, p. 3).

their debit card number, Canadian Internet consumers selecting the Interac online payment option are redirected to their financial institution's website where they must log in to their bank account. Consumers are then redirected back to the merchant's website where they receive the confirmation details of the transaction.

With respect to electronic invoicing and payment, Canadians are also falling behind. In particular, Canadians businesses still make a relatively large number of payments by cheque, a payment system that contains many drawbacks: it is relatively risky, slow to clear, expensive, slow to use as a purchasing medium and unsuitable for online transactions. As noted by the government's Task Force, even online bill payments are processed like paper cheques, in batches and with clearing times of more than 24 hours.

The Canadian payments infrastructure, and by extension the Canadian Payments Association, has failed to facilitate the move away from cheques to electronic invoicing and payment by supporting necessary innovation and investments. In particular, the current clearing and settlement arrangements cannot accommodate the automation of electronic invoicing and payments, which help explain why cheques are still ubiquitous among costumers and, in particular, businesses in Canada.

a. Modernizing the Canadian Payment System Is As Much About Removing Regulations As About Creating New Ones

Given the central role that payments systems play in modern economies, the modernization of the Canadian payment system is clearly essential. Reform should recognize and facilitate the forces of competition and innovation. Open and effective competition and a regulatory environment that better supports risk-taking investment would be helpful.

The contrast between Canada's debit and credit card systems provides a useful case study of different regulatory approaches. Whereas Interac's debit card network has been subject to a cumbersome governance structure, credit cards have been subject to few regulations. As a result, while Canada's debit card system faces significant constraints in its ability to respond to changing market dynamics, the mostly unregulated credit card system is relatively innovative and integrated into the global economy.

Interac's model is frozen in time. As a consequence of a 1996 federal Competition Tribunal consent order related to worries about the association's dominant position in the debit card market, Interac has operated under an ineffective governance structure, must set its price on a cost-recovery basis and must allow merchants the freedom to place a surcharge on Interac debit transactions (Bergevin 2010). No industry can thrive and grow under such restrictive conditions, and payment cards are no exception.

Interac's governance structure was erected as an ad hoc settlement to complaints about alleged anti-competitive acts, rather than as part of a coherent regulatory framework with well-specified goals. Over time, Interac's restrictive governance structure has proven difficult to update in response to changing market conditions.

Interac's decision-making is made difficult by the fact that it is governed by a group of competitors who are simultaneously its owners and its biggest clients, as well as clients of other networks offering similar services. Furthermore, because Interac must operate on a non-profit, cost-recovery basis, ordinary business planning and investment practices are not available. As a result, investments in new technologies do not occur or are delayed.

While Interac faces operational constraints, other payment networks face regulatory barriers to setting foot in the debit payment sphere. The recently adopted Code of Conduct erects an important barrier to new entrants by imposing limits on the number of networks that can exist on a given debit card. In particular, the code demands that, "Competing domestic applications from different networks shall not be offered on the same debit card," fragmenting the market and restricting competition.

This ban on debit cards with access to more than one domestic network, so-called co-badge cards, is not only unnecessary but also harmful to the efficient functioning of the payments system. In effect, the ban makes the entry of new networks in the debit sphere unreasonably difficult. To enter that market, new networks have to rely on financial institutions issuing another debit card to their customers—a move that may be resisted for fear of confusing their clients—or to change networks altogether, a difficult task given Interac's dominant position. Furthermore, the fact that this ban narrowly applies to debit cards highlights the fact that it is not based on sound economic principles.[16]

In short, competition and innovation suffer from a number of regulatory hurdles. Yet it is competition that really drives innovation and efficiency in any market—and has certainly been a driving force in the development of other payment networks in both Canada and abroad. To encourage innovation through competition, a level playing field among different networks is needed without constraints on the types of arrangements these networks can make with others in the payments sphere.

Concretely, policymakers should adopt the following reforms to free the market.

First, Interac should be allowed to compete on a for-profit basis, freed from the shackles of the consent order. We urge the Competition Bureau to rescind the order in recognition of the need for free market players to ensure effective competition.[17]

Second, the federal government should repeal the code of conduct's ban on co-badge debit cards for domestic applications. There is no reason for restraints on the type of arrangements payment networks might make with other players in their sphere.[18]

b. Governance Framework for Innovation and Growth

The federal government can also play a positive role in updating and reorganizing the Canadian payment system's governance framework. The goal, as a matter of public policy, should be to promote flexibility, competition and innovation. At present, the CPA is largely responsible for implementing public policy in the payments sphere. Specifically, it has the power to establish, operate and maintain clearing and settlement systems and to facilitate the development of new payment methods and technologies.

Created by Parliament in 1980, the Canadian Payments Association replaced an existing structure that was housed within the Canadian Bankers Association.[19] Passed in the wake of concerns that banks effectively controlled Canada's clearing and

16 One of the concerns that led to the Code of Conduct and the ban on co-badge cards was the relatively higher merchant fees associated with VISA and MasterCard debit compared to Interac debit. The entry of VISA and MasterCard into the debit sphere would, however, have probably caused some transactions to migrate from the credit – where merchant costs are highest – to the debit sphere, mitigating to some extent the potential increase in total merchant fees.

17 Interac could potentially adopt a structure that resembles those of VISA and MasterCard, which operate, with exceptions in some countries, as independent, public companies. This structure, compared to more associative ones, tends to lessen worries about potential collusion among the various controlling entities.

18 It should be emphasized that the first and the third recommendations go hand in hand. If Interac were to be freed from the consent order, and if the second recommendation is also not implemented, it would benefit from an unfair government advantage in the form of the ban on co-badge cards. Similarly, scrapping the ban on co-badge cards makes sense only to the extent that Interac is able to compete freely with new entrants. Simply removing the ban on co-badge cards without giving Interac the ability to compete effectively would risk undermining its survival.

19 While the former clearing system operated by the Canadian Bankers Association was a private organization, it was also established under federal law and its bylaws were subject to Treasury Board of Canada approval.

settlement system in an anti-competitive manner, the new act gave non-bank deposit-taking intuitions, such as credit unions and caisses populaires, a role alongside banks in managing the infrastructure of the Canadian payments system. Similar concerns supported the adoption of the *Canadian Payments Act* in 2001, which saw the expansion of eligible CPA members to include other types of financial institutions such as life insurance companies, securities dealers and money market mutual funds.

The Bank of Canada also has a role in implementing public policy objectives in the Canadian payments market. Under the *Payments Clearing and Settlement Act*, the Bank is responsible for reviewing all eligible payments and other clearing and settlements systems for their potential to pose systemic risk. (The avoidance of systemic risk, or to mitigate the risk of failures of all or entire parts of the financial system, is a well-established public policy objective).

Unlike many other central banks in the developed world, the Bank of Canada does not operate clearing and settlement systems, although it is a member of the CPA.[20] In effect, many large-value clearing and settlement systems – the fedwire in the United States, for example – are operated by the central bank. Even those that are privately controlled, such as the US wire-transfer operator CHIPS, settle their transactions with central bank money and, hence, interact with central banks' transfer systems.

Central banks often own and operate clearing and settlement systems because of systemic risk concerns but also because they are their main playground. Most central banks conduct monetary policy through large-value clearing and settlement arrangements, for example the electronic Large Value Transfer System (LVTS) in Canada (and to a lesser extent the Canadian Automated Clearing Settlement System [ACSS]).[21]

Participants in such clearing and settlement arrangements benefit greatly from the participation of central banks. In this country, the Bank of Canada provides access to one-day funds to direct clearers and guarantees settlement in the event that more than one direct-participant fails (Engert et al. 2008). Access to clearing and settlement arrangements owned by central banks are usually open to most financial institutions provided they meet certain basic requirements. For example, any financial institution that maintains an account with a US Federal Reserve Bank is generally allowed to be a Fedwire participant.

The Canadian system is unique in the sense that a hybrid private/public institution, the CPA, owns and operates the two main national systems for the clearing and settlement of payments. In Canada, the CPA performs the task that many central banks perform elsewhere. Current debates about the role and membership of the CPA should be looked through this lens.

The appropriate policy objective for the CPA should be to operate prudently those arrangements that are considered of systemic importance. To the extent that the CPA performs tasks usually performed by central banks, access to its systems should be as broad as possible. The CPA's systems should be open, as in other jurisdictions, to all

20 According to a global survey by the World Bank, 112 countries had real-time gross settlement systems and 108 of those were operated by their central bank. The exceptions were Canada, Hong Kong, Iceland and Switzerland, although in these cases the central bank acts as the settlement agent (World Bank Group 2008).

21 The Bank of Canada, for example, provides settlement assets in the LVTS and the ACSS and also provides collateralized advances to the direct participants in the LVTS and the ACSS direct clearing members. As the federal government's banker, the Bank of Canada uses the LVTS to neutralize the net impact of any public sector flows between its balance sheet and that of the financial system. Through these interactions, the Bank of Canada is able to affect the price of one-day funds, its main policy instrument.

financial institutions that have an account at the central bank, but not to others, as has been argued by some.

However, the CPA's governance structure should also preserve and enhance the incentives of the payment network's builders, owners and operators—i.e., those with "skin in the game"—to invest in new technologies and to benefit from them. The CPA's small payments system, which was introduced almost 30 years ago, is badly outdated and its large-value transfer system fails, in particular, to adequately support the electronic processing of accounts receivable and payable. In short, more investment in the CPA's infrastructure is needed.

Expanding the membership, and in particular the decision-making authorities, of the CPA beyond financial institutions runs the risks of making the organization dysfunctional. Here, the case of Interac offers valuable lessons. When Interac membership was broadened, a new governance structure was implemented that transferred some decision-making power from charter members to other Interac members as well as introducing new governance rules. These changes have proven detrimental to Interac's ability to make timely decisions and to invest and adopt new technologies, highlighting the pitfalls associated with transferring decision-making power to individuals or institutions that may not have the proper incentives to maximize the overall value of that system.

Proposals to give the CPA additional objectives, to expand its reach to other sectors of the payments systems or to expand its membership beyond financial institutions would exacerbate such governance liabilities.[22] The organization should not go beyond operating the systematically important clearing and settlement arrangements. Furthermore, as a market operator, the CPA is ill-suited to set rules and standards that affect other networks or participants, which may very well be its competitors.

For example, in order to meet certain public policy objectives, new CPA rules and standards are subject to an extensive and time-consuming internal and external consultation process. Hence, the development of new payment methods and technologies for transactions, such as Interac's, that clear and settle through the CPA are subject to this consultation process, while those of other payment networks are not. One of the main problems with the current governance framework is that the CPA is both an operator and a regulatory settler in the payments sphere, which explains why the CPA develops rules and standards at the operational level rather than setting broad regulatory principles under which all payment networks could operate.

In addition to urging a revamped CPA, there also have been calls for additional regulatory structures to the Canadian payments ecosystem. For example, the government's Task Force recommends the establishment of a Payments Oversight Body and an Industry Self-Governing Organization. However, the existence of multiple rule-making and enforcement bodies, each open to complaints and direct governance by non-risk bearing, non-investing participants, seems likely to produce inefficient decision-making.

The establishment of a self-governing industry organization might seem like an appropriate avenue to address issues associated with the payments system. It could, for example, provide a forum to

22 For example, *The Way We Pay* proposes the following objectives for a revamped CPA: "Reduce concentration of ownership and control of payments networks; provide open access and a platform offering secure clearing and settlement of payments and competition among payment service providers; facilitate the funding of investment in infrastructure; and develop a fair user-pay model to sustain and promote the infrastructure. (p. 28). The Task Force's final report further recommends that the CPA's allowable activities should be more broadly defined to give it the flexibility to acquire and divest other businesses such as Interac and cheque processing.

resolve technical questions. Yet if the organization gave all market players a voice in the integration of new technologies, that could threaten the creation of a competitive market.

While industry-wide collaboration is certainly warranted and beneficial in some instances, market participants should be able to freely pursue technological standards and alternative arrangements with other participants. This would provide the foundation of an efficient and competitive payments market. Furthermore, shifting decision-making rights to merchants, consumer groups and others with a more limited sphere of interest in regards to the overall system might lead to the substitution of their private interests for those of the network's operators, negatively impacting the system's overall efficiency.

C. Putting It All Together: The Case for a Limited Governance Framework

An effective governance framework should allow the government to achieve valid public policy objectives while limiting the impact such a framework can have on open competition. Further, such a framework should seek to align decision-making responsibility with incentives to invest in modernizing the payment networks.

By contrast, proposals to shift decision-making power to stakeholders beyond the network builders and operators seem misguided. These other participants can and should provide information necessary to the efficient operation of the system, but this contribution should not be mistaken for the ability or incentive of these participants to operate systems efficiently.

More fundamentally, regulation, and by extension the establishment of a governance structure, is justified if (a) there is a substantial market failure and (b) the market failure it is intended to address is more costly than the impact of the regulation. For a payments system, therefore, calls for additional regulation and governance based on efficiency and alleged unfairness are ill-founded. On the other hand, it is appropriate for the Bank of Canada to have responsibility for the oversight of clearing and settlement arrangements to avoid systemic risk.

We have also argued that the CPA has an important role to play insofar as it operates the systematically important parts of the Canadian clearing and settlement arrangements. There are also well-founded arguments in favour of allowing a broad array of financial institutions that can access systems operated by the CPA, but not of others. The CPA could nonetheless benefit from a review of its operating model to make sure participants have the appropriate incentives to maintain and upgrade networks under its purview. We therefore support the Task Force's expressed objective of providing infrastructure that supports an innovative payments system and, as such, we argue that the federal government should carefully review the CPA's governance model.

Otherwise, the Finance Department is already well positioned to achieve other policy objectives related to addressing market failure. For example, it was appropriate for the Minister of Finance to issue a Code of Conduct that aimed at ensuring merchants and consumers have enough information to make informed decisions.

Overall, the Finance Department is well placed to establish a coherent regulatory framework, one based on clear, abstract principles applied equally. On the other hand, the CPA is not a good vehicle for achieving public policy objectives. In particular, the legislated requirement that the CPA must consult extensively with different stakeholders for rules development, should be softened or scraped.

Furthermore, we believe there is little justification for establishing an independent regulator separate from the Department of Finance. The latter has the tools available to act if it deems necessary, and the establishment of an independent regulator could lead to mission creep and to self-generating regulatory purposes.

Ultimately, market forces and innovation should shape the future of the Canadian payment system, and the government should therefore avoid leaning toward a more directive approach.

Conclusion

We have argued in this *Commentary* that the country's current payment technologies and governance infrastructure must change. In particular, competition and risk-taking are impeded in today's Canadian payments market: the Interac Association, which operates as a cooperative under a Competition Bureau consent order, should be allowed to compete on a for-profit basis. Limits on the number of networks that can coexist on debit cards should be removed—such bans are detrimental to effective competition and innovation.

We have also argued that potential market failures open the door for a government role in establishing a regulatory and governance framework in the payments sphere. In particular, the need to guard against systemic risks and to ensure appropriate levels of information and disclosure for market participants are identified as appropriate public policy objectives. As such, it is appropriate for the Bank of Canada to have responsibility, under the *Payment Clearing and Settlement Act*, for the oversight of systemic risk in clearing and settlement arrangements.

For similar reasons, the Canadian Payments Association's role should be focused on operating the systemically important parts of the Canadian payments system. Finally, the Department of Finance is well placed to establish a coherent regulatory framework, one based on clear principles applied equally, such as uniform disclosure standards.

Much of the impetus for additional regulation in the payments market rests on the concept of fairness or the perceived lack thereof. Some argue that fees imposed on merchants do not reflect marginal costs and are therefore unfair to them; or that there is an unfair cross-subsidization among classes of consumers, such as between cash-paying and card-paying consumers. As we have maintained here, these arguments are simply not well-grounded. Furthermore, shifting decision-making rights to merchants, consumer groups and others with a more limited sphere of interest in regards to the overall system may lead to the substitution of their private interests for those of the network's operators and impact negatively the overall efficiency of the system.

The successes of modern global payments systems have been hard won. To ensure these successes are replicated to the fullest in Canada, the federal government should erect an architecture within which competitive market forces can flourish and clear away the regulatory obstacles that impede competition and choice.

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