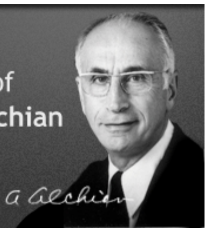
ICLE International Center for Law & Economics

In Honor of Armen Alchian



The Law and Economics of Interchange Fees and Credit Card Markets

December 8 & 9, 2009

A blog symposium hosted by Truth on the Market (www.truthonthemarket.com) and sponsored by the International Center for Law and Economics (www.laweconcenter.org). The symposium is available online at http://www.truthonthemarket.com/category/interchange-and-credit-cards-symposium/ and this document can be downloaded at http://www.laweconcenter.org.

Contributors:

Omri Ben-Shahar | *University of Chicago Law School*
Tom Brown | *O'Melveney & Myers*
Bob Chakravorti | *Federal Reserve Bank of Chicago*
Richard Epstein | *University of Chicago Law School*
Joshua Gans | *University of Melbourne Business School*
Ronald Mann | *Columbia University Law School*
Geoffrey Manne | *Lewis & Clark Law School and ICLE*
Tim Muris | *George Mason University School of Law and O'Melveney & Myers*
Allan Shampine | *Compass/Lexecon*
Bob Stillman | *CRA International*
Jim Van Dyke | *Javelin Strategy & Research*
Joshua Wright | *George Mason University School of Law*
Todd Zywicki | *George Mason University School of Law*

Table of Contents

Introduction

Geoffrey Manne

Geoffrey A. Manne is Executive Director of the International Center for Law & Economics and a Lecturer in Law at Lewis & Clark Law School.

This document pulls together the complete content (including both posts and comments) of our two-day symposium on the law and economics of interchange fees and credit cards, held at the Truth on the Market blog (www.truthonthemarket.com) on December 8 and 9, 2009.

The scholarly and policy debates over interchange fees and credit card markets more generally are raging, with several bills pending in Congress and a recent report by the GAO on the topic. Meanwhile, the financial crisis has brought increased scrutiny to financial institutions and credit markets, and consumer credit in particular is in the regulatory cross hairs. Litigation continues in the Eastern District of New York, and outside the US other countries continue to scrutinize (and regulate) interchange fees.

As the GAO notes:

> Proposals for reducing interchange fees in the United States or other countries have included (1) setting or limiting interchange fees, (2) requiring their disclosure to consumers, (3) prohibiting card networks from imposing rules on merchants that limit their ability to steer customers away from higher-cost cards, and (4) granting antitrust waivers to allow merchants and issuers to voluntarily negotiate rates. If these measures were adopted here, merchants would benefit from lower interchange fees. Consumers would also benefit if merchants reduced prices for goods and services, but identifying such savings would be difficult. Consumers also might face higher card use costs if issuers raised other fees or interest rates to compensate for lost interchange fee income. Each of these options also presents challenges for implementation, such as determining at which rate to set, providing more information to consumers, or addressing the interests of both large and small issuers and merchants in bargaining efforts.

Our symposium brings together several of the world's leading experts on interchange fees and the law and economics of credit card markets to discuss a range of issues surrounding the regulation of interchange and credit card markets.

- Omri Ben-Shahar (University of Chicago Law School)
- Tom Brown (O'Melveney & Myers)
- Bob Chakravorti (Federal Reserve Bank of Chicago)
- Richard Epstein (University of Chicago and NYU Law Schools)
- Joshua Gans (University of Melbourne Business School)
- Ron Mann (Columbia University Law School)
- Geoffrey Manne (International Center for Law & Economics and Lewis & Clark Law School)
- Tim Muris (George Mason University School of Law and O'Melveney & Myers)
- Allan Shampine (Compass/Lexecon)
- Bob Stillman (CRA International)
- Jim Van Dyke (Javelin Strategy & Research)
- Joshua Wright (George Mason University School of Law)
- Todd Zywicki (George Mason University School of Law)

The symposium is sponsored by the International Center for Law and Economics.

The International Center for Law and Economics (ICLE) is a new entity—a global think tank aimed at building a strong, managed, international network of meaningful (and self-sustaining) institutions and academics devoted to methodologies and research agendas that will inject rigorous, evidence-based thinking into important policy debates. Pursuing the most successful and rigorous aspects of law and economics, dynamic competition analysis, New Institutional Economics and similar approaches to law, economics and policy, the ICLE aims to become an essential part of the policy landscape in the most important policy debates around the globe. The goals of the ICLE are both to create important scholarship as well as to ensure that it has policy relevance. The ICLE develops intellectual work itself as well as drawing on its global intellectual network. The ultimate goal is the reinvigoration of a law and economics movement in the spirit of intellectual forebears like Armen Alchian, Ronald Coase, Harold Demsetz, Frank Easterbrook, Benjamin Klein, Henry Manne and Oliver Williamson.

The ICLE is founded in honor of the great UCLE economist, Armen Alchian. Its honorary academic board comprises Harold Demsetz (UCLA Economics), Hon. Douglas H. Ginsburg (US Court of Appeals, DC Circuit), Benjamin Klein (UCLA Economics), Henry G. Manne (George Mason Law), Kevin M. Murphy (University of Chicago Business) and Roberta Romano (Yale Law).

The center's work is built around the following principles:

- A commitment to the application of economic theory, particularly price theory and new institutional economics, to regulatory problems
- A commitment to empirical scholarship and applications of economic theory with real world relevance
- The use of formal mathematical modeling exclusively as a means to furthering our knowledge about the world, rather than an end in its own right
- A dedication to understanding both the role of the law and institutions in facilitating competition as well as the consequences of legal rules
- A commitment to promoting an international discourse on issues of regulatory policy in the increasingly-global regulatory environment

Why Now? The Faulty Economics of Credit Card Reform

Richard Epstein

Richard A. Epstein is the James Parker Hall Distinguished Service Professor of Law at the University of Chicago, the Peter and Kirstin Bedford Senior Fellow at the Hoover Institution, and a visiting professor at New York University Law School.

About four years ago, I worked for Visa in opposing the opposed limitations on interchange fees that the Australian government was about to impose on the credit card industry. The situation there, like the situation in the United States, seemed hardly propitious for reform. The use of credit cards was rapidly expanding, and the rate of interest was being brought down by competition, the number of cards in circulation had increased. What is there not to like?

The fear of monopoly apparently. Everyone knows that the credit card industry is highly concentrated. That point in and of itself is not necessarily a bad thing. The credit cards only work in what is called two-sided markets. Consumers are prepared to sign up for credit cards only if they are aware that merchants will be prepared to accept them. Merchants will be prepared to accept these cards only if consumers are prepared to use them. The huge number of players on each side of the market cry out for the use of an intermediary to forge the connections. The fewer the intermediate parties, the easier it is to organize the grid. That task does not come without cost, and that cost in turn is incurred by the credit card companies that invest in the large infrastructure that keeps the entire system humming.

Breaking up these companies has real efficiency losses, so naturally the thought of the aspiring regulator is to turn to price controls as the next best solution. Someone of course has to pay companies to cover that expense, and to make a profit as well, but who should bear that burden? The great siren of all service users is to insist that they be charged at marginal cost. After all, once costs are raised above marginal cost, some consumer who could have used the service will be excluded, which counts, after a fashion, as a type of inefficiency. Needless to say, marginal cost pricing is a game that all users of inputs would like to play. But it is not a game at which all can succeed. Let the merchants on the one side, and the cardholders on the other, pay marginal cost, and no one is left to pick up the fixed costs of running the entire system.

Those costs amount to a tidy sum that someone has to pick up if the network is to remain viable. But which side and in which proportions? The usual response is to see which side is more inelastic in the demand, on the simple (but nasty) ground that it has fewer options to escape the costs in question. One nice consequence of this strategy is that the network will tend to shrink less on one side, which offers an added inducement to remain on the other side.

But, comes the response, just how much over marginal cost should the credit card companies be able to charge in a two-sided market. Coming up with a precise answer to that question offers enormous descriptive and normative challenges. And so the question is whether this game is worth the candle. The Australian experience is not all that reassuring, as the shifts away from merchants imposed higher costs of card users which tended to thin their ranks, without any clear evidence that the merchants did their part by passing on the reduced interchange fees to their customers.

It is therefore no surprise that the title of the GAO's report is not exactly a clarion call to action: "Rising Interchange Fees Have Increased Costs for Merchants, But Options For Reducing Fees Pose Problems." My believe is that the title was chosen by the editors of the Onion. The first part of this title is of course a necessary truth, but it tells us nothing as to whether the increased fees help or hurt the overall operation of the credit card system. The words after the "but" remind us that there no evidence that two simple risks of price controls won't go away. The first of these is that the cuts are too deep so that the system will experience a financial shock from which it cannot recover. Lawyers might think that this could even raise the question of whether the rate reductions are confiscatory. The second risk is a bit less ominous. The increases of the costs to customers reduce the number of potential customers while making the service less attractive to those who remain.

Needless to say the GAO report gives no assurance that the interchange fee cure is not worse than the disease. So why wade into such muddy waters? With the real estate mortgage market under siege, this is hardly the time to open a second front in the credit card wars. The administrative costs and political risks of initiative are not worth the candle.

Comments

1. I do love the Onion, but the stakes are certainly not a laughing matter. The GAO is clear on why one may wish to wade into these waters. Simply, there is a lot of money at stake. As the GAO points out, literally trillions of dollars of transactions are processed each year on credit and debit cards in the United States. 1.7% of each credit or debit card payment (to use the GAO's example) may not seem like a huge amount on an individual transaction, but 1.7% of $2.5 trillion is real money, even by Washington budget standards. When one thinks about the situation globally, the amount of money at issue is even more substantial. The Reserve Bank of Australia, whose actions are being discussed elsewhere in this forum, was also concerned about the size of the credit and debit card industry and the potential effects of the industry's policies and fees on Australia's economy.

   At a local level for Prof. Epstein and I, there has been an immense amount of press on the Cook County Board's efforts to roll back a sales tax increase by half a percentage point. One of the issues debated there was the degree to which shoppers were going to the suburbs to avoid the sales tax. The point of this anecdote is that transaction costs of this level matter, and people care a lot about them.

   Of course, there is a lot of debate about whether there is a problem with those fees, or, if there is a problem, whether the cure is worse than the disease, but I believe that the size of the fees is more than sufficient to justify having such a debate.

   Comment by Allan Shampine

   ---

2. Richard, Coming from you, your post almost sounds like resounding support for some regulation. I don't have to read between the lines to notice that this is NOT the strongest opposition to regulation that you can author.

   One risk you refer to is from price controls that are "too deep." Well, surely there are some cuts that will not be too deep and should not lead to a unrecoverable shock to the system.

   Second, there was an element not featured in your analysis, which — when present — usually lends great force to the argument 'leave the market alone.' This is the claim that if super-competitive profits exist, they will be competed away, without the need for price controls. The two-sided network feature makes alternative systems more difficult to introduce. with less entry, the rents may not be competed away.

   Third, the point that Allan Shampine commented on — the plea that there are more burning matters to resolve — is not persuasive on the grounds that Allan mentions. Besides, the presence of an even bigger problem does not mean that small ones ought to go untreated.

   So am I correct to conclude, from you fairly faint opposition, that you are actually a secret supporter of some regulation here?

Comment by Omri Ben-Shahar

---

3. Omri raises some good points. In Australia (which we will all be hearing about repeatedly, I am sure), there were cuts to interchange rates that, according to Joshua Gans and Bob Stillman, did not seem to affect usage very much, but reduced bank profits – perhaps suggesting that the rents were not being competed away. Before the Australian reforms, some of the parties involved expressed concerns about possible, potentially catastrophic, shocks to the system. None such appear to have occurred.

   In fact, the Reserve Bank of Australia has not only continued to endorse its decision over the years, but has extended its actions to include other payment methods that use interchange fees. One can certainly debate whether the Reserve Bank of Australia's actions benefited consumers overall, but they also demonstrate that intervention is not necessarily a recipe for catastrophe.

   With respect to the tax analogy, the issues about moving sales back and forth across city lines can also be seen with payment methods. Changing the relative costs of payment methods can influence the usage of those payment methods. But I believe that's a topic for tomorrow morning.

Comment by Allan Shampine

---

4. Omri's recent comment about my initial remarks shows how difficult it is to deal with you own brand name. My basic position of course has long been opposed to overall regulation of the terms and conditions on which goods and services are traded. But, as I have become older and more fuzzy minded, I have become more willing to entertain various forms of regulation that counter a real risk of monopoly misbehavior, of which horizontal cartels are the main culprit. Yet at the same time, the various arrangements with network industries also hold out some risk of monopoly profit, but not enough to make me, as Omri suggests, "a secret supporter" of government regulation.

   Why? The explanation is clear enough. The gains from regulation are harder to identify, as there is a real risk that the effort to stop these price advantages could backfire. Second, the costs of regulation are far higher, as it is more difficult to isolate the abuses to be controlled. That all translates into placing a heavy burden, but not an absolute bar, against the government intervention.

   These general remarks shape my answers to Omri's particular question.

   First, I do believe that some of these price controls could cut "too deep". If so, we could expect serious crimps in service. But if not too deep, not that much is gained. So I would weight the first error larger than the second, which again counsels caution.

   Second, I do believe that entry can help, but it is not clear how effective it can be in a two-sided market. But again even a small help tends to tip the balance away from intervention.

   Third, Omri is right that correcting small ills produces small gains, if we know what to do. But the capital available for these interventions is limited, and if theory suggests that overall gains are weak, why invest wealth here when it could be used to great effect in other areas, like labor law, where there is much that could be done to break down labor monopolies.

   So here, I think that the presumption against intervention sticks, at least if the GAO report is the best one can offer for further government involvement. I would not describe my opposition as "faint." It is principled but not absolute. I suspect that the more specific the proposal the more I will return to my libertarian roots.

Comment by Richard Epstein

Moving the Ball Forward: Macroeconomic Considerations

Ron Mann

Ronald J. Mann is Professor of Law at Columbia University Law School.

What is most surprising about the GAO report is how little the analytical discussion of this subject has advanced in the last decade. We all know that interchange rates might contribute to higher retail prices: customers that use cheaper payment products can be said to "subsidize" customers that use credit cards. Starting with the Australian initiative, regulators for a decade have sought to understand the costs of credit-card processing and to push interchange fees down to the "competitive" level of the "costs" of providing the service. Conversely, economists writing about two-sided networks have shown that the focus on costs reflects a fundamental misunderstanding of the two-sided network, in which the interchange fee is an allocation of burden between merchants and cardholders, not a charge for services rendered to one side or the other.

Yet despite the persistent attention to the issue and the steadily increasing lobbying and public relations campaigns on both sides of the question, the underlying issues interchange regulation raises receive little attention. Given the important effects of credit cards on the national economy, regulatory intervention should rest on, or at least consider, the macroeconomic effects. Consider the following two points.

First, the most important effect of interchange fees on credit card products is to fund rewards. Networks increase their value if they take funds from merchants and give them to cardholders to encourage cardholders to use their cards, up to the point at which the marginal loss from declining merchant acceptance exceeds the marginal gain from increased rewards. Since there is no obvious market trend toward declining merchant acceptance, we presumably have not yet reached the point at which the networks have an incentive to stop raising interchange fees to fund rewards. Thus, a forced decline in interchange fees should shift product lines away from rewards cards. If the rewards card is associated with increased spending (as seems likely), then the shift should bring with it a decline in consumer spending, and probably also a decline in consumer borrowing. We can debate whether that decline would be good or bad, but if we are unsure we want a decline in consumer economic activity, we should think carefully before cutting interchange fees.

Second, consider the relation between interchange fees and market structure. The market for credit card lending is concentrating rapidly; the top ten credit lenders now hold 88% of outstanding debt. The remaining credit card issuers (hundreds of smaller banks and credit unions) typically market credit cards used as transaction vehicles. Because those cards generate little in interest revenue, interchange fee revenues are much more important to their profitability than they are to the lending-driven products of the large issuers. Hence, a decline in interchange fees shifts the balance of profitability from the smaller issuers to the larger issuers. This, in turn, should foster increased concentration in the market. Since the market for credit card issuance (as opposed to the market for credit card networks) traditionally has been quite competitive, market interventions that accelerate the concentration of that industry are noteworthy.

I offer these ideas not because they are the only, or even the most important, possible effects. I proffer them to encourage a discussion of interchange fees that considers their role as part of a complex and important economic system rather than a simple contract term between merchants and their banks.

Comments

1. Prof. Mann writes: "First, the most important effect of interchange fees on credit card products is to fund rewards."

Thank you! That's right, and that is the key to understanding the whole mess. "Rewards" are the means by which issuing banks differentiate themselves to compete for cardholder customers. Without "rewards," they would have to compete on price and service[1] in what has become a commodity market (now that the credit-card infrastructure is fairly mature, though still capable of improvement). All sellers, including banks, hate participating in commodity markets, because competition tends to drive prices down toward costs, until a commodity seller cannot make either a comparatively or absolutely large return. Sellers always strive to differentiate their products, even if only by "brand identification" or other emotion-tugging qualities, to escape commodity pricing competition.

However, interchange fees and the merchant fees which reflect them enable card issuers to differentiate their essentially-identical products at the expense of the merchants who sell possibly-non-commodity goods to cardholders. In concrete terms, the banks collude (through the networks) to make merchants pay for banks' artificial differentiation. No wonder this is galling to merchants– the networks' "honor all cards" rules force merchants to fund bank "rewards" instead of funding the merchants' own marketing schemes– even though bank marketing does nothing for merchants or (in aggregate) cardholders! ("Rewards" schemes do move surplus from one cardholder to another.)

I suggest the simplest reform likely to let the market find a natural balance would be to extirpate "honor all cards" rules and similar schemes which banks use to keep cardholders from realizing that they're just buying their own "rewards." All of those schemes are collusive (the networks coordinate the banks' collusion in return for a rakeoff; a complex structure which has helped them evade antitrust enforcement). Let merchants accept cards but optionally refuse or surcharge cards with high interchange (merchant) fees. That will make those fees salient to cardholders. Merchants and cardholders (in aggregate) will be better off. Banks will merely have to compete honestly– which may trim their profits but who cares? There's no reason we should give banks (another) special privilege (right to collude) in the marketplace.

[1] Banks also compete on which can best trick cardholders into paying excessive fees and interest under incomprehensible and more-or-less crooked contract terms.

Comment by Mark Seecof

---

2. Mark: There is a grain of truth in what you say, but I'd argue with your characterization. It is the case, of course, that there are cross-subsidies in these markets. But these are not in themselves a problem, and merchants have not acted like they were a problem in the past. As a bit of powerful evidence, when retailers run their own credit programs, at significant cost to themselves, they don't charge higher prices to customers purchasing with credit, even though it would be perfectly permissible for them to do so. Rather, they recognize the value of the cross-subsidy and the benefit to credit customers of access to credit and electronic payments, and they finance their credit systems (including, by the way, the discounts they offer to induce customers to sign up–just like offering rewards, and exactly the opposite of what you suggest) with revenue earned from both cash and credit customers. As Ron suggests, we can have a discussion over the macro question whether it is good to lower the price of consumer credit in this fashion, but that's a policy question that has nothing to do with *how* the price of credit is being subsidized. On net, retailers' willingness to incur the costs of maintaining in-house credit systems with no direct financing with surcharges to credit customers suggests these types of cross-subsidies are beneficial, even for merchants. (By the way–I'm sure for in-house credit as for bank credit, interest charges fund the lion's share of the system, but then you are just subsidizing convenience cardholders with charges levied on revolvers–which doesn't strike me as any more "honest.")

Comment by Geoffrey Manne

3. Thanks for taking time to reply. I think the big difference between in-house credit and bank cards is that the merchant's name is on the in-house arrangement. A merchant cross-subsidizing his credit customers from his cash customers is nevertheless funding his own marketing; the "rewards" he hands out induce credit customers to shop in his store. Heck, when the merchant buys radio ads his deaf customers cross-subsidize his hearing ones.

   Interchange fees are not a substitute for merchants' internal cross-subsidy of credit customers because they fund bank marketing, not merchant marketing (I pass over "card partnership" arrangements between big merchants and banks; I never proposed to interfere with those anyway).

   Obviously for many merchants the cost of dealing with bank cards is lower than the cost of operating an in-house credit scheme. It does not automatically follow that banks should be excused from competing rather than colluding.

   I didn't suggest regulating interchange fees, but merely preventing banks from colluding to keep them high. If card issuers competed for merchants' business (that is, if merchants were permitted, whether or not they always chose, to discipline excessive interchange fees on certain cards by refusing or surcharging those cards while still accepting others on the same networks) then the market would set the level of interchange (and other) fees more effectively.

   I can't say exactly what arrangements would fall out, but I don't share the views of Prof. Zywicki and other writers that banks revenues (and profits) are fixed by cosmic forces so that the mix of fees they charge can change but not the total amount. (Cosmic forces no, political forces, very likely!)

   Comment by Mark Seecof

4. As my later post suggests, I agree with Mark that the honor-all-cards rule is central to the current problem. The place where I part ways with Mark is the suggestion that credit cards are a commoditized product that is functionally identical from one issuer to the next. To be sure, the nature of the networks makes the service the merchant receives more or less a commodity, but even with the market concentrating the product offerings of issuers still differ substantially. Capitol One dominates subprime markets. Other issuers like Chase have tried without success to compete in that market. The successful affinity products come from a very small group of people with the know-how to make that product succeed. For me, the core competency here is information technology, which requires a massive capital investment that only a few of the largest issuers can execute with reliable success.

   Comment by Ronald J. Mann

Seven Truths About Regulating Interchange

Bob Stillman

Robert Stillman is a Vice President in the European Competition Practice of Charles River Associates

Interchange fees on payment cards are obviously a hot topic in the United States, but also in Europe and in many other countries around the world. The report on interchange fees released last month by the US Government Accounting Office (GAO) notes that more than 30 countries have intervened or are considering intervening in the payment card industry.

Australia is one of the countries where there has been significant government intervention. Most notably, the Reserve Bank of Australia (RBA) implemented a regulation in October 2003 that had the effect of reducing the average interchange fee on credit card transactions by approximately 50%.

From research that I have done on the effects of the regulations in Australia and from my reading of the ever-expanding literature on the economics of payment cards, I think there are a number of propositions about payment cards that are well supported by economic theory and the available evidence and that should constrain any debate about payment card issues. I will be interested in the extent to which other participants in this blog symposium agree or disagree:

1. A reduction in interchange fees will lead to reductions in merchant discount fees.

This proposition is almost trivial. If this were not the case, it would be difficult to understand why merchants complain so vociferously about interchange fees.

2. If interchange fees are reduced, it is highly unlikely that the resulting decline in merchant discount fees would be quickly and fully passed on to consumers in the form of lower prices and/or higher service levels.

The fact that merchants lobby vigorously for reductions (or even the elimination) of interchange fees must imply that merchants expect their profits to increase if interchange fees are reduced. This is not to say that merchants will not pass-through some portion of any reduction in merchant discount fees; even a monopolist would find it profitable to lower prices if its input costs fell. But I believe it is implausible that an expectation of higher margins is not an important part of the merchants' interest in lower interchange fees. Put differently, if it were really the case that merchants would quickly and completely pass-through any reduction in merchant discount fees, it seems unlikely that merchants would be fighting as hard as they have been fighting for lower interchange fees.

Note that, contrary to the claim that is sometimes made, it is *not* the case as a matter of economic theory that competition will necessarily ensure quick and complete pass-through of changes in input costs. Even in a textbook model of perfect competition, an increase or decrease in input costs will not be passed through fully to consumer prices unless the industry has constant marginal costs. In real-world industries of oligopoly and differentiated products, the economics of pass-through are even more complicated.

3. A reduction in interchange fees will lead to increases in cardholder fees and/or reductions in card benefits (e.g. the value of reward programs).

I would be surprised if there was any argument about this proposition. The evidence from Australia showed seemingly unambiguously that the reductions in interchange fees mandated by the RBA resulted in material increases in cardholder fees and material reductions in the value of reward programs.

4. The government-mandated reduction in interchange fees in Australia did not appear to have any significant effect on the number of cardholders or card use.

In our paper summarizing the evidence from Australia, we pointed to possible factors that may have been operating in Australia at around the time of the RBA regulations and which may have obscured effects on card numbers and usage that otherwise would have been observed. Even so, the evidence from Australia on card numbers and card use tends to support the view that, at least in a country such as Australia where card use is relatively "mature", the demand to hold and use payment cards appears to be fairly inelastic.

5. A reduction in interchange fees will reduce issuer profits.

Issuing banks tend to be opposed to regulatory efforts to limit interchange fees, which implies that issuing banks believe that such regulation would reduce their profits. In theory, the opposition of issuing banks to interchange fee regulation could be due primarily to a concern that any significant reduction in interchange fees might trigger a "death spiral" (or, less colorfully, "negative network effects"). However, if instead the demand to hold and use cards is relatively inelastic – which is what the Australian data tend to suggest is the case, at least for countries where card use is mature – then the opposition of issuer banks is less likely to be based on concerns about negative network effects and more likely to be based on concerns that a reduction in interchange fees will reduce issuer margins.

6. The net effect of a regulatory reduction in interchange fees on the welfare of final consumers depends mainly on relative pass-through rates

The net effect of a reduction in interchange fees on the welfare of final consumers depends ultimately and mainly on relative pass-through rates – (1) the extent to which reductions in revenue from interchange fees on the issuing side are passed through to card holders in the form of higher cardholder fees and reduced card benefits relative to (2) the extent to which reductions in interchange fees on the acquiring side are passed through first to merchants in the form of reduced merchant discount fees and then on to consumers in the form of lower consumer prices and/or higher levels of service.

7. If high interchange fees are the result of competition among schemes, the allegation of collusion seems misplaced.

As explained in the GAO report (and emphasized also by the RBA), interchange fees seem to be the result of *competition* among schemes. In an environment in which merchant acceptance is not very sensitive to the level of merchant discount fees, competition among four-party schemes is likely to lead to higher interchange fees as the schemes use higher interchange fees as a tool to persuade issuers to issue and promote the usage of their particular scheme's cards. Against this backdrop, the suggestion by merchant organizations that they are the victims of collusion is curious. If merchants are the "victims" of anything, it seems more accurate to describe them as the victims of competition in a two-sided market in which enough consumers on the other side of the market use only one card ("single homing") that most merchants decide to accept all cards ("multi-homing"). The same pressures for relatively high merchant discount fees would arise under these conditions even if all schemes were three-party schemes and there were no interchange fees.

Credit Cards in Context: Framing the Discussion

Allan Shampine

Allan L. Shampine is a Vice President at Compass Lexecon in Chicago

While the GAO report provides a useful summary of many of the issues being debated within the credit card community, the GAO's mandate was, in some ways, rather narrow. The GAO was asked to "review (1) how the fees merchants pay have changed over time and the factors affecting the competitiveness of the credit card market, (2) how credit card competition has affected consumers, (3) the benefits and costs to merchants of accepting cards and their ability to negotiate those costs, and (4) the potential impact of various options intended to lower merchant costs." We will be talking a lot about their conclusions on these issues, but first I would like to set the stage by talking about where credit cards fit in the economy as a whole.

Credit cards are a way of buying things, but they are only one of many. Other common methods include cash, checks and debit cards. Each payment method touches different groups, directly and indirectly. Academics, central banks and regulators around the world have debated for many years as to which payment methods are best for society as a whole. The research into this question suggests that there is no simple answer. Indeed, researchers have not even agreed on how to ask the question. Some researchers say that trying to figure out all the costs and benefits is just too hard and we should concentrate on the overall costs of the system. In particular, electronic payment methods are often regarded as less costly than paper payment methods. Other researchers (including myself) point out that consumers stubbornly continue using paper payment methods even as they become more expensive (relative to other payment methods), showing that there must be benefits to doing so, and that those benefits are important enough to influence people's choices. Most researchers agree, though, that different payment methods are better in different circumstances. For example, for a small transaction at a garage sale, cash is very efficient. You don't need any terminals, electricity or approvals. You hand over the cash and you're done. If you're buying a house, though, cash is not a good choice. You're almost certainly going to use a wire transfer. If you're at Starbucks getting a cup of coffee, you might use cash or credit, although the cashier and the other people in line are likely to grind their teeth if you choose credit.

That examples brings up another problem that regulators wrestle with. When you pull out your wallet to pay for something, you ask yourself questions like "Do I have enough cash? Should I use my credit card for the rewards? Should I use my debit card to stick to my budget?" You do not ask yourself, "How much will this cost the merchant? How much will this cost the bank? Are other people going to pay a higher or lower price because of this? Am I going to slow down the line?" (Well, most people don't. If you're reading this blog, you may be the exception that proves the rule). That is, you choose how to pay for things, but the "price" you face for using whatever payment method you choose may not reflect all of the costs and benefits to everyone else.

This distinction is important because whether something is good for an individual does not necessarily mean that it is good for society. If networks take money from some merchants and give it to people using credit cards, at first blush, those merchants are worse off while credit card users are better off. But what does that mean for society? Do prices go up? How does that affect consumers? How does that affect merchants? How are the owners of the networks affected? These are not simple questions. Hopefully this overview will provide something of a framework to discuss them in.

Comments

1. You write "If you're at Starbucks getting a cup of coffee, you might use cash or credit, although the cashier and the other people in line are likely to grind their teeth if you choose credit."

Is this a typo? Credit/debit transactions are faster than cash (particularly given no need to sign for small transactions and no need for a receipt unless you ask for one). I've had people at Starbucks groan at those paying cash.

Comment by Jonathan

---

2. You raise an interesting question. Companies offering electronic payment methods have been working hard to reduce the time it takes to process those payment methods at the cash register, in large part because, historically, it has been time consuming. What you mention – no need for a signature and not getting a receipt – are methods that have been and are used, but those methods themselves have costs associated with them. Not getting a signature generally exposes the merchant to more risk, and not getting a receipt exposes the consumer to more risk. For payment methods there is often a trade-off between speed and risk. The more time spent verifying identity and establishing a record of the transaction, the less chance of fraud. The same applies, of course, to cash, as cashiers that are handed large denomination bills will frequently check them to see if they are counterfeit. For very small transactions at a high volume store, such as at a Starbucks, stores may be willing to assume the risk in order to keep the line moving.

   Electronic payments at Starbucks in particular tend to be faster than at other stores for the reasons you mention, although my personal experience is that they are still slower than cash. The speed involved in processing a payment varies from store to store and product to product, but, generally speaking, studies that have put stop watches on transactions have found that cash is the fastest method at check out, while checks (and less common methods such as food stamps) are the slowest. Electronic payment methods tend to fall somewhere in between.

   Comment by Allan Shampine

---

3. As a general comment, are there economic benefits from interchange fees for more innovation and jobs growth? In the last few weeks, companies have made news with credit card features for wireless devices like Square, Revolution Money, and Chase Blueprint (features include: small business merchants can accept payment by credit card via scanner on mobile phone; service to scramble your credit card number for security; and software to allocate your payments in full per purchase, or on a monthly schedule). These new businesses add a great deal of functionality and security for sellers and buyers, with potential sales spanning domestic and international markets, see http://squareup.com or http://www.revolutionmoney.com or http://www.chaseblueprint.com. Could interchange fees be necessary to encourage development of complementary products that lead to greater consumer welfare, via faster payments, smarter tools, and safer identity protection? Or are these technologies outside the scope of analysis on interchange fees?

   Comment by Anonymous

---

4. That's an excellent question, and I'm impressed with your knowledge of up and coming payment methods. These technologies are not only not outside the scope of analysis on interchange fees, but are right at the center.

   I'm pasting in a small piece from Revolution Money's web site answering the question of why merchants would want to accept RevolutionCard:

   > RevolutionCard Saves Merchants Money
   > Lower Card Acceptance Costs By Up To 80%

> With no interchange payments between banks and a cost of only 0.50% for transaction processing and settlement, RevolutionCard saves merchants up to 80% per transaction compared to other card brands.
> Reduce Fraud And Costly Transaction Disputes By Up To 90%
> RevolutionCards are non-embossed, PIN-based cards that contain no consumer identifying information. This helps protect both consumers and merchants from unauthorized disclosure of cardholder information, and reduces unauthorized transactions, chargebacks and costly transaction disputes by up to 90% compared to traditional signature-based cards.

As you can see, one of the selling points of the RevolutionCard is that it does not have an interchange fee. Between that and the lower incidence of reversed transactions from the use of PIN, Revolution Money claims significantly lower costs for merchants for a service that is pitched as being at least as good and probably better than traditional credit and debit cards. So Revolution Money, at least, does not seem to believe that interchange fees are necessary to develop their product.

Comment by Allan Shampine

Interchange Fees Are Not Rising: Correcting the GAO Report

Tom Brown and Tim Muris

Thomas Brown is a partner in O'Melveny and Myers' San Francisco office. Timothy J. Muris is Foundation Professor of Law at George Mason University School of Law and Of Counsel in O'Melveny & Myers' Washington DC office.

Next summer, the World Cup, the world's most watched sporting event, marks its quadrennial return. Although thirty-two teams will compete in South Africa, the list of favorites begins with the two teams that have won half of the previous eighteen tournaments and three of the last four—Brazil and Italy. Brazil plays an open and flowing brand of soccer. Italy sits back and pounces when its opponents stumble. Although Brazil and Italy follow different philosophies, they have achieved similar success because both have adopted strategies to overcome the adversity that inevitably arises in a major tournament. Even a weak opponent can manage to score a single goal when a referee blows a call. But good teams find a way to overcome.

Long-running legal and policy debates have the feel of the World Cup. Firms on either side of an issue develop their arguments for and against particular policies, and they stage matches between their respective positions in journals and before Congress, courts and administrative agencies. Legislators, judges and administrators observe those skirmishes and, ultimately, render decisions. One hopes that these decisions reflect the relative merits of the parties' competing positions. But even well-intentioned officials make mistakes. The challenge for a firm engaged in a long-running debate is to develop persuasive arguments even in the face of mistakes by the decision makers.

We found ourselves thinking about the ability of generations of Brazilian and Italian soccer players to overcome adversity as we read the GAO's much anticipated report on interchange. Although we agree with the report's ultimate conclusion, we were surprised at how the GAO reached this result. The GAO accepted as true the point from which critics in the U.S. launched their attack on interchange—that "rising interchange fees have increased costs for merchants." The GAO nevertheless recognized, correctly in our view, that the government should neither set rates nor prevent the networks from enforcing the many acceptance rules about which merchants complain. And the fact that the GAO reached this conclusion notwithstanding its flawed analysis of the changes in interchange rates over the recent past is yet more evidence that the networks have the better of the argument.

Interchange is a function of network architecture, not product design. When a payment network supports multiple issuers and acquirers (*i.e.*, allows multiple financial institutions to issue payment products to consumers and to sign merchants to accept those cards), it needs some mechanism that enables those issuers and acquirers to exchange their transactions. This design explains why Discover, but not American Express, has adopted an interchange mechanism. Discover has opened its network to third-party issuers and acquirers. And like Visa and MasterCard, it sets the rate at which issuers and acquirers on its network exchange transactions. American Express now supports third-party issuers, but it remains the sole acquirer on its network. It compensates issuers for providing transactions, but it does not need an interchange device.

Interchange fees are as much a feature of the transactions that consumers initiate with pre-paid and debit transactions on the Visa, MasterCard and Discover networks as the fees are on the networks' credit transactions. But the GAO limited its analysis of the change in interchange rates over time to credit transactions, rendering useless this aspect of GAO's analysis. The centerpiece of the analysis of the change in rates over time is found in Table 2 at page 15. There, the GAO reports that 43% of Visa rates and 45% of MasterCard rates increased between 1991 and 2009.

But the GAO neglects to mention a significant intervening event—the resolution of the Wal-Mart litigation. That settlement allowed merchants to accept Visa and MasterCard credit cards without also accepting the network debit cards. (*See In re Visa Check/Mastermoney Antitrust Litig.*, 297 F. Supp. 2d 503 (E.D.N.Y. 2003), *aff'd*, *Wal-Mart Stores, Inc. v. Visa U.S.A. Inc.*, 396 F.3d 96 (2d Cir. 2005)). And the settlement must be considered when comparing the post-settlement rates to the pre-settlement rates. Prior to the settlement, credit and debit transactions were offered in a bundle. Post-settlement, the transactions were offered independently. Although the system-wide average rate did not change following the settlement, the prices of the components moved in different directions. Credit rates increased, while debit rates fell. (See Chart 3 here).

The report offers no explanation for the GAO's decision to limit its analysis of changing interchange rates to credit transactions or omit discussion of the Wal-Mart litigation. Although the legislation commissioning the report sought an analysis of the effect of interchange on credit cards, the report as a whole discusses interchange more generally. And Visa and MasterCard tried to persuade the GAO to examine changes in all fees. The report acknowledges that both Visa and MasterCard told the GAO that "their average effective interchange rates applied to transactions have remained fairly constant in recent years when transactions on debit cards, which have lower interchange fee rates, are included." The GAO's response to this observation is a non sequitur: "[h]owever, our own analysis of Visa and MasterCard interchange rate schedules shows that the interchange rates for *credit* cards have been increasing and their structures have become more complex."

Moreover, interchange fees relate to but are different from the prices that merchants pay to accept payments. Changes in rates often but do not always affect the prices that merchants pay to accept particular forms of payment. (See chart 4 here). Whether a given rate applies to a given merchant turns on the nature of the rate (*i.e*., whether it applies to all merchants or just some), the investments that the merchant has made in its acceptance technology, and the merchant's skill in negotiating with its acquirer. And the net effect of increases in some rates and decreases in others depends on the mix of transactions at that merchant. The weighted average interchange rate may have declined over time for merchants with proportionally more debit transactions than credit transactions. The first clause of the title of the GAO report should thus read "Changing Interchange Rates Have Had Varying Effects on the Prices That Different Merchants Pay to Accept Different Types of Payments." (The first clause of the title of the GAO Nov. 2009 Report actually reads: "Rising Interchange Fees Have Increased Costs for Merchants.")

But the larger point for purposes of this comment is that the alleged increase of interchange rates and its effect on merchant costs merely opens the inquiry. Many questions follow. Higher interchange rates may drive additional sales for merchants, enable electronic payments to displace less efficient (or more expensive) legacy forms of payment, or reduce the costs of electronic payment for consumers. The GAO report documents the existence of each of these benefits. And it confirms that efforts to regulate interchange rates or reform acceptance rules have shifted costs from merchants to consumers. For these reasons, the GAO's report, on balance, provides little comfort to interchange critics.

The Economics of Payment Cards: Six Lessons from the Literature

Bob Chakravorti

Sujit 'Bob' Chakravorti is a senior economist in the financial markets group at the Federal Reserve Bank of Chicago.

Disclaimer: These views are my own and not those of the Federal Reserve Bank of Chicago or the Federal Reserve System. Much of this discussion is taken from my paper titled "Externalities in Payment Card Networks: Theory and Evidence" presented at the Federal Reserve Bank of Kansas City's 2009 Retail Payments Conference.

The proliferation of payment cards has dramatically changed the ways we shop and merchants sell goods and services. Today, payment cards are indispensable. Recent payment surveys also indicate that consumers are using payment cards instead of cash and checks. Some merchants have started to accept only card payments for safety and convenience reasons. For example, American Airlines began accepting only payment cards for in-flight purchases on all its domestic routes since June 1, 2009. Wider acceptance and usage of payment cards suggest that a growing number of consumers and merchants prefer payment cards to cash and checks.

To date, there is little consensus on what constitutes an efficient fee structure for card-based payments. Reviewing the economic literature on payment cards, I find that no one model is able to capture all the essential elements of the market for payment services. It is a complex market with many participants engaging in a series of interrelated bilateral transactions. Much of the debate over various payment card fees is concerned with the allocation of surpluses from consumers, merchants, and banks, as well as the question of who is able to extract surpluses from whom. Economic models of payment cards generally ignore the allocation of surplus among participants at a given level of social welfare but instead focus on externalities that prevent achieving the highest social welfare.

There are several conclusions that I draw from the academic models. First, a side payment between the issuer and the acquirer may be required to get both sides on board. In this case, the side payment is the interchange fee. This side payment may skew the prices paid by end-users. This sort of asymmetric pricing exists in other industries such as newspapers (readers and advertisers), dating clubs (price differences for men and women), and software such as Adobe Acrobat (document readers and creators). Once fully adoption is reached or the market has reached saturation, the adoption externality disappears but the usage externality may remain.

Second, many economic models suggest that the socially optimal interchange fee structure may not be systematically lower than the network profit-maximizing fee. In other words, the lowest fee is not the one that maximizes social welfare. Wilko Bolt and I construct a model where underlying cost structures such as credit card defaults, crime, and system operating costs determine the optimal acceptance of payment cards. For certain sets of cost parameters, we find that the socially optimal merchant fee may be higher than the bank profit-maximizing merchant fee.

Third, removing merchant pricing restrictions generally improve market price signals. While consumers generally react to price incentives at the point of sale, merchants may be reluctant to charge higher prices to consumers using certain types of payment cards. However, surcharging is increasing in jurisdictions where it is allowed. Furthermore, the ability to surcharge may increase the bargaining power of merchants resulting in downward pressure on merchant and interchange fees.

Fourth, merchant, card issuer, or network competition may result in lower social welfare contrary to generally accepted economic principles. Merchants may use card acceptance as a tool to steal customers resulting in the willingness to pay higher fees. But, when all merchants accept payment cards, total sales across merchants remains constant. Card issuers may try steal cardholders from their competitors with incentives partially or wholly paid for by interchange fee revenue. The recent GAO report suggests that interchange fee revenue may be necessary for some smaller community banks and credit unions to issue credit cards so that they can be competitive with larger issuers especially if fewer of their cardholders revolve debt. Lastly, network competition may put upward pressure on interchange fees because networks are competing for issuers that prefer higher interchange fee revenue given all else equal.

Fifth, both consumers and merchants value credit extended by credit card issuers (along with other benefits such as security), and consumers and merchants are willing to pay for it. When credit cards were first introduced, many smaller merchants adopted general-purpose cards to reduce costs associated with direct lending to their consumers. Merchants often offer subsidized credit to their customers to gain loyalty or increase sales.

Sixth, if warranted, fees set by the authorities should not only consider costs but also benefits received by consumers and merchants, such as convenience, security, and access to credit that may result in greater sales. Policymakers in various jurisdictions often regulate interchange fees by only focusing on costs. Both consumers and merchants may benefit from cards and it is not clear that one party should not pay for it. Clearly, regulating interchange fees by costs and benefits would be difficult.

In reality, the motivation for why public authorities intervene differs across jurisdictions. In addition, the type of public institution that regulates payment cards also differs. The institution may be an antitrust authority, a central bank, or a court of law. Often public authorities intervene because the interchange fee is set by a group of competitors and the level of the fee is deemed to be excessive. In other cases, by mandating fee ceilings, authorities expect greater number of merchants to adopt payment cards instead of cash. In addition to cash handling and safekeeping costs, some public authorities may find the inability to trace cash transactions an unattractive feature of cash. Alternatively, some policymakers argue that lowering card issuers' interchange revenue may reduce incentives to cardholders to use more costly payment cards (for example, credit cards instead of debit cards).

Determining sound public policy regarding the allocation of payment fees is difficult. The central question is whether the specific circumstances of payment markets are such that intervention by public authorities can be expected to improve economic welfare. Efficiency of payment systems is measured not only by the costs of resources used, but also by the social benefits generated by them. Clearly, further research is warranted to explore the complex market for payment services, and policy recommendations should be based on more in-depth research, especially empirical studies that focus on the effects of government intervention.

Comments

1. Bob: I'm not entirely sure I understand this point:

   > Third, removing merchant pricing restrictions generally improve market price signals. While consumers generally react to price incentives at the point of sale, merchants may be reluctant to charge higher prices to consumers using certain types of payment cards. However, surcharging is increasing in jurisdictions where it is allowed. Furthermore, the ability to surcharge may increase the bargaining power of merchants resulting in downward pressure on merchant and interchange fees.

   I do understand why pricing freedom improves price signals, but here we're dealing with identical products with different modes of payment. I think the implication of your comment is that that efficiency is improved if consumers bear the marginal cost of the payment choice. But for this to be true, don't you also have to be saying that cross-subsidies are inefficient? Do you think that they are? If not, isn't the system actually facilitated by the absence of this particular price signal?

Comment by Geoffrey Manne

---

2. Thanks for your question, Geoff.

   The surcharges need not necessarily be set to the marginal cost. In my second post, I give examples where cash and other transactions are surcharged vis-à-vis payment cards. One could argue that in these cases the surcharge incorporates the marginal benefit.

   There has also been discussion in Australia about limiting the level of the surcharges because some merchants surcharge more than their cost. In the U.S., we initially had limits on the discount but no longer do.

   In markets where payment cards have not reached maturity, no-surcharge policies may encourage adoption and may result improved social welfare. In these cases, the substitution is usually from cash and checks to cards and not between cards. However, in mature markets uniform prices may lead to overuse of certain types of payments. Furthermore, why have inconsistent policies that allow surcharging of cash and not the other way around? Perhaps, market forces should work in both directions.

   Interestingly, in countries where payment providers have imposed surcharges on certain products, e.g. Finnish payment providers trying to reduce check volumes, a relatively small surcharge resulted in significant changes in consumer behavior suggesting that cost recovery may not be the only reason to surcharge.

   Comment by Bob Chakravorti

What happened in Australia?

Joshua Gans

Joshua Gans is the foundation Professor of Management (Information Economics) at the Melbourne Business School, University of Melbourne.

What happens when you take a key price in an industry and cut it in half? For normal markets economists would expect that this would have a dramatic effect on quantity. That, however, was not the experience in Australia when the Reserve Bank of Australian (RBA) used new powers in 2003 to move Visa and MasterCard interchange fees from around 0.95 percent of the value of a transaction to just 0.5 percent. The evidence demonstrates that this change was virtually undetectable in any real variable to do with that industry.

To begin, let's review the RBA reforms. First, in January 2003, it moved to eliminate the card association's 'no surcharge' rule. Then in October 2003, the new interchange fee came into effect. As this submission outlined, that latter move had an immediate impact on merchants service charges with acquirers passing on the full extent of the interchange fee reduction to retailers. However, there was no impact on the value of credit card purchases, the level of credit card debt or the share of credit versus debit card transactions. Econometric analysis by Melbourne Business School's Richard Hayes (also appended to that submission) confirmed this. Moreover, that analysis demonstrated that credit card usage did vary with other economic factors including underlying interest rates in the expected direction. Put simply, if we did not know the reforms were actually taking place, you would not be able to observe it in the data.

What was there no impact? There are a couple of possible explanations. First, it may be that the interchange fee was only one of a number of payments between acquirers and issuers and that, unobserved to analysts and the regulator, those payments adjusted to net out the regulated cap. Second, consistent with economic theory, when surcharging is permitted (and it did occur in Australia most notably for online air ticket purchases and phone payments), the interchange fee is neutral (as I will discuss in my next post). That is, the interchange fee reduction causes merchant fees to fall but issuer fees to rise (or loyalty schemes to be curtailed) but otherwise does not impact on the consumer's choice of payment instrument. However, even if that were the case, it is surprising that there was not some period of adjustment.

The RBA continues to regulate interchange fees but has signaled that it is unlikely to adjust them further. When it comes down to it, by capping the fee the industry has survived without disruption and the RBA has ensured that rising interchange fees and associated problems as has occurred in the US will be avoided. That said, it may interest non-Australians to learn that the previous interchange fee was set in the late 1970s and was never changed despite that dramatic changes in the industry over the next two and a half decades. If there was any country without a credit card anti-trust problem it was probably Australia.

The Australian experience tells us that interventions to regulate interchange fees are probably not as important as ones that might deal with other card association rules or generic competition. But it also tells us that such interventions are unlikely to have dramatic consequences for the industry on the choice of payment instruments.

Comments

1. You note that the "change was virtually undetectable in any real variable to do with that industry," but as Todd Zywicki points out in his post following yours, and as you allude to here, there was a change in fees charged to cardholders, right? It is certainly interesting that consumer demand was insufficiently elastic for this to affect card usage, but was there a net effect, or did

the increase in costs to consumers exactly equal the decrease in costs to merchants? I would assume it did, unless there were other efficiencies realized or inefficiencies encountered.

It seems important to view the issue as essentially a trade-off between consumers and merchants (a dynamic, by the way, that is directly opposed to the merchants' characterization of their own position as serving consumer interests), and the question remains whether any overall efficiency interest is served by a policy favoring merchants in such a trade-off.

Comment by Geoffrey Manne

---

2. Cardholder fees are not a real variable but a price. There was no accurate data to look at the offsetting price movements. What was looked at was the impact on the choice of payment instrument. You can't find the change there suggesting there was no trade-off.

   Comment by Joshua Gans

---

3. I've seen data suggesting increases in annual fees and the like–is that data inaccurate? But the absence of a change in payment choice suggests either little of this or considerable inelasticity.

   Comment by Geoffrey Manne

---

4. Joshua,

   Do you have any ideas on the change in merchant adoption of credit cards resulting from the lowering of interchange fees? For example in Spain, reductions in interchange fees resulted in greater adoption by merchants which allowed consumers greater ability to use their cards.
   If I recall correctly, before the regulation there were only two types of interchange fees–electronic and non-electronic. Has that changed? In the US, we have a menu of interchange fees depending on various factors such as type of merchant, type of card, card-present or not, etc. Does something like this exist in Australia today?

   Finally, do you have an idea about bank profits? Did they stay the same? If they fell, any long-term implications on future system innovations?

   Comment by Bob Chakravorti

---

5. There was a one to one pass through of the interchange fee reduction to the merchant charges. My understanding is that there has been no impact on bank profits.

   Credit card demand and usage is not inelastic. The empirical analysis demonstrated that interest rate changes changed usage.

   Comment by Joshua Gans

---

6. So to echo Todd, doesn't that still leave a real quandary? The price of using a credit card goes up, there is no change to the price of goods purchased, yet credit card usage stays the same? Isn't that practically the *definition* of inelastic demand? Or am I missing something?

   Comment by Geoffrey Manne

---

7. Geoffrey, no it is neutrality which is what my next post is about. Of course, I had wanted to post that first!

   Neutrality means that even though consumers have less direct inducement to use cards, the premium they have to pay (via outlet or surcharge) for using cards at the point of sale goes down by the same amount. So it is not inelasticity if the full price to consumers has not changed. That appears to be what has happened in Australia. When the prices change, demand shows itself to be elastic.

   Anyhow this is explained in the next post.

   Comment by Joshua Gans

---

8. Joshua: I get all of this. I think the problem is the evidence (I believe I have seen this evidence) that prices stayed the same and surcharging, though available, was little used. My comments and Todd's comments were based on confusion over the seeming effect that usage stayed the same but prices went up. I understand what you're saying, but I don't know where the evidence of the price reduction at POS comes from. (And sorry about the posting order)

   Comment by Geoffrey Manne

---

9. But it doesn't need surcharging. I can tell you that there are plenty of retail outlets not accepting cards. That is enough to get the price signals working. You have a price at a merchant who accepts only cash and one who accepts cards. The differential is the POS premium for using cards over cash.

   Comment by Joshua Gans

Regulating Interchange Fees will Promote Term Repricing that will be Harmful to Consumers and Competition

Todd Zywicki

Todd J. Zywicki is Foundation Professor of Law at George Mason University School of Law.

Although the mechanisms vary, legislation pending before Congress on interchange has a basic central purpose—to reduce interchange fees, either indirectly or directly. If adopted, these efforts will likely succeed in their intended goal of reducing interchange fees. But they will also likely have substantial unintended consequences that will prove harmful to consumers and competition and will roll-back the innovation in the credit card market over the past two decades.

Credit cards produce three basic revenue streams for issuers: finance charges (interest on revolving credit), merchant fees, and other fees on cardholders. The ratio among these three streams has remained largely constant for almost two decades. About 70 percent of issuer revenues come from interest paid by cardholders on revolving balances. About 20 percent of revenues are generated by interchange fees. And about 10 percent come from various other fees assessed on cardholders: two decades ago the bulk of this revenue was generated by annual fees, today it is predominantly from behavior-based fees such as over-the-limit fees, late fees, and other similar charges tied to a borrower's actual behavior. The precise ratios among these three streams varies slightly over time: in recent years, for example, greater use of home equity loans as a source of consumer credit led to a reduction in revolving balances and interest payments and an increase in risk-based fees. At the same time, transactional use of credit cards has risen rapidly, fueled primarily by consumer use of rewards cards, leading to a growth in interchange fee revenue.

So what would happen if retailers get their way and interchange fees were cut by artificial governmental intervention? The mathematics of the situation is inescapable: card issuers would have to increase the revenue generated from consumers from either interest payments or higher penalty fees or reduce the quality of credit cards, such as by reducing customer support or ancillary card benefits. In fact, this is exactly what happened when Australian regulators imposed price caps on interchange fees in 2003: annual fees increased an average of 22% on standard credit cards and annual fees for rewards cards increased by 47%-77%, costing consumers hundreds of millions of dollars in higher annual fees. Card issuers also reduced the generosity of their reward programs by 23 percent.

The credit card system is essentially a closed system: a forced reduction in one stream of revenues generates efforts to substitute other revenue streams. In a competitive market, the losses from one revenue stream have to be made up for somewhere else. Americans have been recently reminded of this lesson, as Congress's imposition of new limits on certain terms of credit card pricing through the Credit CARD Act over the summer has led to increased interest rates and higher annual fees to offset those restrictions. Because it is more difficult to price risk accurately, issuers have reduced their risk exposure by reducing credit lines and closing accounts. Congress may wail because its legislation failed to repeal the laws of supply and demand, but just as a minimum wage law increases unemployment or rent control creates housing shortages, regulation of some credit terms leads to predictable substitutions for unregulated terms. Direct or indirect price caps on interchange fees would have similar negative consequences.

But while this type of substitution is bad enough for consumers there is an even more important systemic problem. The most important pro-consumer innovation in payment systems of the past two decades has been the general disappearance of annual fees on credit cards (except for rewards cards where the annual fee defrays the cost of program administration). The elimination of annual fees has made it possible for consumers to carry and use multiple cards simultaneously. According to Experian, consumers today have over five credit cards (including retail accounts) on average and over half the population has two credit cards or more. The consequences for consumer choice and competition have been profound—card issuers compete for consumers' business literally every time they open their wallet to make a purchase. Consumers can and do easily shift balances among different cards depending on which provides the best deal at any given time (according to a survey by ComScore, two-thirds of consumers say that they would consider switching their primary credit card if a better feature were offered). Consumers can also stack credit lines when necessary.

An annual fee is essentially a tax on holding cards. Policies that produced a return of annual fees would strangle this process of competition by making it more expensive for consumers to hold multiple cards, increasing switch costs and dampening competition.

Access to multiple cards (and their credit lines) is particularly important for the three-quarters of independent small businesses that rely on personal credit cards in their business and count on infrequently-used reserve lines of credit to exploit rapidly-developing business opportunities. These reserve lines are especially important today as credit lines have been slashed. Forcing small businesses to pay an annual fee just to maintain access to these reserve credit lines would deter many of them from doing so, stifling entrepreneurship and an economic recovery.

Perverse consequences would likely follow on the issuers' side of the market as well. Issuers will find it more burdensome to retain customers who pay their bill every month (the lowest-risk group of customers), creating incentives to pursue customers who revolve and the riskiest class of customers who pay behavior-based fees. This substitution will lead to a less-diversified revenue stream (more dependent on non-interchange revenue), making credit card operations riskier and more dependent on the swings in the business cycle. Credit unions and community banks rely especially heavily on interchange revenue as they tend to cater to lower-risk customers that are less prone to revolve balances and pay penalty fees. Reducing revenue from interchange fees would force these issuers to either abandon the credit card market or to pursue a riskier customer base. It is hard to see why Congress would want to adopt policies that punish the most conservative financial institutions, encourage the very risk-seeking behavior that helped to spawn the financial crisis, and encourage a less-diversified and more risky customer base. Yet squeezing interchange fees would do exactly that.

There is no free lunch. In a competitive market, a reduction of the stream of revenues from interchange fees will have to be made up somewhere else. Not only is this term repricing likely to be inefficient by replacing voluntary contract terms with governmentally-created prices but they will likely dampen competition and innovation, thereby harming consumers in the long run.

Comments

1. Todd,

   I agree that increases in interchange fee would result in increases in other types of fees and charges. Would this shift in fees have any welfare implications? According the Josh's post, there were no real effects to the economy. Would you expect something different for the US market? Do we have any data regarding the benefits of switching from annual fees to "behavioral" fees and its impact on the real economy?

   It is difficult to predict what are the optimal levels for each fee. Clearly, there are benefits to merchants in accepting payment cards and they should share in the cost to enjoy these benefits. One measure that was mentioned elsewhere in this symposium is the cost of directly providing credit and in some cases subsidizing that credit to increase sales and gain loyalty. Other issues include possible better fraud protection and timely receipt of good funds. However, the optimal level of the interchange fee from a social perspective for a specific market has not been identified.

An interesting shift in the US is greater use of debit cards and linkages to lending facilities. These may be worse for the consumer in the sense that there is no 21-day float versus paying a credit card monthly and may result in additional service fees but merchants may be better off because of lower fees.

I am less convinced that interchange fees should be kept high so that annual fees are zero to aid small business borrowing. Interestingly, "business" credit cards have higher interchange fees that can be availed by small business owners. Furthermore, it is not clear who is subsidizing whom here and whether society is better off for it.

Comment by Bob Chakravorti

---

2. Todd,

   Even if you are correct in your conjecture that issuers will make up for lost revenue resulting from interchange fee caps, it is not clear that this substitution is bad. In fact, the substitution can be efficient. If interchange fees inflate product prices, which is probably the case, and if these products can be more efficiently paid for without incurring up to 5% payment fee, then we are dealing with a potentially substantial distortion in the decisions to buy products. It is possible that this fee helps pay for the credit element in the transaction, but for those who don't need this element there is not reason to tie it to the product. So, I don't think that the substitution argument necessarily leads to the conclusion you draw.

   Comment by Omri Ben-Shahar

---

3. Bob:

   Thanks for your comment. This is a tentative response, because I'd want to re-read Josh's paper more closely and read more thoroughly on the academic discussion of it, but here's my initial response.

   I certainly understand Josh's findings, but they remain intuitively puzzling to me. Mandell reports that when annual fees were first imposed on credit cards in the US in 1980, some 8% of the outstanding credit cards in the market were canceled, or about 9 million cards. If any of my card issuers try to impose an annual fee on me, then I'd cancel that card. I can't imagine I'm unique in this. Which should lead to attenuated competition.

   So while I understand Josh's findings, it is hard for me to wrap my head around the logic behind the findings. As Geoff notes in his Comment to Josh's post, these sure seem like some awfully inelastic consumers. And it suggests that consumers are much more inelastic about credit cards than they seemed to be in 1980.

   And it isn't clear to me why that would be. The only possibility I can think of would be that at that time many retailers offered layaway, store credit, and their store credit cards, so maybe consumers who were making credit purchases didn't need bank cards as much. And usury regulations made bank cards much less attractive than these other types of credit. But it hardly seems like we want to say that the goal of interchange regulation would be to resuscitate layaway plans.

   Ditto for surcharging (which I gather he'll discuss tomorrow). I use my credit card for everything, but I'd probably switch to a debit card if my credit card was surcharged. Obviously that's not data, but I can't imagine that I'm unique in that.

So if there is an intuitive logic to back this up, I'd be interested in understanding it (or perhaps Josh is going to explain it tomorrow).

But there is another issue–if there is no welfare effect because there is no change in consumer behavior or the overall economic effects, what is the point of the regulation? Just to change the distribution between the merchants and consumers? I thought the point was to try to change consumer behavior to substitute away from credit cards to other payment schemes.

If I'm understanding the bottom line correctly, what Josh seems to show is sort of curious. Merchants argue that they "must" accept cards because of business necessity–this gives rise to the idea that merchants are the more inelastic side of the market. But Josh seems to be finding that consumers are highly inelastic in their demand for credit cards too. That could be, but this seems like it is starting to look like a pretty strange market. As suggested above, this may be the case with goods almost exclusively bought on credit (like appliances), but it doesn't seem generalizable.

And, of course, this doesn't even consider all the welfare benefits of electronic payments to which you allude.

So this is not to question Josh's empirical findings, but to just say that they seem incongruous to me and that this seems to just be a distributional issue with pretty weak policy implications.

On behavior-based fees, the only research that I'm familiar with (unless I've missed something) is Massoud, Saunders, and Scholnick, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=890826, which finds that behavior-based fees appear to be consistent with risk-based pricing. If that is true, then presumably that improves overall efficiency.

As for small business, you are right that I am not making a broad welfare claim. I don't think that it has been studied thoroughly. I'm making the casual observation that small businesses may have an even greater need for residual credit lines to deal with greater short-term fluctuations in credit needs, so that having a no-annual fee card that can serve as a back-up credit line when needed may be valuable, but would be more costly if the small business has to pay an annual fee to keep it open.

Comment by Todd Zywicki

---

4. Omri:

I think that whether this inflates prices is a matter of relevant cross-elasticities of demand and supply in the market. Empirical evidence so far finds no evidence that the reduction in interchange is passed on to consumers in the form of lower prices. So, this may mean that the merchants increase quality (perhaps better customer service, longer hours, or free gift-wrapping), higher profits, or simply dissipate the rents in some other way (perhaps excessive advertising to try to attract customers).

And it is open to question whether the alternative payment schemes are actually less-expensive (once the full social and externality costs are accounted for) and that they are also subsidized (the government prints currency and clears checks at par).

So it is equally plausible to assert that consumers overuse cash and checks because they don't pay their full price.

As I'll discuss tomorrow, the idea that credit cards makes non-card customers subsidize cash customers is a red herring–those sorts of cross-subsidies have been going on for about a century.

Comment by Todd Zywicki

---

5. Like Todd, I'll do some discussing of the cross-subsidy argument tomorrow. But I think one thing worth noting here is that complaints about cross-subsidies are fundamentally at odds with the conventional posture of the interchange fee debate as a competition policy issue. In other words, the existence of cross-subsidies is a function of the very nature of competition in two-sided markets rather than market power. For example, payment systems with small market shares must engage in the same balancing of both sides of the market which results in cross-subsidies. Further, as Todd alludes to, consumers are "bombarded" by cross-subsidies every time they enter the supermarket, coffee shop, bookstore, etc.

   It is important to recognize that the competitive process generates these sorts of pricing "inefficiencies," which are inefficient primarily in the sense of comparison to a blackboard model of perfect competition, are often the consequence of the normal competitive process. It is in this light that the posturing of interchange fee legislation as antitrust intervention appears troublesome.

   Comment by Joshua Wright

The Myth of Consumer Protection Through Disclosure

Omri Ben-Shahar

Omri Ben-Shahar is the Frank and Bernice J. Greenberg Professor of Law at the University of Chicago.

I will focus my blog post on one of the proposals for reducing interchange fees: the requirement that the fees be disclosed to consumers. I am not sure how seriously this option is taken by the GAO report. Indeed, the report concedes that mandated disclosures in this context are not very likely to be effective, because "consumers are likely to disregard this kind of information." But I will not be surprised if, of all the regulatory options discussed in the report, in the end it will be the disclosure rule that is enacted.

I am sure that readers of this blog don't need a long explanation why disclosures would be futile in this area. Numerous studies have documented the failure of mandated disclosures in other areas of consumer credit, ranging from TILA, through other financial accounts such as depository, savings, and mutual funds, and extending to disclosure by financial brokers, investment advisers, credit reporting agencies, and even pawnshops. These mandated disclosure rules fail to inform people, to improve their decisions, or to change the behavior of the financial institutions. The fail because ordinary people can read them, can't understand them even in the most simple format, don't know what to do with the information even it were understood, and face way too many such disclosures in their every day lives

I recently conducted a study looking at the entire body of mandated disclosure statutes that people encounter, reaching beyond financial transactions. (You can view a talk based on the study here). Mandated disclosures are a routine regulatory device found in insurance law, health care, informed consent doctrine, Miranda warnings, IRBs, and hundreds of product- and service-specific enactments. My study concluded that none of these disclosures do anything to help people, and many of them backfire. One of the features that runs through all these scattered disclosure statutes is how easy it is politically to enact them. When lawmakers respond to a particular problem that requires intervention—much like the one we are now discussing, interchange fees—there is often debate what rules would work, how deep the intervention ought to be, and whose interests to prioritize. But there is very little debate or opposition to disclosure mandates. Everybody supports them. The perception is that more information is always better: it helps people improve their decisions, it "bolsters their autonomy" as some like to put it, and it perfects market competition. At worse, disclosure believers think, the information will not help much, but it surely will not do any harm, and disclosure regulation involves very little budgetary allocation.

Here is a case in point. Just last month, the Federal Reserve regulated overdraft fees. After much thought and consultation, the Fed found a solution to the problem of high overdraft fees for ATM and debit card transactions. Recognizing that many consumers would prefer that money withdrawal would be declined rather than pay a sizeable overdraft fee, the rule enacted by the FED prohibits banks from charging overdraft fees unless consumers *opt in* to the overdraft fee option. Sounds sensible: give people choice, and set the default rule to induce information dissemination.

But here is the catch. How, according to the legislation, would consumers learn about the size of the overdraft fees and choose, if they care, to opt in? By establishing mandated disclosure requirements! That is, to make sure that the notice is "meaningful", the Fed, with the support of consumer advocates, mandated a new form—which they call a "segregated disclosure"—a separate sheet consumers will receive from the bank providing them "a meaningful way to consent and thus to providing meaningful choice." The ingenious advance here, which ensures "informed choice," is to have a separate form, with a separate notice, and a separate signature. This, supposedly, will prevent "inadvertent" consent.

Like any other technical financial disclosure, this format is unlikely to help, especially the least sophisticated consumers—those most likely to carry overdrafts. Whether it is one form of separate forms, one notice or separate notices, one signature or separate signatures, this will not change the ineffectiveness of this disclosure paradigm. Consumers will get yet another pre-printed boilerplate page, with another dotted line at the bottom, which they will happily not read.

The point is that, when all is said and done, nothing much happened. There was a moment of significant public and media attention to the problem of overdraft fees, but in the end they were not regulated. Another meaningless disclosure was added to people's lives, already swamped with hundreds and thousands of disclosures. Politically, the Fed finished its job and the problem is now "solved." This is a familiar pattern: a disclosure rule provides an excuse to refrain from a real solution.

Now back to interchange fees. The GAO report lists several possible policy options, from direct regulation of the fees to restrictions on the terms imposed by issuers and how they are negotiated. These are controversial options that would likely lead to substantial political wrestling. There is also much uncertainty, even among the most sophisticated of academic experts, as to the effects of these measures. Perhaps other entries to this blog will shed more clarity as to the right regulatory direction. But as long as these difficulties remain, and as long as interest groups exert pressure on lawmakers, disclosure rules will once again surface as a safe, unopposed, but unfortunately useless regulatory device.

Comments

1. Consumer disclosure requirements certainly have a long and varied track record. On the one hand, economists like full information, and it's hard to argue against giving consumers more information. On the other hand, if everything is important, then nothing is important. There is a common joke about getting a user agreement that is 100 pages long in 24 point bolded, underlined type.

   Generally, I think the Federal Trade Commission is pretty good at enforcing existing consumer protection requirements. Trying to come up with detailed, specific disclosures always runs the risk of imposing ongoing costs while being made irrelevant by rapidly changing events. Having said that, to the extent that bank or network rules prevent merchants from telling consumers about interchange fees, that raises some concerns. Presumably, if a merchant wishes to tell consumers something, the merchant regards it as important and thinks that the consumer will act upon it. To that extent, regulatory intervention to prevent mandatory nondisclosure may be helpful.

   This issue is closely tied to surcharging, which a few posters have alluded to, but which appears to be up for more detailed discussion tomorrow.

   Comment by Allan Shampine

   ---

2. It is tempting to think that informing consumers can only improve matters. Moreover, if banks are actively trying to stop merchants from disclosing interchange fees, all the more reason to insist that disclosures need to be made and even mandated. Unfortunately, this is not going to help much. Consumers simply do not know how to process all this information. It is not just because of long gibberish boilerplate-style language. Even simple disclosures, like APRs, are unhelpful to consumers who are bombarded at every turn with numerous disclosures about matters that only cause them anxiety.

   I mentioned in my main post my concern that, despite the growing recognition that disclosure is futile and sometimes counterproductive, it is likely to be the only politically feasible regulation (as it has been in hundreds of other cases). Having now read Josh Wright's post, which refers to the recent House hearing on the proposed interchange fee act, I am afraid that this is closer to a reality. Here is what Rep. Shuster had to say in introducing the act:

> "This legislation focuses heavily on transparency … . It makes Interchange Fees subject to full disclosure and terms and conditions set by credit card companies easily accessible by consumers."

Comment by Omri Ben-Shahar

---

3. Its unclear to me whether Allan is saying that there is evidence that banks are preventing merchants from telling consumers about interchange fees. It is my understanding that, quite the contrary, the banks publish the relevant fees. So I'm not sure if rules prohibiting mandatory non-disclosure are a solution in need of a problem? Is there evidence that this is a widespread problem or was that a hypothetical?

   More generally, I'm in agreement that the disclosure aspects here seem most likely to raise the costs of compliance without any real, tangible benefits from a consumer protection perspective. And, as Omri notes, they could make things worse depending on their precise form.

   Comment by Joshua Wright

---

4. Omri is surely spot on when he suggests that disclosure here is not a useful solution.

   He is perhaps a little too skeptical of the general possibilities of useful disclosure regulation. Bill Sage has an excellent piece about disclosure in the health-care context, in which he suggests that the value of disclosure regimes depends on the existence of sophisticated intermediaries that will use the disclosed information. Parallel to that reasoning, I recommended a rule (more or less adopted in the CARDS Act) that required issuers to post their cardholder agreements online. This did not rest on the premise that cardholders would compare the agreements, but on the premise that consumer advocates interested in the topic would scrutinize the agreements and bring attention to provisions sufficiently onerous that they would not bear public scrutiny. So I think disclosure regulation can help consumers some of the time, though I agree with Omri that this is probably not one of them.

   Comment by Ronald J. Mann

Interchange Legislation as Counterproductive Consumer Protection Regulation

Joshua Wright

Joshua D. Wright is Assistant Professor of Law and George Mason University School of Law.

I want to begin with the premise that the legislation pending in Congress, in whatever form is ultimately adopted, will be successful in reducing interchange fees before turning to the question of whether such a reduction can be justified. Proponents of interchange fee legislation offer two basic defenses of the legislation. The first is as a statutory substitute for a perceived failure of both markets and competition law to address the "problem" of interchange fees. Various iterations of this defense of interchange legislation rely on economic arguments that the balance of economic arrangements between merchants and cardholders chosen by Visa or MasterCard over time involves the exercise of market power and reduction of output, or on the general theory that cross-subsidization of credit card users by cash and check customers (whether or not this subsidization is a function of market power) warrants intervention. Many of the comments in this symposium focus on this dimension of the interchange debate. It is an important dimension. I will discuss the proposed legislation from an antitrust economics perspective in my second post.

In this post, however, I'll focus on interchange legislation as a consumer protection measure. While defenses of interchange fee legislation often blend competition and consumer protection concerns together, the latter generally involves alleging consumer harm that derives not from collusion or the exercise of market power, but rather unfair or deceptive business practices. Take, for example, Representative Shuster's opening statement at the recent House hearings on the Credit Card Interchange Fee Act:

> *I believe action is needed to help level the playing field between consumers, small businesses, and credit card companies by requiring greater transparency and prohibiting unfair and abusive practices when it comes to interchange fees.*
>
> *Last summer's dramatic rise in gas prices was a prime example of inflexibility by credit card companies towards merchants and consumers over the interchange fee. As fuel purchases rose above authorized transaction limits, major card companies reserved the right to repay gasoline merchants a lower price than was actually purchased, particularly on smaller transactions. I joined with Congressman Welch to introduce H.R. 2382, to curb this type of practice. This legislation focuses heavily on transparency in the hopes of determining whether credit card companies are pursuing anti-competitive practices. It makes Interchange Fees subject to full disclosure and terms and conditions set by credit card companies easily accessible by consumers. It would also prohibit profits from Interchange Fees from being used to subsidize credit card rewards programs. Small businesses, and ultimately consumers, should not be financing perks of luxury card holders.*

But will a reduction in interchange fees help consumers? Economists have been studying two-sided markets since the early 1980s and it turns out one of the most important lessons of this literature (which other contributors to the symposium have already discussed in detail) is that it is very difficult to figure out whether an interchange fee is too high or too low from a consumer welfare perspective. I do not know whether current interchange fees are socially optimal, or if they're even close to socially optimal. There is great reason for skepticism, however, that regulators would be able to do so with any degree of certainty. One positive feature of H.R. 2382 is that, consistent with the lessons of the economic literature, while it will surely reduce fee levels, it does not attempt to directly engage in specific price regulation. As my colleague Todd Zywicki notes in his earlier post, however, one highly likely outcome of the legislation is that the mandatory reduction in interchange fees will result in a predictable increase in *other* fees as credit card companies reprice their services. Indeed, a second important lesson from the two-sided markets literature is that changes in pricing on one side of the market are often felt on the other. While one can certainly count the reduction in merchant costs associated with a decline in interchange fees as a benefit to that side of the market, it would be unwise from a consumer protection policy standpoint to assume that these changes represent the free lunch legislators have been looking for after all these years – or that those fees will not simply be reinstated in other guises elsewhere.

In fact, it is relatively straightforward to predict that a reduction in interchange fees will, as in any economic system, be made up for in the form of higher finance charges or other fees imposed on cardholders as happened in Australia where the number of cards with annual fees and the size of those fees increased while benefits offered through reward programs fell. The effective disappearance of annual fees from the credit card has had a multitude of consumer benefits ranging from the immediate consequence of the reduced cost of credit availability to the indirect benefit of increased competition between issuers who know that consumers are likely to hold several cards at once. It is no surprise that survey evidence reveals that consumers have particularly strong disdain for annual fees as compared to changes in other terms such as interest rates, late fees, and changes in loyalty programs.

From a consumer protection perspective, one (so far as I can tell) uncontroverted consequence of the legislation will be to reduce consumer access to credit. Given the tenuous state of the economic recovery, legislation that reduces consumer spending has obvious costs. Consumer spending is a critical component of any recovery. As is well known, consumer spending has a multiplier effect, which leads to dramatic economic expansion and the growth in jobs. With an unemployment rate of close to or exceeding 10 percent and weak consumer spending it would seem particularly counterproductive to limit credit availability, especially in light of the highly questionable and transient potential benefits. The costs of doing so are even more pronounced in the current context when small businesses rely on credit cards to fund business activities and create new jobs. As David Evans and I point out in arguing against the Consumer Financial Protection Agency Act of 2009, which also purports to grant consumers additional "protections" many of which are of dubious merit, now is not the time for regulation that reduces the availability of consumer credit. While there are likely other consumer protection measures in the lending industry that could improve consumer welfare, particularly for the non-bank institutions that virtually all commentators identify as the source of most problem mortgages that led to the financial crisis, interchange regulation cannot plausibly not fall into that category.

There are obvious social costs of adding to the regulatory mix yet another piece of legislation that will quite predictably increase fees to cardholders and lower benefits, thereby reducing credit availability to consumers and small businesses. Therefore, the burden of justifying interchange legislation is on its proponents to demonstrate its benefits through economically coherent theory as well as systematic evidence that a reduction in interchange fees will be a net gain to consumers in light of these welfare losses through reduced access to credit. The "consumer protection" arguments often raised against interchange fees as "unfair and abusive" practices do not carry that burden. The remaining argument is that the cross-subsidy theory warrants intervention on competition policy grounds. I will discuss that issue in my second post.

Comments

1. You probably are right that regulators have no useful baseline to set a properly "reduced" interchange fee. But how does the two-sided markets analysis work out in a case where the price level is maintained by tying: if we knew that many merchants would refuse to accept Visa Signature and World MasterCard products if they could unbundle those products from the standard Visa and MasterCard products what makes us think the current interchange fees for those products are at the "correct" level?

   Comment by Ronald J. Mann

2. Thanks for the comment Ronald. I've got two general responses. The first is that the direction that one believes the tying rule cuts for this analysis will depend critically on whether one thinks its economic function is critical to the efficient functioning of the payment system or a mechanism to extract monopoly rents.

   I'm persuaded by the former view that the honor-all-cards rule is critical to the functioning of the payment system because it ensures the cardholder that her card will be accepted at all merchants participating in the network. If one allows merchants to decide on their own which of the cards within the network they would select, the potential for those individual merchant decisions to damage the reputation of the network would be substantial.

   The second point is that, while one must recognize that pro-competitive function of the honor all cards rule in payment systems in the overall balancing, it does necessarily follow that (as you suggest in your comment) the interchange fees are at optimal levels. I agree with you there. But I do not think it changes the analysis in my post that regulators do not have a useful baseline for determining optimal fees. In the absence of clear efficiency gains and the risk of significant efficiency and consumer welfare losses, I believe the "first do no harm" principle is a wise guide to policy whether or not we have any evidence that current fees are "optimal" in the blackboard economic sense.

   Comment by Joshua Wright

---

3. I agree with you that the honor-all-cards rule would be more justified if it was necessary to make the system work. But in a world in which the typical cardholder has several cards in the wallet, and in which few cardholders have only high-interchange cards in their wallet, then it seems pretty unlikely to me that the bundling of the two very differently priced products is "critical" to the efficient functioning of the system. Remember, these price disparities first appeared only after the settlement in the debit-card litigation gave the networks a federal-court approved right to force merchants to accept the bundling

   Comment by Ronald J. Mann

---

4. The fact that most cardholders have several cards might influence the magnitude of the efficiency gains from the honor all cards rule, i.e. the higher the number of cards the consumer carries in its wallet the more likely that he has one that will work if the merchant rejects some of them. But that's not the same as saying there are not efficiencies associated with the rule. Or there are no costs imposed on consumers for using the network under such conditions relative to the world where all cards are accepted. And its not the same as saying that those gains are small. Just that those losses would be smaller than they would be if consumers didn't carry a bunch of cards (including some low interchange cards). We can certainly debate the magnitude of these gains. But I am comfortable sticking to the modest claim here that whether or not the benefits of such a rule have fallen over time, they exist, while evidence of consumer gains from eliminating such a rule (or reducing interchange) are harder to pin down empirically.

   I think its also important to note here that the increase interchange fees occurred at least in part because of an increase in payment card system competition for issuers as the issuers developed methods to increase cardholder loyalty. With increased cardholder loyalty came greater sensitivity to interchange fee differences from issuers (because they could now shift customers from one card to another while losing fewer sales) and more intense competition from payment systems and higher interchange fees. Complaints about the particular margins on which this competition took place sound much more like complaints about the competitive process than they do like traditional antitrust concerns.

Comment by Joshua Wright

---

5. An important adjunct to Josh's point is that, as interchange fees decrease and annual fees increase correspondingly, there will be a decrease in the number of cards in anyone's wallet at any given time. This ability to choose between cards at the POS is in part a function of low interchange fees. Raise those fees and while it becomes more important for cardholders to hold more than one card, it also becomes less likely.

   Comment by Geoffrey Manne

---

6. Prof. Wright wrote "I'm persuaded by the [] view that the honor-all-cards rule is critical to the functioning of the payment system because it ensures the cardholder that her card will be accepted at all merchants participating in the network. If one allows merchants to decide on their own which of the cards within the network they would select, the potential for those individual merchant decisions to damage the reputation of the network would be substantial."

   That seems rather weakly-founded to me. If a network paired its "honor all cards" rule with a rule that interchange fees would be the same for all cards then merchants could accept all of them without being ripped off by some of them (the difference in interchange fees may be 1% or even more of the transaction value– that's a lot to a merchant– it may be in the same league as his own margin on the sale!) Of course, that's not how "honor all cards/no-surcharges" works. The "assurance" to the cardholder is that she can sign up for the most remunerative card-issuer rewards program without worrying that the merchant clobbered with the cost of those "rewards" will balk. That's not critical to the functioning of the network, it's only critical to the supracompetitive margins of card issuers.

   As for the potential for merchants to "damage the reputation of the network" by choosing to accept lower- (interchange/ merchant) fee cards and decline higher-fee cards, we have empirical reason to believe this is (a) not damaging at all, and (b) pro-competitive. Right now merchants decide whether to accept Visa, MasterCard, American-Express, and various other cards. Merchants often refuse American Express cards because the fees are much higher than for most (though not all) Visa or MC cards (network rules forbid surcharging).

   Does this "damage" American Express' reputation? No. Cardholders understand the economic tradeoffs well and adjust the mix of cards they carry to meet their desires for "rewards" and their desires to use cards with some merchants who don't want to price those rewards into their goods and services.

   AmEx stays in business because merchants and cardholders agree that it provides the right mix of benefits to all parties for some transactions (it helps that AmEx rewards transfer some surplus from businesses to cardholders effectively (if not legally) tax-free through "expense reimbursements" paying inflated prices which in turn support "rewards").

   Merchants who don't see a benefit from AmEx don't accept those cards. AmEx and the others (Visa, MC, etc.) *compete* for merchants; all of them offer co-op advertising deals and special fee arrangements to merchants with clout (either cachet or volume).

   If the big networks like Visa and MC were forced to expose their member card-issuers to competition over "interchange" fees, then on the experience of AmEx competing with the other networks, I would expect such competition to result in a more efficient market overall. Immediately after a reform of the rules, cardholders trained in the “honor all cards/no-surcharges” era might be briefly discomfited by some merchants rejecting or surcharging some (greedy) cards, but that would be a minor transition problem– such customers would call their issuers (or perhaps other issuers) and get lower-fee cards to carry. The lower-fee cards might come with fewer “rewards” but obviously, consumers in the aggregate could not lose by that.[1]

Merchants could choose how many sales, if any, to forego by refusing or surcharging some cards. They might waive surcharges for good customers, or on high-margin sales, or “just this once, but next time bring a different card.” It doesn’t matter– competition would sort that out fairly quickly. Banks could compete to offer more widely-accepted (read: cheaper) cards as well as cards with fancier loyalty programs. I am quite confident of that, because Visa/MC do that now, competing with AmEx! (Remember those old Visa ads? “Bring your Visa card, because the Olympics don’t take American Express.” That could turn into “bring your XYZ Bank Visa card, because department stores don’t take Citibank.”)

[1] Certainly the distribution of “rewards” benefits and burdens among cardholders would shift.

Comment by Mark Seecof

Onions Forever! A Response to Allan Shampine

Richard Epstein

There is nothing like the provocative post from Allan Shampine to move this debate up a notch. First, I did not say that the debate over interchange fees was Onionesque. I reserved that dubious distinction to the on-the-hand-on-the-other-hand title of the GAO report. Allan is right that the stakes are huge, which is why this debate is so important. But he is wrong to think that the GAO adds much to the debate when all it can responsibly say is that any regulation of interchange fees has both costs and benefits, when it is unable to quantify or evaluate either.

My own substantive view starts with the legal version of the Hippocratic Oath—first, do no harm. That generally counsels against the interference with competitive markets. But it does not, evidently, have quite the same pop in the complex world of interchange agreements where there are sure to be some pockets of monopoly power. But even if that were the case, the second order concern remains true. Is the cure proposed likely to be worse than the disease, which I suspect will be the case if there is no clear path from diagnosis to treatment.

On this issue, the excellent posts by Tom Brown & Tim Muris, Robert Stillman, and Todd Zywicki all make the same point. As Zywicki properly notes, the credit-card system is a closed loop. The loss of revenues from one part of it has to be offset by the gains in revenues elsewhere. It becomes therefore very difficult to construct a telling narrative that justifies the use of high administrative costs to switch these flows in a direction that retailers prefer, but which do little good for others. As Brown & Muris point out, fully corrected for debit cards, there is no run up in interchange costs, so why worry. As Bob Stillman points out, if the merchants were prepared to make a dollar-for-dollar pass through of fee reductions, they would have no incentive to lobby so hard for a program from which they received no return. I think that they have better knowledge of their own business than I do, so that the question of who pays if they get a government break still remains.

Allan is surely right to point out that the 1.7 percent interconnection fee is not chump change. It is larger than the 0.5 percent reduction in sales taxes that is being mooted in Chicago. A fair comparison would ask about the change in effective rates that regulation could impose. But even if we put that aside, the structural differences between interchange fees and the sales tax really matters. The sales tax takes wealth out of the productive cycle of credit (indeed all) sales. The one unambiguous effect is that Chicago purchasers now have an incentive to shop in the suburbs for their large weekly household purchases, and even for smaller transactions like gasoline. Governing a long and thin city has important tax consequences because it puts a lot of people close to city lines, and also to Indiana. Cutting down the fees brings business back.

There of course no taxes involved in this dispute, just lots of dollars. But the flip side of the tax issue does arise with subsidies for various payment systems. Here one of the great achievements of credit cards is that it does not have the public subsidy that is found both for checks, and for cash, when, last I looked, no one had to pay a cent to acquire a shiny new $20 bill. The government assumes the printing costs, and guards against counterfeit transactions, a rough analogy to credit fraud. If this industry can continue to expand its share of the market, hands off looks to be the better solution, if only because there are more players who can divide the substantial fixed costs in running this system.

Conclusion: even if you cancel your Onion subscription, don't buy into the regulation of interchange fees until the GAO can supply a better narrative than it has already done.

Comments

1. A number of commenters and posters have argued now that a credit card network is a closed system, and that decreases in fees in one place must, by definition, be offset by increases in fees in another place. The experience in Australia has been cited to support this claim – an experience which Bob Stillman, among others, has studied. While Todd Zywicki and others point out, correctly, that research by the Reserve Bank of Australia has indicated that cardholder fees rose and rewards programs became less generous, it is important to point out that Bob did not say that the network was a closed system.

   That is, Bob found, as his post here states, that the reduction in interchange fees was not fully offset by increases in other fees. Total fees flowing into the network were lower – so bank profits fell. Put another way, the total fees paid by cardholders and merchants to the banks were lower after interchange fees were reduced even though volumes did not decline.

   Other researchers have found similar results. Intuitively, if banks could raise the same amount of money without interchange fees, it is hard to see why all of this debate would be necessary.

   Comment by Allan Shampine

Debunking the "Cross-Subsidy" Theory

Tom Brown and Tim Muris

(NB: We have consulted with Visa U.S.A. Inc. on a variety of issues; the views expressed herein are our own.)

In our earlier post, we observed that the GAO report on interchange got off on the wrong foot when it concluded that interchange fees were rising. We infer from the silence which greeted our post that everyone agrees with this criticism. Indeed, yesterday's posts and comments appear to agree that the GAO's report does very little to advance the discussion of interchange or the cost of electronic payment. But we suspect that greater disagreement lies just around the corner.

A number of posts yesterday promised to address the claim on which the criticism of modern payment systems rests–the extent to which the discount that merchants pay to accept most electronic payment systems in the U.S. imposes a tax on legacy payment instruments such as cash and check Mark Seecof seized upon this point in his comment on Ron Mann's post. According to Mark, the "big problem" with the payment card industry is that discount fees are used to fund rewards programs, and he claims that society as a whole would be better off if the government simply forbid networks from enforcing their honor all cards rules and force networks to negotiate acceptance on a program-by-program, issuer-by-issuer basis. The claim that increasing transaction costs will produce more efficient outcomes is a curious one. But we'll save that issue for a later day. Rather, with this post we intend to take up the predicate of Mark's post–that discount fees on electronic payments shift costs to users of legacy payment instruments.

At the outset, we note that discount fees, unlike interchange, are a feature of virtually all private payment instruments. Thus, if there is something to the notion that discount fees tax other forms of payment, then the criticism applies as much to American Express and Discover as it does to MasterCard and Visa. In our view, however, although this criticism is oft repeated, repetition obscures a number of problems.

First, cross-subsidies are ubiquitous in any complex economy. Consumers receive free refills on drinks in restaurants, free parking at shopping malls, goods below cost in supermarkets (via loss leaders), relatively inexpensive newspapers because advertisers pay most of the costs, and many similar benefits. To bring buyers and sellers together through such intermediaries as newspapers, supermarkets, and credit cards, one side frequently receives inducements to participate. These inducements help maximize the joint value of the ultimate transaction for the parties. Rather than an inefficient "subsidy," these inducements are the lubricant necessary to make the economic machine work at its best.

Second, from a social policy perspective, whether interchange forces legacy buyers to pay more should raise a concern only if legacy is more efficient. But it's not. It is hard to believe, as some people suggest, that credit cards and other electronic payments are more expensive than cash and checks. In fact, legacy payments have several limitations that create costs for both consumers and merchants. Cash only works well when the good and payment are exchanged simultaneously. And the technology of cash does not support the instantaneous decision to give credit to the person buying; rather, the buyer has to arrange credit separately with a financial institution. In addition, with cash, you have no recourse against fraud, other than bringing suit. (On the costs of cash, *see* Daniel D. Garcia Swartz, Robert W. Hahn, and Anne Layne-Farrar, *The Move Toward a Cashless Society: A Closer Look at Payment Instrument Economics*, Vol. 5, Issue 2, Review of Network Economics 175, 192 (June 2006) (describing cash as "among the most costly payment method[s] for society")). Similar transaction costs and risks accompany the use of checks.

By contrast, there are numerous benefits to using credit cards and other electronic payments. For consumers, these benefits include the extension of credit real-time, the reduction of risk, automated dispute resolution, and better record keeping, as Garcia-Schwartz, Hahn and Layne-Farrar demonstrate. For merchants, accepting credit cards allows them to make sales on credit at a generally lower cost than operating their own credit program. And merchants can receive faster and more certain payment from customers using cards than from customers using other means, such as checks.

Third, and most significantly, the rapid growth of online payments within the retail industry is rendering legacy payments obsolete. The GAO itself seems generally aware of the shift from legacy to electronic payments. Indeed, it cites the Federal Reserve's recent estimate that the use of both checks and cash have declined, or at least grown more slowly than credit and debit card use, since the mid-1990s as more consumers switched to electronic forms of payment. Since 2005, more than half of total retail transactions have used either credit or debit cards. Large national merchants report that sales made with cash and checks have decreased in recent years, while sales made with credit and debit cards have increased.

But the GAO ignores that the argument in favor of regulating interchange to protect cash and check users, whatever its overall merits, is logically limited to areas where legacy forms of payment can be used. And those areas are quickly vanishing. For example, even if a study of the 1980s retail gasoline market were to suggest the existence of cross-subsidies then—a debatable conclusion—that study cannot be read to suggest the existence of such a subsidy among people who shop on-line or who buy their gas at automated fuel dispensers. According to scholars, we are rapidly moving towards a cashless society where no one uses legacy instruments such as cash or check. And there is simply no reason to believe that this move is driven by the inherent inefficiency of electronic payment or an implicit tax on users of cash or check.

The GAO's misplaced concern for users of legacy payments is yet another example of a theoretical objection to unregulated interchange that finds no support in the facts. According to Garcia-Schwartz, Hahn and Layne-Farrar, "the shift toward a cashless society appears to improve economic welfare," with consumers the party most likely to benefit. But, if history repeats itself, we will likely have to continue to endure the interchange debate regardless of the facts. As the GAO's report again reminds us, merchants simply want to pay less for the benefits that credit cards provide. Not surprisingly, they are in this debate for themselves, not their consumers.

Comments

1. The question about which payment method is most beneficial to society is a matter of debate in the literature. In particular, see the Review of Network Economics at http://www.bepress.com/rne/vol6/iss4/4/ for a critique of the Garcia-Schwartz, Hahn and Layne-Farrar article.

   Comment by Allan Shampine

---

2. Indeed there is a debate in the literature. In fairness, we should also link to GHL's sur-reply: http://www.bepress.com/rne/vol6/iss4/5/.

   Comment by Geoffrey Manne

---

3. I wouldn't mind you criticizing my comments, but I did NOT write that merchant fees "impose[] a tax on legacy payment instruments" NOR "that discount fees on electronic payments shift costs to users of legacy payment instruments."

   Since Google will bring people to your post who may not read the comments, it would be polite of you to correct your post so that readers don't get the wrong impression of my views.
   Those are other folks' complaints. I wrote (http://www.truthonthemarket.com/2009/12/08/moving-the-ball-forward-macroeconomic-considerations/#comments) that card issuers' current scheme taxes merchants to fund bank

marketing. The cardholder thinks he's getting a "reward" from the card issuer, but in fact it's coming from the merchant– who, however, gets no benefit from it, since the bank's name is on the cheque/coupon/whatever. Ultimately, of course, all the "rewards" are funded by cardholders, though they do not reap them equally.

Banks use "rewards" like airlines use frequent-flyer programs: to differentiate themselves and promote customer loyalty in an essentially commodity business (because they rationally prefer not to compete on price or service). The difference is that airlines can't make third parties pay for their marketing (although airlines have entered all sorts of card-issuing partnerships to merge their loyalty programs with banks', an admirably efficient move).

I also wrote that banks collude to impose this scheme (using card network administrators to coordinate and enforce their cartel arrangements). If prevented from practicing that collusion then banks might face lower profits from card operations, but merchants and consumers (in aggregate) would be better off (of course individual consumers might gain or lose, because some pay for "rewards" that others receive and vice-versa).

I recognize that merchants might decide to accept all or nearly all cards (at the same consumer price) regardless of their different levels of interchange (passed through to merchant) fees. They would do so based, however, on their own marketing interests. I explicitly wrote before that abolishing the collusive enforcement of uniform acceptance/no-differential-pricing ("surcharging") would allow the market to find its own balance, without the weight of collusive bank arrangements on one side of the scale.

Comment by Mark Seecof

---

4. The inclusion of the additional cites is helpful, but they should not distract from the fundamental point. Although it may be fair to say that the "the question about which payment method is most beneficial to society is a matter of debate," we can draw the curtain on the strong version of the hypothesis asserted in that article–that electronic payments for some drive up retail prices for all.

   The piece that first asserted the "expensive forms of payment driving out the cheap" hypothesis was published in 1998–Alan S. Frankel, Monopoly and Competition in the Supply and Exchange of Money, 66 Antitrust L. J. 313 (1998). Ten years on, there is simply no empirical support for the proposition that electronic payments are more expensive than legacy instruments for all transactions. Allan, your commentary Garcia-Schwartz, Hahn and Layne-Farrar does not say otherwise. It simply says that estimates of social costs of payment "should be used in policy debates only with great caution." Id. at 508.

   Shouldn't your cautionary principle apply double (or triple) to unsupported hypothesis that do not, as we pointed out in our post, apply to all transaction environments?

   Comment by Tom Brown

---

5. BTW, the main theme of the symposium is “interchange fees,” not whether credit cards (and so-forth) are efficient or cost-effective compared to cash and cheques (I believe they certainly are). I think this efficiency stuff is a strawman. Cards would be efficient even if banks had to compete on “interchange” fees. Card issuers are clearly colluding to avoid “commoditization.” While this is rational behaviour, it’s not necessarily globally efficient. It’s diversionary to harp on the fact card arrangements are better than cash and often better than in-house credit schemes. Sure they are. That doesn’t mean every aspect of the current system is sacrosanct.

   Comment by Mark Seecof

The Merchants' Insincere Concern About Cross-Consumer Subsidies

Todd Zywicki

In my first post I argued that consumers as a group would likely be made worse off as a result of artificially imposed reductions in interchange fees. This post considers a second line of attack—that even if consumers overall would be made no better off (or even worse off) as a result of regulating interchange fees, Congress should intervene in the name of "fairness" to regulate interchange fees. This "fairness" argument, however, is a red herring, especially when advanced by merchants purporting to speak for consumers. Indeed, the sincerity of the merchants' concern is belied by their own behavior.

Merchants claim the current interchange price (typically about 1.75% of the price of the transaction) is "unfair" to those customers who pay by cash or check (and thus don't incur interchange fees) because cash customers are essentially forced to subsidize credit users who pay the same retail price but incur this additional cost. Note first that whether a reduction in interchange fees would be passed through to consumers is a question of market dynamics. There is no evidence that Australia's cap on interchange fees resulted in lower retail prices for consumers. Even if retail prices did fall there is no evidence that any retail price reductions offset higher credit prices to consumers or would benefit consumers equally. While capping interchange fees might eliminate the purported unfairness by making credit purchasers worse off, it is questionable whether it would actually make cash customers better off.

But merchant critics of credit cards on "fairness" grounds are playing with a stacked deck: cash and checks are both subsidized payment mechanisms. The government prints and replaces worn currency and the Federal Reserve clears checks at par. By contrast, credit card issuers bear the cost of maintaining their payment network. If merchants were serious about accurately allocating the costs of the payment network then they would insist that the government eliminate these subsidies from the system. And this doesn't even count the deadweight costs to the economy of cash, such as the time consumers spend making ATM transactions or the cost of paying guards to drive around pieces of paper in armored cars. Studies find that consumers who write checks take twice as long at the check-out line as those who use payment cards—forcibly imposing an external cost on everyone in line behind the check-writer. Should check-writers be required to compensate the rest of us for our wasted time standing in line?

So it may be theoretically possible to imagine that credit cards are overused as a transaction medium. On the other hand, it may also be possible that consumers *underuse* electronic payments because they don't consider the social benefits of electronic payments, such as increasing efficiency, tax compliance, reduced risk of theft (and the police force and judicial system that accompany that)—in which case, it is possible that credit cards should be subsidized, not taxed. Finally, it seems at least as plausible (probably more so) that consumers overuse cash and checks because those payment systems are subsidized by the government or that some of their costs are externalized, thus consumers don't pay their full price.

Moreover, federal law expressly permits merchants to give cash discounts (some do). That most merchants choose to accept credit cards and charge one price for cash and credit reflects a simple business decision, just like offering free parking (thereby subsidizing those who drive versus those who walk or take the bus), manned check-out lines (subsidized by those who use self-check out), or free returns on merchandise or money-back guarantees (subsidized by those who don't return products). Starbucks customers who drink their coffee black subsidize those who use cream and sugar. Movie-goers who attend primetime shows subsidize those who attend matinees. Consumers who pay full price subsidize those who buy the same product on sale a few days later. In a free economy we allow the scope of these cross-consumer "subsidies" to be set by free contracts, not governmental mandates.

The insincerity of the merchants' fairness concerns is illustrated by their own behavior. Traditionally, many retailers operated their own in-house credit operations. This included large department stores, but also many grocers, tailors, furniture, appliance, and hardware stores that offered credit to customers on open-book or installment credit. Many an older lawyer has related to me the memorable experience of opening his first charge account at Brooks Brothers (or the local equivalent) when buying his first suit. Maintaining these credit operations were quite expensive—the retailer had to bear the operational costs (employees, billing operations, underwriting, customer service), the risks of non-payment and fraud, and the time-cost of money of the delay in receiving payments from the billing cycle and grace period. Despite this high cost, however, many merchants made a business decision to maintain credit operations because of consumer demand.

Today, many merchants (especially smaller one) have essentially outsourced their credit operations by terminating their in-house programs and accepting credit cards instead, a much less costly system. Credit cards eliminate the operational cost and non-payment risk associated with maintaining an in-house credit operation. Credit card issuers bear the cost of the delay in payment over the billing cycle and grace period. Outsourcing credit also allows small businesses to compete on equal footing with larger businesses that could afford the cost and risk of in-house credit operations. Some major retailers, however, continue to run their own proprietary credit operations, accepting the higher cost and risk in exchange for the benefits of retaining in-house control.

Why is this history significant? Because during these decades when merchants operated their own credit operations (and where they continue to do so) they consistently charged the same retail prices for cash and credit consumers *despite* the higher costs of credit customers than cash customers. Target's proprietary credit operation, for example, has been battered by double-digit default rates on its credit portfolio—yet Target charges the same price for cash and credit consumers. Some merchants even offer "twelve months same as cash" and other promotions that subsidize credit purchasers. In a similar vein, empirical studies have found that during the 1970s when state usury laws limited the ability of lenders to charge market rates of interest on consumer credit, retailers responded by increasing the price of goods typically sold on credit (such as appliances), thereby burying the price of the credit in a higher price of the goods for all purchasers.

Thus, the merchants' claim today that the interchange fee forces an unfair subsidy between cash and credit purchasers is a red herring: merchants were (and are) more than happy to force charge the same price for cash and credit—so long as the merchants were capturing all the benefits. The difference today has nothing to do with fairness, but that the merchants don't get to keep all the profits. And that they want the benefits of credit cards (making the issuers bear the cost and risk) without the costs. Indeed, given that the merchants have outsourced their credit operations to credit cards precisely because they are less expensive, the size of this subsidy is probably smaller today than it was when merchants ran their own operations. And even this ignores the various costs associated with accepting and handling cash and checks that credit users implicitly pay as subsidies for those types of payment.

Merchants have made a business decision to accept credit cards because it is cheaper and less-risky than running their own in-house credit operations. As such, the cost of accepting credit cards is a cost of business, just like rent, utilities, and employee salaries. Let's get the real issue clear then—the argument over interchange has nothing to do with fairness or benefits to consumers. Merchants are speaking for themselves, not consumers, when they demand to pay lower interchange fees. The merchants own behavior demonstrates the point. Congress needs to stay out of this issue.

Comment

1. Todd,

   I agree that the cross-subsidy argument has more going on with it. Let me first address the cash government subsidy issue. While it is true that the Federal Reserve maintains a fit currency, it earns billions of dollars by providing currency net of these costs. This net revenue is commonly referred to as seigniorage. In fact, most of this income is turned over to the Treasury. Thus, the business of providing cash is a net revenue source for the Federal government. In the case of the U.S., much of this revenue is earned from foreigners who hold more than half the value of US currency outstanding. Private businesses have a form of seigniorage as well. Issuers of traveler's checks or prepaid cards may earn significant revenue for lost or never redeemed monetary value sold (of course, issuers may earn interest on these funds until they are redeemed as central banks do on currency they have outstanding). For example, according to Starbucks' Annual Report, it recognized $13.6 million in unredeemed stored value valances for fiscal year ending 9/2008. Therefore, there are clearly benefits from "issuing" currency or "currency-like" substitutes for governments and private businesses.

Furthermore, cash may be expensive for consumers to use because of acquisition costs such as the classic "shoe-leather" cost and possible other costs such as ATM fees and theft. Alvarez and Lippi (2009) quantify the probability of theft at around 2 percent for Italy in 2004. Thus, cash users may also benefit from card use. Ironically, one person at a conference I attended few years ago argued (somewhat jokingly) that if central banks allowed for greater counterfeits to circulate, this would give consumers and merchants greater incentives to substitute for cash. While central banks would not use such a strategy, some central banks actively encourage more non-cash use even though their income may suffer as a result.

Also, as mentioned before, cash users may impose a negative externality on card users in terms of time. As I mention in my second post, the Illinois Tollway tried to encourage non-cash use by charging cash users twice as much. However, some toll way users may be willing to pay higher tolls for other reasons including anonymity. In other words, there may be some instances where cash users would be willing to pay more.

As far as checks, it seems that the no-surcharge rule is a form of par acceptance for payment cards. However, I agree the conversion of these receipts into good funds does not occur at par. But there are fees to clear checks. Furthermore, as mentioned elsewhere, there is greater settlement risk borne by merchants. To mitigate this risk, merchants often use third-party check guarantors and pay a proportion of the value of the check. While the check clears at par, the merchant using this service is willing to give up a percentage of each check payment. In other words, the merchant discount has bundled many services into to it. Two questions arise. First, would the card networks ever unbundle these services? Second, would greater price differentiation that as has occurred for US interchange fees and merchant discounts be the efficient response? Here, I am limiting my focus to price differentiation as it pertains to settlement risk.

Comment by Bob Chakravorti

Surcharging and Honor-All-Cards

Bob Chakravorti

Disclaimer: These views are my own and not those of the Federal Reserve Bank of Chicago or the Federal Reserve System. Much of this discussion is taken from my paper titled "Externalities in Payment Card Networks: Theory and Evidence" presented at the Federal Reserve Bank of Kansas City's 2009 Retail Payments Conference.

Generally, merchants charge the same price regardless of the type of payment instrument used to make purchases. In many jurisdictions, merchants are not allowed to add a surcharge for payment card transactions because of legal (some states in the U.S. do not allow surcharges) or contractual (card networks generally do not allow surcharges) restrictions. But, merchants may be permitted to offer discounts for noncard payments. Economic models of payment cards generally conclude that social welfare improves if merchants set prices based on payment instrument used.

There are examples of jurisdictions where no-surcharge restrictions have been lifted. To encourage better price signals, the Reserve Bank of Australia removed no-surcharge restrictions. While most Australian merchants do not impose surcharges for any type of payment card transaction today, the number of merchants who do is increasing. At the end of 2007, around 23 percent of very large merchants and around 10 percent of small and very small merchants imposed surcharges. In addition to allowing price differentiation across payment instruments, the RBA allowed merchants to price differentiate across networks. The average surcharge for MasterCard and Visa transactions is around 1 percent, and that for American Express and Diners Club transactions is around 2 percent (Reserve Bank of Australia, 2008).

Some economists have stressed that merchants may surcharge consumers more than their costs resulting in suboptimal card use. A potential regulatory response is to cap the surcharge. In responding to the 2007/08 review of reforms by the Reserve Bank of Australia, some market participants suggested that merchants might be imposing higher surcharges than their cost to accept payment cards. The RBA has considered setting a limit for the surcharge amount but has not gone ahead with implementing one.

In the United States, merchants are allowed to offer cash discounts but may not be allowed to surcharge credit card transactions. In the 1980s, many U.S. gas stations explicitly posted cash and credit card prices. Barron, Staten, and Umbeck (1992) report that gas station operators imposed these policies when their credit card processing costs were high but later abandoned these policies when acceptance costs decreased because of new technologies such as electronic terminals at the point of sale. Recently, some gas stations brought back price differentiation based on payment instrument type, citing the rapid rise in gas prices and declining profit margins.

In the Netherlands, Bolt, Jonker, and van Renselaar (2009) study the impact of debit card surcharges. They report that a significant number of merchants are setting different prices, depending on whether cash or a debit card is used. Debit card surcharges are widely assessed when purchases are below 10 euro. Bolt, Jonker, and van Renselaar find that merchants may surcharge up to four times their fee. In addition, when these surcharges are removed, they argue, consumers start using their debit cards for these small payments, suggesting that merchant price incentives do affect consumer payment choice. Interestingly, in an effort to promote a more efficient payment system, the Dutch central bank has supported a public campaign to encourage retailers to stop surcharging and for consumers to use their debit cards for small transactions.

There are instances when card payments were discounted vis-à-vis cash payments. During the conversion to the euro from national currencies, one German department store offered discounts for using cards because of the high initial demand for euro notes and coins to make change for cash purchases (Benoit, 2002). It should be noted, however, that the retailer was in violation of German retailing laws for doing this. In a more permanent move, the Illinois Tollway charges motorists who use cash to pay tolls twice as much as those who use toll tags (called I-PASS), which may be loaded automatically with credit and debit cards when the level of remaining funds falls below a certain level. In addition to reducing cash handling costs, the widespread implementation of toll tags decreased not only congestions at toll booths but also pollution from idling vehicles waiting to pay tolls. In both of these cases, the benefits of using cards outweighed the costs.

Another rule that restricts merchants is the honor-all-cards rule. A payment card network may require that merchants that accept one of its payment products to accept all of its products. In other words, if a merchant accepts a network's credit card, it must accept debit and prepaid cards from issuers belonging to that network. Such a rule enables a card network to innovate by producing different products that when introduced will have a large base of merchants that accept them bypassing the chicken-and-egg problem. The introduction of payroll cards, a type of prepaid card, is an example of an innovation that leverages a card network's existing infrastructure.

In the United States, around 5 million merchants sued MasterCard and Visa over the required acceptance of the network's signature-based debit card when accepting the same network's credit card. The case was settled out of court. MasterCard and Visa agreed to decouple merchants' acceptance of their debit and credit products. While few merchants have declined one type of card and accepted another type, the decoupling of debit and credit card acceptance may have increased bargaining power for merchants in negotiating fees.

A subset of the honor-all-cards rule is the honor-all-issuers rule. If a merchant accepts a credit card from one issuer, it must also accept credit cards from another issuer within the same network. Such a policy levels the playing field between large and small issuers. Otherwise, small issuers may not be able to compete with the large issuers because of economies of scale and network effects.

Another type of honor-all-cards rule could cover the acceptance of different credit or debit cards from the same issuer. For example, an issuer may have a plain vanilla credit card and also have others that earn different types of rewards. While merchants may not care what types of rewards their customers receive from their banks, merchants may pay different fees based on the type of card used by their patrons from a single issuer. More recently, certain policymakers are considering allowing merchants to discriminate within a card classification, such as a credit card, based on differences in interchange fees.

Interchange fees and other rules

Joshua Gans

The GAO report raises concerns about card association the level of interchange fees (that acquirers pay issuers for credit card transactions processed) but also about other card association rules such as the 'no surcharge rule.' That rule prevents a merchant who accepts card transactions from charging a 'point of sale' premium to consumers who use a card rather than using cash or checks. However, while the report deals with concerns about each issue individually, what is not recognized is that concerns are related. From the perspective of economics, if you deal with no surcharge rules (by eliminating them) there is a diminished and perhaps non-existent case for regulating interchange fees.

To see this, let's start with the interchange fee concern. A higher fee means a higher charge imposed on merchants. Not surprisingly, they would prefer those charges to be lower and so card associations will recognize that increase interchange fees may decrease card acceptance. But there is a flip-side. Those high interchange fees are an inducement to card issuers to get more cards issued and used. Hence, the proliferation of solicitations and reward programs as interchange fees have risen. Those consumers then become the marketing department of card associations with respect to merchants, putting pressure on them to accept cards despite the high fees.

Now merchants may be able to compensate in highly competitive markets by not accepting cards and offering lower prices to consumers. But if retail markets cannot *separate payments* with different retailers specializing in card or cash, there is a problem. Retailers who face both cash and card customers must charge them the same amount by virtue of the no surcharge rule. That means that cash customers must effectively cross subsidize the cost to merchants of accepting cards. This leads to numerous inefficiencies including that consumers may be over-selecting expensive cards rather than other instruments. It also leads to what is termed a 'competitive bottleneck' whereby competition cannot work to bring value to consumers.

One response to this is to regulate or cap interchange fees. That would mitigate the problem but would also bring with it the costs of regulation. The alternative would be to see if you could restore competitive structure to the payments industry by achieving payment separation another way. Specifically, if surcharges are permitted then merchants will face strong incentives to pass on the direct costs of card usage to card users. Consumers would then have to weigh up whether those additional charges were really worth the other benefits they are getting from card use. But the point is that where previously there was no cost pass through to the right consumers (as opposed to the pool of them), allowing surcharges ensures that happens.

This means that card associations face an additional cost if they increase interchange fees, that consumers will simply not use cards at the point of sale and save their retailers those costs. One might think that this would make the card association's management and negotiation over interchange fees more complex. However, as Stephen King and I demonstrated in 2003, permitting surcharging makes the interchange fee neutral (see here for other papers on this topic). Put simply, changing it through association choice or through regulation impacts on prices but not on the total level of card transactions or mix of payment instruments. This makes us wonder why the Reserve Bank of Australia chose *both* to eliminate the no surcharge rule and to regulate interchange fees.

Comments

1. The "no surcharge rule" precludes merchants from charging a premium for using credit cards but it DOES NOT preclude them from giving a discount for cash purchases. If merchants are so concerned they should encourage me to use cash. I frequent a store that does this and I use cash there. These fees are a cost of doing business like shipping, postage, telephone service and

internet access. Consumers won't see any decrease in prices from any cap or reduction on interchange fees. That justification is smoke and mirrors and merchants are just jumping on the big bank bashing bandwagon.

Comment by Jean M

---

2. Jean M – maybe you could explain how businesses can negotiate and manage all other costs, including rent, labor, health care, fuel, etc., but this is the only expense over which they have no control. Also, it's not just merchants who are paying interchange, but it's states and localities, charities accepting online donations, colleges and universities, and anyone else that takes plastic, including politicians accepting donations. See recent article on Oklahoma Univ. trying to save $500K annually in interchange fees: http://ow.ly/KAxs

   Comment by Andy S

---

3. In response to Andy S., businesses can indeed drive their costs down in this area greatly if they understand the underlying factors that regulate Interchange and overall processing expense. Although Visa & MasterCard and the processing companies that sell these services have devised an increasingly confusing pricing model, if armed with the proper information, businesses can reduce their expense drastically.

   My company, Financial Mitigation Services, serves as an educational company to help businesses work with their current processor to reduce unnecessary fees, excess charges and eliminate billing errors. Our average client saves several thousand dollars per year on this expense and some have cut costs by over 40%.

   While legislation and pressure by trade associations may be helpful in the future, businesses that simply wait for these things to occur to lower their prices are throwing money away every month that they do not need to. Smart business owners are taking action now to reduce these costs.

   Comment by Jeff Selmer

The Cost of Payments Interchange: Issues No One Talks About

Jim Van Dyke

James Van Dyke is President and Founder of Javelin Strategy and Research.

I feel that at least two important issues are being left out of the raging controversy over the cost of interchange. (At this point my readers are probably deciding if I'll follow with a pro-merchant or pro-bank POV…but guess what: here comes one of each to make my point that we're being a bit simplistic in this debate!).

Point one: card fees replace other costly forms of payments, and this must be included in any policy discussion. Previous Javelin research of several hundred merchants found that total costs for handling checks and cash are often considered to be as high as those for cards. Cash comes with risk of employee fraud, and may prevent consumer sales for those without current access to paper or cash money. Every check is an incident of fraud waiting to happen, as these antiquated IOU instruments are essentially dead or dying in every country other than the U.S. Checks invite criminals to follow the simple methods documented by Frank Bangle of "Catch Me If You Can" fame.

Point two: Any discussion over cost of interchange should include a review of who pays for fraud. Between merchants and banks, if there is a disparity over who handles the brunt of fraud (the recent study we did for LexisNexis found that merchants incur 90% of direct fraud cost) brings up issues of incentives. Simply put, if you can pass a cost on to someone else your incentive for minimizing the cost may be reduced.

And now that I've said something to anger both merchants and bankers, I'll eagerly await the responses…

Comments

1. Jim:

   Is Javelin's research that you cite on the cost of alternative payment systems available, and if so, would you be willing to post links to it?

   Comment by Todd Zywicki

   ---

2. I have the same question about the research on who bears the "direct fraud cost." Is it possible to access somewhere? And what, by the way, is meant by "direct fraud cost"?

   Comment by Tom Brown

   ---

3. Javelin Strategy & Research does provide information on all costs related to payments, ranging from transaction fees to fraud costs. We recently provided groundbreaking merchant and bank fraud research in a project sponsored by LexisNexis, and LexisNexis clients may be able to obtain that study through the vendor at no cost by checking directly with them. Because we are a commercial research provider that deploys actual statistically-valid studies through highly-experienced experts (yeah, I know…this shouldn't be unusual but it is) we must charge for the research. But I'll post a couple of general trends herein. Alt payments can substantially cut the cost of merchant payments, but one should not assume this will always be the case nor should one assume that lower-cost methods will be successful. Revolution money recently gave up their solo efforts after leading with a low-cost message for merchants, allowing online stores to cut the typical online transaction costs of a couple points down to perhaps half in many cases. And yet another recently alt-payments winner in BillMeLater (recently purchased by PayPal) actually

generally charged *higher* interchange, because they offered consumer incentives to drive more shopping volume. Thus Javelin's conclusion that the cost factor is easy to overvalue in merchants' total ROI calculation. On the cost of fraud, the study which we recently released through LexisNexis shows that out of a dollar of fraud that occurs at the point of purchase, the ratio between which businesses bear the cost is split some 90/10 between merchants and banks.

Comment by James Van Dyke

Assessing the Social Effects of the Use of Credit Cards

Allan Shampine

The GAO has a fairly extensive discussion of the costs and benefits of credit cards to merchants. However, that discussion focuses on the individual benefits. I would like to step back and put two of those benefits – increased merchant sales and fraud prevention costs – into the larger context that I discussed earlier.

First, there is the question of credit cards increasing merchant sales. How exactly does this occur? One possibility is that if some merchants accept credit cards and others do not, then some people will switch their business to the merchants that take credit cards. From the point of view of the merchants taking credit cards, their sales most certainly go up. From the point of view of the merchants which do not take credit cards, their sales go down. From society's point of view, sales are moving from one business to another, but total sales do not change.

Another possibility is that credit cards provide ready access to a line of credit, allowing people to make purchases on credit that they otherwise would not be able to make. If so, it is not clear how much of an effect on sales that would really have. Credit cards are not the only source of credit in the economy. Also, credit has to be paid back. In the short run, credit can certainly increase sales, but, as the economy is so painfully reminding us right now, in the long run the bills have to be paid, so it is not clear that total sales over time increase.

It is also possible that credit cards are just more efficient than other payment methods and save both consumers and merchants money. If that is the case, then there is more money to spend in the economy and sales can go up. Research suggests, however, that the differences between different payment methods (in terms of the real resources used to process a payment) are relatively modest, often less than one cent per dollar spent.

Overall, then, it seems likely that most of any sales increase will come from moving sales between merchants. Intuitively, this makes sense. If you were told that you could not use any credit cards for the next five years, would your total spending over those five years be substantially lower? On the other hand, if you were told that a store down the street was not going to take credit cards anymore, would your spending at that store fall? Increased sales for a merchant may be good for that merchant, but whether society is better off is a different question.

Fraud is a different matter, though. Fraud takes money from some people and gives it to others. However, we as a society disapprove of fraud and do not wish to reward criminals. Thus, we view fraud losses as purely a bad thing for society. Unfortunately, all payment methods are subject to fraud. The GAO discusses costs of prevention for credit cards, but does not discuss the direct costs of fraud to merchants and consumers. Criminals go where the money is, and a lot of money flows through credit card receipts. Restaurant tips get changed, card numbers get stolen, transactions get rerun for higher amounts, cards are cloned – there is an endlessly changing list of fraudulent activities. Many of these activities are difficult to detect. For example, when the tip on a receipt is changed, many people will never notice, even though they just had money taken directly out of their pocket. Estimates on the costs of fraud for different payment methods vary, but there is general agreement that all payment methods are subject to fraud and that debit cards (when authorized with a personal identification number) have some of the lowest overall fraud rates. Different people bear the costs of fraud depending on the type of fraud and the payment method. Merchant costs for losses and prevention are important, but they are not the only ones affected.

Comments

1. Allan,

Even this limited discussion of benefits seems to be missing something–reduced transaction costs. Assume that prior to the existence of electronic payment networks that small retailers and banks were more efficient suppliers of retail services and credit than department stores. But let's also assume that transaction costs made the bundle of credit and retailing services cheaper for consumers to obtain from department stores than from banks plus small retailers.

Now let's assume that the rise of electronic payments networks reduces these transaction costs. By signing on to accept electronic payments, a small merchant can enable its customer to access bank supplied credit on terms that are better than those offered by the nearby department stores. So long as the price that the merchant pays to accept the bank supplied credit is lower than the difference between the retail prices offered by the small merchant and the department store, the transaction will move from the department store to the small retailer/bank. But this switch comes with a social benefit, right?

Comment by Tom Brown

Allocating the Costs of Fraud

Geoffrey Manne

I take to heart Jim's claim that fraud is too-little discussed in this realm given its cost, and thus I'll try my hand at it.

Every discussion of the industrial organization of credit card networks owes a debt to Bill Baxter. Baxter, a law professor and former Assistant Attorney General in the Antitrust Division of the DOJ, was one of the first (maybe the first?) scholars to discuss the economics of two-sided markets, in a paper, as it happens, on the economics of interchange fees in credit card networks.

In simple terms, the essence of Baxter's analysis is that the role of the interchange fee in credit card networks is to balance and maximize demand for credit card transactions on both the consumer side and the merchant side–optimizing the system by drawing in as many consumers on the one side and merchants on the other as possible while still matching up demand for credit transactions on each side (thus maximizing network benefits). The lever of the interchange fee allows the system to re-allocate some of the costs that are otherwise born by only one side of the market in order to effect this optimization. One of these costs is the cost of fraud–and the interchange fee is, it seems to me, an essential lever for re-allocating the costs of fraud within the credit card system to where they can best be born.

Fraud costs are an important, if oft-neglected, component of payment systems' functioning. Every payment system by its nature includes the risk of fraud, and every payment system, by design or by default, imposes the risk of fraud on one or more parties in the system. For example, a merchant that accepts cash in exchange for goods bears the risk that the cash will be counterfeit. The cost of counterfeit currency to merchants is substantial. (Although, speaking of cross-subsidies, the cost to merchants likely captures barely a fraction of the full cost of counterfeit currency—a cost born mostly by the government (and passed on to taxpayers) in policing and deterring counterfeiting). The cash system, essentially by default, imposes the residual fraud costs on the merchant. Checks present an even greater fraud problem than cash and, again, the costs are allocated essentially by default: A merchant that accepts a fraudulent check will bear the cost of the fraud.

In principle, the fraud costs of checks or cash could be allocated differently. The government could offer some sort of guarantee, or the issuing bank could agree to bear the cost. But in part because the government requires banks to clear checks at par—has, in other words, fixed the interchange fee at zero for checks—there is little opportunity for the system's lever to operate to reallocate these costs, ensuring that the costs lie where they fall, and that redistribution is made only in the parts of the system governed by explicit contracts (thus, for example, depending on a host of factors, some of this cost may be redistributed from merchants to merchants' banks via reductions in various fees in the agreement between merchant and bank).

In contrast, the flexible interchange fee in the credit card system allows fraud costs to be allocated differently throughout the system, presumably ensuring not that the costs lie where they fall, but rather that they are born by the party best positioned to bear the costs. In the case of credit cards, assuming the merchant complies with the network's rules for seeking authorization of payment, the *issuing bank*, in fact, guarantees the payment (and thus bears the risk of non-payment). As Bill Baxter noted, "[t]his shifting of risk under the [credit card] system obviously increases [the issuing] bank's cost, enhances [the merchant's] demand for the system, and increases the amount of discount [the merchant] is willing to pay to [the acquiring] bank." It is this re-allocation of costs, facilitated by the interchange fee, that helps to optimize the system.

Comments

1. Jeff,

   The insurance element of interchange fees is important, and it's good that you raise it. You also suggest, following Baxter, that issuers are the efficient insurers. I can see why this might be the case. Issuers have the best data on the risk of fraud, so they can price it accurately. Issuers also have some of the more effective ways to reduce this risk, by following the patterns of card use (I get occasional calls from my issuer when an atypical or suspicious charge is made) and by suspending cards.

   It is possible to imagine, however, that some large merchants can self insure in a more efficient manner. First, they are big enough to be risk-neutral. Second, they can uniquely take some measures to reduce the risk, in real time, at the point of transaction. If efficient insurance is the theory supporting interchange fees, it seems to suggest that merchants who want to self insure ought to be allowed to negotiate such arrangements.

   Moreover, it is far from clear that interchange fees are priced to reflect merely the risk. I take it that the basis for the regulatory concern is that the price reflects a substantial component of profit. If that is the case, then some insureds might prefer to buy risk coverage from a less efficient insurer, which is priced more competitively. I don't know if there is direct insurance product for the fraud "peril" but, again, self insurance can turn out to be more desirable than the overpriced coverage provided through the interchange scheme.

   Comment by Omri Ben-Shahar

   ---

2. With respect to the allocation of risk, Mr. Van Dyke suggests that merchants bear the majority of direct fraud costs on credit cards. If that is the case, then the issuing banks' incentives may be problematic. That is, if issuing banks make the decisions about who gets credit cards and whether transactions are authorized, but the costs of an error are born primarily by someone else, then there might be too little effort to lower those costs.

   Fraud can be difficult to measure, but it is clearly an important issue. All payment methods are subject to fraud, and one can debate the best method for measuring fraud. Overall, I believe that there is a general consensus that PIN debit has the lowest fraud rate of the major electronic payment methods.

   On a related note, there are private mechanisms for reallocating fraud costs. For example, merchants may choose to self-insure against bad checks, or they may purchase check verification services where the risk is shifted to the insuring party. Some merchants do one, some the other. As Omri notes, if efficient insurance is the theory supporting interchange fees, the existence of self insuring and third party coexisting for other payment methods is an interesting alternative.

   Comment by Allan Shampine

   ---

3. The discussion of fraud seems to me to include some odd assumptions. First, with respect to check fraud, the system includes a detailed set of rules that shift the costs of fraud among the parties. Although the rules are outdated in many respects, they do serve to place different types of fraud on the shoulders of parties that arguably are best-placed to avoid it. At a minimum, the rules are clear enough that parties understand what types of fraud they should pay to avoid. Merchants do use check-verification services to avoid certain types of fraud, but most fraud losses in the checking system fall on the banks that process checks, not on the merchants that accept them.

With respect to credit cards, it is surely not true that merchants bear the majority of direct fraud costs on credit cards. Merchants do bear those costs in card-not-present transactions, but even now that is a relatively small share of all transactions. I would love to see (or hear more about) the study that Mr. Van Dyke references.

Comment by Ronald J. Mann

---

4. Great comments. First off, let me clarify that I do not at all think that interchange reflects only risk allocation; certainly it is also a source of profits–and that is by design and essential to the operation of the system.

   With respect to large merchants–many of them negotiate separate agreements (what we're talking about in all of these discussions is a default rate, but many merchants–especially large ones–do negotiate deviations from these rates). And I have no doubt that some of the lower interchange fees they are able to negotiate reflect precisely the dynamic you describe.

   I don't know about the existence of third party insurers, but I agree that in principle this could be more efficient–it need not be the case that any of the direct participants in card networks is in fact the least cost insurer. But this is a Coasian world, and my first-cut guess is that either such entities do exist and do affect the interchange rate in certain cases, or that they are not, in fact, the least cost alternative, taking transaction costs into account. Does anyone have more info on the presence and/or effect of third-party insurers?

   Ron: Of course these rules exist–my point is that because side payments are not allowed in the system (banks are required to process checks at par), the system may be inefficient. The inability to make side payments in fact makes complicated rules more rather than less likely, as a second-best effort to compensate for the difficulty in re-allocating risk through price.

   Comment by Geoffrey Manne

---

5. In his comment on Todd's last post, Bob makes some helpful points. He notes that for checks, merchants do contract with third parties to help minimize the fraud costs that they otherwise bear. And, again, this is not surprising: Since it is hard for merchants to negotiate away the risk to issuers because of the Fed's par requirement, they must turn to self-help. I wouldn't be too quick to draw conclusions from this for the credit card system–the risks of fraud are different–but it supports the basic point that interchange incorporates compensation for risk allocation that would (and may) be otherwise obtainable through costly self-help.

   Comment by Geoffrey Manne

The Fee Neutrality Claim

Omri Ben-Shahar

Will reduction in interchange fees help or hurt consumers? Two posts yesterday made the conjecture that a reduction in one category of fees would only increase other fees, and that the overall sum of fees will not change. This is the fee-neutrality claim. Todd Zywicki writes:

> The mathematics of the situation is inescapable: card issuers would have to increase the revenue generated from consumers from either interest payments or higher penalty fees.

And Josh Wright agrees:

> It would be unwise from a consumer protection policy standpoint to assume that [reduction in interchange fees] represent the free lunch legislators have been looking for after all these years – or that those fees will not simply be reinstated in other guises elsewhere.

As a logical claim, I tend to agree with this "neutrality" conjecture. Indeed, the Australian experience can be explained in a way that is consistent with this dynamic, as Joshua Gans noted:

> The interchange fee reduction causes merchant fees to fall but issuer fees to rise (or loyalty schemes to be curtailed) but otherwise does not impact on the consumer's choice of payment instrument.

The question, though, is what are the implications of fee neutrality. Zywicki and Wright conclude, I believe, that in light of fee neutrality, it is pointless to try to help consumers by capping one component of the overall fee. It will not help, and might introduce an inefficiency.

My claim in this post is that the normative implications are not necessarily as Zywicki and Wright suggest. Fee neutrality, as I understand, applies only to the average cost of using credit cards. That is, consumers who use credit cards end up paying on average the same economic cost, regardless of the division of fees. But when we consider other measures of consumer welfare, the neutrality claim no longer holds.

First, consumers who use credit cards as payment device and not for borrowing would benefit from the fee substitution. For them, the lower product prices when interchange fees decline are not offset by higher finance charges, because they don't pay finance charges. So even if the neutrality proposition is correct on average, limits on fees have a distributive effect. This effect could also change the relative uses consumers make. Buying things becomes cheaper, borrowing becomes more expensive, and so we can predict some shift in primary conduct, which, again, violates the neutrality conjecture.

Second, even if for a given consumer the increase in finance and other charges exactly offsets the reduction in interchange fees, it is plausible to expect that a reduction in fees would lead to a reduction in prices of products and change the consumer's purchasing decisions. Imagine that the interchange fee were to drop, in a hypothetical economy, from 5% to 0.5%. Do we think that product prices will drop accordingly? In response to a comment I posted yesterday, suggesting that such a price decline would occur, Todd Zywicki correctly responds that not all the saving will be rolled over to consumers. It depends on cross-elasticities of demand and supply. But at least in competitive markets, where prices equal marginal cost, the bulk of the savings in interchange fees would be enjoyed by consumers. It may be that nominal prices would display some stickiness, but it's hard to imagine that in the long run consumers will be deprived of this benefit. One has to have very little faith in markets to imagine that the cost reduction will be enjoyed in its entirety by merchants, through higher profits.

If caps on interchange fees cause a non-trivial effect on prices, this regulation has the potential to reach far beyond the credit card market. It now affects primary decisions regarding the composition of consumption.

It is true that some of the increased demand due to lower prices is offset by the higher cost of credit. To buy these cheaper products with borrowed money would be just as costly, according to the neutrality claim. But it is important to unbundle the overall price into its two pure costs—the cost of the product and the cost of the credit. The potential efficiency of fee limits is in achieving an unbundled price, where the product component and the price component are priced separately.

Comments

1. A few comments:

   1. The claim about pass-through that you make here is as if we are talking about a one-sided market. So is the claim about "faith in markets." While the interchange fee is certainly a cost of the merchant, and there may even be some pass through in the form of lower product prices (do we have any evidence of this?), because we are in a two sided market that analysis is incomplete. Consider the equivalent claim that supermarket collusion to reduce competition on free parking services by 20% in each parking lot would certainly reduce supermarket costs, and some of this might be passed through, but the normative impact of the collusion would be pretty clear since the increased monopoly rents are sure to more than offset the pass-through.

   2. With interchange, the point is that the reduction is not just a reduction in cost but also reduces the ability to balance both sides of the market and that has a cost. The other cost is the likely increase in finance charges, annual fees or other charges. You don't dispute this point. You should want us to consider the pass through on product prices before drawing normative conclusions. That's fair.

   3. But on that point, I don't understand how your argument that consumers could simply avoid increases in annual fees (I understand with respect to interest rates, but one has to have very little faith in the profit-maximizing abilities of Visa and MC to think they don't understand it too). Its also important to note that an increase in annual fees will also reduce an important development that has benefited consumers: the ability to simultaneously carry multiple cards at a low or even negative price.

   4. I'm all for factoring the benefits of pass-through of the fees in the form of lower product prices to the extent it exists. But we cannot simply assume a reduction would operate like a decrease in merchants' electricity bills. But again, I'd like to see evidence of pass through to product prices if it exists.

   Comment by Joshua Wright

   ---

2. "First, consumers who use credit cards as payment device and not for borrowing would benefit from the fee substitution. For them, the lower product prices when interchange fees decline are not offset by higher finance charges, because they don't pay finance charges. So even if the neutrality proposition is correct on average, limits on fees have a distributive effect."

   Finance charges are one thing, but annual fees are another. People who use credit cards for payment but not credit hate annual fees above all else.

It's quite possible that a lot of the cross-subsidy goes from consumers who pay the finance charges to those who pay off in full in month. The situation can't be analyzed as though consumers have a monolithic interest.

Comment by John Thacker

Competitive Payments

Ron Mann

Most of the discussion related to pricing at the point of sale has emphasized the "cross-subsidy" between those that pay with cash and checks and those that pay with credit cards. This discussion misses the core of the problem in a market where the use of cash and checks is rapidly declining; the central problem is the differential pricing of different card products. The reaction of the card networks to their "loss" in the debit-card and American Express litigation was to create two new product lines (Visa Signature and World MasterCard) that have unusually high interchange fees, 1-2% higher than typical Visa and MasterCard products. The rationale for these products from the network's perspective is two-fold. First, the increased interchange revenues compensate for lowered interchange revenues on debit-card transactions. Second, issuers collect higher interchange revenues and thus would not shift their business out of Visa and MasterCard and toward American Express.

The problem from the merchant's perspective is that these cards differ in no substantial way from the conventional credit products, except that they cost more. The same customers that formerly used a typical Visa or MasterCard product now use a high-interchange product. Although those customers often have multiple cards in their wallet from which to choose, they are likely to choose the high-interchange product because it brings them more rewards. Merchants that do not believe the products motivate increased spending in their stores have no practical response except to refuse all Visa, or all MasterCard products. Thus, the networks face no price pressure, because the only competitive pressure they face is to keep issuers from moving to other networks.

If the best way to identify prices is to let the market set them, perhaps the best reform is the simplest: allow merchants to discriminate among the products of the various networks, to surcharge or decline products priced at a level that is unattractive to the individual merchant. Wal-Mart and Walgreen's might immediately decline to accept Visa Signature and World MasterCard at their current price. Their customers, predictably, would make identical purchases but simply pull a different card from their wallet. Macy's and Bloomingdale's probably would continue to accept the high-cost products, worried that customers might spend less or go elsewhere if they can't use their high-rewards cards. Visa and MasterCard could judge for themselves whether it would be appropriate to decrease, or increase, the interchange fees for those cards. The outcome, though, would be price levels determined by the attractiveness of the particular products to particular merchants.

Comments

1. Ronald,

   I agree with you. I think there are a few wrinkles that are not as simple to straighten out, and I wonder what your thoughts are. For one, consumers are going to have a hard time knowing which Visas or MasterCards are accepted at which merchant location. This might not be a big deal for those who carry multiple cards, but it might burden others.

   I guess you can say that if this is indeed a problem for consumers, merchants and issuers would be pressured competitively to provide simplicity and uniformity in interchange fees. It is not clear, though, where this would end — what type of arrangements they would institute. But my point is that a regime in which different cards in the same network are accepted in different locations does not seem stable or satisfactory.

   Comment by Omri Ben-Shahar

2. You are surely right that it is not a stable or satisfactory regime. But if the prices for the premium cards are so high that retailers are willing to turn away customers at the point of sale that want to use those cards — and some merchants plainly do have that attitude — doesn't that suggest that the current system is not providing the right type of competitive pressure?

   Comment by Ronald J. Mann

3. "But if the prices for the premium cards are so high that retailers are willing to turn away customers at the point of sale that want to use those cards — and some merchants plainly do have that attitude — doesn't that suggest that the current system is not providing the right type of competitive pressure?"

   I'm confused. Doesn't that show that there *is* competitive pressure? If no retailers were able to turn away customers, and felt forced to accept high-margin cards no matter what, wouldn't you use that as evidence of market power on the part of Visa and MasterCard?

   Comment by John Thacker

Merchant Collusion as an Antitrust Remedy

Josh Wright

In my first post I discussed the potential for interchange legislation from a consumer protection perspective, that is, would the combination of disclosure requirements coupled with a reduction of interchange fees be likely to improve consumer welfare. I concluded that from the consumer protection perspective, the case for interchange legislation was weak. I noted that a highly likely consequence of a direct or indirect reduction in interchange would result in an increase in the cost of credit to consumers (higher finance charges, other fees, annual fees) or a reduction of consumer benefits (loyalty and rewards programs). The significant risk of a reduction of consumer access to credit, especially given the tenuous state of the economic recovery and the critical role of consumer spending in generating economic expansion and jobs, imposes a significant risk of consumer and social losses without strong evidence of offsetting consumer protection value. However, consumer protection is not the only possible defense of such legislation. This post will focus on defense of interchange legislation from a competition policy perspective.

As the commentators in this symposium suggest, as does the long and storied antitrust history of Visa and MasterCard, the more conventional story is that interchange fees are the product of a market power and the lack of competition between payment card systems. Much of the discussion here has followed that general framework and focuses on the "cross-subsidy" question and the role of interchange legislation in increasing efficiency by reducing "usage" externalities. The essence of this argument is that interchange fees should be regulated or eliminated in order to avoid cross-subsidization of payment card users by those using cash or checks (but see Ron Mann's post here, focusing on the subsidy running from high interchange credit products to low interchange debit transactions). So far, the symposium contributors have been largely skeptical of this defense. For example, my colleague Todd Zywicki notes;

So it may be theoretically possible to imagine that credit cards are overused as a transaction medium. On the other hand, it may also be possible that consumers *underuse* electronic payments because they don't consider the social benefits of electronic payments, such as increasing efficiency, tax compliance, reduced risk of theft (and the police force and judicial system that accompany that)—in which case, it is possible that credit cards should be subsidized, not taxed. Finally, it seems at least as plausible (probably more so) that consumers overuse cash and checks because those payment systems are subsidized by the government or that some of their costs are externalized, thus consumers don't pay their full price.

Tom Brown and Tim Muris argue that the objection to cross-subsidies is overdone, emphasizing the ubiquity of such cross-subsidies and noting that the shift toward electronic payments render this objection largely moot:

> At the outset, we note that discount fees, unlike interchange, are a feature of virtually all private payment instruments. Thus, if there is something to the notion that discount fees tax other forms of payment, then the criticism applies as much to American Express and Discover as it does to MasterCard and Visa. In our view, however, although this criticism is oft repeated, repetition obscures a number of problems.
>
> First, cross-subsidies are ubiquitous in any complex economy. Consumers receive free refills on drinks in restaurants, free parking at shopping malls, goods below cost in supermarkets (via loss leaders), relatively inexpensive newspapers because advertisers pay most of the costs, and many similar benefits. To bring buyers and sellers together through such intermediaries as newspapers, supermarkets, and credit cards, one side frequently receives inducements to participate. These inducements help maximize the joint value of the ultimate transaction for the parties. Rather than an inefficient

> "subsidy," these inducements are the lubricant necessary to make the economic machine work at its best.

I agree with these commentators that the cross-subsidy "problem" does not warrant a regulatory fix. But I have a slightly different, and more antitrust-centric perspective. Brown and Muris note the ubiquity of cross-subsidies in restaurants, supermarkets, and shopping malls. These are just examples. Cross-subsidization would occur not only in these settings, and in settings where firms do not plausibly have market power, but would also occur in closed-loop systems that do not use interchange fees, suggesting that this criticism has more to do with the necessity of balancing in two-sided markets rather than interchange per se. But the important point from an antitrust perspective is that cross-subsidization is a normal and healthy part of the competitive process that generates substantial benefits for consumers. The normal competitive process *frequently* does not result in customers being charged for all of the costs associated with their purchases. Consumers face such cross-subsidies every time they go to Starbucks for their caffeine fix or an all you can eat buffet. Some consumers are very sensitive to which products are allocated to the eye level shelf space in the grocery store, while others will purchase their favorite product regardless of where it is put on the shelf. The very idea of promotion is to target what amount to effective discounts at marginal consumers rather than the infra-marginal ones. See generally, Benjamin Klein, Kevin Murphy, Andres Lerner and Lacey Place, *Competition in Two Sided Markets: The Antitrust Economics of Payment Card Interchange Fees*, 73 Antitrust L.J. 571 (2005).

Understanding the nature of promotion, and therefore cross-subsidization, as a part of the normal competitive process offers a new perspective on the potential for interchange legislation as an antitrust remedy. Competition in highly competitive markets, such as grocery retail, results in supermarkets competing by offering various promotional services to marginal consumers. Sometimes this competition results in free parking that some consumers use but others pay for, sometimes it results in dimensions of non-price competition (like offering a deli or keeping the store clean) that some consumers value more than others. Competition between supermarkets to shift sales from these marginal consumers generate largely inter-retailer effects, but that cannot be said to be "inefficient" in any meaningful way. This form of competition is essential to the competitive process. Consider the interchange legislation in this light. Do we, in response to supermarket competition resulting in "usage externalities" call for legislation that would allow the supermarkets to collude? Of course not. From a competition perspective, the very idea of replicating the collusive outcome for merchants and allowing a coordinated reduction in competition on the grounds that it would reduce cross-subsidies or costs wouldn't make economic sense. But notice that collusion between supermarkets to refuse to offer free parking, clean stores, or other promotional services would surely reduce the costs to the retailers in the same way that interchange would result in a reduction of costs to the merchants.

One possible explanation of our tolerance of these arguments is a failure to understand that, like in the case of supermarkets, competition between merchants on the acceptance of payment cards is a normal part of the competitive process. But there is another possible and more plausible argument: countervailing power. In other words, one could argue that legislation to allow collective monopsony conduct is appropriate to offset monopoly power (see, e.g., Steve Salop's recent guest post here at TOTM on this issue in a different context). Whether or not this justification is persuasive depends on the degree to which payment system market power explains interchange fees. As it turns out, there is not compelling evidence that this is the case. For example, consider that regulation reducing the interchange fees for open loop systems (and reducing their ability to balance both sides of the market) results in a shift of total credit purchase volume toward closed loop systems. The loss in share that MC and Visa experienced in reaction to the Australian regulation suggests that interchange levels were not supra-competitive before the regulation. Further, as Klein et al (2005) suggest, the time series evidence also casts doubt over the claim that market power explains interchange fee levels since fees were falling from 1977 to 91 while the importance of the payment systems was growing, and that fees remained lower in 2005 than they were in 1971. In short, interchange fee levels appear to be a poor proxy for market power, and there does not appear to be convincing empirical evidence that market power explains changes in interchange fees.

In the absence of such evidence of a compelling problem, the regulatory “fix” of replicating the collusive outcome for merchants and interfere with the normal competitive process appears to be sure to shift rents between sides of the market, but more importantly, to impose a significant risk of doing more harm than good for the consumers it is purportedly designed to protect.

The Institutional Dynamic: Understand First, Act Second—If At All

Richard Epstein

I have now had a chance to review the excellent posts on the second day, all of which have a common flavor. They expand the universe of relative considerations that need to be taken into account to decide whether imposing caps on interchange fees enhances or reduces overall social welfare. The narrow perspective on this issue, which is difficult enough, is to master the dynamics of two-sided markets to figure out where the fixed costs of running the overall system should be allocated.

That model assumes that the credit card business operates in isolation from all other payment systems present and future. Its effort is to run an efficient allocation of costs in the face of the famous marginal cost controversy that dates back to the 1940s. Unless there is some outside subsidy all relevant players cannot be allowed to pay only marginal cost. Yet to put in the subsidy is to create a tax distortion in some unrelated market whose welfare consequences are virtually impossible to track, given the difficulty that arises in discovery of the incidence of the tax as it works its way through the economy. We are therefore necessarily in the world of second-best even on the simplest possible analysis.

Unfortunately, that simple analysis leaves a lot out of the equation. One key issue is the competition that credit cards have with noncredit card systems, each of which may have built in distortions of their own. We know that the United States has to print and police the use of cash. We also know that it can disappear from company coffers into the hands of dishonest employees. It can be lost. It can be stolen. It can get waterlogged. It can be deposited in the wrong account by accident. Credit cards reduce these costs, and they do so arguably in a more efficient form than the use of checks, which of course clear at par, which means that the cost of interchange is borne by general tax revenues, with the usual set of static distortions. It also creates dynamic distortions because the want of price signals between the players makes it harder to introduce innovation into that space on such critical matters as error control, even if it would result in higher level of reliability in transactions.

In addition, it is also important to consider the other benefits that can arise with the use of credit card payments, one of which is the ability to key in all relevant data from a transaction at once. Quite simply it may well be easier to link in inventory control, for example, with a credit card system than it is with a cash or checking system. And it may speed up the rate of transactions so as to reduce the length of queues that are so important in many retail operations.

The clear upshot is that it is difficult through informed speculation to identify all the collateral consequences of running a credit card system, both positive and negative. The only sure piece of data that we have is that credit transactions have done far better than cash and checks, even if they are losing ground to the next generation of payment systems that rely on cell phones and other technologies that are untied to the now ubiquitous magnetic strip. These dynamic changes could easily force down interchange prices without the need for administrative proceedings.

The hard institutional question therefore is why concentrate major reforms on the interchange fees when all these other components must be added into the mix. On this question, priors really matter. And after reading the assembled posts, my own view is that technological innovation is a far more important driver of improvements than partial fine-tuning of the current system, whatever its flaws.

In one sense, therefore, we, the members of this blog-fest, may well be part of the problem. By putting one part of a complex payment industry under a microscope we divert resources from cost reduction measures that have unambiguously positive effects. How large a cost is this? Frankly, no one knows. But given the risks of error in implementation, the best response still seems to be, play for the next big breakthrough, and in the short run, leave well enough alone.

Symposium Wrap Up

Geoffrey Manne

Thanks to all of our participants and readers for the blog symposium–both the posts and the comments were engaging and thoughtful, and I hope these entries will be helpful in the ongoing debate over credit cards and interchange fees.

A concluding point or two:

Credit card networks are incredibly complex, and no one fully understands the full consequences of tinkering with these markets. The best empirical evidence we have is difficult to interpret, and the broad interactions among the parts of the credit card system, between cards and other payment systems, and in the macro-economy more generally are simply unknown: Richard's do no harm principle seems like the strongest conclusion in this debate.

At worst, theory and empirical evidence suggest that lowering interchange fees does nothing to help consumers, and in fact harms them by raising annual fees and thus again by limiting competition among cards at the point of sale. Perhaps there is some policy reason why we would want to help merchants at the expense of consumers, but the issue, often framed as merchants and consumers against banks and card networks, really seems to be merchants *against* consumers. At best, we have no idea what the full social implications of capping interchange fees would be–but there is still a conflict between merchant and consumer interests, and we should be wary.

As I read the comments and posts in this debate, essentially all of us agree that, at minimum, there is a potential for consumer harm from government intervention in these markets. Certainly all of us engaged in this discussion–even those with a more "pro-regulatory" bent–are far more circumspect about the prospects for positive social welfare effects and effects on consumers in particular than are the proponents of regulation. I do wish our system limited the political salience of regulatory initiatives unsupported by evidence–the burden should be on the proponents of intervention to demonstrate affirmatively that regulation will likely have net positive effect. Here, this is simply not the case.

As is so often the case, Richard has the last word:

> The clear upshot is that it is difficult through informed speculation to identify all the collateral consequences of running a credit card system, both positive and negative. The only sure piece of data that we have is that credit transactions have done far better than cash and checks, even if they are losing ground to the next generation of payment systems that rely on cell phones and other technologies that are untied to the now ubiquitous magnetic strip. These dynamic changes could easily force down interchange prices without the need for administrative proceedings.
>
> The hard institutional question therefore is why concentrate major reforms on the interchange fees when all these other components must be added into the mix. On this question, priors really matter. And after reading the assembled posts, my own view is that technological innovation is a far more important driver of improvements than partial fine-tuning of the current system, whatever its flaws.
>
> In one sense, therefore, we, the members of this blog-fest, may well be part of the problem. By putting one part of a complex payment industry under a microscope we divert resources from cost reduction measures that have unambiguously positive effects. How large a cost is this? Frankly, no one knows. But given the risks of error in

> implementation, the best response still seems to be, play for the next big breakthrough, and in the short run, leave well enough alone.

Thanks once again to all of our great participants, and to our readers. The full set of posts and comments from the symposium are available by clicking on the "credit card symposium" link on the right side of the TOTM page.