Interchange Regulation: 
Implications for Credit Unions

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Deeply embedded in the credit union tradition is an ongoing search for better ways to understand and serve credit union members. Open inquiry, the free flow of ideas, and debate are essential parts of the true democratic process.

The Filene Research Institute is a 501(c)(3) not-for-profit research organization dedicated to scientific and thoughtful analysis about issues affecting the future of consumer finance. Through independent research and innovation programs the Institute examines issues vital to the future of credit unions.

Ideas grow through thoughtful and scientific analysis of top-priority consumer, public policy, and credit union competitive issues. Researchers are given considerable latitude in their exploration and studies of these high-priority issues.

The Institute is governed by an Administrative Board made up of the credit union industry’s top leaders. Research topics and priorities are set by the Research Council, a select group of credit union CEOs, and the Filene Research Fellows, a blue ribbon panel of academic experts. Innovation programs are developed in part by Filene i3, an assembly of credit union executives screened for entrepreneurial competencies.

The name of the Institute honors Edward A. Filene, the “father of the U.S. credit union movement.” Filene was an innovative leader who relied on insightful research and analysis when encouraging credit union development.

Since its founding in 1989, the Institute has worked with over one hundred academic institutions and published hundreds of research studies. The entire research library is available online at www.filene.org.
The Filene Research Institute would like to thank Card Services for Credit Unions (CSCU) for its generous support of this and other important payments research.
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by Ben Rogers,  
*Research Director*

When Jane Doe swipes her debit card for groceries, gas, or a book at the airport, little does she know that her behavior supports a whole ecosystem. The merchant certainly gets paid, but only after coughing up an interchange fee that supports the debit card network, the institution that issued the card, and sometimes even Jane herself in the form of cardholder rewards. But a provision in 2010’s financial reform legislation is sending a tremor through that ecosystem, directly affecting debit card issuers like credit unions.

**What Is the Research About?**

When Congress passed the Dodd-Frank Act in the summer of 2010, its main provisions—aimed squarely at large banks and other systemically important institutions—did little to affect the operations of credit unions. But one amendment, added late in the process by Senator Dick Durbin (D-IL), restricts a key source of many credit unions’ profits: debit card interchange. Despite lobbying against it, and an eventual waiver for financial institutions with assets of less than $10 billion (B), the Durbin Amendment passed in the final law. Pending the Federal Reserve’s implementation rules, due for comment in early 2011, it may be the act’s hardest pill for credit unions to swallow.

This report builds on similar research by Professor Adam Levitin of Georgetown University Law Center and the Filene Research Institute over the past year. As new laws and regulations have begun to change the face of credit union compliance, Filene has published the following reports: *An Analysis of the Consumer Financial Protection Act* (2010), *Overdraft Regulation* (2010), and *The Credit C.A.R.D. Act* (2009). Each seeks to explain the relevant new law and outline its challenges and opportunities for credit unions.

**What Did the Research Reveal?**

The Durbin Amendment will push down the approximately $17B in debit interchange paid to issuing financial institutions every year. Here are some of the key takeaways from the review and a special Filene survey:

- **Growing credit union debit**: Debit card activity at credit unions has grown briskly in the past four years. Median debit transaction dollar volume grew at an average rate of 12% from 2006 to 2009, while the median number of transactions grew at a rate of 9% over the same period.
• **Curtailed interchange will hurt:** According to a Filene credit union survey, debit interchange accounts for between 4% and 5% of credit unions’ gross revenue, while credit interchange is in the range of 1.5% to 2.5%. A 50% or greater decline in debit interchange revenue is possible for institutions larger than $10B, with 20–40 basis points (bps) as a realistic possibility—down from the current range of 75–125 bps.

• **Reasonable and proportional:** The true cost of the Durbin Amendment will become clear once the Fed rules on which charges are reasonable and proportional to the cost incurred by institutions to process debit transactions. Institutions may include the cost of fraud but not the cost of overhead or marketing.

• **Multi-homing:** Institutions with less than $10B in assets may be shielded from the “reasonable and proportional” interchange standards, but they will still be subject to “multi-homing”—the requirement that each card be capable of processing a transaction on more than one network. Competition among networks will allow merchants to route transactions to the network that saves them the most money, which will push down income for issuers.

### What Are the Implications for Credit Unions?

Any regulatory movements will affect profitability, especially in a core product like debit cards. But the Durbin Amendment is particularly noteworthy for its likely middle- and long-term implications.

• **Competition for small issuers:** It is likely that competitive pressures will encourage networks to adopt separate interchange schedules for smaller institutions, which could leave small issuers’ debit interchange revenue largely untouched by the Durbin Amendment. If a two-tiered interchange structure emerges, it will help make credit unions more competitive in the card issuance market.

• **Mobile advances:** Regulatory reform will likely encourage payment card networks to push aggressively into new (and less regulated) markets, particularly mobile commerce. If so, credit unions will generally have to look to license customizable mobile software platforms and piggyback on network-negotiated deals to gain a foothold in mobile payment transactions.

• **Threats to fees abound:** The Durbin Amendment highlights the difficulties that credit unions face from an increasing reliance on fee-based revenue. Credit unions may find it necessary to adjust the bundle of services they offer along with deposit accounts, possibly reemphasizing credit cards that maintain their attractive interchange rates.
The tremors set off by the Durbin Amendment will roil the retail financial services industry. The $10B exemption may salvage debit interchange revenue for most credit unions. But expect it to hasten the move into new technologies and encourage the issuance of more credit cards as large banks and payment networks seek to win back lost income.
Adam J. Levitin

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Many merchants find that the cost of accepting payment cards is one of the fastest-growing costs of doing business, and one over which they have little control. US interchange rates are the highest in the developed world, and US merchants have observed regulators in numerous foreign jurisdictions taking legislative action to reduce already lower interchange rates.
Among the many provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 is a provision regulating debit and credit card interchange fees—the fees paid on every card transaction by merchants' banks to the financial institutions that issue the cards. Interchange fees and related payment card network rules have been the subject of intense regulatory scrutiny and litigation globally for the past decade, but the Dodd-Frank provision, known as the Durbin Amendment, marks the first time the fees have been regulated in the United States. The Durbin Amendment was strongly opposed by many credit unions and their trade organizations, and it promises to have far-reaching effects not just on credit unions' debit and credit card operations but on the credit union business model more generally.

This research brief first reviews the provisions of the Durbin Amendment. It then considers how these changes are likely to affect the payment card industry in general, and card issuers in particular. Next it presents the results of an original survey of credit unions to provide an empirical picture of the role that interchange revenue plays in credit unions' business models and how the Durbin Amendment is likely to affect credit unions. It concludes with an analysis of the implications of the Durbin Amendment for credit unions' business overall and some suggestions for how credit unions can respond to the changed regulator environment.

Every payment card transaction in the United States involves five parties: a purchaser, a merchant, the purchaser's financial institution, the merchant's bank, and a payment card network. When the card is used to make a purchase, the consumer's account at his or her financial institution is debited for the full amount of the transaction. The

The total amount of interchange revenue from credit and debit card transactions is unknown but is estimated to be about $48B annually. Some sources estimate debit interchange as being about $20B; the author's estimated breakdown is similar—roughly $31B in credit interchange and $17B in debit interchange.
consumer’s financial institution then remits the amount of the purchase to the merchant’s bank through the network, minus a fee known as the interchange fee, as well as various card network fees. The merchant’s bank then credits the merchant’s account for the full purchase amount of the transaction minus a fee taken by the merchant’s bank, known as the merchant discount fee. Figure 1 illustrates the fee division for a hypothetical transaction.

The total amount of interchange revenue from credit and debit card transactions is unknown but is estimated to be about $48B annually. The credit/debit breakdown is also unknown. Some sources estimate debit interchange as being about $20B; the author’s estimated breakdown is similar—roughly $31B in credit interchange and $17B in debit interchange. Figures 2 and 3 provide some sense of the breakdown of debit and credit transaction volume and total transaction value for different payment systems. Figure 4 shows the breakdown for payment cards in further detail, differentiating between signature- and PIN-based account-linked debit cards and prepaid cards.

The interchange fee is set by the payment card network. Typically the fee is a combination of a flat fee and a percentage of the transaction; in some cases the total fee is capped. Fees depend on the type of card used, the level of rewards and service on the card, and the type and transaction volume of the merchant. Interchange fee schedules do not vary based on the identity of the financial institutions involved.

Despite fee schedules that are based on merchant and cardholder characteristics, interchange is technically an interbank fee, but it is usually passed on to the merchant as part of the merchant discount fee charged by the merchant’s bank. Most large merchants pay discount fees that are structured as “interchange plus,” meaning the discount fee is the interchange fee plus network fees plus an additional percentage that pays for the acquirer’s costs and profit margin. (“Blended rate” merchant discount fees are more common for smaller merchants.)

Payment card networks maintain a number of rules related to the terms on which merchants accept cards. These rules, which vary
Figure 2: Market Share of Consumer Payments by Dollar Amount

Note: Prepaid, EBT, and ACH transactions are included under "Other payment systems." Source: Nilson Reports.

Figure 3: Market Share of Consumer Payments by Transaction Volume

Note: Prepaid, EBT, and ACH transactions are included under "Other payment systems." Source: Nilson Reports.
among networks, generally require merchants to accept all of the payment card networks’ cards in all of their locations for all transactions (no minimum or maximum purchase amounts) and to route the clearance of all transactions made using the card network’s cards through the card network. The rules also forbid merchants to discriminate among the networks’ cards, against card users (including surcharging), or against the payment card network in favor of other card networks.

Interchange fees on credit and debit cards constitute an important source of US financial institution revenue, estimated at $48B in 2008. They are also highly controversial. Merchants and consumer advocates contend that interchange fees are uncompetitively high because merchants are neither able to bargain over the fees nor pass them along to card users due to payment card network rules. Merchants argue that because payment card network rules forbid them from passing along interchange fees to card users, a large portion of the fees are ultimately passed on to all consumers in the form of higher prices. Merchants allege that this results in a regressive cross-subsidy from cash to electronic payment users, whereby cash consumers are subsidizing payment card rewards programs.

While merchants receive many benefits from accepting payment card transactions, such as reduced theft costs, easier cash management, easier accounting, reduced credit risk, potentially faster transaction speed, and even possibly greater sales volume and ticket amounts, they do not perceive increasing benefits that correspond to the increased costs.

Payment card networks argue that interchange fees are a critical tool for balancing price elasticities—willingness to pay—between merchants and consumers in order to maximize the size and hence the value of the network. They also contend that interchange is necessary to reimburse issuers for the cost of processing purely payment transactions, including fraud prevention. Merchants and consumer advocates challenge these assertions and contend that interchange originated not as a method for balancing price elasticities but as a method for evading usury laws. They also contend that (1) interchange revenue enables more aggressive underwriting standards because with an expanded cardholder base, increased interchange revenue can offset credit losses, and (2) because interchange is used
to fund rewards programs and marketing, it encourages excessive use of credit cards in particular.\textsuperscript{14}

This research brief takes no position on the propriety of interchange fees. Instead, it merely notes the existence of the controversy, the important role interchange plays in payment card networks’ competition for card issuers, and the motivations behind the legislation. Payment card networks’ revenue is based on total transaction volume (in dollar amount), as the networks’ fee is a percentage of the transaction amount. The key determinant of transaction volume is the number of cards issued on the network. Therefore, networks must compete with one another for a share of the card issuer market. Networks compete by offering higher interchange rates to issuers. Interchange rates, however, are currently one-size-fits-all for issuers, so networks offer larger issuers additional compensation for issuing cards on their network in the form of individually negotiated payments. Because card networks use interchange to compete for issuer market share, competition tends to drive up interchange rates. Moreover, since MasterCard’s and Visa’s initial public offerings (IPOs) in 2005–2006, there has been shareholder pressure for the networks to raise their own fees, which tend to be passed along to merchants in the merchant discount rate.

Thus, many merchants find that the cost of accepting payment cards is one of the fastest-growing costs of doing business and one that they can do little to control. While merchants receive many benefits from accepting payment card transactions, such as reduced theft costs, easier cash management, easier accounting, reduced credit risk, potentially faster transaction speed, and even possibly greater sales volume and ticket amounts, they do not perceive increasing benefits that correspond to the increased costs. There is, of course, a threshold to merchants’ price elasticity; if interchange rates become too high, a merchant might refuse to accept the network’s cards. Opting out of accepting cards altogether is an impossible proposition for many merchants, however, because consumers expect to be able to pay with plastic. A merchant that refuses to take payment cards puts itself at a severe competitive disadvantage.

US interchange rates are the highest in the developed world,\textsuperscript{15} and US merchants have observed regulators in numerous foreign jurisdictions, including the EU, Australia, Hungary, Israel, Mexico, New Zealand, Poland, Switzerland, and the UK, take action to reduce already lower interchange rates.\textsuperscript{16} Prior to the
Durbin Amendment, however, no US regulatory agency had authority over interchange rates. Accordingly, US merchants have brought litigation and have pushed hard for a legislative solution to what they perceive as an unfair interchange system that enriches financial institutions at their expense and their consumers’. The Department of Justice has sued American Express, MasterCard, and Visa over their credit card network rules and has reached settlements with MasterCard and Visa. The most substantial product to date, however, of the merchants’ campaign for interchange reform is the Durbin Amendment.
The Durbin Amendment, passed by the Senate, requires interchange fees on debit cards to be “reasonable and proportional” and opens the door for more competition among payment systems that will likely result in lower interchange fees. The amendment was supported by merchants but strongly opposed by credit unions and community banks.
The Durbin Amendment aims to improve competition among payment card networks by reducing interchange fees on debit cards and allowing merchants greater ability to steer transactions toward lower-cost payment systems. The amendment was strongly supported by merchants and consumer groups but fiercely opposed by financial institutions, particularly credit unions and community banks. The amendment’s bipartisan passage (64–33, with 47 Democrats and Independents and 17 Republicans supporting it) in the Senate version of the financial reform bill was a surprise; while there had been previous attempts to move interchange legislation, and interchange is the subject of massive litigation, the amendment’s passage in the Senate was not expected.

The legislation contains two operative sections. One section addresses only debit cards. The other section addresses all payment cards, debit and credit. The first part of the amendment requires that interchange fees on debit card transactions be "reasonable and proportional to the cost incurred by the issuer with respect to the transaction." The amendment instructs the Federal Reserve to promulgate regulations for assessing whether interchange fees are in fact reasonable and proportional to the cost incurred by the issuer with respect to the transaction.

In determining what fees would be "reasonable and proportional," the amendment directs the Fed to consider the similarity between debit and check transactions that it requires to clear at par (meaning without a discount fee). The amendment also provides that in its rule-making, the Fed shall only take into account issuers’ incremental costs for debit transactions, thereby excluding sunk costs like overhead and marketing. The Fed is permitted, however, to adjust its determination of a reasonable and proportional fee to account for the issuer’s net debit fraud prevention costs if the issuer complies with the fraud prevention standards that the amendment requires the Fed to establish. The Fed is instructed that the fraud prevention standards must require issuers to develop and implement cost-effective fraud prevention technology, and that in its consideration
of cost-effectiveness, the Fed must consider the relationship between fraud and PIN-authorized and signature-authorized debit transactions (most networks use PIN technology; signature is used only by MasterCard and Visa26), the allocation of fraud and data security liability and costs, and the incentives interchange creates in affecting fraud losses.27 The Fed is also given authority to regulate network fees to ensure that they are used to reimburse issuers directly or indirectly.28

Small issuers with less than $10B in consolidated assets are exempt from the “reasonable and proportional to cost” requirement,29 as are cards used for government-administered payment programs (e.g., SNAP, Social Security, and unemployment benefits) and prepaid, reloadable debit cards that are not marketed as gift cards or gift certificates and that do not charge a fee for the first in-network ATM usage in a month or overdraft fees.30 By virtue of exemption from the “reasonable and proportional to cost” requirement, small issuers are also exempt from the subsidiary fraud prevention standards. The $10B exemption is not inflation indexed.

The second operative part of the amendment prohibits certain payment card network rules that restrict merchants’ ability to steer consumers toward particular payment systems. The small issuer exemption does not apply to this part of the amendment. First, the amendment prohibits exclusive arrangements for processing debit card transactions.31 The amendment requires that every electronic debit transaction—rather than every debit card—be capable of being processed on at least two unaffiliated networks, enabling what is known as “multi-homing”32 (meaning that the transaction can find its way “home” over multiple network routings). The requirement that at least two unaffiliated debit networks be able to process each transaction opens the door to competition among networks for transaction processing; where there is only one network on a card, there is no competition for the transaction once the consumer presents the card to the merchant.

Second, the amendment prohibits the networks from restricting merchants’ ability to decide on the routing of debit transactions.33 Combined with the multi-homing requirement, this permits merchants to route payments to the debit network offering them the lowest cost, rather than the current system, whereby the card’s processor routes the transaction according to the preferred routing flagging encoded on the card. This means that card networks will have to compete

While merchants’ ability to offer discounts will be constrained by their profit margins—merchants cannot generally discount below margin—the ability to offer in-kind incentives might provide them with greater ability to steer transactions toward favored payment mechanisms.
with one another for merchant routing, presumably resulting in lower interchange rates.

Third, the amendment prohibits payment card networks from preventing merchants from offering discounts or in-kind incentives for the use of cash, check, debit, or credit for payment, so long as the discounts or incentives do not discriminate by issuer or network. This provision expands on an existing federal law, the Cash Discount Act, to clarify that discounts are permitted not only for cash and checks but also for debit and credit transactions. Unaddressed is whether these discounts or incentives could discriminate on the basis of card types within networks, such as between cards with rewards programs and cards without rewards programs (and hence higher interchange fee rates). Likewise unaddressed is whether merchants can distinguish between PIN and signature debit cards. These cards are run on different networks, so distinguishing between them could be viewed as discriminating on the basis of network rather than on product offering.

The provision does not specifically authorize surcharging, which most network rules prohibit. Mathematically, surcharging is indistinguishable from discounting, but in terms of behavior economic effects, surcharging is much more effective at changing consumer behavior, much like the difference between the bottle half-full and the bottle half-empty. While merchants’ ability to offer discounts will be constrained by their profit margins—merchants cannot generally discount below margin—the ability to offer in-kind incentives might provide them with greater ability to steer transactions toward favored payment mechanisms. For example, a merchant might offer dedicated debit-only checkout lanes, a free store-brand product or coupon for future use, or an entry in a raffle with a purchase of $X or more on debit.

Finally, the amendment limits payment card network rules that forbid merchants from imposing minimum and maximum transaction amounts for credit cards. Henceforth, merchants will not be violating network rules by refusing to accept credit cards for transactions under $10, and federal agencies and higher education institutions may impose maximum dollar amounts. The amendment does not affect payment card network rules forbidding minimum transaction amounts for debit cards.

The amendment specifically states that it does not authorize merchants to discriminate among card issuers. Thus, as long as network rules prohibit such discrimination, merchants may not discriminate among issuers. There is no exemption for smaller issuers from the second part of the Durbin Amendment; it applies to all debit and credit card issuers and networks.
Much of the Durbin Amendment will be implemented through regulations. Numerous issues remain to be resolved in the rule-making:

- What constitutes a fee that is “reasonable and proportional to cost”? Fees that are a percentage of the transaction amount are unlikely to qualify, as the cost to an issuer of a debit transaction is not dependent on transaction value. Fraud expense excluded, a $20 debit transaction imposes the same costs on an issuer as a $2,000 debit transaction. Thus, the current fee structure of a small flat fee plus a percentage of the transaction is unlikely to remain intact; instead, flat fees or capped percentages are more likely to prevail. It is not clear, however, that any interchange fee is in fact reasonable and proportional to cost. The existence of zero or reverse interchange (paid from the issuer to the acquirer) electronic debit payment systems in the United States (where some PIN debit networks had reverse interchange before 1998) and other developed countries (such as Australia’s EFTPOS system) raises the possibility that “reasonable and proportional to cost” might be interpreted as par (zero interchange) or virtually so. In any case, debit interchange fees are expected to fall significantly, particularly for signature debit, where interchange fees are close to those on credit cards.

- Whether merchants can offer discounts for PIN but not signature debit or otherwise steer transactions toward PIN debit. Arguably, such steering would be interpreted as discriminating against signature networks rather than signature products.

- Whether fraud-prevention cost adjustments will be granted on a generic basis or whether issuers will have to apply for individualized variances.

- Whether fraud-prevention standards will mandate the use of PIN or chip-and-PIN technology or fraud loss-allocation rules will be restructured for issuers to receive the fraud adjustment. Merchants absorb the majority of payment fraud losses under payment card network rules; if the merchant cannot prove that it followed proper security procedures or it was a card-not-present transaction, the merchant generally bears the loss. The 2009 LexisNexis True Cost of Fraud Study estimates that merchants lost $100B to fraudulent payment card transactions in 2009, compared with $11B in financial institution losses and $4.8B in consumer out-of-pocket costs. Merchants, however, rarely bear fraud liability on PIN debit transactions; because of the two-factor authentication, it is hard for a consumer to claim that the transaction was not authorized. Moreover, financial institution fraud losses are much lower from PIN debit. According to Fiserv, fraud losses for financial institutions on signature debit in 2009 were 7.5 times higher than for PIN debit.
• The Fed could conceivably use the rule-making as a tool for encouraging the adoption of better fraud-prevention systems and/or rationalizing fraud-loss allocation in payment cards by setting a low “reasonable and proportional to cost” fee but then granting more generous upward adjustments for issuers that comply with fraud-prevention standards.

• Whether the multi-homing requirement means that each card must be capable of routing through two unaffiliated networks or that each card must be capable of routing through two unaffiliated signature debit and two unaffiliated PIN debit networks.

• Whether the networks will be required to offer separate pricing for financial institutions with net assets less than $10B.

• What sort of restrictions will be placed on network fees and payments to issuers (other than interchange) in order to prevent circumvention of the Durbin Amendment? Will network fees be restricted to a “reasonable and proportional to cost” standard to prevent side payments to issuers? Will networks be prohibited from tying issuance of credit and debit to prevent payments as part of credit issuance arrangements compensating for reduced debit interchange?

• Whether issuers will be prohibited from taking acts to steer consumers toward one network or type of system (such as signature debit), including charging consumers penalty fees for using PIN debit (as some issuers currently do).45

The resolution of these issues depends on how aggressive the Fed is in its rule-making. The timeframe for the Fed’s rule-making is quite short, which suggests that the Fed will be cautious in its rule-making but might follow up with additional rule-makings as it assesses the impact of the initial rule-making. The Fed is required to prescribe regulations implementing the “reasonable and proportional to cost” requirement and fraud-prevention standards within nine months of the passage of the Dodd-Frank Act, meaning by April 21, 2011.46

Because the Fed must put the rule-making out for notice and comment 90 days before it becomes effective, the proposed rule must be complete in early January 2011. The Fed also has until July 21, 2011, to prescribe regulations regarding multi-homing through prohibitions on debit card exclusivity and routing selection.47 These provisions of the Durbin Amendment are not self-executing without the Fed’s rule-making. The “reasonable and proportional to cost” provision becomes effective July 21, 2011.48 The discounting and authorization of minimum and maximum amounts for credit card transactions were effective as of the signing date of the Dodd-Frank Act, July 21, 2010.
The Filene Interchange Survey gauged the impact of the Durbin Amendment on credit unions. Credit unions were asked about their debit and credit card transaction volume and size, their revenue on cards, and their fraud costs.
In July 2010, the Filene Institute undertook a survey of its credit union members to gauge the likely impact of the Durbin Amendment on credit unions. The survey was administered via the SurveyMonkey website and consisted of 32 questions, some with multiple subparts for time series data. Ninety-one valid survey responses were received; not all respondents answered all questions.

General Profile of Respondents

Of the respondents, 50 (55%) were from state credit unions and 41 (45%) were from federal credit unions. Median (mean) asset size was $428 million (M) ($1.18B), and median (mean) membership was 53,233 (123,223). Larger credit unions are heavily overrepresented in the survey: More than three-quarters of respondents reported assets of over $100M, almost half reported assets of over $500M, and a quarter of respondents reported assets of over $1B. As a result, the survey covers almost 12% of credit unions with over $500M in assets, but less than 1% of credit unions with less than $500M in assets. Figure 5 shows the distribution in terms of National Credit Union Association (NCUA) asset group sizes.

Given the sample size—just over 1% of all credit unions—there is a question of whether the results are a representative sampling or might reflect a self-selection bias or stochastic variation. It is not possible to answer with certainty, so the survey’s results should be taken as illustrative of a segment of the credit union system and not necessarily representative. Nonetheless, there is reason to believe that the survey is at least directionally accurate; responses generally track results in other credit union surveys and for financial institutions in general. As Figure 6 shows, profitability as reported in the Filene survey largely tracks credit unions as a whole. Figure 7 shows profitability breakdown by asset size.
Figure 5: Survey Respondents by NCUA Asset Group Size

- $0 to $2 million asset size, 3 respondents.
- $2 million to $10 million asset size, 1 respondent.
- $10 million to $50 million asset size, 7 respondents.
- $50 million to $100 million asset size, 8 respondents.
- $100 million to $500 million asset size, 29 respondents.
- $500 million to $1 billion asset size, 21 respondents.
- Greater than $1 billion asset size, respondents.

Figure 6: Respondents’ Return on Assets, 2006–2009

- In 2006, respondents mean was about 75, respondents median about 80, all credit unions about 82.
- In 2007, respondents mean was about 60, respondents median about 75, and all credit unions about 65.
- In 2008, respondents mean was about 20, respondents median about 28, and all credit unions about 31.
- In 2009, respondents mean was about 26, respondents median about 45, and all credit unions about 15.

Source: Filene Interchange Survey; CUNA 2009 End of Year Report, CU Spreads.
Respondents’ Debit and Credit Card Programs

Basic Program Features

Nearly all respondents (88 of 91) offer debit cards to their members. Of those issuing cards, most (86%) issue the cards directly, while a minority (14%) issue cards via an agent bank relationship. Ninety-five percent of respondents that issue debit cards issue both PIN and signature debit cards. Only 5% issue only PIN or only signature debit cards. Most respondents that offer debit cards (95%) do not charge an annual fee. Respondents’ debit cards generally do not have rewards programs. Ten percent offer rewards for all their debit cards, while 22% offer rewards only on signature debit transactions. Sixty-eight percent do not offer debit rewards at all. The transaction mix in 2009 on respondents’ debit cards tilted toward signature debit. The median (mean) percentage of signature transactions was 60% (59%). This closely tracks the 61:39 signature-to-PIN debit transaction ratio for the United States.¹⁰ No significant correlations exist between signature-to-PIN ratio and debit interchange revenue as a percentage of gross revenue.

Reflecting the overrepresentation of large credit unions, which prior research has found to be more likely to offer credit cards, most respondents (84 of 91, or 92%) also offer credit cards to their members, a significantly higher percentage than credit unions in...
general (51%). Of those that offer credit cards, 82% issue them directly, while 18% use an agent bank. Credit unions also issue many fewer credit cards than debit cards. On average, respondents issue only about a third (37%) as many credit cards as they do debit cards. Most respondents (82%) do not charge an annual fee on their credit cards, but most (86%) offer some form of rewards on at least some of their credit cards.

**Transaction Volume and Size**

Respondents had a median (mean) 5.1 million (11.3 million) debit transactions in 2009, with a median (mean) total debit purchase volume of $177.3M ($307.3M). This compares with median (mean) credit transactions of 583,000 (1.7 million) in 2009, and median (mean) credit purchase volume of $33M ($102M). The wide discrepancies between medians and means reflect the variation in respondent institution size.

As Figure 8 shows, both the number and the dollar volume of debit transactions have grown steadily over the past four years, tracking the general phenomenon of debit card transaction and volume growth, as debit replaces both checks and cash at point of sale. Median debit transaction dollar volume grew at an average rate of 12% from 2006 to 2009, while the median number of transactions grew at a rate of 9% over the same period. The median (mean) 2009 debit transaction value based on these figures was $35.48 ($31.29) (see Figure 9).

*Figure 8: Respondents’ Debit Card Transaction Volume, 2006–2009*

By comparison, as shown in Figure 10, both the number and the dollar volume of debit transactions has risen and fallen over the past four years. This tracks the general trend of growth in credit card usage followed by a sharp pullback in 2009 with constrained economic conditions. Median credit transaction dollar volume grew at an average rate of 9% from 2006 to 2009, but the median number of transactions fell at a rate of 8% over the same period. The median (mean) 2009 credit transaction value based on these figures was $56.79 ($59.99), just under double that for debit (see Figure 9).
There was no noticeable variation over time by institution size for either debit or credit transaction value.

Credit union debit cards are used much more frequently than credit union credit cards; credit union debit cards generated a median (mean) number of transactions per account of 160 (176), as compared with 50 (59) for credit cards (see Figure 11). This might reflect consumers frequently having multiple credit cards but typically only one debit card; all debit transactions will be on one card, while credit transactions will be divided over multiple cards.
While credit transaction value is approximately double the debit transaction value, the fact that the total number of debit transactions is roughly triple the credit transactions means that consumers spent significantly more on a per account or per member basis using credit union debit cards than credit union credit cards (see Figure 12).

Debit and Credit Card Revenue
Credit cards generate much more revenue per account than debit cards (see Figure 13). Credit card account revenue includes interchange, interest, and fee income, while debit card revenue includes interchange and fee income (primarily from overdraft fees). In 2009, credit unions made a median (mean) of $181.03 ($175.19) in gross credit card revenue per account, as compared with $62.83 ($69.41) per account from debit cards. On a per member basis, 2009 median (mean) gross credit card revenue was $39.45 ($40.72), as compared with $36.85 ($31.57) for debit cards. Figure 14 presents a breakdown of payment card gross revenue as a percentage of total gross revenue by credit union size. Because of the small number of small (<$100M net assets) credit unions reporting, the data for these small issuers are not necessarily representative; indeed, they are almost surely not in terms of credit card revenue’s share of total revenue because few of these smaller credit unions issue credit cards.

Interchange fees make up an important component of both debit and credit card revenue. Interchange fees account for a median (mean) 88% (88%) of respondents’ debit card revenue and 29% (31%) of respondents’ credit card revenue. The remainder of debit card revenue is presumably overdraft fees, which have themselves come under regulatory scrutiny of late. The reported credit card revenue figures are higher than those for financial institutions in general, where interchange accounts for 18% of bank card issuers’ revenue as well as the 25% reported in an earlier Filene survey. Interchange fees’ higher percentage of credit
Figure 13: Gross Credit and Debit Revenue per Account and per Member, 2009

- Mean Credit per account, $175.19.
- Median Credit per account $181.03.
- Mean Debit per account, $69.41.
- Median Debit per account $62.83.
- Mean Credit per member, $40.72.
- Median Credit per member, $39.45.
- Mean Debit per member, $31.57.
- Median Debit per member, $36.85.

Figure 14: Payment Card Gross Revenue as a Percentage of Total Gross Revenue, 2009

- For greater than $1b credit is 5.39%, debit is 3.46%.
- For $500m to $1b credit is 5.9%, debit is 5.36%.
- For $100m to $500m credit is 6.79%, debit is 4.38%.
- For less than $100m, credit is 16.04%, debit is 6.52%.
union credit card revenue indicates that credit unions are less reliant on interest (capped at 18% effective rate for federal credit unions) and other fee income (annual fees, late fees, overlimit fees, etc.) than banks.

In absolute terms, median (mean) gross interchange revenue from debit cards increased by 14% (21%) from 2006 to 2009, while median (mean) gross interchange revenue from credit cards increased by only 5% (5%) over the same period (see Figures 15 and 16). The discrepancies between mean and median figures in Figures 15 and 16 also underscore that there is significant variation in terms of gross debit interchange revenue, which generally correlates with the size of the credit union. Gross debit interchange revenue has an 89% correlation with credit union asset size and a 96% correlation with credit union membership size; for credit interchange, the correlations are weaker, at 35% for both asset and membership size.

Median (mean) gross interchange revenue in 2009 was $1.7M ($3.4M) for debit and $.6M ($1.6M) for credit. On a per account basis (debit card account or credit card account), that translates to $55.61 ($60.99) for debit and $52.05 ($55.10) for credit. On a per member basis, it is $32.61 ($27.74) for debit and $11.34 ($12.81) for credit (see Figure 17).

Interchange revenue plays an important role in credit unions’ bottom line, as shown by Figures 18–22. When interchange is expressed in relation to credit union gross revenue, as in Figures 18 and 19, the discrepancies between the mean and median figures narrow substantially, and nearly disappear for debit interchange. This indicates that there is relatively constrained deviation in terms of the role of interchange (especially debit interchange) in credit unions’ overall revenue models. As Figures 18...
and 19 illustrate, debit interchange accounts for between 4% and 5% of credit unions' gross revenue, while credit interchange is in the range of 1.5% to 2.5%.

Figure 20 provides a breakdown by credit union size and shows that larger credit unions are less dependent on payment card interchange revenue than smaller ones, perhaps because of more diversified lines of business; if smaller credit unions provide primarily transaction account services, then they will necessarily be more dependent on interchange income than larger credit unions that offer a wider array of financial products.\(^5\) This suggests that credit unions with more diversified income sources will be less affected by the Durbin Amendment than other credit unions. Figures 21 and 22 show the relationship of gross interchange income net revenue; given the profitability levels of credit unions, gross interchange income represents a much larger share of profits. Because of the subjective

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**Figure 17: Gross Interchange Revenue per Member and per Account, 2009**

<table>
<thead>
<tr>
<th></th>
<th>Per member</th>
<th>Per account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>$12.81</td>
<td>$55.10</td>
</tr>
<tr>
<td>Debit</td>
<td>$11.34</td>
<td>$50.99</td>
</tr>
</tbody>
</table>

**Figure 18: Gross Debit Interchange Revenue as Percentage of Credit Union Gross Revenue, 2006–2009**

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4.61%</td>
<td>3.72%</td>
</tr>
<tr>
<td>2007</td>
<td>3.91%</td>
<td>3.98%</td>
</tr>
<tr>
<td>2008</td>
<td>4.39%</td>
<td>4.22%</td>
</tr>
<tr>
<td>2009</td>
<td>4.53%</td>
<td>4.79%</td>
</tr>
</tbody>
</table>
Figure 19: Gross Credit Interchange Revenue as Percentage of Credit Union Gross Revenue, 2006–2009

![Bar graph showing gross credit interchange revenue as a percentage of gross revenue for 2006 to 2009. In 2006, mean revenue was 1.81%, median 2.36%. In 2007, mean revenue was 1.59%, median 2.21%. In 2008, mean revenue was 1.62%, median 2.21%. In 2009, mean revenue was 1.67%, median 2.09%. ]

Figure 20: Median Gross Interchange Revenue as a Percentage of Median Credit Union Gross Revenue by Credit Union Asset Size, 2006–2009

![Bar graph showing median gross interchange revenue as a percentage of median credit union gross revenue. In 2006, for greater than $1 billion credit, the median was about 2%, debit about 3.2%. For $500 million to $1 billion credit, the median was about 1.7%, debit about 3.4%. For $100 million to $500 million credit, the median was about 2%, debit about 3.2%. For less than $100 million credit, the median was about 1.9%, debit about 3.3%. In 2007, for greater than $1 billion credit, the median was about 1.7%, debit about 2.6%. For $500 million to $1 billion credit, the median was about 1.8%, debit about 4.4%. For $100 million to $500 million credit, the median was about 2.2%, debit about 3.9%. For less than $100 million credit, the median was about 2%, debit about 3.8%. In 2008, for greater than $1 billion credit, the median was about 1.6%, debit about 2.9%. For $500 million to $1 billion credit, the median was about 2%, debit about 4.2%. For $100 million to $500 million credit, the median was about 2.2%, debit about 4.2%. For less than $100 million credit, the median was about 2.5%, debit about 6.3%. In 2009, for greater than $1 billion credit, the median was about 1.5%, debit about 3%. For $500 million to $1 billion credit, the median was about 1.8%, debit about 4.7%. For $100 million to $500 million credit, the median was about 1.5%, debit about 4.5%. For less than $100 million credit, the median was about 2.8%, debit about 6.2%.]
Figure 21: Gross Debit Interchange Revenue as Percentage of Credit Union Net Revenue, 2006–2009

In 2006 mean revenue 31%, median 35%.
In 2007 mean revenue 31%, median 40%.
In 2008 mean revenue 59%, median 196%.
In 2009 mean revenue 32%, median 63%.

Figure 22: Gross Credit Card Interchange Revenue as Percentage of Credit Union Net Revenue, 2006–2009

In 2006 mean revenue 17%, median 16%.
In 2007 mean revenue 16%, median 17%.
In 2008 mean revenue 75%, median 29%.
In 2009 mean revenue 22%, median 15%.
nature of associating costs such as overhead or cost of funds with particular programs or accounts, the Filene survey did not collect information on debit or credit program costs other than fraud and charge-off data.

**Fraud Costs**

The Filene Interchange Survey asked credit unions about their fraud losses on payment card transactions. These data do *not* provide a means of gauging what fraud prevention adjustments to “reasonable and proportional to cost” debit interchange rates would be. There is an efficient level of fraud that is likely greater than zero, as at some point the marginal cost of reducing fraud starts to outweigh the marginal benefit. The data reported, then, let us see something close to the marginal cost of fraud prevention. While knowing actual fraud costs helps determine what the marginal cost of fraud prevention is, it is not informative about the total costs of fraud prevention, as marginal costs do not account for fixed costs. Moreover, fraud prevention costs need to be considered not just in light of past fraud rates but also in terms of anticipated fraud rates. Current fraud rates might be low, but without investment in technology upgrades, future fraud rates could easily rise. Further, fraud prevention is often a matter of relative security: it is impossible for a system to be completely fraud proof, but an issuer that presents a more formidable target is likely to divert fraud toward other issuers. Accordingly, fraud prevention costs also reflect issuers trying not to fall behind in this arms race and become favored targets for fraud. In any case, it bears emphasis that it is not clear whether the Fed will set a one-size-fits-all cost-of-fraud-prevention adjustment to its determination of “reasonable and proportional to cost” or whether issuers will be able to apply for individualized variances from a baseline adjustment (which could be zero).

Figures 23 and 24 show interchange per transaction and fraud losses per transaction over time for debit and credit, respectively. For debit, fraud losses tend to run about $0.01 per transaction, while interchange revenue ranges from $0.30 to $0.35 per transaction. For credit, fraud losses range from $0.04 to $0.07 per transaction, while interchange revenue has been between $0.89 and $1.07 per transaction.
Figure 23: Debit Interchange Revenue and Debit Fraud Losses per Transaction, 2006–2009

Debit Interchange per transaction:
- 2006: mean $0.368, median $0.318
- 2007: mean $0.320, median $0.345
- 2008: mean $0.292, median $0.321
- 2009: mean $0.303, median $0.304

Debit Fraud per transaction:
- 2006: mean $0.012, median $0.010
- 2007: mean $0.012, median $0.016
- 2008: mean $0.011, median $0.010
- 2009: mean $0.010, median $0.008

Figure 24: Credit Card Interchange Revenue and Credit Card Fraud Losses per Transaction, 2006–2009

Credit Card Interchange per transaction:
- 2006: mean $1.0681, median $0.9474
- 2007: mean $1.0079, median $0.8900
- 2008: mean $0.9488, median $0.8989
- 2009: mean $1.0353, median $0.9265

Credit Card Fraud per transaction:
- 2006: mean $0.0393, median $0.0477
- 2007: mean $0.0438, median $0.0507
- 2008: mean $0.0415, median $0.0644
- 2009: mean $0.0523, median $0.0629
Figures 25–28 illustrate fraud losses by institution size on a per transaction and per dollar basis. On both a per transaction and a per dollar basis, the fraud losses on debit, but not credit, are higher.

**Figure 25: Median Debit Fraud Losses per Debit Transaction by Credit Union Size, 2006–2009**

![Bar graph showing median debit fraud losses per transaction by credit union size and year from 2006 to 2009.](image)

**Figure 26: Median Credit Card Fraud Losses per Transaction by Credit Union Size, 2006–2009**

![Bar graph showing median credit card fraud losses per transaction by credit union size and year from 2006 to 2009.](image)
Figure 27: Median Debit Fraud Losses per Dollar of Debit Transaction by Credit Union Size, 2006–2009

- Credit union size greater than $1 billion:
  - 2006: $0.00058
  - 2007: $0.00035
  - 2008: $0.00045
  - 2009: $0.00045

- Credit union size between $500 million and $1 billion:
  - 2006: $0.0005
  - 2007: $0.00041
  - 2008: $0.0002
  - 2009: $0.00023

- Credit union size between $100 million and $500 million:
  - 2006: $0.00025
  - 2007: $0.00032
  - 2008: $0.00031
  - 2009: $0.00028

- Credit union size less than $100 million:
  - 2006: $0.00026
  - 2007: $0.00024
  - 2008: $0.00026
  - 2009: $0.00021

Figure 28: Median Credit Card Fraud Losses per Credit Dollar Volume by Credit Union Size, 2006–2009

- Credit union size greater than $1 billion:
  - 2006: $0.0006
  - 2007: $0.0007
  - 2008: $0.008
  - 2009: $0.0008

- Credit union size between $500 million and $1 billion:
  - 2006: $0.0022
  - 2007: $0.0006
  - 2008: $0.0004
  - 2009: $0.0004

- Credit union size between $100 million and $500 million:
  - 2006: $0.0003
  - 2007: $0.0002
  - 2008: $0.0008
  - 2009: $0.0008

- Credit union size less than $100 million:
  - 2006: $0.0051
  - 2007: $0.0007
  - 2008: $0.0014
  - 2009: $0.0014
for larger credit unions. The reason for this is not clear; it might be a function of larger credit unions presenting more targets for third-party fraud, or it could relate to looser associative connections in larger credit unions presenting less of an inhibition to first-party fraud. In Figures 26 and 28, the unusual spike in 2006 for small credit unions should be discounted as an anomaly resulting from a single institution's fraud losses, as there were a very small number of respondents (5) in this category.
Although the Durbin Amendment will likely reduce interchange fees, it is not yet determined whether it will reduce interchange rates or will ultimately affect the viability of some of the less profitable small or medium-sized credit unions.
The Durbin Amendment is likely to reduce both debit and credit card interchange fees. It is not clear, yet, how much of a reduction there will be in debit interchange rates as a result of the amendment. Speculation has varied wildly. But there is reason to believe that fees will drop at least to something in the range of 20–40 basis points (bps), based on the EU’s settlement with MasterCard and Visa for cross-border transaction credit interchange and Australia’s regulation of credit interchange. If so, it will represent a steep decline in debit interchange fees, which often range from 75 to 125 bps plus a flat fee component.56 A 50% or greater decline in debit interchange revenue is well within the range of possible outcomes from the Durbin Amendment.57

Some bank issuers, like Bank of America, estimate that they will incur a 60%–80% reduction in debit interchange revenue.58 Likewise, Fifth Third Bank reports that its average debit interchange was 101 bps on signature debit and 57 bps on PIN debit, translating to $0.36 revenue per signature transaction versus $0.23 per PIN transaction. Because issuers’ costs are unlikely to be noticeably different between signature and PIN debit, this suggests that the “reasonable and proportional to cost” would force at least a 36%–44% reduction in signature debit rates, to where they match PIN rates, but also probably a further reduction, to the extent that PIN debit rates are higher than the “reasonable and proportional to cost” standard. Issuers with large signature-debit portfolios are likely, therefore, to see much greater revenue reductions than PIN-debit issuers.

While most of the Durbin Amendment focuses on debit cards (only the discounting and minimum/maximum amount provisions apply to credit cards), it is likely to have a significant impact on credit card interchange. Debit interchange is already lower than credit card interchange, and the Durbin Amendment will further lower debit
interchange fees. The reasonable and proportional to actual cost provision will reduce fees significantly, particularly for signature debit and Interlink, the largest (and highest-priced) PIN debit network. The multi-homing provision will further force down fees because it will make the networks compete for transaction routing by offering merchants the lowest prices. The small issuer (<$10B net assets) exemption does not apply to the multi-homing requirement. This will make debit transactions even more preferable for merchants, who now have the ability to steer transactions toward debit via discounts and in-kind incentives. The effect will be to create downward pressure on credit card interchange, at least for those transactions where credit competes with debit.

Credit and debit do not compete for all transactions; debit is seldom used for Internet and large-ticket items. For smaller-ticket items (under $200 and especially under $40), credit and debit compete directly, and lower debit interchange fees plus merchants’ ability to steer transactions toward debit via discounts and in-kind incentives. The effect will be to create downward pressure on credit card interchange, at least for those transactions where credit competes with debit.

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The credit card networks are likely to develop interchange fee schedules that vary based on transaction value, with interchange fees on large-ticket transactions possibly increasing to offset lost revenue from small-ticket transactions; nothing in the Durbin Amendment directly regulates networks’ ability to set credit interchange fees, although the provision authorizing the Fed to regulate network fees in order to prevent circumvention of debit interchange could conceivably be interpreted as granting the Fed authority to address credit interchange.

A steep reduction in debit and credit interchange income will eat heavily into financial institutions’ bottom line. As Figures 18 and 19 show, combined debit and credit interchange income represents somewhere in the range of 5.5%—7.5% of credit union gross revenue. It bears emphasis that the Durbin Amendment will not eliminate all interchange income. Even if the Fed were to mandate zero interchange on debit, credit interchange would not be eliminated, even if it were reduced. Thus, we might posit a moderate scenario and a severe scenario. In the moderate scenario, there is a 50% reduction in debit interchange income and a 10% reduction in credit interchange income. This would result, before revenue mitigation, in a 2.15%—2.75% reduction in gross credit union revenue. In the severe scenario, there is an 80% reduction in debit interchange income and a 25% reduction in credit interchange income, resulting
in a 3.575%-4.625% premitigation reduction in gross credit union revenue.

In addition to reduced interchange income, there might also be additional costs from implementing security standards to comply with the Fed’s rule-making. While the Fed’s rule-making does not have the authority to mandate security standards itself, only to provide for an adjustment in what interchange fees are “reasonable and proportional to cost,” the card networks or the Payment Card Industry (PCI) Security Council might require issuers to implement the standards necessary for an adjustment in order to ensure systemwide conformity and avoid having to individualize interchange fees on the basis of issuer security measures. One possibility is that the entire payment card industry (debit and credit) will move to chip-and-PIN cards. This will necessitate reissuance of existing cards, which will entail expenses for issuers, even if the reissuance is phased in over time, as chip-and-PIN cards are currently more expensive than regular magnetic-strip cards.

The inevitable reduction in interchange income from the Durbin Amendment will come on top of the Credit CARD Act and debit overdraft regulation, which are likely to reduce payment card revenue, and an economic downturn that has increased credit risk and reduced consumer spending. The combined effect of these changes is likely to place considerable stress on depositories’ consumer financial services business model.

The cornerstone of most depositories’ consumer financial services business model is the deposit account. The standard depository relationship involves providing the consumer with a bundle of products: transaction and savings accounts, transaction instruments (checks and payment cards), rewards points, lines of credit (credit card and overdraft), and balance transfer privileges. This system is very good at attracting low-cost funding via deposits, but for it to work economically, it requires that the revenue-generating parts of the bundle—interchange and overdraft—subsidize the other parts of the bundle. Thus, the cost of maintaining free checking accounts is subsidized by debit interchange fee revenue. Some estimates place debit interchange at between 10% and 30% of revenue from checking accounts for credit unions and community banks.59

The free checking account is generally attributed as a credit union innovation. Most survey respondents (81%) offer truly free checking;
14% waive fees if a minimum balance or number of transactions is maintained. This contrasts notably to major commercial banks, where relatively few checking accounts are completely free, regardless of transaction volume or minimum balances.

While the Durbin Amendment will reduce credit unions’ debit interchange revenue, it is unlikely that free checking will be abandoned, if only because of credit unions’ heavy reliance on deposits for funding. Credit unions can ill afford to scare away funding, and to the extent that commercial banks respond to the Durbin Amendment by raising fees on checking accounts, it will only make credit unions more attractive to consumers.

Nonetheless, with revenue-generating components of the depository relationship under regulatory pressure, all depositories, not just credit unions, will need to reexamine their deposit account product bundling. This might involve unpacking the bundle and charging à la carte for services, perhaps with the basic savings account being free but charging for other services. Thus, one possibility for revenue mitigation is to charge consumers transaction fees. This could be done on a per transaction basis (potentially with a number of free transactions per month), on a graded scale based on account balances or purchases of other services or bundles of service. Alternatively, members could be charged annual fees for debit cards. Credit unions should proceed with caution in testing such new business models to avoid jeopardizing existing member relationships.

The impact on consumers of revised business models will necessarily differ; some consumers may benefit, while others may end up paying more for their financial services. Irrespective, one potential negative impact for consumers might be to make depository relationship products harder to compare—each institution could well offer its own nonstandard bundling that will frustrate comparison shopping by consumers. At this point it is not clear whether regulatory reform will result in a shifting of fee structures or in reduced profitability for financial institutions or both.

**Impact on Credit Unions: Two-Tiered Pricing?**

As of the end of 2009, only three credit unions—Navy FCU, North Carolina State Employees Credit Union, and Pentagon FCU—had over $10B in assets. All other credit unions are exempt from the first part of the Durbin Amendment by virtue of their size. For these
credit unions, the most critical question is whether debit card networks will institute separate interchange schedules for smaller institutions or continue with one-size-fits-all schedules. If the former, credit unions will not be impacted by the Durbin Amendment nearly as severely as they would be in the latter. As the amendment does not directly grant the Fed authority to mandate separate interchange fee schedules for large and small issuers, the decision to do so will presumably be each individual network's.

Fortunately for credit unions, it is likely that competitive pressures will encourage networks to adopt separate interchange schedules for smaller institutions. The Durbin Amendment should not affect the profitability of signing up small issuers for a network; the networks’ own revenue is based on transaction volume, and interchange is not paid by the network but by the acquirer bank. Networks want to maximize the number of cards issued on their brand, which means that they are generally eager to sign up more issuers, unless that comes at the price of losing large issuers. Networks could also conceivably have different fees for transactions on large and small issuers’ cards. If so, small issuers might benefit because if their cards yielded higher network fees, the networks would be more incentivized to court them. While this would make small issuers’ debit cards substantially more expensive than large issuers’, merchants might still come out ahead because of the heavy concentration of debit card market share among large issuers (see Figure 29 on page 40).

Large issuers might object to more generous pricing for their smaller competitors, but their leverage with the networks is limited. They could threaten to shift their business to networks that have one-tier pricing, but that would increase the ability of those networks to push for transaction market share by lowering their one-tier interest rates. The very largest banks could, in theory, become their own stand-alone networks (or purchase existing debit networks), but these banks compete primarily with one another and not with smaller financial institutions, so two-tiered pricing is unlikely to motivate such a realignment.

It is unlikely, therefore, that networks will adopt single-tier pricing. Instead, the networks are likely to move to separate pricing for small issuers because if one network does and the others do not follow, that network will gain significant market share by aggregating the business of numerous small issuers. Knowing this, many networks are likely to institute separate interchange rates for small issuers. In particular, Visa, the debit network market leader, is unlikely to leave room for rival MasterCard to expand its debit market share. Understandably, however, credit unions will be nervous about what interchange pricing under the Durbin Amendment will look like until they see it.
If two-tier pricing is the result of the Durbin Amendment, it will benefit smaller issuers like credit unions. Payment card issuance (particularly for credit) has economies of scale. State-of-the-art dynamic underwriting, fraud detection, rewards programs, national direct-mail advertising, and processing can all be highly automated, which involves substantial fixed costs that are feasible only when defrayed over large account and transaction volumes. Dynamic underwriting capability and fraud detection are essential for backloaded, behaviorally triggered pricing models. Moreover, economies of scale also benefit issuers in terms of funding and liquidity. Larger depository issuers have deep pools of low-cost funds in the form of deposits and are also able to support securitization facilities that provide ongoing liquidity.

Credit unions are already at a disadvantage when attempting to compete with large banks and finance companies on business models that require economies of scale, and this disadvantage is likely to become more pronounced. Many card industry observers believe that “size will become a more pronounced advantage for credit card issuers, and not just from a branding perspective . . . [but also because of] large issuers’ sophisticated systems for determining creditworthiness and more-efficient back-office operations will become crucial in eking out profit in the increasingly constrained credit card industry.”

The dominance of large institutions in the card issuance market is a function of the economies of scale in the card business. Card issuance, particularly credit card issuance, is highly concentrated among a handful of large banks. For credit cards, 10 large bank issuers make up almost 90% of the market in terms of dollars transacted and outstandings, with the top 5 alone providing nearly three-quarters of the total. For all debit products combined, the top 10 institutions have 51% of market share and the top 5 have 43%. Notably, as illustrated in Figure 29, card transaction volume does not track depository relationships; as of 2009, the top 10 financial institutions had only 39% of deposits (and 36% of insured deposits). While some of this discrepancy may be explained by the concentration of large deposits (including business deposits) at large banks, it is clear that many consumers use credit cards issued by financial institutions with which they have no other relationship, and that many credit union members do not use their credit union account as their primary debit transaction account.

If a two-tiered interchange structure emerges from the Durbin Amendment’s implementation, it will help make credit unions more competitive in the card issuance market.
more competitive in the card issuance market. While economies of scale will still favor larger issuers, one critical advantage of large issuers—the ability to offer what appears to be generous rewards programs—will be limited. Rewards are funded by interchange, so reduced interchange income will result in reduced rewards programs or explicit fees for rewards. Reduced rewards programs will make large issuers’ card offerings less enticing to consumers, who might then be more receptive to product cross-selling from smaller issuers like credit unions, with whom they already have relationships, be it through deposit accounts, auto loans, or mortgages.

**Mobile Commerce**

Regulatory reform will likely encourage payment card networks to push aggressively into new (and less regulated) markets, such as mobile commerce. Mobile commerce, particularly mobile payments, enables close integration of payment systems (where the mobile device substitutes for the card), account management tools, and merchant coupons, rebates, loyalty programs, and advertising. In essence, mobile commerce platforms can combine the more regulated payments and banking space with the less regulated sales and advertising space, potentially allowing financial institutions to offset reduced payments income with new income from sales and advertising-related services and cross-selling opportunities. And
because financial institutions have the paramount security concerns in the mobile space, it gives them greater leverage to control mobile commerce platforms relative to device and operating system developers and telecom providers.

Mobile commerce poses competitive challenges for credit unions and other small card issuers. Successful mobile commerce platforms will require seamless integration of payments, banking, and sales services with mobile devices, operating systems, and telecom networks. Smaller issuers lack the resources to engage in extensive software development as well as bargaining power when dealing with device and operating system manufacturers and telecom carriers. Instead, credit unions will generally have to look to license customizable mobile software platforms and piggyback on network-negotiated deals to gain a foothold in mobile payments transactions. This might place credit unions and other small issuers at a disadvantage vis-à-vis larger banks, but it also suggests a new area for credit union cooperation and joint ventures.
The Durbin Amendment will undoubtedly affect the profitability of current credit unions. Credit unions may have to adjust their bundling of services and prepare for a likely transition to mobile commerce. Overall, the amendment illustrates the challenges credit unions face in relying on fee-based revenue.
The Durbin Amendment poses numerous challenges for credit unions. While the ultimate impact of the amendment cannot be judged before the Fed’s rule-making, it will undoubtedly affect the profitability of the current credit union business model. While it will not be the make-or-break measure for most credit unions, it could ultimately affect the viability of some of the less profitable small or medium-sized credit unions. Credit unions may find it necessary to adjust the bundle of services they offer along with deposit accounts, and there may be ways of mitigating the revenue impact of the Durbin Amendment. The Durbin Amendment may also make credit unions more competitive in card issuance by reducing the advantage of large financial institutions. The Durbin Amendment is also likely to usher in a quicker transition to mobile commerce, which presents numerous challenges to credit unions.

Going forward, regulatory scrutiny is likely to be most intense on fees, driven by an unarticulated theory that if fee income is too high, it is a sign of market malfunction, as competition should drive down fee levels to relatively low profit levels, much like the Durbin Amendment’s “reasonable and proportional to cost” requirement aims to do.

Ultimately, though, the Durbin Amendment illustrates the difficulties that credit unions face from an increasing reliance on fee-based revenue (see Figure 30) to generate profit and retained earnings. Fee-based income represents an important component of credit unions’ return on assets (ROA), and retained earnings are a critical method for credit unions to grow their asset base. Going forward, however, regulatory scrutiny is likely to be most intense on fees, driven by an unarticulated theory that if fee income is too high, it is a sign of market malfunction, as competition should drive down fee levels to relatively low profit levels, much like the Durbin Amendment’s “reasonable and proportional to cost” requirement aims to do.

Fee-based income results in a redistribution of wealth from one set of credit union members to another; while credit unions need to
be able to cover their operating expenses and to grow to fill their members’ needs, excessive fee-based income is ultimately inconsistent with the mutual nature of credit unions. Mutuals should generally aim to set fee-based income to cover costs, not to serve as profit centers. Because of an inability to issue equity, mutuals’ ability to grow is necessarily constrained, but if credit unions uphold their long tradition of offering fairly priced, understandable financial products to their members and emphasize this distinction from other financial institutions, there are significant opportunities for organic growth driven by increased membership rather than fees. The credit union system faces numerous challenges to its business model from regulatory changes, and not all credit unions will be strong enough to successfully adapt to the changing market and regulatory conditions. For more solid credit unions, however, these changes also present an opportunity to refocus and reinvigorate credit unions’ traditional core strengths.

While the Durbin Amendment will not be the make-or-break measure for most credit unions, it could ultimately affect the viability of some of the less profitable small or medium-sized credit unions.

5. In the case of American Express and Discover, the financial institutions and the network are often the same firm.
8. This estimate is based on an application of the average credit card interchange fee rate, roughly 1.85% to the 2009 credit card transaction volume of the 100 largest issuers of $1.662 trillion. See Nilson Report, Issue 948 (May 2010). This figure concurs with the credit card interchange income figure provided by Payments Source of $31,721,694,000 for 2009 (Payments Source, Bank Card and Credit Card Interchange Fees, www.paymentsource.com).
Timothy Muris, *Payment Card Regulation and the (Mis)Application of the Economics of Two-Sided Markets*, 4 Colum. Bus. L. Rev. 515 (2005). Interchange fee structures vary significantly among electronic payment systems globally; not every system has interchange fees, and some systems involve interchange flowing from card issuers to merchants’ banks, as was the case with debit cards in the United States into the 1990s.


19. An unresolved question is whether the Durbin Amendment applies to ATM transactions.


21. *Id.* § 920(a)(3).

22. *Id.* § 920(a)(4)(A).

23. *Id.* § 920(a)(4)(B).


25. *Id.* § 920(a)(5)(ii)(II).

26. Visa also owns Interlink, a PIN debit network in the United States, while MasterCard owns the Maestro PIN debit network.

27. *Id.* § 920(a)(5)(B)(ii).

28. *Id.* § 920(a)(8).

29. *Id.* § 920(a)(6).

30. *Id.* § 920(a)(7).
31. *Id.* § 920(b)(1).
32. *Id.* § 920(b)(1)(A).
33. *Id.* § 920(b)(1)(B).
34. *Id.* § 920(b)(2).
37. *Id.*
38. Dodd-Frank Act, § 920(b)(3).
40. *Id.* § 920(b)(4).
41. 2009 LexisNexis True Cost of Fraud Study.
43. LexisNexis, supra note 41.
44. Fiserv, *Risk Management: Your Performance in a Soaring Fraud Climate* (reporting 2009 fraud losses of 7.5 bps for signature debit and 1.0 bps for PIN debit, and 2008 fraud losses of 5.2 bps for signature debit and .8 bps for PIN debit).
45. BAI Banking Strategies, *World of Choice: Consumer Payment Preferences*, January/February 2009, 18 (reporting that U.S. Bancorp was charging cardholders in Colorado, Indiana, Kentucky, and Ohio $0.25 for each PIN debit transaction and that Wells Fargo was charging $1/month to customers who used PIN debit at least once a month).
47. *Id.* § 920(b)(1)(A)-(B).
48. *Id.* § 920(a)(9).
53. Levitin, supra note 52.
54. See CUNA Credit Union Year-End Report, 2009, 13 (reporting higher loans/membership and loans/asset ratios for larger credit unions).

55. It is not clear whether respondents provided gross or net fraud loss figures, i.e., whether they netted losses against subsequent recoveries.

56. ATMI & Debit News, September 24, 2009, 8.


58. Bank of America, 2Q10 Earnings Report, 37 (estimating that premitigation debit interchange will drop from $2.9B to between $0.6B and $1.1B).


60. National Credit Union Administration.


63. Nilson Reports, Issues 917, 918, 919, author’s calculations.


65. To the extent that the Durbin Amendment results in PIN debit becoming a viable Internet payment medium (through either a software or a hardware solution to PIN security), it stands to benefit credit unions. Credit cards currently dominate Internet commerce, and credit unions have minimal market share in credit cards. A viable, secure debit payment option on the Internet would increase debit’s market share at credit’s expense, and thereby also increase credit unions’ share of Internet payments. Thus, the increased transaction volume would mitigate credit unions’ reduced income from lower interchange fees.