Unreasonable and Disproportionate: How the Durbin Amendment Harms Poorer Americans and Small Businesses

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SUMMARY

Introduced as part of the Dodd-Frank Act in 2010, the Durbin Amendment — named after its main sponsor, Senator Richard Durbin — sought to reduce the interchange fees assessed by large banks on each debit card transaction. The Durbin Amendment was hailed by proponents as a victory for merchants and consumers. In the words of Sen. Durbin, the Amendment aspired to help “every single Main Street business that accepts debit cards keep more of their money, which is a savings they can pass on to their consumers.”

In a 2014 analysis, we found that although the Durbin Amendment had generated benefits for large-box retailers, it had harmed many other merchants, especially those specializing in small-ticket items, and imposed substantial net costs on the majority of consumers, especially those from lower-income households.

In this study, we find that the passage of time has not ameliorated the harm to bank customers from the Durbin Amendment; to the contrary, earlier adverse trends have solidified or worsened. Nor do we find any indication that matters have improved for small merchants or retail consumers: Although large merchants continue to reap a Durbin Amendment windfall, there remains no evidence that small merchants have realized any cost savings — indeed, many have suffered cost increases. Nor is there any evidence that merchants have lowered prices for retail consumers; for many small-ticket items, in fact, prices have been driven up.

Finally, we identify a new trend that was not apparent when we examined the data three years ago: Contrary to our findings then, the two-tier system of interchange fee regulation (which exempts issuing banks with under $10 billion in assets) no longer appears to be protecting smaller banks from the Durbin Amendment’s adverse effects.
In sum:

- The evidence presented in this paper contradicts the claim that the costs resulting from the Durbin Amendment have been offset by merchants charging lower prices. Indeed, the majority of consumers — and especially those with lower incomes — have experienced higher prices overall.

- Millions of households, regardless of income level, have been adversely affected by the Durbin Amendment through higher costs for bank accounts and related services. Most troublingly, this has hit lower-income households the hardest. Hundreds of thousands of low-income households have chosen (or been forced) to exit the banking system, with the result that they face higher costs, difficulty obtaining credit, and complications receiving and making payments.

- That a forced reduction in interchange fees would result in higher bank fees for consumers is a matter of basic economics. Retail banking in the United States is a highly competitive industry and there is no evidence of supra-normal profitability for retail banks. As such and over time, cost increases or revenue reductions will be passed on to bank customers in the form of higher bank fees or reduced services. It was simply inevitable that the removal of billions of dollars in interchange fee revenue would ultimately result in higher costs for bank consumers.

- For some higher-income households the costs are likely mitigated by their ability to avoid checking account fees and to switch to credit cards. For both lower-income and higher-income households these costs may have been further offset, to some extent, by slightly lower prices at some merchants. But for lower-income households in particular, these possible offsets are either inaccessible or too small to make much difference. For them the Durbin Amendment has, on net, unequivocally imposed more costs than benefits.

- The Durbin Amendment has also served to increase costs for some smaller retailers and sellers of small-ticket items. Among those most adversely affected have been grocery stores, fast food outlets and similar establishments, a significant proportion of which have raised prices since the Amendment was implemented. Again, these effects hit low-income households the hardest.

In short, our findings in this report echo and reinforce our findings from 2014: Relative to the period before the Durbin Amendment, almost every segment of the interrelated retail, banking and consumer finance markets has been made worse off as a result of it. The Durbin Amendment appears on net to be hurting consumers and small businesses, especially low-income consumers, while providing little but speculative benefits to anyone but large retailers. Moreover, the regulation is starting to affect community banks and credit unions, as well, which can little afford the loss of revenue.

The Durbin experiment has proven a failure, and the price caps that it imposed should be removed.
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INTRODUCTION

Introduced as part of the Dodd-Frank Act in 2010, the Durbin Amendment sought to reduce the interchange fees — essentially, processing fees paid by a merchant to the bank that issues the consumer’s payment card — assessed by large banks on each debit card transaction. Following a period of gradual decline, debit card interchange fees increased somewhat in the 2000s, prompting calls by merchants and others for legislation to constrain the allegedly excessive rates imposed by large issuing banks and the companies that operate the largest payment networks, Visa and MasterCard.

The Durbin Amendment was hailed as a victory for merchants and consumers by both its sponsor, Senator Richard Durbin, as well as other proponents of interchange fee caps, such as the Merchants Payments Coalition.¹ In the words of Senator Durbin, the Amendment aspired to help “every single

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Main Street business that accepts debit cards keep more of their money, which is a savings they can pass on to their consumers.”

This report updates and extends our 2014 analysis, which identified the following effects of the Durbin Amendment:

- Significant adverse effects for consumers, who experienced a drastic reduction in access to free checking, higher bank fees, and declining bank services.
- Particular harm to the most vulnerable — low-income consumers, who were unable to maintain the elevated minimum balances necessary to retain access to free checking and were thus forced to pay higher bank fees or become unbanked.
- While most large merchants had undeniably benefited, many small merchants had not; in fact, many retailers had actually faced higher costs for debit card transactions.
- No evidence that large merchants had passed any of their cost savings on to consumers in the form of lower prices or improved services, much less that they had done so in an amount that compensated for the costs imposed on bank customers as a result of the regulation.
- The overall adverse effect of the Durbin Amendment on lower-income consumers was approximately $1.3 billion per year, consistent with other early studies of the Amendment’s costs.

Now, almost six years after passage of the regulations implementing the Durbin Amendment — and as Congress begins to debate the possibility of its repeal — this report seeks to offer a more definitive assessment of both the aspirations, as well as the actual consequences, of the Amendment, and its effects on low-income households, small merchants, and small banks, in particular.

I. THE DURBIN AMENDMENT: THE BASICS

A. The Durbin Amendment and Regulation II

The “Durbin Amendment,” named for its primary sponsor, Senator Richard Durbin, was enacted in 2009 as Section 1075 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The Durbin Amendment contains several provisions, the most important of which was designed to set “[r]easonable interchange fees for electronic debit transactions.”

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Interchange fees are fees charged by banks that issue consumer payment cards ("issuers" or "issuing banks") to "acquirers"—payment processors or banks that process payments on behalf of merchants. Acquirers, in turn, contract with merchants to recoup these fees through the merchant discount rate (MDR)—effectively the price charged for their services. Interchange fees are used by issuers to cover various costs, which we discuss later in this report.

To achieve its end, the Durbin Amendment granted to the Federal Reserve Board (FRB) regulatory authority over interchange fees for debit card transactions, requiring it to ensure that "[t]he amount of any interchange transaction fee that an issuer may receive or charge with respect to an electronic debit transaction shall be reasonable and proportional to the cost incurred by the issuer with respect to the transaction." It also provided an exemption for "small issuers," which it defined as issuing banks with assets of less than $10 billion, as well as for government-administered payment programs and reloadable prepaid cards.

On the basis of this authority, in June 2011 the FRB issued a rule, known as Regulation II, that capped interchange fees on non-exempt debit card transactions at $0.21 plus 0.05% of the transaction value, plus "no more than" $0.01 per transaction to cover "fraud prevention."

**B. The Intended Effects of the Durbin Amendment**

Although the rationale for imposing price controls was not clearly expressed at the time of the Amendment’s passage, in an *amicus curiae* brief filed with the Supreme Court supporting the Court’s review of Regulation II, Senator Durbin summarized the arguments for the Amendment thus:

Congress enacted the Durbin Amendment with the goals of (1) enhancing competition, transparency and choice in the debit system; (2) squeezing out inefficiencies in the debit system by reducing network-fixed interchange fees to cover only a limited measure of incremental cost, thereby compelling large card-issuing banks to compete against each other to manage their other costs more efficiently; and (3) "help[ing] every single Main Street business that accepts debit cards keep more of their money, which is a savings they can pass on to their consumers."

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8 12 CFR § 235 (2012). Rules regarding fraud prevention, clarifying the obligations of issuers, were amended in October 2012.
This statement provides us with a set of testable propositions against which we can evaluate the effects of the Amendment. We return to these propositions in Section II.

C. The Basic Economics of Interchange Fee Price Controls

There is widespread disagreement among economists over the efficiency of specific interchange fees set by market processes, both as a matter of economic theory and empirical analysis. Underlying this disagreement is the extremely complex economics of platforms – such as payment networks – that connect two sets of market transactions. So complicated is the economic question, in fact, that French economist Jean Tirole was awarded the Nobel Prize in economics in 2014 for, among other things, his pioneering analysis of the complex economics of such “two-sided markets such as payment card interchange fees.” Indeed, economists have generated dozens of different models of interchange fees, only to find that market-set interchange fees can be too low, too high, or just right, depending on the assumptions built into the model regarding retail and banking market structures, as well as a variety of other factors. Moreover, the efficient level of interchange fees can vary dramatically across countries, within the same country over time, and among various industries within a particular country. Truly, as with most blanket price controls, not only does one size not fit all, one size arguably fits none in this complex industry. And this is especially the case “given that the Durbin Amendment was crafted in conference committee at the eleventh hour, its language is confusing and its structure convoluted,” as the court put it in its opinion reviewing the Federal Reserve’s implementation of the law.

Although economists disagree about the efficiency of establishing interchange fees through market processes, they universally agree on one conclusion: that price controls on payment card interchange fees will result in higher prices and lower services for card users. Indeed, for all countries outside the United States that have imposed price controls on interchange fees, the very point of doing so

12 NACS, et al. v. Board of Governors of the Federal Reserve System, 746 F.3d 474, 483 (D.C. Cir. 2014). Moreover, as noted, it is by no means clear that Sen. Durbin’s intentions for the rule were shared by others in Congress at the time of the Amendment’s adoption, nor even that Durbin himself had exactly these aims in mind at the time. The plain fact is that, because of hurried drafting and limited discussion around the passage of the Amendment in Congress, we have little understanding of the actual intention of the Congress: Is it the case that the vast array of seemingly unintended consequences were actually intended, or are they truly accidental byproducts suggesting a need to revisit the law?
was to impose higher prices and reduced services for card users.\textsuperscript{14} It is in the United States alone that some policymakers have engaged in the fantasy economics that interchange fee price controls will not be passed on to bank customers.

\textbf{D. The Effect on Interchange Fees}

Debit card interchange is part of a complex, interdependent financial ecosystem. By imposing price controls on one part of this ecosystem, the Amendment has driven predictable but (presumably) unintended changes elsewhere in the ecosystem, with various troubling effects.

Immediately prior to the implementation of the Durbin Amendment by Regulation II, from January to September 2011, the average interchange fee charged by all issuers was $0.48 per transaction, and the average fee charged by banks that would become covered by Regulation II (i.e., those with assets over $10 billion) was $0.51, and for banks that would remain exempt, $0.44.\textsuperscript{15} After the implementation of Regulation II, the average fee charged by issuers covered by the rule fell by more than 50\% to $0.24 per transaction, and has remained at about the same level since.\textsuperscript{16} And despite Congress’s purported effort to protect smaller banks from the effects of the regulation, during that same period the average interchange fee for exempt banks also fell — from an average of $0.53 per signature-authenticated (Visa, MasterCard & Discover) transaction in 2011 to $0.50 per transaction in 2015, and from $0.32 per PIN-authenticated transaction in 2011 to $0.26 per transaction in 2015.\textsuperscript{17}

\textsuperscript{14} See, e.g., Juan Iranzo, Pascual Fernandez, Gustavo Matias, & Delgao Manuel, The Effect of the Mandatory Decrease of Interchange Fees in Spain (October 2012); Iris Chan, Sophia Chong, & Stephen Mitchell, The Personal Credit Card Market in Australia: Pricing Over the Past Decade, RESERVE BANK OF AUSTRALIA BULLETIN (March Quarter 2012).


\textsuperscript{16} Id. Since 2013, the average has been $0.23.

\textsuperscript{17} Board of Governors of the Federal Reserve System, Average Interchange Fee per Transaction Chart - Accessible Version (Jul. 22, 2016), https://www.federalreserve.gov/paymentsystems/aveintfee_accessible.htm (hereinafter “FRB, Average Interchange Fee per Transaction Chart”).
Figure 1

Average Aggregate Interchange Fees

Source: Federal Reserve

Figure 2

Avg. Interchange Fees: Signature Transactions

Source: Federal Reserve
The effects of Regulation II on exempt transactions were clearly smaller than on covered ones, and this had an effect on both the relative number of transactions and revenue accruing to exempt banks. Prior to the implementation of Regulation II in 2011, exempt signature transactions represented 28% of the total number of signature transactions.\(^\text{18}\) By 2015, however, the relative proportion of exempt signature transactions as well as the share of revenue from interchange fees for exempt signature transactions increased by 8% to 36% and 35%, respectively.\(^\text{19}\)

The consequences of these revenue effects of the interchange fee cap have been manifold. Revenues from interchange fees are used to cover a range of bank activities that can include other things: operating expenses, compliance with capital requirements, maintenance of deposit accounts, investment in fraud prevention and mitigation, and making loans. Today, non-interest income including interchange fees comprises almost half of banks’ annual operating income. The cap on

\(^\text{18}\) Id.

\(^\text{19}\) Id. Unlike exempt signature transactions, exempt PIN transactions held fairly constant relative to covered PIN transactions in both volume and interchange fee revenue. Before the implementation of Regulation II, the proportion of signature to PIN transactions was 64% to 36%, and by the end of 2015 the proportion was nearly identical, 66% to 34%. Over that same period, the share of transaction revenue between signature and PIN transactions changed little from 61% and 39% in 2011 to 65% and 35% in 2015. Similarly, the proportion of interchange fee revenue between signature and PIN transactions remained steady, 75% to 25% in 2011 and 72% to 28% in 2015. See Board of Governors of the Federal Reserve System, Interchange Fee Revenue, Covered Issuer Cost, and Covered Issuer and Merchant Fraud Related to Debit Card Transactions (Dec. 6, 2016), available at https://www.federalreserve.gov/paymentsystems/files/regiireportsdata.pdf (hereinafter, “FRB, 2015 Reg II Data Report”).
such fees had a substantial negative effect on revenues at banks with assets of more than $10 billion. Early estimates suggested annual combined revenue losses at large banks in the range of $8 billion. More recent estimates put the figure closer to $14 billion, which represents more than five percent of noninterest income.\(^\text{20}\)

The Durbin Amendment cap on interchange fees had a nominally smaller, but likely still significant, negative effect on revenues at smaller banks, according to at least one study.\(^\text{22}\) Despite the relative shift of signature transaction interchange revenue from covered to exempt banks, the overall slowdown relative to trend in debit usage following Regulation II appears to have curtailed total interchange revenue growth at exempt banks, as well, and the study, a 2016 report from the Credit Union National Association, estimates substantial foregone revenues from interchange fees for its members.\(^\text{23}\)

### E. The Response by Banks

Banks have responded to this revenue shortfall in a number of ways. Initially, some banks planned to recover revenue directly by charging a monthly fee of $3-5 on debit card holders.\(^\text{24}\) Had the banks introduced such fees, the costs of debit interchange might actually have been more “transparent” — at least to consumers — and debit card holders would have been able to make an informed choice whether or not to keep their cards. But in response to negative media reports about the proposed monthly debit card fees and fears of a consumer backlash, banks abandoned the plan and looked to other ways of recovering revenue lost due to the interchange fee cap.\(^\text{25}\) And, ironically, despite

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\(^{22}\) See Vincent Hui, et al., *Regulatory Financial Impact Study: Report of Findings*, Credit Union National Association (Feb. 2016), at 30, available at https://www.cuna.org/regburden/ (hereinafter, “CUNA Report”). It should be noted, however, that the CUNA Report’s methodology is not entirely transparent, and it is not clear how it estimates the baseline from which exempt bank interchange revenue diverged. There is reason to believe that its precise numbers are too high, based on FRB data, although the amount of foregone revenue is still substantial. See FRB, *Average Interchange Fee per Transaction Chart*, supra note 17.

\(^{23}\) See CUNA Report, *id.*, at 3 & 14. It is important to note that the extent of the “loss” claimed by the CUNA Report is based on a reduction below the report’s estimate of what interchange revenues would have been without the Durbin Amendment — not actual losses. As the report notes, “total interchange revenues have actually increased through higher card usage volumes to offset the lower per-transaction fee.” *Id.* at 31. But, according to the report, the limit on interchange rates has reduced total interchange income below what it would otherwise have been.


claiming that he wanted to make debit costs more “transparent to consumers,” Senator Durbin himself led the charge to force banks to abandon their plans.\textsuperscript{26}

Admittedly, such fixed fees would have benefitted wealthier households, which make more and larger purchases\textsuperscript{27} and are more likely to hold credit cards (many of which are available with no fixed fee), at the expense of poorer households. As we discuss below, however, banks have nevertheless succeeded in implementing other practices and different types of fees — including reducing the availability of “free” checking, raising the monthly fee on checking accounts, increasing other fees (such as for overdrafts), and eliminating rewards programs — to make up some of the lost revenue, and these are arguably even more regressive.

That a forced reduction in interchange fees would result in increases in other bank fees for consumers and/or reductions in the quality of some consumer banking products is a matter of basic economics. Retail banking in the United States is a highly competitive industry, and there is no evidence of supra-normal profitability for retail banks.\textsuperscript{28} As such, over time, cost increases or revenue reductions must inevitably be passed on to bank customers in the form of higher bank fees or reduced services. And that is exactly what we found in our previous study.\textsuperscript{29} Below we report in detail on more recent evidence, but the bottom line is that the latest data continue the trends we identified and bolster our conclusions. Among other things, access to free checking has been scaled back substantially and bank fees have proliferated. In addition, most banks subjected to the Durbin Amendment terminated their debit card rewards programs (while keeping their credit card rewards programs intact).\textsuperscript{30} According to one estimate, banks have been able to recoup approximately 30 percent of their annual revenue loss caused by the Durbin Amendment through higher bank fees.\textsuperscript{31}

\begin{itemize}
\item \textsuperscript{26} See Bernard, In Retreat, Bank of America Cancels Debit Card, supra note 24.
\item \textsuperscript{29} Zywicki, Manne & Morris, Price Controls on Payment Card Interchange Fees, supra note 3, at 5-9, 15.
\item \textsuperscript{30} See Kay, et al., Bank Profitability and Debit Card Interchange Regulation, supra note 21.
\item \textsuperscript{31} Id.
II. DID THE DURBIN AMENDMENT HAVE THE EFFECTS SENATOR DURBIN INTENDED?

The Durbin Amendment has undoubtedly affected competition, transparency and choice, but probably not in the way Senator Durbin intended. The same is true for its effects on merchants, consumers, and small banks, as we show in this section.

A. Effects on Access to Banking Services

One of the great pro-consumer developments of the 2000s was the rapid growth of consumer access to free checking accounts and a general reduction in bank fees, which in turn enabled millions of consumers to gain access to bank accounts. At the beginning of the decade, it is estimated that fewer than 10% of bank accounts were eligible for free checking. But by 2009, the proportion of bank accounts offering free checking had increased to over 75%. 32 This evolution was especially beneficial for millions of younger and low-income consumers who were able to gain access to the mainstream financial sector for the first time.

This growth in free checking was driven primarily by the widespread deployment of ATMs and adoption of debit cards in the 1980s and 1990s, their rapid replacement of checks as a dominant transactional medium, and the revenues generated by debit card interchange fees. In turn, the growth of e-commerce and the convenience of debit cards made it more attractive for consumers to use debit cards and for merchants to accept them (and, increasingly, to reduce acceptance of checks). 33 In the past, banks have encouraged the use of debit cards in conjunction with free checking accounts by offering rewards for their use, either in the form of “cash” (i.e., an account credit, often 1% of the transaction amount) or in the form of more specific benefits (such as points redeemable for travel or merchandise and discounts on purchases from certain retailers). 34

It has been estimated that the annual cost for a bank to maintain a checking account is between $280 and $450. 35 For free accounts, debit interchange fees (along with intermittent overdraft fees) are the primary source of revenue — but even before the Durbin Amendment, less than half of all checking accounts were profitable. 36 And it only makes sense that banks continue to incur significant costs to maintain checking accounts, as the value of these accounts has risen over time, as well. Along with other features, free checking — “free” to the account holder, not the bank — is typically part of

32 See, e.g., Zywicki, Manne & Morris, Price Controls on Payment Card Interchange Fees, supra note 3, at 5-8, and sources cited therein.
a whole package of pro-consumer offerings, including mobile banking, online banking, a debit card, an extensive ATM network, expanded branches, and so on.

In 2010, the proportion of accounts offering free checking fell to 65%, presumably as a result of cost-cutting following the financial crisis, as well as in response to the FRB’s imposition of new overdraft rules in 2009 — but also possibly as a preemptive response to expected changes resulting from Dodd-Frank, including the Durbin Amendment.\textsuperscript{37} Then, in 2011, as the implications of the Durbin Amendment became clear, the proportion of banks offering free checking accounts fell dramatically, to 45%.\textsuperscript{38} And as the costs of Regulation II began to hit, the proportion fell still further, to under 40%, where it has since remained.\textsuperscript{39}

![Proportion of Banks Offering Free Checking](https://example.com/figure4.png)

**Figure 4**

Consumer access to basic banking services was impaired in other ways, as well. In 2008, the average minimum deposit required in order to avoid fees on non-interest-bearing accounts was $109.28 — a figure that had fallen consistently from a high of $562.27 in 1999.\textsuperscript{40} Immediately following


\textsuperscript{39} Claes Bell, Another record-setting year for checking account fees, BANKRATE (2015), http://www.bankrate.com/finance/checking/record-setting-year-for-checking-account-fees-1.aspx.

implementation of the Durbin Amendment, however, average required minimum deposits to avoid fees increased sharply and dramatically, surpassing previous levels and reaching a new peak of $723.02 in 2012. That figure has remained high and, as of 2016, stands at $670.74 — considerably higher than the highest pre-Durbin Amendment level.\footnote{41 Id.}

**Figure 5**

At the same time, the average maintenance fee imposed on customers at covered banks whose balances dip below the required minimums have followed the same trajectory.

Prior to the Durbin Amendment, average monthly checking account maintenance fees were $5.90 (in 2009). Following the Amendment’s implementation, however, the monthly average shot up above the pre-Amendment high to $12.23, and have since climbed to $13.25, according to a recent analysis.\footnote{42 Richard Barrington, The latest MoneyRates.com update on bank fees, MONEYRATES.COM (Aug. 16, 2016), \url{http://www.money-rates.com/research-center/bank-fees/h1-2016.html}.}

And it is not just fees directly associated with account maintenance that have risen; other banking fees have seen similar, record highs since the Amendment’s enactment, as well. For instance, average monthly ATM withdrawal fees, which were already rising prior to the Amendment’s passage, have continued to rise since;\footnote{43 Id.} they now stand at a record high of $1.67.\footnote{44 Id.} Although it cannot be said to
have initiated this increase, the Durbin Amendment has unquestionably put pressure on such fees, and likely ensured their continued increase: “[B]anks continue to face pressure to find income, and ATM fees are an easy place to look.... [As one analyst notes,] ‘I would expect ATM fees to continue to move higher.’”

**Figure 6**

![Average ATM Fees](image)

As discussed in greater detail below, the overall costs of these Durbin Amendment-induced shifts has fallen dramatically more heavily on lower-income than higher-income households. Most notably, the increase in the mandatory minimum balance necessary to retain access to free checking is much easier for higher-income households to meet. Higher-income households are also likely to be able to purchase additional bank products (such as home mortgages or auto loans) that will help them meet the requirements for free checking.

Moreover, as we demonstrated in our prior paper, this decline in access to free checking and increase in bank fees appears to be primarily attributable to the Durbin Amendment, not to more general economic conditions or to generally applicable bank regulation, as evidenced by the differences in trends for covered versus exempt banks. Thus, even though small banks have seen some erosion in interchange revenue, unlike large banks they have largely been able to maintain free checking programs. Whereas the number of covered banks offering access to free checking fell sharply from

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45 Id.
65% in 2010 to 39% in 2012 (and has remained at about the same level), about 78% of credit unions continue to offer free checking, as they have consistently since 2010.47

i. Does the ABA Consumer Survey Contradict These Results?

Virtually all available data suggest that, as predicted, a direct result of the Durbin Amendment has been a reduction in access to free checking and an increase in bank fees. Indeed, this is hardly surprising: As noted, regulators in other countries have adopted price controls precisely in order to increase the costs to consumers of using cards and to reduce rewards. The only data we have been able to locate that questions these predictable results are from an annually administered consumer survey sponsored since 2000 by the American Bankers Association (ABA).48 The survey appears to contain only a single question concerning free checking, which asks: “How much would you estimate you spend on fees for banking services each month, such as checking account maintenance and ATM use and so forth?”49 According to the survey responses, 61% of consumers in 2015 said that they paid “Nothing” each month for bank services, consistent with prior years’ polling conducted post-Durbin in which those reporting “Nothing” hovered between 59 and 62% annually. Proponents of the Amendment, including Senator Durbin himself,50 have enthusiastically touted the ABA survey as evidence that banking fees have remained flat, or even decreased, since the passage of the Durbin Amendment.51

But there is good reason to be extremely skeptical of the ABA’s findings, which are a clear outlier compared to all other data.
First, the ABA’s survey asks consumers to recall and aggregate multiple pieces of information that many consumers often don’t notice, either because they have become routinized or automated, or because they can be difficult to observe. Typical account holders likely don’t often realize when they have been charged a fee unless they watch their accounts unusually closely. And respondents may be disinclined to admit they paid a fee if they view this as embarrassing or as a failure to “properly” manage their accounts. Moreover, it is easy to forget being charged a fee (assuming it is noticed at all) if it happened months before the question is asked.

Related, the survey is also imprecise, and it is surely not clear to respondents what is included in the question. For example, if a respondent paid for replacement checks or was assessed an overdraft fee, it is unclear if she would (or is intended to) consider this a “fee[] for banking services,” and it is virtually certain that respondents don’t respond consistently. And, again, “Nothing” could be viewed by many respondents as the “correct” answer, as consumers may equate paying a fee with not managing a bank account responsibly.

Second, the findings are generally anomalous for the entire time period (including the pre-Durbin era), which suggests that the data series may be somewhat unreliable. For example, the ABA reported that 46% of respondents said that they paid no bank fees in 2000. This is a curiously high figure, and we are aware of no other data that suggests that free checking was so widespread in 2000. At the

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same time, given the well-documented decline of free checking since 2011, the survey’s consistent upward trajectory in “no bank fee” responses is similarly questionable. Moreover, given numerous and substantial fluctuations over time in the banking industry and its regulation, in addition to well-documented changes in the incidence of various fees, the ABA time series shows an implausibly consistent (upward) trend after 2010.

Third, the methodology itself seems prone to generating unreliable results. In contrast to the ABA’s survey, the data upon which we rely above (and elsewhere) is collected from banks, not from consumers. Banks are more likely to report these data reliably, as the results are based on an objective evaluation of their accounts, rather than a subjective effort by consumers to recall their prior month’s experience.

In sum, it is highly implausible that the ABA survey’s results accurately reflect the number of people who pay no bank fees. The overwhelming body of research finds a dramatic increase in access to free checking from 2001-2009 and a dramatic retrenchment since that time, exclusively at larger banks. Analysts and scholars can quibble over the precise magnitude of these changes, but there is no reasonable dispute over the direction of the changes in fees or their implementation by banks as substitute income for the dramatic decrease in debit interchange revenue caused by the Durbin Amendment.

B. Effects on Debit Card Characteristics

As noted, and as we predicted regarding the availability of benefits (such as rewards), many covered banks also eliminated their debit card reward programs in order to reduce costs. According to one industry analyst, the availability of debit card rewards programs declined 30% in the first year the Durbin Amendment was effective, and banks that maintained rewards dramatically scaled back their generosity.

Just as the increase in bank fees was a predictable consequence of the Durbin Amendment, the curtailment of rewards was predictable as well.

It is by now well understood that payment card networks are two-sided platforms: As we noted at the outset, foundational work on this fundamental dynamic garnered a recent Nobel Prize in economics,
and a large body of scholarship has evaluated the consequences of the two-sidedness of payment card networks. The profitability of two-sided platforms depends on total revenues and costs on both sides of the platform: in the case of payment cards, from both merchants (e.g., interchange fee revenue and fraudulent transaction costs) and cardholders (e.g., annual, late-payment, and other fee revenue and rewards costs). If net revenue earned from merchants is sufficiently curtailed, it is a virtual certainty that either cardholder fees will increase, cardholder rewards will decrease, or both.

As the Second Circuit Court of Appeals noted in a recent case reversing the district court’s finding of antitrust liability for failing to evaluate overall profitability by looking at both sides of a payment card platform:

> Without evidence of the net price affecting consumers on both sides of the platform, the District Court could not have properly concluded that a reduction in the merchant-discount fee would benefit the two-sided platform overall. Because Plaintiffs provided neither “a reliable measure of American Express’s per transaction margins,” nor “a reliable measure of American Express’s two-sided price that appropriately accounts for the value or cost of the rewards paid to cardholders,” they failed to meet their burden to show anticompetitive effects directly.

This dynamic of two-sided markets has been extensively observed in other countries where interchange fee price controls have long been in effect. In Australia, for example, where the country’s central bank announced that one motivation for interchange fee regulation was precisely to reduce the generosity of card rewards programs, similar price controls have indeed had that effect. As the Reserve Bank of Australia (RBA) observed, in addition to resulting in higher annual fees for credit card consumers, interchange fee price controls resulted in “less generous” levels of reward points and other benefits.

And just as the increase in bank fees has fallen harder on low-income families, this decline in debit card rewards has also had a regressive effect. Although it is true that higher-income households have also lost rewards on their debit cards, they have been able largely to avoid the adverse consequences by switching much of their purchase activity to credit cards, which continue to offer rewards.

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60 See Zywicki, Manne & Morris, *Price Controls on Payment Card Interchange Fees*, supra note 3, at 18-22. In Australia the effect of reform has been largely regressive as well. Because only four-party systems (Visa and MasterCard) were regulated and three-party systems (American Express and Diners Club) were not, American Express and Diners Club were protected most of the adverse effects of the RBA’s price controls. As a result, many consumers shifted from Visa and MasterCard to American Express and Diners Club. Because those cards tend to cater to a higher-income, higher-
most recent data from the Federal Reserve indicates that credit card usage continues to surge, and, in fact, that

credit card payments grew substantially from 2012 to 2015. The total growth of 6.9 billion in the number of credit card payments over this period exceeded each of the previous three-year study periods for credit cards since 2000 and corresponded to an annual growth rate of 8.0 percent since 2012, the largest among the core payment types.  

Meanwhile, although numerically there are more debit card transactions, the value of credit card payments is substantially larger.

Low-income consumers, by contrast, have not only been impeded in their access to debit cards and debit card rewards, they have also experienced a significant drop in credit card ownership. In fact, debit card adoption for the lowest-income households (under $25K per year) has fallen by almost 10 percentage points relative to households earning between $50K and $75K per year since implementation of the Durbin Amendment.

Perhaps most ironic of all, the loss of cash-back rewards is tantamount to a nominal price increase on all purchases. The cash-back rewards on debit cards (which in 2010 were available on approximately 17% of debit cards, up from 8% in 2003) were typically about 1% of spend. Whether or not merchants are actually passing on their own cost savings to their customers (which we discuss in detail below), the elimination of rewards on debit cards has a direct effect on consumers and, all else equal, can effectively be characterized as a 1% increase in the cost of goods and services for consumers who use those cards.

At the same time, rather than eliminating rewards across the board, some debit card issuers have entered into co-branding arrangements with certain merchants:

62 Id. at 5. (“The number of credit card payments was approximately half the number of debit card payments in 2015, although the value of credit card payments was nearly 25 percent greater.”).
66 FRB, 2015 Reg II Data Report, supra note 19, at 28.
Some financial institutions entered into partnerships with merchants sponsoring customer reward programs to help facilitate the attraction of deposits. Customers receive rewards for shopping with a particular merchant and paying for their purchases using electronic payment cards (i.e., credit, debit, or prepayment card) associated with participating banks.\footnote{Getter, Regulation of Debit Interchange Fees, supra note 33, at 8.}

In effect, these programs entail merchants subsidizing a portion of a bank’s marketing program. But to the extent that they effectively transfer marketing costs from banks to merchants, they ameliorate any reductions in debit-card-associated costs that merchants may have enjoyed post-Durbin Amendment, and thus the likelihood that any cost reductions will be passed on to consumers.

The costs associated with holding a bank account and the loss of debit card rewards are a direct result of the Amendment’s interchange fee caps, and any assessment of the effects of the Amendment must include their consideration. And because these repercussions are widespread, diffuse, and often counterintuitive, the overall effect is anything but an increase in “competition, transparency and choice.”\footnote{Brief of United States Senator Richard J. Durbin as Amicus Curiae in Support of Petitioners, NACS v. FRB, supra note 9, at 19.} Rather, the connection between the Durbin Amendment and these other changes, as well as their net effect on consumers, is manifestly opaque. At the same time, where issuers once competed for customers with a range of rewards, lower fees and attractive banking products, offering consumers a wide range of diverse choices, banks are now forced to forego these competitive offerings, constraining both competition and consumer choice. There can be little doubt, therefore, that the Durbin Amendment’s effects on competition, transparency and choice have been the opposite of those intended.

\section*{C. Effects on “Main Street” Businesses}

Large merchants have been the primary promoters and defenders of the Durbin Amendment. And understandably so: The most direct intended effect was to reduce these merchants’ costs of accepting debit cards and, quite possibly, payment cards overall. But the effect of the Amendment on merchants in general has been less consistent. While larger merchants have almost certainly seen a reduction in costs, many smaller merchants have almost certainly seen costs increase as a result of Regulation II. And these costs increases have affected small “Main Street” merchants most significantly — precisely the group that, along with their consumers, were supposed to benefit most from the Durbin Amendment.\footnote{See Press Release: Durbin Statement On His Debit Card Swipe Fee Amendment, DICK DURBIN, UNITED STATES SENATOR (May 13, 2010), http://www.durbin.senate.gov/newsroom/press-releases/durbin-statement-on-his-debit-card-swipe-fee-amendment (claiming that “small businesses and their customers will be able to keep more of their own money. Making sure small businesses can grow and prosper is vital to putting our country back on solid economic footing”).}
According to the results of a recently published survey of merchants undertaken on behalf of the Federal Reserve Bank of Richmond in late 2013 and early 2014, 57.6% of merchants reported no change (or were unaware of any change) in the costs associated with debit transactions, 11.1% reported reduced costs, and 31.3% reported increased debit costs.\(^{70}\)

So why have most merchants not seen a decrease in their costs of debit card acceptance? The evidence suggests two likely explanations: First, many small merchants lost the preferential interchange rates they enjoyed before the Amendment’s passage; for these merchants, the interchange rates set by Regulation II operate primarily as a floor rather than a ceiling. Second, acquirers, which intermediate the transactions between Issuers and merchants, may have captured some of the surplus generated by the Durbin Amendment that was intended for merchants and consumers.

\[\text{i. The Actual Effects of the Durbin Amendment on Merchants}\]

To be sure, most large retailers have likely benefited from the Durbin Amendment. From the outset, large retailers expected to gain quite a bit under the regulation. Home Depot, for instance, famously predicted that the Durbin Amendment would add $35 million per year to its bottom line.\(^{71}\) Meanwhile, “capital markets anticipated that publicly traded retailers [i.e., the largest retailers] would retain billions of dollars in profits as a result” of the Amendment.\(^{72}\) We have found no evidence that these optimistic scenarios were unfounded.

Simply reducing interchange fee rates, however, does not necessarily mean that consumers or businesses will be better off in the end, and it certainly does not mean that consumer prices or merchant costs will necessarily be reduced. Whether that will be the case depends on two things: first whether and by how much the cost reduction is passed-through, both from the acquirer to the merchant as well as from the merchant to the consumer; and second whether and by how much any cost reductions incurred by acquirers are transferred to merchants in the form of improved services rather than lower costs.

The debit card fees paid by merchants (as well as the services they receive) are set by agreement with acquirers. When a consumer authorizes payment, that amount is debited from his or her account. The issuing bank then sends the total amount, less the interchange fee, to the acquirer, which then sends the total amount, less the MDR (the interchange fee, plus the acquirer’s own processing fees), to the merchant.

\(^{70}\) Richmond Fed Durbin Impact Study, supra note 27, at 192.

\(^{71}\) Event Brief of Q4 2010 Home Depot Inc. Earnings Conference Call – Final, CQ FD DISCLOSURE (Feb. 22, 2011) (in which Home Depot CFO Carol Tomé says, “On the Durbin side…, [b]ased on the Fed’s draft regulations, we think the benefit to the Home Depot could be $35 million a year”).

In our prior study, we examined the extent to which the changes in interchange fees resulting from Regulation II had affected bottom-line MDRs paid by a sample of 1,000 small and medium size merchants in 23 sectors. We found that the average per-transaction MDR fell by only 0.02% — from 1.99% to 1.97% — whereas the average interchange fee (which included both covered and exempt issuers) fell from 1.07% to 0.74%. In other words, the vast majority (93%) of the reduction in interchange fees was captured by the acquirer, and only 7% passed on to merchants.73 A recent survey of 500 small (under $10 million in annual revenues) merchants by Javelin Strategy & Research found that small merchants are being charged an average MDR of 2.3%, suggesting that pass-through rates have not changed substantially since our prior analysis.74

This can be seen in the following example:

<table>
<thead>
<tr>
<th></th>
<th>Before the Durbin Amendment</th>
<th>After the Durbin Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price of goods sold</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Issuer debits from accountholder</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Issuer remits to acquirer</td>
<td>$99</td>
<td>$99.73</td>
</tr>
<tr>
<td>Acquirer remits to merchant</td>
<td>$98</td>
<td>$98.02</td>
</tr>
</tbody>
</table>

In this example, the merchant receives an additional two cents (0.02%) on the transaction after the Durbin Amendment. But whereas both issuer and acquirer kept $1.00 before the Durbin Amendment, after the Amendment the issuer keeps only $0.27 (the capped interchange fee) and the acquirer keeps $1.71. In other words, in this example the Durbin Amendment has mainly transferred income from issuer to acquirer.

The most plausible explanation for these results is that, prior to the Durbin Amendment, interchange fees varied significantly depending on the type of merchant, the size of purchases, and other criteria. Such differential pricing enabled payment networks and issuers to fine-tune the mix of fees in order to optimize income, risk exposure, adoption rates and the like. Thus, for certain transactions and in certain markets, networks instituted lower fees where merchants were less motivated to accept payment cards. Payment networks were also able to charge differential rates depending on the degree of fraud in a particular sector. After the implementation of Regulation II, however, the ability to engage in fine-tuned, differential pricing was effectively removed for the majority of transactions, and Regulation II’s maximum rate became, in practice, the only rate. Without the ability to offer a flexible mix of rates, the incentive to maintain interchange fees below Regulation

73 Zywicki, Manne & Morris, Price Controls on Payment Card Interchange Fees, supra note 3, at 23.

II’s maximum allowable rate also disappeared, and many interchange fees that were previously below Regulation II’s price cap moved up to meet it after.

Consider the effect of the Amendment on the interchange fees charged for small ticket items. Prior to the Durbin Amendment, the interchange fee for signature debit purchases set by Visa and MasterCard on transactions of $15 or less was 1.55% of the transaction value, plus $.04.\textsuperscript{75} Thus, the interchange fee for a $5 purchase was $.11. After the implementation of Regulation II, however, this more than doubled — to $23 (i.e., $.21 + $.01 + 0.05%).\textsuperscript{76} As one commenter noted, reviewing the card processing statement from a café in October 2016, “[u]nfortunately, the capped rate’s $0.22 transaction fee is much higher than the uncapped $0.04 fee. This difference increases processing costs substantially for small ticket merchants.”\textsuperscript{77} As he concludes: “Unfortunately, businesses that routinely process small transactions will be negatively affected by the Durbin Amendment.”\textsuperscript{78}

And for many transactions, this effect is significant:

[U]nder Regulation II, the fee on the average small transaction of $7.50, as a share of the transaction, exceeds the profit margins on such transactions for six industries that depend on small purchases, including supermarkets, groceries, convenience stores, gas stations and pharmacies.\textsuperscript{79}

It is not surprising, therefore, that in the Richmond Fed survey 31.8% of merchants reported that for small ticket items debit costs had risen, while only 2.8% reported that costs had fallen.\textsuperscript{80} Nor is it surprising that the survey found that debit acceptance costs rose more in some sectors than others. In particular, the study found that costs rose for 65.7% of fast food merchants, 54.1% of grocery stores and 47.8% of home improvement stores.\textsuperscript{81} By contrast, debit acceptance costs fell for 25.9% of both merchants selling home furnishings and those selling sporting goods.\textsuperscript{82}

\textsuperscript{75} Richmond Fed Durbin Impact Study, supra note 27, at 186.

\textsuperscript{76} Id.


\textsuperscript{78} Id.


\textsuperscript{80} Richmond Fed Durbin Impact Study, supra note 27, at 192-93.

\textsuperscript{81} Id. at 194.

\textsuperscript{82} Id.
For the same reason, it is also not surprising that, in the Richmond Fed survey, the proportion of merchants requiring customers to spend a minimum amount for debit card purchases rose from 26% to 29%.\(^83\)

Of course, this does not mean that acquirers are somehow “illegitimately” capturing all of the value of reduced costs. The acquiring bank/payments processing market is a competitive one, and it is likely that, even if acquirers initially reaped a windfall from the Durbin Amendment’s price caps, competition eventually ensured that at least some of that benefit was passed on to their merchant customers.

But it also doesn’t mean that merchants necessarily received that benefit in the form of lower costs. Rather, although the MDR paid by merchants to acquirers may have stayed the same or increased, the value of the services offered by acquirers may have increased, as well. Thus, as the recent Javelin Small Merchants Interchange Study found, 66% of small merchants surveyed are “somewhat satisfied” or “extremely satisfied” with the level of fees they pay, and their satisfaction increases with the extent to which they are knowledgeable about the services they receive in exchange.\(^84\) As a result, it is reasonable to conclude that even merchants who are paying more in interchange fees post-Durbin Amendment may still be benefitting from the Amendment in the form of better acquirer services.

On balance, then, it seems clear that the Durbin Amendment has almost certainly had a net adverse effect on many merchants, especially merchants selling predominantly small-ticket items. Meanwhile, only a small proportion of merchants appears to have clearly benefited from the Amendment. And likely many merchants have received some benefit in terms of the value of payments processing services, regardless of whether their processing costs have gone up, stayed the same, or been reduced.

What is certain, however, is that the contention by Senator Durbin that his Amendment would help “every single Main Street business that accepts debit cards keep more of their money” (emphasis added) has proven to be false. Indeed, consistent with the conclusions of our previous paper, the opposite is more nearly the case.\(^85\)

**ii. Reassessing Merchants’ Perceptions of Interchange Fees**

A decidedly vocal cadre of merchants was unequivocally upset with pre-Durbin Amendment, market-determined interchange rates. But the positions taken by that vocal group, led primarily by extremely

\(^{83}\) Id. at 190. It may, perhaps, be surprising that the number was not higher post-Durbin Amendment, but, presumably, competitive pressure among retailers to maintain customer service quality limited the extent of the increase in minimum spend requirements.

\(^{84}\) See Javelin Small Merchants Interchange Study, supra note 74, at 9-10.

large merchants like Target, Home Depot and Kroger (among many others), may not accurately represent the views of merchants overall, particularly smaller merchants.

A recent survey of small merchants, for example, indicates that these retailers, at least, are on the whole willing to pay higher fees when there is a concomitant increase in service quality.86 The survey reveals, for instance, that “[t]wo-thirds (66%) of merchants are satisfied with the level of fees they pay while only 11% are dissatisfied,”87 and that “[m]erchants prefer credit cards to debit cards despite the fact that credit cards tend to have higher interchange rates than debit cards.”88 Much of this satisfaction appears to increase with the extent to which merchants understand the purpose of interchange fees and what they receive in exchange for paying them. With greater understanding comes a greater ability to extract more value from the relationship with their acquiring banks:

Merchants who demonstrated a greater understanding of interchange were more likely to opt for more expensive packages... which include services such as chargeback management and 24/7 tech support, and, on average, were more satisfied with their interchange fees.... Ninety-four percent of merchants who understand why interchange is charged said they are satisfied with their merchant debit card processing relationship, and 80% said they are satisfied with what they pay. In contrast, 73% of merchants who do not understand why interchange is charged were satisfied with their debit card processing relationship, and only one-third (33%) were satisfied with the current amount they are paying.89

The Javelin study makes fairly clear that whatever the explanation for interchange fees being “high,” it is not because merchants fail to understand the cost of cards and what they receive in exchange (e.g., customer convenience, fraud protection, accounting records, and the like). Rather, those merchants who are most informed are also most willing to pay the highest fees and most likely to say that they receive the greatest value from cards. This dynamic also suggests that “high” fees are not being imposed in a take-it-or-leave it fashion; rather, informed merchants willingly opt in to higher fees (and additional services) from which they receive the most value. Thus, while a portion of merchants’ interchange costs are determined by cardholders’ choice of payment instruments (and not within the merchants’ control), they do have control over their bottom-line costs, but nevertheless often choose not simply to minimize costs above all else.

The corollary to this is that if regulators forcibly reduce interchange prices (as Regulation II does), over time this could lead issuers and networks to reduce services or quality if they are unable to recover their costs. Because those who purchase the most services (and pay the highest fees) are also

86 See generally Javelin Small Merchants Interchange Study, supra note 74.
87 Id. at 9.
88 Id. at 4.
89 Id. at 16
the most satisfied with their contracts, price-control-induced quality reductions will end up reducing merchant satisfaction and overall economic welfare.

The market, in other words, appears to be functioning without the sort of systematic failure that some critics contend. And intervention in the form of price controls could have harmful, unintended consequences in the long run if it leads to pure price competition, rather than a more flexible and efficient price-quality tradeoff.

iii. The Meaninglessness of Robert Shapiro’s Fanciful Counterfactual

Some economists, however, claim that by capping interchange fees, merchants, consumers, and the economy as a whole will in fact be better off. Most notably, in a 2013 white paper, Robert Shapiro claims that, in 2012 the Durbin Amendment’s cap on interchange fees saved consumers $5.87 billion and supported more than 37,500 additional jobs.90 Despite being widely cited by Durbin Amendment supporters (and opponents of the Amendment’s repeal), both of these claims are fanciful.

Shapiro’s assessment is based on a simplistic comparative-static model in which he first calculates aggregate revenue from interchange fees in 2012 and compares that to a counterfactual for the same period in which he assumes that interchange fees would remain the same as for the first nine months of 2011, and that 69% of the interchange fee reduction will be passed through to consumers. He further estimates the employment benefits from these savings by assuming that they would lead to a commensurate increase in spending by consumers, all of which, in turn, would support job growth, and that all of the cost reduction retained by merchants would likewise contribute to job growth.

Every step of the analysis required to reach these conclusions is flawed, however.

First, although Shapiro asserts a 69% pass-through rate from merchants to consumers, he fails to recognize that these are so-called “four-party systems” in which there is also another intermediary: the merchant’s acquiring bank or payment processor. Merchants do not pay interchange fees directly to issuing banks; rather, interchange fees are one component of the MDR that merchants pay their acquirers, which also includes the acquirer’s charges for its own services. Acquirers, in turn, pay the interchange fee to issuing banks. By assuming away these entities, Shapiro effectively assumes a 100% pass-through of interchange fees from issuers to merchants. But this is simply not plausible and, of course, Shapiro provides no justification for assuming that merchants will receive all of the reduction in interchange fees. In fact, as we noted in our previous paper,

for a sample of 1,000 merchants in 23 different sectors..., although the weighted average interchange fee fell from 1.07% to 0.74% in this group, nearly all the difference (93%) was captured by the acquiring banks – and only 7% passed through to merchants.91

91 Zywicki, Manne & Morris, Price Controls on Payment Card Interchange Fees, supra note 3, at 24.
It is quite possible that acquirer-to-merchant pass-through has increased since then, but it remains doubtful that all of the savings on interchange fees have been passed through to merchants.

Moreover, as noted above, even if some of the value of the cost reduction is passed through to merchants, some or all of that has come in the form of improved services, rather than lower costs.\textsuperscript{92} While some of these enhanced services may improve merchants’ productivity and, ultimately, reduce consumer prices, the effect is attenuated, at best. What is absolutely certain, however, is that, in terms of merchants’ costs (and consumer prices), it is wildly inaccurate to assume a 100\% pass-through rate of cost savings from acquirers.

Second, even assuming for the sake of argument that none of the interchange fee reduction was captured by acquirers, Shapiro’s claim that 69\% of the savings were passed on from merchants to consumers is dubious, as well. Shapiro derives this estimate from a survey that investigated “23,147 cases of promotions which reduced costs for grocery and drug store merchants.”\textsuperscript{93} In other words, the asserted pass-through rate was simply lifted from a single study that calculated a rate based on data that was highly specific to certain classes of merchants and unrelated to changes in the interchange fee or MDR. Indeed, Shapiro’s analysis is inconsistent with the evidence of the actual effects of caps on interchange fees, which finds little evidence of any pass-through at all.\textsuperscript{94} Similarly, longstanding analysis from other countries is yet to identify any “concrete evidence that merchant cost savings were passed through to consumers, much less that any pass-through of savings to retail consumers has exceeded the increased costs and reduced quality to cardholders.”\textsuperscript{95}

Moreover, Shapiro’s unsupported assumption ignores the broader literature on pass-through rates. Evans and Mateus, for example, look at nine papers (rather than just one), and conclude that, “[o]verall these studies find that the pass-through rate varies in real-world markets from 22-74 percent in the long run with a median of approximately 50 percent in the long run.”\textsuperscript{96} While 69\% is within this range, of course (and the Nijs, et al. paper from which Shapiro lifted his pass-through rate was included in their study), at minimum 50\% would be a more plausible estimate — and even that is tenuous given the absence of any actual evidence of consumer price reductions, including in places like Australia that have had more than a decade in which to observe such effects.

What’s more, Shapiro inexplicably ignores the other side of the two-sided payment cards market, thus ensuring that his calculations are woefully off-base. Regardless of how much of their cost savings merchants pass on to consumers, because most of those consumers are also banking customers, any

\textsuperscript{92} See supra Sections II.C.i and II.C.ii.

\textsuperscript{93} Shapiro, The Costs and Benefits of Half a Loaf, supra note 79, at 20 (citing Vincent Nijs, et al., Channel Pass-Through of Trade Promotions, 29 MARKETING SCIENCE 250 (2009)).

\textsuperscript{94} See Richmond Fed Durbin Impact Study, supra note 27, and discussion in Section II.D, infra.


\textsuperscript{96} Evans and Mateus, How Changes in Payment Card Interchange Fees Affect Consumers Fees and Merchant Prices, supra note 28, at 141.
increases in costs (or reductions in revenue) to banks resulting from Regulation II could also be passed on to consumers, reducing their net benefit. In other words, while a consumer might experience, say, a $1.00 drop in retail prices, if she simultaneously experiences a $1.00 increase in banking costs, then the consumer actually has no additional money to spend — and thus there would be no economic stimulus or employment effect at all. And, indeed, as we have recounted, this is exactly what has happened, both in the US and in other countries that have experimented with interchange fee price controls. In fact, according to one study that estimated the effects of interchange fee regulation for both bank and retail consumers,

the pass-through of the revenue loss to bank consumers is expected to be much larger than the pass-through of retailers’ savings. In particular, they estimate that consumers will lose a total of between $22 billion and $25 billion in net present value terms (that is, the total net cost to consumers, now and in the future, with future effects discounted), as a result of the Durbin Amendment.97

Third, the failure to account for the effects on consumers (and employers) on both sides of the market is fatal to Shapiro’s speculations regarding the employment effects of the Durbin Amendment’s regulations. Shapiro’s job-growth calculation entails several steps, each of which is problematic:98

1. First, Shapiro estimates a pass-through rate of 0.69, concluding that “Regulation II saved consumers $1.42 billion in Q4-2011 and $5.87 billion in 2012.”

As noted above, this amount is almost certainly significantly overstated.

2. He next assumes that “the pass-through to consumers in the form of lower prices also affects employment: Consumers increase their demand by a comparable amount, resulting in $5.87 billion in additional spending in 2012.”

But, in fact, even if consumers benefit from lower prices, there is no basis for the assumption that all of those savings are translated into increased spending; rather, consumers are bound to use some portion of this effective increase in income for savings rather than increased consumption. This, in turn, means that the ensuing calculations, based on the assumption that 100% of consumer benefits are returned to merchants in the form of increased sales, are undoubtedly overstated.

3. Based on Census Bureau data indicating that labor accounts for 16.4% of all revenues, Shapiro concludes that “the pass-through to consumers could support $962 million in additional labor costs. Using the 2012 average annual wage of $44,600 for all sectors, the cost-savings from Regulation II in 2012 would support up to 21,566 additional jobs.”

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98 Unless otherwise noted, all of the quotes in this list are from Shapiro, The Costs and Benefits of Half a Loaf, supra note 79, at 20.
Given the tenuous assumptions, this claim is facially plausible. But because he does not break out his estimated effects by industry or geographic region, Shapiro’s aggregated calculations could easily miss significant deviations that could undermine his conclusions. If, for example, lower retail prices systematically lead consumers to increase consumption of goods and services that might previously have been too expensive because, in part, they are produced with relatively high-cost labor, these aggregate, average numbers would fail to capture the actual (smaller) effect on employment. It is also important to note that Shapiro has no data to support his claim that any such employment effects did occur — only that the asserted savings could support these additional jobs.99

Indeed, economists are well aware of these complexities and interdependencies, which is why they typically rely on sophisticated macroeconomic models to estimate the economic impacts of regulatory policies, including the effects on employment. Rather than follow this traditional methodology, however, Shapiro relies on broad assumptions and back-of-the-envelope arithmetic.

4. He also notes that “the $2.42 billion retained by merchants in 2012 [the amount not passed through in his estimate] presumably was used to improve their profitability, which in turn would increase their spending which consequently would lead to new jobs.”

Again, there is no data (or even theory) to support this assertion. The rate at which businesses would use increased profits to increase profitability is highly fact-specific, and depends on the competitiveness of the market and its particular rate of return on investment, among other things. Many markets are, indeed, extremely competitive — but many others are not. In particular, the estimated cost savings from interchange fee caps are based on assumed price reductions made not only by competitive retailers like convenience stores and gas stations, but also businesses like airlines, hospitals, and cable companies. The wide range of market conditions across these varied businesses means that the incentives to reinvest savings in order to increase productivity vary significantly, as well.

5. Shapiro asserts that “half of the retained cost-savings flow through to higher spending by merchants,” and that “one-quarter of the remaining retained earnings ultimately went to labor.”

The claims are based on completely unsupported, seemingly random assertions. Perhaps 50% of additional profits were used to increase spending — but perhaps not. As noted, this depends on each industry’s — indeed, each business’ — particular economic characteristics. Shapiro’s back-of-the-envelope assumptions may adequately describe overall practices, but if they do so, it would only be by coincidence.

99 Notably, the Javelin Small Merchant Interchange Study indicates that “[c]ontrary to assertions made during the 2010 effort to cap interchange fees, absorbing interchange fees do not affect small merchants’ ability to make a profit or to hire new employees.” Javelin Small Merchants Interchange Study, supra note 74, at 12.
6. Finally, he concludes that “the savings for merchants could finance an additional 15,935 jobs. All told, therefore, the reduction in overall interchange fees arising from Regulation II was sufficient in 2012 to support the creation of 37,501 jobs.”

The most significant flaw in this conclusion is the absence of any consideration of the effects on consumers’ budget constraints and banks’ labor-investment decisions resulting from the increase in bank fees paid by consumers and the reduction in revenue earned by banks as a result of the Durbin Amendment. This is a glaring and inexcusable oversight. In simplified terms, even with an unrealistic 100% pass-through, any change in the interchange fee amounts to a one-to-one transfer from banks to merchants (or vice versa): Cost reductions realized by merchants are incurred by issuing banks as revenue reductions in the same amount. That means that by however much a reduction in interchange fees increases merchants’ ability to pay for labor, it also reduces banks’ ability to pay for labor by the same amount. And, in fact, because pass-through is not 100%, banks’ ability to pay for labor is reduced by more than merchants’ gain. Yet Shapiro’s analysis makes no effort to assess this countervailing effect.

Similarly, because banks have attempted to recoup some of their lost revenue in the form of increased fees charged to consumers, the net effect on consumer budgets (and thus their ability to increase consumption) is also ameliorated, leading to a further, unacknowledged reduction in Shapiro’s asserted employment effects resulting from consumer activity.

In effect, while Shapiro purports to calculate the net macroeconomic effect of the Durbin Amendment, in reality he is looking at only one side of the ledger — and placing his thumb firmly on the scale while doing so.

This is particularly important to assessing the conclusions put forward by Shapiro’s analysis and widely and uncritically cited by proponents of the Durbin Amendment. It has been reported, for example, that Bank of America alone cut almost 40,000 employees in its consumer division, and 68,400 employees in total, between 2009 and summer 2016.100 J.P. Morgan Chase has also closed several hundred branches and laid off employees in its consumer banking division in order to reduce costs to offset reduced revenue streams.101 At least 16,000 of Bank of America’s layoffs (5,300 in consumer banking) occurred in 2012 alone — the same year in which Shapiro touts his claim that interchange regulation could create 37,500 new jobs.102 Citigroup, meanwhile, laid off 11,000 workers in 2012, with “[m]ore than half the cuts... in the company's global consumer-banking unit,

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where Citigroup will close 84 branches around the world, including 44 in the U.S. The company expects to cut 6,200 jobs in the unit.”

It goes without saying that the revenue loss as a result of the Durbin Amendment was just one source of reduced revenues and surely just one impetus for banks to reduce costs. Nevertheless, the key point is that, both empirically and logically, it is a crucial error to ignore, as Shapiro does, the extent of job losses in the consumer banking sector as a result of the revenue losses imposed by the Durbin Amendment. Again, just as any speculative pass-through of cost savings to retail customers must be weighed against the unambiguous increase in bank fees that has resulted from the Durbin Amendment, any speculative employment gains must be weighed against the resulting job losses in the retail banking sector, as well. All told, Shapiro’s analysis is essentially meaningless as a guide to the economic effects of the Durbin Amendment on consumers and workers.

D. Effects on Consumer Prices

For consumers to benefit from merchants’ cost savings, lower costs must be passed on to consumers in the form of lower prices (or else reallocated to provide consumers with better service). But they aren’t. According to the Richmond Fed Durbin Impact Study, the vast majority of merchants — 77.2% — did not change prices at all following the implementation of Regulation II, and only 1.2% reduced prices — leaving a significant minority (21.6%) that actually increased prices. Our Richmond Fed Durbin Impact Study, supra note 27, at 194. This is consistent with earlier research from Australia showing that merchants passed through little if any of the cost savings to consumers in the form of lower prices. See Howard H. Chang, David S. Evans & Daniel D. Garcia-Swartz, The Effect of Regulatory Intervention in Two-Sided Markets, supra note 95.

Consistent with the literature on pass-through of cost increases versus cost reductions, it would appear that whereas about two-thirds of those merchants facing cost increases passed at least some of the increase on to consumers in the form of higher prices, only about one-third of those experiencing savings passed some of those savings on to consumers in the form of lower prices.

And even if merchants did pass on their entire cost to consumers, the savings would be small: according to one estimate, it would result in a maximum retail price reduction of only $.07 on a $40 purchase. See Fumiko Hayashi, The New Debit Card Regulations: Initial Effects on Networks and Banks, 4Q FEDERAL RESERVE BANK OF KANSAS CITY ECON. REV. 79, 86 (2012), available at http://www.kansascityfed.org/publicat/econrev/pdf/12q4Hayashi.pdf.

104 Richmond Fed Durbin Impact Study, supra note 27, at 194. This is consistent with earlier research from Australia showing that merchants passed through little if any of the cost savings to consumers in the form of lower prices. See Howard H. Chang, David S. Evans & Daniel D. Garcia-Swartz, The Effect of Regulatory Intervention in Two-Sided Markets, supra note 95.
105 The tendency of increases in input costs to be passed through more rapidly than cost reductions (the so-called “rockets and feathers” effect) has been observed in a number of producer and consumer markets. See, e.g., Sam Peltzman, Prices Rise Faster than They Fall, 108 J. POL. ECON. 466 (2000).
difficult (or impossible) to discern.\textsuperscript{107} Not only does this call into question the claimed magnitude of any estimated benefits from reduced prices (assuming they exist at all), but it also suggests that they may not exist: Even in competitive markets, cost-induced price reductions are unlikely to materialize if they aren’t actually discernable by consumers. Indeed, prior economic studies suggest that such small marginal increments in cost are unlikely to be realized in the form of lower consumer prices.\textsuperscript{108} And, even if those cost savings are eventually passed through to consumers, there remains the question of how fast that will occur and how completely.

At the same time (and further limiting whatever consumer benefit might have been realized from the Durbin Amendment), a larger proportion of merchants (12.4\%) imposed additional restrictions on the use of debit cards following the Durbin Amendment’s enactment (including requiring a minimum spend, imposing a surcharge, or offering a discount for non-debit payments) compared to the proportion that reduced such restrictions (10.9\%).\textsuperscript{109}

In sum, then, it would appear that only a small proportion of merchants — most likely larger merchants — have experienced savings as a result of the Durbin Amendment, and an even smaller proportion has passed these savings on to consumers. Meanwhile, a sizeable minority of merchants has experienced cost increases, and the majority of these have passed on at least some of these costs to consumers in the form of higher prices and restrictions on debit card use, as noted above.

More important, in order to assess the bottom-line impact on consumers, any alleged pass-through of savings to retail consumers must be compared with the widespread, unambiguous, and direct imposition of higher bank fees and lost rewards on users of debit cards, as well as the costs borne by consumers pushed out of the banking system. There is no evidence to support the inference that pass-through savings have exceeded these costs. Moreover, as noted above, most large debit card issuers eliminated debit card rewards in response to the Durbin Amendment, thus eliminating what was functionally a one percent discount on goods and services for a significant minority of debit card holders.

This is consistent with the experience of other countries. Australia first imposed price controls on interchange fees in 2003, but there remains no tangible evidence that consumers have benefited from lower prices as a result.\textsuperscript{110} A comprehensive 2012 study found that the same was true for Spain, which first imposed interchange fee price controls in 2005.\textsuperscript{111} Moreover, as in the United States, in

\textsuperscript{107} See, e.g., Evans, et al., The Impact of U.S. Debit Card Interchange Fee Regulation on Consumer Welfare, supra note 72, at 22.
\textsuperscript{108} See, e.g., Hayashi, The New Debit Card Regulations: Initial Effects on Networks and Banks, supra note 106, at 101-04.
\textsuperscript{109} Id. at 195.
\textsuperscript{110} As the RBA wrote in 2014, “It is impossible...to measure exactly how these reductions in merchant service fees have flowed through into prices for consumers. However..., it seems reasonable to assume that they have mostly flowed through to lower retail prices for consumers.” RBA, SUBMISSION TO THE FINANCIAL SYSTEM INQUIRY 206 (March 2014) at 18, available at http://fsi.gov.au/files/2014/04/Reserve_Bank_of_Australia.pdf.
\textsuperscript{111} See Iranzo, et al., The Effect of the Mandatory Decrease of Interchange Fees in Spain, supra note 14.
neither country is there any evidence that purported pass-through of savings by retailers has exceeded the costs to consumers from higher fees and reduced rewards.

E. Effects on Small Banks and Credit Unions

Despite claims that the Durbin Amendment would create a safe harbor for small banks, the effects of the Amendment appear to have spilled over to smaller institutions. As noted above, the average interchange fee for exempt banks has also fallen since the end of 2011. Indeed, according to a 2014 study conducted by the Mercatus Center, 73.3% of surveyed small banks indicated that “debit card interchange fees policy” had a negative impact of some kind (either “significant” (29.1%) or “slight” (44.2%)) on their earnings.

As a result, despite the claim at the time of its passage that community banks and credit unions would be protected from the Durbin Amendment, they nevertheless claim to have lost substantial interchange revenue (relative to estimated revenue absent the Amendment). If those estimates are accurate, this is a meaningful effect. And, although its cause could be exogenous to the Durbin Amendment’s implementation, there is good reason to think that the Amendment’s purported safe harbor is at least somewhat illusory.

At root, coupled with the increased regulatory compliance costs and capital reserve requirements introduced by Dodd-Frank and other post-financial-crisis rules, as well as the pressure to attract low-risk customers with services like free checking, the effect of the Durbin Amendment on small banks and credit unions is likely significant.

For one thing, small banks and credit unions have fewer alternative revenue streams to offset revenue losses on debit card interchange fees. Thus, as the revenue landscape shifts, it is relatively more difficult for them to adapt.

Moreover, any reduction in interchange fees will disproportionately harm small banks because their debit card processing fees are higher. In 2015 the average per-transaction authorization, clearing and settlement (ACS) costs for high-volume issuers were 3.8 cents and for mid-volume issuers they were 11.6 cents. But for low-volume issuers ACS costs were 56.8 cents — about 15 times higher than for

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112 See FRB, Average Interchange Fee per Transaction Chart, supra note 17.

113 Hester Peirce, Ian Robinson, and Thomas Stratmann, How Are Small Banks Faring Under Dodd-Frank?, Mercatus Center Working Paper No. 14-05 (Feb. 2014) at 85, available at https://www.mercatus.org/system/files/Peirce_SmallBankSurvey_v1.pdf. The survey also asked small banks: “[H]as the Durbin Amendment’s regulation of debit interchange fees and transaction routing affected your bank?” In response to this question, 67.1% of respondents indicated that they were affected (44.7%) or unsure about whether they were affected (17.4%). Most likely the discrepancy arises because of respondents’ uncertainty over the precise cause of reduced interchange-related revenue. Regardless, both sets of responses indicate that interchange fee revenue for small banks has fallen for some reason, and the Durbin Amendment is a likely explanation.


115 FRB, 2015 Reg II Data Report, supra note 19, at 25.
the largest banks. Even at the pre-Amendment, higher interchange rates, many small-volume issuers would barely break even on debit card transactions. To the extent that the Durbin Amendment has eroded interchange fees for small-volume issuers, then, it has made it even harder for them to cover their costs.

There is, moreover, evidence that the $10 billion asset ceiling for exemption from Regulation II has contributed to increased concentration among smaller banks. A bank whose assets are growing close to the asset ceiling faces a choice: marginally grow above $10 billion in assets and face an immediate revenue shortfall as it becomes subject to Regulation II, or acquire another, smaller bank that will push the combined entity far enough over the $10 billion ceiling that it can readily bear the regulation’s effect on revenues. As a result, Regulation II encourages otherwise inefficient bank combinations at the margin, and distorts the optimal balance of smaller and larger banking entities.

Kay, et al. also address the effects of the Durbin Amendment on banks’ incentives to either restrict asset growth or expand it:

To avoid the interchange fee restrictions, firms just above the threshold may have an incentive to shrink their assets to get below it, whereas firms just below the threshold may have an incentive to limit their growth to avoid crossing it. If the benefits of avoiding the interchange fee restrictions outweigh any costs of adjusting assets, this behavior would be a natural response to the threshold.

On the margin, Kay, et al. identified no likely impacts of the Durbin Amendment on bank combinations, but did go on to note why this might be the case:

[The lack of any change in the probability of crossing the threshold is necessary but arguably not sufficient to demonstrate the absence of any response. Asset growth may have adjusted in response to the amendment without altering the probabilities... given the rare nature of the underlying event. Moreover, any conclusions that we might draw about asset growth based on the threshold analysis are complicated by the fact that we cannot distinguish the effects of the Durbin Amendment from other broad factors, such as overall macroeconomic and financial conditions.]

At some level, there must be a threshold effect, whether their analysis has found one or not: As long as the cost of managing assets in order to move to (or stay on) the exempt side of the threshold is less

116 Id.
118 Or the Amendment’s threshold may induce the bank simply to stop growing, or shrink, of course.
120 Id. at 26.
121 Id.
than the benefits of doing so, it will factor into banks’ decision-making. This is a clear cost of the Durbin Amendment, because there is no inherent benefit to this conduct other than the avoidance of regulatory costs.

In fact, in contrast to Kay, et al.’s aggregated, econometric analysis, Tor, et al.’s anecdotal approach may be far more telling. When the consequences of gradually nearing and naturally crossing Regulation II’s artificial barrier is considered in a few discrete cases, the regulation’s distorting effect becomes apparent:

In the first two big bank deals of 2017, both buyers will jump above $10 billion in assets with their purchases, citing Durbin as one of the reasons to buy their way over the asset size threshold.

* * *

Renasant [with $8.7 billion in assets]... estimated that crossing $10 billion in assets would reduce its pretax income by $10 million per year, with 80% to 82% of that impact coming from Regulation II, according to an investor presentation.

To alleviate the impact on earnings, many banks prefer to leap over the $10 billion mark by acquiring another bank. A surge in earning assets and fee-generating deposits as well as earnings accretion from a deal can help offset the decrease in interchange revenue. 80% of the 25 banks that have grown to over $10 billion in assets since Reg II was implemented in 2011 have done so with an acquisition.122

Even if it is not dispositive in every case, it is clear that the $10 billion threshold is very much on the minds of small banks when considering the pace and extent of future growth. As a result, the Amendment is likely a meaningful — and distorting — determinant of the market’s structure.

III. The Durbin Amendment’s Effects on Low-Income Households

An inevitable and predictable consequence of the Durbin Amendment’s price controls is that, for consumers, debit cards have become less-attractive, less-valuable payment instruments for retail transactions. From the loss of rewards to the imposition of fees to the constraints placed on checking accounts to which they are attached, a number of changes have reduced the value of debit cards relative to alternatives. As a result, consumers are marginally more likely to use alternative forms of payment — e.g., cash, checks, money orders, prepaid cards or credit cards — following the Amendment’s implementation. And in most cases where payment would have been made via debit, use of these alternatives is more costly.123

122 Tor, et al., Durbin Amendment May Be Encouraging Small Banks to Merge, supra note 117.

123 The most common substitute for debit in retail settings is cash. As we have detailed elsewhere, cash is generally a much more costly form of payment than debit, not only for individual consumers, but for the economy more broadly.
A. Effects on Household Wealth and Consumption

The cost of making debit cards less attractive relative to other forms of payment is greater for lower-income consumers than it is for wealthier consumers. Low-income consumers have fewer alternative forms of payment to choose from and are considerably less likely than wealthier consumers to have access to a credit card (which is the payment alternative least likely to cost more than debit).124

In fact, according to data from the Boston Fed’s Survey of Consumer Payment Choice, credit card adoption is significantly correlated with income. While 91% of high-income ($75K-$100K per year) and almost 95% of very-high-income (over $100K per year) households have credit cards, only 66.7% of low-income ($25K-$50K per year) and 37.8% of very-low-income (under $25K per year) households do.125 And since the implementation of the Durbin Amendment, the rate of credit card adoption by lower income households has fallen, while that of high income households has increased.126 Meanwhile, low-income and high-income households use debit cards at fairly similar rates (80.7% and 84.7%, respectively). As we discuss in more detail below, the effect is particularly pronounced for unbanked consumers (a disproportionate share of whom are low income), who instead must turn to more expensive and/or less convenient forms of payment like money orders, prepaid cards, and check cashers.127

While overall credit card usage has increased,128 the shift to credit cards is significantly more pronounced among wealthier households. According to a recent study published in the RAND Journal of Economics that looked at the effects of making debit cards less attractive to consumers:


126 Stavins, The Effect of Demographics on Payment Behavior, supra note 64, at 27, Table 3d. The numbers in the table are reported relative to adoption rates by households with an income of between $50,000 and $75,000 per year. While income correlates with usage of all payment types, “[f]or credit cards, the effect was stronger than for other payment instruments and was statistically significant across all income cohorts.” Id. at 14.

127 According to a recent FDIC Survey, “[u]nbanked households used a variety of methods outside of the banking system to pay bills and receive income. To pay bills, 62.3 percent used cash, 35.5 percent used nonbank money orders, and 18.2 percent used prepaid cards in a typical month.” See Susan Burhouse, et al., 2015 FDIC National Survey of Unbanked and Underbanked Households (Oct. 20, 2016), at 9, available at https://www.fdic.gov/householdsurvey/2015/2015report.pdf. (hereinafter, “FDIC 2015 Unbanked Survey”).

128 See supra notes 60-62 and accompanying text. Between 2008 and 2016 the share of consumers using credit cards increased from 19.5% to 29.2%. Notably, much of the overall shift to credit cards has been among consumers who use them for transactional — not credit — purposes. See Kevin Wack, Did Durbin Amendment Lead to Unintended Credit Card
The high-income consumer shift[s] market share to credit card by almost 16 percentage points more than the low-income consumer. The low-income consumer shifts to cash more than the high-income consumer by 9 percentage points, and cash and check together by 15 percentage points.\textsuperscript{129}

The resulting welfare effects of these patterns are significant:

\begin{quote}
The long-run welfare cost of the change in the usage value of debit is estimated to be between -2.8 percent and -1.3 percent, compared to the initial welfare level, depending on [l] income. In the short run, before adoption choices can respond, the welfare loss is substantially larger, about 7 percent to 30 percent larger, with larger effects for low income consumers. The difference over the income range is striking, with welfare falling more than twice as much for consumers from low-income consumers than for consumers from the wealthiest consumers in the long run, and 2.5 times as much in the short run.\textsuperscript{130}
\end{quote}

Restrictions imposed by merchants on the use of debit cards are likely to have had a particularly adverse effect on lower-income consumers, whose purchases are more likely to fall below a minimum spend, compelling them either to spend more than they had intended or to use cash or other payment methods instead.\textsuperscript{131}

Likewise, the change in rewards structures for electronic payments disproportionately harms lower-income consumers.\textsuperscript{132} Far from rewards disappearing altogether, they have largely shifted from debit cards to credit cards, with the general pattern indicating that higher-income consumers who can afford to pay their balances in full are better able to enjoy these programs.\textsuperscript{133} This regressive effect freezes out lower-income consumers (who were previously offered reward incentives with their debit cards) because, particularly following passage of the CARD Act and Dodd-Frank, they do not have the same level of access to credit cards as high income consumers.\textsuperscript{134}

Finally, the higher prices charged by some merchants as a result of the implementation of the Durbin Amendment have likely had a disproportionate effect on lower-income households, which tend to spend a larger proportion of their income on the types of goods for which prices have increased. In particular, lower-income households spend a much larger proportion of their income on food (over 14% for each of the bottom four income deciles and 16% for the lowest decile) than higher-income

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\textsuperscript{130} Id. at *40 (emphasis added).
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\textsuperscript{131} Zywicki, \textit{The Economics of Payment Card Interchange Fees and the Limits of Regulation}, \textit{supra} note 10, at 33.
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\textsuperscript{132} Id.
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\textsuperscript{133} See IBT Staff, \textit{Credit Card Rewards Grow as Debit Rewards Dwindle}, \textit{supra} note 55.
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\textsuperscript{134} See, e.g., Lux & Greene, \textit{Out of Reach}, \textit{supra} note 124, at 19-21.
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households (between 10 and 13% for the top 6 deciles)\textsuperscript{135} and the main sources of their food, grocery stories and fast food merchants, were among those most likely to have increased prices as a result of changes to the cost of debit card transactions.\textsuperscript{136}

B. Effects on Financial Inclusion

In addition to the effects on consumption, the Durbin Amendment has also disproportionately affected lower-income households through increases in the minimum holdings necessary to qualify for free checking and increases in bank fees, including monthly fees, overdraft fees, and fees on the use of ATMs, that apply to accounts that do not qualify for free checking. In short: Low-income consumers are more affected by the bank account fees that arose after implementation of the Durbin Amendment because these fees represent a larger — and increasing — share of their incomes. At the same time, they are also more likely to incur these fees because, e.g., minimum balance requirements are more stringent (and the fee for each infraction is also higher than before, in part due to the Durbin Amendment).

Overdraft fees, in particular, are both significant and significantly borne by lower-income households (which are less likely to have sufficient funds in their accounts to cover even basic living costs). According to the Consumer Financial Protection Bureau (CFPB), “\textit{[o]verdraft and non-sufficient funds (NSF) fees constitute the majority of the total checking account fees that consumers incur}.”\textsuperscript{137}

In 2015 the average overdraft fee accounted for 65.3\% of reported consumer bank charges, and the median fee 75.6\%\textsuperscript{138} — and these numbers have increased since Regulation II went into effect, despite federal regulations implemented in 2010 aimed at minimizing their incidence.\textsuperscript{139} Moreover,

\begin{quote}
\textit{transactions that lead to overdrafts are often quite small. In the case of debit card transactions, the median amount that leads to an overdraft fee is $24 and the median amount of a transaction that leads to an overdraft fee for all types of debits is $50.}\textsuperscript{140}
\end{quote}

As a recent report from the consultancy, Oliver Wyman, notes:


\textsuperscript{136} Richmond Fed Durbin Impact Study, supra note 27, at 194.


\textsuperscript{140} Bakker, et al., CFPB Data Point: Checking Account Overdraft, supra note 137, at 5.
Fees represent an increasing share of checking and savings revenue with decreasing balances – accounting for one-half to two-thirds of total transaction account revenues for the middle-income consumer (depending on the interest rate environment) but up to 90% for [lower-income] consumers.\textsuperscript{141}

The most adversely affected households have been those with the lowest incomes, who are more likely to be, or to have become, unbanked, thereby losing all the benefits of having a checking account.\textsuperscript{142} The costs of being unbanked include: reliance on more expensive payment instruments (such as prepaid cards, money orders, and check cashers); the lack of availability of lower-cost forms of borrowing (such as bank loans and overdraft lines of credit) leading to reliance on higher-cost loans (such as those from payday lenders and pawn shops); and, consequently, difficulty building solid credit history – which, in turn, exacerbates these problems. Using conservative estimates that are still applicable today, we estimated the magnitude of the harm to low-income consumers in our previous paper:

While it is impossible accurately to measure those losses, we can make an educated guess. In 2012, there were approximately 60 million households in the U.S. with income below $50,000 per year. Suppose half of those households, or 30 million, previously had access to [free checking]. Now, suppose that half of those, or 15 million, pay $10 per month for a single checking account, while receiving no appreciable reduction in the cost of their purchases. The result would effectively be a transfer in wealth on the order of $1.8 billion per year from lower income consumers to [acquirers and large] retailers. Of course this is a rough estimate; allowing a reasonable margin of error, the transfer is likely between $1 billion and $3 billion per year.\textsuperscript{143}

Households that rely on cash for payment and storing wealth also suffer greater inconvenience and cost due to the need to hold enough cash to cover payments when shopping, the inability to pay utility bills automatically or by mail, the increased risk of theft, and the increased cost and


\textsuperscript{142} In the FDIC’s 2015 survey of unbanked and underbanked households, 27.7% of respondents gave “Account fees too high” as a reason for being unbanked, including 9.4% who gave this as the main reason. See FDIC 2015 Unbanked Survey, supra note 127, at 3. Suggesting that post-Durbin Amendment banking fees were indeed an important factor in leading to the number of unbanked households, the FDIC’s survey also notes that “[a] higher proportion of unbanked households that previously had an account cited high or unpredictable fees as reasons for not having an account (33.8% and 31.5%, respectively), compared to those that never had an account (23.1% and 17.7%, respectively).” Id. See also Zywicki, The Economics of Payment Card Interchange Fees and the Limits of Regulation, supra note 10, at 14-16.

\textsuperscript{143} Zywicki, Manne & Morris, Price Controls on Payment Card Interchange Fees, supra note 3, at 29.
inconvenience of securing themselves against theft. Employees without bank accounts who are paid by check may also face high fees for cashing those checks.

For many lower-income households, the imposition of higher fees has resulted in the loss or closing of checking accounts, and has, in turn, increased reliance on general-purpose prepaid cards as a partial alternative to a bank account. Yet people using these cards may face difficulties in stores that have imposed higher minimum spending requirements on card payments due to the implementation of the Durbin Amendment. Moreover, the “high-functionality” prepaid cards that may be used for ACH transactions (e.g., inter-bank direct-deposit payments) issued by large banks have been re-classified as debit cards by the Federal Reserve and are thus subject to the Durbin Amendment’s price control terms. As a result, large banks offer prepaid cards with limited functionality in order to avoid having to charge the high fees to consumers that would be necessary to make up for the revenue losses they would incur if the cards were subject to the Durbin Amendment. This limits their usefulness as partial substitutes for checking accounts, and thus further exacerbates the regressive effects of the Durbin Amendment.

**Conclusion**

In 2012, the year following the Federal Reserve Board’s implementation of Regulation II, Scott Strockoz, a Deputy Regional Director of the Federal Deposit Insurance Corporation, offered a prescient indictment of the Durbin Amendment:

> Consumers were supposed to see lower retail prices due to the implementation of the Durbin Amendment. In many cases, consumers are seeing higher prices for low cost...
items or no savings at all. Further, banks are increasing or implementing fees on traditional bank products and services thereby increasing consumer cost. Consumers either have to pay the fees, find a new bank that doesn’t charge those fees, or end their banking relationship and use an alternative financial service provider for their “banking” needs. In certain instances, these providers charge more in fees than a traditional bank but they do not adequately disclose these fees in advance so the consumer ends up paying more to a check casher or a payday lender than they would to their bank. It is unlikely consumers will see any tangible benefits from the Durbin Amendment.  

This report validates those concerns.

The costs of the banking system have to be paid by someone, and in a competitive market eventually those costs will be borne by consumers. While the average interchange fee for debit transactions has fallen since the implementation of Regulation II, that does not appear to have translated into lower debit card fees for all or even most merchants, nor does it appear to have resulted in overall price savings for consumers. Meanwhile, the Amendment seems to have resulted in an increase in the costs of banking services and a reduction in competition and choice. In all, the effects of the Amendment appear to have been the opposite of those intended by Senator Durbin. Worse still, the brunt of the Amendment’s perverse consequences seems to have been borne by many “Main Street” businesses, smaller banks, and low-income households.

In sum:

- The evidence presented in this paper contradicts the claim that the costs resulting from the Durbin Amendment have been offset by merchants charging lower prices. Indeed, the majority of consumers — and especially those with lower incomes — have experienced higher prices overall.
- Millions of households, regardless of income level, have been adversely affected by the Durbin Amendment through higher costs for bank accounts and related services. Most troublingly, this has hit lower-income households the hardest. Hundreds of thousands of low-income households have chosen (or been forced) to exit the banking system, with the result that they face higher costs, difficulty obtaining credit, and complications receiving and making payments.
- That a forced reduction in interchange fees would result in higher bank fees for consumers is a matter of basic economics. Retail banking in the United States is a highly competitive industry and there is no evidence of supra-normal profitability for retail banks. As such and over time, cost increases or revenue reductions will be passed on to bank customers in the

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form of higher bank fees or reduced services. It was simply inevitable that the removal of billions of dollars in interchange fee revenue would ultimately result in higher costs for bank consumers.

- For some higher-income households the costs are likely mitigated by their ability to avoid checking account fees and to switch to credit cards. For both lower-income and higher-income households these costs may have been further offset, to some extent, by slightly lower prices at some merchants. But for lower-income households in particular, these possible offsets are either inaccessible or too small to make much difference. For them the Durbin Amendment has, on net, unequivocally imposed more costs than benefits.

- The Durbin Amendment has also served to increase costs for some smaller retailers and sellers of small-ticket items. Among those most adversely affected have been grocery stores, fast food outlets and similar establishments, a significant proportion of which have raised prices since the Amendment was implemented. Again, these effects hit low-income households the hardest.

The Durbin Amendment was based on the false premise that capping interchange fees would benefit consumers, merchants, and the economy as a whole. To the contrary, however, it has benefitted only a small number of larger merchants, while harming the majority of small merchants and lower-income households — and interfering in the efficient functioning of the economy. Given the inherent indeterminacy of optimal prices in such a complex market, the claims that debit card interchange fees were “too high” prior to the Amendment’s enactment were always fanciful. What we do know is that, relative to the period before the Durbin Amendment, almost every segment of the interrelated retail, banking and consumer finance markets has been made worse off as a result of it. The Durbin experiment has proven a failure, and the price caps that it imposed should be removed.