How Proposed Interchange Fee Caps Will Affect Consumer Costs

A review of evidence from the Durbin Amendment debit card interchange fee caps and an estimate of how proposed fee cap reductions will affect prices consumers pay for bank accounts and merchant goods or services.

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¹ The author acknowledges support from the Consumer Bankers Association, which commissioned a review of research on debit card interchange fee limits and the potential implications if those fee limits are reduced. This white paper summarizes that analysis and provides context about relevant policy goals and methods for measuring policy interventions. The views expressed are the author's own.

Executive Summary

The Durbin Amendment limits interchange fees that banks charge for processing merchant debit card transactions, requiring them to be "reasonable and proportional" to the card-issuing bank's costs. The Federal Reserve Board enacted Regulation II in 2011 to enforce the Durbin Amendment. It set fee caps that reduced covered debit interchange fees by more than 40 percent. In November 2023, the agency proposed a new rule that would reduce the average interchange fee a further 23 percent (5.4 cents) per covered debit card transaction.

This paper reviews research about the Durbin Amendment's effects and estimates expected outcomes if the proposal to reduce debit interchange caps is finalized. The key findings are:

- 1. Economists confidently measured a drop in bank interchange revenue and an increase in fees consumers pay for bank accounts due to the Durbin Amendment. Monthly maintenance fees increased in an amount equal to 42 percent of the overall reduction in interchange revenue. Evidence suggests an additional, related increase in other service fees. Consumers experienced these price increases because, after the Durbin Amendment, monthly fees rose substantially, "free" accounts with no monthly fees became less common, and it became harder to qualify for fee waivers because required minimum balances rose. Lower-income consumers likely bore a disproportionate share of increased costs.
- 2. Any corresponding merchant and consumer savings under the Durbin Amendment are contested or not measurable. There are clashing views about how much merchants saved. Though debit processing costs went down for merchants on average, benefits are unevenly distributed due to variances in merchant business models and agreements with their acquiring banks. Net merchant savings are not certain, in part because other processing costs increased as consumers shifted away from debit card usage. If merchants passed savings through to consumers, as theory suggests, economists concluded it is "virtually impossible" to prove or measure.
- 3. If the current proposal to reduce the debit interchange fee cap is finalized, the research suggests that consumers will pay an extra \$1.3 billion to \$2 billion annually in higher bank account fees. In this scenario, interchange fee revenue for banks drops by \$3 billion annually. Forty-two percent (\$1.3 billion) of this is offset by higher monthly maintenance fees for consumers, while other service fees increase by \$250 million to \$700 million. As with the original implementation of the Durbin Amendment, these fee increases result from a variety of changes to account terms that make it harder to avoid fees, as "free" bank accounts with no maintenance fees become less common and the average minimum deposit required to qualify for fee waivers increases—which may disproportionately affect lower-income consumers. On the merchant side, debit processing costs drop on average, but net savings is once again debatable; a further shift in favor of higher-cost payment mechanisms is possible. Any pass-through savings to consumers (i.e. lower prices for goods or services) remain unmeasurable and cannot be estimated.

Introduction and Key Policy Issues in Regulating Debit Card Interchange

This paper reviews how analysts have measured the effects of debit card interchange rules under the Durbin Amendment (15 U.S.C 16930-2) and what their results suggest about the likely effects of proposed reductions in debit interchange caps. It will show that econometricians have found strong and measurable evidence that bank customers paid more for banking services because of the Durbin Amendment, while the amount of any theoretical pass-through of savings from merchants to their customers has not been proved and is likely unmeasurable.

An interchange fee is the amount a consumer's bank (the card "issuer") receives to facilitate a debit card transaction for a merchant. The average interchange fee is 23 cents (\$0.23) per covered debit card transaction.² Merchants pay the interchange fee to their bank (the "acquirer" or "acquiring bank") as part of an overall "merchant discount fee." In a typical "four-party" payment network, the merchant discount fee includes, in addition to the issuer's interchange fee, a network fee (e.g., for Visa or Mastercard) and a processing fee for the acquiring bank.³ A merchant pays its acquiring bank, which in turn pays the network and the card issuer.

The payment card market is an example of a "platform" or "two-sided" market. Platform markets have value only to the extent that they achieve critical mass; in the payments market, for example, Visa's network is valuable because it provides a system that millions of merchants use to accept payments from tens of millions of consumers who own a Visa card. The payment cards market in the United States is mature, with most adults using at least one type of payment card.⁴

The mature payment cards system provides benefits to both sides of the market. Consumers derive convenience and increased security from card payments, while merchants often benefit from increased consumer satisfaction (more payment choices available), higher turnover, reduced fraud, and faster transaction times.⁵ And of course, card issuers and payment networks benefit from the fee income and customer loyalty that payment card platforms help create.

Different forms of payment—including different types of payment card—impose different costs. The cost of processing payment cards can vary from one merchant to another, depending on their business models and the agreements they have with acquiring banks. Merchants may try to push consumers to lower-cost payment mechanisms (and banks may attempt to nudge consumers in other ways) through use of marketing and rewards, discounts, or other incentives. Yet in practice, merchants do not price differently based on payment method (their goods and services cost the same regardless of payment method); and in the United States, it is uncommon for merchants to impose a surcharge for card payments.⁶ In the case of debit cards, banks tend to provide them to

² Federal Reserve Board (2021) at Table 3. <u>https://www.federalreserve.gov/paymentsystems/regii-data-collections.htm</u>.

³ For more details on card processing fees, see: U.S. Congressional Research Service (2017) at p. 2-5.

⁴ For example, as of 2016: There were almost 14 million standard payment card terminals in the United States (per Midici Insights data) and the average number of card payments per inhabitant in the United States was higher than any other studied country, at 326 (per BIS Red Books data). Górka at Section 2.2.4. ⁵ See, e.g., Górka at Section 1.2.2.

⁶ See, e.g., Górka at Section 1.2.4 (U.S. merchants took advantage of discounting or surcharging on not more than 1.2 to 1.8 percent of transactions). However, other evidence suggests that surcharging is increasing and becoming more accepted among consumers; see, e.g., <u>https://www.pymnts.com/credit-cards/2022/the-data-point-85-percent-consumers-pay-credit-card-surcharges-without-issue/</u>.

consumers as part of a bundle of services, including a bank account. Banks earn interchange revenue and account service fees but in general, they do not charge consumers for debit cards or individual debit card transactions.⁷ In sum, payment processing costs tend to be deeply embedded on both sides of the market. Consequently, consumers tend to choose how to pay based on factors like convenience or the rewards programs tied to cards, for example, without regard to the costs merchants pay to accept the cards or that banks incur to provide them.

Consumers, merchants, and banks all have numerous, interrelated strategies they can pursue to maximize their own benefits and reduce their own costs. Along the way, cross-subsidies occur. In other words, the payment cards market is a complex, two-sided market in which observed results differ from basic economic theory in ways that are difficult to predict and sometimes impossible to measure. This makes regulating interchange fees a complex task.⁸

By the time a platform market is mature and systemically important, policymakers naturally want to know if one side of the market is taking advantage of the other side; that is, whether pricing and terms are fair and reasonable. Yet economists have found that analyzing pricing in platform markets is exceptionally difficult and subject to disagreement.⁹ This is because, as suggested above, the costs and benefits in a platform market are spread, dynamically and unevenly, among its participants. As one review found, the "economics literature identifies a substantial set of distortions in the card market that might drive the market away from a socially optimal performance[;]" but "whatever bias exists could, in general, be in either direction." It concluded that there is "consensus that there is no clear or obvious distortion in the private determination of interchange fees."¹⁰ Or as a member of Congress once put it, "I am not so certain that it is easy to discern who is 'David' and who is 'Goliath' here....⁹¹¹

Policymakers in the United States, European Union, Australia, and elsewhere have regulated interchange fees in various ways. In less mature markets, such as Spain, regulatory intervention aimed to increase overall usage—and therefore, value—of the payment cards market itself.¹² In more mature markets, regulations had other goals, such as reducing costs to end users or increasing competition by, for example, requiring payment platforms to allow merchants to give discounts for using cash.¹³

¹¹ Representative Jeb Hensarling, Congressional Hearing 10/8/2009, transcript available at: <u>https://www.congress.gov/event/111th-congress/house-event/LC4361/text</u>

 ⁷ See: Manuszak and Wozniak (2017) at p. 11. See also: Mukharlyamov and Sarin (2022) at p. 20, 25.
 ⁸ Other concerns include competition (or antitrust) issues, which are beyond the scope of this paper. For more on these issues and a review of available literature, see, e.g. Górka; see also: Rysman and Wright (2014).
 ⁹ See, e.g., Jullien (2021) (noting that "Identifying network effects is fraught with problems of simultaneity and omitted variables" but citing Manuszak and Wozniak [2017] as a successful demonstration of how bank account fee increases correlated to interchange fee caps.)

¹⁰ Rysman and Wright (2014) at p. 332-333. The authors take the position that the private interchange system generally works as a balancing mechanism within an open system; but the complexities and possible distortions provide "a potential rationale for regulation, albeit a controversial rationale given the subtle nature of the potential market failures." (p. 305.) They provide a literature review of various *pro* and *con* arguments for regulating the payment cards market (see also, Górka); but that is beyond the scope of this paper.

¹² Górka at Section 2.2.3.

 $^{^{\}rm 13}$ Rysman and Wright (2014) at Sections 2.3 and 3.

The Durbin Amendment Aimed to Drive Down Consumer Costs

In the United States, the most consequential regulation of interchange fees was the Durbin Amendment, which took effect in 2011 with the implementation of Regulation II.¹⁴ It restricted debit card interchange fees with the goal of reducing transaction costs for merchants so they would passthrough cost savings to consumers (as lower prices for goods and services).¹⁵ The Durbin Amendment's interchange fee cap applies only to debit (not credit) card transactions and only to larger, covered banks (with assets above \$10 billion) not smaller, exempt banks.

Specifically, the Durbin Amendment required debit card interchange fees from covered banks to be "reasonable and proportional to the cost incurred by the issuer with respect to the transaction" and instructed the Federal Reserve Board (The Board) to set rules accordingly. In 2011, The Board's Regulation II established a debit interchange fee cap for covered banks set at 21 cents plus 0.05% of the transaction, plus an additional 1 cent fraud protection fee for qualified issuers.¹⁶ Recently, The Board proposed to reduce the fee cap by more than 20 percent.¹⁷ (See Table 1.)

	Regulation II (Current)	Proposed Revision*
Base component	21 cents (\$0.21)	14.4 cents (\$0.144)
<i>ad valorem</i> component (% of transaction)	0.05%	0.04%
Fraud prevention adjustment	1 cent (\$0.01)	1.3 cents (\$0.013)
Max. fee on average covered debit transaction of \$48.02**	24.4 cents (\$0.244)	17.6 cents (\$0.176) (6.8 cent / 28% reduction)
Actual average covered debit interchange fee**	23.0 cents (\$0.230)	17.6 cents (\$0.176) (5.4 cent / 23% reduction)

Table 1: Current Versus Proposed Debit Interchange Fees Under Durbin Amendment

* 88 FR 78100 (November 14, 2023)

** Federal Reserve Board (Table 3, 2021): <u>https://www.federalreserve.gov/paymentsystems/regii-data-collections.htm</u>

In making its recent proposal to reduce debit interchange caps, The Board noted that data from large debit card issuers indicated their costs had gone down and therefore, what counts as a "reasonable

¹⁴ 15 U.S.C 16930-2 and 12 C.F.R 235. The Durbin Amendment is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

¹⁵ Senator Durbin stated that the amendment "will enable small businesses and merchants to lower their costs and provide discounts for their customers... while preserving the ability of small banks and credit unions to compete with big banks in issuing cards." Senator Richard Durbin, letter to Chairman Chris Dodd and Chairman Barney Frank (May 25, 2010), <u>https://www.durbin.senate.gov/newsroom/press-releases/durbin-sends-letter-</u> to-wall-street-reform-conferees-on-interchange-amendment.

¹⁶ Other provisions apply, which are not discussed here. For example, certain government-administered payment programs and prepaid debit cards are exempt; and all debit card issuers, regardless of size, must enable at least two unaffiliated networks so that merchants may choose the network provider with the lowest processing fees. For a more detailed summary, see U.S. Congressional Research Service (2017). ¹⁷ 88 FR 78100 (November 14, 2023).

and proportional" interchange fee should also go down.¹⁸ The proposal would further allow The Board to revise the debit interchange fee cap periodically, based on its ongoing review of issuer cost data, without further public notice or comment.¹⁹

How the Effects of Interchange Fee Caps Are Measured

Consumer banks (issuers), merchant banks (acquirers), merchants that accept payment cards, and consumers (both bank customers and merchant customers) all experience changes in payment card interchange fees differently. While some effects are readily measured, others are not. Experts agree that measuring the costs of interchange fee regulation on banks and their customers is relatively easy but measuring benefits to merchants and their customers is difficult or impossible. (See Table 2.)

Basic economic theory suggests that, when regulators cap interchange rates, banks will lose interchange revenue, merchants will pay lower processing costs, and consumers will both pay more (for bank services) and less (for merchant goods and services)—with the net effects dependent on how the regulatory intervention is designed and how competitive the various markets for bank and merchant services are.

Analysts attempt to measure these effects using econometrics; that is, they test hypotheses about the effects of certain phenomena (like regulatory changes) by applying statistical analysis to empirical data. According to the International Monetary Fund, the objective of econometrics is to "convert qualitative statements (such as 'the relationship between two or more variables is positive') into quantitative statements (such as 'consumption expenditure increases by 95 cents per every one dollar increase in disposable income.)" In this way, theoretical economic models may become useful tools for policymaking.²⁰

The remainder of this paper will show that econometricians have found strong and measurable evidence that Durbin Amendment interchange fee caps led to higher bank account fees for consumers, while expected benefits to merchants and their customers may not have materialized and may not be measurable.²¹ The paper will conclude by using these results to estimate the effects of currently proposed reductions in debit interchange caps.

¹⁸ 88 FR 78100 at 78100. The Board confirmed that its assessment of issuer costs does not cover general costs, such as overhead or the cost of maintaining consumer accounts; rather, its authority to determine "reasonable and proportional" costs under the statutes is limited to assessing only the costs incurred by an issuer that are specific to authorizing, clearing, and settling a particular debit card transaction. 88 FR 78100 at 78102. ¹⁹ 88 FR 78100 at 78109.

²⁰ International Monetary Fund (2011).

²¹ Mukharlyamov and Sarin (2022) compares its critical findings about the Durbin Amendment to other econometric analysis showing the efficacy of other regulations: "Our paper also complements important work on the CARD Act by Agarwal et al. (2015). These authors show that post-crisis price regulation of consumer credit cards reduced borrowing costs by nearly \$12 billion annually. They find no evidence that other price terms adjusted in response to the CARD Act's restriction.... Nelson (2022) [also] confirms that overall consumer surplus is increased by the CARD Act." A key difference is that "the CARD Act and the Durbin Amendment regulate different sides of the two-sided card market. Durbin regulates prices paid by merchants who accept cards; the CARD Act regulates prices paid by consumers who use them.... The joint lessons of the Durbin Amendment and the CARD Act suggest that price regulations that limit firms' ability to take advantage of consumers' behavioral biases can deliver welfare gains." Mukharlyamov and Sarin (2022) at p.6.

	Covered issuers expect to lose interchange fee revenue.		
Issuers (consumer banks)	 Mechanical calculations show uniform revenue loss in the regulated payment channel, both on a per-transaction basis and overall. Regulatory data allow a before/after observation of overall net drop in interchange fee revenue. 		
	Merchant acquiring bank income is not directly affected.		
Acquirers (merchant banks)	 It is generally presumed that acquirers reduce merchant discount fees to account for interchange fee reductions. One exception, applicable mainly to small merchants, may be when acquirers bundle average interchange fees across payment card types (acquirers may retain a portion of interchange fee reductions in this case). 		
Consumers	Bank customers expect to pay more to maintain bank accounts or find it harder to avoid service fees.		
(bank account holders)	Regulatory data and market scans can show changes in the fees approximate part for bank approximate		
	 Econometric techniques allow isolating the effects of regulatory caps versus other market and legal developments. 		
	Merchants expect lower payment card servicing fees.		
Merchants (card accepters)	• Industry data sources may show overall changes in payment processing costs.		
	Individual merchant results can be uneven due to variances in merchant business models or merchant-acquirer contracts.		
	• Net savings may be affected by overall consumer usage patterns (e.g., if consumers switch to other forms of payment with higher processing costs).		
	Merchant customers expect pass-through cost savings.		
Consumers (merchant customers)	 Economic theory implies that merchants will pass on cost savings if they occur, especially in competitive markets. But economists have concluded that it is not provable or measurable. Econometric techniques cannot measure the effect, in part because payment processing costs are insignificant compared to other merchant costs. 		

Table 2: How Effects of Interchange Fee Caps Are Measured

Source: Author's analysis. See also: U.S. Congressional Research Service (2017), "Regulation of Debit Interchange Fees," by Darryl E. Getter, R41913 (May 16, 2017).

The Durbin Amendment Led to Measurable, Systemic Increases in the Cost of Bank Accounts

In his book-length study of the interchange market and its regulation, professor Jakub Górka found, based on a review of available research from interchange fee regulations in countries such as the United States, Spain, and Australia, that reduction in bank interchange fee revenue led to increased fees for bank customers. "In all three countries," Górka wrote, "banks were not indifferent about falling interchange rates, which hit their fee-based income and profit and loss account directly. The first response of banks was to cut rewards on cards and raise cardholder and possibly account [and] other payment services-related fees."²²

Górka and other experts generally agree that the Durbin Amendment triggered an increase in bank account fees as an offset to the required reduction in interchange revenue.²³ Among other research, they cite an econometric analysis of the Durbin Amendment's effects by Manuszak and Wozniak (2017), which concluded that "almost all statistically significant coefficients are consistent with higher expected fees for cardholders: lower availability of free accounts, higher monthly fees, lower likelihood that the monthly fee could be avoided, and a higher minimum balance to avoid the fee."²⁴

Manuszak and Wozniak (2017) is notable for how it used econometrics to isolate the effects of the Durbin Amendment and how even proponents of interchange fee regulation use it as a reliable analysis showing an offsetting increase in the cost of banking services to consumers.²⁵ Using regulatory data and commercially available market scan data, it isolated the effects of the Durbin Amendment by comparing results for covered versus exempt banks and checking versus savings accounts, measured at various times before and after implementation of Regulation II.²⁶ Other studies confirmed and expanded on these findings.²⁷

To measure the size of the bank account fee increases after Durbin, researchers took different approaches. Kay et al. (2018) used regulatory data to measure bank account service fees (including account maintenance fees and all other service-related fees, such as overdraft, but not interchange fees); and it found that these fees increased in an amount that offset more than 90 percent of debit interchange losses.²⁸ In contrast, Mukharlyamov and Sarin (2022) conducted a more conservative econometric analysis that isolated the effects of interchange fee regulation specifically on account

²² Górka at Section 2.2.4. Note: cuts to debit cards rewards programs in the United States are less apparent than in other countries, potentially because they play a less significant role in the market; see, e.g., Manuszak and Wozniak (2017) at p. 11.

²³ Górka at Section 2.2.2. See also: Rysman and Wright (2014). As noted later in this section, researchers found that bank account prices went up at covered banks and at smaller, exempt banks that also raised prices in some markets when their larger competitors did so.

²⁴ Manuszak and Wozniak (2017) at p. 20-21.

²⁵ For example, professor Górka, who is generally in favor of interchange regulations even though he notes that its benefits in terms of merchant pass-through savings to consumers may be unmeasurable, relies on Manuszak and Wozniak (2017) to state clear effects on consumer banking costs because of the Durbin Amendment and Regulation II. Górka at Section 2.2.2.

²⁶ The authors concluded that "checking account pricing at covered banks appears primarily driven by the interchange fee restriction rather than other factors related to the financial crisis or subsequent regulatory initiatives." Manuszak and Wozniak (2017) at p. 21.

 ²⁷ Mukharlyamov and Sarin (2022), for example, found strong evidence that banks pass through Durbin losses.
 ²⁸ Kay et al. (2018).

maintenance fees; it found that the Durbin Amendment led to an increase in account maintenance fees equal to 42 percent (\$2.3 billion) of debit interchange revenue that banks lost under the law.²⁹

While it is unlikely, per Mukharlyamov and Sarin (2022), that the entire increase in service fees observed by Kay et al. (2018) is attributable to the Durbin Amendment, it may be reasonable to assume that some part of it is. For purposes of calculating the impact of proposed changes to debit interchange caps at the end of this paper, we use as a minimum baseline the increase in account maintenance fees observed by Mukharlyamov and Sarin (2022)—equal to 42 percent of lost interchange revenue—and assume that other service fees will increase such that banks recover a total of 50 to 65 percent of lost interchange revenue.

Consumers experienced this overall increase in bank account fees through a variety of changes to account terms.³⁰ Available research shows that as a result of the Durbin Amendment:

- 1. Average monthly checking account maintenance fees rose substantially;³¹
- 2. Availability of "free" checking accounts with no maintenance fees fell over 30%;³² and
- 3. Minimum account balances needed to avoid maintenance fees rose by 20% or more.³³

Mukharlyamov and Sarin (2022) also concluded that "new account fees associated with Durbin are borne primarily by low-income consumers." To illustrate this, they observed that over 70 percent of consumers in the lowest income quintile faced higher account fees because their average monthly account balances fell below the post-Durbin minimum amount required to avoid a monthly fee, whereas this was true for only five percent of consumers in the highest income quintile.³⁴

Finally, research suggests that customers at smaller banks were not immune from cost increases. Even though the Durbin Amendment only applied to larger banks, smaller (exempt) banks also raised account maintenance fees in markets where their primary competitors were covered banks. Price increases at these smaller banks were generally smaller, however.³⁵

²⁹ Mukharlyamov and Sarin (2022) at p. 19-20. The finding includes a downward adjustment to screen out fee increases attributable to the fact that "Durbin banks" grew significantly faster than their exempt counterparts during the period of analysis. Id.

³⁰ For a broader discussion of how the described fee increases and changes in account terms relate to the Durbin Amendment, see, e.g., Mukharlyamov and Sarin (2022) at p. 20-21 (explaining that the checking account is priced as a bundle of services, which suggests that banks set the aggregate price such that they can provide the total bundle at or above marginal cost; thus, the decline in interchange fee revenue triggered a readjustment of other fees and terms to ensure the overall profitability of the bank account).

³¹ Manuszak and Wozniak (2017) at p. 23. Mukharlyamov and Sarin (2022) at p. 15 ("monthly maintenance fees, which averaged \$3.07 for banks above the Durbin threshold increased by nearly 100 percent because of Durbin's passage.")

³² Manuszak and Wozniak (2017) at p. 5 (35.2% less likely). Mukharlyamov and Sarin (2022) at p.3 (share of free checking accounts fell by 33 percentage points).

³³ Manuszak and Wozniak (2017) at p. 5 (finding a greater than \$400 increase in the minimum required balance on noninterest checking accounts, or 50% increase from pre-Durbin levels). Mukharlyamov and Sarin (2022) at p. 15 and p. 30 (finding a 21% increase in the minimum required balance on basic checking accounts—rising to \$1,400 post-Durbin Amendment).

³⁴ Mukharlyamov and Sarin (2022) at p. 30. See also, id. at p. 5.

³⁵ Manuszak and Wozniak (2017) at p. 24. The authors surmise that covered banks cannot compete at prior (lower) price points, so exempt banks can raise prices while still attracting and retaining customers.

<u>The Durbin Amendment's Effect on Merchant Prices is "Virtually Impossible" to Measure; There</u> <u>Are "Clashing Views" About Merchant Pass-Through Savings to Consumers</u>

The Durbin Amendment resulted in an estimated \$5.5 billion reduction in annual debit card interchange fee revenue for covered issuer banks.³⁶ In other words, merchants' acquiring banks paid \$5.5 billion less per year to card issuer banks. In turn, the average merchant discount fee acquiring banks charged merchants for debit transactions declined. But actual cost savings varied among merchants depending on their size and market sector and their individual agreements with merchant acquiring banks—and some merchants experienced *increases* in debit processing fees on smaller transactions.³⁷

On net, analysts disagree about the total value of savings to merchants resulting from the Durbin Amendment. Górka and others have raised important questions about whether or how much merchant payment processing costs actually declined, overall, since it is possible that the Durbin Amendment accelerated the trend toward the use of payment options that carry higher processing costs than debit cards.³⁸ Mukharlyamov and Sarin (2022) noted: "Since the Durbin Amendment made the issuance of debit cards less profitable for large banks, it might have prompted these institutions to more actively market and roll out credit cards subject to significantly higher interchange fees. As such, accounting for this substitution, the Durbin Amendment might have paradoxically led to higher total interchange fees—debit and credit combined—paid by merchants, thus further impeding the regulation's stated objective."³⁹

Yet specific to debit cards, it is generally agreed that average merchant processing costs went down (i.e., acquiring banks passed most of their debit interchange savings on to merchants in the form of lower merchant discount fees). For example, Górka estimated that "merchants received a relief from lower merchant fees amounting up to several billions of dollars in 2012."⁴⁰ Less clear is what part of these savings reached consumers. Or as Górka wrote: "The issue that has sparked a heated debate is whether [merchant] savings were passed on to consumers as lower prices[.] There are clashing views in this respect among American economists."⁴¹

Economic theory suggests that, if merchants experienced cost savings, they would pass at least some of it to consumers and the part shared would depend largely on the merchant's competitive environment.⁴² But the actual pass-through savings to consumers has proved unmeasurable. This is partly because the interchange fee is such a small portion of a typical purchase (even if merchants passed on *all* the cost savings, "the retail price of a \$40 purchase would decline by at most 7 cents.

³⁶ Mukharlyamov and Sarin (2022) at p. 19-20.

³⁷ Merchant discount fees may vary based on merchant sector or transaction volume, specifically negotiated deals between merchants and acquiring banks, whether the merchant chooses to pay interchange fees as a direct pass-through or as part of a bundle of services, or other factors. After the Durbin Amendment, the debit interchange fees on some small-dollar transactions increased. Hayashi (2013) at p. 93-98.

³⁸ See, e.g.: Górka at Section 2.2.2 ("...debit card payments growth slowed down, contrary to the growth of credit card payments, which accelerated").

³⁹ Mukharlyamov and Sarin (2022) at 31.

⁴⁰ Górka at Section 2.2.2.

⁴¹ Górka at Section 2.2.2.

⁴² See, e.g., Hayashi (2013) at p. 101.

Price changes this small are difficult if not impossible to measure.")⁴³ It is also because the interchange fee is only a small and variable part of a merchant's overall costs.⁴⁴

For these reasons, econometricians have been unable to detect or measure the effects of interchange fee regulations on the prices that consumers pay for merchant goods and services. Even those who endorse the theory that consumers will eventually enjoy substantial benefits of pass-through savings from merchants, such as Professor Górka, typically conclude that the actual pass-through rate from merchants to consumers is "difficult, if not impossible," to measure.⁴⁵ Even Mukharlyamov and Sarin (2022), which found in one analysis that "gas is, in fact, cheaper in ZIP codes with a greater fraction of transactions paid with debit cards issued by large banks [and this] result is consistent with (some) retailers passing through (some) savings to consumers," concluded that the extremely small weight of interchange fees relative to other factors "render the quantification of merchant's pass-through with statistical significance 'virtually impossible.'"⁴⁶

In summary, if merchants saved money because of the Durbin Amendment, the savings would have been distributed unevenly; and any pass-through savings to consumers suggested in economic theory has been impossible to confirm or measure. There is no generally accepted way to estimate the Durbin Amendment's effect on the prices consumers pay for merchant goods and services.⁴⁷

⁴³ Hayashi (2013) at p. 102.

⁴⁴ See, e.g., Górka at Section 2.2.4 ("It is equally difficult to prove econometrically that the pass-through takes place or it does not, because interchange fees are only one price determinant and, compared to other price determinants, their price impact is rather low.") See also, CRS (2017) at p. 8-9 ("A change in one factor may or may not offset the importance of other factors when firms set prices, and the various importance of a factor relative to other factors may change over time.")

⁴⁵ Górka at Section 2.2.2.

⁴⁶ Mukharlyamov and Sarin (2022) at p. 4-5 (also noting "total Durbin savings for gas merchants amount to less than 0.07% of total sales."). See also, Id. at p. 2 ("Merchants do experience a reduction in interchange fees on payments with debit cards. However, since these savings appear negligible relative to combined sales including credit-card and cash transactions, estimating with statistical significance the extent of [merchant] passthrough is virtually impossible."

⁴⁷ One analysis (Shapiro 2013) tried to estimate effects on merchants' prices in reference to a study of manufacturer trade promotions. That study (Nijs 2009-2010) examined incentives that manufacturers of consumer packaged goods use "to influence retailer and wholesaler prices, and thus consumer demand." It found "mean pass-through elasticities [of] 0.71, 0.59, and 0.41, for the wholesaler, retailer, and total channel, respectively" but the authors cautioned that because "large variances in the estimates of pass-through elasticities are observed at all channel levels, we argue that average values are of limited tactical value to manufacturers." It is not clear why Shapiro (2013) chose to use an average value from Nijs (2009-2010) or why it chose only the average from one sales channel; and more fundamentally, it is not clear why it assumed that merchants generally (or their acquirers) would pass through interchange savings on all point-of-sale transactions at the same rate that some grocery and drug stores passed through targeted incentives that consumer goods manufacturers offered in an effort to reduce retail prices of those goods and boost sales.

If Proposed Reductions in Debit Interchange Fee Caps Are Finalized, Consumers Will Pay \$1.3 Billion or More Annually in Higher Bank Account Costs

As noted above, the Federal Reserve Board proposed to revise Regulation II to reduce the debit interchange cap under the Durbin Amendment in a way that would reduce interchange fee income by an average of 5.4 cents per covered transaction. (See Table 1.)

Research on the effects of the original Durbin Amendment strongly suggests the following scenario, if the current proposal to reduce the debit interchange cap is finalized:

- Bank debit interchange revenue reduces by \$3 billion annually. The proposal to reduce the average transaction fee by 5.4 cents affects 56.19 billion covered transactions.⁴⁸
- Consumers pay an extra \$1.3 billion to \$2 billion annually in higher bank account fees. Banks recover 42 percent of lost debit interchange revenue through increased maintenance fees; other estimated service fee increases bring the total offset to between 50 and 65 percent.
- Consumers find it harder to avoid bank account maintenance fees, as "free" accounts become less common and the average minimum deposit to avoid monthly fees increases.
- Lower-income consumers are disproportionately affected because their account balances are likely to be below the minimum needed to avoid monthly fees.
- Consumers at smaller, exempt banks would also expect to pay higher costs as their banks follow larger competitors to raise prices in some markets, just as they did post-Durbin.
- Merchants will save on debit processing costs, on average. But the benefits are likely to be unevenly distributed and there is disagreement about net savings (due, for example, to possible shifts away from debit cards toward more costly forms of payment). If merchants experience cost savings, theory suggests they will pass a part of it through to consumers as lower prices, depending on how competitive their markets are; but economists agree that it will not be possible to measure this.

⁴⁸ Federal Reserve Board data (2021), at Table 3: <u>https://www.federalreserve.gov/paymentsystems/regii-data-collections.htm</u>.

Conclusion

When judging the effects of the Durbin Amendment and any future reductions in its debit card interchange cap, it must be concluded that bank interchange revenue drops and correspondingly, consumers experience measurably higher costs and more restrictive terms on their bank accounts; and even though the average cost of debit card processing falls for merchants, any corresponding reduction in the cost of consumer goods and services is debatable and ultimately not measurable.

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