

EXHIBIT A

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS**

ILLINOIS BANKERS ASSOCIATION,
AMERICAN BANKERS ASSOCIATION,
AMERICA'S CREDIT UNIONS, and
ILLINOIS CREDIT UNION LEAGUE,

Plaintiffs,

v.

KWAME RAOUL, in his official capacity as
Illinois Attorney General,

Defendant.

Case No. 1:24-cv-07307

EXPERT REPORT OF ANTHONY (TONY) HAYES

MARCH 17, 2025

TABLE OF CONTENTS

I.	Introduction.....	1
A.	Qualifications.....	1
B.	Case Background and Assignment	2
II.	Summary of Opinions.....	4
III.	Background on the Illinois Interchange Fee Prohibition Act (IFPA).....	5
A.	The Illinois Interchange Fee Prohibition Act.....	5
B.	Current Status of the Illinois Interchange Fee Prohibition Act.....	6
IV.	The Payment Card Ecosystem and the Role of Interchange in Payment Card Transactions	7
A.	Overview of the Payment Card Ecosystem	7
B.	The Role of Interchange Fees	13
V.	If the Issuer Associated with a Transaction Is Exempt from the IFPA, All Entities Involved with that Transaction Also Need Relief from the IFPA (for that Transaction)	15
A.	Interchange is a Pass-Through Fee from Acquirers to Issuers, with Networks Calculating the Interchange Fee and Performing Settlement.....	16
B.	If Certain Issuers are Exempt from the IFPA, All Entities Involved with the Same Transaction Also Need Relief from the IFPA.....	18
	Appendix A: Curriculum Vitae.....	A-1
	Appendix B: Previous Publications.....	B-1
	Appendix C: Prior Testimony.....	C-1
	Appendix D: Materials Considered.....	D-1

I. INTRODUCTION

A. Qualifications

1. I have worked as a management consultant serving the payments industry for approximately 30 years. I founded Banking & Payments Group LLC (“BPG”), a management consulting firm dedicated to serving the banking and payments industry, in 2023. BPG advises clients with respect to payment economics, go-to-market strategies, and other strategic matters. Prior to launching BPG, I was a partner at Oliver Wyman, a large management consulting firm, where I led the firm’s global payments team for more than 14 years. At Oliver Wyman, I was also the Co-head of the Retail & Business Banking practice in the Americas. I began my career with Dove Consulting, a strategy and organization effectiveness consulting firm. At Dove Consulting, I rose to managing director leading the firm’s financial services practice, which had particular expertise in electronic payments and retail banking.

2. Throughout my career in the payments industry, I have provided consulting services to clients throughout the payments industry. I have worked with a majority of the largest banks, a majority of the largest merchant processors, and each of the largest payment networks in the U.S. I have experience across payment types, including credit cards, debit cards, and prepaid cards, the automated clearing house (“ACH”), cash, checks, mobile wallets, and real-time payments.

3. I have specific expertise related to the economics of payment transactions, both for payment cards and for non-card payments. I have worked on multiple projects related to the economics of payment card transactions—including specifically with respect to the merchant discount rate, network fees, and interchange fees—for clients across the value chain including issuers, acquirers, and networks.

4. Beyond my client work, I regularly perform payments research and analysis, publish research reports and articles, and speak at industry conferences. Recent such initiatives include:

- (1) Conducting primary research to benchmark financial institutions’ (“FIs”) payments metrics, including collecting performance data from a broad sample of banks and credit unions. For the 2024 study we collected and analyzed data from 42 FIs; the

2025 study is currently underway (I have led this industry research almost every year since 2005).

- (2) Authoring various point-of-view articles, such as “The Slow Road to Faster Payments” and “Co-branded Credit Cards: the Allure and the Reality.” One of my longer research reports was on the regulation of the payments industry; this research report was shared with the Federal Reserve’s Federal Advisory Council (an advisory group comprising a bank chief executive officer (“CEO”) or other senior representative from each of the Federal Reserve’s 12 districts).
- (3) Speaking, or being asked to moderate panel discussions, at various high-profile industry conferences such as Fintech Meetup, Money 20/20 and Nacha’s annual payments conference.

5. Additionally, I was asked to serve on the Federal Reserve’s faster payments task force and the Federal Reserve’s Consumer Payments Research Center’s advisory board.

6. I graduated with a bachelor’s and a master’s degree from Oxford University, where I read Philosophy, Politics and Economics (“PPE”) and graduated with First Class Honors. I subsequently taught economics at the University of Warsaw in Poland before moving to the United States. Attached as **Appendix A** is a true and correct copy of my current curriculum vitae (“CV”). Attached as **Appendix B** is a list of my publications. Attached as **Appendix C** is the case caption for the one case in which I have provided deposition or trial testimony within the past four years.

B. Case Background and Assignment

7. Plaintiffs—the Illinois Bankers Association, American Bankers Association, America’s Credit Unions, and Illinois Credit Union League (“Plaintiffs”)—bring this action against the Illinois Attorney General in connection with the Illinois Interchange Fee Prohibition Act (“IFPA”). The IFPA, which is scheduled to become effective on July 1, 2025, prohibits payment card networks, issuers and acquirers, and processors from charging or receiving interchange on the portion of a credit or debit card transaction that is attributable to Illinois tax

and/or gratuity.¹ Plaintiffs seek a permanent injunction preventing the Illinois Attorney General from enforcing the IFPA against any participants in the payment card ecosystem (including payment card networks, issuers, acquirers, and processors) for certain transactions; I understand that Plaintiffs also seek a judgment declaring the IFPA to be preempted, unconstitutional, and invalid.²

8. I understand that the Court has granted Plaintiffs' motion for preliminary injunction with respect to national banks, federal savings associations, and out-of-state-chartered banks, but has denied the motion with respect to other participants in the payment card ecosystem.³ I understand that Plaintiffs seek permanent injunctive relief from IFPA for other entities they contend benefit from preemption (such as credit unions). Plaintiffs also seek permanent injunctive relief for other entities in the payment card ecosystem (such as payment card networks and processors).

9. I have been asked by counsel for Plaintiffs ("Counsel") to draw upon my knowledge of the payments industry to provide an opinion as to whether, in order to give effect to injunctive relief against enforcement of the IFPA granted to certain financial institutions, other parties in the payment card ecosystem also need relief from the requirements of the IFPA, *at least for purposes of transactions involving those institutions*.

10. To perform this assignment, I first provide an overview of the payment card ecosystem and of the role of interchange in payment card transactions to contextualize my opinions. I then explain how interchange operates within the payment card ecosystem, and address the implications of interchange being a transfer from acquirers to issuers, calculated and assessed by networks, for how the IFPA is implemented.

¹ Illinois Interchange Fee Prohibition Act, 815 ILCS 151. The IFPA also imposes data usage limitations regarding the data associated with electronic payment transactions.

² Complaint for Declaratory and Injunctive Relief, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court Northern District of Illinois, August 15, 2024.

³ Memorandum Opinion and Order, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, December 20, 2024, p. 37; Opinion and Order, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, February 6, 2025, p. 8.

11. In preparing this report, I have relied on my education, knowledge, and experience in the payments industry. In addition, I have reviewed certain publicly available documents and data. A list of the materials that I have considered in preparing my report is attached as **Appendix D**.

12. Employees of Analysis Group, Inc. (“AG”), an economics, finance and strategy consulting firm, working under my direction and guidance, assisted me with this assignment. I am being compensated at the rate of \$1,450 per hour for my independent review and analysis provided in this case. I also receive compensation based on the professional fees of AG. This compensation is not contingent on my opinions or the outcome of this litigation.

II. SUMMARY OF OPINIONS

13. Based on my professional experience and review and analysis, I have reached the opinions below.

14. If one financial institution associated with a transaction has injunctive relief from the IFPA, then, by extension, all entities involved in the processing of the same transaction also need relief from the requirements of the IFPA, *at least for purposes of that transaction*. Interchange flows from one side of a network (the acquiring side) to the other side of a network (the issuing side) on a dollar-for-dollar basis. The network calculates the interchange fee at the transaction level; the acquirer or processor charges its merchant customer a merchant discount fee (which funds the interchange fee) and issuers receive the interchange fee, with the network acting as an intermediary for settlement purposes.⁴ For the issuer to receive interchange, intermediaries in the payment transaction—including networks, acquirers, and processors—must perform their role in the end-to-end flow of payment and settlement information between the merchant and the issuer.

15. Given these relationships, and as I further describe in more detail in Section V, in order for an issuer that has injunctive relief from the IFPA (which I refer to as “exempt”⁵) to be

⁴ See Section V.A for a fuller description of how payment transactions are processed.

⁵ As I explain further in paragraph 18, for ease of reference, I use the term “exempt” to refer to a financial institution that has been granted preliminary injunctive relief from the IFPA and is therefore currently exempt from the interchange restrictions imposed by the statute.

able to receive the interchange fee to which it is entitled—the interchange fee based on the full amount of the transaction—the other entities involved with that transaction (including the network, acquirer, and processor) must be able to execute on their role in the collection and transfer of the interchange on the full amount of the transaction, as well. Conversely, if other entities are only allowed to execute on their role in the collection and transfer of interchange on the transaction amount that does not include Illinois tax and gratuity, the exempt issuer will not be able to receive the interchange fee to which it is entitled under the Court’s ruling.

16. My work on this matter is ongoing, and I may review additional materials or conduct further analysis. I reserve the right to refine or supplement my opinions as appropriate.

III. BACKGROUND ON THE ILLINOIS INTERCHANGE FEE PROHIBITION ACT (IFPA)

A. The Illinois Interchange Fee Prohibition Act

17. The IFPA was enacted in June 2024 and is scheduled to become effective July 1, 2025.⁶ I understand that the IFPA prohibits payment card networks, issuers, acquirers, and processors from charging or receiving interchange on the portion of a credit or debit card⁷ transaction that is attributable to Illinois tax and/or gratuity, provided that the merchant informs the acquirer (or its designee) of the tax or gratuity amount as part of the authorization or settlement process. If the merchant does not notify the acquirer of the tax and/or gratuity amount at the time of the transaction, the merchant has up to 180 days to submit documentation regarding the tax and/or gratuity amount to the acquirer and is entitled to receive a credit from the issuer within 30 days of submission. The IFPA further specifies that payment card networks, issuers, acquirers, and processors cannot seek to circumvent the effect of the IFPA by increasing the rate or amount of the fees applicable to the portion of the transaction amount that is not a tax

⁶ Illinois Interchange Fee Prohibition Act, 815 ILCS 151. I am not offering any opinion on the interpretation of the IFPA or the transactions subject to the IFPA.

⁷ The IFPA includes general purpose prepaid cards within the definition of debit cards.

or gratuity. Any payment card network, issuer, acquirer, or processor that violates the IFPA is subject to a civil penalty of \$1,000 per electronic payment transaction.⁸

B. Current Status of the Illinois Interchange Fee Prohibition Act

18. I understand that the Court has ruled that the Illinois Attorney General is preliminarily enjoined from enforcing the IFPA with respect to *certain* entities in the payment card ecosystem (national banks, federal savings associations, and out-of-state-chartered banks) while the Court considers the Plaintiffs’ challenge to the IFPA.⁹ For ease of reference in my report, I refer to these entities as “exempt”; I recognize however that this “exemption” from the requirements is in the form of preliminary injunctive relief and is not final. In their role as issuers, for example, exempt entities will continue to be entitled to receive interchange on the full transaction amount, including Illinois tax and gratuity, pending the Court’s decision regarding the validity of the IFPA.¹⁰

19. I further understand that absent further injunctive relief by the Court, the IFPA is scheduled to take effect for *other* non-exempt entities in the payment card ecosystem, including certain financial institutions, payment card networks, and processors as of July 1, 2025. Therefore, as of July 1, 2025, those issuers that have not been granted injunctive relief from the requirements of the IFPA would be prohibited from charging or receiving interchange on the portion of payment card transactions attributable to Illinois tax and/or gratuity (unless the Court subsequently grants an injunction covering them). In addition, other parties that are integral to processing the transaction and that are providing services to issuers and acquirers, such as networks and processors, would be subject to the requirements of the IFPA.

⁸ Illinois Interchange Fee Prohibition Act, 815 ILCS 151. In addition, the IFPA imposes limits on the ability of the entities involved in an electronic payment transaction—other than the merchant—to transmit or use the data from the electronic payment transaction.

⁹ Memorandum Opinion and Order, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, December 20, 2024, p. 37; Opinion and Order, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, February 6, 2025, p. 8.

¹⁰ In this report, I will focus on what relief from IFPA must be granted to participants in the payment card ecosystem in order for exempt *issuers* to receive interchange fees to which they are entitled. I recognize that some exempt financial institutions are also *acquirers*, but I focus on giving effect to relief for exempt issuers because issuers are the recipients of interchange fees.

IV. THE PAYMENT CARD ECOSYSTEM AND THE ROLE OF INTERCHANGE IN PAYMENT CARD TRANSACTIONS

20. In this section, I provide an overview of payment card systems and the role that interchange plays in payment card transactions to contextualize my discussion of the challenges associated with implementing the IFPA.

A. Overview of the Payment Card Ecosystem

21. Payment cards play a crucial role in facilitating the movement of money between consumers, businesses, and financial institutions.

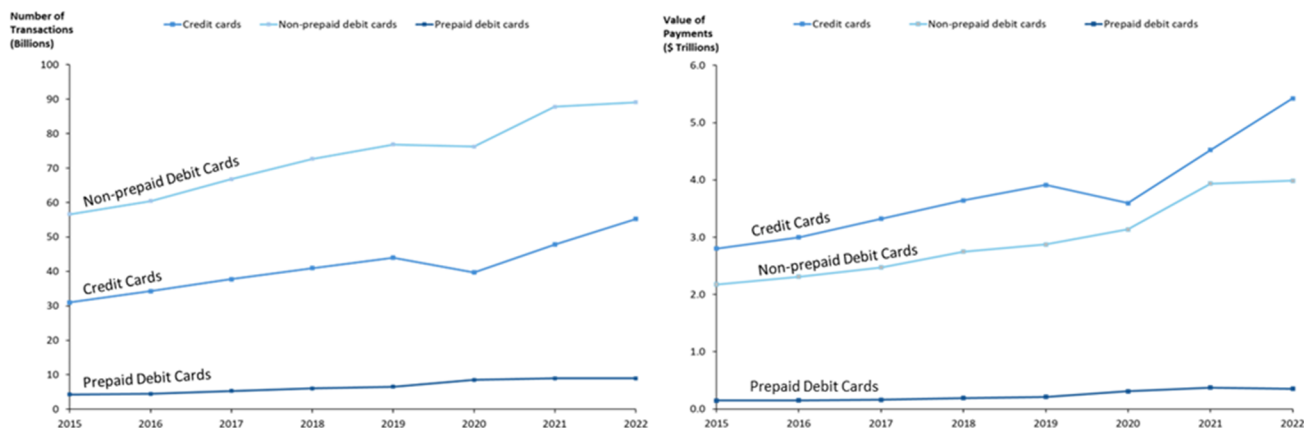
22. Payment cards—credit, debit, and prepaid cards—are now ubiquitous in the United States. Consumers appreciate the convenience, security and benefits offered by electronic payment cards, relative to alternative forms of payments. In recent years, the use of cash and checks has steadily declined as consumers have migrated their spending habits to credit, debit, and prepaid cards. In 2023, 99 percent of U.S. consumers had a credit card and/or a debit card and/or a prepaid card.¹¹ These cards are used for a wide range of activities, including buying goods in stores; paying in full service or quick-service restaurants; shopping online; paying bills; transferring money to other accounts; ordering through different apps (*e.g.*, Uber, DoorDash); serving as the card-on-file for gyms, streaming services, toll road charges, and other services; and countless other payment needs.

23. Billions of purchase transactions accounting for trillions of dollars in spend are processed on general purpose payment cards each year, as shown in the charts below (**Figures 1A and 1B**). In 2022, the most recent year for which the Federal Reserve has released data, there were 89.1 billion debit card transactions worth \$4.0 trillion, 55.3 billion credit card transactions worth \$5.4 trillion, and 9.0 billion prepaid card transactions worth \$0.4 trillion.¹²

¹¹ “2023 Survey and Diary of Consumer Payment Choice: Summary Results,” *Federal Reserve Bank of Atlanta*, 2024, available at https://www.atlantafed.org/-/media/documents/banking/consumer-payments/survey-diary-consumer-payment-choice/2023/sdcpc_2023_report.pdf, p. 7.

¹² “National Payment Volumes, Detailed Data, NPIPS (CY 2021 and 2022),” *Federal Reserve*, available at https://www.federalreserve.gov/paymentsystems/files/frps_2015-22_npips_data.xls.

Figures 1A and 1B¹³
Number of Transactions and Value of Spend on General Purpose Payment Cards



24. The payment card ecosystem underlying these transactions is a complex set of stakeholders, technologies, processes, and regulations that facilitate secure and efficient transactions. When a consumer uses a card (credit, debit, prepaid) to pay a business, whether it is a local restaurant, a large online commerce company, or a utility collecting on a bill, there are typically several parties involved in the transaction including a merchant, an acquirer (merchant acquirer or acquiring bank), an issuer (issuing bank), the cardholder (consumer), and a payment card network.

- **Merchants:** Merchants are businesses that sell goods and/or services to consumers and/or businesses. Merchants contract with an acquirer or merchant processor to accept card payments.
- **Acquirers:** Acquirers are financial institutions that “acquire” merchants (and their associated payment transactions) as their customers. Only financial institutions can be acquirers. Acquirers set the price that each merchant pays for card acceptance and underwrite the satisfactory delivery of merchant goods and services.
 - **Merchant Processors:** Closely related to the term “acquirer” or “merchant acquirer,” “merchant processor” is often synonymously used; however, merchant processor refers to the distinct functions of providing transaction processing and settlement. Large merchant processors will often have their own go-to-market sales teams. Merchant processing can be provided by a merchant acquirer or can be provided by a separate entity

¹³ “National Payment Volumes, Detailed Data, NPIPS (CY 2021 and 2022),” *Federal Reserve*, available at https://www.federalreserve.gov/paymentsystems/files/frps_2015-22_npips_data.xls.

that is not a bank but partners with acquiring banks (*e.g.*, Global Payments, Paysafe and Worldpay).

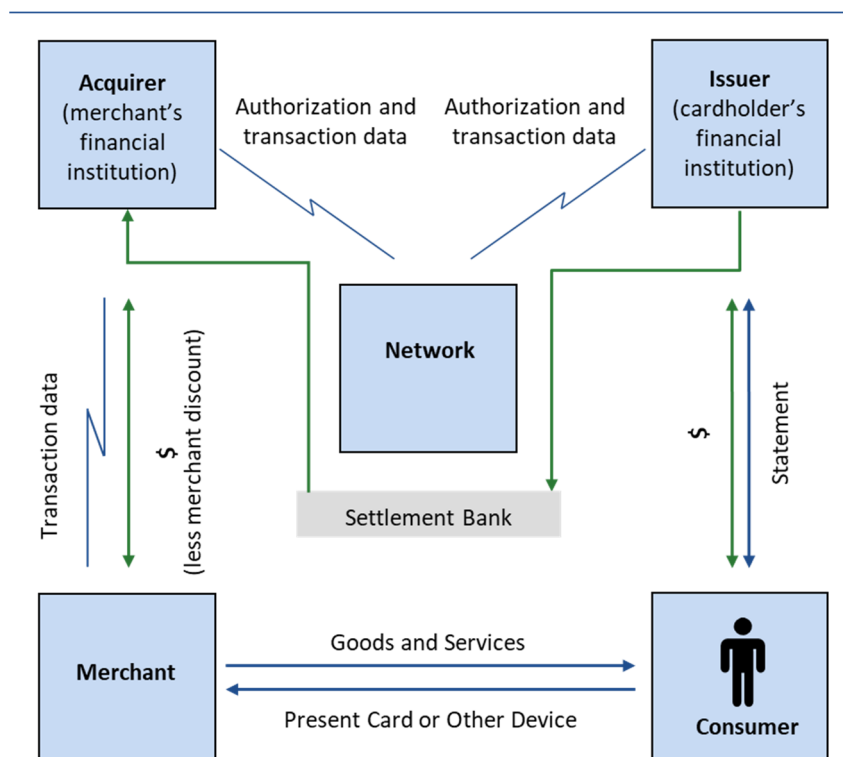
- **Issuers:** Issuers are financial institutions that “issue” payment cards to consumers, small businesses, and other commercial/governmental entities. Only financial institutions can be issuers. Issuers are responsible for cardholder functions such as assessing cardholder risk (*e.g.*, know-your-customer (“KYC”) and underwriting), as well as transaction processing and cardholder servicing.
 - **Issuer Processors:** Smaller financial institutions often rely on separate issuer processors (*e.g.*, FIS, Fiserv, and Jack Henry) to facilitate transaction processing.
- **Cardholders/Consumers:** Cardholders/consumers are the end users who initiate payments to merchants (*e.g.*, using their credit or debit cards) through funds provided by their issuing bank. Cardholders/consumers are customers of both merchants and issuers.
- **Payment Card Networks:** Payment card networks connect acquirers and issuers, enabling electronic payment authorization, clearing, and settlement.¹⁴ The payment card networks are responsible for setting the rules that govern the payment card transactions on those networks, including many aspects of the flow of funds.

25. Collectively, these entities, and the interplay of these entities, are the payment card ecosystem.¹⁵ **Figure 2** below depicts a generic schematic of the above parties and the structure of a standard card payment model.

¹⁴ While many processors have technical connections to payment card networks to facilitate transaction processing, a financial institution must be the acquirer and the issuer for each transaction.

¹⁵ Every transaction will include the stakeholders shown in Figure 2 and in many cases a transaction will also be handled by additional providers. For completeness, I therefore use the term “all entities involved with a transaction.”

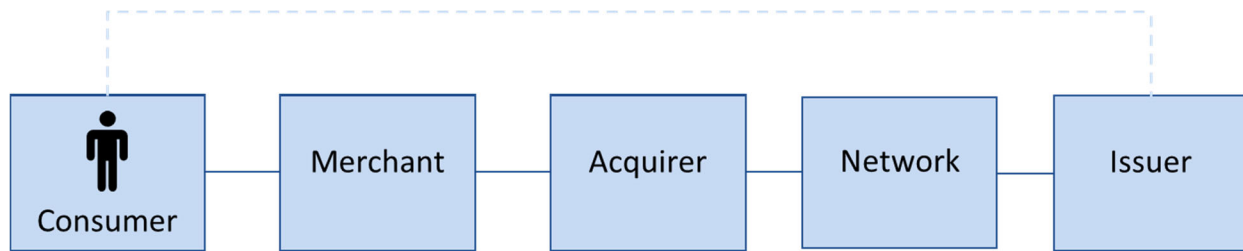
Figure 2
Card Payment Model¹⁶



26. **Figure 3** simplifies the diagram above into a linear view (as is commonly done within the industry). Every transaction starts on the left, usually with the consumer inserting or tapping their card at a point-of-sale (“POS”) terminal or entering their card information online. The payment details are sent from the merchant to the merchant acquirer/processor. The acquirer routes the transaction to the payment network, which in turn routes the transaction to the issuer and requests authorization of the transaction. If the issuer approves the transaction, this authorization is relayed back through the network to the acquirer and to the merchant’s POS system, and the merchant completes the transaction. The entire back-and-forth for a transaction is typically completed within a matter of a few seconds.

¹⁶ This industry structure is commonly described as the “four-party model.” Mastercard and Visa operate as four-party networks since they solely facilitate connectivity between acquirers and issuers. American Express and Discover operate as both three-party and four-party networks. In many cases, American Express or Discover is both the card issuer and the acquirer on their transactions; in this scenario, the acquirer and issuer are one-party, hence the entire model is referred to as a three-party system (merchant, acquirer/network/issuer, cardholder). Three-party systems charge merchant discount fees without the explicit interchange fees charged in the four-party model, but the steps and the flow of funds are comparable across both models.

Figure 3
Linear Depiction of the Card Payment Model



27. The payments industry comprises a multifaceted group of actors. There are millions of merchants that accept payment cards, all competing to attract, retain and expand their relationship with consumers. These merchants include large retailers (*e.g.*, Target, Kroger), large quick-service restaurants (*e.g.*, Wendy’s), gas stations (*e.g.*, Shell), as well as numerous smaller “mom-and-pop” stores. Additionally, cards have enabled the growth of online commerce and various “digital economy” companies.¹⁷

28. There are hundreds of merchant processors and acquirers, all competing to win the payment processing business of merchants. These organizations include large banks (*e.g.*, Bank of America, U.S. Bank) and large processors (*e.g.*, Fiserv, Worldpay), as well as numerous smaller processors. Companies like PayPal, Stripe and Square serve the payment acceptance needs of a growing number of merchants, while specialists such as Toast (a company with solutions aimed at restaurants and similar venues) operate as value-added intermediaries.¹⁸

29. There are approximately 9,000 financial institutions vying to serve consumers’ banking needs and issuing payment cards.¹⁹ These financial institutions range from the largest banks in the country providing a wide range of credit, debit, and prepaid cards, to local

¹⁷ Various other kinds of organizations, such as food trucks and Girl Scout troops selling cookies, now accept cards thanks to the introduction of modern smartphone-based payment terminals.

¹⁸ Toast is referred to as a Payment Facilitator (commonly shortened to PayFac). PayFacs, and other intermediaries in the payment card ecosystem such as Independent Sales Organization (“ISO”), Independent Software Vendor (“ISV”), Value-Added Reseller (“VAR”), *etc.*, represent entities involved with transaction processing.

¹⁹ As of the fourth quarter of 2024, there were approximately 4,500 FDIC-insured institutions and 4,500 federally insured credit unions in the U.S. *See*, “Quarterly Credit Union Data Summary,” *National Credit Union Administration (NCUA)*, available at <https://ncua.gov/files/publications/analysis/quarterly-data-summary-2024-Q4.pdf>; “Statistics at a Glance,” *Federal Deposit Insurance Corporation (FDIC)*, December 31, 2024, available at <https://www.fdic.gov/quarterly-banking-profile/fdic-latest-industry-trends-december-2024-pdf>.

community banks and credit unions offering debit cards to their checking account customers, to specialist prepaid card companies that cater to underbanked consumers or other specific customer segments.

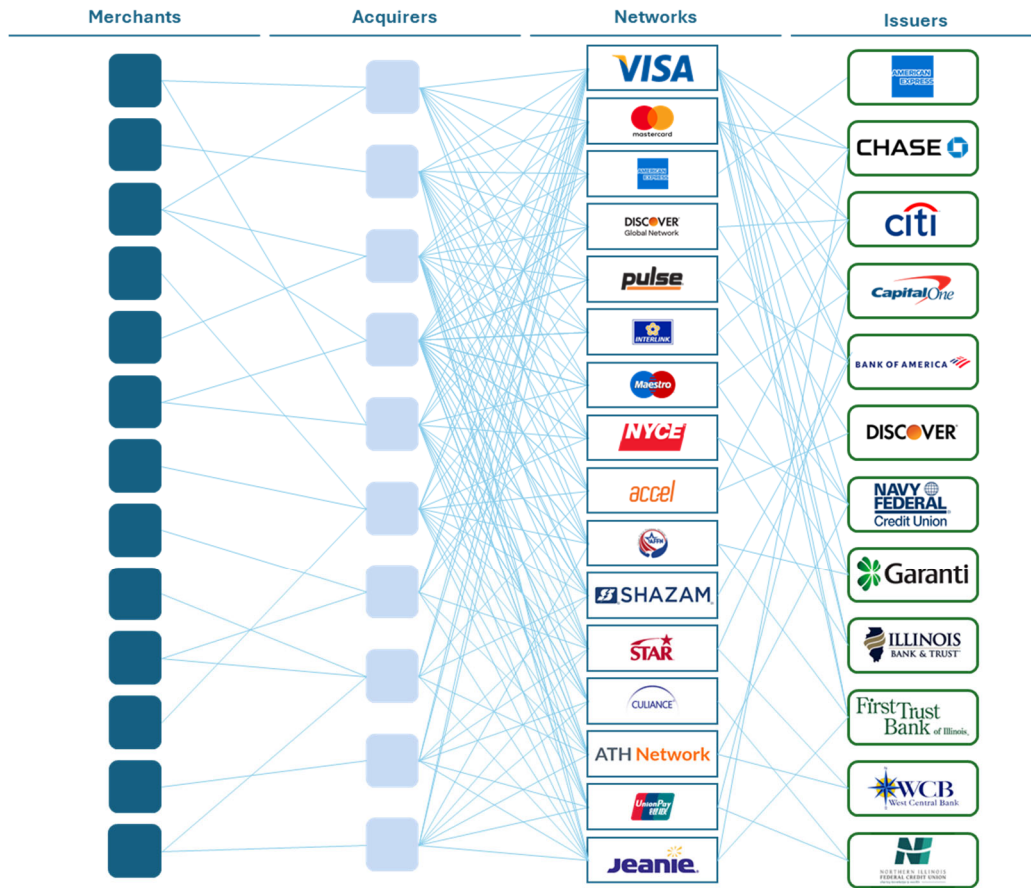
30. Connecting these two sides—acquirers and issuers—are payment card networks. Networks connect acquirers and issuers in multiple ways, including by switching transactions and other information, effectuating settlement, and providing a legal framework through network rules. Over a dozen payment card networks compete to win the allegiance and transaction routing of both acquirers and issuers. Four networks (American Express, Discover, Mastercard, and Visa) settle almost all credit card transactions in the U.S. With respect to debit cards, these same networks (except for American Express) compete for debit card routing alongside several debit-only networks, including Accel, NYCE, Shazam, and STAR. The Federal Reserve tracks data for 15 separate debit networks operating in the U.S.²⁰

31. **Figure 4** provides a simplified, illustrative view of the numerous entities across the payment card ecosystem. There are hundreds of acquirers and processors, thousands of issuers, and millions of merchants, making the real-world picture far more complex than can be shown in a graphic.

²⁰ “Regulation II (Debit Card Interchange Fees and Routing): Average Debit Card Interchange Fee by Payment Card Network,” *Board of Governors of the Federal Reserve System*, available at <https://www.federalreserve.gov/paymentsystems/regii-average-interchange-fee.htm>.

Figure 4
Parties in the Payment Card Ecosystem²¹

Lines and Logos are Illustrative



B. The Role of Interchange Fees

32. Payment card networks sit at the heart of the payment card ecosystem, establishing rules to balance the often-competing interests of network participants. One of the roles that networks play is to set the default interchange rates that apply to transactions over their networks.²² Interchange is the economic foundation of the payment card industry. Interchange is a transfer payment from the acquirer to the issuer for every transaction, with the network both

²¹ As I explained above, there may be additional entities that might be involved in performing certain of the technical and operational functions involved in processing transactions on both the issuing and acquiring sides of the network that are not included in this figure.

²² Although this report refers to payment card networks as setting interchange rates, this is shorthand. In fact, payment card networks establish default interchange rates, which apply in the absence of separately negotiated rates.

establishing the interchange rate for a particular transaction and acting as the intermediary to facilitate the flow of the interchange fee from the acquirer to the issuer.²³

33. Networks develop fee schedules that establish the applicable interchange rate for transactions that utilize the network, based on various factors such as the card type and merchant type. Interchange fees are a function of various considerations, including the card product (credit, debit, prepaid), card type (premium rewards card vs. standard, *etc.*), issuer (financial institutions covered by the Durbin Amendment vs. those that are exempt),²⁴ merchant category (grocery store, restaurant, *etc.*), and use method (card-present vs. card-not-present), among other considerations. Interchange fees vary across card brands, card products, card types, and authorization methods. Interchange fees typically comprise both a fixed fee and a percentage of the transaction amount, where the transaction amount represents the entire amount of a given transaction (including tax and gratuity, if any).

34. While networks establish the appropriate interchange fee for each transaction, based on the transaction's characteristics, the acquirer collects the merchant discount fee (which ultimately funds the interchange fee). The interchange fee then flows from the acquirer to the issuer through the networks' settlement mechanisms.

35. Issuers use the interchange that they receive on credit and debit transactions to pay for the operating expenses associated with their card programs (including processing transactions, monitoring for fraud, administering accounts, funding customer service and so forth), and to fund services and benefits that they offer cardholders.

36. For credit cards, interchange is an important source of funding for the rewards programs that many issuers offer cardholders, among other things. For example, when a credit

²³ As I explained earlier, the merchant discount fee that the acquirer collects from a merchant on a transaction is typically used by the acquirer to fund the interchange fee that the acquirer pays to the issuer. The other participants in the payment card system also receive compensation for the role that they play and the services that they provide; for simplicity, I focus this discussion on interchange.

²⁴ Enacted in 2010 as part of the Dodd-Frank Wall Street Reform and Consumer Protection Act as proposed by Senator Richard J. Durbin, the Durbin Amendment capped interchange fees at \$0.21 per transaction plus 0.05 percent of the transaction value (plus an additional \$0.01 for issuers with adequate fraud prevention capabilities) on debit card transactions for financial institutions with at least \$10 billion in assets. Smaller issuers (issuers with less than \$10 billion in assets) are exempt from this interchange cap. "Federal Reserve Issues a Final Rule Establishing Standards for Debit Card Interchange Fees and Prohibiting Network Exclusivity Arrangements and Routing Restrictions," *Federal Reserve*, June 29, 2011, available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20110629a.htm>.

card issuer provides 1 percent cash back rewards on all credit card spending or 2 airline miles for all purchases in certain categories, interchange fees received on these transactions generate the revenue needed to pay for these cardholder benefits.

37. For debit cards, financial institutions use interchange revenue to support the provision of checking accounts, among other things. Smaller financial institutions tend to be more reliant on debit interchange revenue than larger banks. To help preserve this income stream, when Congress passed the Durbin Amendment regulating the interchange that issuers could receive on debit transactions, the law exempted financial institutions with less than \$10 billion in assets from this interchange cap.

38. While the default interchange rates are set by networks, the networks themselves are not compensated based on interchange. As a practical matter, networks typically charge a fee to both the acquirer and to the issuer for transactions. These fees are the primary source of networks' revenue.

39. Acquirers generally pay the two network-set fees discussed above on transactions: interchange fees (paid to the issuer) and network fees (paid to the network). When setting the merchant discount rate for merchants, acquirers typically set rates that allow them to cover these interchange fees and network fees as well as to generate a margin. Acquirers typically use one of two different pricing models. In the first model, called "cost plus" or "IC+," acquirers charge merchants the interchange fee, the network fee, and their own margin on an itemized basis. In the second model, called "all in" or "blended" pricing, the acquirer charges the merchant a fixed percentage to accept card payments.²⁵

V. IF THE ISSUER ASSOCIATED WITH A TRANSACTION IS EXEMPT FROM THE IFPA, ALL ENTITIES INVOLVED WITH THAT TRANSACTION ALSO NEED RELIEF FROM THE IFPA (FOR THAT TRANSACTION)

40. As I explain in this section, if the issuer associated with a transaction is exempt from the IFPA with respect to a transaction, then—to give effect to the issuer's exemption—

²⁵ With the first model, if the interchange fee declines as a result of the IFPA, the total fee that acquirers charge to their merchant customers will also decline; by contrast, with the second pricing model, if the interchange fee declines as a result of the IFPA, the total fee that acquirers charge to their merchant customers will not necessarily be directly affected.

other participants in the payment card ecosystem also need relief from the requirements of the IFPA *for purposes of that transaction*.

A. Interchange is a Pass-Through Fee from Acquirers to Issuers, with Networks Calculating the Interchange Fee and Performing Settlement

41. The IFPA defines an interchange fee as “a fee established, charged, or received by a payment card network for the purpose of compensating the issuer for its involvement in an electronic payment transaction.”²⁶

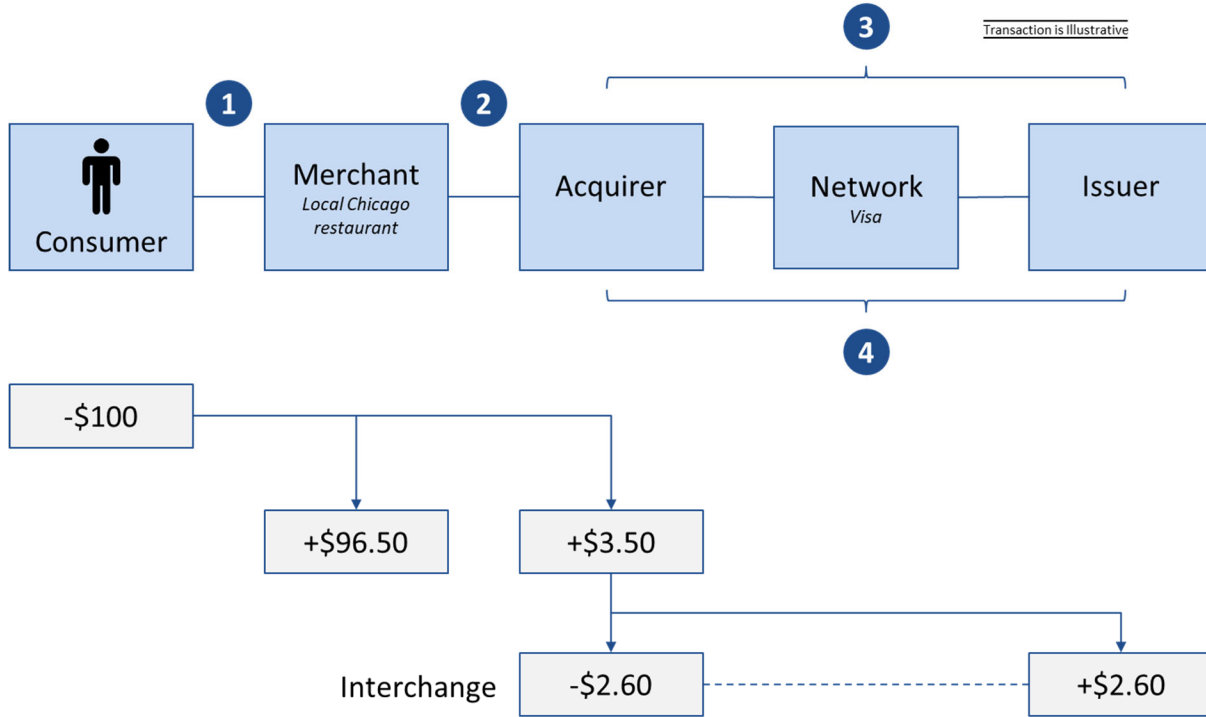
42. As I explained in Section IV above, networks set the interchange fee at the transaction level based on the characteristics of a specific transaction. Interchange is a transfer payment, transferred from one side of the transaction (acquirers) to the other side of the same transaction (issuers).

43. The acquirer or merchant processor charges its merchant customer a merchant discount fee for its services in processing a transaction (including obtaining authorization for the transaction and collecting funds from the issuing bank to pay the merchant for goods and services sold to the cardholder), the network calculates the amounts that are owed by issuers to acquirers to settle card transactions (less the interchange fees due to the issuer from the acquirer) on a net settlement basis, and financial institutions transfer funds to cover amounts owed for card receipts for the processing day as directed by the network. The acquirer then pays the merchant for value of the card transactions processed by the acquirer, less its merchant discount fee. The merchant discount fee the acquirer receives on a transaction would typically fund, among other things, the interchange fee owed by the acquirer to the issuer for that transaction. As a result of this process (established by the network), the interchange fee (as calculated by the network) passes from the acquirer to the issuer.

44. To show this concept graphically, consider the structure of a typical electronic payment transaction as shown in **Figure 5**, followed by a discussion of the key steps.

²⁶ Illinois Interchange Fee Prohibition Act, 815 ILCS 151.

Figure 5²⁷
Interchange Flow in an Illustrative Transaction



45. **Step 1:** A consumer visits a merchant and makes a purchase. In this example, suppose the consumer is paying for dinner at a local Chicago restaurant and the dinner bill is for \$100. The consumer chooses to pay with a Visa-branded credit card (and their card issuer has previously entered into an agreement to issue cards on the Visa network). All of these variables—the merchant category (restaurant), card type (credit card), the network (Visa)—are used to determine the applicable interchange rate. Visa has established an interchange rate of 2.60 percent on U.S. restaurant purchases performed by credit card (where the card is present).²⁸

46. **Step 2:** The purchase transaction is transmitted. Every merchant that wants to accept payment cards needs to enter into a contract with an acquirer or with a processor (that contracts with an acquirer). These organizations “acquire” the transaction and relay the message

²⁷ For simplicity, I have omitted Visa’s network fees from this description.

²⁸ “Visa USA Interchange Reimbursement Fees: Visa Supplemental Requirements,” *Visa*, October 19, 2024, available at <https://usa.visa.com/dam/VCOM/download/merchants/visa-usa-interchange-reimbursement-fees.pdf>, p. 8.

to the appropriate payment network. The restaurant and the acquirer (or processor) will have agreed to a fee schedule for payment acceptance. For the sake of this example, suppose that the acquirer (or processor) charges this restaurant a merchant discount of 3.5 percent for this transaction.

47. **Step 3:** The transaction is switched and authorized. The acquirer relays the transaction to the network (Visa) and the network passes the message on to the card issuer. The card issuer decides whether or not to authorize the transaction. Issuers will consider: Is the card reported lost or stolen? Does the customer have sufficient funds (or open credit line) for this purchase? Does the purchase appear to be fraudulent? After running these internal checks (in near real-time), the issuer provides an approval or denial response. This authorization is relayed by the issuer to the network to the acquirer and back to the merchant's POS terminal.

48. **Step 4:** For all completed purchases, the issuer is compensated for its role in the transaction by an acquirer through an interchange fee. The network determines the interchange fee for each transaction, based on the applicable interchange rate and the full amount of the transaction. The interchange fee assessed on the acquirer is the interchange fee the issuer receives. The entire payments industry is constructed based on this technical design.²⁹

49. In this example, the consumer spends \$100 on dinner and the restaurant nets \$96.50 (the purchase amount minus the 3.5 percent merchant discount assessed by its acquirer). The acquirer receives \$3.50, of which \$2.60 is the interchange fee. This \$2.60 in interchange flows to the card issuer, through the mechanics that I described above.

B. If Certain Issuers are Exempt from the IFPA, All Entities Involved with the Same Transaction Also Need Relief from the IFPA

50. I understand that the Court has granted preliminary injunctive relief to certain issuers with respect to the IFPA.³⁰ Therefore, these exempt issuers are to receive interchange fees as they do today—that is, interchange that is assessed on the full amount of the transaction.

²⁹ While the interchange fee is determined individually for each transaction, the movement of this money (settlement) happens once per business day and aggregates the value of all purchases and all interchange fees.

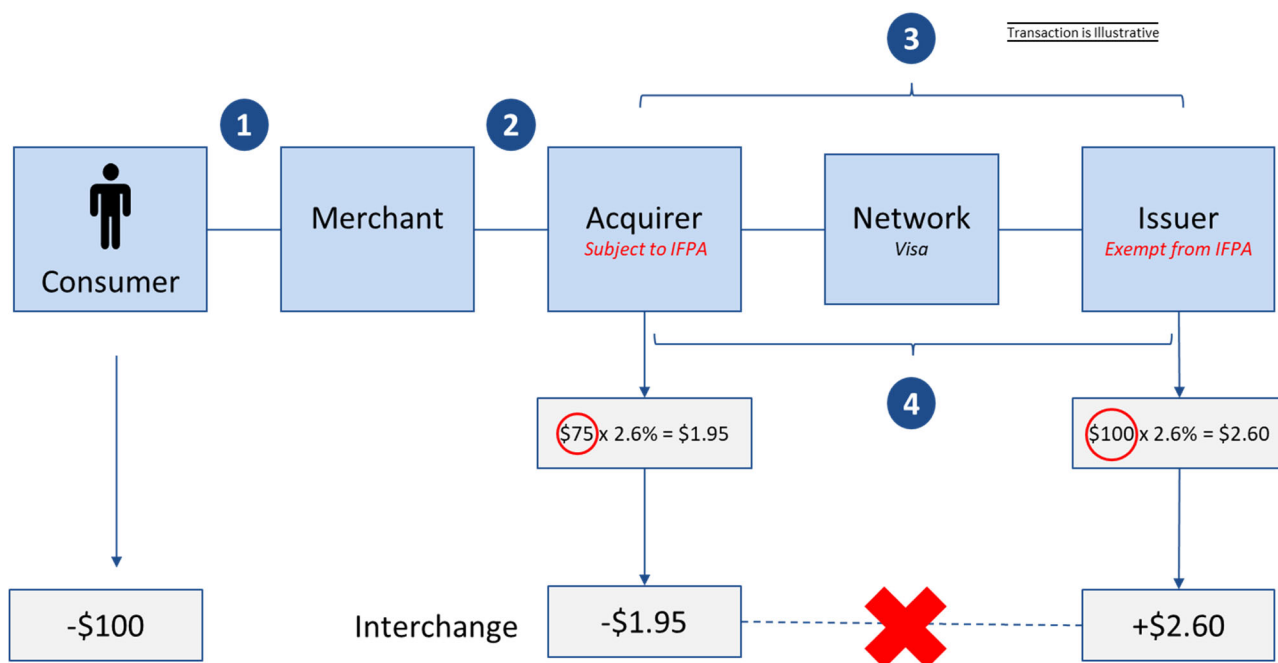
³⁰ The Court has granted preliminary injunctive relief from the IFPA to national banks, federal savings associations, and out-of-state-chartered banks. *See* footnote 3. I understand that this preliminary injunctive relief applies to any operations carried out by these institutions as issuers and as acquirers.

51. Given the pass-through nature of interchange, for these issuers to actually be granted the relief that the Court has determined they are entitled to (that is, for the issuers to be able to receive interchange assessed on the full amount of the transaction), other entities also need to be granted relief from the requirements of the IFPA for applicable transactions with those issuers. Below I explain why this is the case.

52. In my example, an issuer that is exempt from the IFPA is entitled to receive \$2.60 in interchange revenue on this \$100 restaurant purchase, as determined by the network interchange rate schedule and the total purchase amount. For the issuer to receive this amount, the network and processor must be able to apply an interchange fee of \$2.60 to the transaction processed by the acquirer.

53. Suppose the restaurant bill, before tax or tip, is \$75. Then, per the IFPA, this is the amount to which the network's interchange rate is applied. As a result, the acquirer will be assessed an interchange fee of \$1.95 ($2.60\% \times \75) which will flow through to the issuer. That is, the issuer will receive an interchange fee on that transaction that is \$0.65 lower than it is entitled to receive. This is inconsistent with the Court's ruling that the issuer should not be subject to the requirements of the IFPA. I represent this visually below in **Figure 6**.

Figure 6
If An Issuer Is Exempt, “Upstream” Entities Involved with this Issuer’s Transactions Also Need to Be Granted Relief



54. Given the Court’s ruling that certain financial institutions are exempt from the IFPA, then the interchange fee that they receive—as issuers—on their transactions should be calculated on the entire transaction amount (in this example, \$2.60 on the \$100 total purchase amount). Consequently, the network that calculates the interchange fee on this transaction needs to be allowed to perform the appropriate calculation to generate the correct interchange fee, with this interchange fee applied to acquirers (as a debit) and to issuers (as a credit).

55. Accordingly, if an issuer is exempt from the IFPA, then, for that exempt issuer’s transactions, other entities—including networks, acquirers, and processors—also need to be granted relief from the IFPA, *with respect to these transactions*.

56. I used restaurants in my example since this is the merchant category with the greatest prevalence of tipping, but the pass-through nature of interchange flowing through the system on a dollar-for-dollar basis at the transaction level holds true across all merchant categories.

57. The IFPA is defined to cover credit card, debit card, and general-purpose prepaid card transactions. While interchange rates are different across credit, debit, and prepaid cards (and also across networks and merchant categories), the industry dynamics of interchange relevant to my report are the same for all of these card types.

March 17, 2025

A handwritten signature in black ink, appearing to read "A. Hayes". The signature is written in a cursive style with a large initial "A" and a long, sweeping tail.

Anthony (Tony) Hayes

ANTHONY (TONY) HAYES

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Experience

04.23 – Present **BANKING & PAYMENTS GROUP**, Boston, MA

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- Built market awareness through point-of-view articles and speaking at high-profile industry conferences

10.07 – 03.22 **OLIVER WYMAN**, Boston, MA

Partner, Global Head of Payments

Strategy consulting

- Acquire and expand senior-level client relationships across the payments and banking industry. Originate, structure and direct execution of project work. Build world-class team and strengthen market positioning
- Deep expertise across all consumer payment systems, including acquiring, card issuing (credit cards, debit cards, prepaid cards), ATMs and cash, checks, ACH and faster payments, as well as consumer banking more broadly
- Extensive experience across the full industry value chain, spanning issuers (banks and non-banks), payment networks and processors, ATM deployers and merchant acquirers, and industry associations
- Capabilities reflect a mix of strategic assignments (growth, new product development, market assessments, partnerships) and impact delivery (TOM design, pricing optimization, post-merger integration)

• Representative engagements include:

- ATM channel outlook; merchant services strategy; business plan to bring a major credit card portfolio in-house; strategy for extending value-added services (VAS) for SMBs; Board and Exco briefings
- Enhancing a network's affluent proposition; go-to-market strategy for POS lending; interchange rate optimization; rewards platform growth strategy; evaluating healthcare payments
- On-the-ground work in Australia, Canada, France, Indonesia, Mexico, the Netherlands, Singapore, UAE and UK

Private equity due diligence

- Led commercial diligences across multiple industry sub-sectors including ATM, bill payment, cash handling, sub-prime credit card, merchant acquiring, payment network, prepaid card and cross-border B2B payments

Thought leadership

- Co-lead annual US payments benchmarking study. 2024 Study had 42 participating FIs nationwide
- Launched *Payments Plus*, a quarterly overview of Oliver Wyman's work in the payments sector
- Authored several point-of-views including *The US Debit Market and the Durbin Amendment*, *The Regulation of Traditional and Alternative Electronic Payments*, and *Achieving Top of Digital Wallet*
- Regular speaker at industry conferences including Money 20/20, Fintech Meetup, and PAYMENTS. Chaired the American Banker's PayThink conference, 2005-2019. Served on Federal Reserve's faster payments task force

Firm leadership

- Built world-class payments strategy team. Significantly expanded partner team, revenue and client base. Strong people developer, recruiter and coach. Broad industry network
- Co-head of the Americas Retail Banking practice, 2015-2018. Client base in US, Canada and Latin America, engagements spanned digital/direct banking, diligence for bank M&A, small business banking, and payments
- Lead Partner for consultant experienced hire recruiting across Financial Services in the Americas, 2014-2017

02.94 – 09.07 **DOVE CONSULTING (HITACHI CONSULTING)**, Boston, MA

Managing Director, Financial Services Practice

- Joined as a Research Analyst, rapidly promoted, became Partner/Managing Director in 2001, fastest progression in firm's history; sold firm to Hitachi Consulting, transaction closed on August 1, 2005
- Sourced and delivered engagements with FIs (6 of top 10), payment networks, processors, and ATM operators

Education

09.93 – 12.93 **HARVARD UNIVERSITY, Graduate School of Arts & Sciences**, Cambridge, MA

Ph.D. candidate in Economics

09.89 – 06.92 **OXFORD UNIVERSITY, Keble College**, Oxford, UK

MA (Oxon) / BA (Hons) Politics, Philosophy, Economics

- Graduated with First Class Honors. Concentration in Economics; elected as college class president
- President of Oxford University Industrial Society (Hilary Term 1991), second-largest student society at Oxford

Appendix B

Publications

Banking & Payments Group (April 2023 – Present)

“The Slow Road to Faster Payments,” September 2023, <https://bankingandpaymentsgroup.com/the-slow-road-to-faster-payments>

“The Great Payments Engine,” September 2023, <https://bankingandpaymentsgroup.com/the-great-payments-engine>

“Co-Branded Credit Cards: The Allure and The Reality,” July 2023, <https://bankingandpaymentsgroup.com/co-branded-credit-cards-the-allure-and-the-reality>

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“Diversification and Value Migration,” March 2023, <https://bankingandpaymentsgroup.com/diversification-and-value-migration>

Oliver Wyman (2007 – 2022)

“Striving to Sustain Returns,” Corporate & Investment Banks, April 2021, <https://www.oliverwyman.fr/content/dam/oliver-wyman/v2/publications/2021/apr/Oliver-Wyman-Morgan-Stanley-Wholesale-Banks-2021.pdf>

“Payments Shifts with Covid-19,” June 2020, <https://www.oliverwyman.com/our-expertise/insights/2020/jun/payments-shifts-with-covid-19.html>

“COVID-19’s impact on the US debit market,” May 4, 2020, <https://www.oliverwyman.com/our-expertise/insights/2020/may/covid-19-impact-on-the-us-debit-market.html>

“The State of the Financial Services Industry 2019: Time to Start Again,” January 2019, <https://www.oliverwyman.de/content/dam/oliver-wyman/v2/publications/2019/January/The-State-Of-Financial-Services-2019-Time-to-start-again.pdf>

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“Achieving Top of Digital Wallet: The new competitive battleground for credit card issuers,” September 2017, <https://www.oliverwyman.com/our-expertise/insights/2017/sep/achieving-top-of-digital-wallet--.html>

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“Retail Banking in a Post-Durbin World: What the Final Rule Means for Debit Card Issuers,” October 2011, Americas Retail Banking Digest Volume I, <https://www.oliverwyman.com/our-expertise/insights/2011/oct/americas-fall-2011-retail-banking-digest.html>

“The US debit market and the Durbin Amendment: Worse than the worst-case scenario: What banks need to do now,” December 22, 2010

“The Changing Retail Payments Landscape: An Overview,” Federal Reserve Bank of Kansas City, November 9-10, 2009, <https://www.kansascityfed.org/Payments%20Conferences/documents/4128/a1completeproceedings.pdf>

“Sweeping Away Free Checking,” January/February 2009, BAI Banking Strategies magazine

Dove Consulting (1994 – 2007)

“Debit Issuer Study”, <https://www.pulsenetwork.com/public/debit-issuer-study/> (2005 – 2021, 2024)

“The ATM Deployer Study” (1999, 2002, and 2006)

“2005/2006 Study of Consumer Payment Preferences,” Dove Consulting (sponsored by ACI, Citi, The Clearing House and Mastercard)

“2003/2004 Study of Consumer Payment Preferences,” Dove Consulting (sponsored by ACI, eFunds and PULSE)

“Navigating the New Payments Landscape: What Credit Unions Need to Know,”
Dove Consulting (commissioned by CO-OP Network, California Credit Union League, and Wescorp), May 2004

“1999 Study of Consumer Payment Preferences,” Dove Consulting (in collaboration with the American Bankers Association)

“The Future Use of ATMs” (1997)

Appendix C

Testimony at Deposition or Trial within the Last Four Years

In re SwervePay Holdings Acquisition, Court of Chancery of the State of Delaware, C.A. No. 2021-0447-KSJM

Appendix D

Materials Considered

Legal Documents

Illinois Interchange Fee Prohibition Act, 815 ILCS 151

Complaint for Declaratory and Injunctive Relief, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court Northern District of Illinois, August 15, 2024

Plaintiffs' Memorandum in Support of Motion for a Preliminary Injunction, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, August 21, 2024, and Associated Exhibits (Declarations)

Memorandum Opinion and Order, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, December 20, 2024

Opinion and Order, *Illinois Bankers Association et al. v. Kwame Raoul in his official capacity as Illinois Attorney General*, United States District Court for the Northern District of Illinois Eastern Division, February 6, 2025

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"2023 Survey and Diary of Consumer Payment Choice: Summary Results," *Federal Reserve Bank of Atlanta*, 2024, available at https://www.atlantafed.org/-/media/documents/banking/consumer-payments/survey-diary-consumer-payment-choice/2023/sdpc_2023_report.pdf

"2024 Small Business Profile: Illinois," *U.S. Small Business Administration Office of Advocacy*, available at <https://advocacy.sba.gov/wp-content/uploads/2024/11/Illinois.pdf>

"Federal Reserve Issues a Final Rule Establishing Standards for Debit Card Interchange Fees and Prohibiting Network Exclusivity Arrangements and Routing Restrictions," *Federal Reserve*, June 29, 2011, available at <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20110629a.htm>

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"Mastercard 2024–2025 U.S. Region Interchange Programs and Rates," *Mastercard*, April 12, 2024, available at <https://www.mastercard.us/content/dam/public/mastercardcom/na/us/en/documents/merchant-rates-2024-2025.pdf>

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"Regulation II (Debit Card Interchange Fees and Routing): Average Debit Card Interchange Fee by Payment Card Network," *Board of Governors of the Federal Reserve System*, available at <https://www.federalreserve.gov/paymentsystems/regii-average-interchange-fee.htm>

"Statistics at a Glance," *Federal Deposit Insurance Corporation (FDIC)*, December 31, 2024, available at <https://www.fdic.gov/quarterly-banking-profile/fdic-latest-industry-trends-december-2024-pdf>

"U.S. and World Population Clock," *U.S. Census*, available at <https://www.census.gov/popclock>

"Visa USA Interchange Reimbursement Fees: Visa Supplemental Requirements," *Visa*, October 19, 2024, available at <https://usa.visa.com/dam/VCOM/download/merchants/visa-usa-interchange-reimbursement-fees.pdf>