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Executive Summary

Capital One's proposed acquisition of Discover Financial Services has the potential to transform competition and consumer welfare in the retail banking market. Through synergies and cost savings, the new entity would compete more vigorously with other banks and payment networks. Not only will this better serve the public in general, by bringing together the firms' traditional expertise in the development of innovative banking and credit card markets aimed at middle-income consumers, it would also likely expand financial inclusion among underserved communities. And while some critics have expressed concerns that the merger could harm competition, those concerns are speculative and ungrounded in well-established principles of antitrust analysis. Major points to consider include that:

- Discover's credit card network is the fourth-largest in the United States, accounting for only about 4% of payment volume. Discover has languished at that figure for two decades, trailing far behind Visa, MasterCard, and American Express. For years, many commentators and government officials have expressed concern about a perceived lack of competition in the credit card network market, going so far as to refer to a Visa and MasterCard "duopoly" and calling for legislation that they believe would increase competition in the credit card industry. Capital One may be able to use its innovative culture and marketing savvy to leverage Discover's card network and allow it to compete more successfully.
- By switching its debit cards to Discover's payment networks, Capital One might offer more attractive products to depositors. In particular, it could expand access to free checking accounts with no minimum balance requirements to a wider range of low-income consumers. And it could offer debit cards with cashback to lower-income consumers who would not qualify for credit cards. The benefits for this important underserved community could be enormous.
- In combination, Capital One and Discover would be the sixth-largest bank by assets, although it would hold only 3% of all domestic assets, a trivial amount compared to industry behemoths such as JPMorgan Chase, Citibank, and Bank of America.

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Moreover, cost savings and other synergies could make it a more effective competitor in the large national-bank market, driving improvements among other, similar-sized banks that together serve large segments of the U.S. population.

- The combined Capital One-Discover would become the third-largest credit card issuer by purchaser volume, after JPMorgan Chase and American Express. Given that there are thousands of credit card issuing banks in the United States and the largest issuers only have a modest percentage of all volume any potential countervailing adverse effect on competition would likely be minor if noticeable at all. As with its banking operations, its scale and innovative approach could drive improvements both directly for its customers and indirectly for customers of other banks, who would be driven to provide competitive offerings.
- By increasing network traffic, purchasing volume, and revenue dramatically; enabling a seamless integration of customer and merchant data generated by network activity and issuer processing; and allowing increased financial investments in security, the merger would enable the combined company to increase consumer data security. This element of the deal is especially significant in light of Discover's history of prior lapses in consumer data security breaches and other regulatory compliance issues. The ability to capture and analyze more data on more customers may also permit the larger and more competitive company to develop and offer new innovative products designed for more fine-grained customer groups.

I. Introduction

On Feb. 18, 2024, Capital One Financial Corp. announced that it had entered into an agreement to acquire Discover Financial Services in an all-stock transaction valued at $35.3 billion.[1] Before the transaction can be finalized, however, it must be approved by both the U.S. Office of Comptroller of the Currency (OCC) and the Federal Reserve. The two agencies held a July 19, 2024, public meeting on the proposed merger, and have extended public comments on the deal until July 24, 2024.[2]

The proposed acquisition has engendered substantial public and political scrutiny from critics who claim it would have anticompetitive effects. For example, a number of Democratic members

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[1] Press Release, *Capital One to Acquire Discover*, CAPITAL ONE (Feb. 19, 2024), https://investor.capitalone.com/news-releases/news-release-details/capital-one-acquire-discover.

[2] Press Release, *Board of Governors of the Federal Reserve System & Office of the Comptroller of the Currency, Agencies Announce Public Meeting on Proposed Acquisition by Capital One of Discover; Public Comment Period Extended*, FEDERAL RESERVE BOARD (May 14, 2024), https://www.federalreserve.gov/newsevents/pressreleases/other20240514a.htm; Press Release, *Agencies Announce Public Meeting on Proposed Acquisition by Capital One of Discover; Public Comment Period Extended*, OFFICE OF THE COMPTROLLER OF THE CURRENCY (May 14, 2024), https://www.occ.gov/news-issuances/news-releases/2024/nr-ia-2024-50.html.

of Congress,[3] as well as members of the House Financial Services Committee, specifically,[4] and one Republican senator,[5] have written to the regulators responsible for reviewing the merger to urge that it be blocked on that basis.

These criticisms of the proposed merger, however, are confused. To be sure, the combined bank would be larger than either of the two companies standing alone. Yet its size still would pale in comparison to firms such as JPMorgan Chase, Citibank, and other retail bank companies.

More importantly, reflexive "big is bad" arguments overlook the *pro*-competitive benefits of the merger to consumers and the banking industry. By combining Capital One's innovative style and marketing dynamism with Discover's existing network infrastructure and widespread acceptance, the new company could provide a viable new competitor to *both* existing large banks and to the payment-card-network space currently dominated by Visa and MasterCard. The result should be enhanced competition across the board, but particularly in the market for payment card networks, about which many of these same critics of this merger have complained lacks adequate competition due to the supposed Visa and MasterCard "duopoly." Rather than trying to artificially impose a counterproductive scheme of competition on that market through heavy-handed government regulation, such as the Credit Card Competition Act,[6] the merger would do exactly what sponsors of that act claim to desire: foster more robust competition in the payment-card-network space.

This white paper uses the tools of law & economics to evaluate the likely effects of the merger, with a particular focus on two of the key criteria the agencies are required to evaluate: (1) the convenience and needs of the communities to be served by the combined organization and (2) competition in the relevant markets.[7]

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[3] *See*, *Letter to the Honorable Michael Barr, Vice Chair of Supervision for the Board of Governors of the Federal Reserve System and Acting Comptroller Michael Hsu, Office of the Comptroller of the Currency from the Undersigned Members of the Congress of the United States*, OFFICE OF SEN. ELIZABETH WARREN (Feb. 25, 2024), *available at* https://www.warren.senate.gov/imo/media/doc/2024.02.25%20Capital%20One%20Letter1.pdf.

[4] *See*, *Letter to the Honorable Jerome Powell, et. al from the Undersigned Members of the U.S. House of Representatives Committee on Financial Services*, HOUSE FINANCIAL SERVICES COMMITTEE DEMOCRATS (Feb. 28, 2024), *available at* https://democrats-financialservices.house.gov/uploadedfiles/02.28_-_ltr_on_ibmr.pdf.

[5] *See*, *Letter to Jonathan Kanter, Assistant Attorney General of the U.S. Department of Justice, Antitrust Division from Senator Josh Hawley*, OFFICE OF SEN. JOSH HAWLEY (Feb. 21, 2024), *available at* https://www.hawley.senate.gov/wp-content/uploads/files/2024-02/Hawley-Letter-to-Kanter-re-Capital-One-Discover-Merger.pdf.

[6] *See, e.g.*, Julian Morris & Todd Zywicki, *Regulating Routing in Payment Networks* (ICLE White Paper 2022-08-17), *available at* https://laweconcenter.org/wp-content/uploads/2022/08/Regulating-Routing-in-Payment-Networks-final.pdf; Julian Morris, *The Credit Card Competition Act's Potential Effects on Airline Co-Branded Cards, Airlines, and Consumers* (ICLE White Paper 2023-11-17), *available at* https://laweconcenter.org/wp-content/uploads/2023/11/CCCA-Airline-Rewards-Study-v4.pdf.

[7] The list of relevant criteria for consideration includes: the convenience and needs of the communities to be served by the combined organization; each insured depository institution's performance under the Community Reinvestment Act; competition in the relevant markets; the effects of the proposal on the stability of the U.S. banking or financial system; the financial and managerial resources and future prospects of the companies and banks involved in the proposal; and the effectiveness of the companies and banks in combatting money laundering activities. *See* Joint Press Release, *supra* note 4; 12 U.S.C. § 1828(c).

The primary communities served by both Capital One and Discover comprise lower-risk low-income and middle-income consumers who have been underserved by other large financial firms. The merged company will presumably continue to seek to attract and maintain such consumers, while also potentially expanding into other market segments. Indeed, the new company may better serve such communities. This could be achieved through synergies that would enable it to invest in innovation and thereby offer better products at a lower cost. In addition, the combined firm plans to issue debit cards on its own proprietary network, enabling it to offer enhanced products to consumers (because it will not be subject to the price controls and routing requirements imposed on debit card issuers subject to the Durbin amendment and related regulations). For example, the company should be better able to market no-fee, no-minimum-balance bank accounts to underserved low- and middle-income consumers. Furthermore, by combining some credit card operations, the new entity should benefit from scale economies and the ability to cross-market products.

On the competition side, the relevant markets are, broadly, banking (deposits and loans) and payments (card issuance and acceptance, and network facilitation). With respect to the former, the combined company would be the sixth-largest bank in the United States by assets, and roughly one-quarter the size of JPMorgan Chase (the nation's largest bank).[8] If the relevant market is large banks with national reach, the merger will plausibly result in an increase in competition, as the new entity will have greater scope and scale, enabling it to compete more effectively with other large national banks.

Regarding credit card issuance: recent figures suggest that Capital One and Discover combined would be the largest holder of credit card debt in the nation, accounting for nearly 22% of outstanding credit card loans by dollar amount.[9] Even so, and contrary to claims made by some critics of the proposed merger,[10] there is no reason to believe this would harm competition. The increase in market share for credit card debt would not trigger thresholds inviting close scrutiny under federal bank-merger guidelines, or the 2023 Federal Trade Commission (FTC) and U.S. Justice Department (DOJ) merger guidelines.[11] Moreover, as the company notes in its filing with the regulators:

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[8] *See*, *Federal Reserve Board, Insured U.S.-Chartered Commercial Banks That Have Consolidated Assets of $300 Million or More, Ranked by Consolidated Assets as of March 31, 2024*, FEDERAL RESERVE BOARD (Mar. 31, 2024), https://www.federalreserve.gov/releases/lbr/current.

[9] *See*, *Federal Reserve Bank of New York, Quarterly Report on Household Debt and Credit, 2023:Q4*, FEDERAL RESERVE BOARD (Feb. 2024), https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC_2023Q4; *20 Bank Holding Companies With the Largest Credit Card Loan Portfolios*, AMERICAN BANKER (Mar. 28, 2024), https://www.americanbanker.com/list/20-bank-holding-companies-with-the-largest-credit-card-loan-portfolios-at-the-end-of-q4.

[10] *See* Shahid Naeem, *Capital One-Discover: A Competition Policy and Regulatory Deep Dive*, AMERICAN ECONOMIC LIBERTIES PROJECT (Mar. 2024), *available at* https://www.economicliberties.us/wp-content/uploads/2024/03/2024-03-20-Capital-One-Discover-Brief-post-design-FINAL.pdf.

[11] *See* Diana Moss, *The Capital One Financial-Discover Financial Services Merger: A Test for the Biden Merger Agenda?*, PROGRESSIVE POLICY INSTITUTE (Jun. 20, 2024), at 1, *available at* https://www.progressivepolicy.org/wp-content/uploads/2024/06/PPI-Capitol-One-Discover-Commentary.pdf.

> Vertically integrating with Discover's payments networks will add scale to these credit and debit networks—which respective market shares are in long-term decline—making the networks less costly to operate on a marginal basis and more attractive to consumers and merchants. The combination will also allow Capital One to lower its transaction-related costs and to reinvest those dollars in improved banking products and services, including investments into the payments networks to reduce fraud, improve dispute resolution processes, and lessen information sharing friction to the benefit of consumers and merchants. These network investments will allow Capital One to further scale the networks, improve the actual and perceived acceptance of the networks, and create a credible alternative to the Visa, Mastercard, and Amex payments networks, which dominate the industry today.[12]

Critics of the merger, by contrast, have failed to articulate any tangible harms to competition or consumers from the merger beyond reflexive "big is bad" rhetoric.

From a law & economics perspective, the merger's potential to create a stronger fourth network aligns with the theory that increased competition can lead to greater market efficiency and consumer welfare. A more competitive network landscape could pressure all players to improve their offerings, potentially resulting in lower fees, better security features, and more innovative payment solutions. This outcome would be consistent with the goals of antitrust law, which seeks to promote competition, rather than protect individual competitors.

In sum, the evidence strongly suggests that this merger would meet the needs and convenience of the communities served by the combined organization and would be pro-competitive in all relevant markets.

II. Background

The prospective acquisition of Discover by Capital One would bring together Capital One's savvy marketing and innovation advantages with Discover's legacy advantage as a payment-card processing network, thereby creating a new viable competitor to both existing banking giants (such as JPMorgan Chase and Citibank) as well as existing payment networks (Visa, MasterCard, and Amex). At the same time, however, the combined entity will remain a fraction of the size of these incumbent banks and networks. The end result should benefit competition and consumers substantially, especially in the network issuing space.

A. Discover

Discover Financial Services originated in 1985 as a subsidiary of Sears, Roebuck, and Co., arising as a general-purpose spinoff of the legendary Sears credit card program. In 1985, Sears was the largest consumer-lending operation in America, with 60 million cardholders and customer

[12] *Application to the Board of Governors of the Federal Reserve System for Prior Approval for Capital One Financial Corporation to Acquire Discover Financial Services Pursuant to Section 3 of the Bank Holding Company Act and Section 225.15 of Regulation Y*, FEDERAL RESERVE BOARD (Mar. 20, 2024), at 40, *available at* https://www.federalreserve.gov/foia/files/capital-one-application-20240320.pdf [hereinafter "Capital One Application"].

receivables of more than $12 billion.[13] The ubiquity of the Sears credit card owed in large part to the department store's towering presence in the nation's retail landscape, and particularly the company's long-established Sears catalog. Sears had 796 retail stores and more than 3,000 branch offices of its subsidiaries: Dean Witter Financial Services, Allstate Insurance, Coldwell Banker real estate, and Sears Saving Bank.[14] The launch of the general-purpose Discover credit card was part of a larger push at the time by Sears into the consumer retail financial services space, including bank accounts, ATMs, and low-cost retirement brokerage accounts offered by Sears' Dean Witter Reynolds Inc. brokerage subsidiary.[15] The card was issued through Greenwood Trust Co. bank, which was owned by Sears. Sears was able to capitalize on its relationship with those millions of established Sears credit card customers to launch a new general-purpose card to rival Visa and Mastercard.

The Discover Card's launch illustrates the logic of two-sided payment card markets and the need to attract both consumers and merchants to the platform.[16] Because of Sears's existing relationships with 60 million cardholders, Discover likewise found it relatively easy to attract cardholders. The company, however, faced greater difficulty in persuading merchants to take up the card, in part because merchants were reluctant to accept a card affiliated with a major retailing rival (a difficulty further compounded by the fact that the original card face featured an image of the Sears Tower). To induce merchant acceptance, Discover offered a lower merchant discount rate than Visa and MasterCard-branded cards.[17] Today, Discover's average merchant discount rate remains below that of Visa, MasterCard, and American Express.[18]

To encourage consumers to use the card, Discover's initial strategy was to differentiate itself by offering a card with no annual fee and a cashback-rewards program for purchases (including quarterly "bonus categories"), both of which were novel and innovative concepts at the time. This helped to attract consumers and carve out a niche in the competitive credit card market.[19] Because of Sears' massive network of retail stores and affiliates, Discover didn't need to establish a separate system of bank branches to service customers, a distinctive characteristic that remains

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[13] *See*, *New Sears Credit Card by Year-End*, CHICAGO TRIBUNE (Apr. 25, 1985), https://www.chicagotribune.com/1985/04/25/new-sears-credit-card-by-year-end.

[14] *See* Nancy Yoshihara, *Sears Unveils Its New Credit Card: Multipurpose "Discover" to Get 1st Test Marketing in Fall*, LOS ANGELES TIMES (Apr. 25, 1985), https://www.latimes.com/archives/la-xpm-1985-04-25-fi-12317-story.html.

[15] *Id.*

[16] *See* Todd J. Zywicki, *The Economics of Payment Card Interchange Fees and the Limits of Regulation* (ICLE Financial Regulatory Program White Paper Series, Jun. 2, 2010), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1624002.

[17] *See* Chicago Tribune, *supra* note 13.

[18] *See* Jack Caporal, *Average Credit Card Processing Fees and Costs in 2024*, THE ASCENT, https://www.fool.com/the-ascent/research/average-credit-card-processing-fees-costs-america, (*last updated* Jun. 5, 2024), (noting that "Discover credit card processing fees have the lowest range, excluding outliers.").

[19] *See* Eric Schmuckler, *Playing Your Cards Right*, FORBES (Dec. 28, 1987).

the case today (although, today, it is all online). The card was introduced with a 1986 Super Bowl commercial.[20]

One of Discover's key innovations was its approach to the payment network. Like American Express and Diners Club (at the time), but unlike most other issuers, Discover chose to operate a vertically integrated, "three-party" model, acting as card issuer, acquirer, and payment network.[21] This structure enabled Discover to offer merchants lower fees relative to other acquirers, which helped in building acceptance so that it could compete more effectively with "four-party" cards issued on the Visa and Mastercard networks.[22]

In 1993, Sears spun off Dean Witter into a new company and Discover became part of Dean Witter. In 1997, Dean Witter merged with Morgan Stanley and later rebranded itself as Discover Financial Services Inc. In 2007, Discover Financial Services became an independent company. In 2004, Diners Club (then owned by Citigroup) signed an agreement with Mastercard to provide acceptance in the United States and Canada, making it a four-party card issuer in these markets—and leaving Discover and American Express as the only three-party issuers in the United States.[23] In 2008, Discover purchased Diners Club International from Citigroup, giving it an international payment network, albeit one that today has only a tiny share of transactions. (The U.S. and Canadian franchises of Diners Club were not included in the deal, and were sold by Citigroup the following year to BMO International.)[24]

Consistent with its original plan to evolve into a full-service retail banking establishment, in the late 1990s and early 2000s, Discover expanded its product line beyond credit cards. It ventured into personal loans, student loans, and savings accounts, leveraging its brand recognition and customer relationships to compete in broader financial services. In 2005, Discover acquired the Pulse electronic funds transfer (EFT) network, which provides single-message (PIN) ATM and debit payments for around 4,500 smaller banks.[25]

Despite its early distinction as a market innovator, over time, Discover has grown somewhat stagnant. In terms of credit card market share by purchase volume, Discover has been stuck at approximately 4% to 5% of the U.S. market for almost 20 years and has a negligible global

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[20] *See*, *Discover–Dawn of Discover*, ADAGE (Jan. 26, 1986), https://adage.com/videos/discover-dawn-of-discover/1241.

[21] *See* Frances Denmark, *Discover CEO David Nelms Reinvents His Credit Card Firm*, INSTITUTIONAL INVESTOR (Dec. 28, 2011), https://www.institutionalinvestor.com/article/2bszspjc02cwjwn5f2pds/portfolio/discover-ceo-david-nelms-reinvents-his-credit-card-firm.

[22] Michael Weinstein, *Bankers: DiscoverCard Has Not Hurt Business*, AMERICAN BANKER (Mar. 7, 1988).

[23] *Diners Club and MasterCard Finalize Alliance*, THE PAYERS (Sep. 27, 2004), https://thepaypers.com/payments-general/diners-club-and-mastercard-finalize-alliance--724076.

[24] *See, e.g.*, *The Story Behind The Card*, DINERS CLUB INT'L, https://www.dinersclubus.com/home/about/dinersclub/story (*last accessed* Jul. 17, 2024); Press Release, *BMO Financial Group Announces Agreement to Acquire the Diners Club North American Franchise From Citigroup*, BMO FINANCIAL GROUP (Nov. 24, 2009), https://newsroom.bmo.com/2009-11-24-BMO-Financial-Group-Announces-Agreement-to-Acquire-the-Diners-Club-North-American-Franchise-From-Citigroup.

[25] *See* Denmark, *supra* note 21.

presence.[26] While Discover has a slightly larger number of credit cards in circulation than American Express, Amex's market share by purchase volume is roughly five times that of Discover.[27] As a network competitor, therefore, Discover has neither the large cardholder base of Visa and MasterCard nor Amex's highly coveted high-spend customer base. As one news report summarized Capital One's arguments in support of the deal, "Discover's network has ceded market share over the past decade and Capital One, as a much bigger bank, can provide the additional scale and volume Discover needs to be competitive."[28]

B. Capital One

Capital One Financial Corp. emerged in the early 1990s as a spin-off from Signet Bank, under the leadership of Richard Fairbank and Nigel Morris.[29] Their vision was to revolutionize the credit card industry by applying data analytics and information technology to consumer finance.[30] This approach, often referred to as "information-based strategy," allowed Capital One to tailor its offerings to specific customer segments, a novel concept at the time.[31]

The company's key innovation was its use of data-mining techniques to identify and target potential customers with personalized credit card offers.[32] This strategy allowed Capital One to extend credit to a broader range of consumers, including those who might have been overlooked or rejected by traditional banks.[33] By using sophisticated risk-assessment models, they could offer competitive rates to customers across various credit profiles, effectively disrupting the one-size-fits-all approach prevalent in the industry.[34] Writing in the *Financial Times*, former Federal Deposit Insurance Corp. (FDIC) Chair Sheila Bair noted:

> I suspect Capital One's subprime market share is relatively substantial because other banks simply have less (or no) interest in serving subprime customers. Subprime lending involves higher capital requirements, greater regulatory scrutiny and more resources to underwrite and manage those accounts. Any concentrations in the

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[26] *See* Adam McCann, *Market Share by Credit Card Network*, WALLETHUB (May 9, 2024), https://wallethub.com/edu/cc/market-share-by-credit-card-network/25531.

[27] *See* Fred Ashton, *Capital One's Acquisition of Discover Could Inject Competition Into Payments Market*, AMERICAN ACTION FORUM INSIGHT (Feb. 29, 2024), at fig. 2, https://www.americanactionforum.org/insight/capital-ones-acquisition-of-discover-could-inject-competition-into-payments-market.

[28] Michelle Price, *Exclusive: CapOne Tells Regulators Discover Deal will Boost Competition and Stability*, REUTERS (Mar. 21, 2024), https://www.reuters.com/markets/deals/capone-tells-regulators-discover-deal-will-boost-competition-stability-sources-2024-03-21.

[29] CAPITAL ONE FINANCIAL CORPORATION, CAPTURING THE ESSENCE OF CAPITAL ONE: 1996 ANNUAL REPORT 2-3 (1996), *available at* https://investor.capitalone.com/static-files/d823fcd3-e1f1-439a-a34f-5296ef58b93c.

[30] *See id.* at 3, 5-6.

[31] *Id.* at 3.

[32] *See* David Morrison & Adrian Slywotzky, *Off the Grid*, INDUSTRY STANDARD (Oct. 23, 2000).

[33] *See* Andrew Becker, *The Secret History of the Credit Card*, FRONTLINE (Nov. 23, 2004), https://www.pbs.org/wgbh/pages/frontline/shows/credit/more/battle.html.

[34] *See* Morrison & Slywotzky, *supra* note 32.

subprime market are the result of banks' conscious investment decisions, not barriers to entry.[35]

Capital One's market entry coincided with the rise of direct marketing in the financial sector.[36] The company leveraged this trend by aggressively promoting its products through direct-mail offers, a strategy that helped it rapidly acquire customers and market share.[37] This direct-to-consumer approach bypassed traditional banking channels and allowed Capital One to build a national presence without the need for an extensive branch network.[38]

As the company grew, it continued to innovate in product design and customer acquisition. Capital One introduced features like balance transfers with low introductory rates, cashback rewards, and no annual fee cards, which were not common at the time.[39] The company was also one of the first banks to offer a secured credit card.[40] These offerings appealed to consumers and forced competitors to adapt, ultimately benefiting the broader market through increased competition and more favorable terms for cardholders.

Capital One's disruptive influence extends beyond credit cards. The company has expanded into retail banking, auto financing, and savings products, often bringing its data-driven approach to these sectors.[41] For instance, its online savings accounts offer higher interest rates than many traditional banks, challenging the status quo and prompting other institutions to improve their offerings to remain competitive.[42]

III. The Acquisition

Capitol One's acquisition of Discover will have manifest benefits to consumers, competition, and innovation in the payment-card market. By combining the advantages of Discover's existing (but somewhat stagnant) presence in the payment-card-network space and its reach into middle-

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[35] Sheila Bair, *How the Capital One/Discover Deal Could Boost Competition*, FINANCIAL TIMES (May 31, 2024), https://on.ft.com/4640E6h.

[36] *See* Morrison & Slywotzky, *supra* note 32.

[37] *See* Zack Martin, *Capital One Makes Big Push to Become a National Brand*, CARD MARKETING (Dec. 2000).

[38] *See* Jon Prior, *Capital One Keeps Closing Branches, Even as Rivals Open Them*, AMERICAN BANKER (Jul. 1, 2019), https://www.americanbanker.com/news/capital-one-keeps-closing-branches-even-as-rivals-open-them.

[39] *See* Lukasz Drozd, *Why Credit Cards Played a Surprisingly Big Role in the Great Recession*, 6(2) ECON. INSIGHTS 10 (Mar. 2021), n. 12, https://fraser.stlouisfed.org/title/6149/item/604454?start_page=ii.

[40] Naomi Snyder, *Capital One's Secret to Success*, BANK DIRECTOR (Aug. 15, 2022), https://www.bankdirector.com/article/capital-ones-secret-to-success (Capital One "invented the secure credit card"); Larry Santucci, *The Secured Credit Card Market*, FEDERAL RESERVE BANK OF PHILADELPHIA (Nov. 2016), *available at* https://www.philadelphiafed.org/-/media/frbp/assets/consumer-finance/discussion-papers/dp16-03.pdf ("While we were unable to identify the first bank to issue a secured card, the innovation is believed to have occurred sometime in the late 1970s.").

[41] *See* Alex Woodie, *The Modernization of Data Engineering at Capital One*, DATANAMI (Apr. 4, 2022), https://www.datanami.com/2022/04/04/the-modernization-of-data-engineering-at-capital-one.

[42] *See, e.g.*, Sabrina Karl, *Best High-Yield Savings Accounts of July 2024—Up to 5.55%*, INVESTOPEDIA, https://www.investopedia.com/best-high-yield-savings-accounts-4770633 (*last updated* Jul. 17, 2024), (listing Capital One and Discover among the highest-available interest rates for new accounts).

class consumers with Capital One's innovative culture in payments and data security and its marketing savvy, the deal offers the potential to create a viable competitor to existing mega-banks and the dominant card-processing networks. As noted, the proposed deal has elicited some criticism from politicians, but none of those criticisms have amounted to much more than a reflexive "big is bad" mentality and vague, unspecified concerns about the potential for harm to competition and consumers. By contrast, the potential benefits of the deal are manifest and concrete.

These benefits are explained in greater detail below, but in broad terms comprise the following two components:

1. The acquisition would likely lead to increased investment in innovation both at Capital One and among various competing banks, credit card issuers, and payment networks. Such investments would, among other things, result in reduced fraud, with both direct and indirect benefits to consumers and merchants. It would also likely lead to new products designed for more fine-grained customer groups.[43]
2. Capital One's plan to switch its debit cards to Discover's payment networks would lead to improved bank-account offerings, likely to include additional sign-on bonuses and/or cashback debit cards. These products would improve access to and encourage the adoption of fee-free checking accounts, especially for low-income consumers and those with lower credit scores.

This section analyses the various components of the proposed acquisition. From an industrial-organization perspective, this has both "horizontal" and "vertical" components. Both companies accept deposits, issue loans, offer credit and debit cards, and offer other financial services; the combination of these business lines would therefore be considered a horizontal merger. While such mergers have the potential to be anticompetitive, they can also be pro-competitive, as demonstrated by many horizontal "four-to-three" mergers in the wireless industry discussed in the first sub-section below.

While these horizontal aspects are tasty *hors d'oeuvres*, the main course in Capital One's acquisition of Discover is its purchase of Discover's payment networks, which would facilitate vertical integration with many of Capital One's existing products (including all of its debit cards).[44] The beneficial effects of this vertical aspect of the merger are addressed in the separate subsections on credit cards, debit cards, and banking. This is followed by a more detailed discussion of the effects of the merger on the identification and deterrence of fraud—and the

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[43] *See* Anish Kapoor, *Capital One-Discover Acquisition: Unpicking [sic] the Consumer and Competitive Benefits*, LINKEDIN.COM (Apr. 15, 2024), *available at* https://www.linkedin.com/pulse/capital-one-discover-acquisition-unpicking-consumer-benefits-kapoor-53yge.

[44] Capital One itself lists "Combin[ing] Capital One's scale in credit cards and banking with Discover's vertically integrated global payments network" and "Enhanc[ing] Capital One's ability to compete with the national's largest banks in credit cards and banking" as the top two reasons for its "strategic rationale." *Investor Presentation*, CAPITOL ONE & DISCOVER (Feb. 20, 2024), at 4 https://investor.capitalone.com/static-files/cfa11729-0aec-43dc-b531-200e250c8413.

benefits this would bring to consumers and merchants. The final subsection addresses some concerns raised by critics of the merger.

1. Lessons from Horizontal "Four-to-Three" Mergers for Capital One-Discover Merger

Some lessons may be learned from mergers in other industries where two mid-size firms merge to create a competitor that is similar in size to the market leaders. An example is so-called "four-to-three" mergers in wireless telecommunications. A survey of empirical research on these mergers, undertaken by a team that included two of the authors of this white paper, provides insights that may help to evaluate the merger between Capital One and Discover.[45]

First, the paper notes the importance of considering both price and nonprice effects when assessing mergers. In the case of Capital One and Discover, while price effects (such as interest rates or fees) are crucial, nonprice factors like investments in technology, product innovation, and service-quality improvements should be given substantial weight.[46] The merger will enable the combined entity to increase investments in digital-banking capabilities, artificial intelligence, and data analytics—all areas where both companies have shown strengths. This increased investment capacity could lead to more innovative financial products and improved customer experiences, ultimately benefiting consumers.

Second, the review of empirical research highlights that mergers can lead to more symmetrical market structures (that is, with firms of more equal size), which may result in stronger incentives for individual firms to invest and compete.[47] In the context of the credit card and banking industries, a merged Capital One-Discover entity could become a more formidable competitor to larger players like JPMorgan Chase, Bank of America, and Citigroup. This increased symmetry in market power could drive all players to innovate and compete more aggressively, potentially leading to better offerings for consumers across the industry.

Lastly, the empirical research suggests that the optimal number of competitors in a market depends on various factors, including geographic and demographic considerations.[48] In the U.S. financial-services market, which is both large and geographically diverse, the merger could potentially create a stronger nationwide competitor. By combining Capital One's extensive customer base and marketing prowess with Discover's payment network and reputation for customer service, the merged entity could more effectively compete across different regions and customer segments. This could be particularly beneficial in making Discover a more effective

[45] *See* Eric Fruits, Justin (Gus) Hurwitz, Geoffrey A. Manne, Julian Morris, & Alec Stapp, *Static and Dynamic Effects of Mergers: A Review of the Empirical Evidence in the Wireless Telecommunications Industry* (OECD, DAF/COMP/GF(2019)13, Dec. 6, 2019), *available at* https://one.oecd.org/document/DAF/COMP/GF(2019)13/en/pdf.

[46] *Id.* at 17.

[47] *Id.* at 8.

[48] *Id.* at 3.

competitor, as it would gain access to Capital One's larger customer base and potentially expand the reach and utilization of its payment network.

B. Credit Cards

Three networks currently account for approximately 96% of credit card purchase volume in the United States: Visa (52%), Mastercard (25%), and American Express (20%).[49] Discover has most of the remaining 4%, a proportion that has declined from 6% in 2011.[50] Capital One's acquisition of Discover could potentially create a more robust fourth network, aligning with some legislators' stated desire for an increase in the number of competitors in this market.[51] Unlike current proposed legislative interventions, however, it also would more plausibly lead to a genuine increase in competition, as Capital One would have strong incentives to identify ways to reinvigorate the network. Unlike some legislative proposals ostensibly intended to promote competition, but which likely would lead to increased fraud, the merger would likely improve the detection and prevention of fraud.

Capital One's extensive cardholder base and innovative approach to payments could provide the scale and technological edge that Discover's network has been lacking. Capital One's data analytics capabilities and marketing prowess could be leveraged to expand the network's reach, potentially making it more attractive to both merchants and consumers. This, in turn, could lead to a more competitive market in which four major players compete, potentially driving down transaction fees and spurring further innovation in payment technologies.

Moreover, whereas mandatory routing regulations—such as those contained in the Durbin amendment and the proposed Credit Card Competition Act—lead to data fragmentation that would undermine fraud detection, the combination of Capital One's innovative data analytics with Discover's networks would likely improve fraud detection. For example, Capital One recently partnered with Stripe and Ayden to build an open-source application programming interface (API) that enables any entity in the payment stack to share real-time transaction data, enabling Capital One to better detect fraud.[52]

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[49] Caitlin Mullin, *Capital One Pledges to Give Discover's Network a Boost*, PAYMENTS DIVE (Mar. 26, 2024), https://www.paymentsdive.com/news/capital-one-discover-acquisition-federal-reserve-occ-debit-credit-card-network-visa-mastercard/711385.

[50] *Id.; see also*, *Leading Credit Card Issuers in the United States from 2007 to 2023, Based on Value of Transactions for Goods and Services*, STATISTA (Feb. 2024), https://www.statista.com/statistics/1080768/leading-credit-card-issuers-usa-by-purchase-volume.

[51] *See, e.g.*, Press Release, *Sen. Dick Durbin, Durbin, Marshall Announce Hawley, Reed as New Cosponsors, Growing Support for Credit Card Competition Act*, OFFICE OF SEN. DICK DURBIN (Feb. 14 2024), https://www.durbin.senate.gov/newsroom/press-releases/durbin-marshall-announce-hawley-reed-as-new-cosponsors-growing-support-for-credit-card-comptition-act (arguing that "[f]or too long, the Visa-Mastercard duopoly alongside the Wall Street megabanks have price-gouged hardworking Americans with little-to-no oversight" and "[f]or years, Visa and Mastercard have taken advantage of their duopoly in the credit market to impose extreme fees on small merchants and retailers.").

[52] Mary Ann Azevedo, *When Foes Become Friends: Capital One Partners with Fintech Giants Stripe, Adyen to Prevent Fraud*,

C. Debit Cards

The transaction also potentially offers an opportunity for Capital One to shift the debit cards of its current and future bank customers over to Discover's payment networks. Capital One founder and CEO Richard Fairbank has stated that the company intends to transfer all its debit cards to the newly acquired networks.[53]

By moving customers onto Discover's three-party payment card network, Capital One's customers will be able to avoid the distortions imposed by the Durbin Amendment's price controls. In turn, this will enable Capital One to offer rewards and maintain free checking accounts for lower-income consumers. These price controls only apply to debit cards issued on four-party payment networks, so Capital One will be able to avoid them by issuing debit cards on its own newly acquired three-party network.

Under a provision of the Dodd-Frank Wall Street Reform Act of 2010 known commonly as the "Durbin amendment," the U.S. Federal Reserve imposed caps on debit card interchange fees for banks with more than $10 billion in assets ("covered banks"), as well as routing requirements for all debit card issuers.[54] As a result, debit card interchange fees fell by about 50% for large banks almost immediately. Interchange fees on debit cards issued by smaller banks and credit unions initially fell by a smaller amount, and interchange fees on single-message (PIN) debit cards have now fallen to similar levels as PIN debit cards issued by larger banks.[55]

Estimates suggest that the Durbin amendment initially reduced annual interchange fee revenue for covered banks by between $4.1 and $8 billion.[56] In response, covered banks eliminated or

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TECHCRUNCH (Jun. 5, 2024), https://techcrunch.com/2024/06/05/when-foes-become-friends-capital-one-partners-with-fintech-giants-stripe-adyen-to-prevent-fraud.

[53] *Transcript of Conference Call Held by Capital One Financial Corporation and Discover Financial Services on February 20, 2024, Filed by Capital One Financial Corporation* (Commission File No.: 001-13300), *available at* https://investor.capitalone.com/static-files/d7b64c07-9663-4b0a-b382-48792a04c148:

> "So, on the debit side with the Discover Global Network, with the Pulse PIN debit network, along with their Discover signature debit network, it's really well-positioned and in a strong position to just basically take our debit volume at this place and at this point, and we feel comfortable moving our entire business over there." *See also*, *supra* note 49 ("Currently, Capital One's debit cards run on Mastercard's network, and all of that volume will move to Discover's network, Capital One executives said Tuesday. Some portion of Capital One's credit cards will move to Discover's payment rails as well, Fairbank said. Capital One issues cards on both the Visa and Mastercard networks, with about 42% of the bank's credit cards running on Visa and 58% on Mastercard, as of 2022, according to Bank of America Securities analysts.".

[54] H.R.4173 - Dodd-Frank Wall Street Reform and Consumer Protection Act, s.1075(a)(3); *Debit Card Interchange Fees and Routing; Final Rule*, 76 FED. REG. 43,393-43,475, (Jul. 20, 2011).

[55] Todd J. Zywicki, Geoffrey A. Manne, & Julian Morris, *Unreasonable and Disproportionate: How the Durbin Amendment Harms Poorer Americans and Small Businesses*, INT'L CNTR FOR L. & ECON. (Apr. 25, 2017), *available at* https://laweconcenter.org/wp-content/uploads/2017/08/icle-durbin_update_2017_final-1.pdf.

[56] *See, e.g.*, Benjamin S. Kay, Mark D. Manuszak, & Cindy M. Vojtech, *Competition and Complementarities in Retail Banking: Evidence From Debit Card Interchange Regulation*, 34 J. FIN. INTERMEDIATION 91, 92 (2018) (estimating losses of interchange income between $4.1-$6.5 billion); Vladimir Mukharlyamov & Natasha Sarin, *Price Regulation in Two-Sided*

reduced card-rewards programs on debit cards.[57] They also typically raised monthly account maintenance fees and increased the minimum balance needed for a fee-free account.[58] These changes have resulted in an increase in unbanked and underbanked households in the United States, particularly among lower-income consumers.[59]

As a covered bank, Capital One might have been expected to have been among those that reduced the availability of free checking. But Capital One's business model is focused on attracting the very clients who would be put off by having to pay a fee for their checking account. So, as noted above, it has kept fee-free checking accounts with zero minimum balances.[60] It has been able to do this, in part, because of its lower costs as a primarily online bank. As with most covered banks, however, Capital One discontinued its debit card rewards program following the implementation of the Durbin amendment.[61]

Capital One's debit cards currently operate on four-party networks. By contrast, the Discover card network operates as a three-party closed-loop system, in which the issuer and the acquirer are the same and there is, therefore, no interchange fee. As such, debit cards issued directly by Discover are not subject to the Durbin amendment, which is why it is able to continue to offer cashback rewards of 1% on purchases made on those cards.[62] Shifting all of Capital One's debit cards over to the Discover network (including, in particular, the PULSE single-message PIN-debit network) would allow Capital One to more effectively balance the two sides of the market, using fees charged to merchants to cross-subsidize holders of Capital One current accounts. This might include:

Markets: Empirical Evidence From Debit Cards (Dec. 2019), https://ssrn.com/abstract=3328579 (estimating $5.5 billion annual revenue loss to banks from interchange-fee reductions); Bradley G. Hubbard, *The Durbin Amendment, Two-Sided Markets, and Wealth Transfers: An Examination of Unintended Consequences Three Years Later*, SSRN (May 20, 2013), at 20, https://ssrn.com/abstract=2285105 (estimating annual revenue loss of $6.6 billion to $8 billion from the Durbin amendment).

[57] *See* Darryl E. Getter, *Regulation of Debit Interchange Fees*, CONGRESSIONAL RESEARCH SERVICE (May 16, 2017), at 8. *See also* ELECTRONIC PAYMENTS COALITION, OUT OF BALANCE: HOW THE DURBIN AMENDMENT HAS FAILED TO MEET ITS PROMISES 7 (Dec. 2018), *available* at https://www.electronicpaymentscoalition.org/wp-content/uploads/2018/12/EPC.DurbinStudiesPaper.pdf (Eliminating rewards, such as cash-back on purchases, is functionally equivalent to a price increase).

[58] Mark D. Manuszak & Krzysztof Wozniak, *The Impact of Price Controls in Two-Sided Markets: Evidence From US Debit Card Interchange Fee Regulation* (Bd. of Governors of the Fed. Res. Sys. Fin. & Econ. Discussion Series, Working Paper No. 2017-074, 2017); Mukharlyamov & Sarin, *supra* note 56.

[59] Mukharlyamov & Sarin, *supra* note 56.

[60] *See* Aly J. Yale, *Everything You Need to Know About Banking with Capital One*, WALL STREET JOURNAL (May 28, 2024), https://www.wsj.com/buyside/personal-finance/banking/capital-one-bank-review.

[61] *See* Blake Ellis, *Wells Fargo, Chase, SunTrust cancel debit rewards program*, CNN MONEY (Mar. 28, 2011), https://money.cnn.com/2011/03/25/pf/debit_rewards/index.htm (noting the move by major banks to cancel debit-card rewards in anticipation of the Durbin amendment going into effect); Richard Kerr, *Where Have All the Rewards Debit Cards Gone?*, THE POINTS GUY (Jun. 24, 2015), https://thepointsguy.com/credit-cards/rewards-debit-cards-gone (describing the "slow death of debit cards that earn points and miles.").

[62] *See, e.g.*, *Earn Cash Back Rewards with No Fees*, DISCOVER (2024), https://www.discover.com/online-banking/checking-account.

- Expanding access to fee-free checking accounts to low-income consumers and those with lower credit scores;
- Further encouraging adoption of checking accounts by offering higher rates of interest on deposits and/or rewards on debit card purchases; and/or
- Creating co-branded debit cards with specific merchants and offering additional rewards redeemable at those merchants.

D. Data-Security Effects for Consumers and Merchants

Another potentially significant benefit of the merger is its effect on fraud, which is a challenge for every party in the payments ecosystem: issuers, acquirers, merchants, and cardholders. Global losses from payment-card fraud were estimated to be $34 billion in 2022, of which 36% was attributed to the United States.[63] Discover, in particular, has had various data security breaches and other compliance issues.[64] By combining Capital One's innovative approach to data management with Discover's payment networks, the combined entity could help to significantly reduce such fraud.

Issuers and networks have developed increasingly sophisticated systems to reduce fraud. For example, when a card with a chip is dipped or tapped, it transfers a unique one-time token, generated by the chip, that is encrypted and can only be read by the issuer.[65] The implementation of chip-based tokenized transactions has dramatically reduced fraud compared to the simpler magnetic stripe cards. Mobile payments also use tokens in a similar way.

But tokens by themselves can't solve the problem of stolen cards and hacked online accounts. Issuers and networks have thus implemented other measures, most notably systems of multifactor authentication. An example is 3D-Secure (3DS), which involves using the information sent in the first (authorization) message to check against a cardholder's profile. If the proposed payment fits the profile, it is permitted; if not, then the cardholder is asked to complete two-factor authentication on the transaction.[66]

[63] Kalle Radage, *Credit Card Fraud in 2023*, CLEARLY PAYMENTS (Aug. 13, 2023), https://www.clearlypayments.com/blog/credit-card-fraud-in-2023.

[64] *See, e.g.*, *Discover Financial Jumps 7% After Agreeing with FDIC to Improve Consumer Compliance*, REUTERS (Oct. 2, 2023), https://www.reuters.com/business/finance/discover-financial-jumps-7-after-agreeing-with-fdic-improve-consumer-compliance-2023-10-02; David Lukic, *The Discover Breach, Credit Card Companies Nightmare*, ID STRONG (Dec. 11, 2023), https://www.idstrong.com/sentinel/discover-breach-credit-card-companies-nightmare.

[65] EMV chips use a form of public-key infrastructure. The token is encrypted using the issuer's public key and can only be decrypted using the issuer's private key. After decrypting the token (technically, a cryptogram), the issuer can validate the transaction by checking its authenticity and integrity. If the token is validated successfully, the issuer authorizes the transaction. If the token cannot be validated, the transaction is declined.

[66] *See* Elint Chu, *What Is New with EMV 3DS v.2.3?*, EMVCO (Nov. 12, 2021), https://www.emvco.com/knowledge-hub/what-is-new-with-emv-3ds-v2-3.

3DS would not be possible without cardholder profiles, which are an example of the application of AI to payments. Since the 1990s, Visa and Mastercard have used machine learning to develop cardholders profiles, which then enable them to identify potential instances of fraud.

Payment networks, issuers, and other companies in the card-processing stack have also begun to use biometrics, typically combined with machine learning, as part of the authentication and authorization process.[67] Capital One has been a leading innovator in such methods, going back at least to its pattern-tracing system for accessing mobile accounts.[68] From 2018 to 2020, Capital One applied for 23 biometric-related patents, including one for voice recognition.[69]

One problem that can reduce the effectiveness of AI-based fraud detection (including 3DS) is data fragmentation. When a consumer has cards from multiple issuers on multiple networks, or where the same card is run by different merchants over different networks (which is currently possible with debit cards, due to the Durbin amendment's routing requirements), it may be difficult for networks and issuers to build a consistent picture of an individual's payment patterns. This makes it more difficult to identify attempted payments that do not fit a pattern.

The merger might improve fraud detection in several ways. First, when Capital One's debit cards are moved to Discover's networks, they will no longer be subject to the Durbin amendment's routing requirements, and thus all transactions on those cards will be monitored directly by Capital One's systems. Second, Capital One will be able to implement its highly innovative fraud-detection and prevention systems across all Discover networks. Third, as noted above, Capital One recently partnered with Stripe and Ayden to build an open-source API that enables any entity in the payment stack to share real-time transaction data,[70] which should help Capital One to address fraud more effectively and in a manner comparable to existing larger networks (Visa, Mastercard, American Express) despite of its smaller size.

These improvements in fraud detection and prevention would have both direct and indirect benefits for merchants and consumers. The direct benefits arise from the simple fact of experiencing fewer fraudulent transactions. For consumers, this means not having to identify fraudulent transactions or go through the process of initiating chargebacks. For merchants, it means fewer chargebacks and related disputes with issuers. The indirect benefit is lower costs all around, which can be passed on in the form of lower fees and/or additional account or card benefits. And these increased benefits should be expected to drive an increase in the use of

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[67] *See, e.g.*, *NuData: It's Time for Businesses to Replace the Old 'New Normal' With a New One*, PYMNTS (Jun. 30, 2021), https://www.pymnts.com/news/payments-innovation/2021/nudata-time-businesses-replace-old-new-normal; Chris Burt, *Smartmetric CEO Claims Progress Towards American Biometric Payment Card Launch*, BIOMETRIC UPDATE (Jul. 18, 2022), https://www.biometricupdate.com/202207/smartmetric-ceo-claims-progress-towards-american-biometric-payment-card-launch.

[68] *See* Jim Bruene, *Capital One Launches SureSwipe for Gesutre-Based Mobile Login*, FINOVATE (Nov. 11, 2013), https://finovate.com/capital_ones_gesture-based_mobile_login_sureswipe.

[69] *Capital One Patent Looks To Bring Voice Recognition Technology To Mobile Payments*, CBINSIGHTS (Oct. 13, 2020), https://www.cbinsights.com/research/capital-one-patent-voice-recognition-tech-mobile-payments.

[70] *See supra note* 52 and accompanying text.

Capital One cards, thereby generating a virtuous cycle of network effects, whereby fraud can be reduced further, while use and acceptance of the cards are further increased.

E. Banking (Deposits and Lending)

Critics of the merger have identified ways the proposed merger could harm banking consumers by increasing the cost of credit, increasing fees, and reducing the interest paid to depositors.[71] There is, however, little evidence the merger poses potential antitrust harm to depositors. Of note:

- Capital One is currently the ninth-largest bank in the United States by total assets, while Discover is the 27th largest.[72] The combined bank will have total assets of under $630 billion, making it the sixth-largest. This would still represent only 3.1% of domestic assets held by the largest commercial banks in the United States, and leave the combined entity less than one-quarter the size of the largest bank, JPMorgan Chase.[73]
- Similarly, the combined companies account for less than 3% of total bank deposits.[74]
- Because Discover has no branches, the merger would have little to no effect on the total number of bank branches in the United States. Indeed, it would arguably increase access to Capital One bank branches (and cafes) for Discover's customers.

Capital One and Discover have both been industry leaders in increasing financial access for underserved consumers. For example, most bank accounts in the United States today impose monthly maintenance fees, especially for lower-income consumers who cannot meet the stiffer average balance requirements required to be eligible for free checking. Both Capital One's 360 Checking Account and Discover's Cashback Debit accounts offer free checking accounts with no minimum balance requirements. Capital One was also one of the first large banks to eliminate overdraft fees.

With such small market shares, it would be a stretch to conclude that a merger between Capital One and Discover would have any noticeable effect on competition for deposits or depositors in the U.S. banking sector. Moreover, as primarily online banks, Capital One and Discover compete nationally against other online banks, as well as "traditional" banks with substantial online presence. Thus, even if the merged firm were to try to charge above-competitive fees or offer below-competitive interest rates to depositors, such efforts would be likely to fail in the face of competition from hundreds of other competing banks and credit unions.

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[71] *See supra* notes 3-5 and accompanying text.

[72] *See Federal Reserve Board, supra* note 8.

[73] *Id.*

[74] *See* Capital One Application, *supra* note 12, at 39.

F. Are There *Any* Competition Concerns?

Based on the above analysis, the prospective acquisition of Discover by Capital One augurs well for consumer welfare. As noted, however, some critics have raised concerns regarding certain aspects of the merger. Here, we briefly review these concerns.

1. Credit cards

The merged firm would be the largest holder of credit card debt, accounting for nearly 22% of outstanding credit card loans by dollar amount.[75] That, in and of itself, is not necessarily a concern; as Capital One points out in its filing, it would not exceed any threshold in a conventional antitrust analysis.[76]

Much of the concern has been focused on potential harms to specific groups of credit card customers, especially the "near-prime" or "subprime" segments of borrowers with FICO scores below 660.[77] A key question for antitrust analysis is whether these constitute a distinct relevant market. One critic of the merger argues that these consumers' higher risk, as well as Capital One and Discover's direct-mail marketing to these consumers, suggest they constitute a distinct "submarket."[78] In contrast, the Bank Policy Institute reports:

> No evidence has been put forth by critics of the proposed merger to define the boundaries of the subprime segment and establish that consumers in this segment are sufficiently isolated for it to be considered a distinct submarket for antitrust purposes.[79]

One important consideration in evaluating this concern is that a consumer's credit status is rarely static over time. Due to changes in income and other circumstances, a subprime borrower today may be a prime borrower next year, and vice versa. Using data from 2014 and 2015, Fair Isaac found that a "notable percentage" of FICO scores migrated up or down more than 20 points in a six-month period, with 14% of accounts decreasing by more than 20 points, and 19% increasing by more than 20 points.[80] Thus, even if a subprime or near-prime market segment can

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[75] *See Federal Reserve Board, supra* note 8.

[76] *See* Capital One Application, *supra* note 12, at 39-40.

[77] CFPB provides the following definitions: superprime (800 or greater), prime plus (720 to 799), prime (660 to 719), near-prime (620 to 659), subprime (580 to 619), and deep subprime (579 or less). CONSUMER FINANCIAL PROTECTION BUREAU, THE CONSUMER CREDIT CARD MARKET 12 (Oct. 2023), *available at* https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2023.pdf.

[78] Naeem, *supra* note 10, at 17.

[79] Haelim Anderson, Paul Calem, & Benjamin Gross, *Is the Subprime Segment of the Credit Card Market Concentrated?* BANK POLICY INSTITUTE (May 31, 2024), https://bpi.com/is-the-subprime-segment-of-the-credit-card-market-concentrated.

[80] *See* FAIR ISAAC CORPORATION, FICO RESEARCH: CONSUMER CREDIT SCORE MIGRATION (2018), https://www.fico.com/en/latest-thinking/white-paper/fico-research-consumer-credit-score-migration.

be defined, migration into and out of these segments makes it exceedingly difficult to establish a reliable market definition for antitrust analysis.

Among consumers with at least one credit card, as of 2023, 8.6% were near-prime and 4.4% subprime.[81] The Bank Policy Institute estimates the merged firm would account for a little less than 30% of subprime credit card balances in the United States.[82] Thus, the authors conclude, "If the subprime consumer segment of the credit card market merits separate scrutiny, our analysis indicates that the segment is highly competitive and would remain so even after the proposed merger."[83]

It is also worth noting that Capital One gained its market share in "subprime" over time through its data-driven strategy. This has enabled the company to identify lower-risk individuals in (otherwise) higher-risk groups, thereby serving otherwise underserved consumers, while limiting default risk.[84] It also provides opportunities for these consumers to migrate toward a lower-risk category by gradually increasing the size of their credit lines as they demonstrate creditworthiness.[85]

Another important aspect of this strategy was the pioneering of two now-widespread credit card offerings: secured credit cards and balance transfers. In 1991, Capital One became the first credit card issuer to introduce a balance-transfer offer.[86] A balance transfer provides a temporarily low interest rate to induce people to move balances from a competing credit card to the card providing the balance-transfer offer. In short, Capital One's substantial market share in the subprime credit card market is best explained by its innovative culture in meeting the needs of the heterogeneous consumers in this complex market.

Although perhaps not the first to offer a secured credit card, Capital One was arguably the first issuer to implement a major program of such cards.[87] A secured credit card differs from a traditional card in that all or part of the borrower's credit limit is secured against a cash deposit provided by the consumer at the time of account opening. Secured cards are most useful to

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[81] CFPB, *supra* note 77, at 16—17.

[82] *See* Anderson, Calem, & Gross, *supra* note 79, at Panel C.

[83] *Id.* at Conclusion.

[84] Becker, *supra* note 33 ("By identifying lower-risk individuals in high-risk groups, Capital One was able to market to reliable consumers other companies wouldn't touch, says [Chris] Meyer [CEO of Monitor Networks]. In just six years, Capital One became the sixth-largest credit card issuer in the country. "When others were attacking the market with blunt instruments, Capital One used a scalpel," says Meyer.").

[85] Snyder, *supra* note 40 ("Sanjay Sakhrani, an equity analyst and managing director at the investment bank Keefe, Bruyette & Woods, says the bank focuses its efforts on the most profitable risk-adjusted return segments. "I think they've done a very effective job [of] underwriting and managing risks inside of the subprime population," he says. The bank starts by offering those customers low credit lines and graduates them over time as they demonstrate their credit worthiness.").

[86] *See* Drozd, *supra* note 39.

[87] *See* Snyder, *supra* note 40.

consumers seeking to build a credit history or attempting to repair a damaged credit history.[88] Research published by the Philadelphia Fed concludes that a combination of credit-score migration and increased competition has been associated with increasing "graduation rates" over time from secured cards to unsecured cards.[89]

Finally, for credit card issuers, a merger might result in a more effective competitor to the major incumbents, thereby potentially *increasing* competition, even while reducing the number of competitors. And a smaller number of larger firms facing more intense competition may be better for consumers than a larger number of smaller, less effective firms.

With respect to payment *networks*, it's important to note that the proposed merger between Capital One and Discover does not reduce the number of competitors; it merely shifts ownership of Discover's network to the merged firm, which would presumably adopt Capital One's more sophisticated technologies, including those related to fraud detection, as discussed above. In this way, it could be argued that Capital One's acquisition of Discover's payments network might result in more effective competition to Visa, Mastercard, and American Express, with broad benefits to merchants and consumers.

2. Debit cards

A major objective of the merger is, as noted above, to switch Capital One's debit cards over to Discover's payment network and thereby circumvent the Durbin amendment's price controls and routing requirements. This vertical integration could allow for more flexibility in fee structures and potentially higher overall revenue per transaction. This would enable Capital One to offer cashback rewards to debit cards and potentially also cross-subsidize accounts in other ways, such as by offering sign-up bonuses.

Consumers would almost certainly benefit from the increased availability of debit card rewards and sign-up bonuses. Cashback rewards may be especially beneficial to lower-income cardholders. Indeed, it is likely that the reintroduction of such rewards will encourage some lower-income consumers, and especially those with poor credit scores and without access to a rewards credit card, to switch to Capital One. Moreover, the prospect of such rewards would likely entice many consumers who are currently unbanked or "underbanked" (*i.e.*, have access to only minimal banking services) to open accounts with Capital One and thereby participate more fully in the banking system.

Of course, if Capital One does charge higher debit card transaction fees than four-party issuers, some merchants may choose to no longer accept its debit cards (and, if Capital One's terms require merchants to accept all cards operating on its branded three-party network, also its credit cards). And if fewer merchants accept its cards, that will make the cards less attractive to

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[88] *See, e.g.*, Ian McGroarty, *CFI in Focus: Secured Credit Cards*, FEDERAL RESERVE BANK OF PHILADELPHIA (Sep. 2019), at 1-2, *available at* https://www.philadelphiafed.org/-/media/frbp/assets/consumer-finance/articles/secured-credit-cards.pdf.

[89] *Id.* at 6-7.

consumers. Capital One will therefore have to balance such potential effects on merchants against the benefits to cardholders, just as Sears did in 1986 when it introduced Discover with *lower* than prevailing merchant fees in order to incentivize merchant acceptance.

From the perspective of merchants as a whole, the prospect of a larger proportion of consumers having bank accounts, and an even greater proportion paying by card rather than cash, should be attractive, given that card payments can result in increased sales (because consumers are able to spend more than they have in their wallet).[90] Meanwhile, having some consumers use debit cards rather than credit cards should also be attractive. As such, not only does it seem unlikely that many merchants would cease accepting Capital One cards, but it is also unlikely that Capital One switching its debit cards to Discover's networks would cause net harm to social welfare.

From an antitrust perspective, it appears almost certain that, while some merchants may face higher costs of acceptance, this will be more than balanced by the increase in card-based transactions. Hence, there would be lower net costs for many merchants and an increase in consumer benefits arising from the rewards and other benefits the debit cards would now provide.

A similar issue lay at the heart of the U.S. Supreme Court's decision in *Ohio v. Amex*:

> Respondent… Amex… operate[s] what economists call a "two-sided platform," providing services to two different groups (cardholders and merchants) who depend on the platform to intermediate between them. Because the interaction between the two groups is a transaction, credit-card networks are a special type of two-sided platform known as a "transaction" platform. The key feature of transaction platforms is that they cannot make a sale to one side of the platform without simultaneously making a sale to the other. Unlike traditional markets, two-sided platforms exhibit "indirect network effects," which exist where the value of the platform to one group depends on how many members of another group participate. Two-sided platforms must take these effects into account before making a change in price on either side, or they risk creating a feedback loop of declining demand. Thus, striking the optimal balance of the prices charged on each side of the platform is essential for two-sided platforms to maximize the value of their services and to compete with their rivals.
>
> Visa and MasterCard—two of the major players in the credit-card market—have significant structural advantages over Amex. Amex competes with them by using a different business model, which focuses on cardholder spending rather than cardholder lending. To encourage cardholder spending, Amex provides better rewards than the other credit-card companies. Amex must continually invest in its cardholder rewards program to maintain its cardholders' loyalty. But to fund those investments, it must charge merchants higher fees than its rivals. Although this

[90] Sumit Agarwal, Wenlan Qian, Yuan Ren, Hsin-Tien Tsai, and Bernard Yeung, *Mobile Wallet and Entrepreneurial Growth*, AEA PAPERS AND PROCEEDINGS, 109:48–53 (2019); David Bounie and Youssouf Camara, *Card-Sales Response to Merchant Contactless Payment Acceptance*, *JOURNAL OF BANKING & FINANCE*, Vol. 119, issue C. (2020).

> business model has stimulated competitive innovations in the credit-card market, it sometimes causes friction with merchants.[91]

Thus, the fact that some merchants may see their costs rise (slightly) as a result of the merger must be weighed against the significant benefits that accrue to consumers and other merchants.

IV. Conclusion

Returning to the criteria by which the Federal Reserve and OCC are required to evaluate this merger, and in service of which this paper has been produced, (1) the convenience and needs of the communities to be served by the combined organization and (2) competition in the relevant markets, the forgoing analysis leads to the following conclusions:

- By switching its debit cards to Discover's payment networks, Capital One might offer more attractive products to depositors. In particular, it could expand access to free checking accounts with no minimum balance requirements to a wider range of low-income consumers. And it could offer debit cards with cashback to lower-income consumers who would not qualify for credit cards. The benefits for this important underserved community could be enormous.
- In combination, Capital One and Discover would be the sixth-largest U.S. bank by assets. Cost savings and other synergies could make it a more effective competitor in the large national bank market, driving improvements in its own offerings, as well as among other, similarly sized banks that serve large segments of the U.S. population.
- The combined Capital One-Discover would become the third-largest credit card issuer by purchaser volume, after JPMorgan Chase and American Express. As with its banking operations, its scale and innovative approach could drive improvements both directly for its customers and indirectly for the customers of other banks. In particular, it would likely lead to significant reductions in fraud, which could result in a virtuous cycle of increased use and acceptance.
- Discover's credit card network is currently the fourth largest in the United States, accounting for only about 4% of payment volumes and thus trailing far behind Visa, MasterCard, and American Express. Through these investments, especially in fraud detection and prevention, and the resulting network effects, Capital One may be able to leverage Discover's card network to allow it to compete more successfully.

Through these effects, Capital One may attract additional customers, especially those with low incomes or lower credit scores, thereby more effectively meeting the convenience and needs of the communities it serves. At the same time, and for largely the same reasons, it would arguably increase competition in most relevant markets and is unlikely substantially to diminish competition in any markets.

[91] *Ohio v. American Express Co.*, 138, S.Ct. 2274, 2276-77, 585 U.S. 529 (2018).