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This report includes a set of proposals for the Biden Administration and Congress to address two key groups of competition issues in the financial sector: 1) Problems of unequal access to retail banking and credit for low-income communities and communities of color; and 2) Issues relating to common ownership of stocks by large mutual funds.

Part I: Expanding Access to Retail Banking & Credit

Introduction

More than 30 million American households lack access to affordable basic banking services.[1] The market for retail banking and credit does not provide affordable, equitable products for low-income communities and communities of color. As a result, expensive and often predatory alternatives have filled the market gap. Low-income Americans without access to mainstream banking and credit options spend around 10% of their income each year in fees and interest on financial services that those with access to mainstream services typically get for free.[2] The COVID-19 crisis both highlighted and magnified the disadvantages associated with being unbanked, as consumers shifted even further to online payments and millions of unbanked Americans waited weeks or months to receive their stimulus payments.[3] Meanwhile, other countries like China,[4] Canada,[5] and Brazil[6] are investing in digital currencies and faster payment systems as the United States continues to lag behind.

At the same time, as many as 60 million adults in the U.S. have difficulty applying for credit cards and other loans. This number adds those with blemishes on their credit reports to the 26.5 million adults who are "invisible" due to not having credit reports or scores. Such individuals have a more difficult time withstanding financial difficulties or other emergencies.[7] Lack of competition in the credit score market—in which one player, the Fair Isaac Corporation (FICO), claims a 90 percent market share—appears to contribute to these disparities by stifling innovation in credit scoring methodology.

The proposals in this section would address each of these challenges. First, a public option for retail banking services would expand access to affordable, equitable basic banking and credit services for millions of unbanked and underbanked Americans. The Biden Administration should work with Congress to establish a public option for retail banking services that builds upon proposals for FedAccounts, postal banking, and other related proposals that have emerged in recent years. Several scholars, advocacy organizations, Members of Congress, and the Biden-Sanders Unity Task Force endorsed versions of a FedAccounts or postal banking model.[8] This report outlines recommendations for a model that addresses some of the major

[1] Federal Deposit Insurance Corporation, "How America Banks: Household Use of Banking and Financial Services: 2019 FDIC Survey Executive Summary," October 2020.
[2] Mehrsa Baradaran, It's Time for Postal Banking (February 24, 2014), 127 Harvard Law Review F. 165.
[3] Aaron Klein, "A Big Problem for the Coronavirus Economy: The Internet Doesn't Take Cash," Brookings Institution, March 25, 2020.
[4] James Areddy, "China Creates Its Own Digital Currency, a First for Major Economy," Wall Street Journal, April 5, 2021.
[5] Julie Gordon & David Ljunggren, "Bank of Canada Accelerates Work on Digital Currency Amid Pandemic," Reuters, February 10, 2021.
[6] Paulo Trevisani & Jeffrey T. Lewis, "Brazil's Central Bank Uses Payment System to Spur Competition," Wall Street Journal, March 26, 2021.
[7] Jonnelle Marte, "U.S. consumers' access to credit may be worse than previously thought: Fed study," Reuters, September 24, 2019.
[8] See *infra* Proposal 1.

critiques facing these proposals and lays out considerations for the Administration as it seeks to implement this idea.

Second, this report recommends two key actions to increase competition in the credit score market: developing a public credit score alternative and lowering regulatory barriers to new private market entrants. These include a combination of legislative and executive actions for the Biden Administration and Congress to take to expand access to credit for low-income communities and communities of color while addressing potential pitfalls associated with artificial intelligence (AI) innovation in the credit score market.

Proposal 1: Designing a Banking Public Option

Problem & Context

The market for retail banking and credit does not provide affordable, equitable products for low-income communities and communities of color. These services are critical prerequisites to an equitable recovery from the COVID-19 crisis and to full participation in the 21st century economy.

Disparities in Access to Basic Banking

In 2019, an estimated 5.4% of U.S. households (7.1 million households) were "unbanked," meaning no one in the household had a checking or savings account at a bank or credit union. While that number decreased steadily since 2011, about two thirds of the decline is attributed to improved socioeconomic circumstances (income level, income volatility, employment, homeownership, and educational attainment) of U.S. households during that period. For that reason, the FDIC believes the recession caused by the COVID-19 pandemic is likely driving this rate back up.[9]

Another 24.2 million U.S. households were underbanked in 2017, relying at least in part on money orders, check cashing, rent-to-own, or other alternative financial services. In 2017, the last year for which the FDIC reported underbanked status, 18.7% of U.S. households who had a checking or savings account also used alternative financial products such as money orders, check cashing, payday loans, and pawn shops.[10] Unbanked and underbanked households are disproportionately low-income, Black or Hispanic/Latino, less educated, disabled, and noncitizen.

Failures of the Private Market

We do not propose a federal public solution lightly. Rather, we believe, as the Biden Administration does, in an expansive definition of infrastructure. Banking, and access to credit, are foundational to the healthy functioning and growth of our society. Therefore, as we put forth our solutions to these seemingly intractable issues, we want to contextualize our findings with an explanation of why even the combination of existing banking services and the advent of "FinTech" players will not sufficiently address this problem. First, we will explore the various reasons why unbanked and underbanked households eschew or supplement banks. Next, we consider the banks (or other financial service providers') perspective to elucidate certain insurmountable gaps between consumer needs and provider services.

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[9] Federal Deposit Insurance Corporation, "How America Banks: Household Use of Banking and Financial Services: 2019 FDIC Survey Executive Summary," October 2020.
[10] Federal Deposit Insurance Corporation, "FDIC National Survey of Unbanked and Underbanked Households: 2017 Executive Summary," October 2018.

The reasons households give for being unbanked suggest that the retail banking market is not providing affordable, trustworthy products.[11] In 2019, the most common reasons households gave for not having a bank account was 1) that they did not have enough money to meet minimum balance requirements, 2) that they don't trust banks, 3) that they are concerned about their privacy, 4) that bank account fees are too high, and 5) that bank account fees are too unpredictable.[12] Moreover, these five reasons and their relative frequency in the survey have remained consistent since the 2015 FDIC survey, suggesting that the prevailing sentiment among unbanked consumers has not changed much.

Indeed, providing basic bank accounts and credit services to consumers is often unprofitable for mainstream banks due to relatively low-dollar account balances and higher default risk on loans.[13] Past efforts to create affordable, government sponsored banking and credit options (e.g. credit unions, Savings and Loans, etc.) were undermined by deregulation and concentration in the banking sector.[14] Further, when large companies from other sectors, like Wal-Mart in 2005, have attempted to enter this market and provide basic banking services, the existing players have successfully lobbied to prevent them from entering.[15]

In 2011, the FDIC also surveyed the home office of 567 banks to better understand why these institutions were struggling to provide access to certain households. Although the survey itself is dated, its findings remain relevant.[16] Across business and product related obstacles to serving the unbanked and underbanked, respondents ranked the following as their top 5 impediments (at least a "minor obstacle) to providing service[17]:

- Fraud (79%)
- Lack of Consumer Understanding (74%)
- Effective Product Marketing (74%)
- Underwriting (70%)
- Profitability (63%)

All of the above obstacles for banks either imply or directly relate to profitability challenges. Increased costs to build consumer understanding, develop proper marketing, specialize underwriting for the subprime segment, and prevent fraud through further AML/KYC requirements require cost expenditures from financial services providers. Along these lines, in her analysis of how lower socioeconomic status consumers have been cut out of banking, Baradaran contends that providing financial services to the poor is intrinsically unprofitable.[18] In the context of loan origination, the argument is that the costs of originating a small loan are essentially equivalent to a large loan; thus, a natural incentive exists to make larger loans.

[11] In 2019, the most common reasons households gave for not having a bank account was 1) that they did not have enough money to meet minimum balance requirements, 2) that they don't trust banks, 3) that they are concerned about their privacy, 4) that bank account fees are too high, and 5) that bank account fees are too unpredictable. See Federal Deposit Insurance Corporation, "How America Banks: Household Use of Banking and Financial Services: 2019 FDIC Survey Executive Summary," October 2020.
[12] Federal Deposit Insurance Corporation, "How America Banks: Household Use of Banking and Financial Services: 2019 FDIC Survey Executive Summary," October 2020.
[13] Id. at 493.
[14] Mehrsa Baradaran, How the Poor Got Cut Out of Banking (March 11, 2012). 62 Emory Law Journal 483, 487 (2013).
[15] Michael Barbaro, "Bankers Oppose Wal-Mart as Rival," New York Times, October 15, 2005.
[16] Federal Deposit Insurance Corporation, "Survey of Banks' Efforts to Serve the Unbanked and Underbanked: 2011 Executive Summary," April 2021.
[17] Id.
[18] Baradaran, *supra* note 13, at 487.

A similar argument can be made regarding the provisions of checking and savings accounts - although there is more flexibility to tailor costs and revenue (through interest rates). Banks are unlikely to develop extensive consumer listening efforts to understand the deposit needs of poor consumers and equally unlikely to create extensive marketing campaigns to reach them as all of these resources could be redirected toward more profitable consumers. Adding to the costs of serving low income customers is their disproportionate use of cash. A 2016 Pew Research Survey found that lower income households are far more likely to make all of their purchases in cash and that Black and Latino households are also more likely to use cash on a weekly basis.[19] Meanwhile, cash is operationally expensive for banks: it costs money to store, transport, and monitor.

Indeed, many banks justify fee income and minimum balance requirements using this logic. Given that fee avoidance and minimum balance requirements are major concerns for underbanked consumers and banks' reliance on fees to cover the increased costs of serving poor consumers, it is unlikely that banks will sustainably address the needs of this segment of the population. It is equally as unwise to wait and see if this hypothesis proves true.

Further, bank closures and consolidations after the financial crisis have increased the number of both rural and urban areas that are considered banking deserts. More than 6% of bank branches were closed between 2008 and 2016, and they were disproportionately located in rural Hispanic areas and low-income urban neighborhoods. As of 2016, residents of low-income census tracts were 80% more likely to live in a banking desert than are residents of higher-income census tracts.[20] These trends contribute to the racial and socioeconomic disparities in banking access and underscore the limitations of the private market in meeting the needs of these populations.

Just as banks have curtailed physical access for poor consumers, they have also raised service fees. A 2019 examination of trends in noninterest income by the Cleveland Federal Reserve demonstrated that service charges from commercial banks (including ATM and overdraft fees) have grown in share of non-interest revenue (from 14% in 2001 to 25% in 2018)[21]. Service charges jumped considerably after the financial crisis—with the increase most pronounced among mid-sized banks. The study concluded that overall reliance on service charges may be increasing due to net interest margin pressure (from lower rates), especially when other forms of noninterest income were adversely affected by the Great Recession.

As a result of all these forces, alternative, often predatory financial products have emerged to fill the gap. Estimates suggest that low-income Americans without access to mainstream banking and credit options spend around 10% of their income each year in fees and interest on financial services that those with access to mainstream services typically get for free.[22] In 2018, unbanked, underbanked, and other low-income households in the U.S. spent $189 billion in fees and interest on financial products, and that number is growing. That includes $16.7 billion spent on fees for payments and deposits and another $39.9 billion on fees for single payment

[19] Aaron Smith & Monica Anderson, "New Modes of Payment and the 'Cashless Economy,'" Pew Research Center, December 16, 2016.
[20] NCRC, "Research Memo: Bank Branch Closures from 2008-2016," available at https://ncrc.org/wp-content/uploads/2017/05/NCRC_Branch_Deserts_Research_Memo_050517_2.pdf.
[21] Joseph G. Haubrich & Tristan Young, "Trends in the Noninterest Income of Banks," Federal Reserve Bank of Cleveland, September 24, 2019.
[22] Baradaran, *supra* note 2, at 127.

loan products like payday loans.[23] Spread across an estimated 31.3 million unbanked or underbanked households, the total cost represents about $6,000 per household.[24]

As Baradaran puts it starkly, "What we have today are two forms of banks—regulated mainstream banks that seek maximum profit for their shareholders by serving the needs of the wealthy and middle class, and unregulated fringe banks that seek maximum profits for their shareholders by taking advantage of the needs of the poor."[25] The private market is failing tens of millions of Americans, and a public option is necessary.

The United States's Slow, Costly Payment System

Another contributor to the failures of the private retail banking market for low-income Americans is the lack of access to real-time payments. Real-time payments systems facilitate money transfers from one bank/brokerage account to another instantaneously. The U.S. lags behind Mexico, Europe, and other advanced economies in implementing widespread real-time payments systems. Brazil's central bank recently launched a state-owned instant payments system.[26] In the United States, however, consumers and businesses often have to wait multiple days for their funds to transfer.

This friction creates detrimental liquidity challenges for families with low or volatile incomes, for whom a three-day delay in their rent payment getting to their landlord or their paycheck landing in their checking account can be particularly costly. These delays cause many families who do have bank accounts to opt for more expensive check cashing, payday loan, or other alternative financial services. One estimate suggests that lack of universal real-time payments costs low-income families $7 billion a year.[27] In other words, the lack of universal real-time payments infrastructure drives up the rate of underbanked Americans.

Insufficient competition in the market for real-time payments systems has driven these increased costs and decreased quality for consumers of basic banking services. The U.S. market for real-time payments systems for retail banking consumers is dominated by The Clearing House, a bank services provider owned by the world's largest banks. The Clearing House's Real Time Payments (RTP) system enables real-time transfers for low-dollar transactions between participating financial institutions. But it excludes smaller banks and other competitors.

A public solution is necessary to expand access to real-time payments and thereby reduce reliance on alternative financial products. The Federal Reserve is working to create FedNow, a public option for real-time payments processing that would be operated as a public utility accessible to all banks.[28] This would provide competition to the private RTP option and ensure that smaller banks, businesses, and communities can access real-time payments.[29] However, the project has been delayed and is not currently on pace to launch until 2023-2024.[30] In the

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23 Financial Health Network, "Financially Underserved Market Size Study 2019," 2019.
24 This rough estimate divides the $189 billion cost for financial products by an estimate of the total number of unbanked (7.1 million in 2019) and underbanked (24.1 million in 2017) households.
25 Baradaran, *supra* note 13, at 487.
26 Jamie McGeever, Marcela Ayres, & Carolina Mandl, "Brazil launches 'Piz' instant payments system, Whatsapp to enter 'soon,'" Reuters, November 16, 2020.
27 Aaron Klein, "The fastest way to address income inequality? Implement a real time payment system," Brookings Institution, January 2, 2019.
28 Federal Reserve, "Federal Reserve announces details of new 24x7x365 interbank settlement service with clearing functionality to support instant payments in the United States," August 6, 2020.
29 Peter Conti-Brown & David A. Wishnick, Private Markets, Public Options, and the Payment System, 37 Yale J. on Reg. (2020).
30 Id.

meantime, a bank account public option promises to immediately make the Fed's existing instant payment infrastructure available to any American who wants it, free of charge.

COVID-19 Challenges

The COVID-19 crisis has only magnified the disadvantages associated with being unbanked. The increasing reliance on online shopping and digital payments has made unbanked families' reliance on a combination of cash and expensive prepaid cards increasingly untenable.[31] Meanwhile, millions of Americans' stimulus payments were delayed because they were unbanked, often by weeks or months.[32] Indeed, some Americans waited about 20 weeks after payments were authorized by Congress.[33] These challenges will only continue as the Administration rolls out monthly Child Tax Credit payments: millions of Americans who need the payments most risk getting them last.

In recognition of these challenges, the FDIC recently launched localized campaigns to encourage more low-income Americans to open low-cost private bank accounts.[34] However, it is unlikely that these efforts will close the large gaps illustrated above, given a) the lack of trust that many unbanked Americans express toward banks, and b) the lack of real-time payments associated with those accounts. Many cash-strapped consumers who are unable to wait 2-3 days for their child tax credit payment to clear in their account may choose to pay the fee for instance check cashing, reducing the value of their tax credit.

The Rise of Digital Currencies

While electronic payments and online banking have already transformed a lot about how banking is done—at least for those with access to the banking system—a more dramatic recent technological shift is the rise of digital/crypto currencies. In reaction to innovations like blockchain distributed ledger currencies (like Bitcoin) and stablecoins (like Facebook's Libra), central banks are exploring Central Bank Digital Currencies (CBDCs) as complements to existing cash and payment options.[35] In April 2021, China was the first major country to announce plans to launch its own CBDC.[36] A retail banking infrastructure operated through the Federal Reserve's existing systems, as we propose here, would both enable the move to digital-first currencies that CBDC's aim for without many of the risks (privacy, stability, and otherwise) associated with CBDC models (though it would also not preclude the Fed from exploring CBDC models, too).[37]

Solution

Legislative Action: Congress should pass legislation to allow all U.S. citizens, residents, and U.S.-domiciled businesses and institutions to open a banking account at the Federal Reserve. This program, as discussed in detail below, would fill market gaps not being served by private

[31] Klein, *supra* note 3.
[32] Elisabeth Buchwald, "14 million Americans risk major delays in their stimulus checks — should they use Square, PayPal or a bank account?" MarketWatch, April 29, 2020.
[33] Amanda Fischer & Alix Gould-Werth, "Broken plumbing: How systems for delivering economic relief in response to the coronavirus recession failed the U.S. economy," Washington Center for Equitable Growth, July 29, 2020.
[34] Michelle Singletary, "The FDIC wants to make it easier for millions of 'unbanked' Americans to get their stimulus payments," Washington Post, April 6, 2021.
[35] Lael Brainard, "An Update on Digital Currencies," Board of Governors of the Federal Reserve System, August 13, 2021.
[36] Areddy, *supra* note 4.
[37] Morgan Ricks, John Crawford, & Lev Menand, "Central Banking for All: A Public Option for Bank Accounts," The Great Democracy Initiative, 7, 2018.

financial institutions and reduce costs and other burdens that low-income Americans face in accessing basic financial services.

Current Proposals for Banking Public Options

Postal Banking

The traditional postal banking proposal, as put forward by legal scholar Mehrsa Baradaran in 2014,[38] contains two key components. First, the U.S. Postal Service would provide basic checking and savings accounts, ATMs, and in-person customer service at all post offices. Second, the Postal Service would offer small-dollar loans to individuals (up to $500 at a time and $1,000 per year) with low fees and low interest rates compared to private alternatives.[39] USPS would also be authorized to create remittance services; check-cashing services; and other basic financial services as deemed appropriate by the agency.[40]

Proponents of postal banking point to the fact that it has been done before: the USPS offered basic banking services from 1911 to 1966. Most other developed countries also offer some type of postal banking service.[41] By leveraging the existing post office infrastructure, postal banking would reach zip codes that have lost bank branches.[42] As a relatively well-trusted institution, the Postal Service would provide a safe, non-predatory option for communities that are distrustful of private banks and who may instead rely on expensive alternative financial products.[43] Further, some have argued that postal banking could provide the Postal Service with revenue to help close its budget shortfalls. However, Baradaran and other progressive proponents insist that the program not aim to turn a profit, given the risk of recreating predatory or inaccessible products for the low-income Americans that need this public option most.

The USPS's Inspector General's Office endorsed a version of this proposal in 2014,[44] and the American Postal Workers Union supports it.[45] Senators Gillibrand and Sanders introduced the latest version of their postal banking legislation in 2020.[46] Recently, the ACLU launched an effort to advocate for postal banking legislation or executive action.[47]

FedAccounts

A complementary proposal for a banking public option is FedAccounts, which would provide basic bank accounts through the Federal Reserve system. Under this proposal, as put forward by Morgan Ricks, John Crawford, and Lev Menand, Congress would authorize the Federal Reserve to establish basic banking accounts for all U.S. citizens, residents, and U.S.-domiciled businesses and institutions. Like postal banking, the accounts would have no regular fees or

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[38] Baradaran, *supra* note 2.
[39] In 2014, the Postal Service estimated that it could provide a $375 loan with just $48 in interest and fees, compared to $520 in fees and interest that would be charged on the average $375 payday loan from a private payday lender. See U.S. Postal Service, Providing Non-Bank Financial Services for the Underserved (2014), 14.
[40] S.2755 - Postal Banking Act, introduced April 25, 2018.
[41] Mehrsa Baradaran, "A Short History of Postal Banking," Slate, August 18, 2014.
[42] U.S. Postal Service Office of the Inspector General, "Providing Non-Bank Financial Services for the Underserved," January 25, 2014. See also New America, "Mapping Financial Opportunity: Where are Financial Services Located?" visited May 1, 2021, available at https://www.newamerica.org/in-depth/mapping-financial-opportunity/where-are-financial-services-located/.
[43] Baradaran, *supra* note 2.
[44] U.S. Postal Service Office of the Inspector General, "Providing Non-Bank Financial Services for the Underserved," January 25, 2014.
[45] "Campaign for Postal Banking," American Postal Workers Union, AFL-CIO, visited May 1, 2021, available at https://apwu.org/postal-banking.
[46] Kirsten Gillibrand, "Senators Gillibrand And Sanders Reintroduce Postal Banking Act To Fund United States Postal Service And Provide Basic Financial Services To Underbanked Americans," September 17, 2020.
[47] Rakim Brooks, "Why We Need the Post Office to Close the Racial Wealth Gap," ACLU, March 18, 2021.

minimum deposits and no credit check requirements for opening an account.[48] Unlike the traditional postal banking proposal, these accounts would be accessible on a user-friendly online interface, including debit card, ATM access, and direct deposit and online bill pay functionalities.[49] The proposal also includes phone customer service support, as well as in-person support at Federal Reserve branches and other locations. Further, as discussed further below, post offices could be used to provide physical points of service for these accounts—meaning this proposal could operate similar to postal banking, but with the Fed providing the back-end account infrastructure.[50]

One key benefit of the FedAccounts model is that it would enable every American to connect directly to the Fed's existing instant payment system, allowing payments between FedAccounts to clear in real time. It would also enable payments to be made without fees—so, for example, a business accepting a FedAccount debit card payment would not have to pay a fee on the transaction. Further, FedAccounts would provide a simple, universal mechanism for the federal government to distribute payments like stimulus checks and monthly Child Tax Credit payments. It could also serve as a broader tool for monetary policy and macroeconomic stability.[51]

Senator Sherrod Brown and Representative Maxine Waters both introduced legislation for FedAccounts as part of the initial COVID-19 stimulus discussions in Spring 2020.[52] Sen. Brown also discussed including this proposal in the American Rescue Plan legislation.[53]

Critiques and Challenges to Existing Proposals

Despite widespread political support for these proposals, some criticism has emerged. This section discusses four critiques that we feel merit additional discussion at this stage in the debate. We note that others have responded to these and other critiques at some length.[54]

Critique 1: New FinTech products will close the existing disparities

Some question whether a public option is necessary to reach the unbanked and underbanked in the face of nimbler, non-traditional banking players that fall under the broad umbrella of "FinTech." For example, Brookings Institution released a report discussing the potential for FinTech to expand financial access given the right regulatory changes.[55] Given the ubiquitous use of mobile, especially among younger generations, it is easy to imagine that online-only financial products could reduce costs and create more user-friendly, attractive options for those who for a variety of reasons choose not to use existing banks.

However, as discussed above, the unbanked and underbanked population has been staying steady or even growing, suggesting that new financial products are not closing the gap. Indeed, even with increasing smartphone ownership, a lack of consistent high-speed broadband and mobile internet is a major inhibitor to seamless FinTech adoption. While most studies tend to

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[48] Note that, despite the lack of regular monthly fees, the account could still include other small fees to help defray costs of particular transactions and discourage abuse, such as small fees for bounced checks.

[49] Ricks et al., *supra* note 37.

[50] Id.

[51] Id.

[52] S.3561 - Banking for All Act, introduced March 23, 2020; https://www.congress.gov/bill/116th-congress/house-bill/6321/text?r=1&s=1

[53] Smith, Talmon Joseph, "Sherrod Brown: Progressives Will Be 'Pretty Happy' With Biden," New York Times, January 14, 2021.

[54] See, e.g., Ricks et al., *supra* note 37; "Know the Facts," Campaign for Postal Banking, visited May 1, 2021, available at http://www.campaignforpostalbanking.org/know-the-facts/.

[55] Michael Barr, Karen Gifford, & Aaron Klein, "Enhancing anti-money laundering and financial access: Can new technology achieve both?" Brookings Institution, April 2018.

center on increasing broadband internet access, an FCC working paper supplements this view with an examination of mobile internet, finding that rural networks are relatively more dependent on non-WiFi mobile technology and that counties with a greater share of minority residents are more likely to rely on dated mobile technology.[56] Further, low-income consumers and small businesses disproportionately rely on in-person banking services.[57]

Outside of mobile and broadband infrastructure, low-income consumers' emphasis on cash and other "expensive" banking services remains a key impediment for FinTech companies. Finally, these new entrants still face headwinds in building trust and must beware aligning themselves too heavily with the technology industry—which recently hit new lows in public perception.[58] Although FinTechs often bring an intense focus on user experience, design, portability, and mobility, they face many of the same structural hurdles as their banking peers. Once more, the economic incentive to serve low-income consumers is simply subordinated to the pursuit of more profitable, digital-ready consumers.

Critique 2: A public option could endanger community banks and credit unions
Supporters of community banks and credit unions argue that a public option could threaten their position in the market in favor of the largest and most profitable banks. They also argue that these institutions already serve many areas that have been abandoned by the large banks.[59] However, the data is clear that these institutions are not able to serve the unbanked and underbanked populations, and that the number of banking deserts is growing rather than shrinking.[60] In fact, many of the unbanked live in areas without community banks or credit unions.[61] Nonetheless, as discussed below, we think these institutions can and should play an important role as part of a banking public option ecosystem, alongside the Fed and the Postal Service.

Critique 3: Positioning the U.S. government as a collector on small-dollar loans may be undesirable
Other critics contend that we may not want to put the federal government in the position of creditor on small-dollar consumer loans that have been put forward as part of the postal banking proposal. Because some borrowers would inevitably default on their loans, the postal service or another agency would be in the position of having to collect on these loans, potentially in the form of wage garnishment, liens, and other methods. Legal scholar Peter Conti-Brown has argued this would be both politically undesirable and would undermine the current favorable view that Americans have toward the USPS when it becomes a collector.[62]

This very issue is why Baradaran and others have insisted that the public option not be used to turn a profit for the government or close the gap in the USPS's budget. Nonetheless, the question of how much the government should subsidize these loans and to what lengths it should go to collect on defaulted loans is one that should be considered in these proposals. Moreover, it is important to note that the lending component of the public option is not central

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[56] Judith Dempsey and Patrick Sun, "The Digital Divide in U.S. Mobile Technology and Speeds: OEA Working Paper 51," Office of Economics and Analytics, Federal Communications Commission, December 30, 2020.
[57] Jason Richardson and Zoe Paige, "Bank Branches Are Still Essential for Small Business Communities," National Community Reinvestment Coalition, June 10, 2019; Jad Edlebi, "Research Brief: Bank Branch Closure Update (2017-2020)," National Community Reinvestment Coalition, visited May 1, 2021.
[58] Megan Brenan, "Views of Big Tech Worsen; Public Wants More Regulation," Gallup, February 18, 2021.
[59] ICBA, "Our Position: Postal or State-Owned Public Banks," visited May 1, 2021, available at https://www.icba.org/our-positions-a-z/postal-and-state-banks/postal-banking.
[60] Jad Edlebi, "Research Brief: Bank Branch Closure Update (2017-2020)," National Community Reinvestment Coalition, visited May 1, 2021.
[61] John Heltman, "Postal Banking Is a Solution But to Which Problem?" American Banker, August 29, 2020.
[62] Peter Conti-Brown, "Why the next big bank shouldn't be USPS," Brookings Institution, May 31, 2018.

to the proposal. The Fed or the Postal Service can still provide basic banking and payment services even without also providing small-dollar loans. The need to think through these considerations around the loan component should not hold up the immediate implementation of a public bank account option.

Critique 4: Shifting deposits to the U.S. government could undermine other functions of the financial system

Finally, some have raised concerns about the prospect of consumers' deposits shifting from private banks—where they sit now, at least for those with bank accounts—to the Fed or the postal service. This migration could remove significant assets from banks' balance sheets and restrict their ability to lend. (This assumes, of course, that not just low-income, currently-unbanked consumers but also higher-income consumers with larger balances would move to the FedAccount system en masse.) However, FedAccounts proponents have written about the Fed's ability to address this issue through their discount window. In addition, these assets could enable the Fed to develop additional creative lending and investment vehicles targeted to underinvested areas and national priorities.[63]

Proposed Structure and Design Options

A combination of the features of FedAccounts and postal banking can address each of the challenges and critiques outlined above while still closing the disparities in access to retail banking services. This section outlines what we think are the most promising design features of a banking public option. Some of these contain considerations for further research and discussion.

Design Feature 1: Federal Reserve as Backbone Account Infrastructure & Digital Platform

The Federal Reserve should provide the underlying accounts for a banking public option. As discussed above, the Fed is best positioned to provide universal, digital-first accounts, and it can do so on top of its existing instant payment infrastructure and connections to the banking sector.

Congress should enable the Fed to make these accounts available to all U.S. citizens, residents, and U.S.-domiciled businesses and institutions. To successfully fill the market gap and meet the needs of low-income Americans, these accounts should include at least the following key features:

- A debit card, ATM access, and direct deposit and online bill pay functionalities;
- No regular fees and no minimum deposits, in order to maximize accessibility;
- No credit check requirement for opening an account, and no profitability considerations used to determine account opening;
- Real-time payments between accounts, a critically important feature made possible because the accounts would operate on the Fed's existing real-time payments infrastructure;
- User-friendly, accessible interfaces available in multiple languages;
- Customer service available by phone in multiple languages and in person at Federal Reserve branches and other locations.

Ricks, Crawford, and Menand propose that these accounts offer the same interest rate that commercial banks receive on their balances. As of June 2018, that was 1.75%. That rate would

[63] Saule T. Omarova, The People's Ledger: How to Democratize Money and Finance the Economy (October 20, 2020). Cornell Legal Studies Research Paper No. 20-45, Vanderbilt Law Review, Forthcoming, Available at SSRN: https://ssrn.com/abstract=3715735 or http://dx.doi.org/10.2139/ssrn.3715735.

be significantly higher than that offered in private checking and savings accounts.[64] We agree that these accounts should offer generous interest rates and can do so given the economies of scale and lack of profit motive associated with this public option. That said, to the extent private banks may consider that rate impossible to compete with, the Fed could consider lowering the rate slightly in a compromise, if necessary. For instance, the Fed offer over an interest rate at or around the average rate offered in the market.

Design Feature 2: Post Offices as Points of Service

Though the online FedAccounts interface would have all the necessary functionality, U.S. Postal Service branches should be used to provide physical points of service for those with limited computer literacy or trust. Fed ATMs should be placed at every post office location, and post office employees should be trained to handle cash and check deposits and cash withdrawals. The Fed does not have experience with customer service, and it only has 12 Federal Reserve branches located across the country. The Postal Service could provide necessary in-person services, including handling cash, and could leverage its popular reputation in ways the Fed could not. This arrangement would combine the benefits of postal banking with the significant benefits of the Fed's account platform, as discussed above.

Design Feature 3: Community Banks, Credit Unions, & Other Qualifying Banks as Pass-through Account Providers

In addition to the Postal Service, community banks and credit unions should also play an important front-end role on top of the FedAccounts infrastructure. Sen. Brown's and Rep. Waters's FedAccounts legislation included a provision that would have required every member bank of the Federal Reserve system (approximately 3,000 commercial banks across the country) to provide "pass-through" FedAccounts. The banks would provide the front-end account opening, customer service, and other interactions with the consumers, and the deposits would be held at the Federal Reserve rather than on the banks' books. The legislation also allowed state-chartered banks and credit unions that are not Fed member banks to opt in to provide pass-through FedAccounts, subject to limitations, but it did not mandate it. Further, it provided that any participating bank or credit union with less than $10 billion in total consolidated assets would be reimbursed for operational costs incurred in offering these pass-through accounts.[65]

While this proposal offers one creative way to integrate private banks into this system, we propose an alternative that prioritizes community banks and credit unions as partners and provides sufficient incentives to make participation valuable for them. The Federal Reserve could allow financial institutions to bid on becoming a pass-through account provider, and it could give preferences to smaller banks, credit unions, and institutions located in underserved areas. Further, it could allow these institutions to market other products alongside the pass-through FedAccounts product.[66] This opportunity to offer the Fed's attractive account option could help these institutions reach new customers and give them a competitive advantage relative to the largest banks, pushing back against consolidating and closures in the banking sector. The leaders of two prominent national credit union associations, including one that has

[64] Ricks et al., *supra* note 37

[65] See, e.g., H.R. 6321, introduced March 23, 2020.

[66] The Fed should pre-approve and regularly review the products that banks market alongside the pass-through FedAccounts, and the marketing collateral and strategies used, to ensure that the products are not exploitative or deceptive. If a financial institution that offered FedAccounts were engaged in exploitative practices via co-marketed products, the Fed should consider removing that financial institution as a FedAccounts provider.

publicly opposed postal banking[67], put forward a similar idea last year as a version of postal banking that their membership could support.[68]

Design Feature 4: Integration with FinTech Products to Drive Innovation
The digital-first FedAccounts model presents a valuable opportunity to promote innovation in the FinTech space. As part of its FedAccounts system, the Fed should put in place an open application programming interface (API) functionality. This would enable third-party developers to create applications for FedAccounts and link existing services and products to people's FedAccounts.[69] To the extent that the cost and complexity of providing back-end accounts hinders smaller FinTech providers from entering the market, allowing them to plug into and build off of the FedAccount infrastructure could create many more opportunities for innovation.[70]

Design Feature 5: Postal Service as Small-dollar Lender
This system could also include the small-dollar loan component of the postal banking proposals. As proposed in Sens. Gillibrand and Sanders's legislation, Postal Service could be authorized to provide small-dollar loans (up to $500 at a time and $1,000 per year) with low fees and low interest rates compared to private alternatives[71] As discussed above, some have raised questions as to the wisdom of the federal government becoming a creditor (and collector) on small-dollar loans. However, given the significant costs that the most economically vulnerable Americans pay to access small amounts of credit through alternative, often-predatory financial products, a non-predatory public option could provide significant value to low-income Americans and should be incorporated.

Design Feature 6: Redirecting Deposits to Private Banks and/or Public Investment Priorities
To address concerns about significant assets migrating from private banks to the Federal Reserve as consumers shift their funds into FedAccounts, the Fed can redirect some or all of these deposits back to private banks for lending purposes. As discussed above, this can be done through the Fed's discount window. The Fed could also consider targeting these assets toward community banks or those in underbanked areas. Further, as discussed above, these assets on the Fed's balance sheets could enable the Fed to engage in new lending and investments, including loans for small- and medium-sized businesses, financing for large-scale public infrastructure projects, and expanding their portfolio of trading assets for the purposes of financial market stabilization.[72] Finally, we note that this scenario will only arise if the public option is wildly successful. The Fed has several options to address this problem if/when it arises.

Executive Action Option: If Congress does not pass the above proposal, the Administration can establish a public banking option through the Postal Service by executive action. Experts

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[67] American Bankers Association et al., "Joint Financial Services Trades Letter to the House: Oppose the Pascrell-Kaptur Postal Banking Amendment," July 30, 2020, available at https://www.aba.com/advocacy/policy-analysis/joint-financial-services-trades-letter-to-the-house-oppose-pascrell-kaptur-postal-banking-amendment.
[68] B. Dan Berger & Anthony Hernandez, "BankThink: USPS needs to keep an open mind on postal banking," American Banker, August 21, 2020.
[69] Ricks et al., *supra* note 37
[70] While it takes a different approach, the UK's Open Banking model has similarly opened up retail banking APIs to third parties, enabling integration with fintech products and innovation in the fintech space. See, e.g., Victor Chatenay, "The UK's Open Banking regime has turned three years old," Business Insider, Jan 14, 2021.
[71] In 2014, the Postal Service estimated that it could provide a $375 loan with just $48 in interest and fees, compared to $520 in fees and interest that would be charged on the average $375 payday loan from a private payday lender. See U.S. Postal Service, Providing Non-Bank Financial Services for the Underserved (2014), 14.
[72] Omarova, *supra* note 63.

on postal banking, as well as the Postal Service itself, have said it can offer basic checking and savings accounts and some other financial services within its existing authority.[73] This would simply require a vote of the Board of Governors. The Administration should appoint pro-postal banking leaders to the four open seats on the USPS Board of Governors. Democratic appointees would then make up a majority of the board and could establish postal banking. If necessary, the Board could also remove current Postmaster General Louis DeJoy, who has been opposed to postal banking, from his position.[74] Congress could then add the small-dollar loan, digital FedAccount, and pass-through account components through subsequent legislation.

Proposal 2: FICO Score Alternatives

Problem

As many as 60 million adults in the U.S. have difficulty applying for credit cards and other loans. This number adds those with blemishes on their credit reports to the 26.5 million adults who are "invisible" due to not having credit reports or scores. Such individuals have a more difficult time withstanding financial difficulties or other emergencies.[75] There is also a racial gap in consumer access to credit. A CFPB study revealed a 34th percentile median FICO score for consumers in zip codes that were majority non-white, as opposed to a 52nd percentile median FICO score for consumers in zip codes that were majority white.[76] Credit score impacts not just access to, but quality of, credit. The drop off in credit scores from 760+ to 620-639 corresponds to a 66% increase in interest rate.[77]

The Fair Isaac Corporation (FICO) enjoys a virtual monopoly in the credit score market, providing its proprietary analytical output to each of the three major credit bureaus: Experian, TransUnion, and Equifax. FICO claims that its scoring models capture a 90 percent share of the market. In March 2020, the DOJ opened an antitrust probe into FICO, centering on alleged "exclusionary practices." [78] The three major credit bureaus, who also wield considerable market power in a triopoly, have also created their own credit score, VantageScore, to challenge the FICO paradigm. Because the three credit bureaus have the power to control access to and pricing of their data, the likelihood of VantageScore driving down costs and improving credit scoring is uncertain.[79]

Because of the lack of competition in this domain, there has been limited innovation in scoring methodology. Current algorithms fail to account for a number of variables (e.g. rent, telecom, and utility payments) that are positive predictors of credit behavior.[80] FICO's older model, FICO 4, is still the only model used for mortgage underwriting and pricing, even though it is outdated. There are also a number of fledgling startups that are attempting to disrupt the credit score industry via the inclusion of new—and more inclusive—scoring mechanisms.

Solutions

[73] Covert, Bryce, "Create a Public Option for Simple Banking," The American Prospect, September 25, 2019.
[74] Estes, Adam Clark, "How the Biden administration can save the Postal Service," Vox.com, January 22, 2021.
[75] Jonnelle Marte, "U.S. consumers' access to credit may be worse than previously thought: Fed study," Reuters, September 24, 2019.
[76] Lisa Rice, "Missing Credit: How the U.S. Credit System Restricts Access to Consumers of Color," Testimony before the U.S. House Committee on Financial Services, February 26, 2019.
[77] Megan DeMatteo, "This is the credit score lenders use when you apply for a mortgage," CNBC.com, December 2, 2020.
[78] Jann Swanson, "FICO Being Investigated by Anti-Trust Committee," Mortgage News Daily, March 19, 2020.
[79] Progressive Policy Institute, "Updated Credit Scoring and the Mortgage Market," December 2017.
[80] Laurie Goodman, "In Need of An Update: Credit Scoring in the Mortgage Market," Urban Institute, July 2017.

Legislative Action: Establish a Consumer-Centered Public Credit Registry
In accordance with the Biden-Sanders Task Force Recommendations, Congress should pass legislation to create a Public Credit Registry to generate competition in the credit scoring and reporting market.[81] Credit is an essential vehicle to wealth accumulation in the United States. Yet, our current model for deciding which consumers may have access to credit rests on a system that is incentivized to think of consumers, and full consumer participation in credit markets, as its last priority. That is because the credit scoring and reporting business models exclude consumers as relevant stakeholders. As a consequence, Fair Isaac, which generates the ubiquitous FICO scores lenders use to determine borrower creditworthiness, and the three major credit bureaus, Experian, Equifax, and Transunion, are left with perverse incentives in the marketplace.[82] The credit bureaus' primary customers are creditors, employers, and prospective landlords who want a way of assessing the financial health, and risk, of individual consumers. Consumer data, often collected without individual consumers' consent, is their product, and their bottom line is ultimately only accountable to prospective creditors.[83] The result is that credit bureaus and scorers are incentivized to be over-inclusive in their reporting, and slow to react to consumer complaints. This leads to systemic inaccuracies that block consumers from fully participating in the U.S. economy, particularly those with already limited access.[84]

A public credit registry would have a consumer-centered mission to collect, score and report on accurate data, and would be the best measure to counteract these perverse incentives in the marketplace. The registry would be housed in the Consumer Financial Protection Bureau, and once established, major lenders would be required to pull consumer reports from the public credit registry in addition to any other privately generated credit report when making underwriting decisions. When making any adverse credit decisions on the basis of a consumer's credit score, creditors would have a duty to notify what the basis of the adverse decision was. And if the adverse decision was based on a private measure not factored into the public score, the creditor should have to provide a permissible reason to rely on the private credit score. Any private credit reporting or scoring agency would then be incentivized to meet the baseline level of completeness and accuracy set by the public registry, which would produce an incentive to fill in "thin files" and expand reporting to previously credit invisible individuals. In being a consumer-centered model, such a public registry would also have the added advantage of incorporating voluntary disclosure of alternative data,[85]which has been a primary concern among consumer advocates when discussing alternative data in credit scoring.[86] The public registry would also adjust scoring algorithms to account for varying types of debt, minimizing the impact of unexpected debt like medical debt, or predatory loan products.

Lastly, a public credit registry would serve as a countervailing pressure against the inertia in the credit scoring market, which contributes to Fair Isaac's monopolist position in the market. While other reform proposals addressing competition in credit scoring may be effective in encouraging entrance into the market, lenders are often slow to adopt updated, more accurate

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[81] "Biden Sanders Unity Task force Recommendations" 18, available at https://joebiden.com/wp-content/uploads/2020/08/UNITY-TASK-FORCE-RECOMMENDATIONS.pdf.
[82] Amy Traub, "Establish a Public Credit Registry," Demos, available at https://www.demos.org/sites/default/files/2019-03/Credit%20Report_Full.pdf.
[83] Id.
[84] Chi Chi Wu, "Automated Injustice: How a Mechanized Dispute System Frustrates Consumers Seeking to Fix Errors in Their Credit Reports," National Consumer Law Center, January 2019.
[85] Traub, *supra* note 2, at 9
[86] "Statement Regarding Bank Regulators' Guidance on Alternative Data," National Consumer Law Center, Dec. 4, 2019.

scoring models.[87] While the home mortgage market is hindered by FHFA regulations, auto and credit card lenders unhindered by this approval process nonetheless have been hesitant to adopt later versions of the FICO score.[88] This suggests that lenders would be even slower to purchase credit scores from new entrants into the market absent any external pressure to do so. The public credit registry coupled with a legislative mandate to incorporate scores generated by the public credit registry would have the power to disrupt this inertia.

Executive Action: Lowering FHFA Regulatory Barriers
The Biden Administration should take action to ensure that competing credit models reach and are considered by Fannie Mae and Freddie Mac in a fair and timely manner. Fannie Mae and Freddie Mac are federally chartered companies which supply mortgage funds throughout the country. In 2018, Congress passed the Economic Growth, Regulatory Relief, and Consumer Protection Act, which allowed Fannie Mae and Freddie Mac to consider non-FICO scoring models for mortgages. However, no non-FICO models have yet been adopted. Potential competitors have been stalled by a multi-year FHFA validation process that they must pass through before even being considered for approval by Fannie Mae and Freddie Mac. [45] The FHFA should ensure Vantage Score, the public option, and other models are fairly treated and are granted a fast approval process. [46]

To enable this fix, the CFPB should identify, concretely, the regulatory barriers that might be insulating FICO from competition in the FHA backed mortgage market and propose support of presently circulating acts or promote the framework of new acts to remove these barriers. If the main barrier is an insurmountable and protracted validation process, an amendment to the legislation should place clear rules on what are legitimate reasons for rejecting an alternative model and enable a more expeditious review. To ensure transparency, the FHFA should be required to report its rejection of any alternative models in its Annual Report to Congress, with justifications for why the alternative score was rejected and why the rejection complies with the specified rules. If the validation process continues to be slow-walked or is not complied with by FHFA director Mark Calabria, the administration should consider appointing a new FHFA director committed to increasing competition in the credit score industry.

If this executive action proves unfeasible, perhaps related legislative action should be considered. In the event that Fannie Mae and Freddie Mac do not adopt new alternative scoring methods, and FHFA does not act to facilitate competition in the credit scoring market, Congress should amend the 2018 legislation to require FHFA government-sponsored enterprises to consider scores from multiple companies before issuing mortgages.

Executive Action: Encourage Innovation while Monitoring AI Bias
Agencies should work together to address the potential pitfalls associated with the use of artificial intelligence (AI) in both existing and new credit scoring algorithms.

Because of the lack of competition in the credit score domain, there has been limited innovation in scoring methodology. For example, FICO's older model is still the only algorithm used for

[87] Nick Clements, "Finally: Anyone Can Get Their Official FICO Credit Score For Free," Forbes, May 6, 2016; Sarah O'Brien, "Why FICO's New Scoring Model May Not Mean Much for Consumers," CNBC, Feb. 10, 2020; Tara Siegel Bernard, "Your Credit Score May Soon Change. Here's Why," NY Times, Jan. 25, 2020 ("Many other lenders are also using older FICO formulas, and it remains to be seen how quickly they adopt the new scoring method — or if they will decide to change.").
[88] "Who's Keeping Score? Holding Credit Bureaus Accountable and Repairing a Broken System: Hearing Before The Committee on Financial Services," 116th Cong. 3, 2019 (statement of Chi Chi Wu, staff attorney, National Consumer Law Center). ("The problem is that lenders would have to accept that data, and right now, we can't even get them to accept FICO 9, which reduces the impact of medical debt."); "Which FICO Scores Do Lenders Use?," Investopia, Mar. 5, 2021.

mortgage underwriting and pricing, even though it is outdated. Current algorithms fail to account for a number of variables (e.g. rent, telecom, and utility payments) that are positive predictors of credit behavior.[89] Beyond improving the robustness of credit scoring, the inclusion of such variables will likely increase access to credit.[90]

In fact, interagency support exists for the implementation of cash flow data in credit scoring. In 2019, the CFPB, FDIC, Federal Reserve Board, NCUA, and OCC issued an "Interagency Statement on the Use of Alternative Data in Credit Underwriting." In this statement, they explicitly recognized the accuracy and access benefits that alternative data may provide. Furthermore, they identified how alternative data such as cash flow information likely present no greater risk than data currently used in credit scoring. Use of this data is also likely to conform with the requirements of the Equal Credit Opportunity Act and the Fair Credit Reporting Act.[91]

Yet, the door is left open as to who will produce these enhanced algorithms, and how they will be produced. One possibility is for startups to enter with new methodologies created through artificial intelligence. Indeed, a number of companies have put forth AI credit scoring solutions.[92] There are reasons to support this trend, as the AI solutions pick up on much of the alternative data understood to correlate with increased accuracy and access.[93] However, AI scoring solutions pose risk to the extent they attempt to maximize predictiveness.[94] For example, the models, in seeking to optimize accuracy, may incorporate zip code and other metrics that serve as proxies for race.[95] This may exacerbate inequity in what is an already discriminatory lending system.[96]

In light of these considerations, we recommend the following actions:

- The interagency group should come together once more to publish detailed guidance on how technology companies may leverage and collect alternative data in a compliant, non-competitive way that benefits credit-seeking consumers.
- In addition, the interagency group should establish guidance for governing the use of AI in the creation and ongoing use of credit scoring algorithms. We recommend leveraging the suggestions put forward by the Bank Policy Institute and Covington & Burling LLP on page 14 of their draft paper on the role of AI in consumer credit.[97]
- Members of the interagency group should impose regulatory "sandbox" programs. These programs would allow entrants into the credit scoring market to test their products under robust regulatory supervision, but without the risk of enforcement actions. This recommendation will work synergistically with the above two recommendations, pressure testing the interagency group's guidance and revealing shortcomings or gaps that must be addressed.

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[89] Laurie Goodman, "In Need of An Update: Credit Scoring in the Mortgage Market," Urban Institute, July 2017.
[90] Michelle Black and Caroline Lupini, "President Biden's Plan To Change Credit Reporting And Scoring," Forbes, February 22, 2021.
[91] Board of Governors of the Federal Reserve System et al., "Interagency Statement on the Use of Alternative Data in Credit Underwriting," December 2019.
[92] Niccolo Mejia, "AI for Credit Scoring – An Overview of Startups and Innovation," Emerj, January 18, 2019.
[93] BPI and Covington, "Artificial Intelligence Discussion Draft: The Future of Credit Underwriting: Artificial Intelligence and Its Role in Consumer Credit," visited May 1, 2021.
[94] Aaron Klein. "Reducing bias in AI-based financial services," Brookings, July 10, 2020.
[95] Rose Eveleth, "Credit Scores Could Soon Get Even Creepier and More Biased," Vice, June 13, 2019.
[96] Lisa Rice, "Missing Credit: How the U.S. Credit System Restricts Access to Consumers of Color," Testimony before the U.S. House Committee on Financial Services, February 26, 2019.
[97] Id. at 5.

- CFPB should be granted authority over reviewing all algorithms used to issue anything insured or supported by the government. This could take the form of any or all of assessing the algorithm for admittance into the sandbox, close supervision while the algorithm is in the sandbox, and a final review for the viability of nationwide adoption following the sandbox. In addition, it may be worth considering whether to direct CFPB to take the lead on developing new credit scoring algorithms.

Part II: Mutual Fund Concentration and Common Ownership

"Common Ownership", or "Horizontal Shareholding", arises when shareholders hold substantial stakes in competing firms. Like horizontal mergers, common ownership may lead to anticompetitive effects through one of two means. First, a common owner has an incentive to influence a portfolio firm's conduct so that the shareholder maximizes its portfolio profits as opposed to the firm's individual profits, even in the absence of any explicit collusion or communication between firms. Second, common ownership has the potential to encourage either tacit or explicit collusion amongst competing firms. Both mechanisms are likely to result in a decrease in competition by the commonly owned firms across product markets, resulting in increased prices and/or worse quality of goods and services for consumers.

Although scholars have known about these potential anticompetitive effects for a long time, there has been a substantial increase in scrutiny of the issue in recent years, driven by real-world changes in the structure of capital markets over the past century. In 1950, institutional investors owned about 7% of public companies in the U.S. Today, they hold almost 70-80% of the U.S. market[98]. When combined, three firms alone; Vanguard, BlackRock, and State Street; own about 40% of the S&P 500.

A wave of recent literature[99], though in its early stages, indicates that greater regulatory attention to the issue is warranted. In particular, the mechanisms by which common ownership causes anticompetitive harm require further study. Furthermore, proposals to anticipate or ameliorate potential harms are sensitive to multiple possible channels of anticompetitive behavior. It is of particular concern that collection of the data required to fully and accurately analyze the scope of this issue has been neglected.

In this report, we propose a variety of regulatory and legislative solutions to address this problem. We advocate revamping reporting requirements to enable better study of potential harms of common ownership, urge antitrust regulators to conduct vigorous investigation and prepare for litigation if necessary, and outline potential structural remedies to directly address these issues depending on the results of regulatory investigations.

Problem A: Systemic Errors and Gaps in Relevant Data

The study of common ownership issues is hampered by gaps in data and known substantial errors in the data that does exist. The regulatory agencies that collect these data should act to

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[98] Joseph A. McCahery, Zacharias Sautner & Laura T. Starks, "Behind the Scenes: The Corporate Governance Preferences of Institutional Investors," *Journal of Finance* 71, no. 6 (2016): 2905; Jan Fichtner, Javier Garcia-Bernardo & Eelke M. Heemskerk, "Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk," *Business & Politics* 19, no. 2 (2017): 298.
[99] Matthew Backus, Christopher Conlon, and Michael Sinkinson, *The Common Ownership Hypothesis: Theory and Evidence*, Brookings Institution Center on Regulation and Markets, 2019.

rectify these problems. Analyzing potential anticompetitive harms cannot be done effectively without comprehensive and detailed data.

Enforcement Action Solutions:

1. The Securities and Exchange Commission (SEC) should overhaul its Form 13F, where institutional investors with assets of over $100 million must disclose their asset holdings each quarter. The 13F, though it is the most important data source for much of the research on common ownership, is notoriously unreliable[100]. On 13F filings, the SEC even includes the disclaimer, "The Securities and Exchange Commission has not necessarily reviewed the information in this filing and has not determined if it is accurate and complete. The reader should not assume that information is accurate and complete."
    a. The SEC should give investors that file 13Fs one year to amend filings going back to 1999 (the first year 13Fs were required to be filed electronically) for accuracy. Following the grace period, the SEC should conduct checks of post-1999 13Fs and issue penalties to companies with misfiled data.
        i. If necessary, Congress should appropriate additional funding to the SEC to create a specific team that will be permanently responsible for 13F maintenance.
    b. The SEC should immediately reverse course on its recent proposal to increase the 13F threshold to institutional investors with assets of over $3.5 billion. This change would reduce the number of 13F forms filed by 90%[101] and thus severely hamper insight into behavior of major institutional investors.
    c. The SEC should require disclosure of short positions on the 13F beginning in 2021. Policymakers, academics, and the public should be able to catalogue investment activity broadly, which includes shorts.
    d. The SEC should require both the prospective and retrospective disclosure of which share classes are owned by the investor in a new column in the 13F (ex. owning Class A shares vs Class B shares in companies with dual class share structures where Class A shares have more voting power), so that genuine level of control over a company can be better measured.
        i. The SEC should also create and maintain a quarterly database of company share classes as well as the voting power of each class of shares for each company for all publicly traded American firms.
    e. The SEC should require disclosure of the security ownership at both the investor/manager level and the individual fund level. This will help substantially in matching data to other datasets where securities ownership may only be recorded at lower or higher levels of institutional affiliation.
    f. The SEC should publish criteria for inclusion into the Official List of securities that must be reported on the 13F. The SEC should also be required to publish an explanation of why a security is deleted from the list whenever a security is deleted.
    g. Costs of instituting these reporting requirements to firms will be minimal: the 13F only applies to large asset managers and many of the reporting requirements have already been formally instituted for many years, just not properly enforced.

[100] Anne Anderson and Paul Brockman, "Form 13F (Mis)Filings," Working Paper, 2016; Martin Schmalz, "Common-Ownership Concentration and Corporate Conduct," *Annual Review of Financial Economics* 10 (2018).
[101] Federal Register, "Reporting Threshold for Institutional Investment Managers: A Proposed Rule by the Securities and Exchange Commissioner," July 31, 2020.

2. The Federal Trade Commission (FTC) should authorize a Federal Trade Commission Act 6(b) investigative disclosure order to the most significant common owners to seek information about interactions with portfolio company managers relating to votes and discussions about whether to bring shareholder resolutions, board appointments, etc., as well as on ownership structures (should this information not be available from the SEC). We include in this draft a 6(b) order the FTC may employ for this purpose.
    a. The final report resulting from the 6(b) should also include a review and evaluation of the extensive body of academic work on common ownership and interviews with relevant scholars on approaches to the issue.
    b. When crafting the 6(b), the FTC should gather data that examines the possibility that common ownership can generate anticompetitive behavior through a (passive) *lack* of standard shareholder engagement to push firms to beat competitors as well as aggressive shareholder engagement that directly pushes firms to *not* compete[102]. For example, academics have provided evidence of a "behind the scenes" channel for passive investors to influence corporate governance[103].
        i. One proposal recommends collecting evidence on the following aspects of index fund management companies: "the number of conversations [with portfolio companies], which side initiated them, what changes (if any) the investment fund manager demanded, and what information (if any) the issuer provided that could be material for the investment fund manager's voting decisions[104]."
        ii. The FTC should also be aware of the fact that information exchanges between shareholders and managers (of portfolio companies) may lead to an increased risk of explicit or tacit collusion.[105] Such exchanges may amount to a violation of § 1 of the Sherman Act.[106]
    c. The bulk of current academic research on common ownership concentrates on a select few industries where scholars can readily access data (most notably, airlines and banking). In issuing the 6(b) order, the FTC should require funds to organize their reporting in accordance with the 71 Global Industrial Classification Standard (GICS) categories. Bradshaw and Schaeffer have suggested that more in-depth information is required to analyze whether common ownership manifests in similar ways across industries.[107] Provision of 6(b) data along these lines would greatly facilitate review of common ownership in areas beyond those that have received the most academic attention.
    d. The 6(b) order should be issued to the "big three" index funds (Vanguard, BlackRock, and State Street) and sample from other funds of varying sizes as

[102] Lund (2017) notes that over 12,200 Vanguard portfolio companies do not engage with Vanguard at all. Dorothy Lund, "The Case Against Passive Shareholder Voting," *Journal of Corporation Law* 43, no. 3 (2017). Salop and O'Brien (2000) mathematically derives the incentive of common owners to encourage a reduction in competition between their portfolio companies. Daniel O'Brien and Steven Salop, "Competitive Effects of Partial Ownership: Financial Interest and Corporate Control," *Antitrust Law Journal* 67, no. 3 (2000).
[103] Shenje Hshieh, Jiasun Li, and Yingcong Tang, "How Do Passive Funds Act as Active Owners? Evidence from Mutual Fund Voting Records," *Journal of Corporate Finance* 65 (2020).
[104] Lucian Bebchuk and Scott Hirst, "Index Funds and the Future of Corporate Governance: Theory, Evidence and Policy," *Columbia Law Review* 119, no. 8 (2019). See also Morley, John. "The Separation of Funds and Managers: A Theory of Investment Fund Structure and Regulation." *Yale Law Journal* 1228, no. 123 (2013).
[105] Thomas Bourveau, Guoman She, and Alminas Žaldokas, "Corporate Disclosure as a Tacit Coordination Mechanism: Evidence from Cartel Enforcement Regulations," *Journal of Accounting Research* 58, no. 2 (2020): 295-332.
[106] *United States v. U.S. Gypsum Co.* 438 U.S. 422 (1978).
[107] Benjamin G. Bradshaw and Scott Schaeffer, "Common Ownership and its Competitive Impact: Is It Real and What's at Stake?," *Antitrust* 34, no. 2 (2020): 35.

well in order to examine common owner interactions with portfolio firms by size of fund.

e. In our sample 6(b) order below, we choose to employ a 1% threshold for the following reasons:
    i. Dasgupta et al. suggest that small percentage blocks like 1% are significant insofar as they require large capital commitments at firms with large market capitalization.[108] They also suggest that where small blocks are aggregated across institutional investors, they may collectively play a key role in achieving governance outcomes.
    ii. Based on contemporary datasets of 13F filings, almost 95% of total institutional block ownership would be covered by a 1% threshold.[109]
    iii. Under Securities Exchange Act of 1934 (SEA) Section 14a-8, any blockholder owning 1% or more may include proposals on the company's proxy statement.[110]

3. The FTC is inviting public comment regarding a proposal to loosen the definition of 'person' in rules under the Hart-Scott-Rodino (HSR) Antitrust Improvements Act such that more individual funds in high-asset fund families will be required to report acquisitions. Currently, investment firms beyond a certain asset size are required to report acquisitions, and under the proposed change, the fund size will be evaluated at the fund family level rather than the individual fund level. We commend that the FTC is acting against the ability of massive asset managers to avoid having to report acquisitions by having their smaller funds conduct the transactions and recommend that it continue pursuing this aspect of HSR reform.
    a. Given evidence of substantial consolidation that occurs in deals below HSR prospective merger review acquisition size thresholds, the FTC should also consider substantially lowering such thresholds.[111]

Problem B: The Conceptual Challenge of Addressing Antitrust Concerns from Common Ownership

Potential antitrust concerns arising from common equity ownership are not only difficult to detect, owing to a lack of available data, but are also difficult to confront. Importantly, the effectiveness of potential remedies will depend on the dominant mechanism of anticompetitive harm in common ownership. For instance, if fund managers urge executives of the firms they manage investments in to coordinate with other firms they hold stock in, antitrust regulators can bring suit against them under existing law.[112] However, some scholars have argued that anticompetitive harm can also occur when large fund managers are inactive in corporate governance, tolerating managerial failures to engage in cost-reducing measures.[113] We suggest an array of potential regulatory solutions to address these varying concerns.

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[108] Dasgupta, Amil, Vyacheslav Fos, and Zacharias Sautner. "Institutional Investors and Corporate Governance." Available at SSRN 3682800 (2020).

[109] Backus, Matthew, Christopher Conlon, and Michael Sinkinson. "Common Ownership in America: 1980-2017." No. w25454. National Bureau of Economic Research, 2019. See also Dasgupta, Amil, Vyacheslav Fos, and Zacharias Sautner. " Institutional Investors and Corporate Governance." Available at SSRN 3682800 (2020).

[110] Note, however, that the SEC intends to amend the rule to make it more difficult for shareholders to include their proposals in a company's proxy statement. See https://www.sec.gov/news/press-release/2020-220

[111] Thomas Wollman, "Stealth Consolidation: Evidence from an Amendment to the Hart-Scott-Rodino Act," *AER: Insights* 1, no. 1 (2019): 77-94.

[112] Edward B. Rock and Daniel L. Rubinfeld. "Common Ownership and Coordinated Effects," *Antitrust Law Journal* 83, no. 1 (2020): 201-251.

[113] Miguel Anton, Florian Ederer, Mireia Giné, and Martin Schmalz, "Common Ownership, Competition, and Top Management Incentives" (2021).

Enforcement Action Solutions:

1. The SEC and FTC should jointly convene a conference of large mutual fund managers and academics to consider policy and industry solutions guarding against potential anticompetitive harms created by common ownership. Firms like Vanguard, Blackrock, and State Street now hold a large and increasing proportion of all domestic equity shares, and they have strong incentives to address this issue head-on before regulatory concerns risk posing an existential threat to their business model.
2. We believe there is opportunity to engage the industry constructively to minimize regulatory and legal conflict and find cost-effective solutions. But if major common owners refuse to engage with the legitimate concerns of the risk of anticompetitive conduct, the DOJ and FTC should consider preparing antitrust actions pursuant to existing antitrust law against common owners involved in markets where evidence has accumulated, through academic research or regulatory investigation, of common ownership-associated harms.
    a. § 7 of the Clayton Act is consistent with the preclusion of stock acquisitions that may lead to anticompetitive effects, even without explicit evidence on the exact mechanism of harm. Thus, mutual funds could be precluded from acquiring stock that would lead to such anticompetitive effects.[114]
    b. The so-called passive investor "exception" to the Clayton Act is not really an "exception" at all, but merely requires that a higher standard of proof apply to purely passive investments.[115]

(Potential Future) Regulatory Solutions:

We emphasize that the following recommendations are contingent on further investigation into the nature of common ownership.[116] We include them as examples of possible future courses of action should further action on the issue be warranted.

3. One possible future approach, in the event of evidence that common owners exert affirmative pressure on portfolio firms to refrain from competition with other portfolio firms: regulatory agencies might consider requiring that "no institutional investor or individual holding shares of more than a single effective firm in an oligopoly may ultimately own more than 1% of the market share unless the entity holding shares is a free-standing index fund that commits to being purely passive."[117]
    a. This structural remedy would require the consolidation of existing (common) stockholdings where common owners wish to retain their control rights.
    b. A large fund with, for example, holdings of 5% of the market will want to hold than 1% of firms in an oligopoly, and therefore will not be able to invest in competitors.
    c. Prior to the start of each calendar year, the DOJ and FTC would make a list of industries constituting oligopolies and company market shares based on certain

[114] Einer Elhauge, "Horizontal Shareholding," *Harvard Law Review* 129 (2016).
[115] Ibid.
[116] Structural remedies gain attractiveness when common owners are both able and willing to directly influence firm decision making by way of their control rights. See José Azar and Martin C. Schmalz, "Common Ownership of Competitors Raises Antitrust Concerns," *Journal of European Competition Law & Practice* 8, no. 5 (2017): 329-332.
[117] This could, for instance, assume the form of formal regulations, e.g., via the FTC enacting formal rules under Section 5 of the FTC Act (15 U.S.C. § 45.). See Eric Posner, Fiona Scott Morton and Glen Weyl, "A Proposal to Limit the Anti-Competitive Power of Institutional Investors," *Antitrust Law Journal* 81, no. 3 (2017).

thresholds, and permit institutional investors time to give comment on the list and thresholds and rearrange their holdings to comply with the policy.[118]

   d. An index fund that is purely passive would commit to engage in no communication with top managers or directors, refrain from voting its shares in any corporate governance decision, and own and trade stocks only in accordance with clear and non-discretionary public rules, such as matching an index as closely as possible.[119]
   e. The augmented risks of tunneling associated with the increased value of control rights in voting stock needs to be addressed. Perhaps stricter fiduciary duties and disclosure rules would be effective.[120]

4. In the event of evidence that common owners use their shareholder voting authority to vote for or exert pressure on behalf of anticompetitive resolutions and strategies, the SEC should look into the possible reform of voting rules that mandate mutual fund voting. Mandatory voting rules may have unintended side effects in allowing mutual funds with common ownership to implement their anticompetitive preferences.
   a. Currently, under the Investment Advisers Act of 1940 Rule 206(4)-6, fund managers are fiduciaries that owe their clients duties of care with respect to all services undertaken on the client's behalf, including proxy voting. This requires an adviser with proxy voting authority to vote the proxies.

5. In the event of evidence that common owners act passively in corporate governance matters as to indirectly discourage competition between portfolio firms, the SEC should consider ways to delegate control rights to alternative bodies.
   a. Individual fund managers in large fund families may face disincentives to exercise active governance because doing so could trigger fund family-wide additional regulatory compliance and potentially hurt the position of funds managed by their colleagues.[121] As such, fund managers in positions where the fund family is a large common owner could be required to delegate shareholder voting control rights to a "shareholder representative" organization, independent directors selected by other shareholders, or a public agency designed to promote competition. In this manner, index fund investors would delegate corporate governance decisions in much the same way that government employees do with assets in their pension funds.

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[118] Ibid.

[119] Ibid. See also Lund, "The Case Against Passive Shareholder Voting."

[120] For instance, nonprofit organizations are subject to a "nondistribution constraint", and so beneficiaries without control rights have standing to sue fiduciaries that violate such a constraint. See Henry B. Hansmann, "The Role of Nonprofit Enterprise," *Yale Law Journal* 89, no. 5 (1980): 835-901.

[121] John D. Morley, "Too Big to Be Activist," *Southern California Law Review* 92 (2019).

Proposed Text of Common Ownership FTC 6(b) Order:

UNITED STATES OF AMERICA
BEFORE THE FEDERAL TRADE COMMISSION

COMMISSIONERS:	**X**
	X
	X
	X
	X
FTC Matter No.	**X**

ORDER TO FILE A SPECIAL REPORT

Pursuant to a resolution of the Federal Trade Commission ("FTC" or "the Commission") dated XXX, entitled "Resolution Directing Use of Compulsory Process to Collect Information Regarding Role of Common Ownership In Company Decision-Making," a copy of which is enclosed, [**COMPANY NAME**], hereinafter referred to as the "Company," is ordered to file with the Commission, no later than four months after date of service, a Special Report containing the information and Documents specified herein.

The Commission is seeking information concerning the possible relationship between common ownership by investors across firms and interactions between common owners and portfolio managers. The Special Report will assist the Commission in conducting a study of such relationships and their impact on competitive behavior by portfolio firm managers.

The Special Report is required to be subscribed and sworn by an official of the Company who has prepared or supervised the preparation of the report from books, records, correspondence, and other data and material in Your possession. Your written report should restate each item of this Order with which the corresponding answer is Identified. If any question cannot be answered fully, give the information that is available and explain in what respects and why the answer is incomplete. The Special Report and all accompanying documentary responses must be Bates-stamped.

You are required to respond to this Order using information in Your possession, custody, or control, Including information maintained in a central data repository to which You have access. You should not seek any responsive information and data from separately incorporated subsidiaries or affiliates or from individuals (other than in their capacity as Your employee or as Your agent). However, You should provide information from separately incorporated subsidiaries or affiliates or from individuals if You already have possession, custody, or control of such information. No later than 14 days from the date of service, You should contact Commission staff and indicate whether all of the information required to respond to this Order is in Your possession, custody, or control. If certain information is not in Your possession, custody, or control, no later than 14 days from the date of service, You also must: (1) identify, both orally and in writing, each question or sub-question that You are not able to fully answer because information is not in Your possession, custody, or control, and (2) for each, provide the 2 full names and addresses of all entities or individuals who have possession, custody, or control of such missing information.

Confidential or privileged commercial or financial information will be reported by the Commission on an aggregate or anonymous basis, consistent with Sections 6(f) and 21(d) of the FTC Act. Individual submissions responsive to this Order that are marked "confidential" will not be disclosed without first giving the Company ten (10) days' notice of the Commission's intention to do so, except as provided in Sections 6(f) and 21 of the FTC Act.

SPECIFICATIONS

Please produce the following information, Documents, and items, consistent with the definitions, instructions, and formatting requirements contained in Attachment A.

Identification of Report Author

1. Identify by full name, business address, telephone number, and official capacity the individual(s) who prepared or supervised the preparation of the Company's response to this Order, and Describe in detail the steps taken by the Company to respond to this Order. For each Specification, identify the individual(s) who assisted in preparation of the response. Produce a list identifying the individual(s) whose files were searched, and identify the individual(s) who conducted the search.

Company Information

2. State the Company's complete legal name and all other names under which it has done business, its corporate mailing address, all addresses from which it does or has done business, and the dates and states of its incorporation.

3. Describe the Company's corporate structure, and state the names of all investment funds, parents, subsidiaries, divisions, affiliates, branches, joint ventures, franchises, operations under assumed names, websites, and entities over which it exercises supervision or control, through contractual means or otherwise. For each such entity, describe in detail the nature of its relationship to the Company and the date it was created, acquired, or otherwise changed ownership or control. Produce organizational charts sufficient to detail the Company's corporate structure.

4. If the Company is not publicly traded, identify each individual or entity having an ownership interest in the Company, as well as their individual ownership stakes and their positions and responsibilities within the Company.

5. Provide a copy of the Company's corporate organization chart as of December 31 for each year of the Applicable Period.

Information on Investments Held

6. Identify, as of each financial quarter of each year of the Applicable Period, each Entity in which the Company holds a one percent or more Voting Security interest and/or Economic Interest (i.e. in each Portfolio Company). Identify whether each such

Entity is a U.S. Issuer or a Foreign Issuer, and, if a Foreign Issuer, the country of its corporate headquarters.

a. For purposes of determining the percentage held of Voting Securities and Economic Interests, the Company should separately include the holdings of only the Company and a separate report aggregating the holdings of all Portfolio Companies within the Ultimate Parent Entity of the Company.

b. If the Company holds Voting Securities in a Portfolio Company across different types of Voting Securities with different voting rights, the Company should also disaggregate its holdings in an Entity by class of Voting Security.

c. For each Portfolio Company, the Company should include the category of industry of the Portfolio Company, as per the Global Industrial Classification Standard (GICS) categorization system.

d. Identify, as of each financial quarter of each year of the Applicable Period, each Portfolio Company in which the Company, or the Ultimate Parent Entity (and/or any Entity within the Ultimate Parent Entity) of the Company (or natural person), has the right, directly or indirectly, to manage the operations or investment decisions of the Portfolio Company, either by way of contractual or voting rights.

7. Identify any officer or director (or their equivalent) of the Ultimate Parent Entity of the Company (or any Entity within the Ultimate Parent Entity, including the Company) who also serves or has served as an officer or director of any of the Portfolio Companies identified in response to this Specification. Identify the position and title of that officer or director (or their equivalent) at the Ultimate Parent Entity and/or Company, as of the time of their service at the identified Entit(ies), and identify the position held at the identified Entit(ies).

Information on Interactions with Portfolio Companies

8. For each Portfolio Company, provide, for each financial quarter of each year of the Applicable Period:

a. A list of any Portfolio Company board meetings attended by managers, executives, officers, or directors of the Company, including the location, date, and summary of minutes.

b. A metadata log of all known written correspondence between managers, executives, officers, or directors of the Portfolio Company and managers, executives, officers, or directors of the Company, including the number of communications and which side (the Company or the Portfolio Company) initiated each correspondence.

c. A metadata log of all known phone calls between managers, executives, officers, or directors of the Portfolio Company and managers, executives, officers, or directors of the Company, including the number of phone calls and which side (the Company or the Portfolio Company) initiated each call.

d. A summary of known topics discussed with all managers, executives, officers, or directors of the Portfolio Company that are Material to the Portfolio Company's revenue.

   i. Include Material changes to Portfolio Company policies or strategy requested by the Company managers, executives, officers, or directors.

   ii. Include the current status of any changes requested by the Company managers, executives, officers, or directors.

   iii. Include any efforts at encouragement, inducement, or agreements to maintain any Portfolio Company policies or strategy requested by the Company managers, executives, officers, or directors.

e. Any Material information provided by the Portfolio Company to the Company, and the number of communications from the Portfolio Company to the Company that contained Material information.

9. Provide, for the past three years, all known correspondence between managers, executives, officers, or directors of each Portfolio Company and managers, executives, officers, or directors of the Company that include discussion of matters that are Material to the Portfolio Company and Documents relevant to that correspondence.

10. For each Portfolio Company, provide, for each financial quarter of each year of the Applicable Period:

    a. A metadata log of votes made by the Company in relation to Portfolio Company shareholder proposals and what each shareholder proposal was.

       i. If the Company did not vote on a shareholder proposal, the abstention should be noted as well.

    b. A metadata log of communications related to the encouragement or discouragement of shareholder votes (both for or against any proposal).

    c. A metadata log of shareholder proposals made by the Company in relation to the Portfolio Company.

    d. Whether the shareholder proposals made by the Company in relation to the Portfolio Company were included or excluded in the Portfolio Company's proxy statements under SEA Rule 14a-8.

    e. A list of proposals made by the Company that relate to issues of corporate governance of the Portfolio Company, including, but not limited to, executive compensation, defensive measures, and charter amendments.

11. Describe in detail the role of the Company in determining executive compensation in its Portfolio Companies; for instance, whether the Company requires that Portfolio Companies have charters that require shareholder approval for executive compensation, whether the effect of a shareholder vote on executive compensation is purely advisory, or whether it requires that Portfolio Companies appoint independent

committees to determine the appropriate level of executive compensation.

12. Provide, for each financial quarter of each year of the Applicable Period, a list of all Portfolio Companies with which managers, executives, officers, or directors of the Company have not discussed Material matters.

13. Describe in detail the Company's policies, if any, to ensure that Company managers do not oversee, encourage, or tacitly give approval of cartel-like coordination between Portfolio Companies.

Other Documents

14. Produce all Documents consulted or otherwise relied on to prepare Your Response to this Order that were not otherwise specifically requested.

Penalties may be imposed under applicable provisions of federal law for failure to file special reports or for filing false reports.

The Special Report called for in this Order is to be filed on or before [DATE FOUR MONTHS FROM DATE OF ISSUANCE OF ORDER].

By direction of the Commission.

DEFINITIONS AND ADDITIONAL INSTRUCTIONS

A. **Applicable Period**: Unless otherwise directed in the specifications, the applicable period for the Order shall be from **January 1, 2000 through and including December 31, 2020**.

B. "**Company**" means [COMPANY NAME], its wholly or partially owned subsidiaries, unincorporated divisions, joint ventures, operations under assumed names, and Affiliates, and all directors, officers, members, employees, agents, consultants, and other persons working for or on behalf of the foregoing. In the context of an asset management firm, Company means a distinct fund within the fund family.

C. The terms **"Document"** and **"Documents"** mean any information, on paper or in electronic format, including written, recorded, and graphic materials of every kind, in the possession, custody, or control of the Company. The term "documents" includes, without limitation: computer files; email messages; audio files; instant messages, text messages; messages sent on any enterprise messaging system; any other form of electronic message; drafts of documents; metadata and other bibliographic or historical data describing or relating to documents created, revised, or distributed electronically; copies of documents that are not identical duplicates of the originals in that person's files; and copies of documents the originals of which are not in the possession, custody, or control of the Company. Unless otherwise specified, the term "documents" excludes: bills of lading, invoices, purchase orders, customs declarations, and other similar documents of a purely transactional nature; architectural plans and engineering blueprints; documents solely relating to environmental, tax, OSHA, or ERISA issues; and relational and enterprise databases, except as required to comply with an individual Specification.

D. **"Economic Interest"** means the right to receive profits or assets upon their distribution, either directly or indirectly, or upon dissolution of the Issuer or Entity; or the right to receive the gains from the appreciation in the value of any interest, including Voting Security or interest, held in, or of, the Entity; or the responsibility for the losses associated with the change in value of the Entity or value of any interest, including Voting Security or interest, in the Entity.

E. **"Entity"** means any natural person, corporation, company, partnership, joint venture, association, joint-stock company, trust, estate of a deceased natural person, foundation, fund, institution, society, union, or club, whether incorporated or not, wherever located and of whatever citizenship, or any receiver, trustee in bankruptcy or similar official or any liquidating agent for any of the foregoing, in his or her capacity as such.

F. **"Foreign Issuer"** means an Issuer that is not incorporated in the United States, is not organized under the laws of the United States, and does not have its principal offices within the United States.

G. **"Material"** has the meaning set forth in 17 CFR § 230.405, et seq.

H. **"Order"** means the Order to File Special Report, including the attached Resolution, Specifications, and Attachment.

I. **“Portfolio Company”** means an Entity in which the Company holds a one percent or more Voting Security interest and/or Economic Interest.

J. **“Ultimate Parent Entity”** has the meaning set forth in 16 C.F.R. § 801.1(a)(3).

K. **“United States Issuer”** means an Issuer that is incorporated in the United States, is organized under the laws of the United States, or has its principal offices within the United States.

L. **“Voting Securities,” “Non-Voting Securities,”** and **“Convertible Voting Securities”** have the meanings as set forth in 16 C.F.R. § 801.1, et seq.

M. **“You”** and **“Your”** mean the Person or Entity to whom this CID is issued and include the “Company.”

N. **Production of Copies**: Copies of marketing materials and advertisements shall be produced in color, and copies of other materials shall be produced in color if necessary to interpret them or render them intelligible.

O. **Sensitive Personally Identifiable Information**: If any material called for by these specifications contains sensitive personally identifiable information or sensitive health information of any individual, please contact us before sending those materials to discuss ways to protect such information during production. For purposes of these specifications, “sensitive personally identifiable information” includes: an individual’s Social Security number alone; or an individual’s name or address or phone number in combination with one or more of the following: date of birth, Social Security number, driver’s license number or other state identification number, or a foreign country equivalent, passport number, financial account number, credit card number, or debit card number. “Sensitive health information” includes medical records and other individually identifiable health information relating to the past, present, or future physical or mental health or conditions of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual.