Unfulfilled Promises of the Fintech Revolution

Lindsay Sain Jones* & Goldburn P. Maynard, Jr.**

While financial technology (fintech) has the potential to make financial services more accessible and affordable, hope that technology alone can solve the complex issue of wealth inequality is misplaced. After all, fintech companies are still subject to the same market forces as traditional financial institutions, with little incentive to address contributing causes such as unequal access to credit and financial services, lower rates of return, and discrimination. Yet, key players in the industry promote fintech as a primary means to advance financial inclusion for historically marginalized communities.

Despite the fintech industry's promises of financial inclusion, underserved populations continue to experience unequal access to financial services and wealth. This Article is the first to evaluate claims relating to five key components of the so-called "fintech revolution" to determine whether fintech can address underlying causes of wealth inequality. While fintech developments may have the potential to expand financial inclusion, these technologies have not yet been employed to significantly address the underlying causes of the wealth gap. Further, in some instances, fintech may exacerbate existing inequalities. Given this lack of sufficient progress and potential exploitation vis-à-vis fintech innovations, this Article explores oversight of fintech as well as other reforms to address the underlying causes of wealth inequality.

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INTRODUCTION

In the wake of the financial crisis of 2008, a collection of startups and venture capital-backed companies began exploring developments in information technology and digital infrastructures to reimagine financial services.¹ Some of these financial technology (fintech) firms aimed to revolutionize wealth management and investment advisory services, others lending, and still others mobile and digital payments. The promise of the so-called "fintech revolution" was to broaden access to capital and provide fairer lending standards, better investment advice, and more secure transactions.² Because delivering on these promises would address some of the underlying causes of wealth inequality,³ some are optimistic about fintech's ability to reduce the wealth gap.⁴ Indeed, a

^{1.} William Magnuson, Regulating Fintech, 71 VAND. L. REV. 1167, 1168 (2018).

^{2.} SeeTheFintechRevolution,ECONOMIST(May 9, 2015),https://www.economist.com/leaders/2015/05/09/the-fintech-revolution[https://perma.cc/3FQW-UUZC]UUZC] (discussing benefits of fintech firms).

^{3.} See infra Part I.A (discussing the underlying causes of wealth inequality in the United States).

^{4.} See, e.g., Buy Now, Pay More Later? Investigating Risks and Benefits of BNPL and Other Emerging Fintech Cash Flow Products: Hybrid Hearing Before the Task Force on Fin. Tech., H. Comm. on Fin. Servs., 117th Cong. 5 (2021) (statement of Kristen E. Broady, Fellow, Brookings Inst.) ("Financial technology (fintech) companies can mitigate racial financial health and wealth gaps that hamper Black and Hispanic families' financial security through product offerings and policies they put in place."); LAURA SAUNDERS, NAT'L CONSUMER LAW CTR., FINTECH AND CONSUMER PROTECTION: A SNAPSHOT 2 (2019), https://www.nclc.org/images/pdf/cons-protection/rpt-fintech-and-consumerprotection-a-snapshot-march2019.pdf [https://perma.cc/4LD6-VSJC] ("Fintech products and services . . . promise to lower costs, promote financial inclusion, help people avoid fees and comparison shop, improve personal financial management, and build assets and wealth."); Sarah Strochak, *How Fintech Innovations Can Help Bridge the Wealth Gap*, URB. INST. (Nov. 6, 2017), https://www.urban.org/urban-wire/how-fintech-innovations-can-help-bridge-wealth-gap

[[]https://perma.cc/5BEW-6879] ("Technology can chip away at the legacy of discrimination and the current economic and credit conditions that impede families' financial security by branching out from traditional data-collection strategies and using technology to educate populations that have been left out of the conventional financial system.").

technotopian philosophy seems to animate innovation-friendly government policies.⁵

Although policymakers have allowed and encouraged fintech to innovate, underserved populations continue to experience unequal access to financial services and wealth. Indeed, the COVID-19 pandemic and its economic effects have highlighted and exacerbated long-existing inequalities. Not only have minorities disproportionately suffered the health effects of the coronavirus,⁶ they have also been hit the hardest economically.⁷ In turn, the racial wealth gap has grown during this crisis.⁸ And in the early months of the pandemic, these wealth disparities converged with the outrage caused by the deaths of George Floyd, Ahmaud Arbery, and Breonna Taylor that brought about a summer of unrest and protests.⁹ In response, corporate America, including the financial industry, has designed policies and products for advancing inclusion and diversity.¹⁰ These campaigns have particularly focused on increasing access to credit and financial services among minority populations.¹¹

7. See Kenneth A. Couch, Robert W. Fairlie & Huanan Xu, Early Evidence of the Impacts of COVID-19 on Minority Unemployment, 192 J. PUB. ECON. 1, 9 (2020) (finding disproportionate impacts of COVID-19 on minority unemployment rates).

8. See CHRISTIAN E. WELLER & RICHARD FIGUEROA, CTR. FOR AM. PROGRESS, WEALTH MATTERS: THE BLACK-WHITE WEALTH GAP BEFORE AND DURING THE PANDEMIC 3–4 (2021), https://www.americanprogress.org/wp-content/uploads/2021/07/BlackWhiteWealthGap-brief.pdf [https://perma.cc/CA6X-LM3K] (showing that Black households faced more financial emergencies during the pandemic, widening the racial wealth gap).

9. See Alex Altman, *Why the Killing of George Floyd Sparked an American Uprising*, TIME (June 4, 2020), https://time.com/5847967/george-floyd-protests-trump/ [https://perma.cc/J5SY-PAKV] (reporting on the protest movements of the summer of 2020).

10. Geri Stengel, Black Lives Matter Protests Moves Corporate D&I Initiatives Center Stage, FORBES (June 17, 2020), https://www.forbes.com/sites/geristengel/2020/06/17/black-lives-matterprotests-moves-corporate-di-initiatives-into-the-spotlight/?sh=1be11eaf7a0d [https://perma.cc/8HVY-8FA5].

^{5.} See, e.g., Policy on No-Action Letters; Information Collection, 81 Fed. Reg. 8686, 8692 (Feb. 22, 2016) (explaining the CFPB's intent to "facilitate consumer access to innovative financial products that promise substantial benefit to consumers"); OCC INNOVATION PILOT PROGRAM, OFF. OF THE COMPTROLLER OF THE CURRENCY 2 (2019), https://www.occ.treas.gov/topics/supervision-andexamination/responsible-innovation/occ-innovation-pilot-program.pdf [https://perma.cc/ZZ7M-V2FP] (describing the OCC's "testing of novel or innovative products, services, and processes . . . that could present significant opportunity or benefits to consumers, businesses, financial institutions, and communities."): Innovation. Bd. OF GOVERNORS OF THE Fed. RSRV. SYS.. https://www.federalreserve.gov/aboutthefed/innovation.htm [https://perma.cc/U4E6-C45F] (showing the Federal Reserve's commitment to supporting "responsible innovation").

^{6.} See Maria Godoy & Daniel Wood, *What Do Coronavirus Racial Disparities Look Like State* by State?, NPR (May 20, 2020), https://www.npr.org/sections/healthshots/2020/05/30/865413079/what-do-coronavirus-racial-disparities-look-like-state-by-state [https://perma.cc/W28W-GPMR] (reporting on the disproportionate impact that COVID-19 has had on Black and Latinx communities).

 ^{11.} See, e.g., Press Release, Citigroup, Citi Launches More than \$1 Billion in Strategic

 Initiatives to Help Close the Racial Wealth Gap (Sept. 30, 2020),

 https://www.citigroup.com/citi/news/2020/200923a.htm

 [https://perma.cc/7NWR-XQEG]

 (announcing "action for racial equity" to help address "racial equity and justice in the U.S" by "providing

Not only has this recent focus on equity advanced important justice claims, but policymakers and scholars have also identified racial equity as key to unlocking the nation's untapped economic potential.¹² For example, estimates show that closing the racial wealth gap would lift gross domestic product (GDP) by 8 to 12 percent.¹³ The fintech industry in particular could be well-positioned to capitalize on underserved and important markets. Further, if their actions follow their rhetoric, fintech companies could indeed prove instrumental in promoting financial inclusion. Yet the industry must contend with a substantial legacy of explicit and persistent discrimination on the part of banks and other financial institutions.¹⁴

This legacy of discrimination is partly attributable to policies of the federal government. In the 1930s, the Federal Housing Administration (FHA) established redlining policies that steered private mortgage investors away from predominantly minority areas.¹⁵ Although these practices were eventually made illegal, the racial disparities that redlining caused persist to this day.¹⁶ For

[https://perma.cc/M8CZ-7B27] (reporting on the "performative allyship" of financial institutions that has not been backed up by changes to policies that lead to lending discrimination).

12. See SARAH TREUHAFT, ANGELA GLOVER BLACKWELL & MANUEL PASTOR, POLICYLINK, AMERICA'S TOMORROW: EQUITY IS THE SUPERIOR GROWTH MODEL 4 (2011), https://www.policylink.org/sites/default/files/SUMMIT_FRAMING_WEB_20120110.PDF [https://perma.cc/8WKV-QXZ6].

13. Michael Chui, Sara Prince & Shelley Stewart III, *America 2021: The Opportunity to Advance Racial Equity*, MCKINSEY (Feb. 17, 2021), https://www.mckinsey.com/featured-insights/diversity-and-inclusion/america-2021-the-opportunity-to-advance-racial-equity [https://perma.cc/D55V-4PPJ].

greater access to ... credit in communities of color"); Tracy Jan, Jena McGregor & Meghan Hoyer, *Corporate America's \$50 Billion Promise to Confront Racial Justice Shows Limits of Power to Catalyze Change*, WASH. POST (Aug. 23, 2021), https://www.washingtonpost.com/business/interactive/2021/george-floyd-corporate-america-racial-justice/ [https://perma.cc/97E2-WYWH] (reporting that 90% of the \$50 billion promise made by major companies to address racial equity was attributable to financial institutions for loans or investments and more than half of that in the form of mortgages). *But see* Tracy Jan, Jena McGregor, Renae Merle & Nitasha Tiku, *As Big Corporations Say "Black Lives Matter," Their Track Records Raise Skepticism*, WASH. POST (June 13, 2020), https://www.washingtonpost.com/business/2020/06/13/after-years-marginalizing-black-employees-customers-corporate-america-asys-black-lives-flower.

^{14.} See Robert B. Williams, Wealth Privilege and the Racial Wealth Gap: A Case Study in Economic Stratification, 44 REV. BLACK POL. ECON. 303, 311 (2017). The FHA, part of the U.S. Department of Housing and Urban Development, provides mortgage insurance on loans made by FHA-DEP'T OF HOUS. & approved lenders. About Us, URB. DEV. https://www.hud.gov/program_offices/housing/fhahistory [https://perma.cc/57Y2-WHZC]. This mortgage insurance protects lenders when borrowers default on their mortgage loans. Id.

^{15.} Williams, *supra* note 14, at 311.

^{16.} See, e.g., Carolina Reid & Elizabeth Laderman, *The Untold Costs of Subprime Lending: Examining the Links Among Higher-Priced Lending, Foreclosures and Race in California*, FED. RSRV. BANK OF S.F. 18–19 (Fed. Rsrv. Bank of S.F., Working Paper 2009-09, 2009), https://www.frbsf.org/community-development/files/wp2009-09.pdf [https://perma.cc/924X-GLXD] (showing that the foreclosure crisis disproportionately affected communities of color and that Blacks and Hispanics in California had access to different mortgage markets with a higher likelihood of receiving a riskier loan product); WILHELMINA A. LEIGH & DANIELLE HUFF, JOINT CTR. FOR POL. &

example, Black and Latinx mortgage applicants are rejected more frequently than other groups and pay higher interest rates on loans.¹⁷ Indeed, banks have admitted to steering racial minorities toward more expensive and predatory products.¹⁸ Black and Latinx households also rely on payday loans and short-term credit more frequently than other groups—a direct result of the racial wealth gap and the fewer affordable credit options to get them through difficult times.¹⁹

Reversing the racial underbanking problem and increasing access to capital continue to be identified as critical to closing the racial wealth gap and achieving racial equity.²⁰ Banks lack a sufficient physical presence in minority communities, leaving Black and Latinx neighborhoods underserved.²¹ This lack of access to capital has been crucial in constraining the growth of minority businesses.²² Both the lack of physical presence and the legacy of discrimination on the part of the banking industry have left fintech companies with a market eager for attention.

ECON. STUD., AFRICAN AMERICANS AND HOMEOWNERSHIP: THE SUBPRIME LENDING EXPERIENCE, 1995 TO 2007 3–7 (2007) (finding that borrowers who are African American, Hispanic, American Indian, or Alaska Native are more likely to have subprime loans of each type and that prime mortgage market lenders are often absent from neighborhoods where racial and ethnic subgroups live); Paul S. Calem, Jonathan E. Hershaff & Susan M. Wachter, *Neighborhood Patterns of Subprime Lending: Evidence from Disparate Cities*, 15 HOUS. POL'Y DEBATE 603, 619–20 (2004) (finding that minority status is significantly related to subprime borrowing).

^{17.} See, e.g., Kevin Fox Gotham, Race, Mortgage Lending and Loan Rejections in a U.S. City, 31 SOCIO. FOCUS 391, 395–96 (1998) (finding that "racial minorities, especially African Americans, are rejected for mortgage loans at a much higher rate than white applicants"); Raheem Hanifa, *High-Income Black Homeowners Receive Higher Interest Rates than Low-Income White Homeowners*, JOINT CTR. FOR HOUS. STUD. OF HARV. UNIV. (Feb. 16, 2021), https://www.jchs.harvard.edu/blog/high-income-black-homeowners-receive-higher-interest-rates-low-income-white-homeowners

[[]https://perma.cc/U4NB-DNTH] (finding that "Black homeowners not only have primary mortgages with higher interest rates than [W]hite homeowners with similar incomes, they also have higher interest rates than [W]hite homeowners with substantially lower incomes"); STUDENT BORROWER PROT. CTR., EDUCATIONAL REDLINING 4–5 (2020), https://protectborrowers.org/wp-content/uploads/2020/02/Education-Redlining-Report.pdf [https://perma.cc/T5JJ-BR9M] (reporting that graduates of historically Black- or Hispanic-serving institutions pay more for loans, all other factors being equal).

^{18.} Press Release, U.S. Dept. of Just., Off. Pub. Aff., Justice Department Reaches Settlement with Wells Fargo Resulting in More than \$175 Million in Relief for Homeowners to Resolve Fair Lending Claims (July 12, 2012), https://www.justice.gov/opa/pr/justice-department-reaches-settlement-wells-fargo-resulting-more-175-million-relief [https://perma.cc/HN5Z-E8UC].

^{19.} Darrick Hamilton & William A. Darity, Jr., *The Political Economy of Education, Financial Literacy, and the Racial Wealth Gap*, 99 FED. RSRV. BANK ST. LOUIS REV. 59, 63 (2017).

^{20.} See Timothy Bates & Alicia Robb, Greater Access to Capital Is Needed to Unleash the Local Economic Development Potential of Minority-Owned Businesses, 27 ECON. DEV. Q. 250, 256–58 (2013).

^{21.} Jacob William Faber, Segregation and the Cost of Money: Race, Poverty and the Prevalence of Alternative Financial Institutions, 98 SOC. FORCES 817, 818 (2019).

^{22.} See, e.g., ROBERT W. FAIRLIE & ALICIA M. ROBB, U.S. DEP'T OF COM., DISPARITIES IN CAPITAL ACCESS BETWEEN MINORITY AND NON-MINORITY-OWNED BUSINESSES: THE TROUBLING REALITY OF CAPITAL LIMITATIONS FACED BY MBES 17–20 (2010) (describing the substantial barrier that financial capital constraints create on minority business ownership and business performance).

Some fintechs have launched with the intention of providing financial services to underserved populations. For example, Esusu, a United States-based fintech with a \$1 billion valuation, claims to "unleash the power of data to bridge the racial wealth gap" by including "everyone on the journey from financial identity and stability toward financial wellness that leads to wealth building."²³ To accomplish this noble ambition, Esusu's platform enables property managers to report monthly rent payments to the credit bureaus.²⁴ Viewed in the most favorable light, the platform does advance financial inclusion by providing an opportunity for renters to build a credit history without incurring debt. At the same time, though, property managers can mandate reporting and thereby generate leverage to extract rents from vulnerable tenants. Indeed, Esusu markets its services to property managers by claiming to decrease delinquencies and increase net operating income.²⁵ A similar disconnect between financial inclusion narratives and the ultimate interests that fintechs serve exists across various components of the fintech revolution.²⁶

Beyond misleading marketing tactics, fintech has also been employed in ways that may exacerbate existing inequalities. For example, Rise Credit, an online lender that makes small loans ranging from \$500 to \$5,000, has targeted desperate borrowers for high-interest loans based on data collected from internet search engines.²⁷ Unfortunately, Rise Credit is just one of hundreds of online lenders that market loans with 200 to 500 percent annual interest rates to borrowers who search online for financial help.²⁸ While these terms could lead to financial ruin for any borrower, their impact is not experienced equally. Online payday loans disproportionately affect Black households, as Black people comprise 13.2 percent of the national population but 26 percent of online payday borrowers.²⁹

^{23.} About, ESUSU, https://esusurent.com/about/ [https://perma.cc/HJ42-QYCK].

^{24.} *Property Managers*, ESUSU, https://esusurent.com/property-managers/ [https://perma.cc/2FMT-HJEP].

^{25.} See *id.* (reporting a 25 percent increase in on-time payments and \$16,500 in additional net operating income).

^{26.} See infra Part II.

^{27.} See Coulter Jones, Jean Eaglesham & AnnaMaria Andriotis, *How Payday Lenders Target Consumers Hurt by Coronavirus*, WALL ST. J. (June 3, 2020), https://www.wsj.com/articles/how-payday-lenders-target-consumers-hurt-by-coronavirus-11591176601 [https://perma.cc/SG7X-AGUR] (reporting that hundreds of lenders have been marketing loans that carry 200 to 500 percent annual interest rates to consumers who are searching online for financial help). *See also* Christopher K. Odinet, *Predatory Fintech and the Politics of Banking*, 106 IOWA L. REV. 1739, 1760–65 (2021) (analyzing Elevate, which owns the Credit Rise brand, as a case study of a fintech lender that uses alternative data and ultimately operates like an online payday lender).

^{28.} See Jones et al., supra note 27.

^{29.} Fraud and Abuse Online: Harmful Practices in Internet Payday Lending, PEW CHARITABLE TRS. 28 (Oct. 2014). Note, African Americans account for a lower percentage (23 percent) of storefront payday borrowers. *Id.* Even after controlling for income, Black people are more than twice as likely than other races or ethnicities to take out a payday loan. NICK BOURKE, ALEX HOROWITZ, WALTER LAKE & TARA ROCHE, PEW CHARITABLE TRS., PAYDAY LENDING IN AMERICA: WHO

Given this lack of sufficient progress and the potential for exploitation visà-vis some fintech innovations, this Article explores other means to address wealth inequality and oversight of financial technology. While others have also drawn connections between wealth inequality and fintech,³⁰ this Article is the first to assess a broader range of fintech business models that affect household wealth—e-trading, robo-advising, alternative credit platforms, neobanks, and decentralized payments—and measure them against their potential to address specific problems that contribute to wealth inequality.

To this end, Part I of this Article explores wealth inequality in the United States. It assesses evidence that the lack of access to credit and traditional financial services has significantly contributed to disparities in wealth between racial groups. Part II then evaluates claims that fintech developments can address underlying causes of wealth inequality and concludes that without oversight, some of these technologies may exacerbate existing inequalities. Next, Part III reviews various proposals to address wealth inequality and concludes that absent multi-dimensional reforms, wealth inequality will persist indefinitely. While piecemeal reforms might address some underlying issues, other weaknesses would continue to be exploited. This Article argues that any solution to this complex, deeply rooted problem will necessarily include oversight of developing technologies and financial services, investment in infrastructure to improve access, and updates to tax policies and wealth transfers.

I.

RACIAL WEALTH INEQUALITY IN THE UNITED STATES

This Section explores how differential access to credit and financial services have contributed to the racial wealth gap. It defines wealth as an assetbased concept that is distinct from income and then sketches the now-familiar problem of wealth inequality. This Section underscores the intergenerational, compounding nature of wealth and explains how past federal government

BORROWS, WHERE THEY BORROW, AND WHY 9 (2012), https://www.pewtrusts.org//media/assets/2014/10/payday-lending-

report/fraud_and_abuse_online_harmful_practices_in_internet_payday_lending.pdf

[[]https://perma.cc/B37B-YA5X]. One explanation lies in the marketing of these services: digital advertising networks provide granular ad targeting by ethnicity and racial proxies. *Hearing on Behavioral Advertising: Industry Practices and Consumers' Expectations: Joint Hearing Before the Subcomms. on Com., Trade & Consumer Prot. and on Commc'ns, Tech. & the Internet of the H. Comm. on Energy & Com., 111th Cong. 68–69 (June 18, 2009) (statement of Jeffery Chester, Executive Director, Center for Digital Democracy).*

^{30.} See, e.g., Winnie F. Taylor, Fintech and Race-Based Inequality in the Home Mortgage and Auto Financing Markets, 33 LOY. CONSUMER L. REV. 366 passim (2021) (discussing potential discrimination in algorithmic consumer lending and how it relates to inequality); Pamela Foohey & Nathalie Martin, Fintech's Role in Exacerbating or Reducing the Wealth Gap, 2021 U. ILL. L. REV. 459, 488–98 (2021) (focusing on payroll cards, early wage access, and auto lending in relation to the wealth gap); Julia F. Hollreiser, Closing the Racial Gap in Financial Services: Balancing Algorithmic Opportunity with Legal Limitations, 105 CORNELL L. REV. 1233, 1252–54 (2020) (reviewing the potential for algorithms to generate biased lending results).

policies have contributed to the persistent racial wealth gap. Moreover, by summarizing some of the proposed explanations for the racial wealth gap, this Section underscores that these accounts are incomplete and discusses how historical systemic discrimination set the stage for current predatory inclusion practices that continue to exacerbate racial wealth disparities.

A. The Causes of Today's Troubling Racial Wealth Gap

In this Article, we are interested in a general definition of wealth—one that encompasses anything of monetary value. For this purpose, wealth can be defined as an individual's economic assets or net worth. Thus, wealth is measured as an individual's assets minus that person's debts.³¹ Assets can include bank accounts, houses, stock, 401(k)s, and so forth. Debts include mortgages, vehicle loans, credit card balances, payday loans, and the like.³² Of course, there are also less tangible components to wealth that may be even more important than material assets.³³ For example, social networks can be vital to status attainment, financial literacy, and asset accumulation.³⁴ Moreover, parents pass on many intangible advantages to their children that could be considered cultural wealth.³⁵ We do not necessarily mean to exclude these from our conception of wealth. But because these can be harder to measure, along with other complicating factors such as respect for family privacy, we primarily focus on material assets. Indeed, it is typically easier to account for material assets for purposes of designing tax and other governmental policies.³⁶

The asset-based conception of wealth is important because, traditionally, the story of economic inequality in the United States has disproportionately

^{31.} A more sophisticated way of saying this is the net value of all goods available for an individual's exclusive use through time discounted to the present at the appropriate interest rate.

^{32.} See MEIZHU LUI, BÁRBARA ROBLES, BETSY LEONDAR-WRIGHT, ROSE BREWER & REBECCA ADAMSON, THE COLOR OF WEALTH: THE STORY BEHIND THE U.S. RACIAL WEALTH DIVIDE 1–2 (2006) (examining racial wealth disparities between Whites and non-Whites in the United States); SIGNE-MARY MCKERNAN, CAROLINE RATCLIFFE, EUGENE STEUERLE & SISI ZHANG, URB. INST., LESS THAN EQUAL: RACIAL DISPARITIES IN WEALTH ACCUMULATION 2 (2013), https://www.urban.org/sites/default/files/publication/23536/412802-less-than-equal-racial-disparities-in-wealth-accumulation.pdf [https://perma.cc/G9XZ-8ZK3] (arguing that income inequality understates the difference between Whites and non-Whites in the United States).

^{33.} These noneconomic components of wealth include social networks, love, integrity, and family morale, which make wealth difficult to reach unless society is prepared to compromise its commitment to privacy of the family and private ownership.

^{34.} See, e.g., Nan Lin, Social Networks and Status Attainment, 25 ANN. REV. SOCIO. 467, 470–72 (1999) (tracing the development of social resources theory, which argues that social capital enhances chances of attaining better statuses and is contingent on initial positions in the social hierarchy).

^{35.} See, e.g., Walter J. Blum & Harry Kalven, Jr., *The Uneasy Case for Progressive Taxation*, 19 U. CHI. L. REV. 417, 504 (1952) ("[T]he gravest source of inequality of opportunity in our society is not economic but rather what is called cultural inheritance."); *see also* LIAM MURPHY & THOMAS NAGEL, THE MYTH OF OWNERSHIP: TAXES AND JUSTICE 158–59 (2002) (noting that this source of inequality may be more important than inherited wealth and yet it may be impossible to eliminate).

^{36.} See Blum & Kalven, *supra* note 35, at 504 (noting the difficulty in reaching cultural inheritance through economic measures).

focused on income.³⁷ Income refers to the flow of dollars over a period of time, which can be derived from salaries, wages, investments, alimony, government transfers, and so forth. For most Americans, income data is typically easier to obtain from pay stubs, bank records, and tax returns, for example. Wealth, on the other hand, is harder to measure, as individuals often underestimate their wealth holdings.³⁸ As such, income is often erroneously used as a proxy for wealth, and the two concepts can be conflated.³⁹ But the relative ease of measuring income as compared to wealth breaks down for the wealthiest Americans (and other Americans who primarily earn investment income) for whom an asset-based conception of wealth may often be easier to measure with greater accuracy.⁴⁰

A useful way to distinguish income from wealth is that income is more sensitive to life's ups and downs. Thus, an individual may lose their job (a source

^{37.} See Lisa A. Keister & Stephanie Moller, Wealth Inequality in the United States, 26 ANN. REV. SOCIO. 63, 64 (2000). One important exception to this disproportionate focus on income is the reparations literature. See, e.g., BORIS I. BITTKER, THE CASE FOR BLACK REPARATIONS 128-37 (1973); Roy L. Brooks, Rehabilitative Reparations for the Judicial Process, 58 N.Y.U. ANN. SURV. AM. L. 475, 479-83 (2003) (introducing a judicial model that would consider deficiencies in social capital that Black individuals inherited from slavery); Alfred L. Brophy, Some Conceptual and Legal Problems in Reparations for Slavery, 58 N.Y.U. ANN. SURV. AM. L. 497, 536 (2001); Alfred L. Brophy, The Cultural War Over Reparations for Slavery, 53 DEPAUL L. REV. 1181, 1193 (2004); Lisa A. Crooms, Remembering the Days of Slavery: Plantations, Contracts, and Reparations, 26 U. HAW. L. REV. 405, 412 (2004) (discussing how some formerly enslaved people sought to be compensated for the fruits of their plantation labor); Adrienne Davis, Reparations and the Slave Trade, 101 AM. SOC'Y INT'L L. PROC. 285, 286 (2007); Maria Grahn-Farley, The Master Norm: On the Question of Redressing Slavery, 53 DEPAUL L. REV. 1215, 1219-20 (2004) (underscoring the ways in which healthcare and the juvenile justice system impede reparations); Kevin Hopkins, Forgive U.S. Our Debts? Righting the Wrongs of Slavery, 89 GEO. L.J. 2531, 2550 (2001); Stephen Kershnar, Reparations for Slavery and Justice, 33 U. MEM. L. REV. 277, 287-88 (2003); Albert Mosley, Affirmative Action as a Form of Reparations, 33 U. MEM. L. REV. 353, 364-65 (2003); Charles J. Ogletree, Jr., Reparations for the Children of Slaves: Litigating the Issues, 33 U. MEM. L. REV. 245, 257-58 (2003); George Schedler, Responsibility for and Estimation of the Damages of American Slavery, 33 U. MEM. L. REV. 307, 338-39 (2003); Watson Branch, Comment, Reparations for Slavery: A Dream Deferred, 3 SAN DIEGO INT'L L.J. 177, 196 (2002); Lee A. Harris, Note, "Reparations" as a Dirty Word: The Norm Against Slavery Reparations, 33 U. MEM. L. REV. 409, 424 (2003). But see Richard A. Epstein, The Case Against Black Reparations, 84 B.U. L. REV. 1177, 1185-86 (2004); Eric A. Posner & Adrian Vermeule, Reparations for Slavery and Other Historical Injustices, 103 COLUM. L. REV. 689, 692 (2003). For a response directly towards Posner and Vermeule, see Roy L. Brooks, Getting Reparations for Slavery Right-A Response to Posner and Vermeule, 80 NOTRE DAME L. REV. 251, 255-56 (2004).

^{38.} See MELVIN L. OLIVER & THOMAS M. SHAPIRO, BLACK WEALTH/WHITE WEALTH: A NEW PERSPECTIVE ON RACIAL INEQUALITY 58–59 (2nd ed. 2006) ("Surveys of assets and wealth invariably underrepresent the upper levels, primarily because of the difficulty in obtaining the cooperation of enough very wealthy subjects. Thus, random field surveys conservatively understate the magnitude of wealth inequality.") (footnote omitted).

^{39.} Su Jin Jez, *The Differential Impact of Wealth Versus Income in the College-Going Process*, 55 RSCH. HIGHER EDUC. 710, 711–12 (2014) (noting the stark differences between wealth and income and arguing that income is not a suitable proxy for wealth).

^{40.} See, e.g., David Gamage & John R. Brooks, *Tax Now or Tax Never: Political Optionality* and the Case for Current-Assessment Tax Reform, 100 N.C. L. REV. 487, 490 (2022); DAVID GAMAGE, ARI GLOGOWER & KITTY RICHARDS, ROOSEVELT INST., HOW TO MEASURE AND VALUE WEALTH FOR A FEDERAL WEALTH TAX REFORM 1, 6 (2021), https://rooseveltinstitute.org/wp-content/uploads/2021/03/RI_WealthTax_Report_202104.pdf [https://perma.cc/NZG7-A3DJ].

of income) but still have substantial investments (a source of wealth) to survive until they find a new job. Wealth usually changes over longer periods of time and can reach across generations. Importantly, wealth can derive from interfamilial gifts and inheritances, which are often excluded from measures of taxable income.⁴¹ Income, moreover, is certainly unequally distributed—but much less so than wealth.⁴² Therefore, observing income alone does not fully capture the degree of wealth concentration in the United States.

A crucial and largely unaddressed aspect of wealth inequality in the United States is the racial wealth gap. For the sake of simplicity, as with most scholarship on this topic, this Article primarily focuses on the Black-White wealth gap, partly because it is the starkest and because many proposed interventions would also help other disadvantaged groups. The median and mean wealth of other racial and ethnic minority groups is less than that of White families but more than that of Black families.⁴³

According to the Urban-Brookings Tax Policy Center, the total racial wealth gap is \$10.14 trillion.⁴⁴ According to data from the 2019 Survey of Consumer Finances, White families have mean wealth of \$983,400 and median wealth of \$188,200.⁴⁵ Black families have considerably less wealth: their mean wealth is \$142,500 and their median wealth is \$24,100.⁴⁶ Both of those figures represent less than 15 percent of the wealth holdings of White families. Moreover, the racial wealth gap widens with age. White Americans' wealth compounds over time, so that White persons start with 3.5 times more wealth in their thirties but end up with seven times more wealth in their sixties.⁴⁷ In the

^{41.} See I.R.C. § 102 (1986) (excluding gifts, bequests, and devices from gross income).

^{42.} See, e.g., Marco Cagetti & Mariachristina De Nardi, Wealth Inequality: Data and Models, 12 MACROECON. DYNAMICS 285, 286 (2008); JULIANA MENASCE HOROWITZ, RUTH IGIELNIK & RAKESH KOCHHAR, PEW RSCH. CTR., MOST AMERICANS SAY THERE IS TOO MUCH ECONOMIC INEQUALITY IN THE U.S., BUT FEWER THAN HALF CALL IT A TOP PRIORITY 19 (2020), https://www.pewresearch.org/social-trends/2020/01/09/most-americans-say-there-is-too-mucheconomic-inequality-in-the-u-s-but-fewer-than-half-call-it-a-top-priority/ [https://perma.cc/F55U-QLHU] ("The wealth gap among upper-income families and middle- and lower-income families is sharper than the income gap and is growing more rapidly.").

^{43.} See Neil Bhutta, Andrew C. Chang, Lisa J. Dettling & Joanne W. Hsu, *Disparities in Wealth* by *Race and Ethnicity in the 2019 Survey of Consumer Finances*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (Sept. 28, 2020), https://www.federalreserve.gov/econres/notes/feds-notes/disparities-in-wealth-by-race-and-ethnicity-in-the-2019-survey-of-consumer-finances-20200928.html

[[]https://perma.cc/A3A5-BUG2]. Having said that, a more nuanced treatment of those wealth gaps is also necessary but beyond the scope of this Article.

^{44.} Vanessa Williamson, *Closing the Racial Wealth Gap Requires Heavy, Progressive Taxation of Wealth*, BROOKINGS INST. (Dec. 9, 2020), https://www.brookings.edu/research/closing-the-racial-wealth-gap-requires-heavy-progressive-taxation-of-wealth/ [https://perma.cc/5EXX-H9XP].

^{45.} See Bhutta et al., supra note 43.

^{46.} *Id.*

^{47.} MCKERNAN ET AL., *supra* note 32, at 2.

past twenty years, two events have further exacerbated the racial wealth gap: the Great Recession⁴⁸ and the COVID-19 pandemic.⁴⁹

The racial wealth gap matters partly because it is a direct link to the past. Because of the intergenerational reach of wealth, the racial wealth gap gives a nuanced picture of racial progress in America. By focusing on statutory law and Supreme Court cases, one might assume that Black Americans have fully overcome past discrimination. But wealth provides a more sobering assessment.⁵⁰ As noted sociologists Melvin Oliver and Thomas Shapiro have stated, the wealth gap also underscores the path on which the nation is headed and provides a "reliable racial justice filter for policy and institutional practice."⁵¹ Economic research has revealed that, on our current path, it would take over 200 years to close the racial wealth gap.⁵² Further research has confirmed that without major interventions, the wealth gap will take hundreds of years to close.⁵³

Again, this does not mean that racial poverty and the racial income gap are not important, but rather that they tell an incomplete story. Oliver and Shapiro similarly warned of dangers to a one-sided focus on income when analyzing economic inequality in the United States.⁵⁴ In their groundbreaking 1995 study of racial wealth, they argued that a focus on income was part of a Black progress narrative that linked civil rights movement-era gains to Black prosperity.⁵⁵ That is because the income gap is not as pronounced as the wealth gap. At the time of Oliver and Shapiro's study, Black Americans represented a 9.2 percent share of the population and held a 7.4 percent share of total income.⁵⁶ More recently, an

^{48.} *Id.*

^{49.} WELLER & FIGUEROA, *supra* note 8, at 1 (showing that Black households faced more financial emergencies during the pandemic, widening the racial wealth gap).

^{50.} See, e.g., Brown v. Bd. of Educ., 347 U.S. 483 (1954) (ending racial segregation in schools); Grutter v. Bollinger, 539 U.S. 306, 343 (2003) (suggesting that in twenty-five years, race-based affirmative action programs would no longer be necessary).

^{51.} Melvin L. Oliver & Thomas M. Shapiro, *Disrupting the Racial Wealth Gap*, 18 CONTEXTS 16, 18 (2019).

^{52.} Dionissi Aliprantis & Daniel Carroll, What Is Behind the Persistence of the Racial Wealth Gap?, ECON. COMMENT., Feb. 28, 2019, at 4.

^{53.} See Ellora Derenoncourt, Chi Hyun Kim, Moritz Kuhn & Moritz Schularick, *The Racial Wealth Gap, 1860-2020 3, 25–26* (Nat'l Bureau of Econ. Rsch., Working Paper No. 30101, 2021) (showing that even under ideal conditions, racial wealth convergence is a remote possibility given vastly different starting conditions under slavery).

^{54.} OLIVER & SHAPIRO, *supra* note 38, at 25. *See also* MCKERNAN ET AL., *supra* note 32, at 1; Maury Gittleman & Edward N. Wolff, *Racial Differences in Patterns of Wealth Accumulation*, 39 J. HUM. RES. 193, 194 (2004) ("While studies of earnings and income are important for assessing the extent to which labor market discrimination exists and the ability of African Americans to move closer to [W]hites in terms of acquiring the skills and connections that are currently rewarded by the markets, they provide what is clearly an incomplete picture.").

^{55.} OLIVER & SHAPIRO, *supra* note 38, at 103–05. For racial wealth studies before Oliver and Shapiro, see, e.g., Henry S. Terrell, *Wealth Accumulation of Black and White Families: The Empirical Evidence*, 26 J. FIN. 363, 363 (1971) (finding that race studies focused on income and earnings rather than wealth because of the greater availability of data).

^{56.} OLIVER & SHAPIRO, *supra* note 38, at 105.

Urban Institute study found that for every dollar that Black and Hispanic Americans earned, Whites earned two.⁵⁷ In stark contrast, wealth disparities reveal a much more compelling "no progress" narrative. While the income gap has not changed much over the past three decades, the wealth gap has grown.⁵⁸ In 1983, the average wealth of Whites was about five times as much as that of Blacks and Hispanics.⁵⁹ Today it has grown to six times that of those racial minorities.⁶⁰

Black Americans are less likely to own homes and retirement accounts and generally lack the same asset-building opportunities as White Americans.⁶¹ For example, Black and Hispanic families are five times less likely than White families to inherit money that can help with a down payment for a home.⁶² A lack of assets translates into vulnerability during tough times like the Great Recession and the COVID-19 pandemic. It also means less money for education and retirement.

These racial wealth disparities are partly born of the explicit barriers that denied Blacks the right to acquire wealth. Those explicit barriers largely do not exist anymore, however.⁶³ Instead, their legacy continues because of the intergenerational nature of wealth. Because of the importance of wealth, the average Black person in America still faces unequal life prospects solely as a result of their ancestry.

There are several factors that are sometimes offered to explain the size of the racial wealth gap, but they only provide partial explanations. These include

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^{57.} MCKERNAN ET AL., *supra* note 32, at 1.

^{58.} *Id.* 59. *Id.*

^{60.} *Id.*

^{61.} *Id.* at 2.

^{62.} Id.

^{63.} That being said, current policies such as predatory lending, zip code inequality, and a higher unemployment rate exacerbated the effects of the Great Recession for Black Americans. See, e.g., Vincent Adejumo, African Americans' Economic Setbacks from the Great Recession Are Ongoing-And Could Be Repeated, CONVERSATION (Feb. 5, 2019), https://theconversation.com/africanamericans-economic-setbacks-from-the-great-recession-are-ongoing-and-could-be-repeated-109612 [https://perma.cc/9RSR-HV3E] (describing disparities in income, wealth, educational attainment, and health stemming from "the racist policies that have been entrenched in America's financial, economic and educational fabric since the beginning," such as Jim Crow laws and redlining policies); CHRISTIAN E. WELLER & LILY ROBERTS, CTR. FOR AM. PROGRESS, ELIMINATING THE BLACK-WHITE WEALTH GAP IS A GENERATIONAL CHALLENGE 2 (2021), https://www.americanprogress.org/wp-[https://perma.cc/Z3RH-DTXK] content/uploads/2021/03/BlackWhiteWealthGap-report11.pdf ("From the brutal exploitation of Africans during slavery, to systematic oppression in the Jim Crow South, to today's institutionalized racism-apparent in disparate access to and outcomes in education, health care, jobs, housing, and criminal justice-government policy has created or maintained hurdles for African Americans who attempt to build, maintain, and pass on wealth.").

differences in (1) consumption and savings patterns,⁶⁴ (2) income,⁶⁵ (3) education,⁶⁶ (4) asset holdings,⁶⁷ (5) rates of return on assets,⁶⁸ (6) access to credit and financial services,⁶⁹ (7) the birth lottery and intergenerational transfers,⁷⁰ and (8) mass incarceration.⁷¹ The research generally concludes that structural factors like asset ownership contribute more to the racial wealth disparity than behavioral factors like family structure and spending patterns.⁷² This Article focuses on lack of access to credit and financial services, but these causes cannot be completely isolated. Instead, they form a part of a complex web of factors that contribute to today's racial wealth inequality. For this reason, the racial wealth gap is frustratingly persistent. One study found that even if Black Americans had the same levels of income, business ownership, stock ownership and home ownership as White Americans, the racial wealth gap would only be cut in half, leaving substantial work to be done.⁷³

Many studies have found some unexplained portion of the racial wealth gap.⁷⁴ Often these causes are left open as a catch-all for all past and current discrimination, including historical legacy, public policy, and institutional racism.⁷⁵ In the past fifteen years, this black box has been significantly filled in

68. Luke Petach & Daniele Tavani, *Differential Rates of Return and Racial Wealth Inequality*, 4 J. ECON., RACE & POL'Y 115, 115 (2021).

69. Gary Dymski, Jesus Hernandez & Lisa Mohanty, *Race, Gender, Power, and the US Subprime Mortgage and Foreclosure Crisis: A Meso Analysis*, 19 FEMINIST ECON. 124 (2013); Alexander W. Butler, Erik J. Mayer & James P. Weston, *Racial Disparities in the Auto Loan Market*, 36 REV. FIN. STUD. 2–3 (2023).

70. OLIVER & SHAPIRO, *supra* note 38, at 83.

^{64.} See, e.g., Franco Modigliani & Richard Brumberg, Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data, in 6 THE COLLECTED PAPERS OF FRANCO MODIGLIANI 3 (1954); John H. Young, Crystal R. Hudson & Edward L. Davis, A Survey of Retirement Readiness Among African-Americans, 21 J. AFR. AM. STUD. 551, 552–53 (2017) (discussing the lack of African Americans' retirement readiness and their lack of savings compared to White Americans).

^{65.} OLIVER & SHAPIRO, supra note 38, at 103; Gittleman & Wolff, supra note 54, at 203–05.

^{66.} OLIVER & SHAPIRO, *supra* note 38, at 112; Gittleman & Wolff, *supra* note 54, at 203–05.

^{67.} See, e.g., Erik Hurst, Ming Ching Luoh, Frank P. Stafford & William G. Gale, *The Wealth Dynamics of American Families*, 1984-94, 1998 BROOKINGS PAPERS ON ECON. ACTIVITY 267, 299 (1998) ("There appear to be strong differences in account ownership and account transitions by race."); Gittleman & Wolff, *supra* note 54, at 205.

^{71.} Artika R. Tyner, The Racial Wealth Gap: Strategies for Addressing the Financial

Impact of Mass Incarceration on the African American Community, 28 GEO. MASON L. REV. 885, 891–92 (2021).

^{72.} Cedric Herring & Loren Henderson, *Wealth Inequality in Black and White: Cultural and Structural Sources of the Racial Wealth Gap*, 8 RACE & SOC. PROBS. 4, 14–15 (2016).

^{73.} Id. at 15.

^{74.} See, e.g., Jeffrey P. Thompson & Gustavo A. Suarez, *Updating the Racial Wealth Gap* 3 (Fed. Rsrv. Bd. Fin. & Econ. Discussion Series, Paper No. 2015-076, 2015) (finding that factors like education, income, inherited wealth, demographic and labor force variables, and health "account for three-quarters of the mean difference between [W]hite and [B]lack families, but a substantial unexplained portion remains.").

^{75.} *See, e.g., id.* at 4 ("[T]he unexplained portion of the wealth gap in our regressions potentially includes some effects that could be related to current and past racial discrimination as well as all other unobserved factors."); Oliver & Shapiro, *supra* note 51, at 18.

by the concept of stratification economics.⁷⁶ Stratification economics questions the traditional approach in that it assumes that discrimination is rational in maintaining social hierarchy and promoting the relative status of the privileged group(s).⁷⁷ This is an explicit move away from orthodox approaches that point to cultural differences between Blacks and Whites to explain the racial wealth gap. Importantly, stratification economics considers "various institutional and systemic factors that offer sources of privilege to members of the favored group."⁷⁸

The economic stratification approach looks to deep-seated structures that perpetuate racism and points back to history.⁷⁹ It also allows for some flexibility in the development of clever ways to exclude Black Americans. What some call the "old inequality"⁸⁰ encompasses the periods of slavery and Jim Crow, when society attempted to exclude Black Americans almost completely. The "new inequality,"⁸¹ which is the focus of this Article, is inclusionary but on differential and predatory terms. New inequality does not police exclusion. Rather, because of limited past wealth-building opportunities and current differential opportunities for upward mobility, new inequality maintains the racist status quo. The next Section of this Article will thus seek to summarize some of that history to show how yesterday's discriminatory public policies and governmental choices are directly linked to the current racial wealth gap.

1. The Government's Role in Limiting Access to Credit

The previous Section emphasized the importance of assets in building wealth. The federal government has encouraged wealth building through at least two methods: (1) outright transfers of assets and (2) offering credit and other incentives on favorable terms. One example of historical and wide-ranging asset transfer is the Homestead Acts of the late nineteenth and early twentieth centuries.⁸² This Article and Section largely focus on the latter method—more

^{76.} William Darity, Jr., *Stratification Economics: The Role of Intergroup Inequality*, 29 J. ECON. & FIN. 144 (2005).

^{77.} William A. Darity & Melba J. Nicholson, *Racial Wealth Inequality and the Black Family*, *in* AFRICAN AMERICAN FAMILY LIFE: ECOLOGICAL AND CULTURAL DIVERSITY 78 (Vonnie C. McLoyd, Nancy E. Hill & Kenneth A. Dodge eds., 2005).

^{78.} Robert B. Williams, Wealth Privilege and the Racial Wealth Gap: A Case Study in Economic Stratification, 44 REV. BLACK POL. ECON. 303, 304 (2017).

^{79.} *See, e.g.*, Hamilton & Darity, *supra* note 19, at 70–71 (examining the mismatch between the political discourse around individual agency, education, and financial literacy, and the actual racial wealth gap).

^{80.} For a more detailed definition of the old and new inequalities, see Richard Williams, Reynold Nesiba & Eileen Diaz McConnell, *The Changing Face of Inequality in Home Mortgage Lending*, 52 SOC. PROBS. 181, 182 (2005).

^{81.} *Id.*

^{82.} These laws gave an applicant ownership of federal land at little or no cost. *See, e.g.*, Homestead Act of 1862, Pub. L. No. 37-64, 12 Stat. 392 (1862); Southern Homestead Act of 1866, ch. 127, 14 Stat. 66 (1866).

specifically, the federal government's role in excluding Black individuals from favorable credit opportunities.

a. The Federal Housing Administration Limited Credit Opportunities for Black Americans

Later in this Article, we discuss some of the ways that predatory credit opportunities can strip assets. That is, of course, not the full story. Credit is crucial to well-being and asset building. Much like wealth, access to debt can help individuals absorb financial downturns,⁸³ buy a house, start a business, or afford additional education to increase earnings.⁸⁴ Good debt is an asset.⁸⁵ Accordingly, the federal government radically increased its involvement in credit markets at one of the nation's most difficult times. It did so, however, in a discriminatory fashion, cementing the racial wealth gap that originated during slavery.

Securing financing for home purchases was difficult in the early 1900s due to high down payment requirements and short-term financing that required balloon payments.⁸⁶ During the Great Depression, nearly a quarter of American homeowners lost their homes to foreclosure, and the private market was unable to provide liquidity.⁸⁷ As such, the federal government stepped in during the Depression to infuse liquidity and build a regulatory structure, creating the Federal Housing Administration (FHA)⁸⁸ and tasking it with stimulating asset development across the nation.⁸⁹ The FHA incentivized homeownership by improving housing standards, providing an adequate home financing system, and

^{83.} See, e.g., Edward J. Bird, Paul A. Hagstrom & Robert Wild, *Credit Card Debts of the Poor: High and Rising*, 18 J. POL'Y ANALYSIS & MGMT. 125, 126 (1999) ("Credit cards are a flexible and readily available source of funds; they can be used both as a convenient payment vehicle for purchases and as a way to temporarily maintain standards of living during an income shortfall.").

^{84.} See, e.g., Jonathan Morduch & Julie Siwicki, *In and Out of Poverty: Episodic Poverty and Income Volatility in the US Financial Diaries*, 91 SOC. SERV. REV. 390, 398 (2017) (discussing how households use debt to smooth consumption).

^{85.} Raphaël Charron-Chénier & Louise Seamster, (*Good*) *Debt is an Asset*, 17 CONTEXTS 88, 89 (2018) ("Debt allows households to pay for expensive things that will be worth even more in the future. It means improved credit scores and tax-deductible interest payments.").

^{86.} *History*, FANNIE MAE, https://www.fanniemae.com/about-us/who-we-are/history [https://perma.cc/NU9H-MT33].

^{87.} *Id.*

^{88.} National Housing Act of 1934, Pub. L. No. 73-479, 48 Stat. 1246 (1934).

^{89.} See, e.g., James Midgley, Asset-Based Policy in Historical and International Perspective, in INCLUSION IN THE AMERICAN DREAM: ASSETS, POVERTY, AND PUBLIC POLICY 42, 49–50 (Michael Sherraden ed., 2005) (describing the creation of the FHA as "specifically intended to link employment creation with home ownership").

stabilizing the mortgage market.⁹⁰ To this day, the agency insures loans made by banks and other private lenders for home building and home buying.⁹¹

Unfortunately, the FHA has been notoriously discriminatory in both its policies and delivery of aid.⁹² In the 1930s, the FHA established its now-infamous redlining policies as part of an initiative to develop the first underwriting criteria for mortgages.⁹³ These guidelines were designed to steer private mortgage investors away from risky areas and borrowers.⁹⁴ The least favorable areas—disproportionately racial minority neighborhoods—were shaded red,⁹⁵ marking Black borrowers as bad credit risks. This effectively discouraged lending and investment in Black-majority areas, even as Black home buyers continued to be excluded from White neighborhoods,⁹⁶ promoting an almost exclusively White suburban expansion.⁹⁷

These practices did not become illegal until Congress enacted the Fair Housing Act of 1968.⁹⁸ Thus, by preventing housing purchases and depressing home values, FHA policies significantly impeded Black wealth acquisition and transmission. To this day, the resulting patterns of residential segregation persist: on average, Black households face higher poverty rates and lower home values,⁹⁹ in addition to related spatial discrimination effects. That is, there are still many segregated Black neighborhoods where residents struggle to access services and

93. See, e.g., RICHARD ROTHSTEIN, THE COLOR OF LAW: A FORGOTTEN HISTORY OF HOW OUR GOVERNMENT SEGREGATED AMERICA 9–14 (2017) (describing the FHA's refusal to insure loans to housing cooperatives that included African-American members or insure mortgages for African Americans in designated White neighborhoods and for Whites in neighborhoods where African Americans were present).

^{90.} See, e.g., Amanda Tillotson, Race, Risk and Real Estate: The Federal Housing Administration and Black Homeownership in the Post World War II Home Ownership State, 8 DEPAUL J. SOC. JUST. 25, 30–34 (2014).

^{91.} *Federal Housing Administration*, U.S. DEP'T OF HOUS. & URB. DEV., https://www.hud.gov/federal_housing_administration [https://perma.cc/H5JP-P9NW].

^{92.} See, e.g., LaDale C. Winling & Todd M Michney, *The Roots of Redlining: Academic, Governmental, and Professional Networks in the Making of the New Deal Lending Regime*, 108 J. AM. HIST. 42, 42–44 (2021) (describing the racially and ethnically discriminatory assessments that the Home Owners' Loan Corporation institutionalized, which the FHA then adopted).

^{94.} Tillotson, *supra* note 90, at 34.

^{95.} Id. at 36.

^{96.} GARY A. TOBIN, DIVIDED NEIGHBORHOODS: CHANGING PATTERNS OF RACIAL SEGREGATION 8–10 (1987)

^{97.} DAVID M.P. FREUND, COLORED PROPERTY: STATE POLICY & WHITE RACIAL POLITICS IN SUBURBAN AMERICA 100 (2007).

^{98. 42} U.S.C. §§ 3601–3619 (1968).

^{99.} See, e.g., LAURA SULLIVAN, TATJANA MESCHEDE, LARS DIETRICH & THOMAS SHAPIRO, DEMOS, THE RACIAL WEALTH GAP: WHY POLICY MATTERS 10 (2015), https://www.demos.org/sites/default/files/publications/RacialWealthGap_2.pdf.

[[]https://perma.cc/5QFE-2PCG] ("While redlining was officially outlawed by the Fair Housing Act of 1968, its impact in the form of residential segregation patterns persists with households of color more likely to live in neighborhoods characterized by higher poverty rates, lower home values, and a declining infrastructure compared to neighborhoods inhabited predominantly by [W]hite residents.").

find jobs.¹⁰⁰ For instance, one study concluded that Black men who grew up in racially segregated neighborhoods were substantially less likely to gain upward economic mobility.¹⁰¹

b. The Government's Role in the Credit Market Was Even More Pervasive than Is Commonly Assumed

While the FHA is often rightly the focus, the federal government influenced the credit market in other ways that ultimately exacerbated today's racial wealth gap. Two prominent examples are the Federal Home Loan Bank (FHLB) System and the G.I. Bill.

Congress chartered the Federal Home Loan Bank System in 1932, providing considerable support to the private mortgage market.¹⁰² The FHLB System consisted of twelve regional, government-sponsored Home Loan Banks chartered to provide liquidity and low-cost financing to their member institutions.¹⁰³ Until 1989, the Federal Home Loan Bank Board (FHLBB or Bank Board) supervised the FHLB System.¹⁰⁴ Members of the FHLB System had access to secured loans financed by the regional banks.¹⁰⁵ This government-sponsored liquidity enhanced the financing of housing and community lending.¹⁰⁶ The Bank Board also promoted the expansion of the savings and loans (S&L) industry through its supervision of the Federal Savings and Loan Insurance Corporation (FSLIC).¹⁰⁷ Congress established the FSLIC in 1934 to administer deposit insurance for S&L institutions, which were seen as key to promoting homeownership.¹⁰⁸ All S&L institutions were required to apply for

^{100.} See, e.g., Yves Zenou & Nicolas Boccard, *Racial Discrimination and Redlining in Cities*, 48 J. URB. ECON. 260, 260–62 (2000) (finding that housing discrimination and geographical differentials in mortgage loan supply limit where Black people can live and work).

^{101.} See generally Raj Chetty, Nathaniel Hendren, Maggie R. Jones & Sonya R. Porter, *Race and Economic Opportunity in the United States: An Intergenerational Perspective*, 135 Q. J. ECON. 711 (2020).

^{102.} See, e.g., Herbert Hoover, Statement About Signing the Federal Home Loan Bank Act Dated July 22, 1932, AM. PRESIDENCY PROJECT, https://www.presidency.ucsb.edu/documents/statement-about-signing-the-federal-home-loan-bank-act [https://perma.cc/RH47-MMX5]; Federal Home Loan Bank Act of 1932, 12 U.S.C. §§ 1421–1449.

^{103.} Stefan Gissler & Borghan Narajabad, *The Increased Role of the Federal Home Loan Bank System in Funding Markets, Part 1: Background*, BD. OF GOVERNORS FED. RSRV. SYS. (Oct. 18, 2017), https://doi.org/10.17016/2380-7172.2070 [https://perma.cc/SK5Y-KPRG].

^{104.} The Bank Board originally oversaw the system, but the system was abolished by the Financial Institutions Recovery, Reform, and Enforcement Act of 1989, Pub. L. No. 101-73, § 703, 103 Stat. 183 (1989).

^{105.} See Gissler & Narajabad, supra note 103.

^{106.} *History of Service*, FED. HOME LOAN BANK SYS. OFF. OF FIN., https://www.fhlb-of.com/ofweb_userWeb/pageBuilder/mission--history-29 [https://perma.cc/W3QK-ZY2T].

^{107.} See Rose Marie Kushmeider, *The U.S. Federal Financial Regulatory System: Restructuring Federal Bank Regulation*, 17 FDIC BANKING REV. 1, 3 (2005).

^{108.} FED. DEPOSIT INS. CORP., A BRIEF HISTORY OF DEPOSIT INSURANCE IN THE UNITED STATES 1 (1998), https://www.fdic.gov/bank/historical/brief/brhist.pdf [https://perma.cc/4RTC-MZUS]. Until 1989, the FSLIC insured S&Ls, while the Federal Deposit Insurance Corporation insured commercial and mutual savings banks. *Id.* at 2.

insurance with the FSLIC,¹⁰⁹ which sought to promote confidence in the system and encourage homeownership.¹¹⁰

In 1933, Congress also created the now-defunct Home Owners' Loan Corporation (HOLC) as an emergency agency under the supervision of the FHLBB.¹¹¹ The HOLC issued bonds and then used these bonds to purchase mortgage loans from lenders for homeowners struggling to make payments.¹¹² The HOLC saved the homes of thousands of distressed borrowers through refinancing and thereby became the primary lending and appraisal arm of the FHLBB.¹¹³ Unfortunately, the HOLC would ultimately deem entire minority neighborhoods hazardous investments by utilizing appraisal techniques that relied on neighborhood composition.¹¹⁴ Compounding the problem, these discriminatory HOLC maps were utilized by subsidiary banking agencies throughout the federal government and private actors who depended on federal aid (including the FHLBs, S&L associations, and regional banks receiving federal deposit insurance).¹¹⁵

The federal government thus wielded considerable influence on the private market. Black Americans were largely excluded not through statutes, but through the influence of HOLC racial guidelines. Indeed, HOLC's racial neighborhood hierarchy held sway with many private lenders. Regardless of stakeholders' personal convictions, it was safer for an individual lender, builder, or appraiser to discriminate against racial minorities, who were seen as risky propositions. To be sure, these lenders and appraisers were not required to follow the HOLC appraisal and lending guidelines—but they were incentivized to do so.

While less pervasive than the Depression programs, the Servicemen's Readjustment Act of 1944 (G.I. Bill) provided a range of benefits to World War II veterans, including low-cost mortgages; low-interest loans to start a business; cash payments of tuition and living expenses to attend college, high school, or vocational education; and one year of unemployment insurance.¹¹⁶ The G.I. Bill was even more favorable than the FHA programs because it involved both outright transfers and favorable loan terms. For example, the U.S. Department

^{109.} See Richard S. Grossman, Deposit Insurance, Regulation, and Moral Hazard in the Thrift Industry: Evidence from the 1930's, 82 AM. ECON. REV. 800, 805 (1992).

^{110.} Id. at 801.

^{111.} Home Owners' Loan Act of 1933, Pub. L. No. 73-43, 48 Stat. 128 (1933).

^{112.} See, e.g., BRUCE MITCHELL & JUAN FRANCO, NAT'L CMTY. REINVESTMENT COAL., HOLC "REDLINING" MAPS: THE PERSISTENT STRUCTURE OF SEGREGATION AND ECONOMIC INEQUALITY 6 (2018), https://ncrc.org/wp-content/uploads/dlm_uploads/2018/02/NCRC-Research-HOLC-10.pdf [https://perma.cc/9VUT-VFFL] ("In the case of the HOLC, stabilization of the nation's mortgage lending system was the primary goal. It accomplished this task by purchasing mortgages that were in default, providing better terms for financially struggling families.").

^{113.} See Louis Lee Woods II, *The Federal Home Loan Bank Board, Redlining, and the National Proliferation of Racial Lending, 1921-1950,* 38 J. URB. HIST. 1036, 1037 (2012).

^{114.} Id. at 1038.

^{115.} *Id.*

^{116.} Servicemen's Readjustment Act of 1944, Pub. L. No. 78-346, § 268, 58 Stat. 284 (1944).

of Veteran Affairs (VA) eliminated down payment requirements and waived fees to borrowers or lenders for its services until 1966.¹¹⁷ However, because of discriminatory policies and uneven delivery of aid, military service has also led to uneven patterns of wealth building among Black and White Americans.

Although the G.I. Bill increased the Black American collegiate and homeowning population, several factors prevented these beneficiaries from taking full advantage of the bill's policies.¹¹⁸ For instance, the VA, which was closely linked to the all-White American Legion and Veterans of Foreign Wars, could and did deny Black veterans' claims.¹¹⁹ The VA also adopted FHA appraisal standards in its underwriting manual, including its rules about color and property.¹²⁰ As such, banks and mortgage agencies also refused loans to Black veterans at alarming rates. For example, an Ebony Magazine survey of thirteen cities revealed that, by the summer of 1947, only two out of the 3,229 loans the VA had guaranteed went to Black veterans.¹²¹

By promoting the racially discriminatory appraisal and lending standards of the FHA, this combined federal infrastructure virtually shut Black Americans out of conventional mortgage markets. Instead, racial minorities were forced to build homes themselves, use smaller lenders, or utilize installment contracts wherein they paid the seller directly over time while building no equity in the home.¹²² All of these options were considerably riskier and more expensive than conventional mortgages, limiting the growth of Black wealth in America. The picture becomes starker considering that wealth compounds over time, such that missed financial opportunities from nearly a century ago persist across generations. For example, in their book on reparations for Black Americans, William Darity and A. Kirsten Mullen estimated the extent of forgone wealth among freed slaves who were denied their forty acres of land.¹²³ According to Darity and Mullen, the shortfall would range between \$240,000 to \$267,000 per individual Black American who descended from slavery.¹²⁴

^{117.} FREUND, supra note 97, at 181.

^{118.} For a fuller picture of racism under the G.I. Bill, see Hilary Herbold, *Never a Level Playing Field: Blacks and the GI Bill*, 6 J. BLACKS HIGHER EDUC. 104, 104–08 (1994); Ronald Roach, *From Combat to Campus: G.I. Bill Gave a Generation of African Americans an Opportunity to Pursue the American Dream*, 14 BLACK ISSUES HIGHER EDUC. 26, 26–28 (1997); Mark Boulton, *How the G.I. Bill Failed African-American Vietnam War Veterans*, 58 J. BLACKS HIGHER EDUC. 57, 57–60 (2007).

^{119.} Herbold, *supra* note 118, at 106. One survey conducted in 1947 found that of the 1,700 veterans employed by the VA in one southern state, only seven were Black. Howard Johnson, *The Negro Veteran Fights for Freedom!*, 26 POL. AFFS. 429, 430 (1947).

^{120.} FREUND, *supra* note 97, at 181.

^{121.} Johnson, *supra* note 119, at 430; *see also* LIZABETH COHEN, A CONSUMERS' REPUBLIC: THE POLITICS OF MASS CONSUMPTION IN POSTWAR AMERICA 230–32 (2003) (discussing the discrimination faced by Black veterans who tried to take advantage of their G.I. benefits).

^{122.} See, e.g., Calvin Bradford, Financing Home Ownership: The Federal Role in Neighborhood Decline, 14 URB. AFFS. Q. 313, 319 (1979).

^{123.} WILLIAM A. DARITY, JR. & A. KIRSTEN MULLEN, FROM HERE TO EQUALITY: REPARATIONS FOR BLACK AMERICANS IN THE TWENTY-FIRST CENTURY 402–05 (2d ed. 2022).

^{124.} Id. at 404–05.

c. Unbanking, Underbanking, and Lack of Trust

Minority exclusion from mainstream financial services further contributes to racial wealth inequality. Various studies on developing countries have shown that financial inclusion on favorable terms encourages asset accumulation, entrepreneurship, and health investment.¹²⁵ Studies have also shown that banked households accumulate more assets than their unbanked counterparts in the United States.¹²⁶ Yet poorer and minority neighborhoods are less likely to have banks and credit unions, with payday lenders and check-cashing centers taking their place.¹²⁷

Historically, this lack of physical access to institutions traced back to the FHA-influenced segregation of neighborhoods and services. Denial of services occurred either explicitly or implicitly through the selective raising of prices. Black residents were explicitly denied services like healthcare¹²⁸ and supermarkets.¹²⁹ Banks and other service providers also purposely built their facilities far away from Black neighborhoods. As a result, segregated areas of the inner city were distant from and poorly connected to major centers of employment growth, and Black Americans thereby faced strong geographic barriers to finding and keeping well-paid jobs.¹³⁰ In response to concerns over such redlining and lack of investment in these communities, the federal government passed legislation in later decades-most notably the 1977 Community Reinvestment Act (CRA).¹³¹ This law was designed to expand access to lending markets for families living in low- and middle-income neighborhoods. The CRA, however, made no mention of race and only encouraged (rather than mandated) banks to consider the needs of low-income members of communities.¹³²

^{125.} See, e.g., Simone Schaner, *The Persistent Power of Behavioral Change: Long-Run Impacts of Temporary Savings Subsidies for the Poor*, 10 AM. ECON. J. 67 (2018); Pascaline Dupas & Jonathan Robinson, *Why Don't the Poor Save More? Evidence From Health Savings Experiments*, 103 AM. ECON. REV. 1138 (2013).

^{126.} See, e.g., Claire Célerier & Adrien Matray, Bank-Branch Supply, Financial Inclusion, and Wealth Accumulation, 32 REV. FIN. STUD. 4767, 4769 (2019).

^{127.} See, e.g., Steven M. Graves, Landscapes of Predation, Landscapes of Neglect: A Location Analysis of Payday Lenders and Banks, 55 PRO. GEOGRAPHER 303, 303 (2003).

^{128.} Anthony L. Nardone, Joan A. Casey, Kara E. Rudolph, Deborah Karasek, Mahasin Mujahid & Rachel Morello-Frosch, *Associations Between Historical Redlining and Birth Outcomes from 2006 Through 2015 in California*, 15 PLOS ONE, Aug. 7, 2020, at 3.

^{129.} Elizabeth Eisenhauer, In Poor Health: Supermarket Redlining and Urban Nutrition, 53 GEOJOURNAL 125, 125–26 (2001).

^{130.} Jeffrey S. Zax & John F. Kain, *Moving to the Suburbs: Do Relocating Companies Leave Their Black Employees Behind?*, 14 J. LABOR ECON. 472, 473 (1996).

^{131.} Community Reinvestment Act of 1977, Pub. L. No. 95-128, 91 Stat. 1147 (codified as amended at 12 U.S.C. §§ 2901–2908 (2018)); Orin L. McCluskey, *The Community Reinvestment Act: Is It Doing the Job?*, 100 BANKING L.J. 33, 35 (1983) (underscoring that the CRA was meant to end the practice of redlining).

^{132.} David Evan Cohen, *The Community Reinvestment Act—Asset or Liability*, 75 MARQ. L. REV. 599, 602 (1992) ("The CRA is neither a traditional civil rights law nor a traditional banking

Gaps in the utilization of financial services do not solely derive from historical discrepancies in education and market outcomes caused by discrimination,¹³³ but also from Black Americans' mistrust in the financial system.¹³⁴ This lack of confidence in financial institutions has historical roots as well. Several historians have argued that Black Americans' mistrust in financial institutions stems from the deposits they lost when the Freedman's Savings Bank (FSB) collapsed during Reconstruction.¹³⁵

Congress incorporated and chartered the FSB as part of the Freedmen's Bureau Bill, signed into law by President Lincoln in 1865,¹³⁶ which was intended to aid formerly enslaved freedmen who had few economic resources. Growth of the FSB was at first largely fueled by Black soldiers, who deposited their modest paychecks at branches across the country.¹³⁷ However, the White management of the FSB engaged in speculative investing, leading the bank to acquire bad debt.¹³⁸ Ultimately, rumors of corruption and investments that violated the bank's charter left the FSB vulnerable to the Panic of 1873, leading to a series of runs on several of its branches.¹³⁹ After the Panic, attempts to restore Black Americans' confidence in the FSB proved unsuccessful, and the bank ultimately closed in 1874.140 The bank's closing proved disastrous. In addition to considerable delays in winding down the FSB, some depositors never received any of their deposits, while others received discounted amounts.¹⁴¹ Bank managers misled depositors to believe that their deposits had been guaranteed by the federal government.¹⁴² Thus began an intergenerational pattern of Black Americans distrusting financial institutions and government guarantees.¹⁴³

- 137. OSTHAUS, *supra* note 135, at 5–6.
- 138. *Id.* at 138, 152–53.

- 140. Id. at 184, 211.
- 141. Id. at 211–13.
- 142. *Id.* at 56.
- 143. BARADARAN, supra note 135, at 31.

regulation. It does not strictly prohibit any acts nor does it establish civil penalties, damages, or injunctions.").

^{133.} See, e.g., Stijn Claessens, Access to Financial Services: A Review of the Issues and Public Policy Objectives, 21 WORLD BANK RSCH. OBSERVER 207, 218–19 (2006) (finding that an individual's occupation, income, and education strongly correlate with their degree of participation in the formal financial sector); Shawn Cole & Nilesh Fernando, Assessing the Importance of Financial Literacy, 9 FIN. FOR POOR 1, 3 (2008) (showing that low financial literacy, related to low levels of education, explains why some individuals use fewer financial services).

^{134.} Luke C. D. Stein & Constantine Yannelis, *Financial Inclusion, Human Capital, and Wealth Accumulation: Evidence from the Freedman's Savings Bank*, 33 REV. FIN. STUD. 5333, 5374 (2020) (demonstrating that financial inclusion and the provision of financial services has a large effect on human capital and labor market outcomes).

^{135.} See id.; see also Mehrsa Baradaran, The Color of Money: Black Banks and the Racial Wealth Gap 30–31 (2017); Carl R. Osthaus, Freedmen, Philanthropy, and Fraud: A History of the Freedman's Savings Bank 211 (1976).

^{136.} Freedmen's Bureau Act, §§ 1–5, 13 Stat. 507 (1865).

^{139.} Id. at 176.

The loss of the FSB should not only be measured in the deposits lost and the distrust it engendered; Black Americans also lost the correlated and downstream effects that financial inclusion can provide. For instance, a 2020 study found that individuals in families with an FSB account were more likely to attend school, be literate, work outside the home, and have higher income and real estate wealth.¹⁴⁴ Similarly, the Federal Deposit Insurance Corporation's (FDIC) 2019 Survey of Household Use of Banking and Financial Services found that the unbanked rate among Black households (13.8 percent) remains substantially higher than the rate for White ones (2.5 percent).¹⁴⁵ Approximately one-half of American households cite lack of money as a reason they do not have bank accounts, with almost 30 percent citing it as the main reason.¹⁴⁶ The second most cited reason is lack of trust in banks.¹⁴⁷ Specifically, over one-third of households indicate a lack of trust in banks as a reason for not having a bank account, with 16.1 percent citing it as the main reason. While these numbers are not broken down by race, distrust nonetheless remains a major factor for minorities, who are more likely to be wary of the financial system due to past racist practices, lack of transparency about fees, and feelings that banks do not want customers who look like them.148

This lack of trust extends beyond banks to other financial institutions and services, such as those offered by financial professionals. Mistrust also leads to conservative investing strategies, which further contribute to the racial wealth gap. To wit, Black Americans are less likely to hold risky assets and more likely to invest most of their wealth in their homes.¹⁴⁹ Less risk often results in less wealth because returns on stocks have historically been higher than those for other assets.¹⁵⁰ Moreover, Black Americans are less likely to engage wealth

^{144.} Stein & Yannelis, supra note 134, at 5336.

^{145.} MARK KUTZBACH, ALICIA LLORO, JEFFREY WEINSTEIN & KARYEN CHU, FED. DEPOSIT INS. CORP., HOW AMERICA BANKS: HOUSEHOLD USE OF BANKING AND FINANCIAL SERVICES 2 (2020), https://www.fdic.gov/analysis/household-survey/2019execsum.pdf [https://perma.cc/TD3Y-NDK5].

^{146.} *Id.* at 3.

^{147.} Id.

^{148.} Samantha Masunaga & Jackeline Luna, Big Banks Want Communities of Color to Trust Simple, L.A. TIMES (June 19. Them. But It's Not So 2021), https://www.latimes.com/business/story/2021-06-19/big-banks-banks-community-people-of-colortrust [https://perma.cc/P2HR-PBQU]; Marcus Anthony Hunter, Black America's Distrust of Banks Rooted in Reconstruction, CHI. REP. (Feb. 22, 2018), https://www.chicagoreporter.com/black-americasdistrust-of-banks-rooted-in-reconstruction/ [https://perma.cc/CC67-NE8F]; Marlette Williams, After Years of Banks Overcharging and Undervaluing Black Customers, "Banking Black" Is Gaining Popularity as an Effective Way to Fight Systemic Racism, BUS. INSIDER, Feb. 22, 2021, https://www.businessinsider.com/personal-finance/banking-black-americans-switching-banks-2021-2 [https://perma.cc/5CKS-WBDD].

^{149.} Dawn Burton, *The US Racial Wealth Gap and the Implications for Financial Inclusion and Wealth Management Policies*, 47 J. SOC. POL'Y 683, 693 (2018).

^{150.} *See, e.g.*, Thompson & Suarez, *supra* note 74, at 34–37 (finding that the mean wealth difference between Black and White families is due to higher likelihood of White families owning homes and stock); Petach & Tavani, *supra* note 68, at 115.

management professionals because they do not believe they have sufficient assets, because of high fees, or, importantly, because they do not trust these traditionally White institutions.¹⁵¹ Perhaps some of the trust deficit could be closed by taking investment advice from friends and family, but Black households are much less likely than White households to have financial experts in their social networks.¹⁵² As a result, Black Americans have less access to the types of information associated with successful investing.¹⁵³ This discrepancy cannot only be explained by differences in financial literacy but is also the result of racialized discrepancies in social networks.¹⁵⁴ In other words, White households are far more likely to have a financial expert in their social networks.¹⁵⁵

B. The New Inequality: Predatory Inclusion

Given the compounding and long-lasting nature of wealth, the historical legacy of inequality is important. Rather than disappearing, however, inequality has simply morphed. Whereas the old, FHA-influenced inequality largely excluded Black Americans, the new conception of inequality includes everyone but does so in ways that reinforce historical inequalities and contribute to the racial wealth gap. This process, called "predatory inclusion," grants members of marginalized groups access to financial services, but only on terms that eliminate its very benefits.¹⁵⁶

Mistrust and lack of access create opportunities for predation. Not only are payday lenders more commonly located in minority neighborhoods, but those lenders also engage in deliberate target marketing.¹⁵⁷ In turn, where the old inequality involved redlining, the new inequality uses reverse redlining.¹⁵⁸ Reverse redlining, used in the years leading up to the Great Recession, involved

^{151.} Id. at 691, 694–95; Mariko Lin Chang, With a Little Help from My Friends (And My Financial Planner), 83 SOC. FORCES 1469, 1469–97 (2005).

^{152.} Erin York Cornwell & Benjamin Cornwell, *Access to Expertise as a Form of Social Capital: An Examination of Race- and Class-Based Disparities in Network Ties to Experts*, 51 SOCIO. PERSPS. 853, 858 (2008).

^{153.} Burton, *supra* note 149, at 688.

^{154.} Raphaël Charron-Chénier & Louise Seamster, *Racialized Debts: Racial Exclusion from Credit Tools and Information Networks*, 47 CRITICAL SOCIO. 977, 988 (2021).

^{155.} Id. at 981.

^{156.} Louise Seamster & Raphaël Charron-Chénier, *Predatory Inclusion and Education Debt: Rethinking the Racial Wealth Gap*, 4 SOC. CURRENTS 199, 199–200 (2017).

^{157.} See, e.g., Claire Williams, 'It's What We Call Reverse Redlining': Measuring the Proximity of Payday Lenders, Pawn Shops to Black Adults, MORNING CONSULT (July 23, 2020), https://morningconsult.com/2020/07/23/black-consumers-payday-loan-banking-services/ [https://perma.cc/78NA-8647].

^{158.} See, e.g., Paul S. Calem, Kevin Gillen & Susan Wachter, *The Neighborhood Distribution of Subprime Mortgage Lending*, 29 J. REAL ESTATE FIN. & ECON. 393, 394 (2004) ("[A]]l previous studies find significant concentration of subprime lending among minority borrowers or within neighborhoods where minority households predominate."); Jacob S. Rugh & Douglas S. Massey, *Racial Segregation and the American Foreclosure Crisis*, 75 AM. SOCIO. REV. 629, 630 (2010) ("[T]]he financial institutions that do exist in minority areas are likely to be predatory.").

targeting subprime mortgages to areas with larger minority populations. The highly segregated patterns fostered by historical redlining set the stage for this practice by making address a proxy for race. And this predatory lending raised default rates during the financial crisis.¹⁵⁹ Lenders tailored pitches to Black borrowers, operated out of bank branches in targeted Black-majority neighborhoods, and filled in inflated income figures on loan applications without borrowers' knowledge.¹⁶⁰

Payday lenders similarly target Black borrowers.¹⁶¹ Moreover, Black borrowers receive less favorable terms on their car loans.¹⁶² Even educational loans, often viewed as a means to minority advancement, are plagued with predatory inclusion¹⁶³—Black students more likely to incur educational debt and to be targeted by the for-profit sector.¹⁶⁴ As such, Black borrowers receive lower average returns on educational investment.¹⁶⁵ Predatory inclusion and loan denials by mainstream institutions also have a chilling effect, as many Black applicants do not apply for bank loans because they do not believe their applications will be approved.¹⁶⁶

These disparate loan outcomes contribute to the racial wealth gap. One study estimated that the average Black family's net worth would be anywhere from 2 to 8 percent higher if those families could borrow at the same interest rates as White families.¹⁶⁷

The COVID-19 pandemic has led to an increase in the number of unbanked households and reliance on predatory products like payday loans.¹⁶⁸ These changes, coupled with Black Americans' lack of access to affordable credit, mean that Black Americans continue to fall further behind in wealth accumulation.

162. Mark A. Cohen, Imperfect Competition in Auto Lending: Subjective Markup, Racial Disparity, and Class Action Litigation, 8 REV. L. & ECON. 21, 23 (2012).

163. See, e.g., Seamster & Charron-Chénier, *supra* note 156, at 200; N. S. Chiteji, *The Racial Wealth Gap and the Borrower's Dilemma*, 41 J. BLACK STUD. 351, 358–59 (2010).

164. Seamster & Charron-Chénier, *supra* note 156, at 204.

^{159.} *See, e.g.*, Sumit Agarwal, Gene Amromin, Itzhak Ben-David, Souphala Chomsisengphet & Douglas D. Evanoff, *Predatory Lending and the Subprime Crisis*, 113 J. FIN. ECON. 29, 29 (2014) (finding that predatory lending raised default rates by one-third).

^{160.} Linda E. Fisher, Target Marketing of Subprime Loans: Racialized Consumer Fraud & Reverse Redlining, 18 J.L. & POL'Y 121, 140, 142 (2009).

^{161.} See James R. Barth, Jitka Hilliard, John S. Jahera & Yanfei Sun, Do State Regulations Affect Payday Lender Concentration?, 84 J. ECON. & BUS. 14, 24 (2016); Mark L. Burkey & Scott P. Simkins, Factors Affecting the Location of Payday Lending and Traditional Banking Services in North Carolina, 34 REV. REG'L STUD. 191, 202 (2004); Robin A. Prager, Determinants of the Locations of Alternative Financial Service Providers, 45 REV. INDUS. ORG. 21, 37 (2014).

^{165.} Id. at 200.

^{166.} Kerwin Kofi Charles & Erik Hurst, *The Transition to Home Ownership and the Black-White Wealth Gap*, 84 REV. ECON. & STAT. 281, 293 (2002); Sheila D. Ards, Inhyuck Steve Ha, Jose-Luis Mazas & Samuel L. Myers, Jr., *Bad Credit and Intergroup Differences in Loan Denial Rates*, 42 REV. BLACK POL. ECON. 19, 32 (2015).

^{167.} Chiteji, supra note 163, at 357.

^{168.} Kutzbach et al., *supra* note 145, at 10–12.

Bad debt is thus highly racialized.¹⁶⁹ The growth of fintech and ever more complex financial products has only aggravated the issues identified above.¹⁷⁰ The problem is not only high interest rates, as with payday loans, but also unregulated financial intermediaries offering financial products that the average consumer does not understand. The complexity only steepens the financial literacy learning curve. Distinguishing between good and bad debt, and wise and unwise investments, is an ever more daunting task. These issues are discussed in more detail in Part II.

II.

THE (BROKEN) PROMISES OF FINTECH

Key players in the fintech revolution often claim that their products foster financial inclusion, which would address some of the issues that underlie wealth inequality as described in Part I.¹⁷¹ In this Section, we review the specific promises of the most prominent fintech developments—e-trading, robo-advising, alternative credit platforms, neobanks, and decentralized payments— and evaluate how well each innovation has lived up to its promises. Surveying the fintech revolution, we acknowledge that the impacts of these business models vary considerably. While we identify instances in which some technologies have exacerbated existing inequities, we also identify less-problematic structures within fintech business models that simply reduce the likelihood that the technology could succeed in reducing racial inequality.

A. E-Trading

As discussed in Part I, the racial wealth gap in the United States is estimated at roughly \$10.14 trillion.¹⁷² Disparities in stock ownership contribute to that gap: about 61 percent of White households report stock ownership, while only 34 percent of Black households and 24 percent of Hispanic households do.¹⁷³

^{169.} Charron-Chénier & Seamster, supra note 154, at 980.

^{170.} Id. at 989.

^{171.} See, e.g., Welcome to the Historical White Paper, DIEM (Apr. 2020), http://web.archive.org/web/20220122052956/https://www.diem.com/en-us/white-paper/

[[]https://perma.cc/U48K-JU6U] ("With more than 1.7 billion people who are either unbanked or underbanked around the world, large-scale innovation that promotes financial inclusion, compliance, and competition could help those who need it the most."). In its initial white paper for its digital payment system, the Diem Association discussed how blockchains can address problems of accessibility and trustworthiness that exclude people from the traditional financial system. *Id.* While the Diem Association is technically a separate organization from Meta (formerly Facebook), its funding came from the firm. *Facebook-Funded Cryptocurrency Diem Winds Down*, BBC NEWS (Feb. 1, 2022), https://www.bbc.com/news/technology-60156682[https://perma.cc/LZ8Q-L2LR].

^{172.} See Williamson, supra note 44 and accompanying text.

^{173.} Tim Smart, *Who Owns Stocks in America? Mostly, It's the Wealthy and White*, U.S. NEWS (Mar. 15, 2021), https://www.usnews.com/news/national-news/articles/2021-03-15/who-owns-stocksin-america-mostly-its-the-wealthy-and-white [https://perma.cc/6F8P-ZP4A]. Overall, though, stock ownership has increased to 53 percent from the 32 percent who owned stock in 1989. *Id.*

Research by Thomas Piketty suggests that these inequalities in stock ownership will exacerbate wealth inequality over the coming decades.¹⁷⁴

Two massive disruptions transformed retail stock trading from the province of the wealthy elite into a booming market accessible to anyone with a smartphone.¹⁷⁵ The first development was Jack Bogle's creation of the first index mutual fund in 1975.¹⁷⁶ Tied to the performance of the entire market, index funds provided a means for middle-class Americans to invest in the stock market without high management fees.¹⁷⁷ The second major disruption was the launch of Robinhood in 2015.¹⁷⁸

1. The Promise: To "Democratize Finance for All"

On March 12, 2015, Stanford roommates Vladimir Tenev and Baiju Bhatt launched their new mobile trading platform, Robinhood.¹⁷⁹ While other online brokers charged \$7.99 or more per trade, Robinhood promised a commission-free trading experience aimed at millennial customers that Bhatt claimed would "unlock[] the market for the micro investor."¹⁸⁰ Robinhood had an immediate impact on the trading industry. In the days following Robinhood's launch, nearly every major online brokerage eliminated commissions for buying and selling stocks.¹⁸¹ With its commission-free trading app, Robinhood has indeed opened the stock markets to millions of first-time investors.¹⁸²

Robinhood's commission-free trading structure is made possible by a rebate paid to the brokers called Payment for Order Flow (PFOF).¹⁸³ Market

175. To the Moon, Part 3: A People's History of Investing, WALL ST. J. & GIMLET (June 6, 2021), https://www.wsj.com/podcasts/the-journal/to-the-moon-part-3-a-people-history-ofinvesting/f2727ca6-06ef-4248-aa0b-6c62eedf9b18 [https://perma.cc/387N-JCKC] [hereinafter *To the*

179. Michael MacKenzie, *Robinhood Not Out of the Woods After GameStop*, FIN. TIMES (Feb. 6, 2021), https://www.ft.com/content/3a244aa0-70c4-45b0-bb6d-a2214fc10018.

180. Heather Long, *New App Offers Free Trading. Millennials Jump In*, CNN (Mar. 12, 2015), https://money.cnn.com/2015/03/12/investing/robinhood-app-free-trading-millennials/

[https://perma.cc/ANH3-KBMX]. A micro investor is considered a "saver who could buy small-dollar amounts of share of stocks." Julie Jason, *Investing in Fractions—What You Should Know*, CONN. POST (Nov. 15, 2020), https://www.ctpost.com/business/article/Julie-Jason-Investing-in-fractions-what-you-15726759.php [https://perma.cc/725C-CR7D].

181. Matt Egan, *This App Completely Disrupted the Trading Industry*, CNN (Dec. 13, 2019), https://www.cnn.com/2019/12/13/investing/robinhood-free-trading-fractional-shares/index.html [https://perma.cc/VBF5-JZCX].

182. See Robinhood Mkts., Inc., Registration Statement (Form S-1) (July 1, 2021) ("As of December 31, 2020 and as of March 31, 2021, we had 12.5 million and 18.0 million Net Cumulative Funded Accounts, respectively, and from January 1, 2015 to March 31, 2021, over half of the customers funding accounts on our platform told us that Robinhood was their first brokerage account.")

183. GARY SHORTER, CONG. RSCH. SERV., BROKER-DEALERS AND PAYMENT FOR ORDER FLOW 1 (Apr. 2, 2021), https://crsreports.congress.gov/product/pdf/IF/IF11800 [https://perma.cc/2XZ9-JB3F].

^{174.} See THOMAS PIKETTY, CAPITAL IN THE TWENTY-FIRST CENTURY 53 (2014).

Moon, Part 3].

^{176.} *Id*.

^{177.} *Id*.

^{178.} Id.

makers, alternatively known as wholesalers, pay firms like Robinhood fractions of a penny per trade in exchange for marketable stock order flows.¹⁸⁴ These tiny amounts add up, and their scope has grown dramatically: the aggregate PFOF revenue nearly tripled from \$892 million in 2019 to \$2.5 billion in 2020 at four major broker-dealers—TD Ameritrade, Robinhood, E*Trade, and Charles Schwab.¹⁸⁵ Not all brokers have fully disclosed this source of revenue, however. Indeed, in late 2020, the U.S. Securities and Exchange Commission (SEC) charged Robinhood with intentionally hiding its PFOF revenues from its customers.¹⁸⁶ Such concealment of PFOF hinders customers' informed decisions about broker choice, as it obscures how PFOF creates a conflict of interest and ultimately affects execution prices.

2. The Reality: Lower Returns and Conflicts of Interest

A potential problem with PFOF is that Robinhood and other brokers are incentivized to increase the number of trades per user on their platform to increase their revenue. Yet, studies have shown that small investors who trade stocks more frequently tend to earn lower returns.¹⁸⁷ In particular, Robinhood users tend to trade much more frequently than do other investors. Alphacution, a research firm, analyzed new filings from nine brokerage firms and found that Robinhood's users trade at the fastest pace.¹⁸⁸ Specifically, in the first quarter of 2020, Robinhood users traded nine times as many shares as E*Trade's customers and forty times as many shares as Charles Schwab's customers.¹⁸⁹

At the heart of the ongoing policy debate over PFOF are concerns that the arrangement may compromise a broker's duty to seek the best execution

^{184.} *Id.* Market makers buy the stocks at the bid price and sell to them at a slightly higher price. *Id.* The SEC's approach to PFOF involves disclosing its existence. *Id.* Under rules 606 and 607 of Regulation NMS of the Securities Exchange Act of 1934, key aspects of PFOFs must be disclosed. *See* 17 C.F.R. §§ 242.606–.607 (2023).

^{185.} See To the Moon, Part 3, supra note 175.

^{186.} Press Release, Sec. & Exch. Comm'n, SEC Charges Robinhood Financial with Misleading Customers About Revenue Sources and Failing to Satisfy Duty of Best Execution (Dec. 17, 2020), https://www.sec.gov/news/press-release/2020-321 [https://perma.cc/A58H-9RCA]. For example, Robinhood reported PFOF as a "negligible" source of revenue and did not include PFOF in response to the question "How does Robinhood make money?" on its FAQ page despite earning more than 80 percent of its revenue from PFOF during the same period. Robinhood Fin., LLC, Securities Act Release No. 10906, Exchange Act Release No. 90694 (Dec. 17, 2020). Robinhood agreed to pay \$65 million to settle the charges. *Id.*

^{187.} See, e.g., Brad M. Barber, Yi-Tsung Lee, Yu-Jane Liu & Terrance Odean, *The Cross-Section of Speculator Skill: Evidence from Day Trading*, 18 J. FIN. MKTS. 1, 23 (2014) (concluding that "trading is hazardous to one's wealth"); Siu-Kai Choy, *Retail Clientele and Option Returns*, J. BANKING & FIN. 26, 41 (2015) (concluding that higher retail trading proportions are associated with lower deltahedged returns).

^{188.} Nathaniel Popper, *Robinhood Has Lured Young Traders, Sometimes with Devastating Results*, N.Y. TIMES (July 8, 2020), https://www.nytimes.com/2020/07/08/technology/robinhood-risky-trading.html [https://perma.cc/BH5D-ESBN].

^{189.} Id.

available for its customers' orders.¹⁹⁰ During his nomination hearing, SEC Chair Gary Gensler stated that PFOF "raises a number of policy questions, including whether and how it enables best execution for investors, its role in growing concentration in market making, and its effects on fair, orderly and efficient markets."¹⁹¹ Putting those concerns into action, Gensler announced in June of 2021 that he had asked the agency's staff to make recommendations to amend a host of market structure rules, including PFOF.¹⁹²

The SEC is not alone in its concerns about PFOF. The Massachusetts Securities Division filed an enforcement action against Robinhood in 2020, asserting that Robinhood profited from allowing and even encouraging inexperienced investors to trade frequently on its platform.¹⁹³ In its complaint, Massachusetts claimed that Robinhood gamified its platform in order to "lure customers into consistent participation."¹⁹⁴ The complaint pointed to Robinhood's use of confetti falling on screen when a user bought or sold stock, along with the use of ranked waitlists for certain app features.¹⁹⁵ The State alleged that these tactics facilitated "frequent, risky, and unsuitable trading."¹⁹⁶

Massachusetts also noted that Robinhood sends users push notifications that identify certain stocks as "Top Movers" or "Most Popular."¹⁹⁷ Such tactics are effective. Using data from Robinhood, a 2020 study found that Robinhood

^{190.} SHORTER, *supra* note 183, at 2. "Best execution" denotes the broker's obligation to seek the most favorable terms for a customer's transaction in the context of the prevailing circumstances. *Id.* In its 2020 case against Robinhood, the SEC charged Robinhood with breaching its duty by executing orders at prices that were inferior to other brokers. Robinhood Fin., LLC, *supra* note 186, at 5. Robinhood apportioned less PFOF to price improvement than its competitors (a 20/80 split as opposed to an 80/20 split). *Id.* at 6. A 2021 study, however, found that the adoption of PFOF-facilitated zero commissions led to improved trade execution quality. *See* Samuel Adams & Connor Kasten, Retail Order Execution Quality Under Zero Commissions 26 (Jan. 7, 2021) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3779474 [https://perma.cc/WX87-SLDR].

^{191.} Nominations of the Honorable Gary Gensler and the Honorable Rohit Chopra: Hearing Before the S. Comm. on Banking, Hous. & Urb. Affs., 117th Cong. 34 (2021) (statement of Gary Gensler).

^{192.} Gary Gensler, Chair, Sec. & Exch. Comm'n, Prepared Remarks at the Global Exchange and FinTech Conference, Washington, D.C. (June 9, 2021).

^{193.} Robinhood Fin., LLC, No. E-2020-0047, 6, 18 (Mass. Sec. Div. Dec. 16, 2020). In March of 2020, the Massachusetts Securities Division adopted amendments that required broker-dealers registered in Massachusetts to meet a fiduciary standard when dealing with their customers. *Id.* at 4.

^{194.} Id. at 12. Gamification is the implementation of game design elements in a real-word context with the goal of motivating specific behaviors. Michael Sailer, Jan Ulrich Hense, Sarah Katharina Mayr & Heinz Mandl, *How Gamification Motivates: An Experimental Study of the Effects of Specific Game Design Elements on Psychological Need Satisfaction*, 69 COMPUTS. HUM. BEHAV. 371, 371 (2017). For a discussion of the ethical consideration of gamifications, see Tae Wan Kim & Kevin Werbach, *More than Just a Game: Ethical Issues in Gamification*, 18 ETHICS & INFO. TECH. 157, 160–65 (2016).

^{195.} Robinhood Fin., No. E-2020-0047, at 12.

^{196.} Id. at 14.

^{197.} *Id.* The Massachusetts Securities Division stated that these lists have the potential to influence the securities that "new, unsophisticated customers with no investment experience purchase" and yet "Robinhood does not conduct a suitability analysis of the securities contained in the list." *Id.* at 12.

investors engage in more attention-induced trading than other retail investors.¹⁹⁸ While these results are consistent with Robinhood attracting relatively inexperienced investors, the study showed such attention-induced trading is at least partially attributable to the app's unique features—including Robinhood's identification of trending investments.¹⁹⁹ Further, consistent with previous models, the study showed that users who engage in attention-induced trading generally earn negative returns.²⁰⁰

Not only do Robinhood investors trade more frequently to their detriment, they also trade the riskiest products.²⁰¹ Robinhood has made high-risk options trading easily accessible to users with little to no investment experience.²⁰² Indeed, when the Financial Industry Regulatory Authority (FINRA) fined Robinhood \$65 million in 2021, it charged the firm with failing to exercise due diligence before approving customers to trade options.²⁰³ FINRA asserted that Robinhood relied on computer algorithms with limited oversight to approve thousands of customers who did not satisfy the firm's eligibility criteria or whose accounts contained red flags.²⁰⁴ In addition, FINRA found that Robinhood misled its customers that they would "never lose more than the premium

201. Popper, *supra* note 188. Robinhood users bought and sold eighty-eight times as many risky options contracts as Schwab customers, relative to the average account size, according to Alphacution Research Conservatory. *Id.*

^{198.} Brad M. Barber, Xing Huang, Terrance Odean & Christopher Schwarz, Attention-Induced Trading and Returns: Evidence from Robinhood Users 2 (Oct. 18, 2020) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3715077 [https://perma.cc/V62R-KFEX]. The study also found that Robinhood's outages disproportionately reduce trading in high-attention stocks. *Id.*

^{199.} Id. at 23.

^{200.} *Id.* The top 0.5 percent of stocks bought by Robinhood users each day experience negative average returns of approximately 5 percent over the next month. *Id.* at 29. "[E]xtreme herding events" (at least a 50 percent increase in Robinhood users representing a minimum of 1,000 new users) are followed by negative average returns of almost 20 percent. *Id.*

^{202.} *Id.* The company advertises options with the tagline "quick, straightforward & free." *Id.* Even though beginners are legally barred from trading options, customers can trade options after answering a few multiple-choice questions. *Id.* Those who indicate that they have no investing experience are then coached by the app on how to change the answer to "not much" experience. *Id.* Then people can immediately begin trading. *Id.* These policies have sometimes resulted in devastating consequences. A University of Nebraska student, Alex Kearns, took his own life after seeing a negative \$730,165 balance in his Robinhood account. Sergei Klebnikov, *20-Year-Old Robinhood Customer Dies by Suicide After Seeing a \$730,000 Negative Balance*, FORBES (June 17, 2020), https://www.forbes.com/sites/sergeiklebnikov/2020/06/17/20-year-old-robinhood-customer-dies-by-suicide-after-seeing-a-730000-negative-balance/?sh=6f9927016384 [https://perma.cc/G3GE-2QFH]. In his suicide note, Kearns expressed anger toward Robinhood, writing that he had "no clue" what he was doing and that he had never authorized margin trading. *Id.*

^{203.} Robinhood Fin., LLC, Letter of Acceptance, Waiver, and Consent No. 2020066971201 to Financial Industry Regulatory Authority (FINRA) Alleged Rule Violations 17–20 (June 30, 2021), https://www.finra.org/sites/default/files/2021-06/robinhood-financial-awc-063021.pdf [https://perma.cc/TCN8-KVKT].

^{204.} *Id.* at 3–4.

^{205.} Id. at 3.

paid to enter [a] debit spread" when customers could, and many did, lose much more than the premiums they paid.²⁰⁶

3. Conclusion

Robinhood has forever changed the retail trading market by providing easy, commission-free trading and introducing a new generation to retail investing and risky options trading. Without commissions, though, Robinhood and other brokers have relied more heavily on PFOF as a source of revenue. In an apparent effort to maximize its PFOF, Robinhood has designed its app to increase the number of trades by gamifying the user experience and highlighting certain stocks for purchase. Given that increased trading frequency and attention-induced trading are associated with lower or even negative returns, it is unlikely that the platform will democratize finance in a way that will reduce the racial wealth gap.

B. Robo-Advisers

Another component of the racial wealth gap derives from disparities in rates of return on investments.²⁰⁷ Robo-advisers could be a potential solution to this issue as they are ostensibly more accessible than human wealth management advisers.²⁰⁸ A robo-adviser is an online wealth management tool that uses algorithms to generate financial advice with minimal human involvement.²⁰⁹ Robo-advisers create a risk profile based on customer input, which they leverage to allocate clients' funds to investments based on their individual preferences.²¹⁰

Robo-advisers differ in the types of services they provide and the extent to which they supplement their digital services with human guidance and monitoring.²¹¹ Although newer technologies exist, the most commonly utilized robo-advisers rely on decision trees or heuristics developed based on human knowledge.²¹² Given the current pace of development, however, robo-advisers

^{206.} Id.

^{207.} Petach & Tevani, supra note 68, at 115.

^{208.} Milan Ganatra & Aashika Jain, *What Is a Robo-Adviser and How Does It Work?*, FORBES (Nov. 29, 2021), https://www.forbes.com/adviser/in/investing/what-is-a-robo-adviser-and-how-does-it-work/ [https://perma.cc/YPL7-UAJK] (describing robo-advisers as providing "easy access" to investment advisory services in that they are "easy to use" and charge lower fees than the average human wealth management adviser).

^{209.} Id.

^{210.} DELOITTE, THE EXPANSION OF ROBO-ADVISORY IN WEALTH MANAGEMENT 2 (2016), https://www2.deloitte.com/content/dam/Deloitte/de/Documents/financial-services/Deloitte-Robo-safe.pdf [https://perma.cc/3MLG-8NZ2] (describing robo-advisers as "propos[ing] adequate investment

opportunities well beyond simply highlighting a handful of ETS of out of a few thousand possibilities"). 211. Ganatra & Jain, *supra* note 208.

^{212.} Hui Chia, *In Machines We Trust: Are Robo-Advisers More Trustworthy than Human Financial Advisers?*, 1 LAW, TECH. & HUMS. 129, 130 (2019). Chia refers to this as "old-style' AI." *Id.* Chia also describes newer technologies that are based on deep learning or deep convolutional neural networks. *Id.* at 130–31. A revolutionary feature of these deep neural networks is an ability to continuously learn from data. *Id.* at 131.

that employ fully automated deep neural networks will likely replace older systems in the next few years.²¹³

Since launching more than a decade ago, robo-advisement has grown into an industry that managed \$460 billion in assets in 2020.²¹⁴ While the first roboadvisers were stand-alone firms, many existing financial firms including banks, broker-dealers, technology firms, and asset managers have now entered the market.²¹⁵ In 2020, Betterment, the largest start-up robo-adviser, managed \$29 billion in assets, while Vanguard Personal Adviser, the largest incumbent roboadviser, managed \$231 billion in assets.²¹⁶ The field of robo-advisers is expanding as well—a 2016 study by BlackRock identified thirty-seven new robo-adviser firms that launched in 2014 and forty-four more in 2015.²¹⁷

1. The Promise: To Make Quality Investment Advice More Accessible

As with many other fintech developments, robo-advisers launched during the 2008 financial crisis. The first consumer-facing robo-advisers, Wealthfront and Betterment, began operations in 2008 and started advising retail investors in 2010.²¹⁸ Initially, Wealthfront sought to provide financial advice to the tech community, but the founders broadened their focus to make investment advice accessible to more people at lower costs.²¹⁹ Similarly, Betterment sought to offer financial advice at a lower cost by automating the selection and management of investments.²²⁰

More recently, entrepreneurs have launched robo-adviser start-ups with the express purpose of catering to underserved groups. For example, Carlos Garcia created Finhabits, a bilingual robo-adviser platform designed to help first-time savers develop good investing habits.²²¹ Similarly, Ellevest offers algorithmic

^{213.} Id. at 132.

^{214.} Nathaniel Lee, *Why Robo-Advisers Are Striving Toward a 'Hybrid Model,' As the Industry Passes the \$460 Billion Mark*, CNBC (Apr. 12, 2021), https://www.cnbc.com/2021/04/12/why-robo-advisers-may-never-replace-human-financial-advisers.html [https://perma.cc/JDE3-WQ6G]. Assets under management by robo-advisers are expected to rise to \$1.2 trillion by 2024. *Id.*

^{215.} Jill E. Fisch, Marion Labouré & John A. Turner, *The Emergence of the Robo-Adviser, in* THE DISRUPTIVE IMPACT OF FINTECH ON RETIREMENT SYSTEMS 13, 17 (Julie Agnew & Olivia S. Mitchell eds., 2019).

^{216.} Victor Chatenay, *Charles Schwab's \$200 Million Fine Signals SEC Scrutiny of Robo-Advisors*, BUS. INSIDER (July 8, 2021), https://www.businessinsider.com/charles-schwab-fine-signalssec-scrutiny-of-robo-advisers-2021-7 [https://perma.cc/T76J-WELU]. Although algorithmic-driven investment services have experienced rapid growth, they still represent a relatively small market share in comparison with more traditional investment advisers.

^{217.} BLACKROCK, DIGITAL INVESTMENT ADVICE: ROBO ADVISORS COME OF AGE 5 (2016), https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-digital-investment-adviceseptember-2016.pdf [https://perma.cc/3UZX-WE6P].

^{218.} Fisch et al., *supra* note 215, at 16–17.

^{219.} Id. at 17.

^{220.} Id.

^{221.} Ainsley Harris, *Can Finhabits Narrow the Wealth Gap Between Whites and Latinos?*, FAST CO. (Apr. 14, 2017), https://www.fastcompany.com/40406639/can-finhabits-narrow-the-wealth-gap-between-whites-and-latinos [https://perma.cc/5TEU-WC3R].

investing for women with the purpose of closing gender wealth gaps.²²² Although Ellevest now manages \$1 billion in assets,²²³ and Finhabits over \$21 million,²²⁴ these platforms represent a small slice of the overall wealth management market.²²⁵

2. The Reality: Repackaged Goods

Some scholars claim that in addition to charging lower fees, robo-advisers offer more transparency and suffer from fewer conflicts of interest than traditional human financial advisers.²²⁶ With these features, robo-advisers may improve access to good investment advice and thereby offer at least a partial solution to wealth inequality. To evaluate this claim and the other promises of robo-advisers, this Section assesses robo-advisers' customer populations, their investment performance, and the extent of their conflicts of interest.

a. A Tool for Younger but Affluent Investors

Although robo-advisers purport to benefit investors of modest means, a 2020 study concluded that investors who use robo-adviser services are more likely to have higher amounts of investable assets and higher levels of perceived investment knowledge than non-users.²²⁷ The study analyzed a large sample of investors with non-retirement investment accounts and concluded that most investors who use robo-advisers already owned substantial investable assets.²²⁸ The study's findings run counter to the narrative that robo-advisers serve underserved markets. Instead, robo-advisers provide a less expensive alternative to traditional investment advisers for younger but relatively affluent investors.²²⁹

^{222.} *Start Investing Today*, ELLEVEST, https://www.ellevest.com/investing [https://perma.cc/AFC6-UBDG].

^{223.} Maggie McGrath, *Sallie Krawcheck Leads Ellevest to a Landmark \$1 Billion in Assets Under Management*, FORBES (Mar. 23, 2021), https://www.forbes.com/sites/maggiemcgrath/2021/03/23/sallie-krawcheck-grows-ellevest-to-1billion-in-assets-under-management/?sh=2d8bb1a72395 [https://perma.cc/T2EW-3U3Z].

^{224.} Rick Houston, *Finhabits Review: Automated Investing App with Support for Both Spanish and English*, BUS. INSIDER (Mar. 8, 2021), https://www.businessinsider.com/personal-finance/finhabits-investing-review [https://perma.cc/E6LM-DFVP].

^{225.} See Victor Chatenay, Less than One in Ten US Households Use Robo-Advisory Platforms, BUS. INSIDER (Sept. 10, 2020), https://www.businessinsider.com/eight-percent-us-households-investin-robo-advisers-2020-9 [https://perma.cc/SS47-W26P] (reporting that robo-advisers had \$330 billion in assets under management out of the \$43 trillion wealth management market in 2019).

^{226.} See Francesco D'Acunto, Nagpurnanand Prabhala & Alberto G. Rossi, *The Promises and Pitfalls of Robo-Advising*, 32 REV. FIN. STUD. 1983, 1989 (2019).

^{227.} Lu Fan & Swarn Chatterjee, *The Utilization of Robo-Advisors by Individual Investors: An Analysis Using Diffusion of Innovation and Information Search Frameworks*, 31 J. FIN. COUNSELING & PLAN. 130, 143 (2020).

^{228.} Id.

^{229.} See id. (concluding that adopters of robo-advisers are "less likely to be older" and more likely to "possess higher amounts of investable assets").

b. Mixed Investment Performance

Another element of the promise of robo-advisers is that they provide *quality* investment advice. However, while robo-advisers have delivered services at relatively lower costs, their investment choices have generated mixed returns.²³⁰ A 2019 study concluded that under-diversified investors benefited from increased portfolio diversification using a robo-adviser, but found that diversified investors tended to increase their trading activity, which did not translate into improved investment performance.²³¹ One possible explanation is that, relative to traditional investment advisers, robo-advisers confer a greater degree of autonomy on the investors themselves.²³² Giving more control to investors increases the likelihood of suboptimal behavior caused by lack of self-control²³³ and overtrading.²³⁴

c. Misleading Advertising

Like other investment advisers, robo-advisers must register with the SEC and are subject to agency oversight and enforcement.²³⁵ The SEC brought its first enforcement actions against a robo-adviser in 2018, when it fined Wealthfront and Hedgeable \$250,000 and \$80,000, respectively, over false disclosures about investment performance and misleading advertising.²³⁶

Specifically, Wealthfront claimed that it would monitor certain client accounts for transactions triggering a wash sale but failed to do so.²³⁷ As a result, wash sales occurred in 31 percent of the accounts enrolled in Wealthfront's tax loss harvesting program.²³⁸ Further, the SEC found that Wealthfront had

bulletins/investor-bulletins-45 [https://perma.cc/PW7L-FFM3].

^{230.} See D'Acunto et al., supra note 226, at 2017.

^{231.} Id.

^{232.} See id. at 1989.

^{233.} See Nicolas Barberis & Richard Thaler, A Survey of Behavioral Finance, 1 HANDBOOK ECONS. FIN. 1053, 1107–08 (2003) (discussing how lack of self-control can influence investment decisions).

^{234.} See D'Acunto et al., supra note 226, at 1989; see also Brad M. Barber & Terrance Odean, All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors, 21 REV. FIN. STUD. 785, 812–13 (2008) (finding individual investors display attention-driven buying behavior and discussing that this attention-driven trading does not generate superior returns).

^{235.} Investor Bulletin: Robo-Advisers, SEC. & EXCH. COMM'N (Feb. 23, 2017), https://www.investor.gov/introduction-investing/general-resources/news-alerts/alerts-

^{236.} Press Release, Sec. & Exch. Comm'n, SEC Charges Two Robo-Advisers with False Disclosures (Dec. 21, 2018), https://www.sec.gov/news/press-release/2018-300 [https://perma.cc/Y2QB-L2HB].

^{237.} *Id.* A wash sale occurs when an investor sells a security at a loss and then purchases that same security or "substantially identical" securities within thirty days (before or after the sale date). Hayden Adams, *A Primer on Wash Sales*, CHARLES SCHWAB (Feb. 3, 2021), https://www.schwab.com/resource-center/insights/content/a-primer-on-wash-sales

[[]https://perma.cc/29S6-E6GL]. The IRS's tax sale rule prohibits the investor from claiming a loss on the sold security. *Id.*

^{238.} Press Release, SEC, *supra* note 236.

"improperly re-tweeted prohibited client testimonials" and "paid bloggers for client referrals without the required disclosure and documentation."²³⁹

In a separate order, the SEC found that Hedgeable made misleading statements about its clients' investment performance.²⁴⁰ According to the order, Hedgeable's website and social media accounts included misleading comparisons of its clients' investment performance with those of two robo-adviser competitors.²⁴¹ The performance comparisons included less than 4 percent of Hedgeable's client accounts, which had higher-than-average returns.²⁴² "Hedgable compared this with rates of return that were not based on competitors' actual trading models."²⁴³

While Wealthfront and Hedgeable are not necessarily indicative of the entire market, their active efforts to mislead customers inhibit investors from accurately evaluating their adviser options. Further, once a customer has enrolled with a robo-adviser, the robo-adviser may employ simple choice architecture techniques to mislead consumers—especially when those techniques are combined with a biased or inaccurate ranking algorithm.²⁴⁴ Given the potential for robo-advisers to misdirect customers, the next Section evaluates whether robo-advisers are vulnerable to conflicts of interest with their customers.

d. Conflicts of Interest

The fines imposed against Wealthfront and Hedgeable pale in comparison to the \$200 million fine the SEC levied against Charles Schwab's robo-adviser service in 2021.²⁴⁵ Although the SEC has not yet disclosed specific details of the case, commentators speculate that the action is in response to the company advertising that it charges "no fee" while earning income on customers' cash held in deposit accounts.²⁴⁶ Such a compensation structure creates a conflict of interest, as it could drive the company to allocate more of a customer's portfolio to cash even if that strategy does not maximize customer returns.²⁴⁷

The proceedings against Charles Schwab highlight a problem in the roboadviser industry generally. With firms competing to offer investment advice at low or no cost, robo-advisers face increased pressure to produce alternative revenue streams that may not serve clients' best interests. For example, a 2017

246. Id.

247. Id.

^{239.} Id.

^{240.} Id.

^{241.} Id.

^{242.} Id.

^{243.} Id.

^{244.} Tom Baker & Benedict Dellaert, *Regulating Robo Advice Across the Financial Services Industry*, 103 IOWA L. REV. 713, 732 n.68 (2018). For example, a study found that switching the medals (e.g., gold, silver, bronze) assigned to particular health insurance plans changed consumer choices. Peter A. Ubel, David A. Comerford & Eric Johnson, *Healthcare.gov 3.0—Behavioral Economics and Insurance Exchanges*, 372 NEW ENG. J. MED. 695 (2015).

^{245.} Chatenay, *supra* note 216.

lawsuit alleged that Morningstar, a robo-adviser designer, and Prudential, the investment management company, colluded "to design a robo-adviser program to steer [users] toward investments that paid Prudential high fees."²⁴⁸ Although the lawsuit was eventually dismissed, the complaint alleged that Morningstar and Prudential modified their adviser technology "to generate 'revenue sharing fees' . . . by limiting the investment options available to [the plaintiffs] and other plan participants."²⁴⁹ If true, such practices would violate the fiduciary duties imposed upon investment advisers pursuant to the Investment Advisers Act.²⁵⁰

3. Conclusion

Robo-advisers are touted as providing more affordable investment advice without the cognitive limitations and behavioral biases that affect traditional human advisers.²⁵¹ The hope is that this technology will help to reduce the wealth gap by making investment advice more accessible and bias-free.²⁵² But this assumption ignores that humans still develop, run, and maintain the algorithms that provide financial advice. With many of the same flaws as traditional investment advisers, policymakers cannot rely on the technology alone to reduce

^{248.} Diana Novak Jones, *Morningstar, Prudential Face Class Action over Robo-Adviser*, LAW360 (Aug. 4, 2017), https://www.law360.com/articles/951428/morningstar-prudential-face-class-action-over-robo-adviser [https://perma.cc/2ZN6-HKFR].

^{249.} Green v. Morningstar Inv. Mgmt. LLC, No. 1:17-cv-05652, 2019 WL 216538, at *1 (N.D. III. Jan. 16, 2019). In dismissing the case initially, the court noted that the plaintiff "failed to allege that he would have paid lower fees if Prudential had not received revenue-sharing payments." Green v. Morningstar, Inc., No. 1:17-cv-05652, 2018 WL 1378176, at *3 (N.D. III. Mar. 16, 2018).

^{250.} See SEC v. Cap. Gains Rsch., Inc., 375 U.S. 180, 201 (1963) (holding that the Investment Advisers Act of 1940 creates fiduciary duties for registered investment advisers vis-à-vis their clients). The SEC has interpreted these duties to include a "fundamental obligation to act in the best interests" of clients as well as a "duty of undivided loyalty and utmost good faith." Information for Newly-Registered Investment Advisers. SEC. & EXCH. COMM'N (Nov. 23. 2010). https://www.sec.gov/divisions/investment/advoverview.htm [https://perma.cc/2RX8-5445]. The SEC has also specifically stated that the fiduciary standards apply to robo-advisers. See SEC. & EXCH. COMM'N, DIV. OF INV. MGMT., GUIDANCE UPDATE NO. 2017-02 2-3 (2017), https://www.sec.gov/investment/im-guidance-2017-02.pdf [https://perma.cc/3LYH-CT6W] (noting that an investment robo-adviser, as defined in that guidance statement, is a fiduciary and, thus, must provide disclosures that are "sufficiently specific so that a client is able to understand the investment adviser's business practices and conflicts of interest"). The question of whether robo-advisers are capable of fulfilling fiduciary duties has been given some scholarly attention. See generally Megan Ji, Note, Are Robots Good Fiduciaries? Regulating Robo-Advisors Under the Investment Advisers Act of 1940, 117 COLUM. L. REV. 1543, 1545 (2017) (arguing that robo-advisers are "structurally capable" of meeting duty of care standards required under the Investment Advisers Act of 1940 if regulated properly); John Lightbourne, Note, Algorithms & Fiduciaries: Existing and Proposed Regulatory Approaches to Artificially Intelligent Financial Planners, 67 DUKE LJ. 651, 678-79 (2017) (arguing that robo-advisers can meet a fiduciary standard as currently modeled).

^{251.} See Stephen Foerster, Juhani T. Linnainmaa, Brian T. Melzer & Alessandro Previtero, *Retail Financial Advice: Does One Size Fit All?*, 72 J. FIN. 1441, 1480 (2017) (identifying biases in traditional investment advisers).

^{252.} Juergen Braunstein & Marion Laboure, *Democratising Finance: The Digital Wealth Management Revolution*, VOX EU (Nov. 11, 2017), https://voxeu.org/article/digital-wealth-management-revolution [https://perma.cc/NYJ4-N4QT].

wealth gaps. Rather, the technology's potential to address the problem cannot be realized without additional oversight.²⁵³

C. Alternative Credit Platforms

As discussed in Part I, the inability to access credit has impeded the ability of generations of Black Americans to build wealth.²⁵⁴ After the official end of redlining, barriers in the form of minimum credit scores have continued to exclude historically disadvantaged groups from accessing favorable credit terms.²⁵⁵ Because the variables used to calculate credit scores still reflect the effects of discriminatory policies, credit scores claim to remedy this issue with the use of alternative credit data.²⁵⁷

1. The Promise: To Provide Credit Opportunities to the Unscored and Underscored

Fintech credit rating agencies and lenders purport to use alternative credit data to "unlock more credit opportunities for millions of hardworking people."²⁵⁸ This alternative scoring generally takes two different forms: (1) an opt-in

254. See supra Part I.B.

For some, the recent probe into Charles Schwab's robo-advisery service suggests that the 253. industry will receive greater scrutiny under new SEC Chair Gary Gensler. Chatenay, supra note 216. In Gensler's first testimony to Congress in his new role, he specifically discussed robo-advisers, emphasizing that their business models "put additional demands on SEC resources ... [and] raise a variety of policy questions around gamification, behavioral prompts, the use of data analytics, and more." Gary Gensler, Testimony Before the Subcommittee on Financial Services and General Government, U.S. House Appropriations Committee, SEC. & EXCH. COMM'N (May 26, 2021), https://www.sec.gov/news/testimony/gensler-2021-05-26 [https://perma.cc/E5SZ-3P4T]. Further signaling increased attention on ensuring that investment advisors are fulfilling their fiduciary duties to provide advice that is in their clients' best interests, the SEC sent out a series of deficiency letters to "nearly all of the examined advisers." DIV. OF EXAMINATIONS, SEC. & EXCH. COMM'N, OBSERVATIONS FROM EXAMINATIONS OF ADVISERS THAT PROVIDE ELECTRONIC INVESTMENT ADVICE 4 (2021), https://www.sec.gov/files/exams-eia-risk-alert.pdf [https://perma.cc/N8KP-CSJQ]. With increased regulatory focus on robo-advisers, regulators may be able to address some of the issues identified herein.

^{255.} Janine Hiller & Lindsay Sain Jones, *Who's Keeping Score?: Oversight of Changing Consumer Credit Infrastructure*, 59 AM. BUS. L.J. 61, 63–64 (2022). While the introduction of algorithms and the removal of human bias were supposed to eliminate discrimination in lending, studies have shown that algorithms have a bias of their own. Using data from mortgages in the United States, one recent study found that Black and Hispanic borrowers are disproportionately less likely to gain from the introduction of machine learning in credit scoring models. Andreas Fuster, Paul S. Goldsmith-Pinkham, Tarun Ramadorai & Ansgar Walther, *Predictably Unequal? The Effects of Machine Learning on Credit Markets*, 77 J. FIN. 5, 5 (2022).

^{256.} See Lisa Rice & Deidre Swesnik, *Discriminatory Effects of Credit Scoring on Communities of Color*, 46 SUFFOLK U. L. REV. 935, 940–43 (2013) (describing the policies of the HOLC, FHA, and VA that were explicitly discriminatory).

^{257.} *See, e.g., About,* UPSTART, https://www.upstart.com/i/about [https://perma.cc/8U6Q-KS6E] ("Upstart goes beyond the FICO score, using non-conventional variables at scale to provide superior loan performance and improve consumers' access to credit.")

^{258.} UltraFICO, FICO, https://www.fico.com/ultrafico/ [https://perma.cc/M3G9-9A67].

structure that allows applicants to choose to share their financial data for a chance to increase their credit score²⁵⁹ or (2) the use of non-permissioned data collected from proprietary databases, third-party data aggregators, and publicly available data to supplement traditional scoring models.²⁶⁰ This Section examines these methods that ostensibly "empower consumers to establish or improve their credit worthiness."²⁶¹

2. The Reality: Coerced Surveillance and Predatory Inclusion

Alternative credit scoring is often presented to applicants as a "second chance" after they have been denied credit based on a traditional credit score.²⁶² An applicant is then asked to grant permission to the scorer to directly access their checking, savings, or utility account histories.²⁶³ For example, UltraFICO calculates an alternative credit score based on the length of time the permissioned accounts have been open, recency and frequency of transactions, evidence of consistent cash on hand, and history of positive account balances, together with traditional credit data.²⁶⁴

Although this arrangement is technically voluntary, an applicant may feel compelled to opt in after being denied credit.²⁶⁵ Given that the services are marketed as free with no downside,²⁶⁶ applicants are also "insufficiently informed of the nature of the bargain."²⁶⁷ An applicant provides access to their bank accounts, utility, or subscription services until the applicant proactively takes steps to disconnect their accounts.²⁶⁸ In exchange for providing this

263.

See id.

^{259.} See, e.g., FINICITY, ULTRAFICO SCORE FAQ 1–2, https://www.finicity.com/wp-content/uploads/UltraFICO-Simplified-FAQ.pdf [https://perma.cc/9H4B-6S6H].

^{260.} See Hiller & Jones, supra note 255, at 76–77 (describing covert data collection practices).

^{261.} FINICITY, supra note 259, at 2.

^{262.} Penny Crosman, *New UltraFICO Score Stokes Concerns About Data Privacy*, AM. BANKER (Oct. 24, 2018), https://www.americanbanker.com/news/new-ultrafico-score-stokes-concerns-about-data-privacy [https://perma.cc/SD3K-H9LM].

^{264.} FICO, ULTRAFICO SCORE FACT SHEET 2 (2019), https://www.fico.com/ultrafico/themes/custom/ultrafico/assets/UltraFICO_FactSheet_Cobranded.pdf [https://perma.cc/7B8A-ZL4X]. Experian offers a similar product called Experian Boost. *Score Boost*, EXPERIAN, https://www.experian.com/consumer-products/score-boost.html [https://perma.cc/R6FE-FH7S].

^{265.} *See* Hiller & Jones, *supra* note 255, at 67 (arguing that "opting out is not a feasible option for the majority of Americans" because most people need credit to buy homes and cars, to go to school, or to start a business).

^{266.} See, e.g., EXPERIAN, supra note 264 (advertising that "Experian Boost is completely free" and that consumers can raise "credit scores fast").

^{267.} Hiller & Jones, supra note 255, at 85.

^{268.} See Emily Long, What Is Experian Boost and How Does It Work?, N.Y. TIMES (Apr. 21, 2020), https://www.nytimes.com/wirecutter/money/does-experian-boost-actually-work/ [https://perma.cc/5KUE-FYUA] (reporting that Experian's access to permissioned accounts continues until the applicant disconnects the accounts).

continuing access, the average credit score boost is only thirteen points,²⁶⁹ which is not likely to change the outcome of a credit application.²⁷⁰

While the opt-in arrangement is not ideal in terms of consumer consent, other forms of alternative credit scoring are not disclosed to applicants at all and may further discriminatory lending practices. Lenders may use data from an applicant's interaction with the application itself or may buy data from aggregators who pull relevant information from the web, social media, or public records.²⁷¹ Rather than opening up credit opportunities for disadvantaged groups, then, alternative credit scoring could serve to extend discriminatory lending practices.²⁷² After all, with the use of this expansive data, algorithms may evaluate applicants based upon facially neutral alternative data points that are strongly correlated with immutable traits (e.g., race and sex).²⁷³ Further, the alternative data makes it easier for high-interest lenders to target vulnerable populations for high-interest loans, thus perpetuating the discriminatory cycle.²⁷⁴

3. Conclusion

While the rhetoric around alternative lending and scoring is focused on financial inclusion, lack of access to affordable credit continues to contribute to wealth gaps in this country.²⁷⁵ Although the use of alternative data could improve

^{269.} See EXPERIAN, supra note 264 ("Users who received a boost from non-rental data improved their FICO Score 8 from Experian by an average of 13 points.").

^{270.} See Liz Weston, Is Better Credit Worth Exposing Your Bank Data?, AP NEWS (May 6, 2019), https://apnews.com/article/41404bfa14a240f9ae23d3599edfeaec [https://perma.cc/P65Y-RHVQ]. Even the best-case scenarios, the applicant would be unlikely to move from a "bad" to "fair" or from a "fair" to "good" score. See id.

^{271.} Elizabeth Dwoskin, "*Big Data*" *Doesn't Yield Better Loans*, WALL ST. J. (Mar. 18, 2014), https://www.wsj.com/articles/SB10001424052702304732804579425631517880424 [https://perma.cc/S3N3-NQWM].

^{272.} See Mikella Hurley & Julius Adebayo, *Credit Scoring in the Era of Big Data*, 18 YALE J.L. & TECH. 148, 173–74 (2016) ("[A]lternative credit scorers may not be truly interested in predicting consumer creditworthiness, but rather in finding vulnerable, high-value targets for unfavorable loans.").

^{273.} Hiller & Jones, *supra* note 255, at 91.

^{274.} See Jones et al., *supra* note 27 (reporting that lenders have been marketing loans that carry 200 percent to 500 percent annual interest rates to consumers who are searching online for financial help); *see also* Odinet, *supra* note 27, at 1760–65 (2021) (analyzing Elevate as a case study of a fintech lender that uses alternative data and ultimately operates like an online payday lender). The CFPB recently announced an inquiry into a particular fintech business model that has experienced rapid growth, buy-now-pay-later (BNPL) providers, highlighting concerns about fees and who uses the service. Press Release, Consumer Fin. Prot. Bureau, Consumer Financial Protection Bureau Opens Inquiry into "Buy Now, Pay Later" Credit (Dec. 16, 2021), https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-opens-inquiry-into-buy-now-pay-later-credit/

[[]https://perma.cc/NS4X-PAU9]. Questions arise as to whether it's credit by another name. Further, if the user-base is primarily low-income people, the Bureau would have concerns. *See generally* Nicole K. McConlogue, *Discrimination on Wheels: How Big Data Uses License Plate Surveillance to Put the Brakes on Disadvantaged Drivers*, 18 STAN. J. C.R. & C.L. 279 (2022) (arguing that the use of automated license plate reader technology in auto financing and insurance will exacerbate economic and racial disparities in car ownership).

^{275.} See supra Part I.B.

financial inclusion,²⁷⁶ alternative credit scoring in its current form cannot meaningfully reduce wealth gaps. As Terri Friedline has noted, these tools can be used for surveillance of "Black and Brown communities by requiring individuals to sacrifice their privacy in order to participate."²⁷⁷ Further, the tools have been used to exclude historically disadvantaged groups from credit and to target these groups for high-interest, short-term loans.²⁷⁸

D. Neobanks

As discussed in Part I, a significant portion of Americans remain outside of the traditional banking system.²⁷⁹ Many of the unbanked rely on check-cashing services and payday lenders who charge higher interest than any chartered bank can legally impose.²⁸⁰ Those who manage to open bank accounts incur disproportionately high fees and penalties for small overdrafts.²⁸¹ The past decade has seen the emergence of fintech banks, also known as neobanks or challenger banks, who are thought to be positioned to address some of these issues.²⁸² Neobanks operate entirely virtually, avoiding the overhead associated with brick-and-mortar branches.²⁸³ With incumbent banks jumping into the mix, the estimated size of the digital banking market was over \$7 trillion in 2017 and is expected to grow to \$9 trillion by 2024.²⁸⁴

1. The Promise: To Provide Fee-Free Checking

Currently, more than thirty neobanks exist in the United States, and many of them launched in just the past few years.²⁸⁵ For example, Chime, a neobank with approximately 12 million customers, claims to provide "lower-cost options for everyday Americans who aren't being served well by traditional banks."²⁸⁶

^{276.} See, e.g., Julapa Jagtiani & Catharine Lemieux, *Fintech Lending: Financial Inclusion, Risk Pricing, and Alternative Information* 1, 28 (Fed. Rsrv. Bank of Phila., Working Paper No. 17-17, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3 [https://perma.cc/Z7XT-P5QF] (describing the potential for alternative data to foster financial inclusion).

^{277.} TERRI FRIEDLINE, BANKING ON A REVOLUTION: WHY FINANCIAL TECHNOLOGY WON'T SAVE A BROKEN SYSTEM 146 (2021).

^{278.} See Hurley & Adebayo, supra note 272, at 174.

^{279.} See supra Part I.C.

^{280.} MEHRSA BARADARAN, HOW THE OTHER HALF BANKS 122-23 (2015).

^{281.} *Id.* at 140–43.

^{282.} TERRI BRADFORD, FED. RES. BANK OF KAN. CITY, NEOBANK: BANKS BY ANY OTHER NAME? 1 (2020), https://www.kansascityfed.org/documents/7600/psrb20bradford0812.pdf [https://perma.cc/9Z2E-6PTY]. Simple and Moven were among the first neobanks and launched in the United States in 2009 and 2011, respectively. *Id.* at 1.

^{283.} Id.

^{284.} Luigi Wewege, Jeo Lee & Michael C. Thomsett, *Disruptions and Digital Banking Trends*, 10 J. APPLIED FIN. & BANKING 15, 16 (2020).

^{285.} BRADFORD, supra note 282, at 1.

^{286.} About Us, CHIME, https://www.chime.com/about-us/ [https://perma.cc/4HUM-AC7E]. As of February 2021, Chime had approximately 12 million customers. Stephanie Walden & Mitch Strohm, *What Is a Neobank?*, FORBES (June 24, 2021), https://www.forbes.com/advisor/banking/what-is-a-

Chime and other neobanks aim to attract the unbanked and the underbanked by offering features such as fee-free overdrafts, no minimum balance requirements, and early access to paychecks.²⁸⁷

2. The Reality: Higher Fees Charged to Merchants and Problems with Scale

Neobanks' structures are key to their strategies but may ultimately leave them unable to fulfill their promises. Generally, neobanks are not "banks," but are rather fintech companies that rely on relationships with chartered regional banks to provide financial services.²⁸⁸ These fintech platforms commonly choose to partner with regional banks for two reasons: (1) to utilize the bank's charter in order to accept customer deposits²⁸⁹ and (2) to charge higher interchange fees than a larger bank is permitted to charge.²⁹⁰

Regulators allow smaller banks to charge at least double the interchange fees that large banks can charge.²⁹¹ Interchange fees are charged by debit and credit card issuers to businesses as they process card payments.²⁹² The Durbin Amendment in the Dodd-Frank Act capped interchange fees that a bank with \$10 billion or more assets may charge.²⁹³ Banks with \$10 billion or less in assets, however, are not subject to the statutory limits.²⁹⁴ Neobanks thus partner with smaller banks to capitalize on their ability to charge higher interchange fees.²⁹⁵

291. *Id.* In 2020, the average interchange charge for transactions covered by the Durbin Amendment was \$0.23, while the average interchange charge for exempt transactions was \$0.44. *Average Debit Card Interchange Fee by Payment Card Network*, BD. OF GOVERNORS OF THE FED. RSRV., https://www.federalreserve.gov/paymentsystems/regii-average-interchange-fee.htm [https://perma.cc/KJ8B-S5DP].

292. Why Big Banks and Fintechs Are Battling Over Interchange, FINLEY (June 22, 2021), https://www.finleycms.com/why-big-banks-and-fintechs-are-battling-over-interchange [https://perma.cc/9UWU-U6UG].

293. 15 U.S.C. § 16930-2 (2018). The statute requires the Board of Governors of the Federal Reserve System to prescribe regulations that require interchange fees to be "reasonable and proportional to the cost incurred by the issuer." Id. §§ 16930-2(a)(1)-16930-2(a)(2). The bill was a last-minute addition to the Dodd-Frank Act proposed by Senator Dick Durbin of Illinois. Tim Chen, What the Durbin Amendment Means for You, U.S. NEWS (July 12, 2011), https://money.usnews.com/money/blogs/my-money/2011/07/12/what-the-durbin-amendment-meansfor-you [https://perma.cc/9C7Y-GRBH].

294. The rule does not apply to issuers with assets less than \$10 billion. 15 U.S.C. 1693o-2(a)(6)(A) (2018).

2023]

neobank [https://perma.cc/3DDN-WT3A]. Branch is among the leading providers in this segment, with 3 million customer accounts. *Id.*

^{287.} See Online Banking, CHIME, https://www.chime.com/online-banking/ [https://perma.cc/Z5T2-XUYE].

^{288.} BRADFORD, *supra* note 282, at 1. By definition, a bank is a chartered financial institution that is licensed to receive deposits and make loans. *Id.*

^{289.} Id.

^{290.} *Can Neobanks' Popularity Outlast the Pandemic?*, ECONOMIST (Aug. 21, 2021), https://www.economist.com/finance-and-economics/2021/08/21/can-neobanks-popularity-outlast-the-pandemic [https://perma.cc/9SLY-5WCZ].

^{295.} FINLEY, supra note 292.

One problem with this structure is that neobanks must stay under \$10 billion in assets to remain exempt from the Durbin Amendment. This could present issues of scalability for neobanks. Branch, for example, is a neo-bank that offers fee-free checking, but its accounts are not available to the general public.²⁹⁶ Branch accounts are only available to employees whose employers sign up with the neobank. Further, Chime, which provides app-based banking services to an estimated 12 million customers, has reportedly closed accounts with little notice to customers.²⁹⁷

3. Conclusion

With their low- or no-fee accounts, neobanks provide a hopeful alternative to traditional financial intermediaries. Questions arise, though, as to whether the business model is sustainable in the long run as it requires ongoing partnerships with small banks. Not only does the business model present issues of scale, but it also shifts the burden of fees entirely to the merchants.²⁹⁸ Indeed, neobanks' ability to charge higher fees is contingent upon their ability to charge merchants higher interchange fees.²⁹⁹ These fees are particularly challenging for minority-owned businesses that already face higher costs just to do business.³⁰⁰ For large companies, the increased fees may prove less problematic. But for small businesses, the reduction in margin can be devastating.³⁰¹ Further, a study released by the Boston Federal Reserve showed that the interchange fee system transfers wealth from the lowest-income households to the highest-income households.³⁰²

^{296.} Branch Launches New Debit Card, Zero-Fee Banking, BUS. WIRE (Oct. 10, 2019), https://www.businesswire.com/news/home/20191010005848/en/Branch-Launches-New-Debit-Card-Zero-Fee-Banking [https://perma.cc/7DMA-PAJP].

^{297.} Carson Kessler, A Banking App Has Been Suddenly Closing Accounts, Sometimes Not Returning Customers' Money, PROPUBLICA (July 6, 2021), https://www.propublica.org/article/chime [https://perma.cc/JK36-WX8H].

^{298.} See Cyril Lalo, *Have Neobanks Lost Their DNA?*, FINEXTRA (Dec. 16, 2020), https://www.finextra.com/blogposting/19672/have-neobanks-lost-their-dna [https://perma.cc/9U2G-EQFE] ("Neobanks are overly reliant on interchange fees for revenue.").

^{299.} Id.

^{300.} See FAIRLIE & ROBB, supra note 22, at 3.

^{301.} AnnaMaria Andriotis & Harriet Torry, *The Credit-Card Fees Merchants Hate, Banks Love and Consumers Pay*, WALL ST. J. (June 21, 2020), https://www.wsj.com/articles/the-credit-card-fees-merchants-hate-banks-love-and-consumers-pay-11592731800 [https://perma.cc/5WW6-ZN52].

^{302.} Scott Schuh, Oz Shy & Joanna Stavins, *Who Gains and Who Loses from Credit Card Payments? Theory and Calibrations* 21 (Fed. Rsrv. of Boston, Pub. Pol'y Discussion Paper No. 10-03. 2010), https://www.bostonfed.org/publications/public-policy-discussion-paper/2010/who-gains-and-who-loses-from-credit-card-payments-theory-and-calibrations.aspx [https://perma.cc/VA32-JFUD].

E. Decentralized Finance (DeFi)³⁰³

Using the pseudonym Satoshi Nakamoto, an unknown computer programmer proposed a new platform that would allow users to make transfers of digital representations of value to be recorded on a public ledger called a blockchain.³⁰⁴ Implementing the proposal, Nakamoto created the first block of the chain in January of 2009, known as the genesis block.³⁰⁵ The native currency on this blockchain, dubbed Bitcoin, is the first known cryptocurrency.³⁰⁶ Since the creation of the first block, cryptocurrencies have progressed from relative obscurity to a mainstream investment, with a peak total market capitalization of over \$1 trillion.³⁰⁷

1. The Promise: To Provide a Trust-less Alternative with Lower Costs and Broader Access

Nakamoto proposed an electronic payment system based on cryptographic proof rather than trust in order to eliminate the need for financial intermediaries.³⁰⁸ From improving financial access for the unbanked to reducing transaction costs, many crypto-enthusiasts posit that cryptocurrencies and their underlying distributed ledger technology have the potential to transform financial services.³⁰⁹ If true, cryptocurrencies could potentially address some of the underlying issues that contribute to wealth inequality identified in Part I. For example, if blockchain technology allows users to have confidence in

^{303.} Although a precise definition of "DeFi" is elusive, we use the term to refer to a software application that provides financial services using coins or tokens hosted on a permissionless, distributed ledger. Hilary J. Allen, *DeFi: Shadow Banking 2.0?*, 64 WM. & MARY L. REV. (forthcoming 2023) (manuscript at 9–10), https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=3195&context=facsch_lawrev

https://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=3195&context=facscn_lawrev [https://perma.cc/AW5E-D53H].

^{304.} See SATOSHI NAKAMOTO, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM 1 (2008), https://bitcoin.org/bitcoin.pdf [https://perma.cc/XD27-PUHD]; Benjamin Wallace, *The Rise and Fall of Bitcoin*, WIRED (Nov. 23, 2011), https://www.wired.com/2011/11/mf-bitcoin/ [https://perma.cc/S8ZJ-TBRH].

^{305.} Wallace, supra note 304.

^{306.} See DAVID W. PERKINS, CONG. RSCH. SERV., CRYPTOCURRENCY: THE ECONOMICS OF MONEY AND SELECTED POLICY ISSUES 1 (2020).

^{307.} Gertrude Chavez-Dreyfuss & Tom Wilson, *Bitcoin Hits \$1 Trillion Market Cap, Surges to Fresh All-Time Peak*, REUTERS (Feb. 18, 2021), https://www.reuters.com/article/us-crypto-currency-Bitcoin-hits-1-trillion-market-cap-surges-to-fresh-all-time-peak-idUSKBN2AJ0GC [https://perma.cc/7A5A-B3FN].

^{308.} NAKAMOTO, supra note 304, at 1.

^{309.} See, e.g., CAMPBELL R. HARVEY, ASHWIN RAMACHANDRAN & JOEY SANTORO, DEFI AND THE FUTURE OF FINANCE 58–65 (2021); Paul Schrodt, Cryptocurrency Will Replace National Currencies by 2030, According to This Futurist, MONEY (Mar. 1, 2018), http://money.com/the-future-of-cryptocurrency/ [https://perma.cc/9SZP-CZPJ]; Kirsten Grind, Let Me Tell You Some More About Bitcoin—Hello? Hello?, WALL ST. J. (Jan. 19, 2018), https://www-wsj-com.proxy-remote.galib.uga.edu/articles/mention-bitcoin-one-more-time-and-youre-sleeping-on-the-couch-

^{1516377771 [}https://perma.cc/L8N2-DSDQ] (quoting Doug Scribner, "It's going to prevent wars, help the unbanked and bring honesty to financial systems").

transactions without an intermediary or the government,³¹⁰ the technology could provide a viable alternative to the institutions that many Black Americans have grown to distrust.³¹¹ Whether this potential will bear out over time remains to be seen. But for now, reality is more complicated.³¹²

2. The Reality: Intermediation, Stability, and Access Issues

Notwithstanding the fact that the blockchain protocol was developed to allow for transacting without intermediaries,³¹³ the system still requires trust in intermediaries.³¹⁴ DeFi users must place their trust in core software developers, miners, wallets, stablecoin issuers, exchanges, and application programming interfaces (APIs) that allow access to distributed ledgers.³¹⁵ Indeed, over \$829 billion in cryptocurrencies are traded on over 524 exchanges each day.³¹⁶ Many of these exchanges employ the same intermediation practices as their traditional counterparts.³¹⁷ The largest platforms, such as Coinbase, Gemini, Bittrex, and Binance, collect fees for matching buy and sell orders.³¹⁸ Coinbase, which operates the largest cryptocurrency exchange,³¹⁹ reportedly charges purchasers a spread of approximately 0.5 percent plus a fee ranging from \$0.99 to \$2.99.³²⁰ Coinbase then charges users who sell their cryptocurrencies a spread as well.³²¹

However, some alternative platforms are less centralized as they do not match buyers' and sellers' orders.³²² These "decentralized" platforms still rely

313. Kristin N. Johnson, *Decentralized Finance: Regulating Cryptocurrency Exchanges*, 62 WM. & MARY L. REV. 1911, 1953 (2021).

314. Allen, *supra* note 303, at 3.

315. Id.

316. *Top Cryptocurrency Spot Exchanges*, COINMARKETCAP, https://coinmarketcap.com/rankings/exchanges/ [https://perma.cc/PUR9-LCR4]; Johnson, *supra* note 313, at 1953.

317. See Johnson, supra note 313, at 1953–54.

318. *Id.*

319. Olga Kharif, *Coinbase Expands Institutional Services*, BLOOMBERG (May 27, 2020), https://www.bloomberg.com/news/articles/2020-05-27/coinbase-expands-institutional-services-with-tagomi-purchase#xj4y7vzkg [https://perma.cc/K8M3-X6XQ].

320 Coinbase Pricing and Fees Disclosures, COINBASE, https://web.archive.org/web/20210519150055/https://help.coinbase.com/en/coinbase/trading-andfunding/pricing-and-fees/fees [https://perma.cc/JYE7-LBSQ]; Taylor Tepper & John Schmidt, Coinbase Review 2022, FORBES (Feb. 24, 2022), https://www.forbes.com/advisor/investing/cryptocurrency/coinbase-review/ [https://perma.cc/R5JR-6KBL]; see also Kenneth Rapoza, Cryptocurrency Exchange Fees Are a Mess. Will They Ever Improve? FORBES (Oct. 17. 2021) https://www.forbes.com/sites/kenrapoza/2021/10/17/cryptocurrency-exchange-fees-are-a-mess-whenwill-they-ever-improve/?sh=75d3b02f2f4c [https://perma.cc/FJ6U-PQCQ] (reporting on the unpredictability of charges for buying and selling cryptocurrencies on exchanges).

321. COINBASE, supra note 320.

322. See Johnson, supra note 313, at 1963–64.

^{310.} See Kevin Werbach, Trust, but Verify: Why Blockchain Needs the Law, 33 BERKELEY TECH. L.J. 487, 491 (2018).

^{311.} See supra notes 134–154 and accompanying text.

^{312.} Lindsay Sain Jones, *Beyond the Hype: A Practical Approach to CryptoReg*, 25 VA. J.L. & TECH. 176, 190 (2022) (explaining that crypto recipients can still incur fees).

on some aspects of traditional intermediation, such as liquidity pools, to facilitate trades.³²³ Providers are incentivized to contribute to market liquidity through trading fees paid by users who use the pool.³²⁴ Traders on these decentralized platforms tend to pay higher network fees because the infrastructure requires additional steps for verifications and posting transactions.³²⁵ Thus, regardless of the type of exchange, users must pay to use a platform's services.

In addition to the fees, the relative complexity of cryptocurrencies is another impediment to their use as a path to financial inclusion.³²⁶ Despite their apparent ubiquity, only 16 percent of the U.S. population owns cryptocurrency.³²⁷ And while people of color invest in cryptocurrency at higher rates than in other investment realms, the average cryptocurrency owner is still White, male, and relatively affluent.³²⁸ The choices before potential cryptocurrency investors are as follows: (1) undertake the research necessary to understand cryptocurrencies prior to investing, (2) invest in cryptocurrencies without fully understanding the technology, or (3) opt-out of investing in cryptocurrencies entirely. While many have profitably chosen the first two options, those same options are less feasible for individuals who are already excluded from the financial system. Those living outside of the financial system generally do not have the time and resources to research cryptocurrencies, nor do they have the income certainty to invest in something they do not fully understand.³²⁹

^{323.} Id. at 1956.

^{324.} For an explanation of how liquidity pools work, see Nikolai Kuznetsov, *DeFi Liquidity Pools, Explained*, COINTELEGRAPH (Jan. 28, 2021), https://cointelegraph.com/explained/defi-liquidity-pools-explained [https://perma.cc/L2H3-MKVY].

^{325.} See Johnson, supra note 313, at 1956.

^{326.} Of those who own cryptocurrency, 90 percent identify as at least somewhat knowledgeable and 45 percent consider themselves extremely or very knowledgeable. GEMINI, 2021 STATE OF U.S. CRYPTO REPORT 9 (2021), https://www.gemini.com/state-of-us-crypto [https://perma.cc/K6DG-RBHB].

^{327.} Andrew Perrin, 16% Of Americans Say They Have Ever Invested In, Traded or Used Cryptocurrency, PEW RSCH. CTR. (Nov. 11, 2021), https://www.pewresearch.org/fact-tank/2021/11/11/16-of-americans-say-they-have-ever-invested-in-traded-or-used-cryptocurrency/

[[]https://perma.cc/L38X-8UEQ]. While this Article focuses on the United States, it should be noted that in Venezuela and other countries that struggle with hyperinflation, it is primarily the wealthy and the upper-middle class who are able to utilize cryptocurrencies as substitutes for their home countries' currencies. *See* Nicholas Martin, *Venezuelans Try to Beat Hyperinflation with Cryptocurrency Revolution*, DEUTSCHE WELLE (Apr. 16, 2021), https://p.dw.com/p/3s5IR [https://perma.cc/E9A2-U77L].

^{328.} According to a 2021 report, the average cryptocurrency investor is a thirty-eight-year-old White male with an annual income of \$111,000. GEMINI, supra note 326, at 6 (reporting that of cryptocurrency owners, 74 percent are male, 77 percent are under the age of forty-five, and 71 percent are White). See also Yosef Bonaparte, On the Portfolio Choice of Crypto Asset Class: Why the Millennials Own Crypto? 29 (Apr. 18, 2021) (unpublished manuscript). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3829275 [https://perma.cc.3WLA-JF6Z] (finding that being White, male, and having a college degree are the strongest demographic determinants in cryptocurrency ownership).

^{329.} *See* Bonaparte, *supra* note 328, at 13 (finding that cryptocurrency owners have less income uncertainty than their non-crypto-owning counterparts).

With the additional complexity of cryptocurrencies comes additional risks to financial stability as well. As is clear from past financial crises, complexity increases the likelihood that risks will be underestimated when times are good and overestimated in a downturn.³³⁰ Hilary Allen posits that DeFi is a new form of shadow banking that contributes to systemic risks in the same manner as other complex instruments did leading up to the 2008–2009 financial crisis.³³¹ In spite of the risks, DeFi remains largely unregulated. This is especially concerning given that the last financial crisis exacerbated wealth inequality in the United States.³³²

The prices of cryptocurrencies, such as Bitcoin, are notoriously volatile, which prevents their use as a true medium of exchange.³³³ Some look to stablecoins as a solution. As the name suggests, stablecoins are digital currencies that are programmed to maintain a stable value relative to a reference asset, such as the U.S. dollar.³³⁴ However, a recent report found that stablecoins suffer from the same hurdles as other forms of retail finance.³³⁵ For example, stablecoin users still need a bank account to convert their stablecoins back to fiat currency.³³⁶ On top of the standard barriers, the study identified additional problems of illiquidity, insolvency, and potential technical failure at the blockchain or smart contract levels.³³⁷

333. See Dirk G. Baur & Thomas Dimpfl, *The Volatility of Bitcoin and Its Role as a Medium of Exchange and a Store of Value*, 61 EMPIRICAL ECON. 2663, 2677–78 (2021). Cryptocurrency markets are notoriously volatile. *See, e.g.*, Jörg Osterrieder & Julian Lorenz, *A Statistical Risk Assessment of Bitcoin and Its Extreme Tail Behavior*, 12 ANNALS FIN. ECON. 1, 12 (2016).

335. Id. at 36.

^{330.} *See* Allen, *supra* note 303, at 4. Allen discusses how key fragilities (leverage, rigidity, and susceptibility to runs) are present in the DeFi ecosystem. *See id. See generally* HILARY J. ALLEN, DRIVERLESS FINANCE: FINTECH'S IMPACT ON FINANCIAL STABILITY (2022).

^{331.} See Allen, supra note 303, at 10–15.

^{332.} See Jonathan Bridges, Georgina Green & Mark Joy, *Credit, Crises and Inequality* 27–28 (Bank of Eng., Staff Working Paper No. 949, 2021); see also Janet L. Yellen, Vice-Chair, Fed. Rsrv., Speech at the AFL-CIO and IMK Macroeconomic Policy Institute "A Trans-Atlantic Agenda for Shared Prosperity" Conference: A Painfully Slow Recovery for America's Workers: Causes, Implications, and the Federal Reserve's Response (Feb. 11, 2013), http://www.federalreserve.gov/newsevents/speech/yellen20130211a.htm [https://perma.cc/4M79-ZKV7].

^{334.} See WORLD ECON. F., WHAT IS THE VALUE PROPOSITION OF STABLECOINS FOR FINANCIAL INCLUSION? 7 (2021), https://www3.weforum.org/docs/WEF_Value_Proposition_of_Stablecoins_for_Financial_Inclusion_2 021.pdf [https://perma.cc/LZS7-T45G].

^{336.} Stablecoins: How Do They Work, How Are They Used, and What Are Their Risks?: Hearing Before the H. Comm. on Banking, Hous., and Urb. Aff., 117th Cong. 9 (2021), https://www.banking.senate.gov/imo/media/doc/Goldstein%20Testimony%2012-14-21.pdf [https://perma.cc/DS5L-D8UK].

^{337.} WORLD ECON. F., *supra* note 334, at 14. Some regulators have raised concerns about whether stablecoins hold as many reserves as their issuers claim. *See also* Jeanna Smialek, *Why Washington Worries About Stablecoins*, N.Y. TIMES (Sept. 17, 2021), https://www.nytimes.com/2021/09/17/business/economy/federal-reserve-virtual-currency-stablecoin.html [https://perma.cc/9C9M-K3VA]. Plus, the fees to send stablecoins currently exceed the

Lastly, even if cryptocurrencies could improve access to financial services by providing an alternative payment method, cryptocurrencies do not carry the same legal protections as other forms of payment, such as credit or debit cards.³³⁸ If an unauthorized transfer occurs, for example, there is generally no intermediary to cover the loss.³³⁹ Further, cryptocurrency payments are irreversible.³⁴⁰ Once a scammer has received the funds, a user cannot reverse the transaction.³⁴¹

3. Conclusion

The creator of Bitcoin, Satoshi Nakamoto, envisioned Bitcoin as a means to send payments without financial intermediaries.³⁴² A financial system that does not require trust in the institutions that have failed Black Americans and other historically disadvantaged groups is an appealing prospect. Rather than disintermediating financial services, however, exchanges have profited from cryptocurrencies like Bitcoin by facilitating their trading for fees.³⁴³ The fees such exchanges charge, combined with cryptocurrency's relative complexity, financial instability, and lack of consumer protections, leave the promise of improving access to financial services unfulfilled. Ironically, while promising

fees charged to remit money through a service like Western Union. *Stablecoins: How Do They Work, How Are They Used, and What Are Their Risks, supra* note 336, at 9–10 (estimating that it costs \$5.98 to remit \$200 using stablecoins and \$4.88 to remit \$200 using Western Union).

^{338.} What to Know About Cryptocurrency and Scams, FED. TRADE COMM'N, https://www.consumer.ftc.gov/articles/what-know-about-cryptocurrency-and-scams

[[]https://perma.cc/3GTU-PVJQ]; see also 15 U.S.C. §§ 1643, 1666 (2018) (providing credit cardholders with limits to their liability for unauthorized use and the ability to withhold payment for billing disputes or for merchant non-performance); 15 U.S.C. § 1693g (2018) (providing debit cardholders with limits to their liability for unauthorized charges).

^{339.} Coinbase has its own insurance policy to cover up to \$255 million in losses from hacking of wallets connected to the exchange. Philip Martin, *On Insurance and Cryptocurrency*, COINBASE BLOG (Apr. 2, 2019), https://blog.coinbase.com/on-insurance-and-cryptocurrency-d6db86ba40bd [https://perma.cc/438G-SZZZ]. The policy does not guarantee recovery for specific accounts. *See id.*

^{340.} See Some Things You Need to Know, BITCOIN, https://bitcoin.org/en/you-need-to-know [https://perma.cc/D7NP-Q2VW] ("A Bitcoin transaction cannot be reversed, it can only be refunded by the person receiving the funds.").

^{341.} *Id.* Researchers at Aalto University and NEC Laboratories have considered one possible solution by identifying and comparing payment-for-receipt protocols to leverage functionality from the blockchain and increase fairness in cryptocurrency payments. *See* Jian Liu, Wenting Li, Ghassan O. Karame & N. Asokan, *Toward Fairness of Cryptocurrency Payments*, 16 IEEE SEC. & PRIV. 81, 81–89 (2018).

^{342.} *See* NAKAMOTO, *supra* note 304, at 1 (describing Bitcoin as a "purely peer-to-peer version of electronic cash [that] would allow online payments to be sent directly from one party to another without going through a financial institution").

^{343.} Stepping into the role of a traditional financial intermediary has proven to be a profitable venture for many exchanges. When Coinbase went public in 2021, it was valued at \$85.7 billion. Jason Henry, *Coinbase Valued at \$86 Billion in 'Landmark Moment' for Crypto*, N. Y. TIMES (Apr. 14, 2021), https://www.nytimes.com/live/2021/04/14/business/stock-market-today [https://perma.cc/AL87-B5UP].

decentralization and disintermediation, DeFi essentially asks users to place their trust in newer, less-regulated intermediaries.³⁴⁴

III.

THE PROPOSAL

This Article has examined racial wealth inequality in the United States and analyzed fintech's potential to address some of its underlying causes. Given the inherent limitations in each fintech tool, we understand that innovation alone cannot close this gap. Further, any solution that only addresses the shortcomings of technology would be insufficient. Rather, solving the deeply complex problem of racial wealth inequality necessitates a comprehensive solution that includes technological oversight as well as solutions that account for the historical roots of the wealth gap.

Over the years, scholars and policymakers have offered promising potential solutions to the issues identified in this Article.³⁴⁵ This Section groups these proposals into five basic types: (1) changes to financial services, (2) infrastructure improvements, (3) technology oversight, (4) tax policy changes, and (5) federal government wealth transfers. Then, this Section argues that a comprehensive solution that combines elements of each category would be most effective to address wealth inequality. Finally, this Section considers the hurdles to this multidimensional reform effort.

A. Types of Proposals

1. Changes to Financial Services

Over the years, scholars have proposed modifying our financial system to improve access and trust among underserved communities. Prominent among such proposals is providing a public banking option that competes with traditional banks and fintechs.³⁴⁶ For example, Mehrsa Baradaran has proposed reestablishing postal banking, which would allow post offices to accept small deposits again.³⁴⁷ The prevalence of local post offices would increase

^{344.} See Sirio Aramonte, Wenqian Huang & Andreas Schrimpf, *DeFi Risks and the Decentralization Illusion*, BIS Q. REV., Dec. 2021, at 21, https://www.bis.org/publ/qtrpdf/r_qt2112b.pdf [https://perma.cc/9K7H-MRXC].

^{345.} For a summary of proposals to address the wealth gap, see CHRISTIAN E. WELLER & RICHARD FIGUEROA, CTR. FOR AM. PROGRESS, SUMMARY OF PROPOSALS AND POLICY ACTIONS TO REDUCE THE BLACK-WHITE WEALTH GAP 1–2, https://www.americanprogress.org/wp-content/uploads/2021/07/BlackWhiteWealthGap-factsheet-2.pdf [https://perma.cc/E8SS-ZQJ6].

^{346.} *See* Mehrsa Baradaran, *It's Time for Postal Banking*, 127 HARV. L. REV. F. 165, 166–72 (2014) (detailing historic support and benefits of postal banking); *see also* THOMAS HERNDON & MARK PAUL, ROOSEVELT INST., A PUBLIC BANKING OPTION 5 (2018), https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI-Public-Banking-Option-201808.pdf [https://perma.cc/6XNP-7BRU] (proposing a public banking option).

^{347.} See Baradaran, supra note 346, at 166–72.

accessibility.³⁴⁸ In addition to offering checking and savings accounts with online accessibility, postal banks would provide a viable alternative to predatory lenders via check-cashing services and emergency loans with manageable interest rates.³⁴⁹

There is an ongoing debate about whether a central bank digital currency (CBDC) could improve access to financial services as well.³⁵⁰ As a governmentbacked alternative to stablecoins, a CBDC could facilitate faster and cheaper payments with fewer risks.³⁵¹ However, many remain skeptical about a CBDC's ability to improve financial inclusion on its own.³⁵² CBDC proposals that also incorporate the use of accounts provided by the Federal Reserve or the Treasury Department would better increase access to affordable financial services.³⁵³ Such

^{348.} Pamela Foohey & Nathalie Martin, *Fintech's Role in Exacerbating or Reducing the Wealth Gap*, 2021 U. ILL. L. REV. 459, 503 (2021).

^{349.} See, e.g., HERNDON & PAUL, supra note 346, at 4. Along similar lines, others have proposed for the Federal Reserve to create retail bank accounts (FedAccounts) at no costs. MORGAN RICKS, JOHN CRAWFORD & LEV MENAND, ROOSEVELT INST., CENTRAL BANKING FOR ALL: A PUBLIC OPTION FOR BANK ACCOUNTS 1 (2018), https://rooseveltinstitute.org/wp-content/uploads/2021/08/GDI_Central-Banking-For-All_201806.pdf [https://perma.cc/9M4Q-SLEH] (proposing providing the general public with an option to have a bank account at the Federal Reserve). Similarly, others have proposed for the U.S. Treasury to use its existing authority to create "Treasury Accounts" to provide banking services and facilitate distribution of benefit programs. See, e.g., HOWELL JACKSON & TIMOTHY MASSAD, BROOKINGS INST., THE TREASURY OPTION: HOW THE US CAN ACHIEVE THE FINANCIAL INCLUSION BENEFITS OF CBDC Now 3 (2022),https://www.brookings.edu/wp-А content/uploads/2022/03/20220307_JacksonMassad_TreasuryAccounts_v2.pdf

[[]https://perma.cc/UF5E-TXLY] (proposing treasury accounts to improve financial access for unbanked and underbanked individuals).

^{350.} In March of 2022, President Biden issued an executive order on digital assets that called for "plac[ing] the highest urgency on research and development efforts into the potential design and deployment options of a United States CBDC." Exec. Order No. 14607, 87 Fed. Reg. 14143 (Mar. 9, 2022). A CBDC is a "fiat currency issued by central banks in place of, or as a complement to, physical currency (bank notes and coins)." ESWAR PRASAD, BROOKINGS INST., CENTRAL BANKING IN A STOCK-TAKING AND PRELIMINARY 5 DIGITAL AGE: THOUGHTS (2018).https://www.brookings.edu/wp-content/uploads/2018/04/es_20180416_digitalcurrencies.pdf [https://perma.cc/VDA5-XAAK]. For a broad discussion of considerations relating to CBDCs, see generally id.

^{351.} See JACKSON & MASSAD, supra note 349, at 6–7. For example, faster and cheaper payments could reduce the need for check-cashing services. See id. at 6. For a discussion of the issues relating to stablecoins, see supra notes 334–337 and accompanying text.

^{352.} *See, e.g.*, Randal K. Quarles, Governor, Fed. Rsrv., Keynote Address at the 113th Annual Utah Bankers Association Convention: Parachute Pants and Central Bank Money 10 (June 28, 2021) (transcript available at Bank for International Settlements library) ("I am far from convinced that a CBDC is the best, or even an effective, method to increase financial inclusion."); Christopher J. Waller, Governor, Fed. Rsrv., Remarks at the Enterprise Institute: CBDC—A Solution in Search of a Problem? 3 (Aug. 5, 2021) ("It is implausible to me that developing a CBDC is the simplest, least costly way to reach... [unbanked and underbanked] households."); Greta Bull, William Cook, Mehmet Kerse & Stefan Staschen, *Is Financial Inclusion a Reason to Push Central Bank Digital Currencies?*, CGAP (May 13, 2021) (explaining why they are not "not convinced" of CBDC's ability to impact financial inclusion).

^{353.} JACKSON & MASSAD, *supra* note 349, at 6. For a FedAccounts proposal that calls for a simplified CBDC, see John Crawford, Lev Menand & Morgan Ricks, *FedAccounts: Digital Dollars*, 89

accounts could be an alternative to the accounts offered by for-profit institutions, with interest on balances, real-time payments, instant access to government benefits, no minimum balance requirements, and no interchange fees.³⁵⁴

Civil rights leaders and segregationists alike have long promoted notions of self-help and Black capitalism as a means to address wealth inequality.³⁵⁵ These ideals have been so politically appealing that every president since Nixon has advanced some form of Black capitalism.³⁵⁶ For example, the Financial Institutions Reform, Recovery, and Enforcement Act, signed by President George H.W. Bush, contained the first legislative decree on minority depository institutions (MDIs), instructing banking regulators to work toward preserving the "present number" and "character" of MDIs.³⁵⁷ Thus far, the assistance provided to MDIs has largely included education, guidance, training, and counseling.³⁵⁸ Beyond mere training, some scholars have suggested more substantive support of MDIs through capital-access or capital-injection programs, technical assistance, and deposit programs, as MDIs can play a special role in markets underserved by other institutions³⁵⁹

Instead of creating new financial service options, other proposals have focused on strengthening existing frameworks. Since the CRA, which was intended to address redlining by requiring banks to meet the credit needs of their communities, has long been criticized as "toothless,"³⁶⁰ many proposed reforms

354. See RICKS ET AL., supra note 349, at 125–35. Others have proposed a new private option that would expand bank chartering to supermarket chains. See Diego Zuluaga, To Help the Unbanked, Break the Industrial Bank Taboo, CATO INST. (June 9, 2020), https://www.cato.org/blog/help-unbanked-break-industrial-bank-taboo [https://perma.cc/MQR2-U5ZJ].

355. BARADARAN, supra note 135, at 3.

356. See BARADARAN, supra note 135, at 3. Unfortunately, the self-help narrative has also been used to thwart more direct means to address the wealth gap. *Id.*

358. BARADARAN, *supra* note 135, at 264.

GEO. WASH. L. REV. 113 (2021). One hitch with this proposal is that the Federal Reserve Act does not authorize direct Federal Reserve accounts for individuals. BD. OF GOVERNORS OF THE FED. RSRV. SYS., MONEY AND PAYMENTS: THE U.S. DOLLAR IN THE AGE OF DIGITAL TRANSFORMATION 13 (2022), https://www.federalreserve.gov/publications/files/money-and-payments-20220120.pdf

[[]https://perma.cc/BWC6-RU9J]. In the alternative, Jackson and Massad contend that the Treasury Department has the authority to provide retail accounts and is better suited to do so. *See* JACKSON & MASSAD, *supra* note 349, at 7–13.

^{357.} Pub. L. No. 101-73, 103 Stat. 183 (1989). According to the FDIC, an MDI is "a federal insured depository institution for which (1) 51 percent or more of the voting stock is owned by minority individuals; or (2) a majority of the board of directors is minority and the community that the institution serves is predominantly minority." *Minority Depository Institutions Program*, FED. DEPOSIT INS. CORP., https://www.fdic.gov/regulations/resources/minority/mdi.html [https://perma.cc/5BQ5-FMJS].

^{359.} Maude Toussaint-Comeau & Robin Newberger, *Minority-Owned Banks and Their Primary Local Market Areas*, 41 ECON. PERSPS. 24–25 (2017), https://www.chicagofed.org/publications/economic-perspectives/2017/4 [https://perma.cc/5E4Q-S8JW].

^{360.} BARADARAN, *supra* note 135, at 232. Having been criticized as "toothless" and more about process than reform, the CRA has also been blamed for causing the financial crisis. *See id.* at 232–33. However, the theory has been largely debunked because CRA loans represented a very small fraction of the subprime loans leading up to the financial crisis. Neil Bhutta & Daniel Ringo, *Assessing the*

have sought to strengthen the CRA and its implementing regulations.³⁶¹ Following the rescission of Trump-era reforms to CRA regulations that would have "lessen[ed] public accountability of banks to their communities,"³⁶² community groups submitted a position paper to federal banking regulators that calls for, among other things, consideration of race on CRA exams.³⁶³ Currently, rather than evaluating banks' services to customers by race, CRA exams assess services provided to low- and moderate-income neighborhoods.³⁶⁴ Measuring progress toward race-based goals would more efficiently address discriminatory lending practices and the racial wealth gap. Others have proposed broadening the application of the CRA beyond just banks to include other financial service providers.³⁶⁵ If applied to fintechs, such a reform could address some of the concerns discussed in Part II.

Community Reinvestment Act's Role in the Financial Crisis, BD. OF GOVERNORS OF THE FED. RSRV. SYS. (May 26, 2015), https://www.federalreserve.gov/econresdata/notes/feds-notes/2015/assessing-thecommunity-reinvestment-acts-role-in-the-financial-crisis-20150526.html [https://perma.cc/4J4T-P3WD]; see also David Min, Why Wallison Is Wrong About the Genesis of the U.S. Housing Crisis, CTR. FOR AM. PROGRESS (July 12, 2011), https://www.americanprogress.org/article/why-wallison-iswrong-about-the-genesis-of-the-u-s-housing-crisis/ [https://perma.cc/D2J6-67YX] (refuting an attempt to blame the CRA for the housing crisis).

^{361.} See, e.g., Roberto Quercia, Janneke Ratcliffe & Michael A. Stegman, *The CRA: Outstanding, and Needs to Improve, in* REVISITING THE CRA: PERSPECTIVES ON THE FUTURE OF THE COMMUNITY REINVESTMENT ACT 47, 57 (Prabal Chakrabarti, David Erickson, Ren S. Essene, Ian Galloway & John Olson eds., 2009) (suggesting the following improvements to strengthen the CRA: expanding the scope of activities considered, fine tuning measurements, strengthening the service test, and revitalizing the public's role).

^{362.} Analysis of the OCC's Final CRA Rule, NAT'L CMTY. REINVESTMENT COAL. (June 15, 2020), https://ncrc.org/analysis-of-the-occs-final-cra-rule/ [https://perma.cc/5M7H-C22D]. Within three months of the OCC's announcement regarding the rescission, the National Community Reinvestment Coalition, an association of more than six-hundred community-based organizations, submitted a position paper that called for revisions to the CRA, including consideration of race on CRA exams and an expansion of assessment areas. NAT'L CMTY. REINVESTMENT COAL., POSITION PAPER ON CRA REFORM 1–2 (2022), https://www.ncrc.org/position-paper-on-cra-reform/ [https://perma.cc/G5TR-MPG8].

^{363.} See id. The proposal also calls for more objective measures of performance and the expansion of assessment areas. *Id.* at 1. In May of 2022, the banking agencies issued a notice of joint rulemaking to "strengthen and modernize" CRA regulations. Press Release, Off. of the Comptroller of the Currency, Community Reinvestment Act: Interagency Notice of Proposed Rulemaking to Implement the CRA (May 5, 2022), https://www.occ.treas.gov/news-issuances/bulletins/2022/bulletin-2022-14.html [https://perma.cc/RR7Q-K4CX]. While newly proposed regulations under the Biden administration would require disclosure of "borrower race and ethnicity of the bank's home mortgage loan originations and applications" in the public portion of the CRA exams, the impact is reduced because the proposed regulations expressly state the data is not to be used in banks' ratings. Community Reinvestment Act, 87 Fed. Reg. 33884 (June 3, 2022) (to be codified at 12 C.F.R. § 345).

^{364.} *See* 12 U.S.C. § 2903 (2006) (requiring the banking agencies to "assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of such institution").

^{365.} For example, Representative Eddie Bernice Johnson introduced the Community Reinvestment Modernization Act of 2009 that would have expanded the scope of CRA to include nonbank financial institutions. H.R.1479, 111th Cong. (2009). *See also* Josh Silver, *Why the Community Reinvestment Act Should Be Expanded Broadly Across the Financial Industry*, NAT'L CMTY.

Another proposal to improve access to the financial system is a federal maximum interest rate.³⁶⁶ Currently, there is only one group federally protected against maximum interest rates: active-duty service members. In 2006, Congress passed the Military Lending Act (MLA), which capped interest rates at 36 percent for loans to such individuals.³⁶⁷ In 2015, the Department of Defense issued a revised rule expanding the reach of the MLA to additional credit products, including credit cards.³⁶⁸ The proposed Veterans and Consumer Fair Credit Act (VCFCA) would extend these protections to all consumers.³⁶⁹ This proposal has been under consideration for several years³⁷⁰ and was last reintroduced in the House and Senate in 2021.³⁷¹

Increased oversight by the Consumer Financial Protection Bureau (CFPB) could also address underlying causes of equality in fintech. The CFPB issued a rule in 2017 to impose strict limits on payday loans,³⁷² but the regulation was gutted under Trump-appointed officials in 2019³⁷³ and 2020.³⁷⁴ These rescinded regulations prohibited making certain payday and car loans without reasonably determining the debtor's ability to repay.³⁷⁵ The only part of the rule still in effect—requiring lenders to receive authorization before attempting to withdraw

REINVESTMENT COAL. (Aug. 7, 2020), https://www.ncrc.org/why-the-community-reinvestment-actshould-be-expanded-broadly-across-the-financial-industry/ [https://perma.cc/3J3S-E6UX] (advocating for the expansion of the CRA to nonbanks). While a complete discussion of proposed amendments to the CRA is outside the scope of this article, the Authors are writing an article that fully explores amendments to the CRA. *See generally* Lindsay Sain Jones & Goldburn P. Maynard, Jr., Rebooting the Community Reinvestment Act (unpublished manuscript) (on file with authors).

^{366.} See Sylvan Lane, House Chairwoman Backs Interest Rate Cap on Payday Loans, THE HILL (Dec. 20, 2019), https://thehill.com/policy/finance/475511-house-chairwoman-eyes-interest-rate-cap-on-payday-loans [https://perma.cc/U4XA-ZZM8] (describing Representative Maxine Waters's plan to propose a bill to limit interest rates to 36 percent).

^{367. 10} U.S.C. § 987 (2006).

^{368.} Military Lending Act Regulation, 80 Fed. Reg. 43560 (July 22, 2015) (codified at 32 C.F.R. § 232); *see also* Press Release, U.S. Dep't of Def., Department of Defense Issues Final Military Lending Act Rule (July 21, 2015), https://www.defense.gov/News/Releases/Release/Article/612795/department-of-defense-issues-final-military-lending-act-rule/ [https://perma.cc/Q9ZM-9UYB].

^{369.} H.R. 5974, 117th Cong. (2021); S. 2508, 117th Cong. (2021).

^{370.} See, e.g., S. 2833, 116th Cong. (2019).

^{371.} Press Release, Pub. Int. Res. Grp., Bipartisan Introduction of Veterans and Consumers Fair Credit Act Marks Important Step in Stopping the Debt Trap (Nov. 17, 2021), https://uspirg.org/news/usp/statement-bipartisan-introduction-veterans-and-consumers-fair-credit-act-marks-important [https://perma.cc/Y4GW-JCY9].

^{372.} Payday, Vehicle Title, and Certain High-Cost Installment Loans, 82 Fed. Reg. 54472 (Nov. 17, 2017) (codified at 12 C.F.R. § 1041).

^{373.} Payday, Vehicle Title, and Certain High-Cost Installment Loans; Delays of Compliance Date; Correcting Amendments, 84 Fed. Reg. 27907 (June 17, 2019) (delaying the compliance date of the underwriting provisions by fifteen months).

^{374.} Payday, Vehicle Title, and Certain High-Cost Installment Loans, 85 Fed. Reg. 44382 (July 22, 2020) (revoking the underwriting provisions).

^{375.} Id.

missed payments from bank accounts³⁷⁶—is currently being challenged in courts.³⁷⁷ However, the political situation has since evolved: the Biden administration's CFPB could propose to restore the 2017 payday rules.

Sociologists Frederick Wherry, Kristin Seefeldt, and Anthony Alvarez have focused on the high costs of credit exclusion or "credit invisibility," which they propose combating by expanding the financial system to allow individuals to fully participate in society regardless of their financial status.³⁷⁸ They propose mechanisms such as lending circles to expand credit outside of the traditional banking system.³⁷⁹ Moreover, they argue that dignity assessments (e.g., measuring the level of "indignity" of financial services, products, or debt collectors) and participatory design of financial products (e.g., incorporating the experiences of low- and moderate-income families when building financial products) could expand access to financial tools.³⁸⁰ Some of their proposals, like baby bonds (discussed later in this Article), could transform the racial imbalance of inherited wealth.³⁸¹

2. Infrastructure Improvements³⁸²

While fintech innovations offer some hopeful solutions for underserved communities, access to broadband internet service to use these services remains unequal.³⁸³ In an effort to address this issue, Congress included \$65 billion in the Infrastructure Investment and Jobs Act to improve internet access and broadband affordability in rural areas.³⁸⁴ The law allocated \$2.75 billion specifically for states to develop and fund projects, such as WiFi hot spots in schools, to ensure internet access for historically underserved communities.³⁸⁵ Although hailed as a major step toward addressing inequalities, the final bill did not include

^{376.} Payday, Vehicle Title, and Certain High-Cost Installment Loans, 82 Fed. Reg. 54472 (Nov. 17, 2017).

^{377.} Evan Weinberger, *Court Delays CFPB Payday Rule as Industry Challenge Continues*, BLOOMBERG L. (Oct. 15, 2021), https://news.bloomberglaw.com/banking-law/court-delays-cfpb-payday-rule-while-industry-challenge-continues [https://perma.cc/A4GS-86BE].

^{378.} FREDERICK F. WHERRY, KRISTIN S. SEEFELDT & ANTHONY S. ALVAREZ, CREDIT WHERE IT'S DUE: RETHINKING FINANCIAL CITIZENSHIP 110 (2019).

^{379.} *Id.* at 65–79.

^{380.} Id. at 107, 108.

^{381.} *Id.* at 104.

^{382.} The term "infrastructure" broadly refers to investments in the core components of a modern society, which include delivery of high-speed internet and quality education. For a discussion of the debate on how broadly or narrowly infrastructure should be defined, see Jim Tankersley & Jeanna Smialek, *Biden Plan Spurs Fight Over What "Infrastructure" Really Means*, N.Y. TIMES (Apr. 5, 2021), https://www.nytimes.com/2021/04/05/business/economy/biden-infrastructure.html [https://perma.cc/3B9E-TGBG].

^{383.} FRIEDLINE, *supra* note 277, at 138.

^{384.} Infrastructure Investment and Jobs Act of 2021, Pub. L. No. 117-58, 135 Stat. 448 (2021).

^{385.} Id. § 60301.

provisions to develop municipal broadband networks.³⁸⁶ In fact, nineteen states have banned municipal broadband networks, and a group of Republicans in Congress have proposed a ban on municipal providers.³⁸⁷ Nonetheless, continued investment in expanding broadband internet is advisable, given that fintech's ability to fulfill its promise to expand financial access is predicated upon users' ability to access their services.

Infrastructure improvements to two inextricably intertwined contributors to wealth inequality—education and home values—could also increase financial access in underserved communities. A 2014 study found that low home values are linked to poorly performing, underfunded schools.³⁸⁸ For example, schools that are designated as "in need of improvement" under the No Child Left Behind Act³⁸⁹ depress surrounding neighborhood prices by an average of 6 percent.³⁹⁰ The designation is also linked to social stigma, which then negatively impacts the very neighborhoods those designations were designed to help.³⁹¹ Conversely, investments in public education in Black neighborhoods could have the added benefit of boosting home values and increasing Black wealth.³⁹² These investments could spur a virtuous cycle because as the property values rise, so does the tax base to support spending in nearby public schools.³⁹³

The federal government could also take more robust action against discrimination.³⁹⁴ To reverse the Trump administration's efforts to weaken fair housing regulations,³⁹⁵ President Biden signed executive orders aimed at increasing racial equity and eliminating housing discrimination.³⁹⁶ The Biden administration has also sought to restore³⁹⁷ two rules that the Trump

^{386.} The Biden administration's original plan called for lifting barriers that prevent municipally owned providers from competing with private providers. Press Release, White House, Fact Sheet: The American Jobs Plan (Mar. 31, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/ [https://perma.cc/K4KP-3VFF].

^{387.} Jon Reid, *Municipal Broadband War Reignited in Biden's Infrastructure Push*, BLOOMBERG L. (Apr. 1, 2021), https://news.bloomberglaw.com/tech-and-telecom-law/municipal-broadband-war-reignited-in-bidens-infrastructure-push [https://perma.cc/BT99-74G6].

^{388.} Alexander Bogin & Phuong Nguyen-Hoang, Property Left Behind: An Unintended Consequence of a No Child Left Behind "Failing" School Designation, 54 J. REG'L SCI. 788, 788 (2014).

^{389. 20} U.S.C. § 6319 (2002).

^{390.} Bogin & Nguyen-Hoang, *supra* note 388, at 803.

^{391.} Id. at 804.

^{392.} See Patrick J. Bayer, Peter Q. Blair & Kenneth Whaley, Are We Spending Enough on Teachers in the U.S.? 3 (Nat'l Bureau of Econ. Rsch., Working Paper No. 28255, 2021), https://www.nber.org/system/files/working_papers/w28255/w28255.pdf [https://perma.cc/8RZ3-YVTG] (finding that an increase in school spending increases house prices).

^{393.} See Matthew Davis & Fernando V. Ferreira, *Housing Disease and Public School Finances*, 88 ECON. EDUC. REV. 1, 16 (2022) (finding an increase in spending after increases in home prices).

^{394.} Tracy Jan, *Trump Gutted Obama-Era Housing Discrimination Rules. Biden's Bringing Them Back*, WASH. POST (Apr. 13, 2021), https://www.washingtonpost.com/us-policy/2021/04/13/hud-biden-fair-housing-rules/ [https://perma.cc/74R6-P93K].

^{395.} Id.

^{396.} Exec. Order No. 13985, 86 Fed. Reg. 7009 (Jan. 25, 2021).

^{397.} Jan, *supra* note 394.

administration gutted:³⁹⁸ (1) the disparate impact rule³⁹⁹ and (2) a 2015 rule requiring communities to identify and dismantle barriers to racial integration.⁴⁰⁰

Public investment to address inequitable exposure to environmental harms is another promising strategy to combat the racial wealth gap. A Brookings Institute study found that homes in Black neighborhoods were undervalued by \$48,000 per home on average, amounting to \$156 billion in cumulative losses.⁴⁰¹ Several scholars have documented how Black-majority neighborhoods and cities are disproportionately impacted by negative environmental externalities.⁴⁰² Flint, Michigan, is the most recent well-known example of this phenomenon.⁴⁰³ Measures such as relocation of hazardous waste facilities, modernization of water-treatment infrastructure, and increased pollution regulation could help to increase the value of homes in Black neighborhoods.

3. Technology Oversight

As discussed in Part II, fintech business models inherently impede their own ability to meaningfully address wealth inequality. Neobanks, for example, can only provide free checking by partnering with small banks and charging

^{398.} Id.

^{399.} Implementation of the Fair Housing Act's Discriminatory Effects Standard, 78 Fed. Reg. 11460 (Feb. 15, 2013) (codified at 24 C.F.R. § 100); *see also* Press Release, U.S. Dep't of Hous. & Urb. Dev., HUD Proposes Restoring Discriminatory Effects Rule (June 25, 2021), https://www.hud.gov/press/press_releases_media_advisories/HUD_No_21_107#:~:text=Fudge%20an nounced%20on%20Thursday%20that,the%202013%20discriminatory Effects %20rule [https://perma.cc/7EJ7-EABU]; Reinstatement of HUD's Discriminatory Effects Standard, 86 Fed. Reg.

⁽¹⁰⁰ s Discriminatory Effects Standard, 86 Fed. Reg. 33590 (June 25, 2021).

^{400.} Affirmatively Furthering Fair Housing, 80 Fed. Reg. 42272 (July 16, 2015) (codified at 24 C.F.R. §§ 5, 91, 92, 570, 574, 576, and 903); Reinstatement of HUD's Discriminatory Effects Standard, 86 Fed. Reg. 33590 (June 25, 2021) (proposing rule reinstating the 2015 rule).

^{401.} ANDRE PERRY, JONATHAN ROTHWELL & DAVID HARSHBARGER, BROOKINGS INST., THE DEVALUATION OF ASSETS IN BLACK NEIGHBORHOODS 15 (2018), https://www.brookings.edu/wp-content/uploads/2018/11/2018.11_Brookings-Metro_Devaluation-Assets-Black-Neighborhoods final.pdf [https://perma.cc/3XT2-T26A].

^{402.} See, e.g., James T. Hamilton, *Testing for Environmental Racism: Prejudice, Profits, and Power?*, 14 J. POL'Y ANALYSIS & MGMT. 107, 111 (1995) (finding that communities targeted for capacity expansion plans by hazardous waste facilities have a greater proportion of minority residents); Laura Pulido, *Rethinking Environmental Racism: White Privilege and Urban Development in Southerm California*, 90 ANNALS ASS'N AM. GEOGRAPHERS 12, 15–16 (2000) (explaining how suburbanization and decentralization have contributed to contemporary patterns of environmental racism); Allison Shertzer, Tate Twinam & Randall P. Walsh, *Race, Ethnicity, and Discriminatory Zoning*, 8 AM. ECON. J.: APPLIED ECON. 217, 219 (2016) (finding that neighborhoods with larger populations of Southernborn Blacks or first-generation immigrants were more likely to be zoned for industrial uses); Spencer Banzhaf, Lala Ma & Christopher Timmins, *Environmental Justice: The Economics of Race, Place, And Pollution*, 33 J. ECON. PERSPS. 185, 186–88 (2019) (showing that emissions facilities are more likely to be operating in tracts that are more than 80 percent non-White than in those that are more than 80 percent White).

^{403.} See Lindsey J. Butler, Madeleine K. Scammell & Eugene B. Benson, The Flint, Michigan, Water Crisis: A Case Study in Regulatory Failure and Environmental Injustice, 9 ENV'T JUST. 93, 94 (2016).

merchants higher fees.⁴⁰⁴ However, policymakers could address other issues identified in Part II through stronger enforcement and stricter interpretation of existing laws and regulations.⁴⁰⁵ For example, broker-dealers are already subject to Regulation Best Interest, which requires brokers to act in the best interest of their clients when making recommendations.⁴⁰⁶ Under those guidelines, the SEC could interpret Robinhood's tactics to induce trading as a "recommendation" and thus require the firm to ensure that the promoted investments are in the best interest of its clients.⁴⁰⁷ Others have argued that enforcement of existing laws is not enough and that new laws or regulations are needed to address the problems.⁴⁰⁸

Perhaps the most alarming of the concerns raised in Part II is lenders' use of algorithms and new data that may negatively impact historically disadvantaged groups and exacerbate existing wealth gaps.⁴⁰⁹ Again, this issue could be addressed by stronger enforcement of existing laws such as the Equal Credit Opportunity Act (ECOA).⁴¹⁰ Several scholars have considered the role that the toxic combination of (1) the increasing use of algorithms and (2) inherent

409. See supra Part II.C.2.

^{404.} See supra Part II.E.2.

^{405.} Scholars, such as William Magnuson, have argued that more regulatory attention should be paid to fintechs due to the unique concerns that fintech poses. Magnuson, *supra* note 1, at 1172. Chris Brummer and Yesha Yadav have identified the difficulties in promulgating rules for fintechs that are clear, maintain market integrity, and encourage financial innovation simultaneously. Chris Brummer & Yesha Yadav, *Fintech and the Innovation Trilemma*, 107 GEO. L.J. 235, 244 (2019).

^{406.} Regulation Best Interest: The Broker-Dealer Standard of Conduct, 84 Fed. Reg. 33318, 33320 (July 12, 2019) (to be codified at 17 C.F.R. § 240). SEC Chairman Gary Gensler is also considering a full ban on PFOF to address the "conflicts of interest between brokerage apps and consumers" that it raises. Alexis Keenan, *Why It Could Be Tough for the SEC to Ban Payment for Order Flow*, YAHOO! FIN. (Oct. 26, 2021), https://news.yahoo.com/sec-chair-banning-payment-for-order-flow-is-on-the-table-140624328.html?soc_src=social-sh&soc_trk=ma [https://perma.cc/3QJ7-EAM9]. The regulatory authority for banning PFOF is not entirely clear but could be derived from the duty of best execution, which applies to all broker transactions. *Id*.

^{407.} See Gary Gensler, Chair, Sec. & Exch. Comm'n, Prepared Remarks at the "SEC Speaks" Conference (Oct. 12, 2021) (suggesting that design elements and psychological nudges could cross the line to become recommendations); see also Kyle Langvardt & James Fallows Tierney, On "Confetti Regulation": The Wrong Way to Regulate Gamified Investing, 131 YALE L.J.F. 717, 738 (2022) (suggesting that gamification tactics could be considered making a recommendations under Regulation Best Interest).

^{408.} *See* Magnuson, *supra* note 1, at 1215 (contending that regulation of fintech must contain different substantive standards than regulations imposed on other financial institutions).

^{410.} Not only is establishing "[d]isparate treatment" or "[d]isparate impact" under the ECOA difficult for evidentiary reasons, but even when a *prima facie* case is established for a disparate impact claim, the plaintiff still must prove that an alternative policy could serve the business purpose with a less discriminatory effect. *See* Winnie F. Taylor, *Eliminating Racial Discrimination in the Subprime Mortgage Market: Proposals for Fair Lending Reform*, 18 J.L. & POL'Y 263, 273 nn.38–39 (2009). Further, the CFPB has made enforcement more difficult by taking an innovation-friendly approach to alternative credit data. *See* Press Release, Consumer Fin. Prot. Bureau, CFPB Announces First No-Action Letter to Upstart Network (Sept. 14, 2017), https://www.consumerfinance.gov/about-us/newsroom/cfpb-announces-first-no-action-letter-upstart-network/ [https://perma.cc/5U3L-ENX4].

algorithmic bias play in perpetuating inequality.⁴¹¹ Solutions may include increased transparency, auditing or oversight, and more human autonomy.⁴¹² One method of addressing potential misuse of alternative data (like social media activity, contacts, and college grades) in credit decisions would be to treat credit scores as a public utility.⁴¹³ This regulation would acknowledge the necessary and fundamental role of fair consumer credit ratings in the U.S. economy.⁴¹⁴ Further, the reform would make the credit scoring entities directly responsible to the public and subject them to further regulation.⁴¹⁵ Finally, treating credit scores as a public utility might give consumers control over what data they consent to share.

The increased use of behavioral data gleaned from social media activity, called social credit, has led some scholars to call for a limited right to be unnetworked.⁴¹⁶ More regulation could help prevent the potential privacy harms, due process violations, and discrimination that social credit generates.⁴¹⁷ This right would broadly disallow the use of social information unless the creditor satisfies one of several exceptions, such as using the information to comply with state and federal requirements.⁴¹⁸ While all these measures could help fintech to

413. See Hiller & Jones, supra note 255, at 110–13.

415. Id. at 115-20.

416. Nizan Geslevich-Packin & Yafit Lev-Aretz, *On Social Credit and the Right to be Unnetworked*, 2016 COLUM. BUS. L. REV. 339, 416–20 (2016). In 2019, the State of New York banned consumer reporting agencies and lenders from using social network data to determine an applicant's creditworthiness. N.Y. GEN. BUS. LAW §§ 380-a(u), 380-j(h) (McKinney 2019); N.Y. BANKING LAW §§ 2(31), 352 (McKinney 2019).

417. Geslevich-Packin & Lev-Aretz, supra note 416, at 416-17.

418. Id. at 419.

^{411.} See, e.g., SAFIYA UMOJA NOBLE, ALGORITHMS OF OPPRESSION: HOW SEARCH ENGINES REINFORCE RACISM 12–14 (2018); VIRGINIA EUBANKS, AUTOMATING INEQUALITY: HOW HIGH-TECH TOOLS PROFILE, POLICE, AND PUNISH THE POOR 10–13 (2017); CATHY O'NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY 3–8 (2016); Pauline T. Kim, *Data-Driven Discrimination at Work*, 58 WM. & MARY L. REV. 857, 890–91 (2017).

^{412.} See, e.g., FRANK PASOUALE, THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION 8 (2015) (raising concerns about secret algorithms used by internet and finance companies and calling for a more "intelligible" society which entails, among other things, greater transparency); Danielle Keats Citron & Frank Pasquale, The Scored Society: Due Process for Automated Predictions, 89 WASH. L. REV. 1, 8 (2014) (criticizing the secrecy surrounding credit scoring systems and arguing that "transparency . . . is essential"); Neil M. Richards & Jonathan H. King, Big Data Ethics, 49 WAKE FOREST L. REV. 393, 421 (2014) ("Transparency has heightened importance with the arrival of big data."); Pauline T. Kim, Auditing Algorithms for Discrimination, 166 U. PA. L. REV. ONLINE 189, 190 (2017) (arguing that trade secrets can be adequately protected even if we police algorithms by analyzing their results or their inputs); James A. Allen, The Color of Algorithms: An Analysis and Proposed Research Agenda for Deterring Algorithmic Redlining, 46 FORDHAM URB. L.J. 219, 262-70 (2019); Kate Crawford & Jason Schultz, Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms, 55 B.C. L. REV. 93, 126 (proposing that those who use data for predictive purposes disclose the data used and the methodology employed); Joshua A. Kroll, Joanna Huey, Solon Barocas, Edward W. Felten, Joel R. Reidenberg, David G. Robinson & Harlan Yu, Accountable Algorithms, 165 U. PA. L. REV. 633, 657-58 (2017) (arguing that technical tools will be more effective at ensuring nondiscrimination than calls for transparency).

^{414.} *Id.* at 108.

better deliver on its promises, any reforms that fail to examine the areas that have increased the wealth gap—such as our tax policies—will prove incomplete.

4. Updates to Tax Policies

The public has increasingly focused on wealth taxation in the past decade in recognition of wealth's central place in our economic structure. By taxing labor income more heavily than wealth, the tax system holds back disadvantaged groups.⁴¹⁹ The renewed interest in wealth taxation is at least partly due to Thomas Piketty's best-selling book *Capital in the Twenty-First Century*,⁴²⁰ which prompted robust discussions about wealth disparities. Piketty proposed a global wealth tax to combat increasing wealth disparities.⁴²¹ Economists Emmanuel Saez and Gabriel Zucman also helped to revive interest in a wealth tax with their book *The Triumph of Injustice*.⁴²² The debate became especially vibrant during the 2020 election season when Zucman served as a policy adviser for Elizabeth Warren and helped to write her annual wealth tax proposal.⁴²³

Tax policies provide a viable path for reducing wealth inequality. While such changes would likely need to be race-neutral to pass constitutional scrutiny, tax treatment can (and presently does) differ depending upon income and wealth levels.⁴²⁴ Currently, our system taxes everyone based on income, but also favors those with more wealth by subsidizing homeownership, retirement accounts, and retirement property, thereby expanding the wealth gap.⁴²⁵ In turn, some have proposed a wealth tax or an enhanced estate tax as a means to reverse course and

^{419.} David Gamage & John R. Brooks, *Tax Now or Tax Never: Political Optionality and the Case for Current-Assessment Tax Reform*, 100 N.C. L. REV. 487, 514 (2022),

^{420.} See generally PIKETTY, supra note 174 (arguing that inequitable returns on capital exacerbate wealth inequality that in turn threatens democratic values).

^{421.} Id. at 515.

^{422.} See generally EMMANUEL SAEZ & GABRIEL ZUCMAN, THE TRIUMPH OF INJUSTICE: HOW THE RICH DODGE TAXES AND HOW TO MAKE THEM PAY (2019) (showing how regressive tax policy and tax avoidance fuel America's wealth inequality). See also Jonathan Curry, UC Berkeley Economists Chosen as Tax Notes Federal's Persons of the Year, TAX NOTES FED. (Dec. 16, 2019), https://www.taxnotes.com/special-reports/tax-policy/uc-berkeley-economists-chosen-tax-notes-federals-persons-year/2019/12/13/2b617 [https://perma.cc/J4M7-9UUS] (discussing Saez and Zucman's roles in popularizing discussions of wealth inequality and in tax reforms aimed at taxing wealth).

^{423.} Benjamin Wallace-Wells, *The French Economist Who Helped Invent Elizabeth Warren's Wealth Tax*, NEW YORKER (Oct. 19, 2019), https://www.newyorker.com/news/the-political-scene/the-french-economist-who-helped-invent-elizabeth-warrens-wealth-tax [https://perma.cc/ZR4G-SEH8].

^{424.} See Goldburn P. Maynard, Jr., Biden's Gambit: Advancing Racial Equity While Relying on a Race-Neutral Tax Code, 131 YALE L.J.F. 656, 682 (2021) [hereinafter Biden's Gambit].

^{425.} See, e.g., Goldburn P. Maynard, Jr., Addressing Wealth Disparities: Reimagining Wealth Taxation as a Tool for Building Wealth, 92 DENV. U. L. REV. 145, 148–49, 153–54 (2014) [hereinafter Addressing Wealth Disparities]. For example, capital gains are taxed at a maximum of 20 percent while the maximum rate of 37 percent applies to income acquired through labor. Kate Ashford & Benjamin Curry, 2021 and 2022 Capital Gains Tax Rates, FORBES (Nov. 10, 2021), https://www.forbes.com/advisor/taxes/capital-gains-tax/ [https://perma.cc/4A2H-4ZY6].

reduce wealth inequality.⁴²⁶ Tax scholar Dorothy Brown, for example, has highlighted how U.S. tax policies negatively impact Black Americans.⁴²⁷ As a race-neutral solution, Brown proposes a "wealth-based refundable tax credit for individual taxpayers whose wealth is below the median."⁴²⁸ Several other legislative proposals have also sought to tackle wealth inequality, including increased taxation of capital gains,⁴²⁹ a financial transaction tax,⁴³⁰ and a millionaires and billionaires tax.⁴³¹ While such solutions would certainly help to reduce the racial asset gap, those solutions alone are insufficient solve the long-lasting nature of wealth inequality.⁴³² Instead, these solutions must be used in concert with other antidiscrimination policies.

5. Federal Government Wealth Transfers

Along with wealth taxation, the tax system could also make direct transfers to the least wealthy to support wealth building, similar to the Earned Income Tax Credit.⁴³³ For example, scholars have proposed a refundable credit that would fund wealth-building accounts for minorities.⁴³⁴ Minorities could use these funds to buy a home, start a small business, or fund an education.⁴³⁵ Similarly, some economists have proposed the use of baby bonds.⁴³⁶ A bond of up to \$60,000 would be deposited into an account for each child depending on their wealth.⁴³⁷ The average middle-class child would receive around \$20,000.⁴³⁸ These bonds would remain locked until the child turned eighteen when the funds would become available to pay for college, buy a home, or start a business.⁴³⁹

^{426.} See, e.g., SAEZ & ZUCMAN, supra note 422, at 145–53, 173–76; Ari Glogower, *Taxing Inequality*, 93 N.Y.U. L. Rev. 1421–22, 1467–76 (2018) (proposing a redefined wealth tax as part of a new combined tax on income and wealth).

^{427.} DOROTHY A. BROWN, THE WHITENESS OF WEALTH: HOW THE TAX SYSTEM IMPOVERISHES BLACK AMERICANS—AND HOW WE CAN FIX IT 206 (2021).

^{428.} *Id.* at 220. Brown acknowledges that a race-based solution to reforming the tax system would likely be unconstitutional. *Id.* at 217.

^{429.} See, e.g., Greg Iacurci, House Democrats Propose Raising Capital Gains Tax to 28.8%, CNBC (Sept. 13, 2021), https://www.cnbc.com/2021/09/13/house-democrats-propose-hiking-capital-gains-tax-to-28point8percent-.html [https://perma.cc/A5GW-N6NA].

^{430.} See, e.g., Aaron Klein, *What is a Financial Transaction Tax*?, BROOKINGS INST. (Mar. 27, 2020), https://www.brookings.edu/policy2020/votervital/what-is-a-financial-transaction-tax-2/ [https://perma.cc/N32A-CS6N].

^{431.} See, e.g., Catherine Clifford, Top Economists Stiglitz and Piketty: The US Needs a Wealth Tax on Millionaires and Billionaires, CNBC (Sept. 17, 2020), https://www.cnbc.com/2020/09/17/economists-stiglitz-and-piketty-us-needs-a-wealth-tax.html [https://perma.cc/4U5J-E5Z4].

^{432.} Maynard, Addressing Wealth Disparities, supra note 425, at 151–52.

^{433.} I.R.C. § 32 (2021).

^{434.} Maynard, Addressing Wealth Disparities, supra note 425, at 175–77.

^{435.} Id. at 156.

^{436.} Darrick Hamilton & William Darity, Jr., Can "Baby Bonds" Eliminate the Racial Wealth Gap in Putative Post-Racial America?, 37 REV. BLACK POL. ECON. 207 (2010).

^{437.} Id. at 215.

^{438.} Id.

^{439.} Id.

Moreover, forgiving student loan debt could reduce the racial wealth gap.⁴⁴⁰ Black households carry more student debt, which hurts their credit worthiness and impedes their ability to purchase homes.⁴⁴¹ A policy that reduced student loan debt would disproportionately help racial minorities and address a portion of the racial wealth gap.⁴⁴² Contrary to popular belief, the plurality of outstanding debt is held by individuals with low incomes.⁴⁴³ Advocates of debt cancellation argue this reform would boost GDP and allow Black households to make decisions they currently defer, like purchasing a home or launching a business.⁴⁴⁴ Indeed, in August 2022, the Biden administration took the relatively modest step of forgiving between \$10,000 and \$20,000 in student loans for each borrower.⁴⁴⁵ By allowing Pell Grant recipients to receive a higher amount (\$20,000) of debt cancellation, this measure targeted Black borrowers who are twice as likely to receive Pell Grants as their White peers.⁴⁴⁶ Yet, the promise of this debt cancellation is in question, as a federal court issued a temporary injunction halting the program.⁴⁴⁷

Scholars have long identified reparations for slavery and racial discrimination as both necessary for justice and as another means of closing the racial wealth gap.⁴⁴⁸ Reparations would involve wealth transfers to descendants of enslaved people to compensate for some of the wealth lost because of slavery and subsequent discrimination. H.R. 40, originally drafted by Representative John Conyers⁴⁴⁹ and now sponsored by Representative Sheila Jackson Lee, calls for the establishment of a commission to investigate the history of racial injustice

^{440.} OLIVER & SHAPIRO, *supra* note 38, at 20.

^{441.} Andre M. Perry, Marshall Steinbaum & Carl Romer, *Student Loans, the Racial Wealth Divide, and Why We Need Full Student Debt Cancellation*, BROOKINGS INST. (June 23, 2021), https://www.brookings.edu/research/student-loans-the-racial-wealth-divide-and-why-we-need-full-student-debt-cancellation/ [https://perma.cc/EYB3-KWPG].

^{442.} Id.

^{443.} Id.

^{444.} Id.

^{445.} Press Release, White House, Fact Sheet: President Biden Announces Student Loan Relief for Borrowers Who Need It Most (Aug. 24, 2022), https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/24/fact-sheet-president-biden-announces-student-loan-relief-for-borrowers-who-need-it-most/ [https://perma.cc/PUX7-8JMY].

^{446.} Id.

^{447.} Nebraska v. Biden, 52 F.4th 1044, 1048 (8th Cir. 2022); *see also* Annie Nova & Dan Mangan, *Federal Appeals Court Blocks Biden Student Debt Relief Program Nationwide*, CNBC (Nov. 14, 2022), https://www.cnbc.com/2022/11/14/biden-student-loan-debt-relief-plan-appeals-court-rules.html [https://perma.cc/7NXW-4A4N].

^{448.} *See* sources cited *supra* note 37.

^{449.} Representative John Conyers introduced the bill every year since 1989 and retired in 2017. Kevin Freking, *House Panel Votes to Advance Bill on Slavery Reparations*, AP NEWS (Apr. 14, 2021), https://apnews.com/article/race-and-ethnicity-discrimination-legislation-slavery-john-conyers-4929d09132b8a72e655d8a42cc068a9d. [https://perma.cc/9KPZ-YA43]. Representative Sheila Jackson

⁴⁹²⁹d09132b8a72e655d8a42cc068a9d. [https://perma.cc/9KPZ-YA43]. Representative Sheila Jackson Lee has since assumed the role as sponsor. *Id.*

in the United States.⁴⁵⁰ Meanwhile, several different proposals have sought to structure a reparations program. One of the more recent proposals would make wealth transfers to Americans who (1) have at least one ancestor who was enslaved in the United States and (2) prove that they self-identified as Black at least twelve years before the enactment of the reparations program.⁴⁵¹ Instead of using present-value calculations of unpaid wages, this plan would use the racial wealth gap itself to measure the amount to be transferred.⁴⁵² Notably, the proposal would deposit money into trust accounts with a twelve-member reparations supervisory board.⁴⁵³ The board would monitor the program and develop a financial management curriculum, while also documenting America's history of racism.⁴⁵⁴ While this reparations program would fail to cover Black Americans who do not descend from slavery, an infusion of over \$200,000 per descendant would substantially close the racial wealth gap for millions of Black individuals.

B. Our Proposal: Everything at Once

Having considered various proposals to tackle wealth inequality, we now return to our recommendation: enacting policies from each category. This recommendation does not just take the easy way out. Instead, it reflects the complex and embedded nature of the racial wealth gap.⁴⁵⁵ Some scholars have acknowledged this and called for reforms that both tackle inequality and address the predatory actions of lenders.⁴⁵⁶ Others have called for multidimensional solutions to problems of inequality.⁴⁵⁷ For the reasons described below, we believe that a packaged solution is necessary, although that position could make its success doubtful.

^{450.} Commission to Study and Develop Reparation Proposals for African Americans Act, H.R. 40, 117th Cong. (2021) (as introduced by Representative Sheila Jackson Lee) ("The commission shall identify (1) the role of the federal and state governments in supporting the institution of slavery, (2) forms of discrimination in the public and private sectors against freed slaves and their descendants, and (3) lingering negative effects of slavery on living African Americans and society."); S. 40, 117th Cong. (2021) (as introduced by Senator Cory Booker).

^{451.} DARITY & MULLEN, supra note 123, at 258.

^{452.} *Id.* at 259–60.

^{453.} Id. at 264, 267.

^{454.} Id. at 267–69.

^{455.} See, e.g., Christian E. Weller & Angela Hanks, *The Widening Racial Wealth Gap in the United States After the Great Recession*, 47 F. FOR SOC. ECON. 237, 238 (2018); DALTON CONLEY, BEING BLACK, LIVING IN THE RED: RACE, WEALTH, AND SOCIAL POLICY IN AMERICA 25 (1999) ("Wealth has the particular attribute of tending to reproduce itself in a multiplicative fashion from generation to generation.").

^{456.} See Gregory D. Squires & Derek S. Hyra, Foreclosures—Yesterday, Today, and Tomorrow, 9 CITY & CMTY. 50, 58 (2010).

^{457.} Prudence L. Carter, *The Multidimensional Problems of Educational Inequality Require Multidimensional Solutions*, 54 EDUC. STUD. 1, 2–14 (2018) (distinguishing between macro-, meso-, and microlevel discrimination and calling for radical inclusion).

As briefly discussed in Part I, the insights of stratification economics are helpful in analyzing the racial wealth gap.⁴⁵⁸ Stratification economists see wealth inequality as persistent, and therefore an effective vehicle for reproducing stratification across generations because of its durability and transferability.⁴⁵⁹ When discrimination is seen as a rational exercise in maintaining a superior position on a hierarchy,⁴⁶⁰ the embedded nature of the wealth gap makes more sense. The difficulty in uprooting the wealth gap also more clearly comes into view. In in the absence of radical, multidimensional action, closing the racial wealth gap may take centuries.⁴⁶¹

Building on stratification economics, scholars have rejected approaches that rely on single-cause determinants of the racial wealth gap.⁴⁶² Instead, they have highlighted the "overlapping and compounding effects of various factors linking racism and economic inequality."⁴⁶³ For example, if the fintech industry is regulated without tackling structural racism, clever human beings (e.g., lawyers, entrepreneurs, and others) will find loopholes or variations on their current predatory operations. On the other hand, if there is a large transfer of federal funds to disadvantaged minorities but no reforms to tackle financial institutions' disparate treatment of Black Americans, much of the wealth may quickly transfer back to predatory actors. To wit, racial wealth inequality has thrived for generations despite past piecemeal reform efforts.⁴⁶⁴ It is clear that more comprehensive action is necessary.

1. Hurdles

Today's political climate makes it difficult to countenance the passage of a comprehensive package. Any one of these proposals on its own would be difficult to pass. For example, the so-called Billionaire's Income Tax floundered despite robust support by the American public for more taxation of the

^{458.} See Darity, supra note 76, at 146.

^{459.} Id.

^{460.} Note that some legal scholars have also conceptualized racial discrimination as a quest for superior status. *See, e.g.*, Richard H. McAdams, *Relative Preferences*, 102 YALE L.J. 1, 95 (1992) ("Race discrimination by [W]hites may be seen not as an attempt to satisfy an irrational 'taste' for nonassociation with [B]lacks, but as an attempt to produce the 'commodity' of individual distinction by raising the relative status of a particularly salient social group—one's race.").

^{461.} Aliprantis & Carroll, *supra* note 52, at 5.

^{462.} Victor Ray & Louise Seamster, *Rethinking Racial Progress: A Response to Wimmer*, 39 ETHNIC & RACIAL STUD. 1361, 1364–67 (2016).

^{463.} Charron-Chénier & Seamster, supra note 154, at 979.

^{464.} For example, the estate tax, which was enacted in 1916, has done little to curb the concentration of wealth. *See, e.g.*, Aimee Picchi, *Is America's Low Estate Tax to Blame for Wealth Inequality?*, CBS NEWS (Jan. 29, 2020), https://www.cbsnews.com/news/is-americas-low-estate-tax-to-blame-for-wealth-inequality/ [https://perma.cc/D6E8-2LQ9].

wealthy.⁴⁶⁵ Reparations, moreover, remain a contentious matter.⁴⁶⁶ And a reform as simple as placing a 36 percent interest rate cap on payday loans has yet to come up for a vote in Congress.⁴⁶⁷ Meanwhile, the structural hurdles of sixty votes in the Senate and the lobbying power of the financial interests involved

cannot be underestimated.⁴⁶⁸ Political party differences between presidential administrations, too, mean that commitment to regulation efforts can ebb and flow.⁴⁶⁹ Moreover, any race-based solutions will face constitutional hurdles in the

Moreover, any race-based solutions will face constitutional nurdles in the courts.⁴⁷⁰ If the federal government cannot show that it actively or passively participated in past discrimination, race-based remedial measures violate equal protection principles. While addressing historic discrimination in general terms was once allowed, over time courts have begun to require more detailed explanations, along with substantial data to show that programs increase diversity.⁴⁷¹ And as the United States has moved further away from the enactment of civil rights laws, courts have become increasingly impatient with race-conscious government efforts to tackle racism. There is a sense that many

466. See Toplines and Crosstabs April 2021 Slavery Reparation Payments, BLM, and DC, Puerto Rico Statehood, UNIV. MASS. AMHERST (Apr. 29, 2021), https://polsci.umass.edu/toplines-and-crosstabs-april-2021-slavery-reparation-payments-blm-and-dc-puerto-rico-

^{465.} See, e.g., Annika Olson, *The Plan to Tax Billionaires Like Elon Musk Is Dead—For Now. Why It Should Be Revived*, NBC NEWS (Oct. 28, 2021), https://www.nbcnews.com/think/politicspolicy/plan-tax-billionaires-elon-musk-dead-now-revived-rcna3981 [https://perma.cc/3MGT-9G36]; Tim Ryan Williams, *Americans Are Ready to Tax the Rich*, VOX (Oct. 16, 2021), https://www.vox.com/2021/10/15/22723457/build-back-better-poll-democrats-bill-infrastructure-taxes [https://perma.cc/A9CK-6E6U].

statehood?_gl=1*13d6jwp*_ga*NDI5NzE3OTcwLjE2NDM5MDg2MTE.*_ga_21RLS0L7EB*MT Y0MzkwODYxMC4xLjEuMTY0MzkwODcyMi4w&_ga=2.200880366.115321471.1643908611-429717970.1643908611 [https://perma.cc/RW7D-EDG7] (finding that nearly two-thirds of Americans oppose the idea of providing reparations).

^{467.} The proposal is still being considered by the Committee on Banking, Housing, and Urban Affairs. *See All Actions—S.2508—117th Congress (2021–2022): Veterans and Consumers Fair Credit Act*, S.2508, CONGRESS.GOV, https://www.congress.gov/bill/117th-congress/senate-bill/2508/all-actions?r=59&overview=closed&s=1#tabs [https://perma.cc/ZW4H-WRQ3].

^{468.} For some examples of fintech lobbying efforts, see, e.g., Benjamin Pimentel, *Fintech's First Trade Association Tackles a Rule-Making Wave*, PROTOCOL (Aug 10, 2021), https://www.protocol.com/fintech/fta-fintech-lobby [https://perma.cc/4ZNH-9SHV]; Jim Saksa, *Fintech Lobby Spending Targets Cryptocurrency Taxation*, ROLL CALL (Apr. 30, 2019), https://rollcall.com/2019/04/30/fintech-lobby-spending-targets-cryptocurrency-taxation/ [https://perma.cc/7DZ8-5NJH].

^{469.} See Clyde Wayne Crews, Jr., *How Donald Trump Has Cut Regulation—But Also Added It*, FORBES (June 29, 2020), https://www.forbes.com/sites/waynecrews/2020/06/29/how-donald-trump-has-cut-regulationbut-also-added-it/?sh=4376e2c230d3 [https://perma.cc/BHA5-M5HW].

^{470.} For a recent example, see Maynard, *Biden's Gambit, supra* note 424, at 675–79 (explaining that courts struck down two race-based programs in the American Rescue Plan Act).

^{471.} *See, e.g.*, Parents Involved in Cmty. Schs. v. Seattle Sch. Dist. No. 1, 551 U.S. 701, 702–03 (2007) (upholding the use of race-conscious objectives but striking down programs by Seattle Public Schools and Jefferson County Schools).

judges expect racism to be "fixed" by a certain time.⁴⁷² Some scholars have tried to overcome these constitutional obstacles by offering race-neutral proposals that disproportionately benefit racial minorities. Yet, as several scholars have argued, tackling structural racism will require at least some race-based programs.⁴⁷³

CONCLUSION

Ultimately, no single approach will solve wealth inequality and reform the fintech industry. Indeed, each of the categories of solutions suggested above are critical to reducing wealth inequality. If each solution is taken on its own, though, actors could continue to exploit the other weaknesses identified in this Article. Without comprehensive reforms, the effects of the official era of redlining, and the more subtle forms of discrimination that persist today, will continue to negatively affect generations of Americans. Reforms must include changes to delivery of financial services, improvements to infrastructure that improve access to financial services, oversight of financial technologies to improve their ability to deliver on their promises, overhauls of tax policies that favor the wealthy, and wealth transfers to disadvantaged individuals. Without these sweeping, large-scale reforms, progress toward wealth equality will be unacceptably slow.⁴⁷⁴

Although we are clear-eyed about the many obstacles to enacting such reforms, those hurdles should not be the cause for complete pessimism. Human beings are terrible at predicting the future and cannot account for the political coalitions that will form moving forward. The optimism lies in acknowledging that inequality in general is not a genetic *fait accompli*. Rather, there are choices to be made and human ingenuity to be engaged in fixing these longstanding issues.

^{472.} Justice O'Connor revealed a similar sentiment in *Grutter* when she suggested a twenty-fiveyear limit on race-conscious affirmative action programs. *See* Grutter v. Bollinger, 539 U.S. 306, 343 (2003). Eighteen years later, the United States is not much further along.

^{473.} See, e.g., Samuel R. Bagenstos, Universalism and Civil Rights (with Notes on Voting Rights After Shelby), 123 YALE L.J. 2838, 2843 (2014); Maynard, Biden's Gambit, supra note 424, at 685–86.

^{474.} Derenoncourt et al., *supra* note 53, at 14 (showing that even under ideal conditions, racial wealth convergence will take hundreds of years).