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FINANCIAL INCLUSION, CRYPTOCURRENCY, AND AFROFUTURISM

Lynnise Phillips Pantin

ABSTRACT—As a community, Black people consistently face barriers to full participation in traditional financial markets. The decentralized nature of the cryptocurrency market is attractive to a community that has been historically and systematically excluded from the traditional financial markets by both private and public actors. As new entrants to any type of financial market, Black people have increasingly embraced blockchain technology and cryptocurrency as a path towards the wealth-building opportunities and financial freedom they have been denied in traditional markets. This Article analyzes whether the technology's decentralized system will lead to financial inclusion or increased financial exclusion. Without reconciling the racially discriminatory history or effects of the current central financial system, the innovative decentralized appeal to Black people will do little to overcome economic inequity. It may be possible that some cryptocurrencies can be tools for financial inclusion by improving economic outcomes and building wealth outside of traditional financial institutions, but without an intervention, a decentralized system will not necessarily lead to decentralized wealth.

The rise of cryptocurrency presents an opportunity to think about how to create a fairer, more inclusive financial system. Taken together with the financial exclusions of the past, cryptocurrency can be a vehicle through which we think about true financial inclusion. However, asking traditionally marginalized groups to participate in an extremely risky cryptocurrency market in pursuit of racial equity is an unrealistic solution given the legacy and reality of financial exclusion. A decentralized system cannot fix the systemic racial inequality that has been embedded in our financial systems. This Article proposes using an Afrofuturist framework in the shaping of policy toward cryptocurrency. An Afrofuturist paradigm pushes for systemic problems to be solved through wholesale systems change rather than tinkering at the margins. Moving forward using an Afrofuturist lens would facilitate a rethinking of our financial systems and the role of cryptocurrency as a portal for racial equity.

AUTHOR—This Article was presented at the 2022 Clinical Law Review Writers' Workshop at New York University Law School, the Fordham University School of Law's Center on Race, Law and Justice Workshop on Afrofuturism and the Law, and at the University of Alabama School of Law. I thank the facilitators and participants for their insightful comments and suggestions. For additional helpful comments and suggestions, I would like to thank Deborah Archer, Alina Ball, Priya Baskaran, Amber Baylor, Carliss Chatman, Bernice Grant, Gautam Hans, Daniel Harawa, Norrinda Hayat, Kate Judge, Ngozi Okidegbe, Lev Menand, Chris Morten, Dave Pozen, Tomica Saul, Helen Scott, Colleen Shanahan, and Tony Thompson. For truly exceptional research assistance, I thank my hardworking and diligent students, Kelly Ian Lei, Ray Lu, Leah Miano, and Celine Tsang.

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INTRODUCTION

In January 2022, New York City's newly elected Mayor Eric Adams announced that he would automatically convert his first three paychecks into Bitcoin and Ethereum.¹ The mayor of the nation's largest city was promoting cryptocurrency, a new form of currency that many had previously dismissed as a Ponzi scheme.² Accompanying the mayor's announcement was his hope that the city would become "the center of the cryptocurrency industry." His declaration reflected the increasing acceptance of digital currencies, which have generally been considered to be highly volatile financial products.⁴ Perhaps Mayor Adams's announcement signaled to the world that the age of cryptocurrency is here to stay.⁵

¹ Dana Rubinstein, Jonah E. Bromwich & Jeffery C. Mays, *Eric Adams, A Bitcoin Booster, Is Taking First Paycheck in Crypto*, N.Y. TIMES (Jan. 20, 2022), https://www.nytimes.com/2022/01/20/nyregion/eric-adams-bitcoin-cryptocurrency.html [https://perma.cc/QYS8-E5M5]. Bitcoin and Ethereum combined represent more than 60% of total cryptocurrency market capitalization. Press Release, Off. of Sci. & Tech. Pol'y, White House, Fact Sheet: Climate and Energy Implications of Crypto-Assets in the United States (Sept. 8, 2022), https://www.whitehouse.gov/ostp/news-updates/2022/09/08/fact-sheet-climate-and-energy-implications-of-crypto-assets-in-the-united-states/ [https://perma.cc/RG8W-Z2MR].

² Steven Zeitchik, *The Crypto-Skeptics' Voices Are Getting Louder*, WASH. POST (June 3, 2022, 7:00 AM), https://www.washingtonpost.com/business/2022/06/03/crypto-skeptics-growing/[https://perma.cc/VXC6-PKGU].

³ In a tweet, Mayor Adams announced that he would take his first three paychecks in the form of Bitcoin and proclaimed that "NYC is going to be the center of the cryptocurrency industry and other fast-growing, innovative industries!" Eric Adams (@ericadamsfornyc), TWITTER (Nov. 4, 2021, 12:26 PM), https://twitter.com/ericadamsfornyc/status/1456311827550384129 [https://perma.cc/J5EV-SHUS].

⁴ As of June 13, 2022, Bitcoin dropped 66% from its high in November 2021, contributing to a roughly \$2 trillion loss in the broader market. Elaine Yu, Joe Wallace & Paul Vigna, *Bitcoin Price Plunges as Crypto Lender Celsius Halts Withdrawals*, WALL ST. J. (June 13, 2022, 11:03 PM), https://www.wsj.com/articles/bitcoin-revisits-late-2020-levels-as-it-suffers-fresh-selloff-11655096332 [https://perma.cc/4YUY-RRCR].

⁵ As of July 2023, 130 countries are exploring or piloting central bank digital currencies (CBDCs), a digital form of a country's sovereign currency. *Central Bank Digital Currency Tracker*, ATL. COUNCIL, https://www.atlanticcouncil.org/cbdctracker/ [https://perma.cc/3E3Z-MXK8]. As of the time of publication, the United States has not yet pursued a CBDC, which would be a digital version of the U.S. dollar, but the Biden Administration has examined the possibility of issuing digital currency. Press Release, Alondra Nelson, Alexander Macgillivray & Nik Marda, Off. of Sci. & Tech. Pol'y, White House, Technical Possibilities for a U.S. Central Bank Digital Currency (Sept. 16, 2022), https://www.whitehouse.gov/ostp/news-updates/2022/09/16/technical-possibilities-for-a-u-s-central-bank-digital-currency/ [https://perma.cc/T86B-FA8T]; BD. of GOVERNORS OF THE FED. RSRV. SYS., MONEY AND PAYMENTS: THE U.S. DOLLAR IN THE AGE OF DIGITAL TRANSFORMATION (2022), https://www.federalreserve.gov/publications/files/money-and-payments-20220120.pdf [https://perma.cc/M2MQ-J9T2]. In 2021, El Salvador became the first country in the world to adopt cryptocurrency as legal tender. Jude Webber & Eva Szalay, *El Salvador Becomes First Country to Adopt Bitcoin as Legal Tender*, FIN. TIMES (June 9, 2021), https://www.ft.com/content/7b5blcc4-

Mayor Adams spread the gospel of cryptocurrency, and Black cryptocurrency adopters, wary of government-regulated markets and financial institutions, embraced the decentralized nature of digital currency. Cryptocurrency is digital currency. Cryptocurrency transactions are verified, and their records are maintained by a decentralized system that uses cryptography to securely transmit digital messages, rather than a centralized authority.6 Blockchain technology makes the use of cryptocurrency possible because the blockchain creates a digital public ledger of all associated transactions.⁷ The cryptocurrency market is a decentralized financial system built on this distributed ledger or blockchain technology. The blockchain contributes to cryptocurrency's appeal because transactions are ostensibly transparent and immutable.8 Cryptocurrency is not backed by the federal government or any central authority.9 Recognizing that government-supported pathways to wealth have been consistently accessible to mostly white Americans, Black cryptocurrency adopters have embraced cryptocurrency as a vehicle to create both greater agency and prosperity. They claim that the decentralized nature of the cryptocurrency market

50bb-437f-aa16-f106d2dbc1c7 [https://perma.cc/AZZ9-6GAY]. The Central African Republic adopted cryptocurrency as legal tender in 2022 but reversed its decision a year later. Jonathan Buck, *The Fall of Bitcoin in the Central African Republic: Why This Legal Tender Experiment Failed*, BITCOIN MAG. (Apr. 30, 2023), https://bitcoinmagazine.com/culture/why-bitcoin-failed-in-car [https://perma.cc/JL2M-XZ78].

⁶ Digital assets can mean any intangible product in the digital space that can be assigned a value. Cryptocurrency can be both an asset class and an industry. For purposes of this Article, "cryptocurrency" will be used to generally refer to cryptocurrencies, such as Bitcoin and Ethereum, and not the entire universe of cryptocurrencies that involve blockchains—the digital ledger systems that power digital currencies, and the layer of technology for things such as non-fungible tokens (NFTs), web3 applications, and decentralized finance.

⁷ In late 2008, Satoshi Nakamoto, a pseudonymous programmer, published a white paper introducing the idea that would become Bitcoin, the first ever cryptocurrency. SATOSHI NAKAMOTO, BITCOIN, BITCOIN: A PEER-TO-PEER ELECTRONIC CASH SYSTEM (2008), https://bitcoin.org/bitcoin.pdf [https://perma.cc/B5RU-WCTK]. Nakamoto describes how Bitcoin would use blockchain technology to keep track of and timestamp financial transactions. *Id.* The white paper was notable because, for the first time, technology, specifically blockchain technology, enabled individuals to send and receive money over the internet without needing to involve central authorities such as banks or third-party intermediaries (e.g., credit card companies, PayPal, or Venmo). *Id.* at 1.

⁸ It should be noted that although I use the terms "blockchain technology" and "digital ledger technology" interchangeably in this Article, which does not change the analysis in this Article, they are technically not synonymous. For a brief explanation of the software behind the technology, see Carla L. Reyes, *If Rockefeller Were a Coder*, 87 GEO. WASH. L. REV. 373, 379–82 (2019).

⁹ Note that the one exception is stablecoin, which is a type of cryptocurrency tied to real-world assets such as the dollar or gold markets. Garth Baughman, Francesca Carapella, Jacob Gerszten & David Mills, *The Stable in Stablecoins*, BD. OF GOVERNORS OF THE FED. RSRV. SYS.: FEDS NOTES (Dec. 16, 2022), https://www.federalreserve.gov/econres/notes/feds-notes/the-stable-in-stablecoins-20221216.html [https://perma.cc/UM55-TES2].

lends itself to a democratic,¹⁰ participatory, and inclusive ecosystem in contrast to the central financial system that has excluded and marginalized Black people.¹¹

Young Black entrepreneurs and technologists have jumped into the cryptocurrency space enthusiastically.¹² According to the Biden Administration, about "16 percent of adult Americans—approximately 40 million people—have invested in, traded, or used cryptocurrencies."¹³ Black Americans were more than twice as likely as white Americans to purchase cryptocurrency as their first investment in any financial market.¹⁴ To this community, blockchain technology is a disruptor of centuries-long oppression because the blockchain eliminates the role of centralized entities that have facilitated the community's exclusion from the traditional financial markets.¹⁵ But despite the excitement surrounding cryptocurrency as a path to financial inclusivity, this Article argues that

¹⁰ The definition of democracy is debated in the cryptocurrency space. For purposes of this Article, I use democracy to reference the idea that all persons have access to cryptocurrency and can theoretically "create" it.

While, in this Article, I reference "Black people" or the "Black community" throughout, in doing so I do not assume or imply that the Black community is monolithic. I acknowledge that Black immigrant communities, which include African and Caribbean communities, might engage with the U.S. financial system differently than the Black American community. Further, I acknowledge that even within the Black American community there are, of course, a range of different views, perspectives, and engagements with the banking system. For a discussion of racial essentialism and a critique of the monolithic treatment of Black people, see generally Raisa D'Oyley, Overrepresented and Under the Radar: Black Immigrants in Law School and the Legal Profession, 10 GEO. J.L. & MOD. CRIT. RACE PERSPS. 1 (2018); Eteena J. Tadjiogueu, Fifty Shades of Black: Challenging the Monolithic Treatment of "Black or African American" Candidates on Law School Admissions Applications, 44 WASH. U. J.L. & POL'Y 133 (2014); and Regina Austin, "The Black Community," Its Lawbreakers, and a Politics of Identification, 65 S. CAL. L. REV. 1769 (1992).

¹² Almost 40% of Black investors under the age of forty own cryptocurrency compared with 29% of white investors. About 25% of Black Americans own cryptocurrency compared to 15% of whites, according to a survey released by Ariel Investments and Charles Schwab, two financial services companies. See Ariel-Schwab Black Investor Survey, SCHWAB MONEYWISE (2022), https://www.schwabmoneywise.com/tools-resources/ariel-schwab-survey-2022 [https://perma.cc/5YSC-CR9P]; see also Kristen N. Johnson, Decentralized Finance: Regulating Cryptocurrency Exchanges, 62 WM. & MARY L. REV. 1911, 1946 (2021) ("[E]ntrepreneurs continue to originate a significant percentage of cryptocurrency offerings").

¹³ Press Release, White House, Fact Sheet: President Biden to Sign Executive Order on Ensuring Responsible Development of Digital Assets (Mar. 9, 2022), https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/09/fact-sheet-president-biden-to-sign-executive-order-on-ensuring-responsible-innovation-in-digital-assets [https://perma.cc/YM5A-DYRA].

¹⁴ Ariel-Schwab Black Investor Survey, supra note 12.

¹⁵ For a report showing how members of the Black community are less likely to trust financial institutions than their white counterparts, see generally EDELMAN, EDELMAN TRUST BAROMETER 2021: SPECIAL REPORT: ADDRESSING RACISM IN AMERICA'S FINANCIAL SYSTEM (2021), https://www.edelman.com/sites/g/files/aatuss191/files/2021-08/TrustBarometer_AddressingRacism AmericaFinancialSystem_Report_Final.pdf [https://perma.cc/SD7L-N52Z].

cryptocurrencies are unlikely to repair the harms caused by systemic racism and financial exclusion. Only an ambitious and transformative governmental intervention could hope to remedy those harms, such as implementing an Afrofuturist framework into the financial markets.

Why are some young Black people drawn to these relatively new and risky assets? Their investment is, in part, a reaction to their historic and systemic exclusion. ¹⁶ Financial exclusion has had the effect of underdeveloping and undervaluing the Black community. ¹⁷ For decades, Black people have faced multiple, dynamic forms of systemic discrimination within financial institutions. As a result of discriminatory practices, Black people were prevented from full participation in the U.S. economy, leading to a notably growing racial wealth disparity. ¹⁸ When measuring economic indicators, including income, homeownership, home equity, investments, or wealth, Black consumers are consistently at the very bottom of all economic metrics. ¹⁹ The policies of exclusion at the hands of the central financial systems have hampered the ability for Black people to build wealth and pursue economic opportunities. ²⁰

Based on past systemic racism and discrimination, it is understandable that a marginalized Black community would embrace this new decentralized financial system made possible by blockchain technology. Arguably, such technology has the potential to avoid the inequities and discrimination that were built into central finance because the decentralized structure lends itself to increased equity and freedom

¹⁶ KEEANGA-YAMAHTTA TAYLOR, RACE FOR PROFIT: HOW BANKS AND THE REAL ESTATE INDUSTRY UNDERMINED BLACK HOMEOWNERSHIP 255–62 (2019); see also Hilary J. Allen, Hilary Allen on the Superficial Allure of Crypto, IMF PODCASTS (Oct. 20, 2022), https://www.imf.org/en/News/Podcasts/All-Podcasts/2022/10/19/hilary-allen-on-crypto [https://perma.cc/WS9K-SSTH] (using the term "predatory inclusion" to describe the phenomenon of financial institutions and startups using the "financial inclusion" narrative as a form of marketing to get more consumers into cryptocurrency markets).

¹⁷ See generally Manning Marable, How Capitalism Underdeveloped Black America: Problems in Race, Political Economy and Society (1983).

¹⁸ Ellora Derenoncourt, Chi Hyun Kim, Moritz Kuhn & Moritz Schularick, Wealth of Two Nations: The U.S. Racial Wealth Gap, 1860-2020, at 3 (Nat'l Bureau of Econ. Rsch., Working Paper No. 30101, 2022), https://www.nber.org/system/files/working_papers/w30101/w30101.pdf [https://perma.cc/UTM9-JCWT]; Aditya Aladangady & Akila Forde, Wealth Inequality and the Racial Wealth Gap, BD. OF GOVERNORS OF THE FED. RSRV. SYS.: FEDS NOTES (Oct. 22, 2021), https://www.federalreserve.gov/econres/notes/feds-notes/wealth-inequality-and-the-racial-wealth-gap-20211022.html [https://perma.cc/Z2HE-FCXQ].

¹⁹ Aladangady & Forde, *supra* note 18.

²⁰ Kristen Broady, An Analysis of Financial Institutions in Black-Majority Communities: Black Borrowers and Depositors Face Considerable Challenges in Accessing Banking Services, BROOKINGS (Nov. 2, 2021), https://www.brookings.edu/research/an-analysis-of-financial-institutions-in-Black-majority-communities-Black-borrowers-and-depositors-face-considerable-challenges-in-accessing-banking-services/ [https://perma.cc/2H6E-GQ3K].

from discrimination. For example, cryptocurrency enables users to bypass traditional central banking systems when applying for and receiving a loan by using their cryptocurrency as collateral and connecting their digital "wallets" to lending platforms.

Although credit checks, criminal background checks, or screenings are not needed for cryptocurrency transactions, cryptocurrency exchanges are increasingly following "Know Your Customer" (KYC)²¹ protocol.²² In addition, cryptocurrency exchanges typically require a linked bank account. Yet the idea of bypassing the gatekeeping mechanisms of traditional financial institutions remains compelling.²³

prohibits discrimination in any aspect of a credit transaction. It applies to any extension of credit, including extensions of credit to small businesses, corporations, partnerships, and trusts.

The ECOA prohibits discrimination based on

- Race or color,
- Religion,
- National origin,
- Sex.
- Marital status,
- Age (provided the applicant has the capacity to contract),
- The applicant's receipt of income derived from any public assistance program, or
- The applicant's exercise, in good faith, of any right under the Consumer Credit Protection Act.

FDIC, FDIC CONSUMER COMPLIANCE EXAMINATION MANUAL V—7.1 (2022), https://www/fdic.gov/resources/supervision-and-examination/consumer-compliance-examination-manual/documents/5/v-7-1.pdf [https://perma.cc/SC2H-CVE9]; *see infra* Section I.D (describing how discriminatory algorithmic systems have been used by the lending and credit industry).

²¹ KYC protocol refers to a due diligence process that banks and other financial services companies employ to confirm their customers' identities and to prevent fraud. Jennifer Lowe, What Is KYC? Financial Regulations to Reduce Fraud, PLAID (Nov. 2, 2022), https://plaid.com/resources/banking/what-is-kyc/ [https://perma.cc/9BE5-CQCU]. Further, anti-money laundering laws require financial institutions to verify that their clients are not using their services to engage in money laundering, fraudulent, terrorist, or other criminal activities. For purposes of meeting KYC requirements, financial institutions may verify their clients' identities using identification cards or other document, face, or biometric verification. KYC regulatory compliance helps prevent fraud, money laundering, and terrorism financing. Id.; Benedict George, What Is KYC and Why Does It Matter for Crypto?, COINDESK (May 11, 2023, 1:04 PM), https://www.coindesk.com/learn/what-is-kyc-and-why-does-it-matter-for-crypto [https://perma.cc/NQ9T-C9RV].

²² The perception of racial bias in KYC checks remains a concern for many. *See* EDELMAN, *supra* note 15, at 9 (reporting that the Black and Latinx community perceive prejudice in credit criteria to determine eligibility to be biased or discriminatory).

²³ The Equal Credit Opportunity Act

The legacy of financial exclusion has also bred a lack of trust in traditional finance institutions and systems.²⁴ This lack of trust also helps to explain the appeal of the decentralized cryptocurrency market. At the same time, the value of cryptocurrency investments plunged in the last quarter of 2022, and various exchanges collapsed.²⁵ These losses in the cryptocurrency market have significant consequences for those relying on that market as a path to financial security. Black Americans' relatively high "exposure to cryptocurrencies has left them more vulnerable to the financial downturn," as they have less wealth to absorb the financial shock.²⁶

Black technologists have been among the first to adopt cryptocurrencies, and many have done so in the name of racial equity. The high rate of participation in cryptocurrency by young Black people is not so much a cure for systemic racism in the financial industry as it is a symptom.²⁷ It is a form of "predatory inclusion."²⁸ Predatory inclusion is a term used to describe how Black homebuyers were granted access to conventional real estate products and mortgage financing after the passage of the Fair Housing Act, but on more expensive and comparatively unequal terms, as opposed to the products offered in the suburbs.²⁹ Those unfair terms were justified because of poverty and dilapidation in urban areas. In the same way that marginalized homebuyers were vulnerable to unfair mortgage terms, marginalized communities are vulnerable to the appeal of cryptocurrencies.

The cryptocurrency market may hold some potential for a few to build wealth, but the reality of the market does not rise to the ideal of a democratic, decentralized financial utopia. It is a risky investment for

²⁴ Aria Florant, JP Julien, Shelley Stewart, Nina Yancy & Jason Wright, *The Case for Accelerating Financial Inclusion in Black Communities*, MCKINSEY & CO. (Feb. 25, 2020), https://www.mckinsey.com/industries/social-sector/our-insights/the-case-for-accelerating-financial-inclusion-in-black-communities [https://perma.cc//JZC-AVSU].

²⁵ Taylor Nicole Rogers, *Crypto Collapse Reverberates Widely Among Black American Investors*, Fin. TIMES (July 5, 2022), https://www.ft.com/content/47d338e2-3d3c-40ce-8a09-abfa25c16a7f [https://perma.cc/VF2K-DR5E] ("The total market capitalisation of cryptocurrencies has plunged below \$1 [trillion] from more than \$3.2 [trillion] last year.").

 $^{^{26}}$ Id.

²⁷ See Michelle Singletary, Crypto Is Not the Key to Black Generational Wealth, WASH. POST (Apr. 23, 2023), https://www.washingtonpost.com/business/2023/04/26/cryptocurrency-black-generational-wealth/ [https://perma.cc/Y2W5-G6Y4] ("But for many Black Americans, it's also being pitched as the answer to decades of financial disenfranchisement.").

²⁸ See supra note 16 (citing to sources explaining predatory inclusion).

²⁹ The Fair Housing Act was enacted as Title VIII of the Civil Rights Act of 1968, and it was codified at 42 U.S.C. §§ 3601–19, with penalties for violation at § 3631. It is enforced by the U.S. Department of Housing and Urban Development. *Id.* § 3612.

marginalized communities rather than an escape from the pathologies of the traditional financial markets.³⁰

Little scholarly attention has been given to the demographics and motivations of early cryptocurrency adopters or to the racial dynamics in the cryptocurrency space. This Article gives the intersection of cryptocurrency and racial dynamics much needed attention and examines blockchain technology's superficial promise to curtail exclusionary practices of the current centralized financial system. It analyzes Black people's embrace of the cryptocurrency market and related implications. As cryptocurrency policy is shaped, the historic effects of banking and financial policy undergirded by structural racism looms. At the same time, some scholars imagine and create a future where prescriptive theories of change have come to pass. Through the lens of Afrofuturism, this Article uses a futures analysis of cryptocurrency to take on the task of examining how to implement financial inclusion in a system grounded in exclusion.

This Article proceeds in three parts. Part I outlines the history of economic exclusion, chronicling the ways Black people have been systematically prevented from building intergenerational wealth. This Part documents how the legacy of financial exclusion left Black communities distrustful of financial institutions and how, as a result, these communities developed an alternative or underground economy on the margins of the financial system. This Part also describes how financial technology and the use of algorithms in the financial system exacerbated this distrust. Part II examines the cryptocurrency movement and the implications of the decentralized market. This Part describes how the theory of cryptocurrency responds to the financially exclusionary environment both philosophically and practically. It also analyzes the challenges and opportunities of government and private market strategies to cryptocurrency. Lastly, Part III uses an Afrofuturist framework to develop a theory and path to financial inclusion in the cryptocurrency ecosystem, as well as the current traditional financial system.

I. THE HISTORY AND LEGACY OF FINANCIAL EXCLUSION

Stark disparities in wealth between Black and white Americans continue to persist in American society:

The racial wealth gap is larger today than it was when the United States passed the Civil Rights Act of 1964. The average white family currently

³⁰ Singletary, *supra* note 27 ("Crypto investing is extremely high risk.... As an investment, it's closer to gambling.").

holds about 10 times the wealth of a Black one, and the average income from the labor of white families stands at about two times that of Black ones.³¹

The racial wealth gap has only continued to increase over the past few decades.³² In 2019, the median white family's wealth was around \$188,200 compared to \$24,100 for a Black family.³³ This implicates that the racial wealth gap "leaves many Black families at a significant economic disadvantage, with less financial security and less ability to fully participate in the economy."³⁴ One possible inference drawn from Black Americans having less wealth than their white counterparts is that Black Americans are less likely to be represented in the financial services market. This Part contextualizes financial exclusion by providing a brief history of discriminatory events, policies, and practices that have barred financial inclusion for Black people, beginning with the period of forced migration to the United States in the seventeenth and eighteenth centuries. This Part also documents the mechanisms that have historically inhibited the accumulation of intergenerational wealth and economic power in the Black community.

A. Exclusion from Building Intergenerational Wealth and Economic Power

The economic harm to Black people began with slavery itself, as enslaved Black people generally were barred from earning money, accessing capital, and owning property.³⁵ Indeed, even basic access to rudimentary education and stable family structure were denied. The transatlantic slave trade resulted in millions of enslaved Africans arriving in the United States from 1619 until the early part of the nineteenth century.³⁶ The forced migrants and their descendants were subject to

³¹ Yemi Rose, *The Racial Wealth Is Dizzying. Its Best Solution, Less So*, ROOT (Mar. 2, 2020), https://www.theroot.com/the-racial-wealth-gap-is-dizzying-its-best-solution-l-1842032034 [https://perma.cc/U8W2-FLQ4].

³² Aladangady & Forde, *supra* note 18.

³³ Emily Moss, Kriston McIntosh, Wendy Edelberg & Kristen Broady, *The Black-White Wealth Gap Left Black Households More Vulnerable*, BROOKINGS (Dec. 8, 2020), https://www.brookings.edu/blog/up-front/2020/12/08/the-black-white-wealth-gap-left-black-households-more-vulnerable/ [https://perma.cc/2QHB-6FQ9].

³⁴ Florant et al., *supra* note 24.

³⁵ WILLIAM A. DARITY JR. & A. KIRSTEN MULLEN, FROM HERE TO EQUALITY: REPARATIONS FOR BLACK AMERICANS IN THE TWENTY-FIRST CENTURY 43 (2020); MELVIN L. OLIVER & THOMAS M. SHAPIRO, BLACK WEALTH / WHITE WEALTH: A NEW PERSPECTIVE ON RACIAL INEQUALITY 39 (2d ed. 2006).

 $^{^{36}}$ Edward E. Baptist, The Half Has Never Been Told: Slavery and the Making of American Capitalism, at xiv (2014).

horrific physical and mental abuse.³⁷ Although their labor was the source of much of the nation's wealth, the enslaved could not benefit from the fruits of their own labor, including the substantial wealth generated by the economy of slavery.³⁸

1. Reconstruction and Its Aftermath

In 1865, Congress chartered the Freedman's Savings and Trust Co. (Freedman's Bank), the purpose of which was to assist formerly enslaved people in becoming financially independent.³⁹ According to the Office of the Comptroller of the Currency (OCC), the bank attracted millions of dollars from tens of thousands of formerly enslaved depositors as a result of the Freedmen's Bureau helping to publicize its existence.⁴⁰ In addition to individuals, many Black churches and institutions held accounts in the bank as well.⁴¹ Ultimately, thirty-seven branches of the bank were established across the country and over 100,000 people opened accounts. Freedman's Bank built headquarters in Washington, D.C., which cost \$200,000 to construct and furnish.⁴²

This expense contributed to some of the bank's financial problems, already exacerbated by the volatility of the postwar economy, which led to the Panic of 1873.⁴³ According to the OCC, the rapid contraction of the economy pushed down the yield on government securities, which formed the primary component of the bank's investment portfolio and reduced depositors' returns.⁴⁴ The bank was managed by corrupt leaders who encouraged Congress to amend its charter to allow management to invest depositors' savings into risky railroad companies and real estate, which

³⁷ See generally id. For firsthand accounts of slavery, see Born in Slavery: Slave Narratives from the Federal Writers' Project, 1936 to 1938, Libr. OF CONG. (2001), https://www.loc.gov/collections/slave-narratives-from-the-federal-writers-project-1936-to-1938/about-this-collection/[https://perma.cc/3EE2-Z7TH].

³⁸ See Cheryl I. Harris, Whiteness as Property, 106 HARV. L. REV. 1707, 1716 (1993) (discussing the hyperexploitation of Black labor and the treatment of Black people as property).

³⁹ The Freedman's Savings Bank: Good Intentions Were Not Enough; A Noble Experiment Goes Awry, OFF. OF THE COMPTROLLER OF THE CURRENCY, https://www.occ.treas.gov/about/who-we-are/history/1863-1865/1863-1865-freedmans-savings-bank.html [https://perma.cc/HQB4-HJT8].

⁴⁰ *Id*.

⁴¹ Life of Freedman's Bank, U.S. DEP'T OF THE TREASURY, https://home.treasury.gov/about/history/freedmans-bank-building/life-of-freedmans-bank [https://perma.cc/T2ZA-HDBW].

⁴² *Id.*; OFF. OF THE COMPTROLLER OF THE CURRENCY, *supra* note 39.

⁴³ Financial Panic of 1873, U.S. DEP'T OF THE TREASURY, https://home.treasury.gov/about/history/freedmans-bank-building/financial-panic-of-1873 [https://perma.cc/VMA9-FY59].

⁴⁴ OFF. OF THE COMPTROLLER OF THE CURRENCY, *supra* note 39.

only served to benefit the leaders themselves.⁴⁵ After the economic panic in 1873, the bank could not recover its investments and the bank's trustees voted to close the bank. The closure of the Freedman's Bank on June 29, 1874, left "more than 60,000 depositors with nearly \$3 million in losses."⁴⁶ For the newly emancipated Black community, the devastating financial losses stemming from their first encounter with mainstream banking services sowed the seeds of distrust in formal financial institutions.

During Reconstruction, Black businesses began to develop, and a Black business class emerged, with many formerly enslaved people building businesses around skillsets they developed during slavery. Booker T. Washington's autobiographical memoir, *Up from Slavery*, outlined his support for Black entrepreneurialism as a way towards progress against exclusion and marginalization. He, and others like him, promoted the economic development of the Black community by bringing together many successful Black businesspeople across the country. ⁴⁸ The first three decades of the twentieth century were the golden age for

⁴⁵ The Office of the Comptroller of the Currency (OCC) was created in 1863, just two years before the Freedman's Bank. The OCC was tasked with supervising the national banks it chartered. However, the Freedman's Bank's charter explicitly subjected it not to the authority of the OCC, but to Congress itself. For a summary of the history of the Freedman's Bank, see U.S. DEP'T OF THE TREASURY, *supra* note 41, and OFF. OF THE COMPTROLLER OF THE CURRENCY, *supra* note 39, which explain how the bank's repository was largely co-opted by the First National Bank, which offloaded its liabilities onto the Freedman's Bank books with no objection from the latter's all-white trustees.

⁴⁶ Why a 19th-Century Bank Failure Still Matters, UCHICAGO NEWS (Sept. 11, 2020), https://news.uchicago.edu/story/why-19th-century-bank-failure-still-matters [https://perma.cc/ZB78-7Z6Y]. After the Freedman's Bank moved its headquarters from New York City to Washington, D.C., the new trustees, composed of local bankers, politicians and businessmen, took control and urged Congress to amend the bank's charter. Following the amendment, the trustees invested in real estate projects and railroads, made risky loans to friends, and transferred bad loans from other banks they oversaw to Freedman's Bank. Freedman's Bank Demise: "Married to a Corpse"—The Bank's Demise, U.S. DEP'T OF THE TREASURY, https://home.treasury.gov/about/history/freedmans-bank-building/freedmans-bank-demise [https://perma.cc/2EK5-L6BR].

⁴⁷ See W. Sherman Rogers, The Black Quest for Economic Liberty: Legal, Historical, and Related Considerations, 48 How. L.J. 1, 45–46 (2004).

⁴⁸ See, e.g., JULIET E.K. WALKER, THE HISTORY OF BLACK BUSINESS IN AMERICA: CAPITALISM, RACE, ENTREPRENEURSHIP 183 (1998) (discussing W. E. B. Du Bois' emphasis "on the importance of black business as a springboard for racial toleration: "We must cooperate or we are lost. Ten million people who join in intelligent self-help can never be ignored or mistreated""). In the early 1900s, "many companies owned by Black entrepreneurs (which primarily served Black customers) thrived in a country starkly divided along racial lines. These companies included not only small local shops but also organizations with regional, national, and international reach." Leon C. Prieto & Simone T.A. Phipps, How 20th-Century Black Business Leaders Envisioned a More Just Capitalism, HARV. BUS. REV. (Apr. 7, 2021), https://hbr.org/2021/04/how-20th-century-black-business-leaders-envisioned-a-more-just-capitalism [https://perma.cc/EC9V-WZ2V].

Black-owned businesses in the United States.⁴⁹ Following a model of collective advancement, self-determination, and financial success through entrepreneurship,⁵⁰ Black people built businesses around day labor, local moving, hairdressing and barbering services, catering, and performing when formal jobs were unavailable or the wages were inadequate for survival.⁵¹

Despite the path laid out by those Black leaders of the Reconstruction Era who put faith in entrepreneurship and business ownership as a means to true emancipation, Black business and Black economic growth would soon be stunted by the racial backlash that followed. Racial segregation, Jim Crow, and the establishment and enforcement of Black Codes would undermine any hope of systemic Black economic opportunity.⁵²

2. Segregation and Black Economic Power

By the end of the nineteenth century, racial segregation was the law of the land.⁵³ Deep residential segregation had the effect of concentrating poverty, facilitating the divestment of public and private institutions from the communities where Black people lived, and confining Black people

⁴⁹ WALKER, *supra* note 48, at 182–83 (describing 1900–1930 as a golden era for Black business and explaining that as Black business grew, some in the Black community built up economic power through business ownership). In 1863, there were 2,000 Black-owned firms; in 1875, there were 4,000 firms and in 1883, there were 10,000 firms. The golden years of Black business ownership were from 1919–1929 when there were 70,000 firms nationwide. *See* U.S. DEP'T OF COM. BUREAU OF THE CENSUS, THE SOCIAL AND ECONOMIC STATUS OF THE BLACK POPULATION IN THE UNITED STATES: AN HISTORICAL VIEW, 1790–1978, 78 (1979); *see also* Prieto & Phipps, *supra* note 48 (noting that little is known about the golden age of Black business and Black business thinkers because systemic prejudices meant that these individuals and their thinking were omitted from most textbooks and leadership workshops, as well as from public consciousness).

⁵⁰ This model was a path outlined by Black activists and scholars in that era, such as Frederick Douglass, Booker T. Washington, Anna J. Cooper, and W. E. B. Du Bois. In 1900, Booker T. Washington founded the National Negro Business League. The league supported Black entrepreneurs and helped them start and grow their businesses. Six hundred chapters of the National Negro Business League were established across the United States. See JOHN SIBLEY BUTLER, ENTREPRENEURSHIP AND SELF-HELP AMONG BLACK AMERICANS: A RECONSIDERATION OF RACE AND ECONOMICS, 71–76 (2005).

⁵¹ See Rogers, supra note 47, at 59–61, 118.

⁵² The ways in which Black entrepreneurs and businesses have been financially excluded tracks the way individuals have been financially excluded. Exclusionary practices have not only prevented the accumulation of intergenerational wealth for individuals but has also denied financial resources to Black business owners and entrepreneurs. In fact, there is a great deal of overlap between the barriers faced by individuals and the barriers faced by Black business owners. See Steven J. Gold, A Critical Race Theory Approach to Black American Entrepreneurship, 39 ETHNIC & RACIAL STUDS. 1697, 1698–1703 (2016) (finding that Black people have not developed levels of entrepreneurship large enough to address their economic challenges).

 $^{^{53}}$ See generally Plessy v. Ferguson, 163 U.S. 537 (1896) (establishing legality of the separate but equal doctrine).

to economically depressed neighborhoods isolated from opportunity.⁵⁴ Black people living in segregating communities were denied access to effective education, sustaining work, and capital.⁵⁵

As a central strategy in their efforts to rebuild white supremacy after Reconstruction, many state legislatures enacted the Black Codes—laws designed to both limit the freedom of Black people and provide for their availability as a source of cheap labor.⁵⁶ Black Codes effectively continued enslavement for many Black people by severely restricting their rights and movements and exploiting their labor. For example, many states enacted vagrancy and antienticement laws that were used as pretense for local law enforcement to arrest Black people and compel them to work.⁵⁷ Some of these laws, for example, limited work for Black people without licenses to work, which were often issued annually.⁵⁸ White citizens could work without obtaining these licenses. The license requirement placed an additional burden on Black citizens to access economic power or the right to work. The Black Codes are an example of a number of practices and policies that were put into place to reduce and restrain Black economic power.⁵⁹

Throughout the nineteenth and twentieth centuries, Jim Crow effectively segregated Black people in communities of concentrated poverty, isolated from economic opportunity.⁶⁰ Jim Crow not only restricted where Black people could live, learn, and play—racist laws also

⁵⁴ See RICHARD ROTHSTEIN, THE COLOR OF LAW 154, 195–97 (2017).

⁵⁵ See Charles J. Ogletree Jr., Repairing the Past: New Efforts in the Reparations Debate in America, 38 HARV. C.R.-C.L. L. REV. 279, 284, 311 (2003).

⁵⁶ For a description of convicts in forced labor camps and enforcement of various states' Black Codes, see generally DOUGLAS A. BLACKMON, SLAVERY BY ANOTHER NAME: THE RE-ENSLAVEMENT OF BLACK AMERICANS FROM THE CIVIL WAR TO WORLD WAR II (2008).

⁵⁷ Jennifer Roback, *Southern Labor Law in the Jim Crow Era: Exploitative or Competitive?*, 51 U. Chi. L. Rev. 1161, 1163–69 (1984) (describing southern vagrancy laws implemented after 1865, which were designed to prevent newly freed Black people from being unemployed or not working and antienticement laws that prevent employers from "enticing" a worker away from employment with higher wages). While some of these enticement statutes have been repealed, a good number are still on the books. *See, e.g.*, MISS. CODE ANN. § 97-23-29 (1972) (providing an antienticement law); N.C. GEN. STAT. § 14-358 (1980) (providing misdemeanor punishment for a tenant or cropper willfully abandoning crops).

⁵⁸ MARABLE, *supra* note 17, at 143 (providing an example of an 1865 South Carolina law declaring that "no person of color shall pursue or practice the art, trade, or business of an artisan mechanic or shopkeeper, or any other trade, employment or business . . . on his own account and for his own benefit until he shall have obtained a license which shall be good for one year only.").

⁵⁹ See OLIVER & SHAPIRO, supra note 35, at 139 (delineating the institutional and policy factors that generate wealth inequality and citing the Black Codes as one of those factors).

⁶⁰ Jim Crow is a policy of blatant social exclusion that created or enforced laws that promoted racial segregation and racial hierarchy between the end of Reconstruction in 1877 and the beginning of the Civil Rights Movement in the 1950s.

restricted Black business owners from accessing capital, training, and technology. These segregationist policies effectively restricted Black people to Black neighborhoods and prevented Black-owned businesses from competing outside of Black neighborhoods. ⁶¹ At the same time, government-sponsored suburbanization allowed white residents to move away from communities with Black residents and Black business owners. Following the passage of the Interstate Highway Act, the development of the nation's highways was a potent tool for facilitating continued white flight from the nation's cities. These highways were often built through and around vibrant Black communities, destroying Black-owned businesses and further isolating those communities from economic opportunity. ⁶²

Historians and scholars have argued that although some Black-owned businesses were harmed by segregation, there is evidence that other Black-owned businesses benefited from segregation, such as through jobs for Black teachers or certain housing and schooling opportunities. Yet, Black business owners received little benefit from participating in segregated local economies. The relegation of Black-owned businesses to Black neighborhoods, the destruction of vibrant Black local economies in the name of "slum clearance," and the systemic denial of capital and business opportunities to Black entrepreneurs evince patterns of structural racism occurring over time. These patterns negatively affected Black entrepreneurs and carryover to the present day.

The growth of Black economic power was sharply curtailed after Reconstruction and well into the twentieth century by incidents of anti-Black and state-sanctioned violence against flourishing businesses and

⁶¹ See, e.g., JAMES W. LOEWEN, SUNDOWN TOWNS: A HIDDEN DIMENSION OF AMERICAN RACISM 15, 99 (2005) (documenting the existence of white towns across the United States that created laws excluding Black Americans and other minority social groups).

⁶² See Deborah N. Archer, Transportation Policy and the Underdevelopment of Black Communities, 106 Iowa L. Rev. 2125, 2134-41 (2021) (describing how Black small business communities are often targeted for redevelopment through federal programs or suffer because of violent acts such as in Tulsa or neglect through suburbanization).

⁶³ Davison M. Douglas, *The Limits of Law in Accomplishing Racial Change: School Segregation in the Brown North*, 44 UCLA L. REV. 677, 713 n.213 (1997); *see* W. E. B. Du Bois, *The Tragedy of "Jim Crow,"* 26 CRISIS 169, 170 (1923) (noting opposition of NAACP to northern school segregation); *see also* Alex M. Johnson Jr., *Bid Whist, Tonk, and* United States v. Fordice: *Why Integrationism Fails African-Americans Again*, 81 CALIF. L. REV. 1401, 1432 (1993); Alex M. Johnson Jr., *How Race and Poverty Intersect to Prevent Integration: Destabilizing Race as a Vehicle to Integrate Neighborhoods*, 143 U. PA. L. REV. 1595, 1598 n.10 (1997) ("[I]n the analogous context of postsecondary education, I take the position that although integration may be normatively positive for society and therefore something that should be encouraged, it should be recognized and accepted that positive benefits flow from maintaining segregated environments as long as those segregated environments, including housing, are freely chosen by Blacks.").

communities.⁶⁴ These incidents conveyed a resentment of Black economic achievement and a goal of elimination of Black power and prosperity.⁶⁵

3. Discrimination in Housing Markets

The fact and the duration of homeownership are two of the single most important indicators of wealth growth.66 In the 1930s, as part of the New Deal, the federal government initiated programs to combat the Great Depression and ignite a stagnant economy.⁶⁷ Many of these federal programs created barriers to accessing wealth through either discriminatory practices, or unequal access to opportunities or legal protections.⁶⁸ For example, in an effort to stimulate the mortgage and credit markets under the New Deal, Congress created the Federal Housing Administration (FHA) for the purpose of insuring mortgages.⁶⁹ The FHA created national lending standards and extended insurance against default to lenders who originated loans. When making loans, the FHA and lending banks relied on a rudimentary and simplistic rating system based on color-coded maps provided by the Homeowners' Loan Corporation (HOLC). Neighborhoods that were marked in red (redlined)—primarily Black neighborhoods—were not considered for FHA-backed loans, but residents of those neighborhoods marked green—primarily white neighborhoods—were considered for federally insured

⁶⁴ The first half of the twentieth century saw civil unrest manifest in Black communities time and time again. Similar events took place in Chicago, Illinois; Springfield, Illinois; Washington, D.C.; St. Louis, Missouri; and Rosewood, Florida through the 1920s. In most of these events, white people perpetrated the violence and destruction on Black people and communities. *See, e.g.*, ROTHSTEIN, *supra* note 54, at 139–51.

⁶⁵ See Deborah N. Archer, Reparations and the Right to Return, 45 N.Y.U. J.L. & SOC. CHANGE 343, 347–61 (2020) (describing decades of racial violence that forced Black people out of their homes, businesses, and communities).

⁶⁶ See Zhu Xiao Di, Yi Yang & Xiaodong Liu, Joint Ctr. For Hous. Stud. of Harv. Univ., The Importance of Housing to the Accumulation of Household Net Wealth, 1 (2003) (finding both homeownership itself and the length of ownership to have a significant, positive association with wealth growth).

⁶⁷ There are many tools used to prevent home ownership by Black people. The FHA and HOLC are among the most prominent. For a list of ways Black people were discriminated against in the housing market, see ROTHSTEIN, *supra* note 54, at 60–67; SHERYLL CASHIN, WHITE SPACE, BLACK HOOD: OPPORTUNITY HOARDING AND SEGREGATION IN THE AGE OF INEQUALITY 105–26 (2021).

 $^{^{68}}$ See generally Marable, supra note 17; Ira Katznelson, When Affirmative Action Was White: An Untold History of Racial Inequality in Twentieth-Century America 17 (2005).

⁶⁹ See National Housing Act (NHA) of 1934, 12 U.S.C. §§ 1701-29.

mortgages.⁷⁰ Those federally insured FHA mortgages came with smaller down payments and friendlier interest rates. Black homebuyers received significantly fewer loans than white homebuyers through the FHA.

The significance of the redlining rating system is that white neighborhoods and white families were able to build intergenerational wealth with the blessing and financial support of the federal government. Simultaneously, Black people and Black communities were excluded from the benefits of federal government support and their communities were allowed to fall into a downward financial trajectory. Despite the creation of the FHA in 1934, Black people generally did not benefit from federal housing programs established under the New Deal until after the Fair Housing Act became law in 1968.71 Additionally, other forms of housing discrimination—local zoning ordinances, contract buying, and racially restrictive covenants—also had a similar impact on Black people.⁷² The direct prohibition of homeownership paired with declining home values in predominantly Black communities greatly restricted the accumulation of wealth for Black people over generations.⁷³ The effects of this exclusion have been felt for decades and are compounded as time goes on.

4. Other Lending and Banking Barriers

Many in the Black community are considered to be unbanked, meaning that they do not have a checking or savings account, or underbanked, meaning that they may have a bank account, but also use nontraditional financial services, such as prepaid debit cards and payday

⁷⁰ If a neighborhood was deemed iffy, banks did not lend in that area. The maps ranked areas from green to red. Green areas were considered "A" rated areas and considered in-demand. Neighborhoods where Black people resided were considered to be "D" rated areas. Those Black neighborhoods were marked in red. Those areas came to be known as "redlined" neighborhoods. ROTHSTEIN, *supra* note 54, at 63–66; CASHIN, *supra* note 67, at 52.

⁷¹ 42 U.S.C. § 3610(a) (1970); see generally Jonathan Zasloff, *The Secret History of the Fair Housing Act*, 53 HARV. J. ON LEGIS. 247 (2016) (discussing the passage of the Fair Housing Act and the history of its enforcement).

⁷² See supra note 67 and accompanying text.

⁷³ See Angela Hanks, Danyelle Solomon & Christian E. Weller, Systematic Inequality: How America's Structural Racism Helped Create the Black-White Wealth Gap 19–20 (2018), https://www.americanprogress.org/wp-content/uploads/sites/2/2018/02/Racial WealthGap-report.pdf [https://perma.cc/HMW7-3PXB] ("Because wealth is often built over generations, the legacy of these policies has made it even more difficult for future generations of black households to participate in homeownership. Today, the disparity between white and black families who own homes is stark. Seventy-three percent of white families own a home compared with just 45 percent of black families. In addition, black families who do own homes are more likely to face barriers throughout the process.").

loans.⁷⁴ Black communities disproportionately exist in banking deserts—communities with no bank branch within them or within ten miles of their center⁷⁵—with limited access to affordable, sustainable credit and the basic tools of an economically vibrant life. Granted, the physical location of bank branches is not the barrier to bank accounts it once was due to the existence of online banking. However, branch location may be one of the observable actions that demonstrates banks' attitudes toward serving the Black community. The significance of the number of unbanked or underbanked people is that "without bank accounts, [Black] families cannot generate the data that helps establish creditworthiness. This makes it difficult to access the credit needed to fund wealth-creating activities, such as investing in education or a business venture."⁷⁶

People living and working in banking deserts are forced to rely on alternative financial institutions and be exposed to the high transaction costs and predatory behavior that often accompany them.⁷⁷ Instead of being able to take advantage of the accessible and sustainable credit available in predominantly white neighborhoods, Black people living in predominantly Black communities are likely relegated to using fringe lenders and paying much more for much less service.⁷⁸ This type of

⁷⁴ BD. OF GOVERNORS OF THE FED. RSRV. SYS., REPORT ON THE ECONOMIC WELL-BEING OF U.S. HOUSEHOLDS IN 2019 3, 27–30 (2020), https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf [https://perma.cc/2H8D-TF3F]. The 2021 Federal Deposit Insurance Company (FDIC) Survey of Household Use of Banking and Financial Services reports that 11.3% of Black households are unbanked compared to 2.1% of white households. 2021 FDIC National Survey of Unbanked and Underbanked Households, FDIC (Nov. 2, 2022), https://www.fdic.gov/analysis/household-survey/2021report.pdf [https://perma.cc/6Y3S-JRC4].

⁷⁵ Drew Dahl & Michelle Franke, Banking Deserts Become a Concern as Branches Dry Up, FED. RSRV. BANK OF ST. LOUIS (2017), https://www.stlouisfed.org/publications/regional-economist/second-quarter-2017/banking-deserts-become-a-concern-as-branches-dry-up [https://perma.cc/3ZCZ-MGTZ].

⁷⁶ KENDRA NEWSOM, MINDY HAMPTON, CAITLIN GUZMAN HARTMAN, RYAN CURLEY, MIKE MARCUS & BRIAN O'MALLEY, RACIAL EQUITY IN BANKING STARTS WITH BUSTING THE MYTHS (2021), https://web-assets.bcg.com/76/ce/89f202ae4022a62c4a022d4fbbcd/bcg-racial-equity-in-banking-starts-with-busting-the-myths-feb-2021.pdf [https://perma.cc/6GNA-5V9Q].

⁷⁷ Creola Johnson, Payday Loans: Shrewd Business or Predatory Lending?, 87 MINN. L. REV. 1, 3, 11 (2002)

⁷⁸ See Ian M. Dunham, Alec Foster, Steven Graves & Michele Masucci, Navigating the Dual Financial Service System: Neighborhood-Level Predictors of Access to Brick-and-Mortar Financial Services, 57 CAL. GEOGRAPHER 139, 144 (2018) (finding that payday lenders are disproportionately located in Census block groups with a higher percentage of poor, minority, primarily Black residents, and that the neighborhoods in near proximity to payday lenders are served by fewer bank branches); see also Nakita Q. Cuttino, The Rise of "FringeTech": Regulatory Risks in Earned-Wage Access, 115 N.W. U. L. REV. 1505, 1545, 1549–50 (2021) ("With such disproportionate bargaining power, payday lenders are not compelled to reduce costs or otherwise improve their service offerings. They are also not compelled to assist borrowers in accessing superior alternatives.").

predatory lending has had harsh consequences.⁷⁹ Black people use payday lending at much higher rates than white people.⁸⁰ Payday loans can be expensive as payday lenders charge very high fees and require repayment in a short period of time. Due to the high fees and short terms, borrowers often cannot repay on time and end up continuing to take out new payday loans to cover the previous ones.

More broadly, predatory and discriminatory lending are major forces driving racial disparities in access to economic opportunity. One example is the subprime mortgage crisis.⁸¹ Leading up to the crisis, many financial institutions flooded communities of color with unfair loan products,⁸² targeting Black people and other communities of color at alarming rates.⁸³ In turn, this led to massive foreclosures during the Great Recession of 2008 which ultimately eliminated large portions of wealth in the Black community.⁸⁴

[https://perma.cc/QZZ5-TPYL] ("In 2007, the ratio of debt to net worth among African-American

⁷⁹ See Charles Lewis Nier III, The Shadow of Credit: The Historical Origins of Racial Predatory Lending and its Impact upon African American Wealth Accumulation, 11 U. PA. J.L. & SOC. CHANGE 131, 134 (2007) (asserting that one of the largest factors in the homeownership gap between Black and white Americans is the lack of credit or increased cost of credit available to Black communities).

⁸⁰ See Nathalie Martin & Ernesto Longa, *High-Interest Loans and Class: Do Payday and Title Loans Really Serve the Middle Class?*, 24 LOY. CONSUMER L. REV. 524, 534–35 (2012) (overviewing findings about the demographics of people who use high-cost loans); PEW CHARITABLE TRUSTS, PAYDAY LENDING IN AMERICA: WHO BORROWS, WHERE THEY BORROW, AND WHY 1, 9 (2012), https://www.pewtrusts.org/-/media/legacy/uploadedfiles/pcs_assets/2012/pewpaydaylendingreportpdf.pdf [https://perma.cc/T5H9-FA8V] (reporting that African Americans take out payday loans at a rate 105% higher than other races and ethnicities).

⁸¹ Research has shown that race discrimination was at the root of the subprime lending market and the economic crisis it created at the beginning of the 21st century. *See, e.g.*, Jacob S. Rugh, Len Albright & Douglas S. Massey, *Race, Space, and Cumulative Disadvantage: A Case Study of the Subprime Lending Collapse*, 62 Soc. PROBS. 186, 186, 207 (2015) (finding the predatory lending aimed at racially segregated minority neighborhoods to have fueled the U.S. housing crisis).

⁸² See, e.g., Michael Powell, Bank Accused of Pushing Mortgage Deals on Blacks, N.Y. TIMES (June 6, 2009), https://www.nytimes.com/2009/06/07/us/07baltimore.html [https://perma.cc/9E4R-HVP4] (discussing Wells Fargo Bank's practice of systematically singling out Black people for high-interest subprime mortgages).

⁸³ During the subprime mortgage crisis, lenders were criticized for offering products and specifically targeting minority borrowers who could not meet the repayment conditions over the long term. Cassandra Jones Havard, *Democratizing Credit: Examining the Structural Inequities of Subprime Lending*, 56 SYRACUSE L. REV. 233, 247–48, 52 (2006).

⁸⁴ For statistics on how wealth inequality has widened since the Great Recession along racial and ethnic lines, see Rakesh Kochhar & Richard Fry, Wealth Inequality Has Widened Along Racial, Ethnic Lines Since End of Great Recession, PEW RSCH. CTR. (Dec. 12, 2014), https://www.pewresearch.org/short-reads/2014/12/12/racial-wealth-gaps-great-recession/
[https://perma.cc/3C3T-VNJ5]. See also Edward N. Wolff, The Decline of African-American and Hispanic Wealth Since the Great Recession 10 (Nat'1 Bureau of Econ. Rsch., Working Paper No. 25198, 2018), https://www.nber.org/system/files/working_papers/w25198/w25198.pdf

Racial disparities in banking and access to investment vehicles persist. Black households have less access to tax-advantaged forms of savings, are less likely to be homeowners, and thus have less access to the accompanying tax benefits of home ownership. Black households have worse employment opportunities and, thus, worse corresponding benefits than white households. They also receive fewer tax incentives related to housing and retirement savings that are reserved for high-income families. Black and white Americans bank differently and have different types of debt, which has implications for health and economic power. Black people tend to hold debt that is costlier with higher interest rates, such as consumer debt and credit card debt. Additionally, Black people pay more for their debt, often being denied applications for less costly loans.

B. Exclusion and Marginalization

Financial exclusion has intergenerational consequences. If one looks back over generations, one sees a Black community where positive

households was an astounding 0.553, compared to 0.154 among whites, while housing as a share of gross assets was 54 percent for the former as against 31 percent for the latter. The ratio of mortgage debt to home value was also much higher for blacks, 0.49, than for whites, 0.32. The sharp drop in home prices from 2007 to 2010 thus led to a relatively steeper loss in home equity for black homeowners, 26 percent, than for white homeowners, 24 percent and this factor, in turn, led to a greater fall in mean net worth for black than white households. The annual real rate of return on the net worth of black families over years 2007 to 2010 was a [sic] -9.9 percent, compared to -7.1 percent for white households Moreover, the higher leverage of African-American households relative to white households and the broad decline in asset prices led to greater relative losses in mean FR for the former than the latter."); Douglas S. Massey & Jacob S. Rugh, The Great Recession and the Destruction of Minority Wealth, 117 CURRENT HIST. 298, 303 (2018) ("The end result of this predatory lending to blacks and Hispanics was a pronounced boom and bust cycle for wealth. From 1983 to 2007, the wealth of both groups rose as home prices inflated and the risks of predatory lending were obscured. Mean black family wealth rose from \$67,000 to \$95,000 between 1983 and 1998. After a brief pause, black wealth then increased very markedly, peaking at \$156,000 in 2007 on the eve of the Great Recession. But owing to the excessive costs and risks imposed on blacks because of predatory lending, and a lack of non-housing investments, when the housing bubble burst their apparent gains in wealth evaporated. Black wealth fell to a nadir of \$102,000 in 2013, marginally above where it had been in 2001. Although black wealth recovered somewhat by 2016, it still remained below the level achieved back in 2007.").

⁸⁵ HANKS, supra note 73.

⁸⁶ See Patrick Bayer, Fernando Ferreira & Stephen L. Ross, What Drives Racial and Ethnic Differences in High-Cost Mortgages? The Role of High-Risk Lenders (Nat'l Bureau of Econ. Rsch., Working Paper No. 22004, 2016), https://www.nber.org/papers/w22004 [https://perma.cc/5PQ3-SBKH].

⁸⁷ Robert Bartlett, Adair Morse, Richard Stanton & Nancy Wallace, *Consumer-Lending Discrimination in the FinTech Era*, 143 J. FIN. ECON. 30, 48 tbl.7, 55 (2022).

banking relationships are not part of the story.⁸⁸ If one's grandparents did not have a banking relationship or one's parents also did not have banking relationships, then a pattern of exclusion and distrust develops.⁸⁹

Today, the biggest challenges facing founders of Black-owned businesses primarily center on access to capital. The relationship between homeownership and access to capital is pivotal both for individual access to wealth and for the success of Black businesses. In particular, the level of personal wealth has implications for business success because it feeds into the ability to capitalize a business. For example, lack of personal wealth creates difficulty in getting a loan or a line of credit, and may create lower credit scores. Black businesses have less upfront capital to start and maintain operations, which often indicates likelihood of failure. They are underrepresented in the most profitable industries and business locations. Finally, lower capitalization often

⁸⁸ Tess Montgomery, *How Generational Trauma Affects Our Financial Wellbeing*, TPT ORIGINALS (Oct. 7, 2020), https://www.tptoriginals.org/how-generational-trauma-affects-our-financial-wellbeing/ [https://perma.cc/CZF3-8JQC].

⁸⁹ Cf. Rachel Yehuda & Amy Lehrner, Intergenerational Transmission of Trauma Effects: Putative Role of Epigenetic Mechanisms, 17 WORLD PSYCH. 243, 243 (Oct. 2018) (reviewing research studies showing the effects of intergenerational trauma on offspring).

⁹⁰ See generally EWING MARION KAUFFMAN FOUND., KAUFFMAN COMPILATION: RESEARCH ON RACE AND ENTREPRENEURSHIP 3 (2016), https://www.kauffman.org/wp-content/uploads/2019/12/kauffman_compilation_race_entrepreneurship.pdf [https://perma.cc/8S4R-6HTG] ("Racial and ethnic gaps persist in access to credit."); Lynnise Pantin, Race and Equity in the Age of Unicorns, 72 HASTINGS L.J. 1453, 1505 (2021) (discussing how economic racism prevails in the Silicon Valley ecosystem); Lynnise Pantin, The Wealth Gap and the Racial Disparities in the Startup Ecosystem, 62 ST. LOUIS U. L.J. 419, 440 (2018) (finding that regulations have kept Black and Latinx people out of opportunities to create generational wealth through entrepreneurship and investing, just as redlining kept them from building wealth in homeownership).

⁹¹ THOMAS SHAPIRO, TATJANA MESCHEDE & SAM OSORO, INST. ON ASSETS & SOC. POL'Y, THE ROOTS OF THE WIDENING RACIAL WEALTH GAP: EXPLAINING THE BLACK-WHITE ECONOMIC DIVIDE 3–5 (2013), https://heller.brandeis.edu/iere/pdfs/racial-wealth-equity/racial-wealth-gap/roots-widening-racial-wealth-gap.pdf [https://perma.cc/GN5B-PFCX].

 $^{^{92}\,}$ Robert W. Fairlie & Alicia M. Robb, Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States 97 (2008).

⁹³ The Racial Wealth Gap: Business Ownership & Entrepreneurship, UNC CHARLOTTE URB. INST. (June 1, 2020), https://ui.charlotte.edu/story/racial-wealth-gap-business-ownership-entrepreneurship [https://perma.cc/8QB4-ET57].

⁹⁴ Id.; see JPMORGAN CHASE & CO. INST., PLACE MATTERS: SMALL BUSINESS FINANCIAL HEALTH IN URBAN COMMUNITIES, 27–29 (2019), https://www.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/institute/pdf/institute-place-matters.pdf [https://perma.cc/QDC2-ER3W] (finding that few majority-Black communities have very profitable small businesses, small businesses with large cash buffers are rare in majority-Black communities, and that majority-Black communities are "overrepresented in restaurants and repair and maintenance, and underrepresented in health care, high-tech, and other professional services").

prevents Black businesses from paying employees, which in turn makes it harder to attract employees.⁹⁵

Through financial exclusion that started from the collapse of the Freedman's Bank, to explicitly discriminatory New Deal Era policies, and then to the subprime mortgage crisis in 2008 that targeted minority borrowers, seeds of distrust were sown. 96 The legacy of financial exclusion manifested as intergenerational trauma and distrust of central financial systems and institutions that transferred from one generation to the next and contributed to a growing demand for alternative financial systems, which have generally failed to serve the Black community.

Generational trauma, or cumulative trauma, can affect financial decision-making.⁹⁷ Trauma such as poverty, racism, and oppression causes stress, anxiety, and emotional strain, all of which can influence an individual's financial decision-making.⁹⁸ For example, people who have experienced poverty, financial insecurity, or instability in their family history may be more likely to exhibit negative financial behaviors. Such behaviors can be linked to the trauma of financial insecurity or poverty. Similarly, individuals who have experienced systemic oppression or financial exclusion may develop feelings of mistrust or anxiety towards traditional financial institutions.

The systemic barriers that prevented Black people from accessing traditional financial institutions in parity with their white counterparts created a narrative within the Black community. This narrative, carried from generation to generation, is that big commercial banks and financial institutions are not the vehicles to build wealth and prosperity. 99 Structural barriers to capital access formed a sense of distrust between the Black

⁹⁵ The Racial Wealth Gap, supra note 93.

⁹⁶ 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) ("African Americans in the present day who live in counties that once had a Freedman's Savings Bank branch are more likely to list mistrust of financial institutions as a reason for being unbanked....").

⁹⁷ Generational trauma is the emotional psychological impact of traumatic experiences that are passed down from one generation to another. See Sidney Hankerson et al., The Intergenerational Impact of Structural Racism and Cumulative Trauma on Depression, 179 Am. J. PSYCHIATRY 434, 434 (2022).

⁹⁸ Gwendolyn Scott-Jones & Mozella Richardson Kamara, *The Traumatic Impact of Structural Racism on African Americans*, 6 Del. J. Pub. HEALTH 80, 80–82 (2020).

⁹⁹ According to neuroscientific researchers, parenting behaviors can be transmitted from parents to their children as a result of both genetic expression and nongenetic expression. It is possible that nongenetic expression of behavior resulting from trauma may be transmitted to offspring of those who have experienced such trauma. See Susan Branje et al., Intergenerational Transmission: Theoretical and Methodological Issues and an Introduction to Four Dutch Cohorts, 45 DEV. COGNITIVE NEUROSCIENCE 1, 1, 2 (2020).

community and financial institutions, creating a preference for alternative financial systems and leaving that community susceptible to speculative, nontraditional asset markets.

C. Exclusion and the Development of Alternative Economies

In response to mainstream financial exclusion, the Black community and other communities of color developed self-help systems and methodologies of cooperative economics and underground economies. They operate akin to microfinance to collectively build wealth on the margins of the financial system. ¹⁰⁰ Ultimately, these marginalized alternative forms of banking and community approaches to wealth building further the disconnect between the Black community and central banking. ¹⁰¹

The underground economic model of Black communities involves pooling resources to support members of the community. The model mimics traditions of resource pooling in communities who would emigrate to the United States and bring such practices—called rotating savings and credit associations (ROSCAs)—with them. ROSCAs are

MARABLE, supra note 17, at 128–29 (citing AUGUST MEIER, NEGRO THOUGHT IN AMERICA, 1880-1915, 276 (Ann Arbor Paperback 1988) (1963)) (describing how the response to racism and hegemony is to often take dollars elsewhere).

There is a history of Black banks and community banks that is not the subject of this Article. Discussions between leading Black businessmen who envisioned a mutual savings bank established by Black people began early in 1851. MEHRSA BARADARAN, THE COLOR OF MONEY: BLACK BANKS AND THE RACIAL WEALTH GAP 12–13 (2017). Between 1888 and 1934, 134 Black-owned banks were formed. Maude Toussaint-Comeau & Robin Newberger, *Minority-Owned Banks and Their Primary Local Market Areas*, 41 ECON. PERSPS. 1, 3 (2017). Though most of the Black-owned banks closed as a result of the Great Depression, many reemerged during the 1970s when civil rights leaders such as Martin Luther King Jr. encouraged the Black community to "take your money out of the banks downtown and deposit your money in [a Black-owned bank]. We want a 'bank-in' movement." BARADARAN, *supra*, at 2.

¹⁰² See W. SHERMAN ROGERS, THE AFRICAN AMERICAN ENTREPRENEUR: THEN & NOW 16 (2010). See generally BUTLER, supra note 50.

¹⁰³ In Guyanese, the model is referred to as "box hands," in Trinidad and Tobago, "sou-sou," "Hui" in Taiwan, "Tontines" in Cameroon, "Tanda" in Mexico, and in India, "chits." Box hands is the practice of money saved privately among adults. A neighbor or close friend or family member that one trusted completely would be designated as the "box holder." That person would be trusted to hold the "box" or what is commonly known as the "pot." The number of savers is small, typically corresponding to the number of months in the year or weeks that the group wishes to save. Each contributed hands over the same amount of money every month and each takes turns in getting back their yearly contribution, the "box hand," all at once. Also known as the sou-sou, contributors use this method to start a business, plan for a wedding or build a house. MULTILATERAL INV. FUND, BUILDING UP BUSINESS: MICROENTERPRISE DEMAND FOR CREDIT IN THE CARIBBEAN 44 (2014), http://competecaribbean.org/wp-content/uploads/2016/02/107-ENG-Caribbean-Informal-MF-Final-Report-2014-05-19.pdf [https://perma.cc/T9U3-2T43]; see also Nicole Woolsey Biggart, Banking on

informal community-based savings groups commonly used around the world as an alternative to traditional financial institutions, ¹⁰⁴ the members of which meet regularly to contribute to a common pot for one attendee to take home as a loan. ¹⁰⁵ While ROSCAs originated internationally, elements of these mutual aid, microfinance practices have been used in the United States primarily in immigrant communities and in the Black American community. The practices originated in West Africa and spread to the Caribbean and, from there, the Black American community. ¹⁰⁶

ROSCAs sit on the continuum of cooperative economics, the sharing economy, and giving circles that aims to build individual wealth with assistance from the collective. Members of a ROSCA collectively create a "bank" amongst the ROSCA. Membership is highly selective and sourced from trusted friends or family members. ROSCAs may have regular meetings, but the common feature is that each member contributes the same amount of money into the "bank" and one member gets to take the entire sum during each lending period.

But participation in ROSCAs makes it difficult to build up wealth or credit through traditional means. Individuals who opt for ROSCAs may limit their exposure to formal financial institutions, which offer more extensive financial products and services, including investment opportunities, credit reporting, and insurance. Take the example of a ROSCA with twelve members, each paying \$1000 a month for eleven months. On the twelfth month, one member receives a payment of \$11,000, which that member can then use towards their financial goals. However, the individuals contributing to a ROSCA are only getting back the money that they and the other members put into the ROSCA. Those funds have not earned any interest or equity. The banking system, by contrast, provides leverage, interest, and protection by state institutions such as the Federal Deposit Insurance Corporation (FDIC), all of which are essential tools for building wealth in this country. These tools are what ROSCAs and underground economic solutions lack.

Each Other: The Situational Logic of Rotating Savings and Credit Associations, 3 Advances Qualitative Org. Rsch. 129, 132, 140–41 (2001).

¹⁰⁴ Caroline Shenaz Hossein, Caribbean Women's Use of Susu, Partner, Sol, and Boxhand as Quiet Resistance, in COMMUNITY ECONOMIES IN THE GLOBAL SOUTH: CASE STUDIES OF ROTATING SAVINGS AND CREDIT ASSOCIATIONS AND ECONOMIC COOPERATION 49, 49, 56 (Caroline Shenaz Hossein & Christabell P. J. eds., 2022).

¹⁰⁵ MULTILATERAL INV. FUND, *supra* note 103, at 23.

 $^{^{106}}$ For an account of ROSCA practices around the world, see Hossein, supra note 104.

 $^{^{107}}$ See generally Jessica Gordon Nembhard, Collective Courage: A History of African American Cooperative Economic Thought and Practice (2014).

The theory of cryptocurrency similarly responds to traditional banking's exclusionary environment. The rich history of a sharing economy model is connected to the appeal of decentralized financial systems such as cryptocurrency in Black communities. While people of color may benefit from these alternative methods of community and informal banking, those benefits are small compared to the economic benefits they might receive if they had access to mainstream financial infrastructure. The success of the alternative underground economy masks true economic and social problems within communities targeted by these new technology initiatives. ROSCAs are how people build networks and communities to survive outside of traditional processes, but communities should not have to rely on ROSCAs or any other alternative models to build wealth. And yet, it is the reliance on these alternative models that laid the groundwork for the popularity of cryptocurrency in the Black community.

Ultimately, the financial exclusion experienced by marginalized Black people drove them into underground economies and self-help financial groups, which operated outside of the central banking system. This practice exacerbated existing financial inequities as these underground economies and self-help practices did not lead to wealth-building and economic growth compared to traditional financial institutions. The willingness to embrace marginalized alternative systems laid the foundation for the Black community to accept cryptocurrency and blockchain technology more than white Americans. As the next Section describes, the legacy of financial exclusion continued as banks and financial institutions began to rely on and use technology to automate certain banking functions.

D. Exclusion and Financial Technology

Another part of the story of financial exclusion is the way financial technology interacts with the status quo.¹⁰⁸ Generally, financial technology was expected to democratize financial institutions, make them more equitable, and eliminate bias since the interface is not with a subjective person, but with objective technology.¹⁰⁹ The banks and

¹⁰⁸ Financial technology or fintech is described as "a diverse group of nonbank companies that use digital technology to modernize and simplify both the provision of financial services and the customer experience in interfacing with financial service providers." Winnie F. Taylor, *Fintech and Race-Based Inequality in the Home Mortgage and Auto Financing Markets*, 33 LOY. CONSUMER L. REV. 366, 373 (2021).

 $^{^{109}\,}$ Ifeoma Ajunwa, The Paradox of Automation as Anti-Bias Intervention, 41 CARDOZO L. Rev. 1671, 1671, 1699 (2020).

government began to rely on automated decision-making and other forms of technology in an effort to promote not only efficiency, but fairness and objectivity. The Despite the appearance of objectivity, the use of automated decision-making and algorithms has produced racialized results, The data mining systems "are capable of reproducing the biases created by human decisions." The discriminatory effects of the use of technology, big data, and algorithms in the financial system have exacerbated the distrust of the current financial system.

The credit-scoring and mortgage-lending industries have been revolutionized by the rise of artificial intelligence and access to big data.¹¹³ Lenders almost exclusively rely on algorithmic systems to evaluate creditworthiness of prospective borrowers.¹¹⁴ Yet, the "current credit-scoring system [has] a disparate impact on people and communities of color."¹¹⁵ Black and other communities of color pay more for credit and banking services as a result of disparate credit scoring on which interest rates are based.¹¹⁶ The credit-scoring systems in use today continue to

¹¹⁰ RUHA BENJAMIN, RACE AFTER TECHNOLOGY: ABOLITIONIST TOOLS FOR THE NEW JIM CODE, 4 (2019); Tal Zarsky, *The Trouble with Algorithmic Decisions: An Analytic Road Map to Examine Efficiency and Fairness in Automated and Opaque Decision Making*, 41 SCI., TECH. & HUM. VALUES 118, 122 (2016).

¹¹¹ BENJAMIN, *supra* note 110, at 42; Zarsky, *supra* note 110, at 126. *See generally* Frank Pasquale, The Black Box Society: The Secret Algorithms That Control Money and Information (2015) (describing how the improper use of algorithms and rule-based programs have impacted our society and economy).

¹¹² See Kristin Johnson, Frank Pasquale & Jennifer Chapman, Artificial Intelligence, Machine Learning, and Bias in Finance: Toward Responsible Innovation, 88 FORDHAM L. REV. 499, 510 (2019)

¹¹³ Id. at 504 (citing Michael L. Rich, Machine Learning, Automated Suspicion Algorithms, and the Fourth Amendment, 164 U. PA. L. REV. 871, 880 (2016)) (defining the term "artificial intelligence" as referring to a diverse but related body of technologies that simulate human decision-making and learning behavior. The technologies include, among others, machine learning, deep learning, and neural networks).

 $^{^{114}}$ Josh Lauer, Creditworthy: A History of Consumer Surveillance and Financial Identity in America 182–83 (2017).

¹¹⁵ Lisa Rice & Deidre Swesnik, *Discriminatory Effects of Credit Scoring on Communities of Color*, 46 SUFFOLK U. L. REV. 935, 936 (2013) ("[M]any credit-scoring mechanisms include factors that do not just assess the risk characteristics of the borrower; they also reflect the riskiness of the environment in which a consumer is utilizing credit, as well as the riskiness of the types of products a consumer uses.").

¹¹⁶ Pamela Foohey & Nathalie Martin, *Fintech's Role in Exacerbating or Reducing the Wealth Gap*, 2021 U. ILL. L. REV. 459, 475–76 (2021) (describing research that shows a disparity in the amounts paid for financial products).

perpetuate the dual credit market and discriminate against people of color through the use of algorithms.¹¹⁷

Algorithms have been shown to produce racially disparate predictions that lead to racially inequitable outcomes.¹¹⁸ Despite the fact that the credit score is an algorithm based on an objective equation of past payment history, bias and racism creep into the technology through the use of racialized inputs.¹¹⁹ The acknowledged danger of algorithms is that their results are deemed to be objective and scientific rather than motive-driven and therefore cannot be racist or biased. This thinking may be the result of automation bias—a phenomenon where human beings tend to defer to the outputs of computer systems, even where they themselves recognize that the output of the computer system might be wrong.¹²⁰

As banks increased their reliance on financial technology to automate decisions, algorithms became proxies for illegal discrimination in the housing market, since the algorithms affect people differently depending on their race or ethnicity. ¹²¹ An example that demonstrates the similarities in outcomes between the disparate approval of federally-backed FHA loans, and the disparities in the loan approval process from the country's largest lenders, Fannie Mae and Freddie Mac, involves automated underwriting software programs that use algorithms. ¹²² Just as the federally backed FHA loans were the result of racially neutral laws, the implementation of the loan approval process produced racially disparate outcomes. As with FHA implementation, the seemingly race-

¹¹⁷ Pamela Foohey & Sara Sternberg Greene, *Credit Scoring Duality*, 85 LAW & CONTEMP. PROBS. 101, 110–11 (2022) (showing disparity among the costs of financial products according to race).

¹¹⁸ Matthew Adam Bruckner, *The Promise and Perils of Algorithmic Lenders' Use of Big Data*, 93 CHI.-KENT L. REV. 3, 25–27 (2018); Aaron Klein, *Reducing Bias in AI-Based Financial Services*, BROOKINGS (July 10, 2020), https://www.brookings.edu/research/reducing-bias-in-ai-based-financial-services/ [https://perma.cc/WJ66-JCMP]; Bartlett, *supra* note 87, at 55–56.

¹¹⁹ The Fair Isaac Corporation's (FICO) proprietary scoring system dominates the mortgage industry across the country. The FICO system has been criticized for giving white people an advantage in credit-scoring since the system uses homeownership loan payments and not rent payments to predict future behavior of borrowers. Since more white households own their homes and most Black households do not, the algorithm in the FICO system disproportionately affects Black people. Bill Block, *How Biased Algorithms Create Barriers to Housing*, ACLU WASH. (Feb. 16, 2022), https://www.aclu-wa.org/story/how-biased-algorithms-create-barriers-housing [https://perma.cc/W2MZ-EPZ7].

¹²⁰ Danielle Keats Citron, Technological Due Process, 85 WASH. U. L. REV. 1249, 1271–72 (2008).

¹²¹ These products were first launched in 1995 and at the time there was much fanfare about speed, ease, and fairness. *See, e.g.*, James A. Allen, *The Color of Algorithms: An Analysis and Proposed Research Agenda for Deterring Algorithmic Redlining*, 46 FORDHAM URB. L.J. 219, 255 (2019) (detailing how algorithms can be used to perpetuate redlining in housing).

¹²² See LAUER, supra note 114, at 248–50.

neutral algorithms used by the underwriting software in the distribution of Fannie Mae and Freddie Mac loans still produced racialized results.

Algorithms, fintech, and access to big data created an additional layer to racism and discrimination in the financial services system. The technology that promised to solve human biases and racism ended up defaulting to past patterns. Thus, financial technology complicates notions of objectivity and racial neutrality. Financial technology was supposed to account for past wrongs. Algorithms were supposed to be race-neutral¹²³ and by using an algorithm, financial technology intended to eliminate bias or reduce bias. Instead, it has also produced disparate racial outcomes.¹²⁴

The legacy of financial exclusion culminates in financial technology whose promises of fairness and objectivity quickly turned to bias and discrimination, further entrenching Black people's distrust in the central financial system. This lack of trust explains the appeal of the decentralized cryptocurrency market. The cryptocurrency market is appealing to Black adopters as a new system where financial inclusion is possible because of the decentralized nature of the market. The next Part describes cryptocurrency, discusses some of the dangers inherent in these highly speculative, volatile assets, and explores why Black people are attracted to cryptocurrency markets.

II. THE CRYPTOCURRENCY MARKET

Cryptocurrency grew out of a response to the federal government's \$700 billion bailout of Wall Street during the Great Recession. 127 It is digital currency in which transactions are verified and records are

¹²³ Ngozi Okidegbe, The Democratizing Potential of Algorithms?, 53 CONN. L. REV. 79 (2022).

¹²⁴ Lorena Rodriguez, All Data Is Not Credit Data: Closing the Gap Between the Fair Housing Act and Algorithmic Decisionmaking in the Lending Industry, 120 COLUM. L. REV. 1843, 1861–62 (2020); Taylor, supra note 108, at 373; Andreas Fuster, Paul S. Goldsmith-Pinkham, Tarun Ramadorai & Ansgar Walther, Predictably Unequal? The Effects of Machine Learning on Credit Markets, 77 J. FIN. 5, 6 (2021); Tobias Berg, Andreas Fuster & Manju Puri, Fintech Lending 13 (Nat'l Bureau of Econ. Rsch., Working Paper No. 29421, 2021), https://www.nber.org/system/files/working_papers/w29421/w29421.pdf [https://perma.cc/FZ3J-2VFU].

¹²⁵ EDELMAN, supra note 15.

¹²⁶ TIFFIANY HOWARD, CROWDFUNDING, CRYPTOCURRENCY, AND CAPITAL: ALTERNATIVE SOURCES OF BUSINESS CAPITAL FOR BLACK ENTREPRENEURS 14 (2019), https://www.cbcfinc.org/wp-content/uploads/2019/03/CPAR-Report-Crowdfunding-Cryptocurrency-FINAL.pdf [https://perma.cc/MUG3-9WAE].

¹²⁷ See Johnson, *supra* note 12, at 1917 ("Innovative financial technology (fintech) products and firms aimed to disrupt conventional financial markets and displace legacy financial institutions."); *see also* Chris Brummer & Yesha Yadav, *Fintech and the Innovation Trilemma*, 107 GEO. L.J. 235, 258–63 (2019).

maintained by a decentralized system that uses cryptography to securely transmit digital messages. Blockchain technology makes the use of cryptocurrency possible because the blockchain creates a digital public ledger of all associated transactions, which are transparent and immutable.¹²⁸ The decentralization is informal and not built on trust, but rather on the technology itself. Thus, adopters see potential for inclusion.

The cryptocurrency market is a decentralized financial system built on this digital public ledger of all associated transactions. The currency is not backed by the federal government or any central authority, government or otherwise. One advantage cited by adopters that cryptocurrency has over government-issued money is that the supply of cryptocurrency is finite, limited by software code, as opposed to fiat money that is regulated by policymakers. The value of the currency is mostly based on supply and collective demand. The appeal of cryptocurrency is that the decentralized nature of the cryptocurrency market lends itself to a democratic, participatory, and inclusive ecosystem, in contrast to the central financial system that has excluded and marginalized the Black community.

The cryptocurrency market has been embraced for its potential to disrupt the pathologies of the traditional banking system. This is because the central feature of the blockchain is its ability to facilitate an exchange of value without gatekeeping third parties. Granted, cryptocurrency transactions still rely on parties other than the sender and receiver to validate transactions and maintain copies of the ledger, but cryptocurrency is not currently under the control and regulation of centralized financial institutions. There are no central entities or agents to exclude market participation, although the exchanges increasingly serve as gatekeepers to market participation.

Cryptocurrency's market position outside of the centralized financial system specifically attracts some Black cryptocurrency adopters.¹³³ These technologists see the cryptocurrency market as an

¹²⁸ See supra note 6 and accompanying text.

¹²⁹ See supra note 7 and accompanying text.

¹³⁰ See supra note 8.

¹³¹ Andrew Ackerman & Paul Kiernan, *Crypto Could Threaten Financial System, Federal Risk Panel Warns*, WALL ST. J. (Oct. 3, 2022), https://www.wsj.com/articles/crypto-could-threaten-financial-system-federal-risk-panel-warns-11664826496 [https://perma.cc/4CHJ-3DJB].

¹³² See Pavel Ciaian, Miroslava Rajcaniova & d'Artis Kancs, *The Economics of Bitcoin Price Formation*, 48 APPLIED ECON. 1799, 1811, 1813 (2016).

¹³³ Emily Stewart, *How Cryptocurrency Failed Black Investors*, Vox (Feb. 16, 2023, 7:00 AM), https://www.vox.com/the-goods/23599845/crypto-bitcoin-black-investors-ftx-freedmans-bank-

opportunity for communities left behind by the mainstream financial system. What they see in cryptocurrency is the promise of ownership and the potential for intergenerational wealth and economic power, which have been elusive to Black people since their arrival to the United States. Black cryptocurrency enthusiasts argue that cryptocurrencies will enable African Americans to build "generational wealth," all while avoiding racially discriminatory financial institutions.¹³⁴

"Bitcoin Bros" is the popular stereotypical moniker given to young and tech-savvy white male users of the cryptocurrency space. 135 However, there exists a diverse section of cryptocurrency adopters and champions that are atypical in the traditional investment space. 136 In fact, these are new entrants to the financial markets in general. 137 The average trader of cryptocurrency is under forty and did not graduate college. 138 Of cryptocurrency users, 44% are not white, 41% are women, and over 33%

civil-war [https://perma.cc/PR9K-XCDX]; Kimberly Adams, *Crypto Marketing Attracted a Disproportionate Number of Black Investors. Here's Why.*, MARKETPLACE (Feb. 3, 2023), https://www.marketplace.org/2023/02/03/crypto-marketing-attracted-a-disproportionate-number-of-black-investors-heres-why/ [https://perma.cc/J877-3DLB]; Annie Lowrey, *The Black Investors Who Were Burned by Bitcoin*, ATLANTIC (Nov. 29, 2022), https://www.theatlantic.com/ideas/archive/2022/11/black-investors-bitcoin-cryptocurrency-crash/671750/ [https://perma.cc/TQL-DAUQ]; Nicquel Terry Ellis, *Cryptocurrency Has Been Touted as the Key to Building Black Wealth. But Critics Are Skeptical*, CNN (Aug. 20, 2022, 8:45 AM), https://www.cnn.com/2022/08/20/us/cryptocurrency-black-investors-reaj/index.html [https://perma.cc/U79U-RUSE]. *See generally* BLACK BITCOIN BILLIONAIRE, https://www.blackbitcoinbillionaire.com/ [https://perma.cc/9PWG-CWY3].

- 134 Algernon Austin, Julia Tache & Timi Iwayemi, Stock Market Index Funds Can Beat Crypto: On Cryptocurrency Investing and Building Black Wealth, CTR. FOR ECON. & POL'Y RSCH. (Jan. 10, 2023), https://cepr.net/crypto-and-building-black-wealth/[https://perma.cc/VZ92-4BWW].
- 135 See Janell Ross, Inside the World of Black Bitcoin, Where Crypto Is About Making More Than Just Money, TIME (Oct. 15, 2021, 8:00 AM), https://time.com/6106706/bitcoin-Black-investors/ [https://perma.cc/C75V-NGVY] (referencing a "Bitcoin Bro" as "fleece-vest-wearing finance guy or an Elon Musk type with a grudge against regulators").
- 136 Leda Alvim & Lulit Tadesse, *Cryptocurrency Attracting Black, Latino Investors and Fans*, ABC NEWS (Feb. 10, 2022), https://abcnews.go.com/Business/cryptocurrency-attracting-Black-latino-investors-fans/story?id=82684748 [https://perma.cc/T8VC-G8NT] ("[D]ecentralization is an opportunity for us to not have any barriers to entry and also participate and be producers as well").
- 137 Black Americans are twice as likely as white Americans to purchase cryptocurrency as their first investment. See Ariel-Schwab Black Investor Survey, supra note 12. In 2021, the NORC Survey out of University of Chicago found that 13% of Americans reported having purchased or traded cryptocurrencies in the past twelve months. See Press Release, NORC, More Than One in Ten Americans Surveyed Invest in Cryptocurrencies (July 22, 2021), https://www.norc.org/NewsEventsPublications/PressReleases/Pages/more-than-one-in-ten-americans-surveyed-invest-in-cryptocurrencies.aspx [https://perma.cc/SX43-JHBL].
 - 138 Press Release, NORC, supra note 137.

have annual household incomes under \$60,000.139 Retail investors in lower income countries are also big cryptocurrency adopters.140

The demographics of the investors in the cryptocurrency space are different from the demographics of those investing in traditional stocks and bonds. Cryptocurrency investors are younger, more likely to be Latinx or Black than white, and less likely to seek a broker's or other financial expert's advice.¹⁴¹ People of color "are more likely than white adults to say they have invested in, traded, or used a cryptocurrency. There are no statistically significant differences by household income."¹⁴² Additionally, recent data shows that Black and Latinx communities are driving national mainstream adoption of crypto.¹⁴³

Why are young Black people drawn to these relatively new and risky assets? Take the example of Jefferson Noel. Noel is the young founder of Barbershop Speaks, a platform to educate and empower underserved communities to invest in cryptocurrency. He gained his first exposure to cryptocurrency in January 2019 when he accidentally invested \$5 in Bitcoin through the payment platform, Cash App. By May of that same

¹³⁹ *Id*.

¹⁴⁰ See Jonathan Wheatley & Adrienne Klasa, Cryptocurrencies: Developing Countries Provide Fertile Ground, FIN. TIMES (Sept. 5, 2021), https://www.ft.com/content/1ea829ed-5dde-4f6e-be11-99392bdc0788 [https://perma.cc/74PG-URXT] (showing that Vietnam has the highest level of cryptocurrency adoption, followed by India, Pakistan, and Ukraine).

¹⁴¹ Michelle Faverio & Navid Massarat, 46% of Americans Who Have Invested in Cryptocurrency Say It's Done Worse Than Expected, PEW RSCH. CTR. (Aug. 23, 2022), https://www.pewresearch.org/fact-tank/2022/08/23/46-of-americans-who-have-invested-in-cryptocurrency-say-its-done-worse-than-expected [https://perma.cc/FH94-459D]; Dan Shaw, For Stocks and Bonds, New Investors Seek Planners' Advice. Not So Much with Crypto, FIN. PLANNING (Apr. 25, 2023), https://www.financial-planning.com/news/survey-news-investors-less-likely-to-seek-advice-on-crypto-than-stocks-bonds [https://perma.cc/XA7K-5Z36].

¹⁴² 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/short-reads/2021/11/11/16-of-americans-say-they-have-ever-invested-in-traded-or-used-cryptocurrency [https://perma.cc/6MX8-H4VQ]. Black-owned firms were the most likely group to be turned down for credit cards, according to Federal Reserve data from 2012 to 2017. In 2014, fewer than half of Black-owned firms' applications for bank financing were fully funded, the data show. Bd. of Governors of the Fed. Rsrv. Sys., Report to the Congress on the Availability of Credit to Small Businesses 26 (2017), https://www.federalreserve.gov/publications/files/sbfreport2017.pdf [https://perma.cc/2NCR-B5DM]. A recent survey found that 25% of Black investors with a household income of over \$50,000 reported owning cryptocurrency, compared with just 15% of white investors with similar income. Ariel-Schwab Black Investor Survey, supra note 12.

¹⁴³ A recent study on behalf of *USA Today* by the Harvard-Harris poll noted that while only 11% of white Americans report owning cryptocurrencies, 23% of Black Americans and 17% of Latino Americans own such assets. Charisse Jones & Jessica Menton, *Black, Latino, LGBTQ Investors See Crypto Investments like Bitcoin as 'A New Path' to Wealth and Equity*, USA TODAY (Aug. 13, 2021), https://www.usatoday.com/story/money/2021/08/13/crypto-seen-path-equity-Black-latino-and-lgbtq-investors/5431122001/?gnt-cfr=1 [https://perma.cc/8UUY-AUEF].

year, his \$5 investment turned into \$70. As a result of that return, he decided to invest \$20,000 of his savings into various cryptocurrencies. Persistent losses subsequently wiped out over twenty percent of his cryptocurrency investment portfolio. However, he continues to invest in cryptocurrency and travels around the country giving talks and appearing on YouTube channels and podcasts encouraging Black people to get into cryptocurrencies before it is too late. Heeding Noel's call and that of other celebrity voices and influencers, Black investors are drawn to cryptocurrency by the promise of building wealth in a country where, after centuries of financial exclusion, it has remained elusive. He

Black cryptocurrency adopters argue that "[n]ow [Black people] can lift [them]selves up by [their] bootstraps and build [their] own infrastructure." The cryptocurrency market is therefore seen as an alternative path to close the racial wealth gap without government intervention. In other words, this unusual development, where the

Noel frequently tells this cryptocurrency investor origin story in media interviews. See, e.g., Jefferson Noel, 360 MAG: A NO NONSENSE CONVERSATION (2020), https://open.spotify.com/episode/4nSjBtPPMZiL9yFygK5Kg1?si=2PUgwTV1RzuuFrOquNTvKQ&utm_source=copy-link&nd=1 [https://perma.cc/9X2B-57AP].

¹⁴⁵ Filmmaker and director Spike Lee directed and starred in a television advertisement for cryptocurrency ATM operator Coin Cloud. In that commercial, he states that "old money is not going to pick us up; it pushes us down" and "systematically oppresses," whereas digital currency is "positive, inclusive." *Coin Cloud TV Spot, "The Currency of Currency" Featuring Spike Lee, Teyana Taylor, Song by War*, ISPOT.TV (July 15, 2021), https://www.ispot.tv/ad/OJy_/coin-cloud-the-currency-of-currency-featuring-spike-lee-song-by-war [https://perma.cc/54QP-L495]; Tiffany Hsu & Coral Murphy Marcos, *Cryptocurrency Seeks the Spotlight, with Spike Lee's Help*, N.Y. TIMES (July 7, 2021), https://www.nytimes.com/2021/07/07/business/media/cryptocurrency-seeks-the-spotlight-with-spike-lees-help.html [https://perma.cc/3M9J-UMTF]; Jen Wieczner, *What's the Deal with the Spike Lee Crypto Ad?*, N.Y. MAG. (July 16, 2021), https://nymag.com/intelligencer/2021/07/whats-the-deal-with-the-spike-lee-crypto-ad.html [https://perma.cc/3ZGB-RS46].

¹⁴⁶ Silvia Foster-Frau, Locked Out of Traditional Financial Industry, More People of Color are Turning to Cryptocurrency, WASH. POST (Dec. 1, 2021, 2:53 PM), https://www.washingtonpost.com/national/locked-out-of-traditional-financial-industry-more-people-of-color-are-turning-to-cryptocurrency/2021/12/01/a21df3fa-37fe-11ec-9bc4-86107e7b0ab1_story.html
[https://perma.cc/9L8M-MDY7] (quoting Deidre McIntyre, the founder of the Facebook Group "Black People and Cryptocurrency").

¹⁴⁷ See TERRI BRADFORD, FED. RSRV. BANK OF KAN. CITY, THE CRYPTIC NATURE OF BLACK CONSUMER CRYPTOCURRENCY OWNERSHIP (2022), https://www.kansascityfed.org/Payments% 20Systems% 20Research% 20Briefings/documents/8843/PSRB22Bradford0601.pdf [https://perma.cc/YUT8-CF62] (explaining that Black consumers have seen cryptocurrencies as a quick way to close the wealth gap with other races, and that cryptocurrencies can be purchased easily without the traditional financial barriers). In addition, Black people have formed their own cryptocurrency communities to share their knowledge and skill sets with the greater goal to bridge the racial wealth gap. See, e.g., BLACK PEOPLE & CRYPTOCURRENCY, https://blackpeoplecryptocurrency.com/ [https://perma.cc/7MC3-RL9F]; The Black Crypto League, ONEUNITED BANK, https://www.oneunited.com/the-black-crypto-league/ [https://perma.cc/PM84-9Q7M].

demographic shifts as compared to traditional investment markets, is the effect of the belief that cryptocurrency has the potential to "disrupt[] centuries-long patterns of [Black] oppression" by the financial system.¹⁴⁸

While the underground economy may have community-building benefits, it introduces financial harms and consequences into already marginalized communities. The traditional banking sector remains a prime vector of structural racism and, given the propensity of marginalized communities to embrace underground, unconventional financial practices, it is unsurprising that Black participants in the cryptocurrency ecosystem see cryptocurrencies as a way to circumvent long-standing inequities of traditional banking. The next Section describes the case for cryptocurrency.

A. The Case for Cryptocurrency

Money is a liquid asset used to facilitate transactions of value. Money is often defined in terms of its purposes: (1) it is used as a medium of exchanges; (2) it is a store of value; and (3) it is a unit of account that provides a common measure of the value of goods and services. Cryptocurrency has many of the properties of money and is sometimes used as a medium of exchange, as well as a store of value. The theory of cryptocurrency resonates with Black cryptocurrency adopters because they see cryptocurrency as an investment tool and a form of liberation. The case that proponents of cryptocurrency make are the benefits of decentralization, the attractiveness of a revolutionary monetary system, inevitable rewards that are worth the risk, and the potential of crypto's democratic nature to democratize finance.

¹⁴⁸ Ross, supra note 135.

¹⁴⁹ See id. In an opinion piece, Cleve Mesidor, founder of the National Policy Network of Women of Color in Blockchain, makes the argument that

[[]i]n the United States, an estimated 63 million Americans are unbanked, underbanked or lack access to the traditional financial system. That is a stain on our democracy and economic structure. Today, urban, rural and native communities that continue to be locked out of centralized finance are looking to cryptocurrencies as a pathway to economic empowerment.

Cleve Mesidor, *How Crypto Can Power the Future of Work for People of Color*, COINDESK (Feb. 6, 2022), https://www.coindesk.com/layer2/2022/02/06/how-crypto-can-power-the-future-of-work-for-people-of-color/ [https://perma.cc/PYR6-D688].

¹⁵⁰ What Is Decentralization in Blockchain?, AWS, https://aws.amazon.com/blockchain/decentralization-in-blockchain/ [https://perma.cc/2WLR-32VJ]; Rakesh Sharma, What Is Decentralized Finance (DeFi) and How Does It Work?, INVESTOPEDIA (Sept. 21, 2022), https://www.investopedia.com/decentralized-finance-defi-5113835 [https://perma.cc/T22X-LLAM]; Justin Kuepper, What is Crypto Decentralization?, ZENLEDGER (May 9, 2022), https://www.zenledger.io/blog/what-is-crypto-decentralization/ [https://perma.cc/NE62-CD9C];

1. Decentralization as a Substitute for Trust

The primary appeal of cryptocurrencies is that the cryptocurrency market is an alternative path to financial freedom, free from government or central bank control. Decentralized financial products like cryptocurrency are available on a public network that does not have oversight or singular authority. In other words, there are no intermediaries such as banks involved in transactions and there are no credit checks. Is a decentralized blockchain network, no one is required to know or trust any one individual. The trust resides within the software code and computers. Through a distributed ledger, all members in the network have access to the same data. Decentralization can arguably reduce points of weakness in systems with too much reliance on potentially biased individual actors.

2. Democratizing Investment Systems Through Inclusive Participation

Cryptocurrencies have the potential to be more inclusive and accessible than traditional financial institutions, which can promote greater financial empowerment and inclusion of global users. The barriers to entry into the cryptocurrency ecosystem are relatively low and do not require permission to participate, since anyone with a computer or smartphone and an internet connection, regardless of their location or background, can participate in the market. This accessibility can make cryptocurrency more inclusive than traditional financial institutions that have higher barriers to entry, such as identity verification, account minimums, and credit checks.¹⁵⁴

Cryptocurrencies can provide greater financial inclusion to underbanked and unbanked individuals by allowing them to store and transfer value without going through a financial institution. Ordinary

Frederick Reese, 7 Benefits of Decentralized Currency, BITCOIN MKT. J. (Apr. 29, 2019, 8:00 AM), https://www.bitcoinmarketjournal.com/decentralized-currency/ [https://perma.cc/F9D6-4JVJ]; Coin Rivet, 7 Best Advantages Of Decentralized Currencies Like Bitcoin, YAHOO FIN. (Apr. 27, 2023), https://finance.yahoo.com/news/7-best-advantages-decentralized-currencies-082834875.html [https://perma.cc/D6RW-NXB8].

¹⁵¹ Financial freedom means different things to different people. To some, financial freedom is simply about having enough money. To others, it is whether you personally control your money.

¹⁵² Initially, blockchain technology eliminated the need for third-party financial intermediaries; however, cryptocurrency has not completely eliminated intermediaries. Increasingly, cryptocurrency exchanges rely on central banks for conversion to fiat currency. Further, cryptocurrencies have created dependency on other intermediaries, such as software developers and miners.

¹⁵³ What is Decentralization in Blockchain?, AWS, https://aws.amazaon.com/blockchain/decentralization-in-blockchain/ [https://perma.cc/AD48-DAN3].

¹⁵⁴ Increasingly, cryptocurrency exchanges are requiring KYC documentation. See supra notes 21–22 and accompanying text.

investors can enter the cryptocurrency investment market when they might otherwise be barred from traditional capital markets. Furthermore, people do not need permission from any financial authority or governmental authority to use the cryptocurrency ecosystem. Cryptocurrencies can facilitate borderless transactions, which can benefit individuals and businesses in countries with restrictive financial systems or high fees for cross-border transactions.

3. Autonomy Translates to Inclusiveness and Urgency of Participation

To many cryptocurrency adopters, the cryptocurrency market is revolutionary because it enables decentralized peer-to-peer transactions free from intermediaries. Adopters argue that due to the revolutionary nature of crypto, there is a risk of being left behind. Proponents of cryptocurrencies and Bitcoin organize around maximizing participation of Black people in the market before it is too late.¹⁵⁵ These Black cryptocurrency adopters have organized around these principles and expressed a sense of urgency in entering the cryptocurrency market, driven by the historical pattern of Black people entering financial markets belatedly, after the markets have already experienced exponential growth.¹⁵⁶

4. The Technology Replaces Institutional Reliance

Cryptocurrency, as a technology and asset class, has the potential to disrupt traditional financial markets and reduce reliance on institutional intermediaries in some areas. However, it is unlikely to completely replace institutional reliance in the short term. Cryptocurrencies operate on decentralized blockchain networks, which means that they do not require intermediaries such as banks, brokers, or exchanges to facilitate transactions or store value. This can potentially reduce the need for institutional intermediaries in some areas, such as cross-border payments or remittances.

¹⁵⁵ See, e.g., Black Crypto League, supra note 147 ("It's time we built our own league, a space where we can recoup the generations of wealth lost to the hands of slavery, Jim Crow, unequal housing, and many more factors. We are building revolutionary ways of existing and excelling, from claiming our #OneTransaction to restoring Black Wall Street. The Black Financial Revolution is here!"); Coinbase Presents: Black Americans & Crypto, Coinbase, https://www.coinbase.com/learn/community/black-americans-and-crypto [https://perma.cc/XLY2-E3KG] ("It's important that underrepresented people of color play a role in helping shape Web 3.0 and partake in the new opportunities that will arise from it." (quoting Vernon Johnson, co-founder of Yup, a cryptocurrency social network)).

¹⁵⁶ COINBASE, *supra* note 155 (explaining that people of color were underrepresented during the emergence of the internet and, as a result, had fewer opportunities to enter into the industry and share the wealth and innovation from the last technology revolution).

Proponents claim that cryptocurrency is much more secure than traditional forms of money. The security stems from the fact that transactions are verified by miners, who use complex algorithms to ensure that each transaction is legitimate. While hackers could hack into individual cryptocurrency owners' wallets and accounts to steal their cryptocurrency, the concepts behind blockchain technology make it arguably nearly impossible to hack the blockchain. Yet, hackers have found ways to attack the unique vulnerabilities of blockchains. 157

5. Cryptocurrency as a Path to Racial Equity

The disproportionate participation in cryptocurrency by young Black people tells a story about how this population views the technology. Cryptocurrency investors of color are less likely than their white counterparts to invest in the traditional stock market and retirement products as compared to their white counterparts. Black Americans are more likely to think stock markets are untrustworthy than white Americans. The same is true of financial institutions. After collective distrust in the banking system, it can be inferred that Black people are motivated by the prospect of never having to deal with traditional financial institutions that have prevented Black people from experiencing prosperity.

Young, financially stable Black people are opting into cryptocurrency, even though their similarly situated white counterparts are investing in mainstream financial systems. This fact indicates that Black investors may have a different view of crypto's decentralized system as compared to the traditional mainstream financial system. The latter has effectively locked out these same participants from economic power and wealth-building opportunities.¹⁶¹ This behavior can be understood through the theory of liberation that claims cryptocurrencies

¹⁵⁷ See Ephrat Livni & Eric Lipton, Crypto Banking and Decentralized Finance, Explained, N.Y. TIMES (Sept. 5, 2021), https://www.nytimes.com/2021/09/05/us/politics/cryptocurrency-explainer.html [https://perma.cc/3HP2-M9CU].

¹⁵⁸ See Lowrey, supra note 133; see also Michael Powell, Wealth, Race and the Great Recession, N.Y. TIMES (May 17, 2010), https://archive.nytimes.com/economix.blogs.nytimes.com/2010/05/17/wealth-race-and-the-great-recession/?_r=0 [https://perma.cc/86PH-39LG].

^{159 30%} of Black Americans are more likely to think stock markets are untrustworthy compared to 23% of white Americans. *Ariel-Schwab Black Investor Survey*, *supra* note 12.

 $^{^{160}}$ 28% of Black Americans are more likely to think financial institutions are untrustworthy compared to 18% of white Americans. *Id.*

¹⁶¹ Investors who are younger, have lower incomes, and started trading cryptocurrencies during the 2017–2018 boom tend to be overly optimistic on the future trajectory of cryptocurrency prices. Matteo Benetton & Giovanni Compiani, *Investors' Beliefs and Asset Prices: A Structural Model of Cryptocurrency Demand* (Becker Friedman Inst., Working Paper No. 2020-107, 2020), https://bfi.uchicago.edu/wp-content/uploads/BFI_WP_2020107.pdf [https://perma.cc/9P4P-RS8M].

are a path to financial freedom. The theory claims that it is about more than just money: It is the financial freedom for future generations that is at stake. But given the racial wealth gap, the general risks applicable to cryptocurrency are even more pronounced for Black people.

Despite the relatively low barriers to entry, there are still challenges and risks associated with participating in the cryptocurrency market. Examples include the volatility of cryptocurrency prices, the potential for fraud or theft, the lack of regulatory oversight in some jurisdictions, and the complexity of some cryptocurrency concepts. Becoming a successful cryptocurrency trader or investor requires knowledge of the cryptocurrency market, technical analysis, and risk management, which can be challenging for novice users. There are still challenges and limitations to the widespread adoption of cryptocurrencies, such as scalability, security, and regulatory compliance.

Further, as a technology that can be used by anyone regardless of their race or ethnicity, cryptocurrency alone is not a path to racial equity. While cryptocurrency can provide greater access to financial services for underbanked and unbanked individuals, who may be disproportionately represented among minority communities, cryptocurrency is not a panacea for racial equity. Systemic barriers cannot be addressed through technology alone. Rather, a comprehensive approach to racial equity can address the underlying social, economic, and political factors that contribute to inequity. As the next Section demonstrates, there is an even stronger case against the cryptocurrency market.

B. The Case Against Cryptocurrency

Cryptocurrency influencers and those who have been trying to convince people to get into the market have been compared to snake oil salesmen. 162 Skeptics compare some cryptocurrencies to Ponzi pyramid

¹⁶² See, e.g., Kevin Stankiewicz, Sen. Elizabeth Warren Shoots Down a Key Reason Investors Buy Bitcoin, Calls For Tighter Regulation, CNBC (July 28, 2021), https://www.cnbc.com/2021/07/28/sen-elizabeth-warren-doubts-bitcoin-as-inflation-hedge-wants-tighter-regulation.html [https://perma.cc/8AWS-EYGS] (interviewing Senator Elizabeth Warren, who compared cryptocurrencies to the unregulated days of the pharmaceuticals industry, when anyone could manufacture and sell drugs and customers had virtually no protection against snake oil salesmen). The Federal Trade Commission reports that more than 46,000 people have reported losing over \$1 billion in cryptocurrency to scams since 2021. The median individual loss is \$2,600. See Emma Fletcher, Reports Show Scammers Cashing in on Crypto Craze, FTC (June 3, 2022), https://www.ftc.gov/news-events/data-visualizations/data-spotlight/2022/06/reports-show-scammers-cashing-crypto-craze [https://perma.cc/6ECF-LWRC]; see also Alexander Osipovich, Crypto Frauds Target Investors Hoping to Cash in on Bitcoin, WALL ST. J. (June 7, 2021), https://www.wsj.com/articles/crypto-frauds-target-investors-hoping-to-cash-in-on-bitcoin-boom-

schemes, ¹⁶³ and some analogize them to gambling. ¹⁶⁴ Crypto's detractors say that investors in cryptocurrency will likely end up with nothing. ¹⁶⁵ In its current form, it is not immediately obvious what the case for cryptocurrency actually is. Using cryptocurrency is a generally more expensive way to transact than using fiat currency. In addition, using and relying on cryptocurrency, a system outside of any centralized authority, is not without risk because "cryptocurrencies are highly speculative, volatile, unregulated, and not backed by a government." ¹⁶⁶ The value of cryptocurrencies is entirely dependent on a person's willingness to buy that asset from the asset holder. This Section explains the common arguments against the case for cryptocurrency.

1. The Myth of Decentralization

The volatility of the cryptocurrency markets has made cryptocurrency ineffective as a medium of exchange. The cryptocurrency market has shifted such that it is not so much a medium of exchange, but rather a means of payment. Initially, cryptocurrencies appeared to revolutionize the way payments were made because cryptocurrencies do not rely on a centralized system or intermediaries to conduct transactions. However, the decentralized nature of the market is more theoretical than real. Most cryptocurrency transactions

[https://perma.cc/5EYB-TUKX] (discussing SEC chairman Gary Gensler likening stablecoin to poker chips at the casino); *see also* Singletary, *supra* note 27 (noting comments about cryptocurrency by Algernon Austin, Director for Race and Economic Justice at the Center for Economic and Policy Research, that "[a]s an investment, it's closer to gambling").

^{11623058380?}mod=article_inline [https://perma.cc/Z47G-YCQ8] (noting that according to the FTC, consumers reported losing approximately \$82 million to cryptocurrency scams during the fourth quarter of 2020 and first quarter of 2021 alone).

¹⁶³ David Segal, *The Crypto Ponzi Scheme Avenger*, N.Y. TIMES (Nov. 11, 2022), https://www.nytimes.com/2022/11/11/business/crypto-ponzi-scheme-hyperfund.html [https://perma.cc/4BLF-3MAB]. A Ponzi pyramid scheme is a fraud where early investors are paid from funds obtained from later investors. *Id.*

¹⁶⁴ See Tory Newmyer, SEC's Gensler Likens Stablecoins to 'Poker Chips' Amid Call for Tougher Crypto Regulation, WASH. POST (Sept. 21, 2021, 3:17 PM), https://www.washingtonpost.com/business/2021/09/21/sec-gensler-crypto-stablecoins/

¹⁶⁵ Paul Krugman, How Crypto Became the New Subprime, N.Y. TIMES (Jan. 27, 2022), https://www.nytimes.com/2022/01/27/opinion/cryptocurrency-subprime-vulnerable.html [https://perma.cc/JMM3-39QU].

¹⁶⁶ BRADFORD, supra note 147.

¹⁶⁷ Eswar S. Prasad, *A New Era for Money*, FIN. & DEV., Sept. 2022, at 4, 6; Kevin V. Tu & Michael W. Meredith, *Rethinking Virtual Currency Regulation in the Bitcoin Age*, 90 WASH. L. REV. 271, 292 (2015).

¹⁶⁸ Hilary J. Allen, *supra* note 16; *see also* Johnson, *supra* note 12, at 1911 ("[C]areful examination revealed that cryptocurrency issuers and the firms that offer secondary market cryptocurrency trading services have not quite lived up to their promise. . . . [E]vidence reveals that platforms that facilitate cryptocurrency trading frequently employ the long-adopted intermediation practices of their traditional counterparts.").

occurred peer-to-peer—without a financial intermediary—which reduced transaction costs. However, many transactions currently occur through centralized exchanges and off-chain. People generally value intermediaries because they do not have the time or the knowledge to conduct direct exchanges, which is why crypto has centralized.

Although the underlying blockchain technology is decentralized, the cryptocurrency market has become more and more centralized. An example is the growing dominance of a few large cryptocurrency exchanges. These exchanges have amassed a significant amount of trading volume and have become the primary gateway for users to buy and sell certain cryptocurrencies. For instance, Binance, Coinbase, and Kraken are among the largest cryptocurrency exchanges in terms of trading volume and user base, and they dominate the trading of several cryptocurrencies such as Bitcoin, Ethereum, and Litecoin. This concentration of trading volume and user base in a few large exchanges has led to concerns around market manipulation, lack of competition, and increased vulnerability to cyberattacks. Additionally, the actions of these exchanges, such as delisting certain cryptocurrencies or making changes to their trading rules, can have a significant impact on the overall market.

Despite earlier iterations of the cryptocurrency market generally operating without financial intermediaries, the cryptocurrency market no longer operates completely free of these intermediaries. ¹⁷¹ Bitcoins are the most decentralized. Altoins, which are typically defined as

¹⁶⁹ Top Cryptocurrency Spot Exchanges, COINMARKETCAP, https://coinmarketcap.com/rankings/exchanges/ [https://perma.cc/4HF2-G6LD]; Rosie, 5 Biggest Crypto Exchanges by Average Daily Volume, COINSTATS/BLOG (June 19, 2023), https://coinstats.app/blog/biggest-crypto-exchanges/ [https://perma.cc/FU69-5WS9].

¹⁷⁰ Sarah Weisner, 8 Reasons Coins Get Delisted From Cryptocurrency Exchanges, MEDIUM (Mar. 7, 2019), https://medium.com/efficient-frontier/six-reasons-coins-get-delisted-from-crytpocurrency-exchanges-3666deb1ef9f# [https://perma.cc/BW7E-MZFG]; Leo Schwartz, Bakkt Delists Solana, Polygon, and Cardano, Citing Lack of Regulatory Clarity, YAHOO FIN. (June 16, 2023), https://finance.yahoo.com/news/bakkt-delists-solana-polygon-cardano-120000183.html [https://perma.cc/2SEM-5KN2].

¹⁷¹ Tonantzin Carmona, *Debunking the Narratives About Cryptocurrency and Financial Inclusion*, BROOKINGS (Oct. 26, 2022), https://www.brookings.edu/articles/debunking-the-narratives-about-cryptocurrency-and-financial-inclusion/ [https://perma.cc/SSQ3-SCDD] ("Though crypto proponents often argue that the 'trustless' environment created by blockchain technology has removed many intermediaries (such as governments and banks), interactions with traditional financial institutions are often required to do things like convert cryptocurrencies into fiat currency. Many have also pointed out that cryptocurrencies as well as crypto-products and companies come with their own set of intermediaries, including software developers, miners, venture capitalists, and even centralized intermediaries and platforms such as exchanges and crypto-lending products.").

cryptocurrencies other than Bitcoin or Ethereum, are more centralized.¹⁷² Cryptocurrency that is backed by central banks and government securities and currencies—called "stablecoins"—is commonly used as a means of payment.¹⁷³ Stablecoins are entirely intermediated by bank-like entities that lack bank charters. Although there are recent arguments to the contrary given the crash of one of the largest stablecoins, terraCoin, stablecoins have generally been considered to be less-volatile products.¹⁷⁴ In response to stability concerns, banks have started to issue digital forms of central bank money for retail payments—central bank digital currencies (CBDCs).¹⁷⁵ Additionally, many traditional financial intermediaries now provide ways for their customers to invest in cryptocurrency.¹⁷⁶

The volatility of the market is a barrier for cryptocurrency to function as a payment system and the ecosystem has shifted towards cryptocurrency as an investment. One of the reasons for the shift is that the easiest way to buy, sell, and trade cryptocurrency is through a third-party exchange site.¹⁷⁷ These changes undermine the original

¹⁷² Ryan Austin, *Altcoins Are the Alternative Digital Currencies to Bitcoin—Here's What They Are and How They Work*, BUS. INSIDER (Aug. 4, 2021, 3:14 PM), https://www.businessinsider.com/personal-finance/what-is-altcoin [https://www.perma.cc/A56T-5MHJ].

¹⁷³ See News Release, Off. of the Comptroller of the Currency, Federally Chartered Banks and Thrifts May Engage in Certain Stablecoin Activities (Sept. 21, 2020), https://www.occ.gov/news-issuances/news-releases/2020/nr-occ-2020-125.html [https://perma.cc/UDK3-WMY5] (discussing the Office of the Comptroller of the Currency issuing a release stating federally chartered banks and federal savings associations may engage in some stablecoin activities such as holding reserves on behalf of customers who issue certain stablecoins); see also News Release, Off. of the Comptroller of the Currency, Federally Chartered Banks and Thrifts May Participate in Independent Node Verification Networks and Use Stablecoins for Payment Activities (Jan. 4, 2021), https://www.occ.gov/news-issuances/news-releases/2021/nr-occ-2021-2.html [https://perma.cc/XG7N-7SWF] (stating that the OCC also approved stablecoins for payment activities).

^{174 &}quot;Stablecoins," despite the nomenclature, have been found to not be all that stable. They are not backed with real assets and at the time of this writing, the stablecoin market has been crashing, rather than staying stable. Reed Lamberg, *Bank of England Says Stablecoins Aren't Stable for Investors*, BNN BLOOMBERG (June 1, 2022), https://www.bnnbloomberg.ca/bank-of-england-says-stablecoins-aren-t-stable-for-investors-1.1773342 [https://perma.cc/8G3P-BYTF].

¹⁷⁵ Prasad, *supra* note 167; *Central Bank Digital Currency Tracker*, ATL. COUNCIL https://www.atlanticcouncil.org/cbdctracker/ [https://perma.cc/A5Y5-URBR].

¹⁷⁶ U.S. DEP'T OF THE TREASURY, CRYPTO-ASSETS: IMPLICATIONS FOR CONSUMERS, INVESTORS, AND BUSINESSES 7 (2022), https://home.treasury.gov/system/files/136/CryptoAsset_EO5.pdf [https://perma.cc/2EK6-F3F3].

¹⁷⁷ Many of these transactions come with a fee. Coinbase, the largest U.S. cryptocurrency exchange company, reported that in the last quarter of 2021, it made over \$2 billion from transaction fees alone. Tom Mitchelhill, *Coinbase Made \$2.2 Billion in Revenue from Transaction Fees in Q4*, COINTELEGRAPH (Feb. 25, 2022), https://cointelegraph.com/news/coinbase-made-2-2-billion-in-revenue-from-transaction-fees-in-q4 [https://perma.cc/7XC2-E34L].

cryptocurrency market principles of evading government and corporate control.

While cryptocurrency might have been conceived to evade the power and control of central banks, financial institutions are capitalizing on recent trends. Several major financial institutions in the traditional financial markets have entered the cryptocurrency market to capture its growth.¹⁷⁸ Banks, including Bank of New York Mellon and Northern Trust, began offering cryptocurrency-related services to their clients, such as custodial services, fiat-to-cryptocurrency conversion, and blockchainbased payment platforms.¹⁷⁹ Silvergate Bank created the Silvergate Exchange Network, a platform that facilitated the conversion of fiat currency to cryptocurrency and vice versa and allows customers to move funds easily between traditional banks and cryptocurrency exchanges. Finally, Signature Bank launched a blockchain-based payment platform called Signet that allowed its customers to instantly send and receive payments in digital currencies like Bitcoin. The platform is designed to provide faster, more secure, and more efficient payment processing than traditional wire transfers. 180

This convergence between traditional banking and cryptocurrency is legitimizing digital assets and making it easier for investors to access this emerging asset class. One cannot fail to see the irony of central financial institutions investing in what was supposed to be a way around such institutions. In other words, "[t]hese cryptocurrency exchanges are exactly the type of institutions that the original advocates for cryptocurrencies hoped to circumvent. The reality of cryptocurrencies today is essentially the opposite of what was originally envisioned." ¹⁸¹

Involvement from large institutional investors also suggests that they may see certain cryptocurrency as a viable commercial product, deriving

¹⁷⁸ Luke DeVault & Kainan Wang, Embracing the Future or Buying into the Bubble: Do Sophisticated Institutions Invest in Crypto Assets? 4 (Nov. 18, 2021) (unpublished manuscript), https://papers.csm.com/sol3/papers.cfm?abstract_id=3965717 [https://perma.cc/N67U-VUFW]; See PWC, 4TH ANNUAL GLOBAL CRYPTO HEDGE FUND REPORT 2022, at 41 (2022), https://www.pwc.com/gx/en/financial-services/pdf/4th-annual-global-crypto-hedge-fund-report-june-2022.pdf [https://perma.cc/PT2Q-PF38].

¹⁷⁹ Emily Flitter, Banks Tried to Kill Crypto and Failed. Now They're Embracing It (Slowly)., N.Y. TIMES (Nov. 1, 2021), https://www.nytimes.com/2021/11/01/business/banks-crypto-bitcoin.html [https://perma.cc/A2LU-BUV6].

¹⁸⁰ It should be noted that both Silvergate Bank and Signature Bank have collapsed in the first quarter of 2023, and their network transaction services for cryptocurrencies are no longer operational. MacKenzie Sigalos, What the Failures of Signature, SVB and Silvergate Mean for the Crypto Sector, CNBC (Mar. 12, 2023), https://www.cnbc.com/2023/03/12/signature-svb-silvergate-failures-effects-on-crypto-sector.html [https://perma.cc/TT2H-EJ5H].

¹⁸¹ Austin et al., *supra* note 134.

profits from data mining and predictive analytics. These institutions are laying the groundwork for control should money completely digitize. The involvement of corporations in the cryptocurrency market effectively means that it may be, if it has not already been, co-opted by mainstream actors.¹⁸²

2. The Cryptocurrency Market Replicates the Current System of Exclusion and Hierarchy

The abstract philosophy of the autonomous, decentralized system that flaunts the global financial markets as a path towards liberation, freedom, and financial wealth is flawed. The distribution of cryptocurrency replicates access to traditional forms of capital. The realities do not connect to the rhetoric. Those that have the most to gain—the wealthy and the privileged—will be likely to capitalize on the cryptocurrency markets. This dynamic replicates the current hierarchical system.

The current cryptocurrency system is not as inclusive as proponents say it is and it has potential to create deep inequities. The system is not inclusive when there is a perception that one needs to understand computer science and complicated jargon to participate in the market. While the same could be said of traditional investing, especially in securities and derivatives, ordinary people can often outsource investment management to financial advisors. The same role does not yet exist for cryptocurrency in a mainstream capacity. Further, the system is not inclusive when the transaction costs are high. For payers, cryptocurrency has very high transaction costs—network fees, exchange fees, wallet fees, conversion fees, and potential tax liability—compared to credit card transactions. Transactions with higher fees are typically processed faster than those with lower fees, as network participants prioritize transactions with higher fees. These transaction costs alone mitigate against the notions of democratic participation in the cryptocurrency market.

Like the problems identified with artificial intelligence and fintech described in Section I.D, the technology is not autonomous and free from human interaction and behavior. Cryptocurrency adopters are attracted to the market for the fact that the system does not rely on human beings to guarantee access. But the cryptocurrency market is entirely reliant on human beings to program the code and mine the assets. For example,

¹⁸² In the United States, institutional investors such as hedge funds are the driving force in the cryptocurrency market. See Gregory Zuckerman, Mainstream Hedge Funds Pour Billions of Dollars into Crypto, WALL St. J. (Mar. 9, 2022), https://www.wsj.com/articles/mainstream-hedge-funds-pour-billions-of-dollars-into-crypto-11646808223 [https://perma.cc/9RSX-QWQZ].

Bitcoin depends on "a small group of software developers and mining pools to function." The miners and developers are a small, concentrated group that controls the processing and verifying of Bitcoin transactions. 184 Cryptocurrency is distributed as unequally as more traditional types of capital, rebutting the presumption that its decentralized nature would lead to decentralized wealth. 185 Another group of researchers studied the transactional behavior and ownership patterns of the main market participants in the Bitcoin ecosystem using data from the Bitcoin blockchain. Their research results suggest that Bitcoin is "dominated by large and concentrated players, be it large miners, Bitcoin holders or exchanges." 186 Ultimately, the majority of cryptocurrency's benefits is likely to fall disproportionately to a small set of market participants.

The cryptocurrency market replicates current hierarchies within the traditional finance system in that ownership concentrates among the select few.¹⁸⁷ Those who are most skilled in high technology may use blockchain to enrich and empower themselves. The irony is that cryptocurrency is distributed as unequally as more traditional types of capital. While young Black technologists have become fast cryptocurrency adopters, most cryptocurrencies are held by a few cryptocurrency "whales." ¹⁸⁸ Although the quantity of investors for the Black community may be significant, the actual percentage of the Black community's investment in cryptocurrency is relatively low as compared to these whales. ¹⁸⁹ In fact, "voting rights in decentralized autonomous

¹⁸³ Hilary J. Allen, *The Superficial Allure of Crypto*, FIN. & DEV., Sept. 2022, at 27, 27.

¹⁸⁴ Emily Graffeo, *Just 0.1% of Bitcoin Miners Control Half of All Mining Capacity, According to a New Study*, FORTUNE (Oct. 26, 2021), https://fortune.com/2021/10/26/bitcoin-mining-capacity-ownership-concentration-top-investors-nber-study/ [https://perma.cc/JM8M-ZAVN].

¹⁸⁵ Ashish Rajendra Sai, Jim Buckley & Andrew Le Gear, *Characterizing Wealth Inequality in Cryptocurrencies*, FRONTIERS IN BLOCKCHAIN, Dec. 20, 2021, at 1, 11 (finding that most cryptocurrencies have a wealth distribution that is in line with traditional economies. Their analysis suggests that "free-market implementation of these cryptocurrencies may eventually lead to wealth inequality similar to those observed in real-world economies").

¹⁸⁶ Igor Makarov & Antoinette Schoar, *Blockchain Analysis of the Bitcoin Market* 30 (Nat'l Bureau of Econ. Rsch., Working Paper No. 29396, 2021), https://www.nber.org/system/files/working_papers/w29396/w29396.pdf [https://perma.cc/3KJG-QKS8].

¹⁸⁷ *Id.* (describing the results of their finding "that the majority of gains from further adoption are likely to fall disproportionately to a small set of participants").

¹⁸⁸ Cryptocurrency whales are large holders of cryptocurrencies. Whales hold enough cryptocurrency that they can manipulate and influence the cryptocurrency market. For example, with respect to Bitcoin, the largest and first cryptocurrency, most of the money in Bitcoin is concentrated in the hands of a small number of people. See id.

¹⁸⁹ Paul Vigna, *Bitcoin's 'One Percent' Controls Lion's Share of the Cryptocurrency's Wealth*, WALL ST. J. (Dec. 20, 2021), https://www.wsj.com/articles/bitcoins-one-percent-controls-lions-share-of-the-cryptocurrencys-wealth-11639996204 [https://perma.cc/AJ4H-CKRT].

organizations and wealth tend toward concentration in crypto even more than in the traditional financial system."¹⁹⁰ The decentralized nature of the cryptocurrency market does not lead to decentralized wealth. In fact, a crypto-based system is likely only to move wealth upward to those wealthy institutions and individuals that have the resources to speculate on the market.

The private market, Wall Street, and Silicon Valley financial institutions have started to encroach on cryptocurrency in a way that belies the value placed on decentralization. Indeed, cryptocurrency adopters have increased their advocacy and lobbying efforts to preserve the value placed on decentralization as regulators seek to control cryptocurrency in the United States and Europe. 191 In recent years, there has been a significant increase in such lobbying activity on behalf of cryptocurrency users and related interest groups. 192 Many cryptocurrency companies and organizations have established lobbying arms to advocate for favorable legislation and regulation. For example, the Blockchain Association, which represents various cryptocurrency companies, has been active in lobbying for clearer regulations and more favorable treatment of the cryptocurrency industry. 193 Similarly, the Cryptocurrency Council for Innovation (CCI), which includes major players in the industry such as Coinbase and Square, has also been actively lobbying policymakers.¹⁹⁴ In addition to industry groups, individual investors and advocates have also been vocal in their support of cryptocurrency and have sought to influence policy decisions. 195 For example, investors have publicly lobbied for the approval of a Bitcoin ETF, which would make it

¹⁹⁰ Allen, *supra* note 183, at 27, 28.

¹⁹¹ Brody Ford, Crypto Lobbying Skyrocketed Last Year—Even Facebook and IBM Got Involved, BLOOMBERG (Mar. 8, 2022, 1:22 PM), https://www.bloomberg.com/news/articles/2022-03-08/crypto-lobbying-skyrocketed-last-year-and-quadrupled-since-2018 [https://perma.cc/C8FS-C6HJ].

¹⁹² Crypto Lobbying Is Going Ballistic, ECONOMIST (Dec. 7, 2021), https://www.economist.com/finance-and-economics/crypto-lobbying-is-going-ballistic/21806674 [https://perma.cc/AN6Y-47JJ]; Caitlin Reilly, Crypto Sector Lobbying Expenditures Up a Third in Second Quarter, ROLL CALL (Aug. 9, 2022), https://rollcall.com/2022/08/09/crypto-sector-lobbying-expenditures-up-a-third-in-second-quarter/ [https://perma.cc/6W8V-3GBE].

¹⁹³ Ben Strack, Will Crypto Lobbying Spend Continue Big Growth in 'Crucial' Year?, BLOCKWORKS (Apr. 3, 2023, 4:42 PM), https://blockworks.co/news/crypto-lobbying-spend-continue-growth [https://perma.cc/9XE5-USVK].

¹⁹⁴ Tory Newmeyer, *Crypto Companies, on Defense in Washington, Scramble to Assemble a Lobbying Machine*, WASH. POST (Nov. 16, 2021, 6:00AM), https://www.washingtonpost.com/business/2021/11/16/crypto-lobby-struggles/ [https://perma.cc/A7GB-JC2C].

¹⁹⁵ Eric Lipton & David Yaffe-Bellany, *Crypto Industry Helps Write, and Pass, Its Own Agenda in State Capitols*, N.Y. TIMES (Apr. 10, 2022), https://www.nytimes.com/2022/04/10/us/politics/crypto-industry-states-legislation.html [https://perma.cc/C3KU-62HJ].

easier for individuals to invest in Bitcoin through traditional brokerage accounts.¹⁹⁶

Accessibility to cryptocurrency is likely limited by the wealth gap and lack of financial literacy as well as cryptocurrency literacy, which is complicated by the use of technical language and jargon. The cryptocurrency market is not user-friendly. There are hurdles to the commercialization of blockchain technology for ordinary entrepreneurs. There is a high barrier to entry because entrance is reliant upon understanding the technology and the basics of the cryptocurrency marketplace. New technology can be overwhelming and a limiting factor for potential users.

3. The Decentralized System Is Risky and Requires Watchdogs

The cryptocurrency boom seemed to peak at a market value of \$3 trillion in the fall of 2021. 197 It has since plunged to \$1 trillion but stabilized over the third quarter of 2022. 198 Bitcoin's price has crashed to two-year lows as one of the big exchanges, FTX, went insolvent. 199 There has been a lot of volatility in 2022–2023 in the cryptocurrency ecosystem with the bankruptcies of several cryptocurrency firms and potential enforcement action by the SEC and Commodity Futures Trading Commission (CFTC). 200 As these firms interact with regulators, observers can see how the uninhibited and pseudonymous nature of the decentralized cryptocurrency system presents challenges for enforcing tax and anti-money laundering laws as well as preventing financial

¹⁹⁶ Suzanne O'Halloran, Bitcoin ETF Push: Grayscale Asks Americans to Lobby for Approval, FOX BUS. (Feb. 26, 2022), https://www.foxbusiness.com/markets/bitcoin-etf-fund-sec-grayscale-cryptocurrency [https://perma.cc/U6TV-MFY3].

¹⁹⁷ Joanna Ossinger, *The World's Cryptocurrency Is Now Worth More Than \$3 Trillion*, TIME (Nov. 8, 2021), https://time.com/6115300/cryptocurrency-value-3-trillion/[https://perma.cc/5TNX-BEZG].

¹⁹⁸ Ari Levy & MacKenzie Sigalos, *Crypto Peaked a Year Ago—Investors Have Lost More Than* \$2 *Trillion Since*, CNBC (Nov. 11, 2022), https://www.cnbc.com/2022/11/11/crypto-peaked-in-nov-2021-investors-lost-more-than-2-trillion-since.html [https://perma.cc/N8ZH-5JMU].

¹⁹⁹ Ken Sweet, *Crypto Exchange Giant FTX Collapses, Files for Bankruptcy*, AP (Nov. 11, 2022), https://apnews.com/article/ftx-crypto-bankruptcy-filing-ed0f06c5db468e285f58af 2d8766b51a [https://perma.cc/YA5T-HC2Z].

²⁰⁰ On March 27, 2023, a major international cryptocurrency exchange, Binance, was sued by the U.S. Commodity Futures Trading Commission (CFTC) for trading and derivatives laws violations, not the least of which was that Binance offered its derivatives trading services to U.S. customers without being licensed to do so. Ryan Browne, *No "Immediate Path Forward": CFTC Is Talking to Binance After Launching Legal Action, Official Says*, CNBC (Apr. 25, 2023), https://www.cnbc.com/2023/04/25/cftc-commissioner-hopes-to-find-path-forward-in-binance-lawsuit.html [https://perma.cc/3GHH-CQWR]; Paul Kiernan, *Cryptocurrency Faces Legal Reckoning as SEC Prepares Action Against Coinbase*, WALL ST. J. (Mar. 24, 2023), https://www.wsj.com/articles/crypto-faces-legal-reckoning-as-sec-prepares-action-against-coinbase-e4c95bf3 [https://perma.cc/57C7-K86C].

crimes.²⁰¹ The ecosystem is without a watchdog to monitor and maintain market stability and ensure investor and consumer protections. Recent failures of major cryptocurrency issuers, large global exchanges, and hedge funds, as well as the extreme downturn of cryptocurrency value, have contributed to an uptick in the calls to specifically regulate digital financial markets.

As an emerging technology, cryptocurrency is subject to a range of risks, such as liquidity, market, and regulatory risks. As the cryptocurrency industry matures and becomes more mainstream, regulatory scrutiny is likely to increase, and firms that are unable or unwilling to comply with regulatory requirements may face significant legal and reputational consequences.

4. The Technology Is Assailable

Cryptocurrencies, like any other technology, are not immune to hacks and attacks.²⁰² While blockchain technology is considered secure due to its cryptographic algorithms and decentralized nature, cryptocurrencies have been the target of several attacks in the past.²⁰³ Investors have been harmed in various ways, including by cybercrime and ransomware. In addition, many retail investors have been falling prey to simple phishing attempts and other "hacks."²⁰⁴

As a result, cryptocurrency owners are vulnerable to scams and wide fluctuations in price with little to no recourse, particularly in the digital marketplace. According to the FTC, cryptocurrency fraud cost investors \$1.205 billion in 2022. By contrast, credit card fraud amounted only to \$185 million.²⁰⁵ Cryptocurrency scams account for a greater percentage

²⁰¹ Igor Makarov & Antoinette Schoar, *Cryptocurrencies and Decentralized Finance (DeFi)*, BROOKINGS PAPERS ON ECON. ACTIVITY, Spring 2022, at 141, 175.

²⁰² Alexandra Kelley, DARPA Report Finds Vulnerabilities in Blockchain Tech, Non-secure Crypto Transactions, NEXTGOV (June 21, 2022), https://www.nextgov.com/emerging-tech/2022/06/ darpa-report-finds-vulnerabilities-blockchain-tech-non-secure-crypto-transactions/368392/ [https://perma.cc/ZL5A-UD9P].

²⁰³ David Yaffe-Bellany, *The Crypto World Is on Edge After a String of Hacks*, N.Y. TIMES (Sept. 28, 2022), https://www.nytimes.com/2022/09/28/technology/crypto-hacks-defi.html [https://perma.cc/88U4-C8UG]

²⁰⁴ Stu Sjouwerman, The Growing Threat of Cyber Attacks on Cryptocurrencies, FAST Co. (Nov. 4, 2022), https://www.fastcompany.com/90801780/the-growing-threat-of-cyber-attacks-on-cryptocurrencies [https://perma.cc/M53V-C3PS].

²⁰⁵ Fraud Reports by Payment Method, Losses and Contact Method, Year 2022, FTC, https://public.tableau.com/app/profile/federal.trade.commission/viz/FraudReports/FraudFacts [https://perma.cc/5QNR-3N8D].

of losses than any other type of payment method.²⁰⁶ There is no immediate remedy or recourse for victims of cryptocurrency scams or fraud.

5. The Cryptocurrency Market Consumes Excessive Energy

Cryptocurrency consumes excessive amounts of nonrenewable energy.²⁰⁷ Cryptocurrency mining, which is the process of authenticating transactions and connecting them to the blockchain, requires a significant amount of energy due to cryptocurrency's design and the incentives that govern its mining process. The design of cryptocurrency mining involves solving complex mathematical problems using specialized hardware, which requires a lot of computational power and electricity. The energy consumption of cryptocurrency mining can vary depending on the specific cryptocurrency and the mining algorithm it uses.

For example, creating Bitcoin consumes massive amounts of computing power to make the calculations required to mine coins.²⁰⁸ Bitcoin production leaves behind a large carbon footprint.²⁰⁹ A White House press release stated that "from 2018 to 2022, annualized electricity usage from global cryptocurrency assets grew rapidly, with estimates of

²⁰⁶ Emma Fletcher, Reports Show Scammers Cashing in on Crypto Craze, FTC (June 3, 2022), https://www.ftc.gov/news-events/data-visualizations/data-spotlight/2022/06/reports-show-scammers-cashing-crypto-craze [https://perma.cc/4CCJ-H7U5].

²⁰⁷ It is impossible to measure how much energy the cryptocurrency market consumes across all exchanges and currencies. Bitcoin currently consumes around 140 terawatt-hours annually, according to the Cambridge Center for Alternative Finance (CCAF), an organization that tracks electricity production. Bitcoin Network Power Demand, CAMBRIDGE BITCOIN ELECTRICITY CONSUMPTION INDEX, https://ccaf.io/cbnsi/cbeci [https://perma.cc/GZ43-3N7N]. The annual amount of energy used to power Bitcoin is roughly equivalent to the annual amount of energy used in small countries such as Argentina, Malaysia, or Ukraine. Comparisons, CAMBRIDGE BITCOIN ELEC. CONSUMPTION INDEX, https://ccaf.io/cbnsi/cbeci/comparisons [https://perma.cc/D7CX-GDRH]; Cristina Criddle, Bitcoin Consumes 'More Electricity than Argentina', BBC NEWS (Feb. 10, 2021), https://www.bbc.com/news/technology-56012952 [https://perma.cc/4PXC-TE6G]; see also John Schmidt, Why Does Bitcoin Use So Much Energy?, FORBES ADVISOR (May 18, 2022), https://www.forbes.com/advisor/investing/cryptocurrency/bitcoins-energy-usage-explained [https://perma.cc/2TYH-AHX3] (noting that Bitcoin's annual electricity consumption exceeds that of Norway).

²⁰⁸ See Jon Huang, Claire O'Neill & Hiroko Tabuchi, *Bitcoin Uses More Electricity Than Many Countries. How Is That Possible?*, N.Y. TIMES (Sept. 3, 2021), https://www.nytimes.com/interactive/2021/09/03/climate/bitcoin-carbon-footprint-electricity.html [https://perma.cc/D6JE-26ZP] ("The process of creating Bitcoin to spend or trade consumes around 91 terawatt-hours of electricity annually, more than is used by Finland, a nation of about 5.5 million.").

²⁰⁹ Simon Spichak, How Crypto Is Failing Spectacularly to Greenwash Itself, DAILY BEAST (Apr. 22, 2022), https://www.thedailybeast.com/how-cryptocurrencies-are-failing-spectacularly-to-greenwash-themselves [https://perma.cc/C5Z7-Y2T5].

electricity usage quadrupling."²¹⁰ Some cryptocurrencies, such as Ethereum, are transitioning to a more energy-efficient mining algorithm, which could help reduce their energy consumption. More effort is needed to help mitigate the environmental impact of cryptocurrency activity.

6. Cryptocurrency Influencers and Cryptocurrency Startups Create Predatory Inclusion

Black technologists have been among the first to adopt cryptocurrencies and many have done so in the name of racial equity. The high rate of participation in cryptocurrency by young Black people is not so much a cure for systemic racism in the financial industry as it is a symptom. It is a form of "predatory inclusion." Predatory inclusion in the context of cryptocurrency assets is akin to the predatory inclusion that occurred in the housing market and with for-profit educational institutions. However, instead of pushing expensive mortgage products or private educational loans, cryptocurrency market actors are using the financial inclusion narrative to encourage marginalized people to participate in a regulatorily noncompliant, unprotected, and unstudied market, despite having much to lose.

Financial players with deep pockets have sought to capitalize on this phenomenon by marketing cryptocurrencies to the Black population. This marketing parrots the very real concerns of a financially excluded community. The narrative relies on the historic and systemic exclusion of Black people to encourage market participation in cryptocurrencies. A good example of this is the way cryptocurrency firms have spent large

²¹⁰ Press Release, Off. of Sci. & Tech. Pol'y, *supra* note 1 ("As of August 2022, published estimates of the total global electricity usage for crypto-assets are between 120 and 240 billion kilowatt-hours per year, a range that exceeds the total annual electricity usage of many individual countries, such as Argentina or Australia. This is equivalent to 0.4% to 0.9% of annual global electricity usage, and is comparable to the annual electricity usage of all conventional data centers in the world.").

²¹¹ See supra note 16 and accompanying text.

During Super Bowl LVI in 2022, four cryptocurrency companies had purchased ads to air during the Super Bowl. The focus of the ads was not to explain what cryptocurrency is or why it might be a good investment but to suggest that people should invest in cryptocurrency before it is too late. Francesca Fontana, *The Crypto Firms That Bought Those Super Bowl Ads Aren't So Super Anymore*, WALL St. J. (June 18, 2022), https://www.wsj.com/articles/the-crypto-firms-that-bought-those-super-bowl-ads-arent-so-super-anymore-11655524845 [https://perma.cc/8XLY-K94J]. Crypto.com placed an ad during the Super Bowl featuring LeBron James telling his "younger self that 'if you want to make history, you got to call your own shots." *Id.* The tagline of the ad is "Fortune favors the brave." Crypto.com also sponsored the arena where the Los Angeles Lakers play, and it was renamed the "Crypto.com Arena." *Id.*

sums of money to get celebrities to endorse their products.²¹³ In the summer of 2020, Kim Kardashian posted a cryptocurrency ad in her Instagram stories to her 228 million followers.²¹⁴ The ad promoted investment in a limited "token" from Ethereum Max, a cryptocurrency company, which at the time was only a month old.²¹⁵ Ethereum Max's trading volume increased before the post, but after the post, the company's value plummeted, leaving investors who invested after Kardashian's post with little to show for their investment.²¹⁶ The chair of the United Kingdom's Financial Conduct Authority was quoted as saying that Ethereum Max "resembled a pump-and-dump scheme."²¹⁷ The SEC filed charges against Kardashian for failing to disclose the amount she was paid at the time.²¹⁸ Ultimately, "Kardashian agreed to settle the charges, pay \$1.26 million in penalties, disgorgement, and interest, and cooperate with the Commission's ongoing investigation."²¹⁹

In the pop culture canon, corporations have a history of capitalizing on Black youth or Black culture to sell a product.²²⁰ The cryptocurrency market is no different. These companies have capitalized on the liberation theory described above and have gotten celebrities to "portray[] virtual currency as a world with its own hip culture and philosophy—one that

²¹³ See Immanual John Milton, The Disastrous Record of Celebrity Crypto Endorsements, BLOOMBERG (Aug. 1, 2022), https://www.bloomberg.com/features/2022-crypto-celebrity-endorsements/?leadSource=uverify% 20wall [https://perma.cc/DTN5-TC77] (detailing cryptocurrency partnerships with celebrities such as Matt Damon, Tom Brady, Matt James, and more).

²¹⁴ Jamie Redman, *Kim Kardashian Shills Ethereum Max on Instagram, Media Questions Socialites Motive*, BITCOIN.COM (June 15, 2021), https://news.bitcoin.com/kim-kardashian-shills-ethereum-max-on-instagram-media-questions-socialites-motive/[https://perma.cc/KPM4-TYE8].

²¹⁵ David Z. Morris, *Kim Kardashian and EthereumMax. Why?*, COINDESK (June 15, 2021), https://www.coindesk.com/markets/2021/06/15/kim-kardashian-and-ethereum-max-why/ [https://perma.cc/QRM4-XXUS].

²¹⁶ As of August 2023, Ethereum Max is priced at \$0.00000001158. *See Ethereum Max*, COINMARKETCAP, https://coinmarketcap.com/currencies/ethereummax/ [https://perma.cc/CR6F-D33Y].

²¹⁷ Ben McKenzie & Jacob Silverman, Celebrity Crypto Shilling Is a Moral Disaster, SLATE (Oct. 7, 2021), https://slate.com/technology/2021/10/ben-mckenzie-crypto-celebrities-kardashian-brady-lohan.html [https://perma.cc/SQ9A-SUCW].

Press Release, SEC, SEC Charges Kim Kardashian for Unlawfully Touting Cryptocurrency Security (Oct. 3, 2022), https://www.sec.gov/news/press-release/2022-183 [https://perma.cc/F7B5-DQGD] (announcing charges against Kim Kardashian for promoting on social media the cryptocurrency security offered and "sold by EthereumMax without disclosing the [\$250,000] payment she received for the promotion").

²¹⁹ Id.

²²⁰ See Jennifer Roth-Gordon, Jessica Harris & Stephanie Zamora, Producing White Comfort Through "Corporate Cool": Linguistic Appropriation, Social Media, @BrandsSayingBae, 265 INT'L J. SOCIO. LANGUAGE, 107–28 (2020) (examining how corporations rework Black culture to create "corporate cool" as part of their advertising strategy on social media).

was more inclusive than traditional finance and that involved the chance to make loads of money."²²¹ The celebrity and influencer endorsements targeting the Black community send a message that there is money and wealth to be found in the cryptocurrency market. While it may be true that some early adopters have become wealthy, there is something inherently troubling about marketing a product that is so speculative and volatile to those with the most to lose. In contrast, the wealthy and privileged may be more likely to capitalize on the cryptocurrency market.

Predatory inclusion, whether it comes from Black cryptocurrency adopters, influencers, or companies seeking to capitalize on the ideas of racial equity to pursue profit, is not financial inclusion. It is a smokescreen for the real problem, which is access to capital. The endorsement of cryptocurrency by the Black community functions like a system, not a cure, for racial inequity. Economists Juliet Elu and Miesha Williams developed a financial model around cryptocurrency. Their model predicted those that stand to benefit from crypto track along racial lines. They found that "at best, the existing White-Black wealth hierarchy will be replicated in the cryptocurrency space. At worse, cryptocurrency investing will further widen the White-Black wealth divide."

7. Lack of Immediate Remedy

The recent publicized failures of cryptocurrency issuers, exchanges, and hedge funds demonstrate the risky nature of the ecosystem, as billions of dollars have disappeared overnight with little remedy or recourse for investors. Since the fall of FTX and the subsequent arrest of its founder, Sam Bankman-Fried (SBF), the focus has been on SBF and his losses, the losses of celebrity investors, such as Tom Brady, Gisele Bündchen, Steph Curry, Larry David, and famous venture capital firms, such as Paradigm, SoftBank, and Sequoia Capital, that bet on SBF. There has been little focus on the segment of the population that has the most to lose.

Generally, there are mechanisms in place to hold SBF accountable for the losses, the potential financial crimes, and the banking violations of which he has been accused. There is nothing in place in our regulatory system to help marginalized individuals who have lost everything. Little information is known about how the fall of FTX might have affected the ordinary investor in crypto. Although FTX primarily held institutional deposits, it is possible that small investors lost significant savings and

²²¹ Tiffany Hsu, *All Those Celebrities Pushing Cryptocurrency Are Not So Vocal Now*, N.Y. Times (May 17, 2022), https://www.nytimes.com/2022/05/17/business/media/crypto-gwyneth-paltrow-matt-damon-reese-witherspoon.html [https://perma.cc/HS9V-XJJW].

²²² Austin et al., *supra* note 134.

investments in the crash, if not specifically from FTX's bankruptcy, then because of the inevitable aftershocks.

Given the size and appeal of the cryptocurrency market and its potential, there are very strong public policy interests implicated in how the market is governed moving forward. This next Section describes the challenges and inherent opportunities in seeking to regulate the cryptocurrency market.

C. Regulating Financial Inclusion and Cryptocurrencies

In March of 2022, President Joseph R. Biden Jr. issued an "Executive Order on Ensuring Responsible Development of Digital Assets," which seeks to establish a national policy for cryptocurrency as well as the development of a U.S. CBDC and identifies six priorities: consumer, investor and business protection; financial stability and systemic risk; payment systems; national security; the exercise of human rights; and financial inclusion and equity.²²³ While many activities involving cryptocurrencies are within the scope of existing domestic laws and regulations, the President cited the need for the federal government to "take strong steps to reduce the risks that cryptocurrencies could pose."²²⁴ Of particular interest in the Executive Order was the Administration's explicit efforts to redress past financial exclusion through financial inclusion. Section 2, Part (e) of the Executive Order, outlining the objectives of the Order, states:

We must promote access to safe and affordable financial services. Many Americans are underbanked and the costs of cross-border money transfers and payments are high. The United States has a strong interest in promoting responsible innovation that expands equitable access to financial services, particularly for those Americans underserved by the traditional banking system, including by making investments and domestic and cross-border funds transfers and payments cheaper, faster, and safer, and by promoting greater and more cost-efficient access to financial products and services. The United States also has an interest in ensuring that the benefits of financial innovation are enjoyed equitably by all Americans and that any disparate impacts of financial innovation are mitigated.²²⁵

Thus, an explicit goal of the Executive Order is equitable access to safe and affordable financial services in the U.S. government's approach to digital asset innovation. This approach is especially significant for

²²³ Exec. Order No. 14,067, 87 Fed. Reg. 14,143, 14,143 (Mar. 14, 2022).

²²⁴ *Id*.

²²⁵ *Id.* at 14,144

Black communities that have long been excluded from accessing financial services and markets. The Administration's own language in the Executive Order explicitly names financial inclusion as a central goal of its policy and approach toward the digital assets space, which represents a subtle, but mighty, policy shift in the Order's implicit suggestion that technology and innovation can solve deep-seated structural issues of financial exclusion.

The proclamations in the Executive Order call on the federal government to investigate the cryptocurrency space with the intent of regulating it. This is significant because, as previously described, the main attraction of cryptocurrencies is the decentralized, libertarian, and unregulated nature of blockchain technology. The idea of the federal government playing a central role in promoting and providing access to assets that by their very nature circumvent regulation by central authorities seems contradictory. Nevertheless, the Biden Administration has suggested that the federal government will play a large role in regulating and providing oversight of digital assets.

Proponents of regulation argue for regulation in the name of investor protection, since investors in cryptocurrency, unlike other types of investors, are not specifically protected from fraud or market manipulation. ²²⁶ Currently, compared with traditional financial markets, cryptocurrency is very lightly regulated as an asset class. Cryptocurrencies lack much of the regulation and control from either banks or governments. While some countries have not entirely regulated cryptocurrency, the United States requires centralized cryptocurrency exchanges to register as money transmitters under relevant banking laws such as the Bank Secrecy Act. ²²⁷ Other countries have passed more stringent regulations, while others, such as China, have banned cryptocurrency trading altogether.

The cryptocurrency market is speculative and uncertain. Cryptocurrencies are arguably subject to much of the banking and securities laws, but cryptocurrency firms have mostly been noncompliant, arguing that current regulatory structures are unwieldy and clumsy for decentralized technology.²²⁸ Cryptocurrency firms might soon be subject

²²⁶ Ackerman & Kiernan, supra note 131.

²²⁷ Katherine A. Lemire, *Cryptocurrency and Anti-Money Laundering Enforcement*, REUTERS (Sept. 26, 2022, 10:06 AM), https://www.reuters.com/legal/transactional/cryptocurrency-anti-money-laundering-enforcement-2022-09-26/ [https://perma.cc/PZ4M-VTXY].

²²⁸ See Eric Lipton, As Scrutiny of Cryptocurrency Grows, the Industry Turns to K Street, N.Y. TIMES (Nov. 1, 2021), https://www.nytimes.com/2021/05/09/us/politics/cryptocurrency-regulation-sec-ripple-labs.html [https://perma.cc/996X-YJQM].

to increased regulation specifically tailored to blockchain technology. The United States might contemplate issuing digital currencies. Alternatively, the regulating agencies might recommend to the Biden Administration that the federal government enact a blanket ban for banks and other financial institutions on entering the space. At the same time, there are significant cultural, legal, racial, and political barriers to full or equitable participation in traditional financial systems. This exclusion is a barrier to accessing capital and building intergenerational wealth. Beyond the revolutionary idea behind the technology, the cryptocurrency movement represents a rare opportunity for the United States to look at economic and banking policies as they relate to race. It offers the opportunity to grapple with financial exclusion of the past and address financial inclusion in the present.

Without taking care to address past mechanisms of financial exclusion, cryptocurrency will ultimately default to and repeat old patterns of traditional financial markets. High rates of participation by marginalized consumers are not so much a cure for financial exclusion, but rather a symptom of systematic exclusion. Cryptocurrency or even the decentralized nature of cryptocurrency is not capable of repairing the harms caused by structural racism. Uncritical encouragement of traditionally marginalized groups to participate in extremely risky digital asset markets is an ineffective and unjust solution to the harms of financial exclusion. Only an enormously ambitious governmental intervention could hope to supply such a cure. And yet, many young Black people are looking for immediate financial access that is "independent of government" to escape the longstanding inequities of traditional banking. On this account, the turn to cryptocurrency is entirely understandable. The traditional banking sector remains a major vector of structural racism and is self-defeating without centralized reforms.

The cryptocurrency asset market is likely not the path to closing the racial wealth gap. The idea that a financially marginalized community can invest in new, speculative, decentralized assets "to close inequalities and attract or accumulate wealth in ways that those who have accumulated wealth never did themselves" is a dangerous proposition.²²⁹ In other words, offering marginalized groups alternative, unproven products, such as cryptocurrency, as a means to build wealth instead of providing access to banking services and products and other proven means of wealth-building perpetuates the exclusionary practices of the traditional financial

²²⁹ Trymaine Lee, *Is Black Crypto Freedom? Or Fad?*, MSNBC (Apr. 19, 2022), https://www.msnbc.com/podcast/into-america/transcript-black-crypto-freedom-or-fad-n1294590 [https://perma.cc/ZQ7E-V4S5].

system. It is this decentralized nature of the technology that purportedly lends itself to a participatory, inclusive ecosystem in contrast to the central financial system that has excluded and marginalized the Black community. But previous attempts to build separate monetary institutions for Black people have failed in part because of a catch-22 described by Professor Mehrsa Baradaran that "the very institutions needed to help communities escape the deep poverty [caused by discrimination and segregation] inevitably became victims of that same poverty."²³⁰ Decentralization might then not be as attractive unless one can restructure the higher levels of the monetary system to accommodate it.

As evinced by the history and legacy of financial exclusion outlined in Part I, when technology is accessible and neutral, it should still be critically analyzed as to whether it might be beneficial to marginalized communities. Despite Black cryptocurrency adopters' claims, the case against cryptocurrency assets in their current state is stronger than the case for them. There is no reason to think that the cryptocurrency asset market will be a path toward racial equity. Although there will be those people, such as Jefferson Noel, who may have the opportunity to build wealth and engage in the markets in new and revolutionary ways, these digital markets are not necessarily economic justice and participation in the cryptocurrency ecosystem is likely not a structural path to economic equity for Black people.²³¹

When viewed through a racial lens, cryptocurrency is powerful not because it provides a decentralized market for potential wealth accumulation, but rather because it necessitates constructing a framework for addressing financial inclusion in traditional financial spaces. An Afrofuturist lens facilitates a rethinking of our financial systems and the role of cryptocurrencies as a catalyst for racial equity. From an Afrofuturist perspective, financial inclusion for Black people would mean empowering Black people to imagine their role in future systems change.²³² But before equity is possible, we must first address past racialized harms. A critical interrogation of cryptocurrency and its utility

²³⁰ Black Joy, UCLA BLACK BRUIN RES. CTR., https://blackbruinresourcecenter.ucla.edu/black-joy [https://perma.cc/DWZ2-VGDH]; see also MEHRSA BARADARAN, HOW THE OTHER HALF BANKS: EXCLUSION, EXPLOITATION, AND THE THREAT TO DEMOCRACY 4–5 (2015).

²³¹ Luke Lango, *Understanding the Wealth-Creating Power of Cryptocurrency*, INVESTORPLACE (June 9, 2022), https://investorplace.com/hypergrowthinvesting/2022/06/understanding-the-wealth-creating-power-of-cryptocurrency/ [https://perma.cc/65VC-WRZF].

²³² Sabrina Faramarzi, *Profile: Ingrid LaFleur*, EMERGE, https://www.whatisemerging.com/profiles/ingrid-lafleur [https://perma.cc/Z6FY-QKB6] ("Afrofuturism is an essential lens for looking at systems change because it empowers Black people to imagine their role in the future, even when the current reality is one of systemic discrimination, mass incarceration and state violence.").

is needed before promoting or regulating it because there is the risk of repeating the systemic harms of the past that created the wealth divide. There is also the risk that redress of inequity will be left to individual actors with relatively little power within our financial system, forgoing the chance for a holistic look at how private and public actors contribute to the ways in which financial policy reinforces structural inequality.

Part I of this Article described a pattern and practice of exclusion that has led to Black people being marginalized across all financial and economic metrics. No decentralized system can repair those massive harms caused by systemic discrimination and exclusion across centuries. Given those harms, it is understandable why Black people would be attracted to a decentralized, democratic system built on transparency and inclusion. But in the end, the turn to cryptocurrencies is risky and selfdefeating in the absence of centralized reforms and regulations. Without regulation, Black people have the most to lose from cryptocurrency investments. At the time of the writing of this Article, cryptocurrency is on a downward spiral, but many are still betting on its future. As the federal government seeks to study and regulate cryptocurrencies, we can attempt to avoid replicating financial exclusion of the past by examining new frameworks for financial inclusion. The Afrofuturist paradigm has the potential to inform current financial policy and regulation to promote financial inclusion.

III. AFROFUTURISM: A PATH TOWARD FINANCIAL INCLUSION

Futurist scholars propose using prescriptive theories as a guide toward envisioning and creating a more just and equitable future. These prescriptive theories aim to go beyond describing the current state of life and instead offer a framework for understanding the root causes of inequality and oppression, and proposing solutions to address them.

One futurist theory to combat racial inequality is Afrofuturism. Labeled as an artistic aesthetic and a critical theory framework, "Afrofuturism combines elements of science fiction, historical fiction, speculative fiction, fantasy, Afrocentricity, and magic realism with non-Western beliefs." At times, Afrofuturism completely reenvisions the past and speculates about the future in which cultural critiques are actualized. It belongs in the lineage of resistance to the traditional power structures and, in the words of the Afrofuturist scholar Ytasha

 $^{^{233}}$ Ytasha L. Womack, Afrofuturism: the World of Black Sci-Fi and Fantasy Culture 9 (2013).

²³⁴ Id.

Womack, "comes down to do we really imagine ourselves to be in the future.... Can we be agents of the future or will we be objects of the future, like we were objects of commerce when black folks were brought to the New World?"²³⁵

Afrofuturism centers Black people in conversations around the possibilities for marginalized people within the arts, sciences, and technology. The framework accounts for past harms and traumas and imagines a future free from those harms. As Womack describes, "Afrofuturism is an intersection of imagination, technology, the future, and liberation." Afrofuturist Ingrid LaFleur notes: "I generally define Afrofuturism as a way of imagining possible futures through a black cultural lens." In announcing its special Afrofuturist Exhibit launched in Spring 2023, the Smithsonian National Museum of African American History and Culture, defined Afrofuturism as a concept and a theory—a platform for new ideas and new forms of expression. In short, it is a way of reimagining the world.

Afrofuturism is necessary to generate new ideas to solve old problems. Science fiction, which Afrofuturism embraces, is invoked in scholarship when there is no robust theoretical framework for thinking about what the world will look like beyond existing structures. Science fiction is used to envision alternative spaces or alternative solutions to combat racial injustice in the future. Science fiction and speculative fiction is used to develop ideas about race and create futures with Black societies.²³⁹ An Afrofuturist framework embraces the emancipatory potential of technology and therefore meets cryptocurrency enthusiasts on their own terms, speaking their language, and resonating with their worldview in a way that may generate greater "buy-in," as well as innovative solutions. Afrofuturism not only centers the pursuit of egalitarian outcomes but also the experience of governance—and of being governed. It considers the ways governance may be profoundly alienating for marginalized communities, suggesting the need for reforms that incorporate those communities directly into the policymaking process. In other words, centering Black people and Black experience helps to analyze the impact of government interventions more accurately. By using prescriptive theories for Black lives as a guide, Afrofuturist scholars

²³⁵ *Id.* at 191.

²³⁶ *Id.* at 9.

²³⁷ Id.

²³⁸ See Afrofuturism: A History of Black Futures, SMITHSONIAN, https://nmaahc.si.edu/explore/exhibitions/afrofuturism [https://perma.cc/NNA5-FFP6].

²³⁹ WOMACK, *supra* note 233, at 120.

hope to create a more inclusive and equitable future that addresses the unique challenges facing Black communities and thereby create an environment where all can thrive.

Cryptocurrency is dynamic and firmly situated in the future and presents an opportunity to create a fairer, more inclusive financial system. As such, cryptocurrency can be the vehicle through which society thinks about financial inclusion. Although "emerging technologies is a discussion that all futurists are concerned with, Afrofuturists, in particular, are highly sensitive to how or if such technologies will deepen or transcend the imbalances of race." Since Afrofuturism "unchains the mind," Afrofuturist ideas are useful in the context of cryptocurrency and its demand to reimagine our financial systems.

Afrofuturism is an appropriate lens for cryptocurrency discussions because cryptocurrency assets are centered around speculative visions of the future. Afrofuturism can be used to understand why Black market participants might be interested in cryptocurrency assets to broaden nontraditional sources of financing on which they have so far relied. Further, an Afrofuturist paradigm can help Black people solve problems embedded in the central government system as well as in the implementation of cryptocurrency assets. The Afrofuturist paradigm pushes for systemic problems to be solved through systems change. Afrofuturism presents an opportunity to critically interrogate the bias and predatory nature of the current financial system. Afrofuturist thought can be used to build racial equity within the financial system of the future.

A. An Afrofuturist Approach

The term "Afrofuturism" was coined by cultural critic Mark Dery in 1993 to describe "[s]peculative fiction that treats African-American themes and addresses African-American concerns in the context of twentieth-century techno-culture—and, more generally, African-American signification that appropriates images of technology and a prosthetically enhanced future." Professor Bennett Capers dates Afrofuturist texts as far back as 1857.243 Capers cites several additional

²⁴⁰ *Id.* at 37.

²⁴¹ *Id.* at 15.

²⁴² Mark Dery, *Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose, in Flame Wars: The Discourse of Cyberculture 179, 180 (Mark Dery ed., 1994).*

²⁴³ I. Bennett Capers, *Afrofuturism, Critical Race Theory, and Policing in the Year 2044*, 94 N.Y.U. L. REV. 1, 7 (2019) (describing Martin Delany's 1857 book, *Blake; or, the Huts of America*, as an Afrofuturist fictional alternative history account of Cuban and American slaves successfully orchestrating a revolution). *See generally* MARTIN R. DELANY, BLAKE OR THE HUTS OF AMERICA (Beacon Press 1970) (1857).

examples of Afrofuturism before Dery's article, including Edward Johnson's *Light Ahead for the Negro* in 1904,²⁴⁴ W. E. B. Du Bois's *The Comet* in 1920,²⁴⁵ and Sun Ra's 1950s jazz music.²⁴⁶ And in 2018, there was the Marvel film *Black Panther*.²⁴⁷ Broadly speaking, Afrofuturism is a movement of African American writers, artists, musicians, and theorists that "merges myth and history to imagine new black cultures and futures" through exploration of "historical, geographic, and technoscientific forces transforming the world today."²⁴⁸

Dery's essay contributed both a term for the body of art as well as a recognition that the genre was garnering greater legitimacy with the general rise of science fiction in the 1990s.²⁴⁹ Capers argues that Dery also recognized analogies between science fiction with motifs of alien abductions and domination and "the very existence of blacks in America, originating as it did with abduction, enslavement, and forced breeding."²⁵⁰ Afrofuturist scholar Alondra Nelson described Afrofuturism as a way to discuss "race, identity, alienation, and the aspirations of the black community in a utopic future."²⁵¹ As of late, many examples of mainstream media arguably stem from the same genre, including Janelle Monae in pop music, Kamasi Washington in jazz, Nnedi Okorafor in science fiction, and Wangechi Mutu in the visual arts.²⁵²

 $^{^{244}\,}$ Capers, supra note 243. See $\mathit{generally}$ E.A. Johnson, Light Ahead for the Negro (1904).

²⁴⁵ Capers, *supra* note 243, at 8. *See generally* W. E. B. Du Bois, *The Comet, in* DARKWATER: VOICES FROM WITHIN THE VEIL 253 (1920). W. E. B. Du Bois was a leading scholar and prolific writer of his generation. *W. E. B. Du Bois*, NAACP, https://naacp.org/find-resources/history-explained/civil-rights-leaders/web-du-bois [https://perma.cc/SMY4-8MBH]. Among his writing achievements, Du Bois was also a science fiction writer. Du Bois was an Afrofuturist before the name was coined. According to Womack, "Du Bois was one of many activists who, beginning in the nineteenth century, used speculative fiction and sci-fi to hash out ideas about race, re-create futures with black societies, and make poignant commentary about the times." WOMACK, *supra* note 233, at 120.

²⁴⁶ Capers, *supra* note 243, at 8 (citing Brad Farberman, *Why Is Sun Ra Suddenly Having His Moment?*, ROLLING STONE (Oct. 18, 2017, 4:20 PM), https://www.rollingstone.com/music/music-features/why-is-sun-ra-suddenly-having-his-moment-197156 [https://perma.cc/JD3K-4BYN]).

²⁴⁷ Capers, *supra* note 243, at 7 (citing Clarisse Loughrey, *Black Panther Brings Afrofuturism into the Mainstream*, INDEPENDENT (June 13, 2018, 2:14 PM), https://www.independent.co.uk/arts-entertainment/films/features/black-panther-afrofuturism-ryan-coogler-definition-explainer-watch-release-date-a8209776.html [https://perma.cc/6VVM-TUEN]).

 $^{^{248}\,}$ Isiah Lavender, Afrofuturism Rising: The Literary Prehistory of a Movement 1 (2019).

²⁴⁹ Capers, supra note 243, at 9 (citing Dery, *supra* note 242, at 180).

²⁵⁰ Id. at 9.

²⁵¹ Id. at 11 (citing Soho Rep., Afrofuturism, YOUTUBE (Nov. 30, 2010), https://www.youtube.com/watch?v=IFhEjaal5js [https://perma.cc/3L7B-LSKX]).
²⁵² Id. at 10.

Today, Afrofuturism has a growing reach in mainstream media with popular writers and artists tapping into a variety of core ideas: in particular, "the insistence that people of color in fact *have* a future, and a commitment to disrupting racial, sexual, and economic hierarchies and categories." On a broader level, Afrofuturism asks the question: "Can a community whose past has been deliberately rubbed out, and whose energies have subsequently been consumed by the search for legible traces of its history, imagine possible futures?" 254

Legal scholars have started to write about Afrofuturism and the law in connection with fair housing, policing, and the use of algorithms in the criminal legal system.²⁵⁵ In Afrofuturism, Critical Race Theory, and Policing in the Year 2044, Professor Capers explores the themes of Afrofuturism in the context of law and policing.²⁵⁶ Capers centers Afrofuturism around four distinct themes: (1) a future with people of color, (2) disruption of hierarchies, (3) alienation, and (4) reclamation.²⁵⁷ The first theme's importance is in contrast to mainstream depictions of the future with only token representation for people of color.²⁵⁸ Afrofuturism insists that "people of color do more than simply exist in the future . . . they thrive."259 The second theme, disruption of hierarchies, similarly challenges entrenched social orders along race, gender, class, and sexuality lines.²⁶⁰ Capers sees the last two themes of alienation and reclamation as "closely related . . . reclaiming the identities and perspectives that were lost as a result of the slave trade and colonialism."261

Another core tenet of Afrofuturism is that it embraces technology.²⁶² Technology can be used to deepen entrenched racial inequality or it

²⁵³ *Id.* at 11.

²⁵⁴ Dery, *supra* note 242, at 180.

²⁵⁵ See generally Bennett Capers, Afrofuturism and the Law, 9 CRITICAL ANALYSIS L. 1 (2022); Ngozi Okidegbe, Of Afrofuturism, Of Algorithms, 9 CRITICAL ANALYSIS L. 35, 48 (2022) (invoking Afrofuturism to rethink algorithms, dismantle the criminal legal system in its current form, and reconstitute it into one that seeks to "ensure the well-being and safety of all."); Etienne C. Toussaint, For Every Rat Killed, 9 CRITICAL ANALYSIS L. 1 (2022); Rasheedah Phillips, Race Against Time: Afrofuturism and Our Liberated Housing Futures, 9 CRITICAL ANALYSIS L. 16 (2022).

²⁵⁶ Capers, *supra* note 243, at 1.

²⁵⁷ Id. at 11–17.

²⁵⁸ *Id.* at 11–13.

²⁵⁹ Id. at 13.

²⁶⁰ Id. at 14.

²⁶¹ Id. at 16 (citing Kodwo Eshun, Future Considerations on Afrofuturism, New Centennial Rev., Summer 2003, at 301).

²⁶² Capers, *supra* note 243, at 142.

can be used to transcend racial inequality.²⁶³ As Womack writes: "Afrofuturism is concerned with both the impact of . . . technologies on social conditions and with the power of such technologies to end the '-isms' for good and safeguard humanity."²⁶⁴ This is where Afrofuturism becomes relevant to bringing financial inclusivity into focus as it is applied to U.S. policy towards cryptocurrency assets and to our current financial system.

B. Afrofuturist Legislative and Regulatory Interventions

Given the pattern and practice of financial exclusion in the financial system, the integration of cryptocurrency assets presents challenges for racial and economic justice. Moving forward in an Afrofuturist tradition requires a "radical rethinking" by activists and scholars from multiple disciplines. An important question for legal scholars stemming from this rethinking will continue to be, "[W]hat kinds of institutional structures and arrangements can support Black thriving in the near or distant future?"265 Then, how do we move forward in addressing generational trauma as an important step towards creating a more equitable and inclusive financial system? How do we make sure the government does not put in place consumer protections that prevent small businesses and ordinary investors from full participation in the market in an equitable way?

A legislative strategy is needed that centralizes improving the economic position of Black people and protects cryptocurrency investors. But this leads to another series of questions. What should the SEC do? What should the CFTC do? What should the OCC do? What might they do? What are they likely to do? How does Afrofuturism interact with these agencies?

What if cryptocurrency is successful? How might an equitable legal and regulatory framework be built around it and how do we build a system in the future that is inclusive? If cryptocurrency assets continue to exist, an Afrofuturist lens will ensure that Black people and other marginalized market participants are able to access the markets in a fair and equitable way before powerful gatekeepers replicate the status quo in the current financial system.

Afrofuturist thinking is the ability to perceive the past and future in the exact same moment. "Parts of the brain that can perceive the past, can

²⁶³ WOMACK, *supra* note 233, at 191.

²⁶⁴ *Id.* at 36.

²⁶⁵ Okidegbe, *supra* note 255, at 35–36, 48.

also speculate about the future."²⁶⁶ It is essentially "a lens for looking at systems change, which includes and empowers Black people to imagine their role in the future."²⁶⁷ In this regard, an Afrofuturist paradigm can and should be applied to both the current traditional financial system as well as the system being created around the cryptocurrency asset market. This Section uses the four principles of Afrofuturism outlined by Professor Capers to imagine what financial inclusion looks like in the future with respect to cryptocurrency assets and as applied to the traditional markets. Caper's vision is appealing and effective particularly because it is squarely connected to Afrofuturism and the law. And so, it provides a useful "tool" in this analysis.

The Afrofuturist approach uses Afrofuturist themes to analyze how to ameliorate and remedy the harms of financial exclusion, both through integration of cryptocurrency into traditional financial markets, and in mitigating potential exclusionary harms through regulations. Each Afrofuturist theme describes proposed governmental action to promote financial inclusion.

1. Principle I: Black People in the Future

Afrofuturism's first core tenet is "the insistence that people of color in fact have a future," and such insistence necessitates power shifting. ²⁶⁸ It is a future where Black and other marginalized people are thriving and holding power alongside those who have historically held power. ²⁶⁹ What kind of institutional structures and arrangements can support Black economic thriving in the near or distant future? The cryptocurrency asset market is opening investment channels to communities of color who have not participated in the traditional financial market in the same numbers. It will be important that these investors have access to accurate information in the future. As cryptocurrency moves toward regulation and the public begins to accept Blockchain technology, it is vital that any regulation is geared towards the prevention of bias. Otherwise, bias will be the same as it has been in the centralized financial system.

²⁶⁶ Lonny J Avi Brooks, *When Is Wakanda: Imagining Afrofutures*, THE LONG NOW FOUND. (July 7, 2020), https://longnow.org/seminars/02020/jul/07/when-wakanda-imagining-afrofutures/[https://perma.cc/4HQL-QFXK].

²⁶⁷ Faramarzi, *supra* note 232.

²⁶⁸ Capers, *supra* note 243, at 11; Capers, *supra* note 255, at 5 ("Given that until recently, people of color have either been invisible or at most bit players, in most mainstream visions of the future—think *Minority Report* or *Star Wars* or *A Clockwork Orange* or even *1984*—this theme itself is a radical assertion.").

²⁶⁹ Brooks, supra note 266.

The emergence of the cryptocurrency asset market might seem like an opportunity for the Black community to build wealth and close the racial wealth gap, but the problem with this approach is the unspoken acceptance of the notion that poverty is caused by individual behavior and individual choices, rather than deep-seated structural and historical forces. As part of thinking about financial inclusion in the future, there is a need to incorporate a fundamental understanding into policy or an approach of the development of cryptocurrency assets that historic and structural forces contributed to financial exclusion. In a world where Black people are in power, it is the approach that requires power-shifting.

One means of shifting this power is through intervention, specifically by creating a Presidential Commission on Financial Inclusion. In the fall of 2021, members of Congress sent a letter to Treasury Department Secretary Janet Yellen and Deputy Secretary Wally Adeeyemo, urging the creation of a Presidential Commission on Financial Inclusion.²⁷⁰ The Commission would be a national interagency tasked with the goal of providing all people with the ability to access, utilize, and reap the benefits of financial products and services.²⁷¹ Members of Congress recommended that the Commission have a four-part mandate: (1) catalogue the federal government's existing programs and initiatives that affect financial inclusion; (2) catalogue existing efforts by community organizations and financial services providers to reach underserved communities and create a more inclusive financial system; (3) evaluate how technology can be utilized to improve outcomes for underserved Americans; and (4) devise a financial inclusion strategy for the federal government to implement in partnership with the financial services industry and community organizations.²⁷²

2. Principle II: Disruption of Hierarchies

Afrofuturism is committed to the disruption of hierarchies based on race, gender, sexuality, and class. An Afrofuturist approach to creating rules and laws for cryptocurrency would seek to avoid perpetuating existing entrenched hierarchies. Afrofuturism is committed to dismantling socially constructed hierarchies that promote and justify the vulnerability and disenfranchisement of the marginalized.²⁷³ The

²⁷⁰ Letter from Christopher A. Coons, Raphael G. Warnock & John Hickenlooper, U.S. Sens., to Janet Yellen, Sec'y, Dep't of Treasury, & Wally Adeyemo, Deputy Sec'y, Dep't of Treasury 2 (Nov. 10, 2021), https://www.coons.senate.gov/imo/media/doc/letter_financial_inclusion_commission.pdf [https://perma.cc/RK62-4F8G].

²⁷¹ *Id*.

²⁷² *Id*.

²⁷³ Okidegbe, *supra* note 255, at 35–36.

Afrofuturist paradigm is one in which marginalized people are empowered to change the system and not settle for systemic problems. When looking at the Afrofuturist principle that disrupts hierarchy, one sees that cryptocurrency assets in the context of Afrofuturism mean "open[ing] up a vantage for a utopian reconsideration of the (racially unequal) status quo."²⁷⁴

One way to reconsider the status quo is through an intervention like the Detroit Universal Basic Income Proposal. Detroit, Michigan is a city with a majority-Black population.²⁷⁵ Detroit is a major hub for Afrofuturism.²⁷⁶ The universal basic income proposal is a plan to provide every resident of the city with a guaranteed income, regardless of their employment status. Universal Basic Income for Detroit was first introduced by Ingrid Lafleur, who ran an Afrofuturist platform.²⁷⁷ In 2021, Detroit Mayor Mike Duggan considered a plan that would provide a monthly payment of \$1,200 to every Detroit resident for up to three years.²⁷⁸ The goal of the plan is to address the economic challenges facing many Detroit residents, including high levels of poverty and unemployment.²⁷⁹ Proponents of universal income argue that it can provide a safety net for those who are financially disadvantaged, while also stimulating the local economy by increasing consumer spending.²⁸⁰

The proposal for universal income in Detroit is still in the planning stages, and there are many questions that need to be answered before it can be implemented.²⁸¹ For example, it is not clear how the program would be funded, or how it would be administered. However, supporters of the plan see it as a promising step towards creating a more equitable and just society, and one that could serve as a model for other cities and communities around the world.

²⁷⁴ Alex Zamalin, *Afrofuturism as Reconstitution*, 9 CRITICAL ANALYSIS L. 8, 8 (2022).

²⁷⁵ According to the 2020 U.S. Census, Detroit's population is over 75% Black. *See QuickFacts: Detroit City, Michigan*, U.S. CENSUS BUREAU, https://www.census.gov/quickfacts/fact/table/detroitcitymichigan,MI/PST045222 [https://perma.cc/CMY9-DBSX].

²⁷⁶ Jasmine Espy, Black to Detroit: Imaginative Artistic Movement Afrofuturism Takes Root in Detroit, MODEL D (Aug. 21, 2017), https://www.modeldmedia.com/features/afrofuturism-detroit-082117.aspx [https://perma.cc/MS63-QHY5].

²⁷⁷ Detroit's Afrofuturist Mayoral Candidate Ingrid LaFleur Appears on "This American Life," DAILY DETROIT (Aug. 22, 2017), https://www.dailydetroit.com/2017/08/22/detroits-afrofuturist-mayoral-candidate-ingrid-lafleur-appears-american-life/ [https://perma.cc/MR8A-KDND].

²⁷⁸ *Id*.

²⁷⁹ *Id*.

²⁸⁰ Id.

²⁸¹ Detroit Today: Should Detroit Provide Guaranteed Income to Residents?, WDET (Apr. 4, 2023), https://wdet.org/2023/04/04/detroit-today-should-detroit-provide-guaranteed-income-to-residents/ [https://perma.cc/HV7G-2WEN].

The decentralized nature and philosophy of cryptocurrency means that the "people are in power" and that everyone has a voice and a say in how the ecosystem works. ²⁸² Ingrid Lafleur, in describing the proposal for universal basic income and a new form of currency in Detroit—called "D-coin"— says that a "shift in consciousness is needed to decolonize our systems." ²⁸³ The Detroit model demonstrates Afrofuturism in service to policymaking. The new technology is harnessed to create systemic change. It is important for a community to be heard and feel that their ideas are validated and seen.

3. Principle III: Alienation—Inclusivity for the Digital Asset Market

Alienation is the third theme that animates Afrofuturism. Alienation in Afrofuturism refers to the disconnection or separation from one's cultural roots and heritage. It is a common theme in Afrofuturist art and literature, as it reflects the experiences of many Black people who have been displaced from their ancestral homes and forced to navigate a world that often excludes and marginalizes them. Overall, alienation is a complex and multifaceted theme in Afrofuturism, and one that reflects the struggles and challenges faced by many Black people throughout history and in the present day.²⁸⁴

Technology such as cryptocurrency assets and blockchain that have the potential to disrupt the financial status quo offers possibilities for self-determination. In light of that, an Afrofuturist vision might be to develop an inclusive approach to the cryptocurrency asset market and rebuild the financial system. An Afrofuturist approach would not dismiss the cryptocurrency ecosystem as a Ponzi scheme, nor regulate it as usual. If regulated as usual, the cryptocurrency ecosystem will continue to replicate the existing wealth disparities. An Afrofuturist method would develop an inclusive approach to the cryptocurrency ecosystem, as well as reexamine and reimagine the existing financial system, while using Afrofuturism to avoid duplicating problems of our current system.

Afrofuturism demands that the future being built is not merely an improvement over the status quo, but also that it avoids replicating and

²⁸² Ingrid LaFleur, Dr. Gabriel & DJ Skeez, *Episode 2: Ingrid Lafleur Introduces Afrofuturism, Blockchain, and Cryptocurrency: Our New ABC's*, LADIES LOVE CRYPTO PODCAST (Apr. 30, 2019), https://ladieslovecryptopodcast.podbean.com/e/episode-2-afrofuturism-blockchain-and-cryptocurrency-our-new-abcs-w-guest-ingrid-lafleur/ [https://perma.cc/6Q3C-TJYE].

²⁸⁴ See Okidegbe, *supra* note 255, at 46 ("Afrofuturism is concerned with recovering Black subjectivities, epistemologies, and ways of being that would exist if not for the legacies of slavery and colonization." (citing Capers, *supra* note 243, at 16)).

deepening existing inequality. There is early economic research to suggest that the wealth distribution in the cryptocurrency asset market is concentrated. The Afrofuturist approach insists that Black and other marginalized people be a part of the government's policymaking. They would share power equally over important decisions around cryptocurrency assets, dismantling current hierarchies.

As an intervention, the Electronic Currency and Secure Hardware Act (E-Cash Act) is legislation that contemplates regulating digital currency and diminishing the wealth gap.²⁸⁵ It is regulation that may be an example of Afrofuturist principles. The E-Cash Act provides the government with infrastructure to regulate electronic currency and prevent market abuses. The bill refers to "Universality" and "Inclusion" as two statutory objectives, including prioritizing technologies that promote universal access and "tak[ing] into consideration the unique needs and circumstances of marginalized communities."²⁸⁶ The bill's financial inclusion aspects are actively promoted by its sponsors—in particular, as a resource for the underbanked and unbanked.²⁸⁷ The text of the bill names past harms and articulates how marginalized communities are generally left behind in financial technological innovation and how this bill aims to prevent that. Proponents of the bill state:

E-Cash is well-suited to individuals who: 1. Lack access to traditional banking/payments services; 2. Value privacy and wish to avoid surveillance and/or data-mining; 3. Are concerned about third-party censorship and/or discrimination; 4. Lack reliable internet or digital network connectivity; and 5. Are low-income and/or cannot afford high transaction, withdrawal, and exchange fees.²⁸⁸

(c) Statutory Objectives.

. . .

²⁸⁵ H.R. 7231, 117th Cong. § 3(b)(9), (c)(3) (2022).

²⁸⁶ *Id.* § 3(c)(3), (4).

²⁸⁷ See id.:

⁽³⁾ Universality.—The Secretary shall prioritize wherever possible technologies, practices, and programs that promote universal access and usability, particularly for—

⁽A) individuals with disabilities, including visual impairment;

⁽B) low-income individuals; and

⁽C) communities with limited access to the internet or telecommunications networks.

⁽⁴⁾ Inclusion.—The Secretary shall take into consideration the unique needs and circumstances of marginalized communities and populations that have historically been excluded from or otherwise prevented from taking full advantage of traditional and current financial institutions and payment services.

²⁸⁸ THE E-CASH ACT, https://ecashact.us [https://www.perma.cc/63RB-WADD].

Generally, the bill prioritizes infrastructure and capacity building for digital currency, including creating leadership positions and governing bodies.²⁸⁹

4. Reclamation: The Financial System

The last theme that animates Afrofuturism is reclamation.²⁹⁰ When we consider the Afrofuturist theory of reclamation, we see that cryptocurrency offers the potential for Black adopters to be included in and trust mainstream banking institutions in a way that history has belied.

The cryptocurrency asset market provides a chance for reclaiming institutional banking. The aim here is to fix the flaws within the current traditional financial system. Specifically, the aim is to examine the way banks perform in communities of color, challenge the way people are underserved and underbanked, and study and rectify banking deserts, predatory lending, and the ways in which big data and algorithms interact with race and promulgate bias. Other Afrofuturist solutions might include universal basic income based on cryptocurrency, decentralized autonomous organizations, an economic bill of rights, a serious consideration of reparations, enforcement of the Federal Reserve's mandate for public banking, and more.

One such solution may include widespread digital currency—however, not decentralized currency. Digital currency refers to any form of currency that exists solely in digital form and is not physically tangible. While blockchain-based cryptocurrencies like Bitcoin and Ethereum are currently the most well-known forms of digital currency, there are other types of digital currency that are less centralized.

One example of such digital currency is Ripple, which uses a different consensus algorithm called the Ripple Protocol Consensus Algorithm (RPCA) to validate transactions. Ripple is often used for crossborder payments and has partnerships with many major banks and financial institutions. Another example is Tether, which is a stablecoin that is pegged to the U.S. dollar. Unlike most other cryptocurrencies, which can be highly volatile, the value of Tether remains stable, making

²⁸⁹ See, e.g., H.R. 7231, 117th Cong. § 4(a) ("The Secretary shall establish the Electronic Currency Innovation Program to direct, oversee, coordinate, and harmonize the development, implementation, maintenance, and regulation of e-cash instruments, devices, technologies, platforms, and supporting and enabling infrastructure in accordance with the technical and policy criteria established by this Act.").

²⁹⁰ See, e.g., Tomi Adeyemi, Afrofuturism Gains New Momentum as Artists Reclaim Black History, CBS NEWS (Feb. 22, 2019, 11:22 AM), https://www.cbsnews.com/news/afrofuturism-gains-new-momentum-as-artists-reclaim-black-history-tomi-adeyemi/ [https://perma.cc/7A9W-H649] ("[Afrofuturism] aims to reclaim black history by imagining an alternate future that incorporates science fiction, technology and African mythology.").

it a useful tool for trading and investing. In addition, CBDCs are currently being explored and developed by many countries around the world. These currencies are designed to be backed by the full faith and credit of the issuing government, and would function similarly to traditional fiat currencies, but in digital form.

Digital currency that is not blockchain-based can be a tool for enfranchisement and mitigate against some of the concerns raised by blockchain currencies, as well as offer benefits over traditional currencies. Blockchain-based cryptocurrencies such as Bitcoin and Ethereum sometimes struggle with scalability due to the high computational power required for transactions. Nonblockchain digital currencies may be able to handle larger transaction volumes more efficiently since "decentralized blockchain technology cannot handle large volumes of transactions very well." CBDCs can provide governments with greater control over their monetary policies and financial systems, as they can be designed to be fully traceable and transparent. Some nonblockchain digital currencies may offer lower transaction fees than traditional payment methods or other forms of digital currency. Further, nonblockchain digital currencies may also avoid irreversible climate change effects of the cyber asset market.²⁹²

Adopting an Afrofuturist lens on money and payments would yield universal access of the sort common in other forms of public infrastructure such as electricity, the postal service, or roads. Money and payments are a public utility and the law should structure them such that everyone in society can use them on equal and fair terms. There is precedent for this at various points in U.S. history and in other industries, and we can draw from that to chart a path forward for banking.

Before the Senate Committee on Banking, Housing, and Community Affairs, Professor Baradaran testified that "[w]hile I share many of the cryptocurrency industry's concerns with respect to failures of the banking industry, I do not believe cryptocurrency is the best solution to the problems of financial inclusion and equity in banking."²⁹³ Professor Baradaran then continues her testimony:

²⁹¹ See ALLEN, supra note 183, at 28.

²⁹² Letter from Jared Huffman, U.S. Rep., to Michael S. Regan, Administrator, U.S. EPA (Apr. 20, 2022), https://huffman.house.gov/imo/media/doc/Crypto%20letter%20to%20EPA% 20FINAL.pdf [https://perma.cc/583G-SUTD].

²⁹³ Examining Regulatory Frameworks for Digital Currencies and Blockchain: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs, 116th Cong. 50 (2019) (statement of Mehrsa Baradaran).

Specifically, one stated goal of cryptocurrencies is to establish a "public" payments system available to all. In fact, such a public payments system already exists: that is the exact mission of the Federal Reserve. Congress established the Federal Reserve in 1913 to increase the integrity, efficiency and equity of U.S. payments. It was a public institution by design. According to its own charter, "the Federal Reserve was established to serve the public interest." ²⁹⁴

Each of these Afrofuturist categories provides an opportunity for the government to regulate and account for past harms. Looking at the four themes holistically, an Afrofuturist approach allows for Black people to retake charge of the financial system and live out the values of a decentralized finance system without predatory inclusion. The emergence of the cryptocurrency asset market presents an opportunity to create a fairer, more inclusive system. The cryptocurrency asset market's potential to avoid the traditional financial system makes it a rare and unique opportunity to examine and alter the financial system's status quo.

CONCLUSION

Cryptocurrency is often characterized in hyperbolic and extreme tones.²⁹⁵ Either it is digital gold or digital coal; either it is a tool for wealth creation or a risky investment vehicle that binds its users to destitution. This Article examines some of the reasons communities of color eagerly jumped into the cryptocurrency ecosystem. The Black community embraced cryptocurrencies because decentralization carried the promise of racial equity without the exclusionary practices that have prevented access to financial resources and the ability to build wealth among the Black community. And yet, this Article demonstrates the reality that cryptocurrency is distributed as unequally as more traditional types of capital. As this new financial system grows in popularity, Black people are being marketed the opportunity to change their wealth trajectories, but information about risk is less readily available.²⁹⁶ Recently, the

²⁹⁴ Id. (quoting BITCOIN, https://bitcoin.org/en/ [https://perma.cc/L9UH-H35U]); Structure of the Federal Reserve System: About the Federal Reserve System, BD. OF GOVERNORS OF THE FED. RSV. SYS. (Aug. 24, 2022), https://www.federalreserve.gov/aboutthefed/structure-federal-reserve-system.htm [https://perma.cc/L7R7-U3FZ].

²⁹⁵ See Makarov & Schoar, supra note 186, at 1 ("Opinions about the impact of cryptocurrencies range all the way from being a revolution in financial access to a threat to financial stability and monetary policy.").

²⁹⁶ Why the Crypto Crash Hit Black Americans Hard, ECONOMIST (May 20, 2022) (finding that 30% of Black cryptocurrency investors think that cryptocurrency is regulated by the government), https://www.economist.com/graphic-detail/2022/05/20/why-the-crypto-crash-hit-black-americans-hard [https://perma.cc/DM6D-6NVH].

cryptocurrency market has crashed and investors have taken heavy losses.²⁹⁷ The idea that risky cryptocurrencies can be a driver for racial equity and Black wealth has been challenged and arguably debunked by the volatile state of the market. Participation as a path to liberation in the cryptocurrency space by traditionally marginalized people is as dangerous and risky as the cryptocurrency market itself.

The decentralized nature of the cryptocurrency market does not decentralize wealth. Instead, this Article determines that viewing cryptocurrency as a financial solution for marginalized Black people is misplaced. The abstract philosophy of an autonomous, decentralized system that flaunts the global financial markets as a path towards liberation, freedom, and financial wealth is flawed, as the current distribution of cryptocurrency replicates disparate access to traditional forms of capital. Financial regulation that is just and fair would account for racial harms and traumas. In reimagining a future of freedom from those harms, regulators should seek guidance on developing inclusive strategies for the traditional financial system.

Regulation can be used to think about how both private and public actors might seize an opportunity for financial policies that consider the myriad social and economic factors animating the conversation around financial inclusion. The government must engage in Afrofuturist-informed approaches to design policy around financial inclusion and actively prevent past harms of intentional, systemic discrimination and financial exclusion. An Afrofuturist approach to financial inclusion means a move toward a future of inclusion where Black people and all marginalized people are central in all facets of the financial system.

²⁹⁷ The total value plunged 56% in the third quarter of 2022. The widespread losses brought on by the cryptocurrency crash are even broader amongst Black traders. Justinas Baltrusaitis, *Bitcoin Drops 56% in Q2 2022 Its Worst Quarterly Performance in a Decade*, FINBOLD (July 1, 2022), https://finbold.com/bitcoin-drops-56-in-q2-2022-its-worst-quarterly-performance-in-a-decade/ [https://perma.cc/YC4P-7AM7].

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