Finance, Advertising and Fraud: The Rise and Fall of the Freedman's Savings Bank*

Claire Célérier† Purnoor Tak‡

February 14, 2023

Abstract

We investigate how the Freedman's Savings Bank, the first bank collecting deposits from African Americans following Emancipation, attracted close to 100,000 depositors across 17 states within just a few years. We find that the bank promoted itself in newspapers more than any other bank. A textual analysis shows that the content of the advertising, which included false promises and a moralizing rhetoric, was also unique. This misleading advertising intensified with the fraudulent use of the deposit funds to the benefit of elite white networks, leading to the collapse of the bank and depositor losses rarely matched in history.

JEL classification: D14, G21, G51, J15, N21

Keywords: Banking, Minorities, Targeted Advertising, Economic History

*We thank Pat Akey, Bruno Biais, Laurent Calvet, Ing-Haw Chen, Joao Cocco, Jean-Edouard Colliard, Redouane Elkamhi, Shari Eli, Brian Gettler, David Goldreich, Camille Hebert, Richard Hornbeck, Daniel Keniston, Trevon Logan, Ludovic Phalippou, Boris Vallee, Adrien Verdelhan, Marianne Wanamaker and seminar and conference participants at the Bank of Canada, Bank of England, Bocconi University, 2022 Cliometrics Conference, Cornell, 2022 Economic History Association Annual Meeting, Federal Reserve Board, HEC Paris, Imperial, Laval University, Oxford University, 2022 Paris December Finance Meeting, 2022 Research and Behavioral Finance Conference, Rotman School of Management, University of Illinois Urbana-Champaign, University of Luxembourg, Virtual Economic History Seminar, Washington University in St. Louis, Warwick Business School for helpful suggestions and feedback. We thank Bingxin Chen, Marina Malcheva, Guorong Song, Mohit Vakil, Lisa Wu, Erik Yang, and Jennifer Zhang for their excellent research assistance and Marianne Volle for bringing her unique expertise on the history of the 19^{th} century to the project.

†Rotman School of Management, University of Toronto, 105 St. George Street, Toronto ON M5S 3E6, Canada; *E-mail: claire.celerier@rotman.utoronto.ca*

‡London Business School, Regent's Park, London NW1 4SA, United Kingdom; *E-mail: ptak@london.edu.*

"This was an institution designed to furnish a place of security and profit for the hard earnings of the coloured people, especially of the South. (...) There was something missionary in its composition, and it dealt largely in exhortations as well as promises. (...) Circulars, tracts, and other papers were scattered like snowflakes in winter by this benevolent institution among the sable millions, and they were told to "look" to the Freedmen's Bank and "live.""

Frederick Douglass, 1882

1 Introduction

Policy makers and academics have pointed to disparities in financial markets as a driver of the wide and persistent racial wealth gap in the United States. These racial disparities span many dimensions, from access to credit and borrowing costs, to misselling by banks and the use of costly alternative financial services.[1] For example, while accounting for 13% of the population, African Americans represent one third of the unbanked in the United States, and cite mistrust as a primary reason.[2] This paper gives a historical perspective on these racial disparities in financial markets, investigating the rapid and broad expansion of the first formal financial institution serving African Americans after Emancipation, and its ultimate collapse.[3]

The Freedman's Savings Bank, created in the aftermath of the Civil War as a nominally benevolent institution, opened 37 branches across 17 states from 1865 to

[1] On racial disparities in mortgage approvals, see Munnell et al. (1996), Black et al. (1978), Giacoletti et al. (2021), on borrowing costs, see Ambrose et al. (2020), Bayer et al. (2018), Butler et al. (2022), Charles et al. (2008), Reid et al. (2017), on the use of fringe banks, see Cohen-Cole (2011), on the quality of financial services, see Begley and Purnanandam (2021), Financial Consumer Agency of Canada (2022).

[2] 2019 FDIC National Survey of Unbanked and Underbanked Households.

[3] The literature has shown how abuse of trust can have long term effects on future trust and participation. See, for example, Alsan and Wanamaker (2017) on how the Tuskegee experiment led to distrust in the healthcare system and negatively affected the health of African Americans, or Knüpfer et al. (2021) and Gurun et al. (2018) on the impact of financial fraud. On the impact of trust on financial inclusion, see Dupas et al. (2014), and on stock market participation, see Guiso et al. (2008).

1872. The founders of the Freedman's Savings Bank – distinguished white church members, businessmen, reformers, and abolitionists – organized the bank with the stated objective of bringing economic independence to the 4 million African Americans just released from slavery. Within 7 years, the bank collected close to $100 million (2021 dollars) of deposits from around 100,000 African American individuals.[4] With a branch in almost all main cities in the South, as well as strong connections with schools for the freedmen, federal institutions, and prominent political and military figures of the Civil War and Reconstruction Era, the bank was salient to many African Americans.

However, mismanagement and fraud led to the collapse of the Freedman's Savings Bank in 1874. The failure of the bank "not only ruined thousands of colored men, but taught to thousands more a lesson of distrust which it will take them years to unlearn."[5] About the bank, Du Bois wrote "Not even ten additional years of slavery could have done so much to throttle the thrift of the freedmen as the mismanagement and bankruptcy" (Du Bois 1903).[6] How did the bank build legitimacy and trust among recently freed African Americans, while being governed by only white directors? What was the role of advertising? How did this institution subsequently turn into "the Black man's cow, but the white man's milk," as

[4]We estimate the total number of depositors from the digitized bank registers, which list 75,000 depositors but cover only 28 branches out of 37 and only a subset of years for some branches.

[5]New York: State Charities Aid Association, *Postal Savings Banks for the United States of America*, 1885, no. 41.

[6]William Edward Burghardt Du Bois (1868 – 1963) was a prominent American sociologist, historian and civil rights activist. While particularly striking, this quote is consistent with both the perception of this episode of history among African American intellectuals after the failure and today's consensus among historians. John Mercer Langston, a prominent abolitionist and politician who was a trustee of the bank for a brief time before its collapse, wrote "Perhaps the failure of no institution in the country, however extended its relations, however generally it enjoyed popular confidence and popular patronage, has ever wrought larger disappointment and more disastrous results to those interested in its creation, management and support than that of the Freedmen's Savings and Trust Company" (Langston 1894). Frederick Douglass claimed that he was brought "an amount of abuse and detraction greater than any encountered in any other part of my life" after serving as the bank's president (Douglass 1882). See also Osthaus (1976), Levy (2012), Osborne (2014), Baradaran (2015), Baradaran (2017) and Todd et al. (2019) for views on the Freedman's Savings Bank from contemporary academics in law and history. Baradaran (2015), for example, wrote "The Freedman's Savings Bank serves as a cautionary tale for government support of banking for the poor when that support is just a facade."

Frederick Douglass wrote in 1874?[7]

We address these questions by building an exhaustive dataset of articles and ads on financial institutions over the 1865-1874 period. We focus on 17 digitized newspapers distributed across six of the main states where the bank collected deposits, i.e., Georgia, New York, North Carolina, South Carolina, Virginia and Washington, D.C. We then manually transcribe each newspaper item to perform a textual analysis on their content. In total, we collect, transcribe, and analyze more than 3,200 articles and advertisements mentioning around 130 different banks. Finally, we explore how the advertising of the Freedman's Savings Bank relates to its lending activities and how it affected depositors. To do so, we use individual data on accounts, loans, depositors and borrowers, which are uniquely available in this historical setting.

We first show that the Freedman's Savings Bank advertised extensively, and significantly more than any other financial institutions at this time. All the newspapers in our sample, with an African American or a general audience, covered the Freedman's Savings Bank. Every issue of the *New National Era*, the main national newspaper with an African American audience over the 1870-1874 period, included at least two columns on the Freedman's Savings Bank alone.[8] The advertising intensity correlates with the collection of new deposits. Within a branch area, an increase in the number of publications on the Freedman's Savings Bank in the local journals is followed by an increase in new accounts.

Second, we find that the Freedman's Savings Bank's advertising largely relied on false promises, while the advertising of other banks was more informational.

[7]Frederick Douglass to Gerrit Smith, July 3, 1874, Smith MSS, Syracuse University Library.

[8]The *New National Era* was created in January 1870 by the abolitionist pastor and former slave John Stella Martin, who convinced Frederick Douglass to become the editor-in-chief of the journal. The Washington, D.C., based African American newspaper was originally known as the *New Era*, but by the end of 1870, Frederick Douglass took full control of the newspaper and named it after the *National Era*, a weekly abolitionist newspaper edited from 1847 to 1860 in the same city. At the head of the *New National Era* , Douglass soon delegated the newspaper to his sons Lewis and Frederick Jr, under the Douglass Brother publishing company, who ultimately changed its name again to the *New National Era and Citizen* after merging the journal with the *New Citizen* in May 1873.

We use the Harvard Inquirer Dictionary and a textual analysis algorithm to identify positive words, overstatements, as well as items relating to promises. The bank misleadingly promoted itself as benefiting from a government guarantee, as reflected by this circular that the bank published in 1865: "This then, being a National Institution in the hands of these good men, it is as safe as the Government can make it, and, therefore, there can be no safer place in the country to deposit."[9] False promises also related to the safe use of funds, while the bank started using the deposit funds to make risky loans as early as 1867, and the prosperity of the bank, while it was almost always in deficit. Even after controlling for year, state, bank type and newspaper fixed effects, the Freedman's Savings Bank's advertising included false promises more than any other bank.

Third, the Freedman's Savings Bank's advertising made extensive use of a moralizing rhetoric, referring to religion, duty and vices, as well as prominent personalities. The *New National Era* published the following ad every week from June 1871 to July 1873: "Cut off your vices - don't smoke - don't drink - don't buy lottery tickets. Put the money you save into the FREEDMAN'S SAVINGS BANK."[10] As another illustration, in a circular from 1865, the Freedman's Savings Bank wrote: "Reasons why you should all put money in the Savings Bank (...) Because, being your own masters, it is your duty to provide for your settlement in life, for your families, for sickness, and for old age (...) It teaches you the value of money, and prevents you from spending it foolishly (...) The holy Scriptures require you to be saving."[11] This moralizing rhetoric often reinforced racial stereotypes from this time on the moral habits of African Americans (Eli et al. 2022). We find no other bank advertising itself as a component of a moral life at this time, even when comparing to other minority banks. In these minority banks, however,

[9] "Circular of the National Freedmen's Savings & Trust Co. to the Freedmen of Richmond, Va, and Vicinity." *The Freedman's Savings Bank*, September 1865.

[10] "The Freedman's Savings and Trust Company." *New National Era*, June 22, 1871, p. 4.

[11] "Circular of the National Freedmen's Savings & Trust Co. to the Freedmen of Richmond, Va, and Vicinity." *The Freedman's Savings Bank*, September 1865.

managers and depositors were from the same ethnic background.

This misleading advertising at the Freedman's Savings Bank intensified with the fraudulent use of deposit funds, which led to a transfer of wealth from African Americans to the white directors' financial and political networks. From 1867, the bank's directors started using the deposits to make loans, hence violating the bank's charter. Congress ultimately amended the charter in May 1870 to permit mortgage loans with a maximum loan-to-value of 50%, following lobbying by the bank's managers.[12] To identify the resulting transfer of wealth from depositors to borrowers, we build an exhaustive loan-level dataset and manually collect information on borrowers' identity, occupation and race for 60% of the loan volume. While 92% of the depositors were Black, 80% of the loan volumes went to white borrowers who were often part of the bank directors' elite networks. Almost all loans violated the criteria for lending in the bank's charter and over 95% of loans past due were not paid, suggesting strategic default by borrowers. In a differences-in-differences model, we document an increase in the use of moral statements and promises in the advertising after the charter amendment, when lending accelerated. With no equity on the balance sheet and a majority of loans with a non-performing status, the bank was insolvent within just a few years of its formation, well before the 1873 panic and the failure of the bank in July 1874.[13] We show that the failure led to depositor losses that have rarely been matched in the banking history of the United States, amounting to more than 80% of their deposits on average in present value terms.

Finally, we investigate whether, in the short term, the bank led to better outcomes for African American depositors. We link the depositors listed in the bank registers to the full 1870 census, following Abramitzky et al. (2019), to address this question. We compare 1870 outcomes – literacy, school attendance, employment,

[12]U.S. Congress. 41st Congress, 2nd Session 1871.

[13]Less than 2% of deposits were invested in cash or United States government securities on the date of the failure.

income, wealth – between depositors who opened an account before 1870 and depositors who opened an account after 1870, within branches. We find no statistical difference between early and late depositors' outcomes, and hence no evidence of any positive short run effects of the Freedman's Savings Bank. Here, we challenge the findings of Stein and Yannelis (2020) – henceforth SY2020 – that argues that the institution had dramatic positive effects on the freedmen's education, employment, income, and wealth within five years.[14,15] We raise concerns about SY2020's historical statements supporting the identification strategy, the data construction methodology and the empirical setting. As we can replicate SY2020's large instrumental variable (IV) coefficient estimates with random permutations of the data, we conclude that the bias of SY2020's instruments, which correlate with proxies for ex-ante access to wealth and education and with the bias in the data construction methodology, drives SY2020's results.

Our paper contributes to the literature on racial disparities in financial markets and the implications for the racial wealth gap (Derenoncourt et al. 2022). A growing literature investigates racial disparities in the markets for mortgages (Ambrose et al. 2020; Bayer et al. 2018; Gupta et al. 2022; Reid et al. 2017), consumer and auto loans (Butler et al. 2022; Charles et al. 2008; Cohen-Cole 2011; Dobbie et al. 2021) and small business loans (Cavalluzzo et al. 2002; Howell et al. 2022; Fei 2022), as well as the impact of financial innovation on racial disparities in credit markets (Bartlett et al. 2022; Fuster et al. 2022; Morse and Pence 2021). We add to this literature by showing how financial institutions may discriminate not only through price and quantity, but also through advertising and misselling, consistent with the literature on consumer exploitation by financial institutions (Gurun et al. 2016; Célérier and Vallée 2017; Begley and Purnanandam 2021).

[14]According to Tables 2 and 7 in SY2020, the Freedman's Savings Bank lead to an increase in the probability to attend school by 14 percentage points (+300%), to be literate by 13-19 percentage points (+100%), and to work by 3-6 percentage points (+10%), up from respectively 3.9%, 15% and 39%.

[15]Our comments on SY2020 are available in the Internet Appendix: `https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4139771`.

We also contribute to this literature by documenting how insider lending in elite networks can be at the expense of racial minorities (Haselmann et al. 2018).

Second, our paper adds to the literature on the costs and benefits of household access to formal financial services and the role of governance. Evidence on whether saving money at a bank as opposed to saving cash at home can benefit households is mixed (Prina 2015; Brune et al. 2016; Dupas et al. 2018). Potential advantages of formal savings include safety from theft, interest accumulation, and reduced impulse spending or family and friend pressure (Dupas and Robinson 2013; Karlan et al. 2014; Brune et al. 2016), which might foster overall savings and wealth accumulation (Célérier and Matray 2019; Bachas et al. 2021). However, one also has to consider the implications of delegating the management of savings to weakly governed financial institutions. Information asymmetries within financial institutions create risks of rent extraction, which are risks that racial minorities may be particularly vulnerable to.[16] This paper shows how misaligned incentives and weak governance in financial institutions can lead to a transfer of wealth from discriminated populations to other more privileged groups. It hence raises the question of the possible benefits of Black-owned banks and of the optimal governance of banks catering to minorities.[17]

Third, our paper relates to the literature documenting racial advertising. While an emerging literature investigates the role of race-based advertising, for example, in the market for tobacco and alcohol (Wailoo 2021), this paper documents the use of racial advertising by a financial institution and shows how it was associated with a transfer of wealth away from minorities. Racial advertising in finance

[16]See also the literature on predatory lending (Allcott et al. 2021; Morgan 2007; Melzer 2011; Carrell and Zinman 2014; Melzer 2018; Bachas et al. 2021).

[17]After the failure of the Freedman's Savings Bank, between 1888 and 1934, 134 Black-owned banks were created (Okonkwo 2003). While racial minorities might suffer less from discrimination in these institutions, minority-owned banks face the challenge of serving a clientele with liquidity constraints or less stable income profiles in low-income neighbourhoods, in an environment where they might also be discriminated against as institutions (Bates and Bradford 1980). For example, the costs of funding on markets may be higher for minority-owned banks, hence only shifting the underlying problem to a higher institutional level rather than addressing it (see Dougal et al. (2019) on Black colleges).

can affect racial inequality by pushing more expensive products to minorities, encouraging investment mistakes, exploiting behavioral biases, or further reinforcing stereotypes (Shuey et al. 1953; Pollay 1986; Bristor et al. 1995; Bailey 2006). Our results point to potential policy implications in less regulated markets, such as cryptocurrencies, where advertising campaigns have targeted specific groups such as young people and African Americans.[18]

Finally, our paper complements the literature on the transition from enslavement to Emancipation in the United States and the implementation of racial structures before the Jim Crow era, focusing on the Freedman's Savings Bank's development, collapse and impact on depositors. Osthaus (1976) recollects the history of the bank through an extensive analysis of historical archives and primary sources.[19] More recently, Traweek and Wardlaw (2022) investigate the heterogenous behavior of depositors after the 1873 panic. By identifying the role of advertising, documenting the bank insolvency before the 1873 panic due to the fraudulent lending activities, and quantifying the transfer of wealth from African Americans to white populations, this paper details one mechanism through which the persistence of racial discrimination has affected economic opportunities for African Americans after the Civil War (Darity Jr and Mullen 2020).

The rest of this paper proceeds as follows. In Section 2, we provide historical

[18]These advertising campaigns also often employ prominent personalities to extend the reach of their message. See "Cryptocurrency Seeks the Spotlight, With Spike Lee's Help." *The New York Times* , July 7, 2021, `https://www.nytimes.com/2021/07/07/business/media/cryptocurrency-seeks-the-spotlight-with-spike-lees-help.html`. African Americans are more likely to invest in cryptocurrency and to believe it is regulated by the government; "Why the Crypto Crash Hit Black Americans Hard." *The Economist*, May 20, 2022, `https://www.economist.com/graphic-detail/2022/05/20/why-the-crypto-crash-hit-black-americans-hard`.

[19]This literature also includes Josiah (2004), which shows how community-based mutual aid and financial institutions existed long before the creation of the Freedman's Savings Bank among African American populations, Gilbert (1972), which describes the work of the Comptroller of the Currency in investigating the failure of the Freedman's Savings Bank for 40 years after the collapse and defending the rights of the depositors, Giedeman (2011), which draws a comparative study of the Freedman's Savings Bank with Fannie Mae and Freddie Mac during the financial crisis highlighting supervision and oversight issues in institutions managed by Congress. See also Levy (2012), Osborne (2014), Baradaran (2015), Baradaran (2017) and Todd et al. (2019) for views on the Freedman's Savings Bank from contemporary historians and legal scholars.

background on the formation of the Freedman's Savings Bank, its expansion and its collapse. In Section 3, we describe the data. Section 4 investigates the magnitude and content of the Freedman's Savings Bank's advertising in comparison to other banks and explores the relationship between advertising and the bank's expansion. Section 5 provides evidence of a transfer of wealth away from the freedmen and quantify depositor losses. Finally, Section 6 discusses the short run effects of the Freedman's Savings Bank on African Americans. Section 7 concludes.

2 Historical Background

On March 3, 1865, in the aftermath of the Civil War and following Emancipation, Congress chartered the Freedman's Savings Bank to collect deposits from African Americans. By 1874, before its collapse, the bank had opened 37 branches across 17 states and the District of Columbia, and collected up to \$100 million (2021 dollars) from 100,000 accounts.[20] Figure 1 displays a timeline of the key events.[21]

INSERT FIGURE 1 HERE

2.1 The Creation of the Bank

The founders of the Freedman's Savings Bank – prominent church members, businessmen, reformers, and abolitionists – initially organized the bank following the principles of the savings bank movement of the 19th century.[22] This movement promoted work and thrift as the primary path for the working classes to exit

[20] These 100,000 accounts are a conservative estimate given the availability of the depositor registers which have survived.

[21] We collect these key events from primary sources such as senate and congressional reports, including U.S. Senate. 42nd Congress, 3rd Session (1873); U.S. Senate. 43rd Congress, 2nd Session (1874); U.S. Senate. 43rd Congress 1st Session (1874); U.S. Senate. 44th Congress, 1st Session (1876); U.S. Senate. 46th Congress 2nd Session (1880), and newspaper articles. We also rely on Osthaus (1976).

[22] "Circular of the National Freedmen's Savings & Trust Co. to the Freedmen of Richmond, Va, and Vicinity." *The Freedman's Savings Bank*, September 1865.

poverty.[23] By 1873, a wide network of more than 670 savings banks had flourished in the US, mostly in Northern states, collecting deposits from around 2 million individuals, i.e., around 5% of the US population, and accounting for close to 20% of total financial institution assets (U.S. Senate. 42nd Congress, 3rd Session 1873; Keyes 1878; Wadhwani 2011). In line with the savings bank movement and the "free-labor ideology," which considered that free labor, rather than government support, would result in the economic independence of the 4 million newly freed slaves, the Freedman's Savings Bank had a broad social agenda (Foner 1988).[24] For example, the *New National Era* wrote in 1870: "This institution is doing a great work in educating the colored people (...) to habits of industry, economy, and thrift."[25]

The Freedman's Savings Bank was a pioneering institution in many dimensions. It was a savings bank that operated largely in the South, in areas of the country that had never before seen such organizations. The bank was also the only institution directly targeting emancipated slaves to offer banking services, the first bank branching across states since the Second Bank of the United States, and one of the only banks chartered and supervised by Congress. The other federally chartered institutions, the national banks, were chartered by the US government and supervised by the Office of the Comptroller of the Currency (OCC).[26,27]

[23]On September 1865, a circular of the Freedman's Savings Bank detailed the benefit of savings banks and wrote: "The Savings Banks at the North, of which there are many, have been the chief source of prosperity to the poorer class, thousands of whom have become rich men by reason of the start this Institution has given them." "Circular of the National Freedmen's Savings & Trust Co. to the Freedmen of Richmond, Va, and Vicinity." *The Freedman's Savings Bank*, 1865.

[24]While Sherman and some Republicans promised 40 acres and a mule to the freedmen, and Congress created the Freedmen's Bureau to provide food, shelter, clothing, medical services, and education, the government quickly retracted from any form of direct federal support. In the midst of an environment of growing resentment and opposition to government support to African Americans, the Bureau was closed in 1872. Instead, free-labor and self-sufficiency was considered as the best solution by the political majority.

[25]"Letters from the People." *New National Era*, November 10, 1870, p. 1.

[26]The 1863 and 1864 National Banking Acts established both the dollar as a national currency and the status of these national banks, whose notes were backed with US government securities. However, these national banks were "national" only in the sense that their charter was granted by the federal government, as interstate branching was still prohibited. Savings banks were also mostly unit state-chartered banks with no branches.

[27]By 1865, when the Freedman's Savings Bank was created, there were 349 state banks, 317

The directors of the Freedman's Savings Bank opened the first branches where Black troops were located, following the model of military savings banks that collected the wages of Black Union soldiers during the Civil War.[28,29] In the following years, the directors extended the bank's reach, opening branches across states following local requests and taking into account the "amount of capital and coloured population," as the location of bank branches displayed in Figure 2 illustrates (Osthaus 1976). The bank shared locations, personnel and management with two important institutions that supported the economic inclusion and education of African Americans during the Reconstruction Era: the Freedmen's Bureau, created by Congress on the exact same day as the Freedman's Savings Bank, and the American Missionary Association, a Christian abolitionist organization dedicated to the education of the freedmen.[30,31]

INSERT FIGURE 2 HERE

The governance of the Freedman's Savings Bank presented some important weaknesses from the beginning. First, at the time of the bank's creation, none of the original directors were African Americans and lived in Washington, D.C where the main branch was.[32] Second, the bank directors had no financial or legal incentives to govern the bank. The charter required neither any direct investment in the bank from the directors, nor any penal clauses to align their incentives with

---

savings banks and 1,294 national banks in the country. "Annual Report of the Comptroller of the Currency." *Treasury Department*, 1910, Document No. 2590.

[28]General Saxton created the first military savings bank for Black soldiers on August 1864 in Beaufort, South Carolina, while General Benjamin Butler established a second one in Norfolk, Virginia in the Fall of 1864 (U.S. Senate. 46th Congress 2nd Session 1880).

[29]"Origin and Progress of the Freedmen's Savings Bank." *New Era*, March 31, 1870, p. 3.

[30]"Letters from the South, Relating to the Condition of Freedmen, Addressed to Major General O. O. Howard, Commissioner Bureau R., F., and A. L. by J. W. Alvord, Gen. Sup't Education, Bureau R., F., & A. L.". John Alvord. Washington, D.C.: Howard University Press, 1870.

[31]John Alvord, the founder of the bank, was a close friend of both the founder of the Freedmen's Bureau, General O.O Howard and the executive secretary of the American Missionary Association, Reverand George Whipple. The most notable success of the Freedmen's Bureau and the American Missionary Association was the creation of close to 2,000 schools.

[32]Freedman's Savings and Trust Company. Charter and by-laws. New York, Wm. C. Bryant & Co., Printers, 1865.

the interests of the depositors.[33] This is in stark contrast with the governance of the national banks, which required directors to be stockholders and be subject to the "double liability," and to also reside in the state of the bank.[34] Third, the bank charter was ambiguous about the allocation of the deposit funds, which gave significant discretionary power to the directors. While two-thirds of the deposits were initially required to be invested in government securities only, as it was the standard for savings banks at this time, the remaining available funds did not have any clear restrictions for their use. Fourth, as one of the only institutions under the purview of Congress, supervision was very limited: inspections were very infrequent and not until 1872 did an adequate system of daily branch reports start (U.S. Senate. 46th Congress 2nd Session 1880). Finally, while paying wages often below that of a schoolteacher, the bank was largely hiring workers with missionary rather than banking or accounting credentials to foster the collection of deposits.[35]

2.2 Advertising and Bank Expansion

From the early years, the Freedman's Savings Bank carefully planned a large advertising strategy. In addition to publishing cards, pamphlets and circulars, the bank was extensively using newspapers to promote the bank across states. In 1867, the bank management drew a list of all the African American journals to target.[36] The most important outlet for the bank was the *New National Era*, the main national

[33] Freedman's Savings and Trust Company, and African American Pamphlet Collection. Freedman's Savings and Trust Company. Charter and by-laws. New York, Wm. C. Bryant & Co., Printers, 1865.

[34] The system of double liability remained the norm until 1933, when the American banking system was restructured see (see Koudijs et al. (2021) and Aldunate et al. (2021) on the system of double liability in the national banking era).

[35] *New York Sun*, April 30, 1874. The untrained cashiers, who often doubled as Freedmen's Bureau, AMA or government employees, were overworked and lacked qualification. For example, the bank's inspector Anson Sperry, while well-intentioned, usually certified the accounts as "correct, E & O. E.," standing for "Errors and Omissions Expected." (Osthaus 1976, p. 174).

[36] Alvord, 1867, Semi-annual Report on Schools for Freedmen. The list included *Elevator* (San Francisco), *Pacific Appeal* (San Francisco), *New Orleans Tribune*, *South Carolina Leader* (Charleston), *True Communicator* (Baltimore), *Standard and Weekly Review* (New York), *Christian Recorder* (Philadelphia), *People's Journal* (Brooklyn), and *Colored Citizen* (Cincinnati). Among these newspapers, only the *South Carolina Leader* is digitized as of June 2022.

journal targeting African Americans.[37] Figure 3 displays the Freedman's Savings Bank's advertisement that the *New National Era* published weekly from June 1871 to July 1873. From 1868 to 1872, the bank also distributed its own monthly newspaper, the *National Savings Bank*, with a circulation of around 15,000 copies per month according to the bank officials.[38] Branch cashiers also actively promoted the bank, giving public talks in branches, churches, schools and beneficial societies to highlight the benefits of the institution and solicit more depositors.[39] Finally, the bank relied on teachers to distribute the bank's advertising in freedmen schools and collect deposits from the children.[40] The Internet Appendix includes a sample of representative advertisements of the Freedman's Savings Bank.

INSERT FIGURE 3 HERE

While the bank had the highest pace of opening branches in its early years – within two years, in 1865 and 1866, the bank opened 22 branches across 14 states–, the collection of deposits kept growing until the end of 1872, with a yearly growth rate higher than 60% over the period on average.[41] Figure 4 plots the outstanding amount of deposits and number of new accounts opened at the Freedman's Savings Bank from 1865 to 1874. At the end of 1872, with more than 70,000 open accounts and close to $4 million of deposits, the Freedman's Savings Bank was among the largest savings banks in the country.[42]

[37] See note 8 on the *New National Era*.

[38] "Our Paper as a Sheet to Advertise In." *New Era*, October 27, 1870.

[39] "Baltimore Branch, Section: Reports from the Branches." *New Era*, October 27, 1870.

[40] For example, a 1867 pamphlet of the Freedman's Savings Bank described the following strategy for teachers to collect deposits: "There is a way for little children in the schools to have a part in the Bank. Let teachers take some pretty envelopes from us, on which is printed "Savings Bank", and have one for each scholar; then let all the spare pennies, five cent and ten cent bills which the children can earn, be put in the envelope until they amount to one dollar. This dollar will then be brought, by the teacher, to the cashier of the bank. The cashier will take the children's dollar and give them a bank book for it, and when they get another dollar in the same way to put in, it will be two dollars, and so on." Source: "Pamphlet." The Freedman's Savings Bank, 1867.

[41] Table IA.8 lists the opening date and context of each of the 37 branches.

[42] Only one savings bank, the Bank for Savings, in New York, had a higher number of depositors during this period. However, the amount of deposits, around $20 million was more than four time larger at the Bank for Savings than at the Freedman's Savings Bank. Only around 15 savings

INSERT FIGURE 4 HERE

2.3 Insider Lending, Fraud and Bank Failure

Within a few years of its creation, the Freedman's Savings Bank came under the influence of politically connected white businessmen. As the bank was struggling financially after the rapid expansion of its branches, the directors decided to move the headquarters from New York City to Washington, D.C., in 1867 to get the support of politicians and financiers. Many directors resigned, while Henry D. Cooke, William S. Huntington and the actuary D. L. Eaton took the control of the "finance committee" of the bank. The three men were close to Jay Cooke, the investment banker who subscribed and distributed US treasury bonds during the Civil War, and were actively involved in the management of national banks, in railroad and real estate speculation, and in politics.[43]

From 1867, this new finance committee started using deposit funds to make loans, hence violating the bank's charter, while actively lobbying Congress to legalize these lending activities.[44] In May 1870, Congress passed a bill to permit loans backed by real estate collateral worth at least twice the loan value (U.S. Congress. 41st Congress, 2nd Session 1871).[45] After this charter amendment, the finance committee engaged even more aggressively in fraudulent lending, still violating the bank's charter despite its increased permissiveness.

The Civil War experience of the finance committee members likely influenced

banks had more deposits than the Freedman's Savings Bank, around $4 million, in 1873. Hence, the Freedman's Bank stands as the second largest savings banks in number of depositors and among the 20 largest in deposit amount, out of around 670 savings bank in the United States at this time. See U.S. Senate. 42nd Congress, 3rd Session (1873), Keyes (1878), Olmstead (1976), and Osborne (2014) for a complete picture of US savings banks at this time.

[43] Henry David Cooke (1825-1881) was a journalist and later editor and proprietor of a Republican newspaper in Ohio early in his career. Later, Henry became a prominent member of the Republican party, the President of the First National Bank in Washington, D.C., and the first territorial governor of Washington, D.C. Henry also participated in his brother Jay Cooke's campaign to distribute the Union bonds during the Civil War.

[44] The first loan, to our knowledge, was a 1,000 dollars loan in 1867 to the actuary Eaton himself.

[45] This collateral rule was standard for savings banks at this time (Olmstead 1976).

the advertising of the Freedman's Savings Bank. To sell Union bonds to retail investors, Jay Cooke implemented an extensive advertising campaign unlike anything the United States had ever seen (Larson 1936; Thomson 2022). With the help of his brother Henry Cook, he used strategies the Freedman's Savings Bank would later adopt: advertising in a large range of newspapers, including local papers and religious periodicals, writing pieces for newspaper editors to reproduce en masse, creating elaborate networks of sales agents across the country, and frequently relying on influential public figures in publications.

While the bank kept increasing its lending after the charter amendment, concerns about the bank's solvency started in 1871 and led to the first rumors of runs in November 1871.[46] In January 1873, the first audit of the bank by the OCC led to a large drop in confidence, which amplified during the September 1873 panic and finally resulted in the closure of the bank in July 1874 (U.S. Senate. 43rd Congress, 2nd Session 1874). In the last months of the bank, the directors unsuccessfully attempted to restore confidence by increasing the representation of African Americans in the bank leadership, for example nominating Frederick Douglass as the new president in March 1874. Frederick Douglass later said he was "married to a corpse" (Douglass 1882).

After the closure, in July 1874, Congress appointed the OCC to liquidate the bank's assets and repay depositors, with a limited success. Only in November 1875, did depositors receive a first payment that was supposed to amount to 20% of their deposits. During the proceedings before Congress concerning the collapse of the bank, the investigation committee recommended to indict Henry Cooke and other directors: "...so gross a fraud and conspiracy to defraud, that, in the opinion

[46] The Beaufort Republican wrote in November 1871: "We are very sure that no paper of this city desired to injure an enterprise so worthy as the Freedman's Savings Bank, yet the telegraphic report in all of the papers of October 17th, from Washington stating that there was "a run on the Freedman's Bank" in that city. It is true that on the 18th this falsehood was corrected, but yet one whole day was given for the mischief to work, and that in a time of general financial anxiety (...)." "A False and Malicious Rumour." *The Beaufort Republican*, November 9, 1871, Vol. 2 no. 7.

of your committee, everyone of the survivors in the transaction, viz, Henry D. Cooke, Lewis Clephane, Hallet Kilbourn, and John O. Evans, should be indicted, tried, and punished to the extent of the law" (U.S. Senate. 44th Congress, 1st Session 1876). However, ultimately, none were held responsible.

3 Data

Our analysis uses several sources of data. We exploit advertising data – collecting all articles and advertisements referring to banks in a sample of digitized newspapers over the 1865-1874 period –, individual-level data – using the depositor and loan registers of the Freedman's Savings Bank –, and finally bank-level data – gathering data on US bank failures from 1816 to the creation of the Federal Deposit Insurance Corporation (FDIC) in 1933.

3.1 Advertising

3.1.1 Sample of Newspapers

To build a comprehensive sample of newspapers, we focus on the main states with branches and available registers, i.e., Georgia, South Carolina, North Carolina, Virginia, Washington, D.C., as well as New York, as New York City was the hub of savings banks at this time (Olmstead 1976). These six states account for more than 57% of bank depositors listed in the registers.

In these six states, we select all digitized newspapers targeting African Americans, as well as one to three general audience newspapers. We identify these newspapers using the archives from Newspaper.com, the Chronicling America database from the Library of Congress, the Readex's America's Historical Newspaper Archive, the Proquest Historical Newspapers, as well as the Georgia Historic Newspapers archives from the Digital Library of Georgia.[47] Hence, we cover all the

[47] These sources are available here: https://www.newspapers.com/, https://chroniclingamerica.loc.gov/, https://gahistoricnewspapers.galileo.usg.edu/,

main sources for digitized newspaper archives available for this period (Beach and Hanlon 2022). We also get a list of newspapers edited and supported by African Americans during this period from the *Trubner's American and Oriental Literary Record*.[48] We complete our sample of newspapers with the *Memphis Daily Appeal*.

INSERT TABLE 1 HERE

Table 1 lists the newspapers in our sample and provides information on the readership, state, frequency and period.

3.1.2 Advertising Items

To build our sample of articles and advertisements on financial institutions, we screen each page of each digitized issue of each newspaper of our sample and collect any articles, notices, reports and advertisements mentioning any banks or financial institutions.[49] For each newspaper item, we record the page, title, the type of article or advertisement and the author.

To complement our analysis, we also focus on the advertising of two savings banks collecting deposits from minorities: the Emigrant Industrial Savings Bank, chartered in 1850, and the German Savings Bank, chartered in 1859. These two banks were among the 24 mutual savings banks established in New York State before the Civil War (Olmstead 1976). Groups of prominent Irish and German citizens founded the Emigrant Industrial Savings Bank and the German Savings Bank, respectively, to collect deposits from immigrant populations. In 1873, both banks had around 25,000 open accounts – compared to around 70,000 open accounts at the Freedman's Savings Bank – and held more than $10 million in deposits (Keyes 1878). For both banks, we collect all advertising we identified across

`https://www.readex.com/`, `https://about.proquest.com/en/products-services/pq-hist-news/`.

[48] "Newspapers published in the United States, Edited and Supported by Colored Men." *Trubner's American and Oriental Literary Record*, September 2, 1862.

[49] For two newspapers, the *New York Times* and the *New York Daily Tribune*, we screen only one newspaper per month because of the large abundance of ads and articles referring to banks. We pick the date of the month randomly to avoid selection issues.

all digitized newspapers issued in the state of New York and available in the Chronicling America database from the Library of Congress.

Table 1 lists the number of issues we screen for each newspaper and the number of articles we collect on the Freedman's Savings Bank and any other bank.[50] We drop any newspaper items that are not about promoting financial institutions from our sample, such as news articles about the death of a bank manager, or an event occurring in the same building as a bank. Table IA.1 provides summary statistics on the banks in our final sample of newspaper items. In addition to savings banks, our sample includes advertising from national banks (10%), such as the Atlanta National Bank, and state commercial banks (32%), such as the Bank of Charleston and Jay Cooke Investment Bank.

Finally, we manually transcribe all the newspaper items we have collected to perform a textual analysis on their content. In total, we manually transcribe more than 3,200 articles and advertisements from 17 newspapers over 9 years.

3.2 Accounts and Depositors

We collect information on accounts and depositors from the registers of signatures of the Freedman's Savings Bank. The registers cover 28 branches from 1865 to 1874 and include the first names, last names and race of the depositors at each of these branches. We access the digitized registers data through Familysearch.org.[51] The digitized registers have 498,144 entries corresponding to 93,605 distinct account numbers.

We clean the data the following way. First, we drop accounts that are held by organizations, such as churches and various community societies (0.25%). We also drop accounts for which all the information, except the account identifier,

[50] Except for the *New York Times* and the *New York Daily Tribune*, the number of issues we screen corresponds to the number of issues that are digitized. Some issues published during the coverage period might not be digitized. For example, for the *Beaufort Republican*, only one issue is available in 1870. For the *New York Times* and the *New York Daily Tribune*, we screen only one newspaper per month.

[51] `https://www.familysearch.org/search/collection/1417695`

is missing.[52] Second, we standardize the information on age, place of birth and names. For age, we drop alphabetical characters to convert the information into a number and compute the age in 1870. For place of birth, we convert county- or city-level information into state-level information. Concerning first names and last names, we standardize the information by dropping middle names or titles, removing any non-alphabetic characters, and accounting for common misspelling and first names, following the methodology of Abramitzky et al. (2020). The objective is to correct for transcription errors to the extent possible. Third, we exploit the information on the identities of relatives to create four variables indicating the first and last names of a depositor's father and mother when available.

After having dropped duplicates in terms of names, age, location and place of birth, we arrive at a dataset with information on 74,966 accounts and depositors across 27 branches over the 1865-1874 period.[53,54]

Table 2 provides summary statistics on the final sample of 74,966 accounts and depositors. We observe that 75% of the accounts are opened in 1870 or after. In addition, up to 25% of the depositors are under the age of 18, which is consistent with schoolteachers actively promoting the Freedman's Savings Bank to their students.

INSERT TABLE 2 HERE

3.3 Loans and Borrowers

We build the loan and borrower dataset by exploiting the investigation report on the failure of the Freedman's Savings Bank published in U.S. Senate. 43rd Congress, 2nd Session (1874). This report lists all the loans on the balance sheet of

[52]We also identify as distinct those accounts that have identical identifiers but different depositor identities, locations and account opening dates.

[53]After cleaning the account holder data, no observations remain from the Philadelphia branch and hence the analysis is conducted on the remaining 27 branches.

[54]Prior to merging with the 1870 census, we also drop account holders who died prior to 1870 and hence would not have observable outcomes in the 1870 census. This sample contains 73,506 account holders.

the bank at the time of the investigation and provides the borrowers' identity. We manually transcribe the branch that originated the loan, the face value, issuance date, maturity, amount due, and borrower's first and last names. We arrive at 1,797 outstanding loans issued to 1,108 unique borrowers. In total, the bank had more than \$3.5 million of loans in the balance sheet, equivalent to \$86 million in 2021 dollars.[55,56]

INSERT TABLE 3 HERE

Table 3 provides summary statistics on the loans on the Freedman's Bank balance sheet at the date of the failure. The average face value of the outstanding loans was \$2,024, or \$48,475 in 2021 dollars, and most had a maturity of one year or less. 75% of the loan volumes were issued in the two years following the charter amendment. Finally, for all the loans that had matured (83% of the loans), 95% of the amount due was unpaid, suggesting that borrowers strategically defaulted.[57]

3.4 Depositor Losses

To better understand the magnitude of the failure of the Freedman's Savings Bank and its effects on depositors, we collect data on depositor losses at the Freedman's Savings Bank, as well as other savings and national banks that failed up to 1933, the year of the creation of the FDIC.

Data on the failure of the Freedman's Savings Bank come from the 1883 "Annual Report of the Commissioner," which contains a summary of the repayments

[55]We assume a base year of 1874 for our loan analysis, and convert to 2021 dollars using the historical CPI data of the Minneapolis Fed, available at `https://www.minneapolisfed.org/`

to depositors after the losses (U.S. Senate. 53rd Congress 2nd Session 1883). The total amount owed to depositors, $2,833,251, is from U.S. Senate. 43rd Congress, 2nd Session (1874).

We obtain data on the failures of all national banks from 1863 to 1933 from the annual reports of the Office of the Comptroller of the Currency on National Banks. These reports were published from 1863 through to 1980 and are available from the Federal Reserve Archival System for Economic Research. Specifically, for each bank that failed and were marked as closed by the Office of the Comptroller of the Currency by 1933, we extract the bank name, failure date, amount owed to depositors, % repaid and length of the repayment period.

Finally, we collect data on the failures of savings banks from Keyes (1878) and newspaper archives.[58]

The final sample contains 76 failed banks with deposits over 1,000,000 current dollars at the date of the failure. To quantify the amounts owed to depositors at the time of the banks' failure, we calculate it as a percent of GDP. We use historical GDP figures of the United States from the Maddison Project Database 2020.[59]

4 The Bank's Advertising

This section investigates the magnitude and content of the Freedman's Savings Bank's advertising in comparison to other banks and explores the relationship between advertising and the bank's expansion.

[58] "Broken Savings. Banks." *New York Times*, October 9, 1877. "The Third Avenue Bank Case." *New York Times*, April 5, 1876. "A Savings Bank Failure." *New York Times*, September 30, 1875.

[59] `https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2020`.

4.1 Magnitude

Within our sample of 17 newspapers, we find that no other bank advertised as extensively as the Freedman's Savings Bank over the 1865-1874 period.

As Column 5 in Table 1 indicates, all newspapers in our sample, both with an African American or general audience, mention the Freedman's Savings Bank at least once over the period. If we focus on the main national newspaper with an African American audience over the 1870-1874 period, the *New National Era*, 100% of the weekly issues mention the Freedman's Savings Bank and most include more than two columns on the bank, often on the front page. We find no institution or event with such a broad coverage in the *New National Era* during this period, even when including the Freedmen Bureau and schools.[60]

Second, the Freedman's Savings Bank accounts for 30% of all the newspaper items we collect, while the second most advertised bank, the Bank of Charleston, accounts only for 7% of them. When excluding newspapers with an African American audience, the Freedman's Savings Bank still accounts for 20% of al the newspaper items in our sample.

Finally, when we compare to the two largest savings banks at this time, i.e., the Bank for Savings and the Bowery Savings Bank of New York, we find that these banks were advertising in New York newspapers only, and not at a higher frequency than the Freedman's Savings Bank, even while the New York branch of the Freedman's Savings Bank was much smaller.

4.2 Collection of Deposits

We investigate the relationship between the advertising intensity and the collection of deposits at the Freedman's Savings Bank by exploiting the local nature of the advertising and branch-level information on the number of accounts. To do so,

[60]The Freedman's Savings Bank offered financial support to the *New National Era*, which was struggling financially, in the form of joint stock ownership and the printing of the journal. Douglass Brothers, "An Explanation." *New National Era and Citizen*, 19 March 1874, p. 2.

we link the account data to the advertising data by branch city, restricting our sample to the eight branch cities where newspapers from our sample are issued, i.e., Atlanta, Augusta, Beaufort, Charleston, Memphis, Raleigh, Richmond, and Washington, D.C.[61] We collapse data on the number of new accounts and the number of articles at the day and branch city levels over the 1865-1874 period, and indicate information as missing when the registers are incomplete and/or no digitized newspaper is available. We then estimate the following panel model:

$$New\,Accounts_{b,t} = \alpha + \beta \sum_{t-14}^{t} NumberArticles_{b,t} + Day_t + Branch_b + \varepsilon_{b,t}, \quad (1)$$

where $New\,Accounts_{b,t}$ is the number of new accounts open in branch b on day t, $NumberArticles$ refers to sum of daily articles published over the last three days, last week and last two weeks in the branch city, and Day_t and $Branch_b$ are day and branch fixed effects, respectively.

INSERT TABLE 4 HERE

Table 4 provides the results. Columns 1, 3 and 5 indicate that the number of new accounts opened in a day correlates with the intensity of the advertising over the last three days, week and two weeks, respectively. Columns 2, 4 and 6 show that result holds also in the time series within branches.

4.3 Advertising Content: A Textual Analysis

4.3.1 Hypotheses

To investigate the content of the advertising, we design a textual analysis algorithm around the following three hypotheses.

[61] We exclude New York from this analysis as we only screen randomly picked issues for the three newspapers issued in New York City. We include New York City in the content analysis for comparison to other minority banks, which were based in New York City.

First, we hypothesize that the advertising of the Freedman's Savings Bank was promotional, using overstatements and positive language, as suggested by the changes in the nature of advertising during this period. Advertising accelerated in the US in the second half of the 19^{th} century, switching away from a purely informational to a more promotional content. Newspapers served as the primary channel. The marketing of the Union war bonds by Jay Cooke during the Civil War is one of the first examples of the use of promotional advertising in financial markets (Thomson 2022).

Second, we hypothesize that the advertising of the Freedman's Savings Bank included false promises, as some newspaper items in our sample suggest. Some advertisements of the bank explicitly conveyed the misleading message that the federal government fully guaranteed deposits. For example, on June 1, 1871, the *Semi-Weekly Louisianan* declared that "there is no possibility of loss, for the reason that the government of the United States is responsible for every dollar deposited."[62] Another false promise concerned the safe investment of deposits in only government securities, despite the bank making risky loans from as early as 1867. For example, the first publication of the bank's own newspaper, *The National Savings Bank*, wrote on January 1, 1868 "I know it will be able to repay you for this reason; Whenever anyone lends it any money, that money is at once put into United States bonds. (...) Now as long as the United States pays its debts, you are sure of all the cash you can lend it. When you put your money in the Bank you lend it to the United States." Finally, the bank misleadingly advertised itself as a prosperous institution paying 6% interest, while the bank was in deficit almost every year and never paid this level of interest, as Table IA.3 shows. For example, the *Charleston Daily News* wrote on May 26, 1870: "A good Sign. The freedmen's savings banks are reported to be in a prosperous condition."[63]

Second, we hypothesize that the advertising used a moralizing rhetoric to "in-

[62] "The advantages of a bank." *Semi Weekly Louisianian*, June 1, 1871, p. 2.
[63] "News of the Day." *Charleston Daily News*, May 26, 1870.

stil into the minds of the untutored Africans lessons of sobriety, wisdom, and economy," as Frederick Douglass wrote in his autobiography Douglass (1882). For example, on May 13, 1868, the *Weekly North-Carolina Standard* published an ad saying: "" Mark this," that industry, sobriety, economy, and a good moral character, lead to wealth, education, influence and power. Don't hesitate, but come to the Saving's Bank. Come every one, come, come." Some articles also mention vices, hence reinforcing racial stereotyping: "Cut off your vices - don't smoke - don't drink - don't buy lottery tickets. Put the money you save into the FREEDMAN'S SAVINGS BANK. "[64] We also find references to religion: "The blessings of the savings bank system ought to be enjoyed by every person."[65] Finally, several advertisements refer to prominent personalities, such as Benjamin Franklin, General O. Howard, and Abraham Lincoln. The bank's newspaper wrote on January, 1 1868: "The excellent General O. O. Howard is its friend as lie is the friend of all good things and good people," while the general had no role in the bank's management.

4.3.2 Methodology

To identify and quantify the use of words that correspond to promotional advertising, promises and a moralizing rhetoric, we exploit nine Harvard Inquirer's word lists. We first use the "positive" and "overstatement" word lists to identify promotional content. Second, we identify promises using the "rise" and "increase" word lists, as they suggest improvements. As the promises of the Freedman's Savings Bank were about government support and a safe use of funds, we also include the "politics" and "sure" word lists. Finally, to identify and quantify the use of words that correspond to moral statements, we use the "religion," the "ought," and the "vice" word lists.

Following the literature (Berelson 1952; Loughran and McDonald 2011), we

[64] "The Freedman's Savings and Trust Company." *New National Era*, June 22, 1871, p. 4.
[65] "Items from the Branches. Savannah Branch," *New National Era*, September 29, 1870, p.3.

adjust these Harvard Inquirer's word lists, which were developed for psychology and sociology studies, to our historical and financial context. To do so, we proceed as follows. First, we carefully examine whether each word identified as part of a list had a similar meaning that corresponds in our context by reading a sample of sentences and articles that include this word. If the meaning does not correspond, we withdraw the word from the word list. For example, we drop words from the "positive" word list that are neutral in a finance context, such as *interest* or *capital.* Through this process, we withdraw 1% of the words from the Harvard Inquirer's Word lists we exploit. Second, we follow Loughran and McDonald (2011) and build a dictionary of all words occurring in at least 5% of the documents to see whether we can match these words to a specific word list. Hence, we add words that fit well in a specific list but that the Harvard Inquirer omits because they had a different meaning in the 19^{th} century. For example, we include *lottery* and *drinking* to the "vice" word list, as these words were considered as vices in Postbellum America. We also complete the "sure" list to refer better to the idea of safety in our context with the words *guarantee, stability, federal, safe, steady, promise, steadily, auspices.* Finally, we further identify the moral content adding one additional word list with the names of prominent personalities in Postbellum America, such as *Benjamin Franklin, Abraham Lincoln.*

We classify our ten word lists into four categories: the "positive" and "overstatements" categories identify promotional content, while the "promise" and "moral statement" categories characterize the type of content. Our positive category includes 1,596 words and 99% of it overlaps with the initial Harvard Inquirer's "positive" word list. Our overstatement category includes 537 words. The "promise" category groups the "increase," "rise," "sure" and "politics" word lists and includes 466 words. Finally, the "moral" category includes the "ought," "vice," "religion," and "personalities" word lists and a total of 766 words. The Internet Appendix provides our final 10 word lists, as well as the list of words we drop and add to the initial Harvard Inquirer's word lists.

One concern could be that we build our word lists based on the content of the Freedman's Savings Bank's advertising only. To address this concern, we build a dictionary of words occurring in at least 5% of the documents referring to other banks as well and add them to the respective word lists when relevant.

4.3.3 Results

Table 5 provides summary statistics on the occurrence of words related to positive statements, overstatements, false promises and a moralizing rhetoric in our sample of newspaper items on the Freedman's Savings Bank versus other banks. In total, we examine more than 260,000 words across 3,239 newspaper items. For each word category and list, we observe the percentage of items that include the corresponding words in Columns 1 and 4, and within each item, the percentage of words they represent in Columns 2 and 5. Both the use of positive or overstatement words across items and the intensity *within* items is higher for the Freedman's Savings Bank. Hence, items on the Freedman's Savings include close to 2% of positive words on average, versus 1.1% for other banks. However, the gap between the Freedman's Savings Bank and other banks is even larger when considering the use of moral statements and promises: 68% (31%) of newspaper items related to the Freedman's Savings Bank include moral or promises words, versus 16% (6%) for other banks.

INSERT TABLE 5 HERE

Next, we use a tf.idf weighting scheme to better capture the use intensity of each word list, where tf – term frequency – represents the method used to account for the word frequency adjusting for the document length, and idf – inverse document frequency – denotes the method used to adjust for the importance of this word within the entire corpus. We follow Loughran and McDonald (2011) and use one of the most common tf.idf weighting schemes, where the weight of word i in the newspaper item j is defined as

$$w_{i,j} = \begin{cases} \frac{(1+log(tf_{i,j}))}{1+log(a_j)} log\frac{N}{df_i} & \text{if } tf_{i,j} \geq 1 \\ 0 & \text{otherwise,} \end{cases}$$

where N is the total number of articles and advertisements in our sample, df_i the number of newspaper items including at least one occurrence of the word i, $tf_{i,j}$ the raw count of the word i in document j and a_j the average word count in the newspaper item.

Figure 5 plots the tf.idf-weighted frequency of our four word categories. It illustrates the uniqueness of the advertising of the Freedman's Savings Bank in its use of not only positive words and overstatements, but also of words referring to promises and moral statements.

INSERT FIGURE 5 HERE

One concern could be that the Freedman's Savings Bank's advertising differs from other banks because it advertises in specific newspapers or because savings banks differ from other banks. To address this concern, we estimate OLS regressions where the dependent variable is the tf.idf weighted frequency of the positive, overstatement, moral and promises word lists, in logs. We include bank type, year and newspaper fixed effects and control for the article length, measured in the number of words in an article.

Table 6 provides the results. The advertising of the Freedman's Savings Bank is between 8 to 40% more intense in the use of words from the positive, overstatement, moral and promise word categories after controlling for newspaper fixed effects. Results are robust to clustering at the newspaper times year level.

We also investigate whether other banks targeting minorities were advertising in a similar way including a dummy indicating these banks, i.e., the German

Savings Bank, the Emigrant Industrial Savings Bank and the Freedman's Savings Bank.

In contrast to the Freedman's Savings Bank, other minority banks, which were were managed by directors from the same ethnic background as their depositors, i.e., German or Irish, had more neutral advertising that was similar to other banks at this time. This result suggests that the asymmetry between the white management of the Freedman's Savings Bank and the depositors, mostly African Americans, contributed to the use of false promises and moral statements in the advertising.

INSERT TABLE 6 HERE

5 Advertising, Fraudulent Lending and Depositor Losses

This section provides evidence suggesting a transfer of wealth from African American depositors to elite white networks in Washington, D.C., through fraudulent lending at the Freedman's Savings Bank. As most borrowers defaulted, the Freedman's Savings Bank, with no equity on its balance sheet, was insolvent within a few years, well before the Panic of 1873. Its failure led to depositor losses that have been rarely matched in the history of banking failures in the United States.

5.1 The Transfer of Wealth

We exploit historical archives to identify the race, occupation and networks of borrowers for 60% of the loan volumes.[66]

Figure 6 illustrates the transfer of wealth from African American to white borrowers, and from Southern branch cities to Washington, D.C. While over 90%

[66] We exploit the following sources: U.S. Senate. 43rd Congress, 2nd Session (1874), U.S. Senate. 44th Congress, 1st Session (1876), U.S. Senate. 46th Congress 2nd Session (1880), U.S. Senate. 53rd Congress 2nd Session (1883), Davis (2003) as well as newspaper archives.

of the depositors of the Freedman's Savings Bank were African Americans, they received less than 5% of the loan volumes issued.[67] In addition, the Washington, D.C., branch issued almost 90% of the loans in volume, but collected only 11% of the deposits.

INSERT FIGURE 6 HERE

Table 7 identifies the borrowers of the Freedman's Savings Bank across several dimensions. First, it lists the borrowers' occupations: more than 50% of the loan volumes were issued to real estate contractors, businessmen and financiers. To illustrate, the largest borrower, J. V. W. Vanderburgh, was the white owner of a construction firm working for the Board of Public Works of Washington, D.C. Theophile E. Roessle, the manager of the most prestigious hotel in Washington, D.C., at this time, borrowed more than $78,000 in current dollars. In contrast, depositors of the bank were children or students (21%), cooks, washers, waiters or servants (13% in total), farm workers (13%), and construction workers (9%), as Table 2 indicates.

INSERT TABLE 7 HERE

Second, Table 7 demonstrates that the majority of the loans benefited elite networks composed of politicians, as well as friends, clients or relatives of the bank's finance committee.[68] Elected officials, such as congressmen, senators and state governors, obtained 15% of the loan volumes. For example, the Maryland state senator Samuel Taylor Suit (1832-1888) received a loan of $50,000 in current dollars. Loans were also offered to public and real estate contractors (41%), many of whom worked for the DC Board of Public Work (19%) that Henry Cooke, the

[67]In addition to manually identifying the borrowers' race, we also link borrowers to the full 1870 census and estimate the probability of being Black using county-level name and race probabilities. We arrive at a similar result.

[68]While in the 19$^{\text{th}}$ century in the US, insider lending was very common in commercial banks, these banks were mostly funded with equity held by the bank directors. Lamoreaux (1996) shows that it ensured a relatively efficient governance.

head of the finance committee of the bank but also the first governor of Washington, D.C., managed. Hence, the largest total loan amount was issued to J. V. W. Vandenburgh a contractor of the city of Washington, D.C. Railroad investors, such as Jay Cooke, Henry Cooke's brother, received 13% of the loan volumes. One of these loans, the largest individual loan recorded in the archives, was to Effingham H. Nichols, the treasurer of the Union Pacific Rail Road, which was involved in the Credit Mobilier scandal. In fact, railroad investment and the development of Washington, D.C., were among the main sources of corruption, speculation and self-enrichment in the Post Civil War Era, or the "Gilded Age" (White 2017), with contractors charging the federal government for excessive amounts and bribing politicians to obtain contracts.

One might suggest that transferring funds from African Americans to white businessmen was efficient, as the latter had more investment opportunities. However, African American depositors were not compensated for the increase in risk in the bank lending policy. In fact, the bank rarely paid interests on deposits after 1872, as Table IA.3 shows. In addition, the bank was transferring money from populations with little access to capital to elite networks who already had access to banks, such as the investment banker Jay Cooke. When depositors complained that branches could not make loans, the Freedman's Savings Bank argued that "it is the experience of the trustees at Washington that the vigilance of a finance committee of the strongest men in the board, the knowledge and watchfulness of president and actuary, as well as the aid of the solicitor of the bank, are all required to prevent losses."[69] Third, with no congressional oversight until 1873, borrowers had little incentive to repay loans, as suggested by the almost systematic default and fraud we document below.

[69] "Freedman's Bank." *New National Era*, July 31, 1873.

5.2 Evidence on Fraud and Strategic Default

We find that the vast majority of loans issued by the Freedman's Savings Bank were fraudulent at issuance as they violated the charter, which, after the 1870 amendment, required loans to be backed by real estate worth twice the value of the loan. A large proportion of loans were invested in bonds and securities, often with no collateral, or collateral violating the requirements set out in the charter amendment.

We also find evidence that borrowers strategically defaulted on their loans. As Table 3 indicates, borrowers repaid only 5% of the amount due at maturity.

As a result, the bank, with no equity in the balance sheet, was insolvent from as early as 1872, long before the September 1873 panic. In January 1873, the finance committee of the Freedman's Savings Bank had already issued $3 million of loans among which at least $900,000 were mature but not repaid. In the absence of equity, the bank was not only illiquid but also insolvent.

5.3 Advertising and Fraudulent Lending

To investigate the relationship between the bank's advertising and the fraudulent lending activities, Figure 7 plots the volumes of loans issued each year, the fraction not repaid at maturity, as well as the frequency of false promises and moral statements in the bank advertising. The intensity of the misleading advertising increased with the issuance of fraudulent and non performing loans. The moralizing rhetoric included references to vices, such as drinking or buying lottery tickets, which was consistent with stereotypes about African Americans at the time and could have contributed to reinforce them.

INSERT FIGURE 7 HERE

Table 8 confirms that the bank's advertising content changed after the charter amendment. In a differences-in-differences model, we regress the weighted frequency of each word list on a dummy equal to one after May 1870, the date of the charter amendment, interacted with a dummy for the Freedman's Savings Bank. The coefficient of the interaction indicates an increase in the intensity of the use of a moralizing rhetoric and promises of more than 25% after the charter amendment. This result suggests that the white management of the bank opted for a more aggressive advertising while exploiting the change in the charter to accelerate fraudulent lending activities.

INSERT TABLE 8 HERE

5.4 Depositors' Losses

When the Freedman's Savings Bank failed, 10% of the aggregate wealth of the targeted African American population, i.e., \$2.8 million current dollars, or \$75 million in 2021 dollars, were due to depositors. We define the targeted population as all African Americans living less than 50 miles from a branch and estimate the aggregate wealth of African Americans using the full 1870 census (Derenoncourt et al. 2022).[70] In addition, more than 90% of the depositors we identify in the 1870 census had zero or less than \$100 in wealth.

While Congress agreed to partly repay depositors, Table 9 shows that depositors recouped only 19.8% of their deposits on average in present value terms. This table lists the five payments depositors received from 1875 to 1883 to compensate for their lost deposits in Panel A. The first and largest payment amounted to 20% of the deposits and was paid only in late 1875 (Columns 1 and 2) to less than 50% of the depositors (Column 3). The last payment was nine years after the failure, while African American's average life expectancy at this time was 33 years old. To compute how much depositors received on average in present value as of July 1874, we discount the five repayments using 6% as a discount rate, the interest rate

[70]After winsorizing the wealth variables in the 1870 census at the 1% level, we find that the aggregate wealth of African Americans living within 50 miles from a branch amounts to \$29 million.

promised on deposits at the Freedman's Savings Bank but also at most savings banks at this time (Olmstead 1976).[71]

This estimate is likely to be conservative as the investigation committee, which reported the repayment amounts, had incentives to overestimate the amount received by depositors. We also discount repayments to depositors using the expected returns on deposits, which is a lower bound given how the funds were at risk both before and after the failure. In addition, as depositors had to send their deposit books to the headquarters in Washington, D.C., and prove their identity, it is possible that a much lower percentage of depositors than indicated did so in the climate of distrust that followed the failure. In fact, a secondary market for deposit books suggests that the expected repayment was only 8% of the deposit amount (Osthaus 1976).

INSERT TABLE 9 HERE

Finally, the collapse of the Freedman's Savings Bank stands out as one of the worst instances of depositor losses in the US history of banking until the creation of the Federal Deposit Insurance in 1933.

First, while around thirty other savings banks failed since the creation of the first one in 1816, none of the failures affected so many depositors as the Freedman's Savings Bank. Only the failure of the Townsend Savings Bank in New Haven, Connecticut, in 1873, led to similar depositor losses, while affecting only 13,000 depositors, versus more than 60,000 for the Freedman's Savings Bank.[72] Another significant failure was the one of the Third Avenue Bank of New York in 1875. However, while the bank was of comparable size as the Freedman's Savings Bank in 1873 in terms of deposit amount, most depositors were able to withdraw their funds before the bank closure, and only 8,000 depositors faced losses of $1.4 million

[71] The average repayment received by a depositor in present value as of 1874 is equal to $\sum_{n=1}^{5}$ % Depositors Repaid$_n \times \frac{\text{\% Amount Repaid}_n}{(1+6\%)^{Year_n - 1874}}$], where $Year_n$ is the year of repayment n. When using 10-year Treasury rate in 1874 as the discount rate (Shiller 1989), i.e., 5.47%, the repayments would account for 20.2% of the lost deposits in present value terms.

[72] "To Settle a Bank's Affairs." *The New York Times*, December 16, 1884, p. 5.

in aggregate.[73] Even when focusing on the failures of national banks, which by the charter could invest the deposit funds in risky commercial loans, only two national bank failures led to a larger amount due to depositors. Panel B of Table 9 provides summary statistics on bank failures with claims higher than $1 million: the average amount owed to depositors as a percent of GDP is 0.0004%, while for the Freedman's Savings Bank this number amounts to 0.0013%. Figure IA.7 plots the distribution and shows that the Freedman's Savings Bank ranks in the 95th percentile in the amount due to depositors in our sample of national and savings bank failures.

6 Discussion on Possible Short Term Benefits for Depositors

While depositors faced extensive losses and abuse of trust, one important question is whether they benefited from having an account at the Freedman's Savings Bank *in the short term.* Did the advertising nudge African Americans to save more for education and other investments, leading to better outcomes, as SY2020 suggests? SY2020 concludes about dramatic positive effects of the Freedman's Savings Bank on depositors' literacy, school attendance, income, labor market participation and real estate wealth.[74] SY2020 obtains these results using a *1% sample* of the 1870 census linked with the bank registers to identify depositors and an instrumental variable analysis. Exploiting the *full* 1870 census and an alternative identification strategy, we find no evidence of any positive effects of the Freedman's Savings Bank on its depositors. We raise concerns about SY2020's unfounded historical state-

[73] "Broken Savings Banks." *The New York Times*, October 9, 1877, p. 2. Other notable failures are the ones of the Mechanics and Traders (1875), the Bond Street (1876) and the Market (1872) savings banks, each affecting less than 4,000 depositors.

[74] According to Tables 2 and 7 in SY2020, the Freedman's Savings Bank lead to an increase in the probability to attend school by 14 percentage points (+300%), to be literate by 13-19 percentage points (+100%), and to work by 3-6 percentage points (+10%), up from respectively 3.9%, 15% and 39%.

ments supporting the identification strategy, the data construction methodology and the empirical setting.

6.1 Evidence from the full 1870 Census

We exploit the full 1870 census to investigate depositor outcomes in 1870.

Data

We identify depositors in a sample of the full 1870 census that we construct as follows.

First, we restrict the 1870 census to all individuals living in counties within 50 miles of a branch.[75] To identify these counties, we use the NBER's County Distance Database, which provides all the counties that are within 50 miles of each US county.[76] The 1870 census covers 38 million individuals and around 7.8 million households. When keeping only the counties within 50 miles of a branch that is available in the registers, we arrive at a sample of 7,475,149 individuals and 1,534,962 households.

Then, for each individual, we extract the first name, last name, age, gender, race, county location, place of birth, real estate wealth, personal wealth, literacy, school attendance, income score and relatives.[77] When available, we create variables indicating the father's and mother's first names using the information on the relationship to the household head. We also create a variable indicating the closest Freedman's Savings Bank branch. Finally, we standardize first names and last names using the same procedure as for the depositors' data (Abramitzky

[75] The distance to the branch is one of the parameters of our linking algorithm when considering potential matches. 50 miles might be considered as relatively conservative, as it corresponds to around two days of travel at this time.

[76] `https://www.nber.org/research/data/county-distance-database`. Because the NBER distance database uses current county FIPS codes only, we manually adjust the county FIPS code to reflect the 1870 county composition.

[77] Income score is an IPUMS-constructed census variable which assigns each occupation in a particular census to the median total income of that occupation in 1950, in hundreds of 1950 dollars.

et al. 2020). After dropping observations where the first or last name is missing, and if there are multiple individuals with the same first name, last name, and age *within* a household, we arrive at a final sample of 7,463,045 individuals in 1,533,745 households.

Table IA.16 provides summary statistics on Black individuals in our 1870 census sample. We arrive at a final sample that includes close to 2 million individuals.

Linking Methodology

We use information on names, location, age, place of birth and father and mother's names to identify depositors in our 1870 census sample and build a linking algorithm, following Abramitzky et al. (2019). Section 6.2 of Part III of the Internet Appendix describes the steps of the linking algorithm.

Panel A in Table IA.16 summarizes the sample of individuals we identify in the full 1870 census as depositors. We identify 19,338 Black depositors in our 1870 census sample, i.e., 1% of the individuals. Depositors are much more likely to live in an urban area, to be literate, work and have a higher income score. Among these matched depositors, 28% are children in 1870, and among these children, 23% attend school in 1870, compared to 8% for children not holding bank accounts.

As having a bank account could benefit all members in the household, we also identify as depositors all members of a household that includes a primary account holder. Panel B in Table IA.16 provides summary statistics at the household level.

1870 Outcomes of Early versus Late Depositors

One possible source of bias when investigating the 1870 outcomes of depositors is selection, as individuals who open an account are likely to be ex-ante more educated and wealthy, or have better economic prospects, than individuals who do not open an account. To address this issue, we compare the 1870 outcomes of depositors who opened an account *before 1870* to depositors who opened an account *in 1870 or after*, estimating the following specification:

$$Outcome_{i,1870} = \alpha + \beta \mathbb{1}_{OpenYear<1870} + \theta \mathbb{1}_{OpenYear>=1870} + \eta\, x_{i,1870} + County_i + \varepsilon_i, \tag{2}$$

where $Outcome_{i,1870}$ is a dummy for school attendance, literacy, labor market participation or the log amount of income or real estate property for individual i in 1870, $\mathbb{1}_{OpenYear<1870}$ and $\mathbb{1}_{OpenYear>=1870}$ are dummies equal to 1 for accounts opened before and after 1870, respectively, $County_i$ are county fixed effects and $x_{i,1870}$ are individual controls including age, gender and household size.

Figure 8 plots the coefficients β and θ for each outcome. We find no statistical difference in 1870 outcomes between pre-1870 and post-1870 depositors at pre-1870 branches. Table IA.19 provides estimates for β and θ and p-values testing for the equality of the coefficients: it confirms they are not statistically different.

INSERT FIGURE 8 HERE

One concern is that this specification might suffer from another selection effect that would cancel out the positive effects of having an account: "late" depositors might be ex-ante richer and more educated than "early" depositors. However, we find quantitative and qualitative evidence suggesting the opposite.

First, one key source of variations in the timing of account opening was the advertising effort of the bank, which intensified with the changes in the management of the bank and the charter amendment, as detailed in Section 2. As Figure 7 shows, the use of false promises and a moralizing rhetoric increased after 1870. It corresponds to the period when (i) the influence of the Cooke brothers, who revolutionized the advertising of financial products during the Civil War, increased, and (ii) incentives to advertise and collect deposits grew, since the charter amendment of 1870 facilitated fraudulent lending.[78] Second, late depositors were likely to be less informed and sophisticated than early depositors, as information on the

[78]See Section 2.3,

fraudulent activities of the bank became public from 1870, and in 1871, rumors of runs were spreading.[79] The increasing awareness of the bank's financial situation challenged the finance committee, which finally resigned in February 1872. Third, evidence from the data confirms that late depositors were not more sophisticated than early ones, and that it was even quite the opposite. Hence, the share of children among new depositors jumped up to more than 22% after 1870, as the bank was actively recruiting depositors in schools (see Figure IA.10). Table IA.17 provides summary statistics on early and late depositors and shows that they are similar across most characteristics except gender and age.

To further address this selection issue in the timing of account opening, we focus on "early" depositors within a branch area – defined as depositors who opened an account within two years of a branch opening – and compare them across branches opened *before* 1870 and branches opened *after* 1870. Table IA.20 provides the results: we find no difference in 1870 outcomes between early depositors in early or late branches. Again, this specification is not immune to selection effects. However, if anything, we expect the selection effect to bias the results upwards, as depositors in late branches had a lower access to wealth and education, as Table IA.11 illustrates.

6.2 Issues in SY2020

We identify the following issues in SY2020 that account for the dramatic positive effects of the Freedman's Savings Bank the paper identifies on depositors' literacy, school attendance, labor market participation, income and real estate wealth.

First, SY2020's identification strategy and interpretation of the results rely on a set of unfounded statements that are not consistent with evidence from historical archives. Hence, central to SY2020's analysis is a supposed "planned" roll-out of branches, while in the charter the Freedman's Savings Bank was not meant

[79] See Section 2.3 and Footnote 46.

to even have branches.[80] Another key assumption in SY2020 is that the branch expansion is exogenous, while the bank was explicitly considering the wealth of the African American population when opening branches, as well as the presence of institutions involved in the economic and social integration of the freedmen.[81] Finally, SY2020's main result is about the causal impact of the bank on literacy and school attendance, while the bank largely relied on schools to recruit depositors, resulting in around 20% of the depositors being children.[82]

When we replicate SY2020's final sample, we find that 95% of the "depositors" are falsely identified as such. This large false positive rate is due to the lax rules in SY2020's methodology to link the 1% 1870 census with the bank registers, which, at odds with the standards in the history literature, does not seek to minimize incorrect matches, i.e., "false positives." Hence, SY2020 does not exploit information on the account opening year and identifies as depositors *before* 1870 individuals who opened an account *after* 1870, which account for 75% of the depositors. SY2020 also ignores other useful information such as age or birth place. Second, SY2020 generates *random permutations of last names and first names* in the registers before linking the datasets, and hence links four times more combinations of first and last names than initially available. Third, SY2020 identifies as depositors in the census data each individual within each household with a member that matches any relative as listed in the registers, *even if the household does not include a depositor*.[83] These inconsistencies explains how SY2020 identifies

[80] At this time, interstate branching by banks was prohibited, and the Freedman's Savings Bank did not have a clause in its charter exempting it from this provision. See for example, "Branches of the Freedman's Savings Bank." *New National Era*, March 3 1873 and U.S. Senate. 42nd Congress, 3rd Session (1873).

[81] For example, during the first years following the creation of the Freedman's Savings Bank, from 1865 to 1867, the bank was mostly targeting cities with Black troops and existing banks for soldiers, as military wages were an important source of wealth for African Americans just released from slavery. The *New Era*, March 31, 1870. "Freedman's Savings." *South Carolina Leader*, October 28, 1865. The Internet Appendix provides more sourced evidence on the drivers of the branch location.

[82] The Internet Appendix provides abundant evidence on the role of schools. Among others, see for example, "Pamphlet." The Freedman's Savings Bank, 1867, and "Freedmen's Savings and Trust Company. To the editor of the New Era." *New Era*, March 10, 1870, p. 1.

[83] Figure IA.12 investigates the false positives within the sample of census individuals SY2020

around 800 depositors before 1870 in its final sample, i.e., more than 4% of the ones listed in the registers, while using only a 1% sample of the 1870 census.

When we investigate the characteristics of these "false positive," we identify a bias in the construction of the data. As SY2020 identifies depositors linking the bank registers with the census data *within branches*, the number of potential depositors increases with the number of individuals listed in the registers, which is higher in early and more successful branches. As a result, falsely identified depositors lived in areas with a better access to wealth and education. SY2020's specifications do not include branch fixed effects to control for this selection effect.

We then investigate the empirical design and find evidence suggesting that the exclusion restriction of the instruments for holding an account does not hold. SY2020 exploits four instruments at the county level: (1) a dummy equal to one for counties with a branch opened before 1870, (2) the county distance to the nearest county with a branch opened before 1870, and, relating to the 1868 congressional election, (3) the number of Republican votes in the county, and (4) the share of Republican votes in the county. Figure 9 shows that these instruments all correlate with proxies for African American's ex-ante access to wealth and education. The figure plots average ex-ante county characteristics across values of the four county level instruments in SY2020's final sample. County characteristics include the log of the average number of Black soldiers present in the county over the years 1865-1866, a dummy indicating a Freedmen's Bureau office or school, the population, and the manufacturing output per capita.[84] Table IA.13 provides the coefficient estimates for the corresponding regressions and shows that the instruments also correlate with dummies indicating an urban area and access to rail and water infrastructures.[85]

identifies as depositors.

[84]The Freedmen's Bureau and the number of soldiers indicate access to wealth as the Bureau was providing support to the freedmen and soldiers received relatively large wages from the Union army.

[85]It is well understood in the literature that both branch locations and the timing of branch openings and closures are endogenous choices of banks (see for example Aguirregabiria et al.

INSERT FIGURE 9 HERE

Consistent with the bias we identify both in the data construction and the instruments, we can replicate SY2020's large coefficient estimates in the same sample but with randomized depositors, as Figure 10 illustrates. Figure 10 plots the coefficient estimates of SY2020 IV analysis across 1,000 permutations of the data where we identify depositors randomly within branches. We define the number of depositors within a branch as the number of possible combinations of listed individuals in the registers with individuals in the census times the probability of a match.

INSERT FIGURE 10 HERE

Other inconsistencies in SY2020 include the non-replicability of the data, robustness tests that are not conclusive, a series of other incorrect historical statements, for example on the bank's use of funds or the branch opening dates and status, and omissions that could affect the perception of this episode of history and the interpretation of the results, for example on the massive fraud and abuse of trust. Part III in the Internet Appendix provides more details on each of these other issues.

7 Conclusion

This paper investigates the expansion of the first formal financial institution serving African Americans after Emancipation.

Created as a benevolent institution meant to bring economic independence to the freedmen, the bank recruited depositors through a uniquely extensive advertising campaign, by using false promises, a moralizing rhetoric and racial stereotyping. The bank's success in collecting deposits resulted in a transfer of wealth

(2016)) that affects their lending (Petersen and Rajan 2002; Agarwal and Hauswald 2010).

away from African Americans. Hence, this episode of history illustrates how racial advertising by financial institutions can affect minorities, a question still largely unexplored in the literature. The Freedman's Savings Bank also demonstrates how designing institutions with well-meaning intentions and a broad social agenda can have adverse effects, diverting attention from appropriate regulation and supervision.

The gap between the racial composition of the active directors of the bank, all white until 1873, and the depositors, mostly African Americans, also raises research questions on the potential benefits of minority-owned financial institutions. After the failure of the Freedman's Savings Bank, between 1888 and 1934, 134 Black-owned banks were formed mostly in Southern states (Okonkwo 2003).

Finally, the long run effects of the Freedman's Savings Bank on African Americans' trust in formal financial institutions and wealth accumulation are also important research questions that have not yet been explored. Like the Tulsa race massacre, which destroyed Tulsa's Greenwood District in 1921, commonly referred to as "Black Wall Street," the Jim Crow era's "Black Codes," which restricted economic opportunity in much of the South, as well as practices like redlining, the Freedman's Savings Bank and its failure stands out as a significant obstacle in the accumulation of Black wealth in America.

References

Abramitzky, R., L. Boustan, and K. Eriksson (2019). To the New World and Back Again: Return Migrants in the Age of Mass Migration. *ILR Review 72*(2), 300–322.

Abramitzky, R., R. Mill, and S. Pérez (2020). Linking Individuals across Historical Sources: A Fully Automated Approach. *Historical Methods: A Journal of Quantitative and Interdisciplinary History 53*(2), 94–111.

Agarwal, S. and R. Hauswald (2010, 04). Distance and Private Information in Lending. *Review of Financial Studies 23*(7), 2757–2788.

Aguirregabiria, V., R. Clark, and H. Wang (2016). Diversification of Geographic Risk in Retail Bank Networks: Evidence from Bank Expansion After the Riegle-Neal Act. *RAND Journal of Economics 47*(3), 529–572.

Aldunate, F., D. Jenter, A. G. Korteweg, and P. Koudijs (2021). Shareholder Liability and Bank Failure. *Working Paper*.

Allcott, H., J. Kim, D. Taubinsky, and J. Zinman (2021). Are High-Interest Loans Predatory? Theory and Evidence from Payday Lending. *Review of Economic Studies 89*(3), 1041–1084.

Alsan, M. and M. Wanamaker (2017). Tuskegee and the Health of Black Men. *Quarterly Journal of Economics 133*(1), 407–455.

Ambrose, B. W., J. N. Conklin, and L. A. Lopez (2020, 08). Does Borrower and Broker Race Affect the Cost of Mortgage Credit? *Review of Financial Studies 34*(2), 790–826.

Bachas, P., P. Gertler, S. Higgins, and E. Seira (2021). How Debit Cards Enable the Poor to Save More. *Journal of Finance 76*(4), 1913–1957.

Bailey, A. A. (2006). A Year in the Life of the African-American Male in Advertising: A Content Analysis. *Journal of Advertising 35*(1), 83–104.

Baradaran, M. (2015). *How the Other Half Banks.* Harvard University Press.

Baradaran, M. (2017). *The Color of Money: Black Banks and the Racial Wealth Gap.* Harvard University Press.

Bartlett, R., A. Morse, R. Stanton, and N. Wallace (2022). Consumer-lending Discrimination in the FinTech Era. *Journal of Financial Economics 143*(1), 30–56.

Bates, T. and W. Bradford (1980). An Analysis of the Portfolio Behavior of Black-Owned Commercial Banks. *Journal of Finance 35*(3), 753–768.

Bayer, P., F. Ferreira, and S. L. Ross (2018). What Drives Racial and Ethnic Differences in High-Cost Mortgages? The Role of High-Risk Lenders. *Review of Financial Studies 31*(1), 175–205.

Beach, B. and W. W. Hanlon (2022). Historical Newspaper Data: A Researcher's Guide and Toolkit. *Working Paper*.

Begley, T. A. and A. Purnanandam (2021). Color and Credit: Race, Regulation, and the Quality of Financial Services. *Journal of Financial Economics 141*(1), 48–65.

Berelson, B. (1952). *Content Analysis in Communication Research.* New York: Hafner.

Black, H., R. L. Schweitzer, and L. Mandell (1978). Discrimination in Mortgage Lending. *American Economic Review 68*(2), 186–191.

Bristor, J. M., R. G. Lee, and M. R. Hunt (1995). Race and Ideology: African-American Images in Television Advertising. *Journal of Public Policy & Marketing 14*(1), 48–59.

Brune, L., X. Giné, J. Goldberg, and D. Yang (2016). Facilitating Savings for Agriculture: Field Experimental Evidence from Malawi. *Economic Development and Cultural Change 64*(2), 187–220.

Butler, A. W., E. J. Mayer, and J. P. Weston (2022). Racial Disparities in the Auto Loan Market. *Review of Financial Studies*.

Carrell, S. and J. Zinman (2014). In Harm's Way? Payday Loan Access and Military Personnel Performance. *Review of Financial Studies 27*(9), 2805–2840.

Cavalluzzo, K. S., L. C. Cavalluzzo, and J. D. Wolken (2002). Competition, Small Business Financing, and Discrimination: Evidence from a New Survey. *Journal of Business 75*(4), 641–679.

Célérier, C. and A. Matray (2019). Bank-branch Supply, Financial Inclusion, and Wealth Accumulation. *Review of Financial Studies 32*(12), 4767–4809.

Célérier, C. and B. Vallée (2017). Catering to Investors Through Security Design: Headline Rate and Complexity. *Quarterly Journal of Economics 132*(3), 1469–1508.

Charles, K. K., E. Hurst, and M. Stephens (2008). Rates for Vehicle Loans: Race and Loan Source. *American Economic Review 98*(2), 315–20.

Clubb, J. M., W. H. Flanigan, and N. H. Zingale (2006). Electoral Data for Counties in the United States: Presidential and Congressional Races, 1840–1972. ICPSR.

Cohen-Cole, E. (2011). Credit Card Redlining. *Review of Economics and Statistics 93*(2), 700–713.

Darity Jr, W. A. and A. K. Mullen (2020). *From Here to Equality: Reparations for Black Americans in the Twenty-first Century.* UNC Press Books.

Davis, J. M. (2003). Bankless in Beaufort: A Reexamination of the 1873 Failure of the Freedmans Savings Branch at Beaufort, South Carolina. *South Carolina Historical Magazine 104*(1), 25–55.

Derenoncourt, E., C. H. Kim, M. Kuhn, and M. Schularick (2022). Wealth of Two Nations: The US Racial Wealth Gap, 1860-2020. *Working Paper*.

Dobbie, W., A. Liberman, D. Paravisini, and V. Pathania (2021, 08). Measuring Bias in Consumer Lending. *Review of Economic Studies 88*(6), 2799–2832.

Dougal, C., P. Gao, W. J. Mayew, and C. A. Parsons (2019). What's in A (School) Name? Racial Discrimination in Higher Education Bond Markets. *Journal of Financial Economics 134*(3), 570–590.

Douglass, F. (1882). The Life and Times of Frederick Douglass: From 1817-1882.

Downs, G. P. and S. Nesbit (2015). Mapping Occupation: Force, Freedom, and the Army in Reconstruction. `http://mappingoccupation.org`. Accessed: 2020-06-05.

Du Bois, W. E. B. (1903). *The Souls of Black Folk*. University Press John Wilson and Son.

Dupas, P., S. Green, A. Keats, and J. Robinson (2014). Challenges in Banking the Rural Poor: Evidence from Kenya's Western Province. *African Successes, Volume III: Modernization and Development*, 63–101.

Dupas, P., D. Karlan, J. Robinson, and D. Ubfal (2018). Banking the Unbanked? Evidence from Three Countries. *American Economic Journal: Applied Economics 10*(2), 257–97.

Dupas, P. and J. Robinson (2013). Why Don't the Poor Save More? Evidence from Health Savings Experiments. *American Economic Review 103*(4), 1138–71.

Eli, S., T. Logan, and B. Miloucheva (2022). The Enduring Effects of Racial Discrimination on Income and Health. *Journal of Economic Literature*.

Fei, C. (2022). What Drives Racial Minorities to Use Fintech Lending? Evidence from a Structural Estimation. *Working Paper*.

Financial Consumer Agency of Canada, C. (2022). Mystery Shopping at Domestic Retail Banks. *Report*.

Foner, E. (1988). *Reconstruction: America's Unfinished Revolution, 1863-1877.* Harper Collins.

Fuster, A., P. Goldsmith-Pinkham, T. Ramadorai, and A. Walther (2022). Predictably Unequal? The Effects of Machine Learning on Credit Markets. *Journal of Finance 77*(1), 5–47.

Giacoletti, M., R. Heimer, and E. G. Yu (2021). Using High-Frequency Evaluations to Estimate Discrimination: Evidence from Mortgage Loan Officers. *Working Paper*.

Giedeman, D. C. (2011). Fannie Mae, Freddie Mac, and the Freedman's Savings Bank. *Review of Black Political Economy 38*(3), 205–226.

Gilbert, A. L. (1972). The Comptroller of the Currency and the Freedman s Savings Bank. *Journal of Negro History 57*(2), 125–143.

Guiso, L., P. Sapienza, and L. Zingales (2008). Trusting the Stock Market. *Journal of Finance 63*(6), 2557–2600.

Gupta, A., C. Hansman, and P. Mabille (2022). Financial Constraints and the Racial Housing Gap. *Working Paper*.

Gurun, U. G., G. Matvos, and A. Seru (2016). Advertising Expensive Mortgages. *Journal of Finance 71*(5), 2371–2416.

Gurun, U. G., N. Stoffman, and S. E. Yonker (2018). Trust busting: The effect of fraud on investor behavior. *The Review of Financial Studies 31*(4), 1341–1376.

Haselmann, R., D. Schoenherr, and V. Vig (2018). Rent Seeking in Elite Networks. *Journal of Political Economy 126*(4), 1638–1690.

Howell, S. T., T. Kuchler, D. Snitkof, J. Stroebel, and J. Wong (2022). Lender Automation and Racial Disparities in Credit Access. *Journal of Finance*.

Josiah, B. P. (2004). Providing for the Future: The World of the African American Depositors of Washington, DC's Freedmen's Savings Bank, 1865-1874. *Journal of African American History 89*(1), 1–16.

Karlan, D., A. L. Ratan, and J. Zinman (2014). Savings by and for the Poor: A Research Review and Agenda. *Review of Income and Wealth 60*(1), 36–78.

Keyes, E. W. (1878). *A History of Savings Banks in the United States from Their Inception in 1816 down to 1874: With Discussions of Their Theory, Practical Workings and Incidents, Present Condition and Prospective Development*, Volume 2. B. Rhodes.

Knüpfer, S., V. Rantala, and P. Vokata (2021). Scammed and scarred: Effects of investment fraud on its victims. *Working Paper*.

Koudijs, P., L. Salisbury, and G. Sran (2021). For Richer, for Poorer: Bankers' Liability and Bank Risk in New England, 1867 to 1880. *The Journal of Finance 76*(3), 1541–1599.

Lamoreaux, N. R. (1996). *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England*. Cambridge University Press.

Langston, J. M. (1894). *From the Virginia Plantation to the National Capitol; or, The First and Only Negro Representative in Congress from the Old Dominion.* American Publishing Company.

Larson, H. M. (1936). *Jay Cooke, Private Banker.* Harvard University Press.

Levy, J. (2012). *Freaks of Fortune: The Emerging World of Capitalism and Risk in America.* Harvard University Press.

Loughran, T. and B. McDonald (2011). When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks. *Journal of Finance 66*(1), 35–65.

Melzer, B. T. (2011). The Real Costs of Credit Access: Evidence from the Payday Lending Market. *Quarterly Journal of Economics 126*(1), 517–555.

Melzer, B. T. (2018). Spillovers from Costly Credit. *Review of Financial Studies 31*(9), 3568–3594.

Morgan, D. P. (2007). Defining and Detecting Predatory Lending. *Federal Reserve Bank of New York Staff Reports* (273).

Morse, A. and K. Pence (2021). Technological Innovation and Discrimination in Household Finance. *Palgrave Handbook of Technological Finance*, 783–808.

Munnell, A. H., G. M. Tootell, L. E. Browne, and J. McEneaney (1996). Mortgage Lending in Boston: Interpreting HMDA Data. *American Economic Review*, 25–53.

Okonkwo, V. (2003). Analysis of the Portfolio Behavior of Black-Owned Commercial Banks. *Journal of Academy of Business and Economics 1*(1).

Olmstead, A. L. (1976). *New York City Mutual Savings Banks, 1819-1861.* UNC Press Books.

Osborne, N. (2014). Little Capitalists: The Social Economy of Saving in the United States, 1816-1914. *Columbia University*.

Osthaus, C. R. (1976). *Freedmen, Philanthropy, and Fraud: A History of the Freedman's Savings Bank.* University of Illinois Press.

Petersen, M. A. and R. G. Rajan (2002). Does Distance Still Matter? The Information Revolution in Small Business Lending. *Journal of Finance 57*(6), 2533–2570.

Pollay, R. W. (1986). The Distorted Mirror: Reflections on the Unintended Consequences of Advertising. *Journal of Marketing 50*(2), 18–36.

Prina, S. (2015). Banking the Poor Via Savings Accounts: Evidence from A Field Experiment. *Journal of Development Economics 115*, 16–31.

Reid, C. K., D. Bocian, W. Li, and R. G. Quercia (2017). Revisiting the Subprime Crisis: The Dual Mortgage Market and Mortgage Defaults by Race and Ethnicity. *Journal of Urban Affairs 39*(4), 469–487.

Shiller, R. J. (1989). *Market Volatility*. MIT Press.

Shuey, A. M., N. King, and B. Griffith (1953). Stereotyping of Negroes and Whites: An Analysis of Magazine Pictures. *Public Opinion Quarterly*, 281–287.

Stein, L. C. and C. Yannelis (2020). Financial Inclusion, Human Capital, and Wealth Accumulation: Evidence from the Freedman's Savings Bank. *Review of Financial Studies 33*(11), 5333–5377.

Thomson, D. K. (2022). *Bonds of War: How Civil War Financial Agents Sold the World on the Union*. University of North Carolina Press.

Todd, T., E. George, and F. R. B. of Kansas City. Public Affairs Department (2019). *Let Us Put Our Money Together: The Founding of America's First Black Banks*. Public Affairs Department of the Federal Reserve Bank of Kansas City.

Traweek, V. and M. Wardlaw (2022). Societal Inequality and Financial Market Participation: Evidence from the Freedman's Savings Bank. *Working Paper*.

U.S. Congress. 41st Congress, 2nd Session (1871). *Congressional Globe*. Government Printing Office.

U.S. Senate. 42nd Congress, 3rd Session (1873). *Report of the Comptroller of the Currency, February 25 (S.Rpt.88)*. Government Printing Office.

U.S. Senate. 43rd Congress 1st Session (1874). *Congressional Record and Appendix, Speech of the Honorable F.G. Bromberg of Alabama in the House of Representatives, May 14 (H.Rpt.2-6)*, Volume 2. Government Printing Office.

U.S. Senate. 43rd Congress, 2nd Session (1874). *Letter from the Commissioners of the Freedman's Savings and Trust Company, December 15*. Government Printing Office.

U.S. Senate. 44th Congress, 1st Session (1876). *Freedman's Bank Report in the House of Representatives, January 5 (H.Rpt.502)*, Volume 1710. Government Printing Office.

U.S. Senate. 46th Congress 2nd Session (1880). *Report of the U.S. Congress, Senate, Select Committee on the Freedman's Savings and Trust Company (S.Rpt.440)*. Government Printing Office.

U.S. Senate. 53rd Congress 2nd Session (1883). *Annual Report of the Commissioner of the Freedman's Savings and Trust Company*. Government Printing Office.

Wadhwani, R. D. (2011). The Institutional Foundations of Personal Finance: Innovation in Us Savings Banks, 1880S–1920S. *Business History Review 85*(3), 499–528.

Wailoo, K. (2021). *Pushing Cool: Big Tobacco, Racial Marketing, and the Untold Story of the Menthol Cigarette*. University of Chicago Press.

White, R. (2017). *The Republic for Which It Stands: The United States during Reconstruction and the Gilded Age, 1865-1896*. Oxford University Press.

A Figures

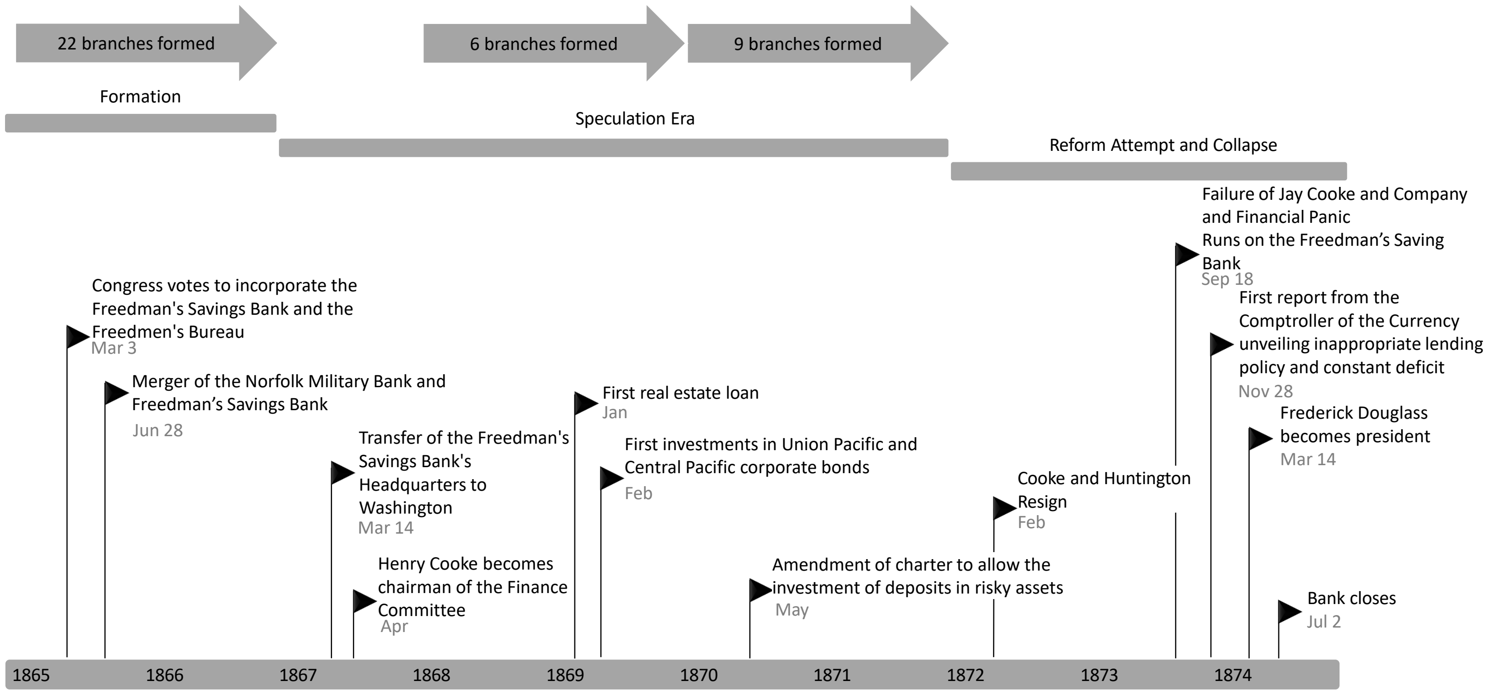

Figure 1. Timeline of the Freedman's Savings Bank

This timeline plots the main events in the history of the Freedman's Savings Bank. The Freedman's Savings Bank was chartered in March 1865 and failed in July, 1874. We identify three distinct periods in the life of the Freedman's Savings Bank. (1) The formation: from 1865 to 1866, the bank was created on the model of the first military banks for Black Union soldiers by white church members, businessmen, reformers, and abolitionists. (2) The speculation era: 1867 was a turning point in the history of the Freedman's Savings Bank. The headquarters were transferred to Washington, D.C., there was a large turnover of trustees and politicians and financiers took over the leadership. The latter started using the deposit funds to make fraudulent loans that were almost never repaid. (3) The reform attempt and collapse: in 1872, some information on the dubious investments became public, the main trustees resigned and new trustees, as well as a new president, Frederick Douglass, were appointed in an attempt to reform the bank and rebuild confidence. In July, 1874 after several months of runs, and years of insolvency, the Freedman Savings Bank failed. Depositors received only 20% of their deposits back on average in net present value terms.

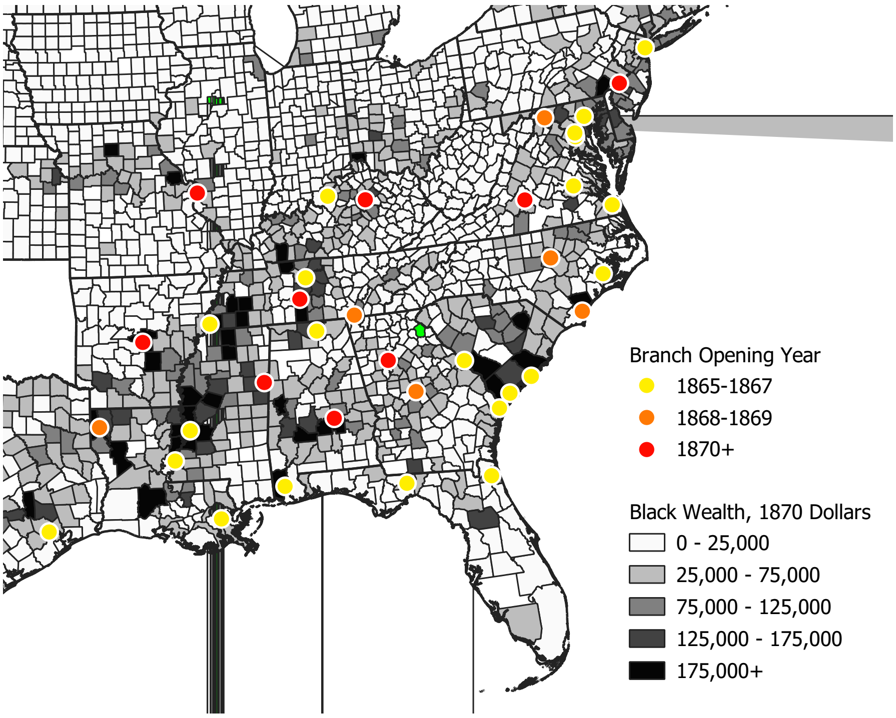

Figure 2. Freedman's Savings Bank: Branch Locations and 1870 Black Wealth

This map displays the location of the 37 Freedman's Savings Bank branches, as well as 1870 Black county wealth in 1870 dollars. Individual Black wealth is winsorized at 1%, then aggregated by county. Yellow, orange and red dots refer to branches that opened between 1865 and 1867, between 1868 and 1869, and after 1870, respectively.

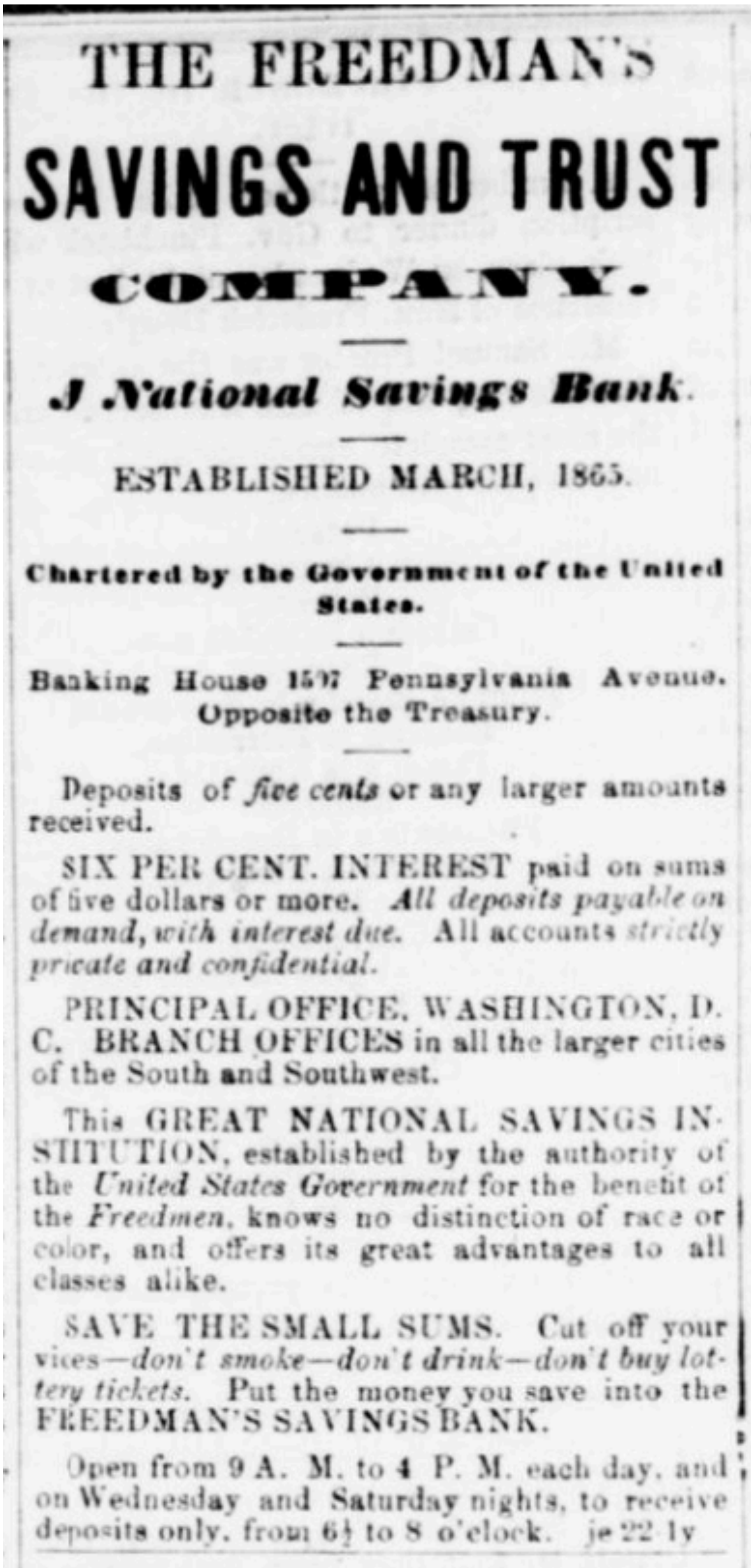

Figure 3. Advertisement from the Freedman's Savings Bank

This advertisement was published every week in the *New National Era*, the main newspaper with an African American audience, from June 1871 to July 1873.

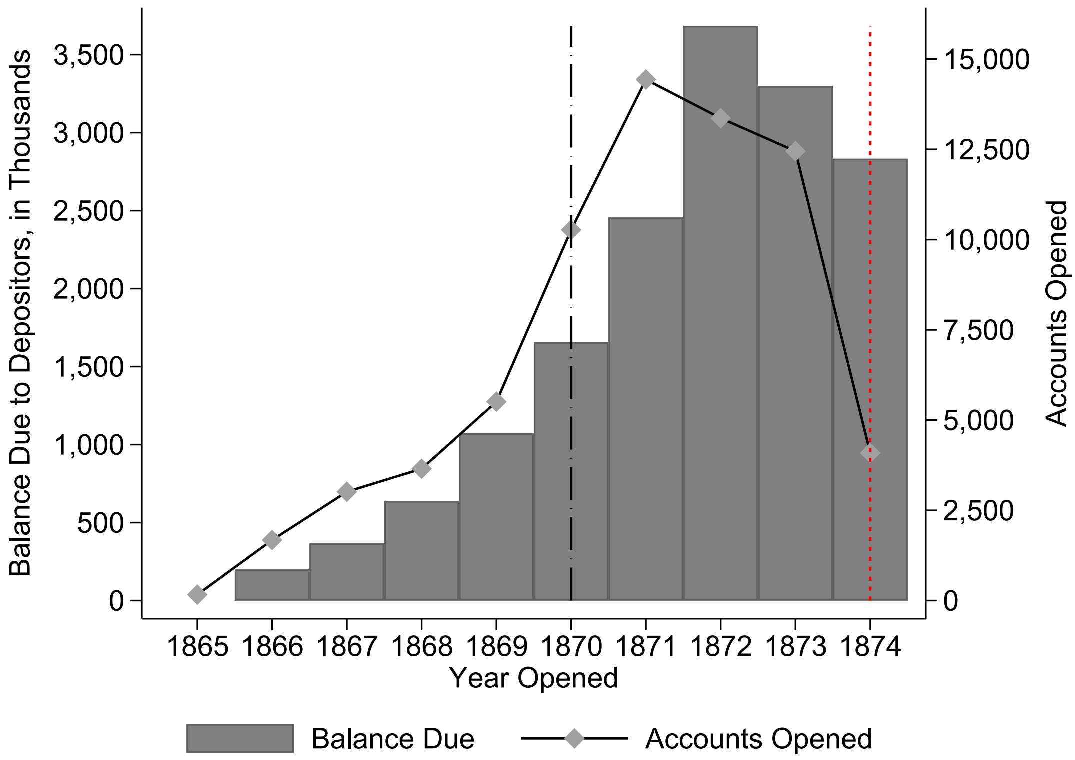

Figure 4. New Accounts Opened and Outstanding Amount of Deposits at the Freedman's Savings Bank from 1865 to 1874

This figure plots the number of accounts opened each year (right axis) and the outstanding amount of deposits at the bank (left axis). The sample of accounts is restricted to the accounts listed in the bank registers that are available and digitized (28 branches) and excludes institutional accounts. The outstanding amounts of deposits are from page 41 of the Report of the U.S. Congress Senate Select Committee to Investigate the Freedman's Savings and Trust Company (U.S. Senate. 46th Congress 2nd Session 1880). The vertical red line indicates the date of the bank failure. The vertical dotted line indicates the year of the 1870 census data.

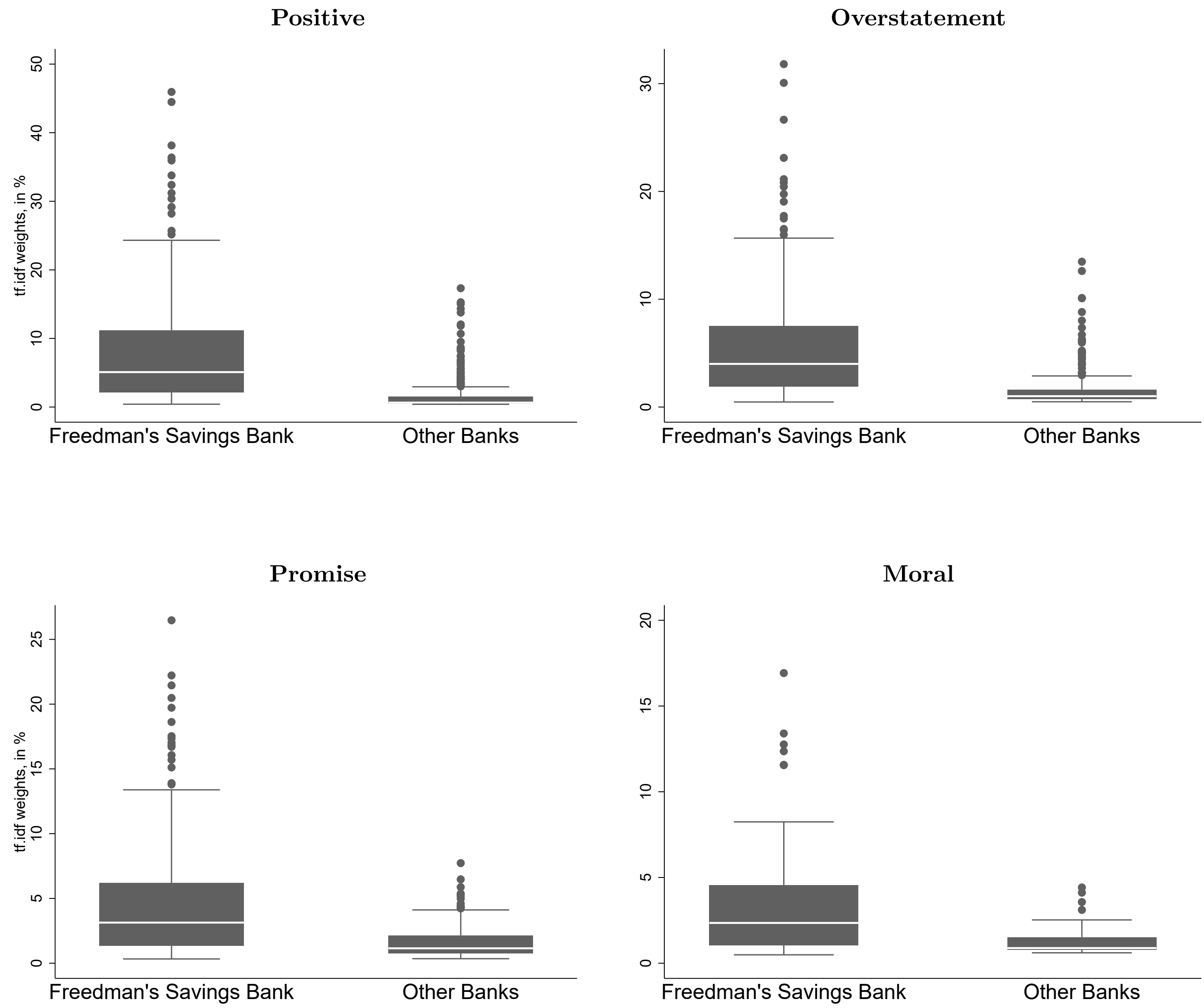

Figure 5. Frequency of Word Lists in Advertisings across Banks

This figure plots the frequency of the "positive," "overstatement," "promise," and "moral" word categories in the 3,239 articles and ads referring to the Freedman's Savings Bank and any other banks we collect in our sample of newspapers over the 1865-1874 period. We measure the frequency using the inverse document frequency weighted measure (tf.idf) as described in Section 4.3.

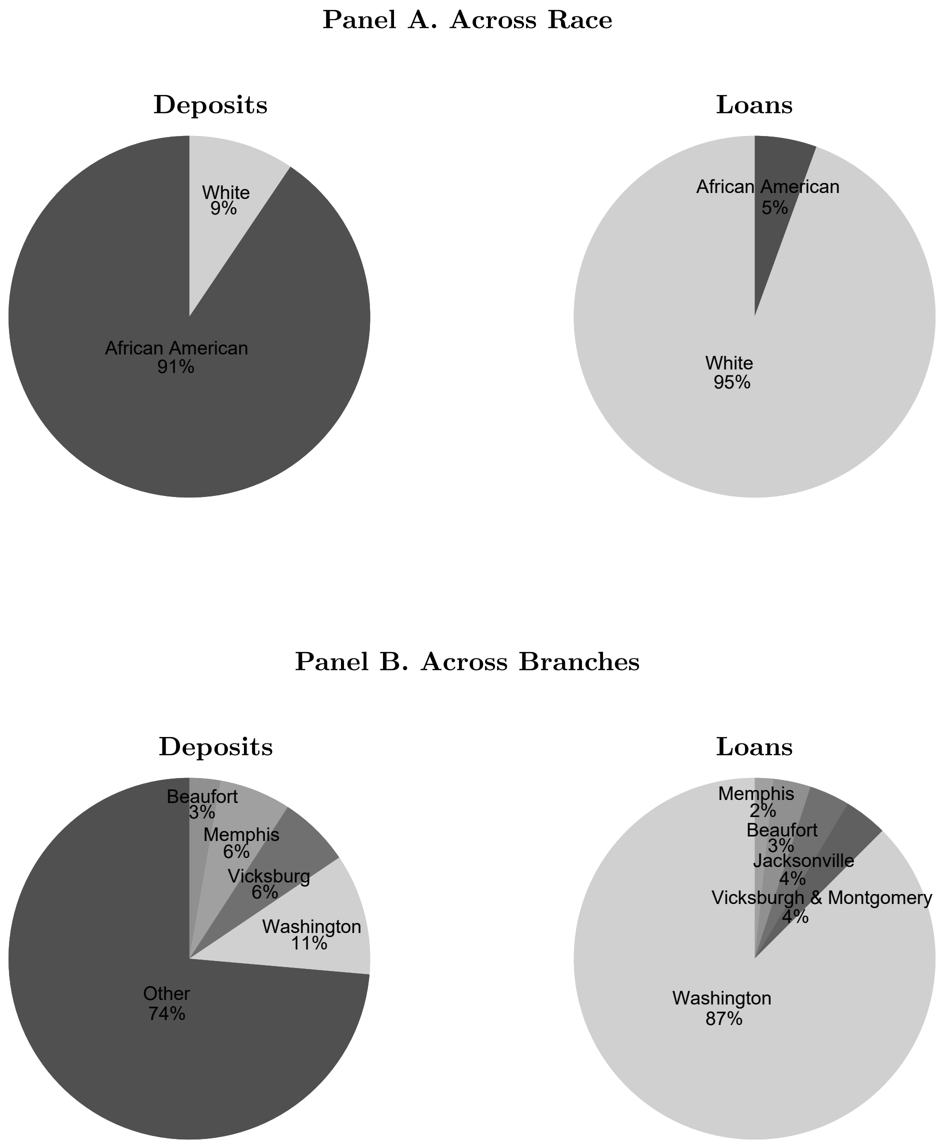

Figure 6. Deposits and Loans across Race and Branches

Panels A and B plot the number of depositors of the Freedman's Savings Bank and the volumes of outstanding loans in 1874 across race and branches, respectively. Information on the race and branch of depositors is from the bank's registers of signatures, which cover 28 branches from 1865 to 1874. We drop accounts that are held by institutions, such as churches and various community societies, and accounts for which all the information, except the account identifier, is missing. We also drop duplicates in terms of names, age, location and place of birth. The final sample of depositors includes 74,966 depositors across 27 branches over 1865 to 1874. Our loan sample is compiled from the descriptions of loans in U.S. Senate. 43rd Congress 1st Session (1874) and includes 1,797 loans in the balance sheet of the Freedman's Savings Bank at the date of the failure. These loans account for \$3.6 million of total issuance, or \$86 million in 2021 dollars. Information on borrower race is from our sample of manually audited loans, which covers 60% of the total loan volumes and 305 loans.

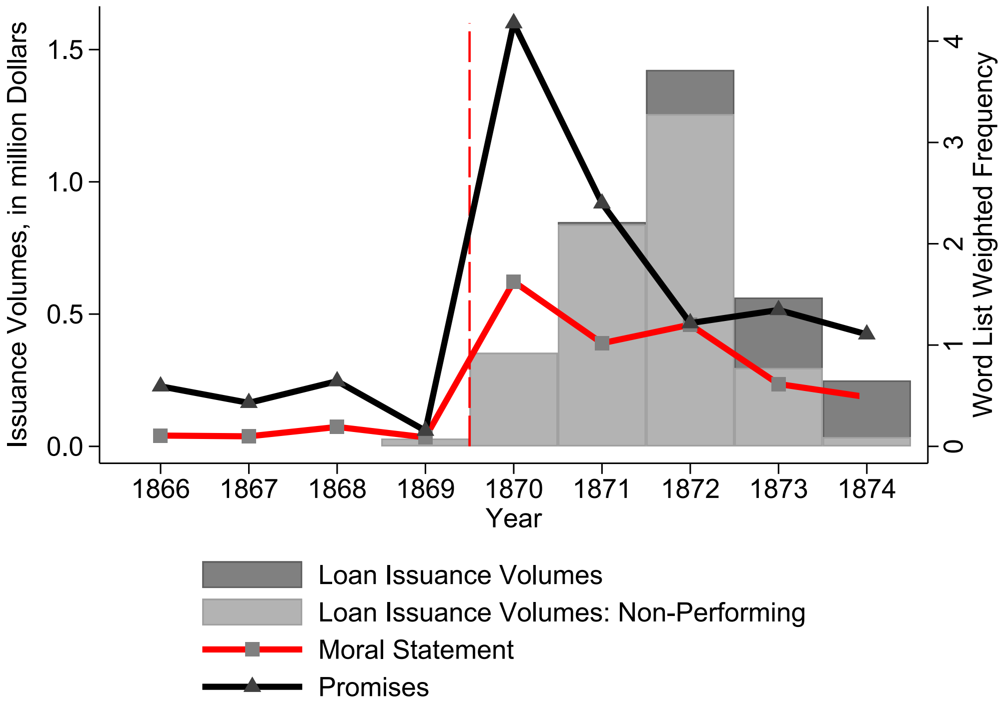

Figure 7. Advertising Content and Fraudulent Lending

This figure plots the use intensity of promises and a moralizing rhetoric in the advertising of the Freedman's Savings Bank as well as the total volume of fraudulent loans the bank issued each year and the volume not repaid at maturity. We measure the use intensity of promises and a moralizing rhetoric with the tf-idf weighted frequency of the corresponding word lists described in Section 4.3. The sample includes the 947 ads and articles we have collected on the Freedman's Savings Bank in our sample of 17 digitized newspapers over the 1865-1874 period. The vertical line indicates the date of the charter amendment in May 1870 allowing the bank to offer loans under strict conditions.

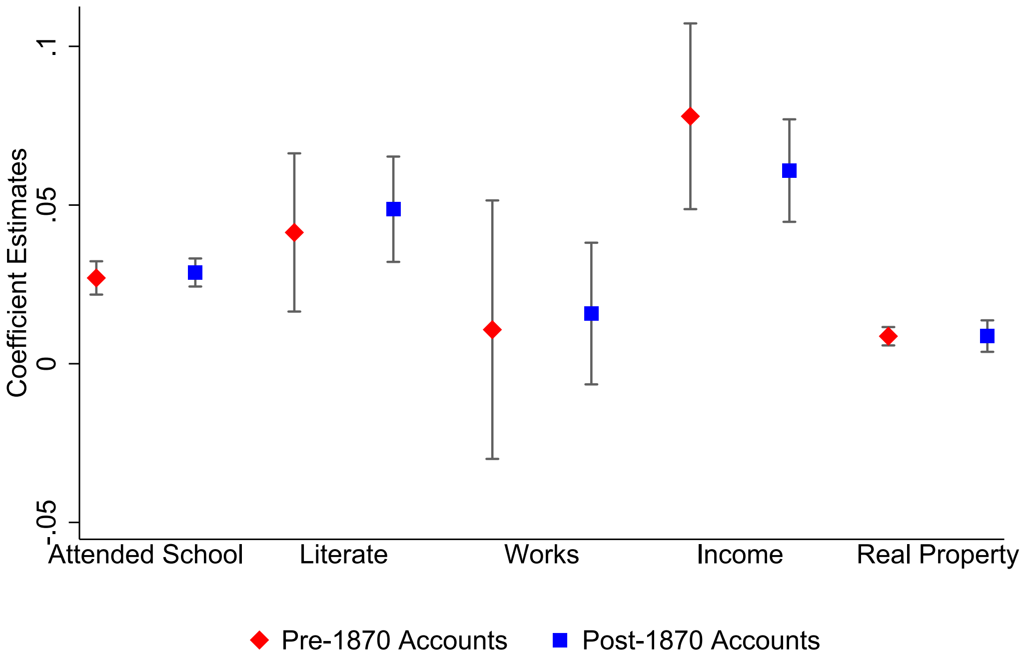

Figure 8. Investigating the Short Run Effects: Comparison of 1870 Outcomes for Early (pre-1870) and Late (post-1870) Depositors

This figure plots the coefficients and confidence intervals for regressions of 1870 outcomes on a dummy indicating depositors who opened accounts before 1870 and a dummy indicating depositors who opened accounts after 1870, among branches opened prior to 1870. This is the same sample and specification as Panel C of Table IA.19. Outcomes, all measured in the full 1870 census, include dummy variables for school attendance, literacy, and employment, as well an income score, representing the median total income in 1950 of an individual with the same occupation in hundreds of 1950 dollars, and the value of the real estate owned by an individual. Regressions control for household size and include county, gender and age category fixed effects. *Attended School* and *Literate* are restricted to those over the age of 5, and *Works*, *Income* and *Real Property* are restricted to those over the age of 15. *Works* and *Income* are further restricted to male only. Standard errors are clustered at the county level. The point estimates are included along with the 90% confidence bands.

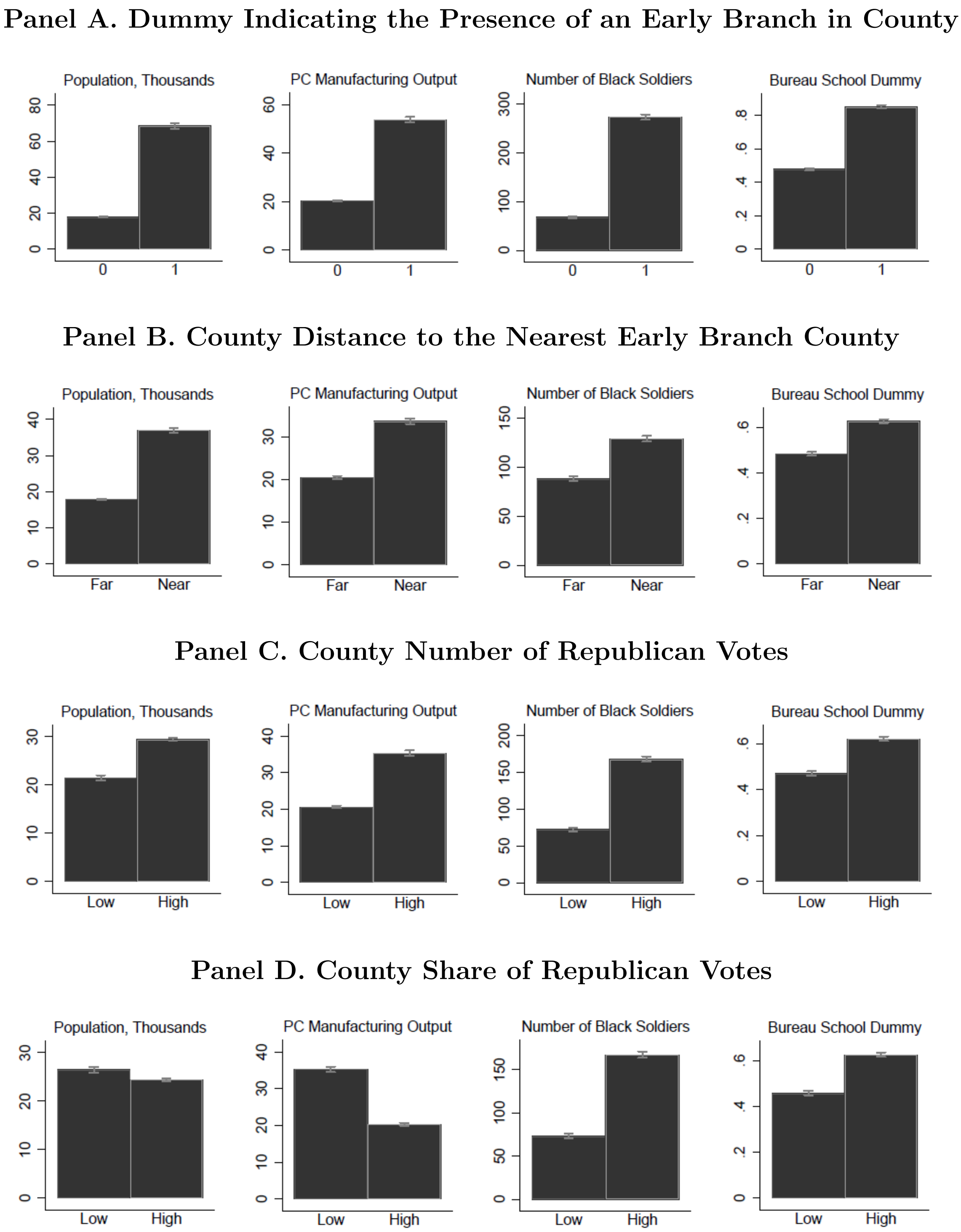

Figure 9. SY2020's Instruments and Ex-ante County Characteristics

This figure plots the mean of ex-ante county characteristics across values of the four SY2020 instruments: a dummy indicating an early branch in the county (Panel A), county distance to the nearest early branch county, the county number of Republican votes in the 1868 congressional election (Panel C), and the county share of Republican votes in the 1868 congressional election (Panel D). The county characteristics are 1860 population, 1860 per capita manufacturing output in current dollars, the average number of Black soldiers in 1865-1866, and a dummy indicating the presence of a Freedmen Bureau's school. The sample is a replication of SY2020's final sample. Election data are from Clubb et al. (2006). Army data are from the archives of the United States Army (Downs and Nesbit 2015). Freedmen Bureau's school information is from the 1869 school reports. Manufacturing data are from the US census of manufactures, 1860. Demographic data are from the US census of population, 1860. Confidence intervals are at the 95% level.

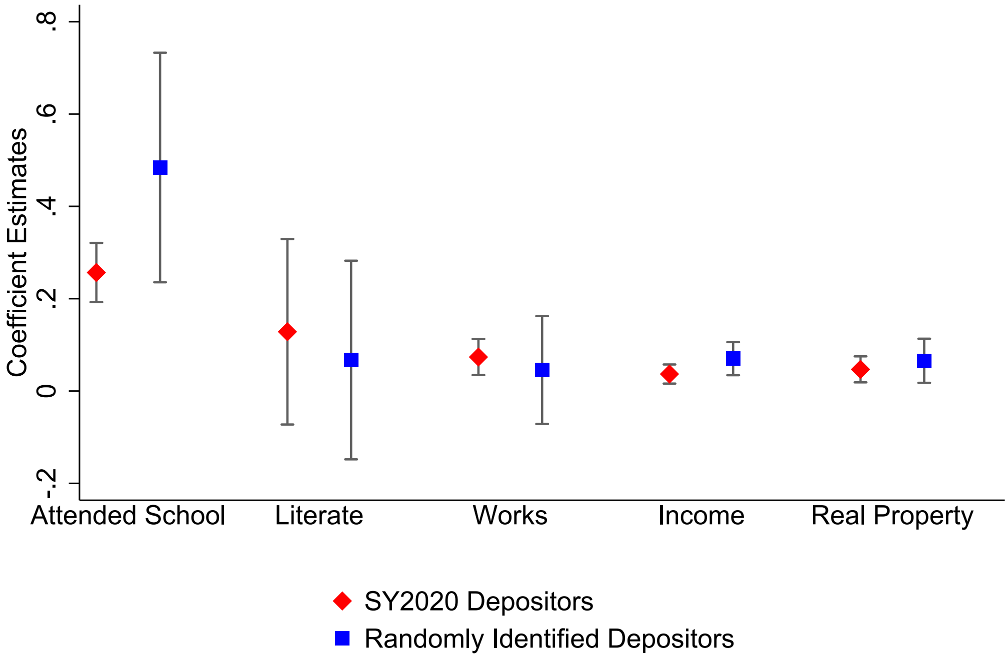

Figure 10. Replication of SY2020's IV Coefficient Estimates on Permutated Samples with Randomized Depositors

This figure displays the coefficient estimates when we estimate SY2020's IV specification in a replication of SY2020's sample (red dots) and in permutations of this sample with randomly identified depositors (blue dots). The blue dots plot the average IV coefficient estimates of the effect of having a Freedman's Savings Bank account across 1,000 sample permutations where individuals are randomly assigned an account within branches. Outcomes, all measured in 1870, include dummy variables for school attendance, literacy, and employment, as well an income score, representing the median total income in 1950 of an individual with the same occupation in hundreds of 1950 dollars, and the value of the real estate owned by an individual. Specifications are the same as in SY2020's Table 7; excluded instruments are the distance to the nearest pre-1870 branch and an indicator for the presence of a pre-1870 branch in the county, and the model includes fixed effects for metropolitan area status, the opening date of the nearest branch, and occupation. Controls include city population, sex, age, number of children under the age of five in household, and fixed effects for relationship with household head and the number of married couples in the household. Income and Real property regressions include an indicator for nonzero values. Observations are weighted using IPUMS sample weights (perwt). Following SY2020's Table 7, standard errors are clustered by distance to the nearest branch or planned branch. The figure plots the 90% confidence intervals.

B Tables

Table 1. Newspaper Dataset

Newspaper	State	Frequency	Period	# of Issues	Number of Articles	
					Freedman's Savings Bank	**Other Banks**
	(1)	(2)	(3)	(4)	(5)	(6)
African American Audience (*N* = 5)						
New National Era	DC	Weekly	1870-1874	211	315	0
Beaufort Republican	SC	Weekly	1870-1873	52	66	0
Charleston Advocate	SC	Weekly	1867-1868	25	30	0
South Carolina Leader	SC	Weekly	1865-1866	27	17	0
Port Royal Commercial	SC	Weekly	1873-1874	27	3	0
General Audience (*N* = 12)						
Charleston Daily News	SC	Daily	1865-1873	2,641	177	916
Atlanta Daily Herald	GA	Daily	1873-1874	239	226	552
New York Times	NY	Daily	1865-1874	468	14	393
New York Daily Tribune	NY	Daily	1865-1872	364	27	324
Daily Dispatch	VA	Daily	1865-1870	1,535	3	32
Daily Loyal Georgian	GA	Daily	1867-1867	29	34	0
New York Herald	NY	Daily	1865-1874	400	1	32
Memphis Daily Appeal	TN	Daily	1866-1873	2,250	2	23
Evening Star	DC	Daily	1865-1873	2,534	9	11
Tri-Weekly Standard	NC	Tri-weekly	1866-18688	289	1	9
Weekly North-Carolina Standard	NC	Weekly	1866-1869	189	19	0
Weekly Loyal Georgian	GA	Weekly	1867-1868	4	3	0
Total					**947**	**2,292**

This table presents the list of newspapers we use for our analysis. We include all the digitized newspapers targeting African Americans from 1865 to 1874 as well as one to three general audience newspapers in the following states: Georgia, New York, North Carolina, South Carolina, Tennessee, Virginia and Washington, D.C. We identify these newspapers using the archives from Newspaper.com, the Chronicling America database from the Library of Congress, the Readex's America's Historical Newspaper Archive, the Proquest Historical Newspapers, as well as the Georgia Historic Newspapers archives from the Digital Library of Georgia. Column 1 provides the state where the newspaper is issued, Column 2 the issuance frequency, Columns 3 and 4 the coverage period and number of issues that are available in a digital format and that we have screened. Finally, Columns 5 and 6 provide the number of advertising and articles referring to the Freedman's Savings Bank and other banks we have identified, collected and manually transcribed. See footnote 8 for more detail on the *New National Era*.

Table 2. Registers Dataset - Summary Statistics

	Number of Accounts = 74,966				
	Mean (1)	**p25** (2)	**p50** (3)	**p75** (4)	**% Non-Missing** (5)
Demographics					
Black (Frequency, in %)	90.6				100%
Age in 1870	27	17	24	35	66%
Number of listed relatives	5	1	4	7	100%
Place of birth (Frequency, in %)					68%
Virginia	20.9				
Georgia	15.2				
South Carolina	14.6				
Kentucky	6.8				
Louisiana	6.8				
Maryland	6.1				
Mississippi	5.9				
Tennessee	5.5				
Others	18.3				
Occupation (Frequency, in %)					69%
Children or students	20.5				
Cooks, washers, waiters or servants	13.3				
Farm workers	12.8				
Construction workers	8.8				
Others	55.4				
Account Information					
Account opening year	1871	1870	1871	1872	92%
Branch opening year	1866	1865	1866	1866	100%
Branch (Frequency, in %)					100%
Washington, D.C.	10.8				
Savannah, GA	10.6				
Charleston, SC	8.2				
Richmond, VA	7.8				
Baltimore, MD	7.0				
Vicksburg, MS	6.4				
Memphis, TN	6.3				
New York City, NY	6.2				
Louisville, KY	5.7				
Augusta, GA	4.8				
New Orleans, LA	4.5				
Atlanta, GA	4.4				
Beaufort, SC	2.9				
Nashville, TN	2.4				
Huntsville, AL	2.2				
Tallahassee, FL	1.9				
Norfolk, VA	1.8				
Mobile, AL	1.7				
Little Rock, AR	1.3				
Shreveport, LA	1.1				
Columbus, MS	1.0				
Natchez, MS	0.7				
St. Louis, MO	0.2				
Lynchburg, VA	0.1				
New Bern, NC	0.0				
Wilmington, NC	0.0				
Raleigh, NC	0.0				

This table provides summary statistics on the accounts listed in the Freedman's Savings Bank's registers of signatures and on the depositors' demographics. The registers cover 28 branches from 1865 to 1874. We drop accounts that are held by institutions, such as churches and various community societies (0.25%), and accounts for which all the information, except the account identifier, is missing. We also drop duplicates in terms of names, age, location and place of birth. We arrive at a dataset covering 74,966 accounts opened across 27 branches over the 1865-1874 period. Children are defined as those aged below 18 at account opening.

Table 3. Loan Dataset – Summary Statistics

N=1,797	**Mean** **(1)**	**Sd** **(2)**	**p25** **(3)**	**p50** **(4)**	**p75** **(5)**
Panel A: Unweighted					
Face value (current dollars)	2,024	6,628	150	500	1,750
Issue year	1872.1	1.1	1871	1872	1873
Maturity (months)	9.9	7.9	2.0	12.0	12.0
Washington, D.C. (dummy)	0.73		0	1	1
Non-performing (dummy)	0.83		1	1	1
% unpaid	95.2	13.6	100	100	100
Panel B: Volume-Weighted					
Issue year	1871.8	1.1	1871	1872	1872
Maturity (in months)	12.5	5.7	12.0	12.0	12.0
Washington, D.C. (dummy)	0.81		1	1	1
Non-performing (dummy)	0.84		1	1	1
% unpaid	93.3	16.4	100	100	100

This table provides summary statistics on the 1,797 loans in the balance sheet of the Freedman's Savings Bank at the date of the failure, accounting for $3.6 million of total issuance, or $86 million in 2021 dollars. The *Non-performing* dummy identifies matured loans that are not repaid. Loans due after the date of the failure might also be non-performing but cannot be accurately identified as such. *% unpaid* refers to the proportion of the amount due – face value and interest – still due at maturity, assuming 6% interest rates with semi-annual payments. Panel B weighs summary statistics by loan face value.

Table 4. Advertising and New Accounts: Panel Analysis

	Number of New Accounts (Day and Branch Level)					
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
# Articles over the last 3 days	0.34*	0.30**				
	(0.18)	(0.13)				
# Articles over the last week			0.22*	0.20**		
			(0.12)	(0.09)		
# Articles over the last 2 weeks					0.14*	0.13**
					(0.08)	(0.05)
Day Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Branch Fixed Effects	No	Yes	No	Yes	No	Yes
Observations	15,607	15,607	11,450	11,450	11,450	11,450
R^2	0.115	0.166	0.198	0.198	0.198	0.199

This table presents OLS coefficients for regressions of daily new account openings on the sum of newspaper items on the Freedman's Savings Bank published over the last three days, week, and two weeks. The panel regressions include day fixed effects in Columns 1, 3 and 5 and branch and day fixed effects in Columns 2, 4 and 6. The sample includes the nine branches in locations covered by the newspapers included in our sample, i.e. Atlanta, Augusta, Beaufort, Charleston, Memphis, New York City, Raleigh, Richmond and Washington, D.C. The sample covers every day-branch observations over the 1865-1874 period when both registers and digitized newspapers are available. Standard errors are clustered at the branch-year level. *, **, and *** represent statistical significance at the 10%, 5%, and 1% confidence levels, respectively.

Table 5. Advertising Content Analysis - Word List Occurence

	Freedman's Savings Bank *N=947*			Other Banks *N=2,292*		
	Occurence Frequency, in %					
	Across Ads	Within Ads		Across Ads	Within Ads	
Word List	**Mean (1)**	**Mean (2)**	**Sd (3)**	**Mean (4)**	**Mean (5)**	**Sd (6)**
Positive	50.4	1.98	2.47	43.9	1.10	1.67
Overstatement	45.8	1.00	1.47	35.0	0.97	1.57
Moral	30.0	0.46	0.86	5.4	0.11	0.59
Vice	26.7	0.38	0.75	1.3	0.01	0.17
Ought	7.5	0.05	0.22	3.7	0.08	0.46
Religion	4.3	0.03	0.27	0.9	0.02	0.22
Authority Figures	1.7	0.01	0.13	0.0	0.00	0.01
Promises	67.3	1.61	1.36	15.5	0.31	0.87
Politics	57.9	0.97	1.06	6.1	0.09	0.48
Sure	34.6	0.51	0.85	8.7	0.10	0.39
Increase	12.4	0.09	0.32	5.3	0.11	0.53
Rise	7.3	0.04	0.17	1.2	0.01	0.10
Other Variables						
Length (in characters)	730			362		
Length (in words)	124			61		
Publication Year	1871			1870		

This table reports summary statistics on the percent of articles and ads with words from a given word list (Columns 1 and 4) and on the frequency of a given word list relative to the total number of words within each newspaper item (Columns 2, 3, 5 and 6). The word lists are from the Harvard Inquirer, adjusted to the finance and historical context as described in Section 4.3, and available in the Internet Appendix. Our sample comprises the 3,239 articles and ads mentioning the Freedman's Savings Bank and any other banks in our newspaper sample over the 1865-1874 period as described in Section 3.

Table 6. The Specificities of the Freedman's Savings Bank's Advertising - OLS Regressions

	Occurence Frequency (tf.idf, in Log)							
	Positive		Overstatement		Moral		Promises	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\mathbb{1}_{Freedman's Savings Bank}$	0.56***	0.17**	0.27**	0.25***	0.31***	0.08***	0.40***	0.38***
	(0.13)	(0.08)	(0.13)	(0.06)	(0.06)	(0.02)	(0.09)	(0.09)
$\mathbb{1}_{Minority Bank}$	-0.19**	-0.13	-0.07	-0.19***	-0.12***	-0.07***	-0.04	-0.21***
	(0.08)	(0.08)	(0.09)	(0.06)	(0.03)	(0.02)	(0.07)	(0.08)
Controls								
Article Length	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects								
Newspaper	-	Yes	-	Yes	-	Yes	-	Yes
Bank Type	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Article Frequency	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,239	3,239	3,239	3,239	3,239	3,239	3,239	3,239
R^2	0.571	0.666	0.592	0.639	0.508	0.613	0.641	0.700

This table presents OLS coefficients for regressions of the use intensity of the positive (Columns 1 and 2), overstatement (Columns 3 and 4), moral (Columns 5 and 6) and promises (Columns 7 and 8) word categories in our sample of newspaper items. The use intensity is the tf.idf weighted frequency, in log. The variable $\mathbb{1}_{Minority Bank}$ indicates banks serving a minority, i.e., German, Irish or African American populations. As opposed to the Freedman's Savings Bank, savings bank serving Irish or German populations were managed by directors from the same ethnicity. The regressions include dummies for the publication year, the bank type – national, state, savings or investment –, and quintiles of article frequency, as well as newspaper fixed effects in columns 2, 4, 6 and 8. Regressions also control for the article length in number of words. The sample includes the 3,239 articles and ads referring to the Freedman's Savings Bank and any other banks as described in Section 3. *, **, and *** represent statistical significance at the 10%, 5%, and 1% confidence levels, respectively. Standard errors are clustered at the newspaper times year level.

Table 7. Borrowers' Occupations and Networks

	% in number (1)	% in volumes (2)
Occupation		
Real Estate and Infrastructure Developers and Contractors	28.9	29.0
Business Owners and Managers	17.4	24.2
Merchants	3.6	3.6
Attorneys and Judges	3.9	3.5
Bankers	4.9	2.5
Civil Servants	2.0	1.6
Freedman's Savings Bank Employees	2.0	1.2
Other	28.2	32.3
Unknown	9.2	2.1
Elected Officials	***8.5***	***14.8***
Congressmen	4.6	3.6
Senators	2.0	2.6
State Governors	0.3	0.2
Other	1.6	8.4
Networks		
Real Estate and Infrastructure Development	41.3	41.1
DC Board of Public Works and Seneca Stone Company	14.8	18.9
Political	20	25.4
Howard University	7.9	12.6
Railroads	8.9	12.9
Jay Cooke and Union Railroad	5.6	9.4
Prominent DC African Americans	10.8	4.1
Douglass Family and Associates	8.2	2.1
Other	15.1	11.7
Unknown	11.8	11.8

This table summarizes manually-identified borrower characteristics in the loan-level database for our sample of manually audited loans, which covers 60% ($2.2 million) of the total loan volumes and 305 loans. Occupation categories are mutually exclusive, while borrower network categories are not. Elected officials is a dummy equal to one if a borrower served in elected office at the federal, state, or local level. The *Real Estate and Infrastructure Development* network category refers to contractors and other professionals with a real estate affiliation, the *Political* network category refers to elected officials and civil servants as well as administrators, faculty and others affiliated with Howard University, the *Railroads* network category refers to those who developed or financed railroads and the *Prominent DC African Americans* network category includes prominent African Americans based in Washington, D.C., including the Douglass family and other influential businessmen and landowners.

Table 8. Changes in the Freedman's Savings Bank's Advertising After the Charter Amendment

	Occurence Frequency (tf-idf, in Logs)			
	Positive (1)	**Overstatement (2)**	**Moral (3)**	**Promises (4)**
$\mathbb{1}_{Post}$ x $\mathbb{1}_{Freedman'sSavingsBank}$	0.25	-0.14	0.25***	0.32***
	(0.20)	(0.13)	(0.09)	(0.09)
$\mathbb{1}_{Freedman'sSavingsBank}$	0.20	0.29***	0.01	0.13
	(0.13)	(0.09)	(0.04)	(0.09)
$\mathbb{1}_{Post}$	0.16	0.34	0.06	0.09
	(0.20)	(0.21)	(0.06)	(0.08)
Controls				
Article Length	Yes	Yes	Yes	Yes
Fixed Effects				
Bank Type	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Frequency	Yes	Yes	Yes	Yes
Observations	3,239	3,239	3,239	3,239
R^2	0.578	0.604	0.527	0.659

This table analyzes the change in the content of the advertising after the charter amendment in May, 1870, in our sample of newspaper items over the 1865-1874 period. In this differences-in-differences framework, $\mathbb{1}_{Post}$ is a dummy variable equal to one from the Freedman's Savings Bank's charter amendment in May 1870. The regressions include bank type, article frequency and year fixed effects. Regressions also control for article length in words. The sample includes the 3,239 articles and ads referring to the Freedman's Savings Bank and any other banks we collect in our sample of newspapers over the 1865-1874 period. *, **, and *** represent statistical significance at the 10%, 5%, and 1% confidence levels, respectively. Standard errors are clustered at the newspaper times year level.

Table 9. Depositors' Losses

Panel A: Repayments to Depositors

N=61,131

Payment Date (1)	**% of the Amount Due** (2)	**% of Depositors Repaid** (3)	**Average % Repaid in Present Value in 1874** (4)
November 1, 1875	20	49.1	9.1
March 20, 1878	10	42.6	3.4
September 1, 1880	10	38.1	2.7
June 1, 1882	15	9.8	3.3
May 12, 1883	7	4.4	1.3
Total			**19.8**

Panel B: Savings and National Bank Failures (1816 - 1933)

	N=76							
	Mean (1)	**Sd** (2)	**p10** (3)	**p25** (4)	**p50** (5)	**p75** (6)	**p90** (7)	***Freedman's Savings Bank*** (8)
Year of Failure	1903	19	1875	1889	1905	1922	1927	*1874*
Amounts Due to Depositors, mm of Current $	2.2	1.6	1.1	1.4	1.7	2.6	3.3	*2.8*
Amounts Due to Depositors, mm of 2021 $	56.3	52.3	22.5	27.3	41.6	64.7	90.5	*67.9*
Amounts Due to Depositors, as a % of Current GDP	**0.0004**	**0.0004**	**0.0001**	**0.0002**	**0.0003**	**0.0006**	**0.0008**	***0.0013***

Panel A lists the repayments to the depositors of the Freedman's Savings Bank after the failure and provides the net present value in 1874 repaid to individual depositors on average. Payment date, % of the amount due, % of depositors repaid are from page 12 of the 1883 "Annual Report of the Commissioner of the Freedman's Savings and Trust Company" (U.S. Senate. 53rd Congress 2nd Session 1883). The present value is computed using a 6% discount rate, the typical interest rates paid on deposits in savings banks during the period. Panel B provides summary statistics on depositor losses from the failures of savings banks (from 1816) and national banks (from 1863) until the creation of the Federal Deposit Insurance Corporation, in 1933. The sample includes all failures of national and savings banks with more than $1 million current dollars due to depositors at the date of the failure. Data on national bank failures are collected from the annual reports of the Comptroller of Currency from 1863 to 1933, while data on savings bank failures are from Keyes (1878) and newspaper archives. See Tables IA.5 and IA.6 for a list of each failure.