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UNCOVERING THE EFFECTS OF THE FREEDMAN'S BANK FAILURE ON PERSONAL PROPERTY: AN ANALYSIS OF NEWLY OBTAINED DATA FROM KENTUCKY AND GEORGIA

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by

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Abstract

The Freedman's Savings and Trust Company (the Freedman's Bank), collapsed in 1874, resulting in the loss of savings for many African American depositors. This study uses a difference-in-difference analysis to investigate the impact of the closure of the Freedman's Bank on the economic well-being of African American taxpayers in Georgia and Kentucky during the Reconstruction era. The analysis did not identify a statistically significant treatment effect; however, it highlights the potential of previously unused archival data sources for future research. The study also draws attention to the need for more comprehensive and rigorous research in this area, in order to better understand the complexities of the Freedman's Bank and its impact on its depositors.

Introduction

In recent years, the National Archives and Records Administration (NARA) has released digitized copies of records from the Freedman's Savings and Trust Company (Freedman's Bank), sparking renewed interest among economic researchers in understanding the bank's impact on its depositors. The Freedman's Bank operated for a decade during the Reconstruction era (1865-1877), which was a critical period for growth and development for newly emancipated African Americans in the South. However, the lack of available data from this era has hampered extensive economic research, making it difficult to understand the economic condition of freedmen in the South. This study addresses this gap by examining the economic condition of freedmen in the South, specifically in relation to the failure of the Freedman's Bank. Using annual tax ledgers from Kentucky and Georgia, this study's goal is to assess whether the failure of the Freedman's Bank in 1874 had a significant impact on the economic condition of the freedmen in the state. By comparing personal property values before and after the bank's closure in 1874, this study seeks to better understand the economic impact of the bank's closure on African American taxpayers in Kentucky and Georgia.

If a community does not have alternative resources to employ for recovery, a negative wealth shock such as the failure of the Freedman's Bank can engender a mistrust of financial institutions. Those who lack trust in these institutions are less likely to engage with them, making it more difficult to establish credit history and access the resources necessary to build financial stability. This can result in a downward spiral where a community's economic situation progressively worsens, making it increasingly difficult to break out of poverty and creating a self-perpetuating poverty trap that can last for generations. In order to better understand the role of financial institutions in promoting or hindering economic growth and development in

marginalized communities, this study explores the impact of the Freedman's Bank on African American taxpayers in Georgia and Kentucky.

Historical Background

During the Civil War, African American soldiers in the Union army faced a significant financial challenge as they did not have access to formal financial institutions to deposit their pay. As a result, military authorities in the Union army established military savings banks for them to store their pay and bounty payments securely and send money to their families (“Military Banks”). In 1864, three military savings banks were established in New Orleans, Virginia, and South Carolina by Union generals to fulfill that purpose (Foner 2003). However, the limitations of these small institutions and the chaos of war ultimately rendered them impractical for continued operation, leading to their closure (Carter 2001). Despite the challenges faced by these military savings banks, they served as the basis for the establishment of the Freedman's Savings Bank, a financial institution that was created to promote economic advancement for African Americans after the Civil War (Foner 2003).

Anson M. Sperry, an army paymaster, and John W. Alvord, a military chaplain, collaborated to establish a savings bank for black people. With the support of philanthropists and abolitionists from New York, the Freedman's Bank Act to incorporate the Freedman's Savings and Trust Company was introduced to the Senate on February 13, 1865 and was passed on March 3 of the same year (Carter 2001). The primary objective of the bank was to receive and hold deposits "by or on behalf of persons heretofore held in slavery in the United States, or their descendants" (Freedman's Savings and Trust Company 1865). The bank's first headquarters were in New York City, with its first branch located in Washington, D.C. (Caires 2016). Fifty leading

businessmen and philanthropists were appointed as the bank's first trustees, with the authority to fill vacant positions by election (Freedman's Savings and Trust Company 1865). Neither trustees nor bank officials were allowed to borrow funds from the bank either directly or indirectly. Only the president and vice presidents were authorized to receive compensation from their positions, and the bank's books were open to inspection by Congress at all times (Freedman's Savings and Trust Company 1865). Although the bank's charter did not provide for personal liability on behalf of the trustees, the philanthropic nature of the undertaking was generally accepted, and it was anticipated that the reputation and integrity of the trustees and officers would prevent corruption and abuse of power (Carter 2001). The bank's goal was to invest at least two-thirds of its deposits solely in "stocks, bonds, Treasury notes, or other securities of the United States," and according to the charter, depositors possessed a portion of the bank's assets proportional to the size of their deposit (Freedman's Savings and Trust Company 1865). Investing in US securities was important for the bank's financial stability as these investments were considered low-risk and guaranteed by the federal government, ensuring a safe return on investment. The proportional ownership protected the depositors by giving them a stake in the bank's assets, so that if the bank were to fail, they would have a claim to a portion of the remaining assets proportional to their deposit size, providing a measure of financial security.

The Freedman's Bank opened its New York headquarters on April 4, 1865 and received its first deposits on May 16th (Caires 2016). The bank was created by Congress to serve the newly emancipated African American population and their families. Within eight months, the bank absorbed the three military savings banks in New Orleans, Beaufort, and Vicksburg, and over the next seven years it established 37 branches across 17 states and the District of Columbia (Sager). Over the course of its existence, the bank held more than $57 million in deposits for

over 70,000 depositors, most of whom were African American (Osthaus 1976). The average deposit was no larger than $60, and it was possible to open an account with as little as 5¢, providing an opportunity for financial inclusion to many who had never had access to such resources before (Osthaus 1976).

The Freedman's Bank had the potential to make a significant impact on the African American community during a time when access to financial services was limited. By providing a secure place to store their wages, the bank helped depositors build wealth and establish financial security. For many freedmen and women, this was a new opportunity that they had never experienced before, and it offered hope for a better future (Foner 2003). Additionally, by serving African American institutions such as churches, schools, and social clubs, the bank supported the growth and development of the community. These institutions played important roles in the lives of many African Americans and were often integral parts of the community's social fabric. By providing financial services to these institutions, the bank helped to sustain them and ensure their continued operation. In this way, the Freedman's Bank had the potential to contribute to the overall economic and social well-being of the African American community during a time of great transition and change (Washington 1997). By 1874, almost half of the bank's employees were African American, providing a source of employment for the community (Sager 2017).

In 1867, the Freedman’s Bank moved its headquarters to Washington, D.C. and underwent a significant change in its leadership. According to historian Carl Osthaus, the new board of trustees included politicians, government officials, and wealthy businessmen who were not necessarily committed to the bank’s original mission of helping African Americans achieve financial stability (Osthaus 1976). This change in leadership led to a shift in the bank’s priorities,

as the new trustees sought to expand the bank's investment portfolio into riskier investments. In 1870, the trustees were able to convince Congress to amend the bank's charter, allowing it to purchase non-U.S. government stocks, bonds, securities. This change made the bank a riskier place to deposit because it increased the possibility of losses for depositors if the bank's investments did not perform well. This change also shifted the focus of the bank from being a safe place to store money to being an institution that actively managed and invested its deposits. The trustees used this new power to make a variety of risky investments, many of which were tied to their own personal business interests (Office of the Comptroller of the Currency 2021).

The Panic of 1873, considered to be the most severe economic depression of the 19th century, severely impacted the Freedman's Savings Bank. Many of its largest investments, including railroad bonds and real estate, lost most of their value (Sager 2017). As a result, the bank faced imminent failure, and depositors were concerned about the bank's solvency, leading to three significant runs over the next eighteen months and the withdrawal of approximately $1.8 million dollars (Washington 1997). In an attempt to restore public trust in the institution, Frederick Douglass, a prominent African American leader, was elected as the bank's president, and he invested $10,000 of his own money to demonstrate his confidence in the bank (Washington; Caires). However, Douglass soon realized that the bank's financial situation was beyond repair, and in June 1874, he recommended that Congress shut down the institution, leading to the bank's permanent closure on June 29, 1874 (Washington 1997).

The closure of the Freedman's Savings Bank in 1874 was a significant setback for the African American community's economic progress. The bank's assets were worth less than 2% of its liabilities, and after the closure, depositors had to endure a complicated and lengthy process to recover their funds. This led to significant financial losses for depositors, many of whom had

saved for years and trusted the bank with their hard-earned money (Rothstein 2017). In total, depositors lost over $2.9 million, which amounts to roughly $77 million in today's currency (The Freedman's Savings Bank). The winding up of the bank's affairs was plagued by inefficiency and corruption, and many depositors never recovered their funds. It was not until 1901 that the U.S. government provided a resolution to compensate depositors for their losses. The bank's failure could have significantly impacted the African American community's efforts to gain economic independence and financial stability and caused them to lose faith in the banking system and distrust financial institutions for generations (Carter 2001; Caires 2016).

This thesis provides an empirical analysis of the aftermath of the Freedman's Savings Bank's closure utilizing new data. Employing primary sources, this study illuminates the experiences of depositors who lost their savings and the impact of the bank's closure on the African American community's economic progress. The results will contribute to the comprehensive understanding of the circumstances surrounding the Freedman's Bank and the challenges faced by African Americans in accessing financial services during this period. Ultimately, this thesis contributes to the ongoing scholarly discussion of the Freedman's Bank and its significance in American history.

Literature Review

Currently, there are only three studies examining the impact of the Freedman’s bank on its patrons. Stein and Yannelis (2020) studies the effect of access to the bank on a previously unbanked population and finds that families with accounts were more likely to have children in school, be literate, be employed, and that they had higher occupational income, business

ownership, and real estate wealth on average. However, a subsequent study by Célerier and Tak (2021) casts significant doubt upon those findings by questioning the assumptions of Stein and Yannelis' identification strategy. Moreover, the authors argue that the bank had an overall negative socioeconomic impact on its African American depositors by transferring their wealth to white elites in Washington, D.C. through fraudulent loans. The authors find that after the resulting failure depositors were only able to recoup an average of 19.8% of their deposits. Traweek and Wardlaw (2022) examine how depositors react to an unfolding financial crisis and conclude that black depositors respond similarly to white depositors during nationwide panics, but that they are slower to react to bank-specific crises. They find that in the case of the Freedman's Bank, white depositors were more than twice as likely to close their accounts before the bank's failure and have their deposits redeemed in full.

The following literature review assesses the preexisting literature along two important aspects of my research. First, it reviews literature on the impacts of gaining access to a formal savings account on those who populations which were previously unbanked or had minimal access to financial services. Second, it examines research on the consequences of a sudden negative wealth shock like that experienced by depositors at the Freedman's Bank.

Impact of Financial Inclusion

Over the past 20 years, there has been significant growth in the economic literature examining financial inclusion; a subset of this literature focuses on the impact of access to formal savings tools, especially for low income, unbanked individuals in developing nations. Both observational and treatment studies have found that formal savings have a positive effect on

a range of outcomes including business investment (Dupas and Robinson 2013), agricultural output (Brune et al. 2017), and ability to deal with financial shocks (Kast and Pomeranz 2014).

Multiple studies have examined the relationship between formal savings and business investment and productivity in developing communities, finding that savings enable increased investment in businesses, productivity growth, and higher employment, among other things.

Dupas and Robinson (2013) offered interest-free savings accounts with relatively high withdrawal fees to a random sample of poor small business owners in rural Western Kenya, comprised of mostly female market vendors and male bicycle taxi drivers. Despite the *de facto* negative interest rate, 87% of people took up the offered savings account, and 41% made two or more transactions within the first six months. They find that women within the treatment group increased their investment in their business considerably when compared to the control group. Their conservative estimate indicates a 38-56% increase in average daily investment for market women 4-6 months after opening a savings account. They also find that market women in the treatment group increased their expenditures; 4-6 months after opening an account, their expenditures were about 37% higher than those in the control group.

To examine whether formal savings can promote agricultural development, Brune et al. (2017) offered a random sample of Malawian farmers the option to have their tobacco profits deposited directly into a savings account rather than the usual cash. They find that farmers using the direct deposit system had higher savings immediately prior to the next planting season, an average 13.3% increase in agricultural input expenditure and an average 21.4% increase in agricultural output when compared to the control. The authors posit that this increase in production enabled the 10.8% growth in household expenditure they observed as well.

Bruhn and Love (2014) conducted an observational study examining the impact of the opening of the Banco Azteca, a Mexican bank with services targeted towards low-income individuals. They find that the opening of the bank's 815 branches led to a 7.6% increase in the number of informal business owners, as well as a 1.4% increase in overall employment; there was a 7% increase in average income observed overall.

Separately from improved business outcomes, access to formal savings mechanisms has been found to have an impact on consumption expenditure and household behavior regarding savings. Prina (2015) offered the opportunity to open a savings account at a local bank to a random sample of Nepalese female heads of household. While analysis of the effect on total household expenditure is too noisy to detect a statistically significant effect, the authors were able to detect a statistically significant positive effect on expenditures on specific areas of expenditure like education and meat. In addition, they observed a non-statistically significant negative effect in other areas; the author suggests that this may indicate a reallocation of household funds as a result of the savings. Furthermore, during negative health shocks, control households experienced an average 40% reduction in income, while treatment households only saw an average 15% reduction, suggesting that households with savings accounts are less impacted by a health emergency than those without. While many of the quantitative consequences remain uncertain, access to a savings account did have a positive impact on the treatment group's self-assessed financial situations; they were 7% less likely to report feeling stretched from month-to-month, and 9% more likely to report that they were "living comfortably" or that they had some money "left over for extras".

Similarly, Kast and Pomeranz (2014) conducted a randomized field experiment which offered free zero-fee savings accounts to low-income members of a microfinance institution in

Chile. In their study, access to a formal savings account corresponded to a 20% decrease in short-term debt, the majority of which is informal debt lent by family and friends. In addition, they observed a 44% mitigation in consumption cutbacks associated with an income shock.

Somville and Vanewalle (2018) conducted a randomized control trial in which rural Indian villagers were given identical weekly payments either through a personal bank account (treatment) or in cash (control). Even with negligible transaction costs and close proximity to the bank, the bank account had significant impacts on the individual's saving behavior. After three months of weekly payments, the treatment group's final savings account balance is 111-115% larger than the controls, and their proportion of days with a positive account balance is 48% higher. They find the effect to be lasting, as the balance of the treated accounts were still twice the size of the control five months after the last weekly payment. The authors noted that the control group did not compensate for their lower account balance by saving other assets in more informal ways; their overall household wealth was reduced compared to the treatment.

Overall, the literature suggests that access to formal savings mechanisms can have a positive impact on a range of outcomes, including business investment, agricultural output, and household behavior regarding savings and consumption expenditure. The studies reviewed provide evidence that savings tools can help to promote economic growth and stability, particularly in developing nations. In the context of the Freedman's Savings Bank, these findings support the idea that providing access to formal savings tools to previously marginalized individuals can have a significant positive impact on their economic wellbeing.

Impact of a Sudden Negative Wealth Shock

The study of negative wealth shocks has important implications for understanding the impact of the failure of the Freedman's Bank on its depositors. The literature on negative wealth shocks demonstrates the potential long-term effects on economic and non-economic outcomes, including consumption, productivity, and health. Examining the historical context and the aftermath of the Freedman's Bank failure, provides insight into the lasting effects of such a wealth shock on the financial development of a community.

In the wake of the Great Recession of 2008, literature on the impact of negative wealth shocks has grown dramatically. The studies range widely in focus, from those examining changes in the marginal propensity to consume (Mian, Rao, and Sufi 2013, Christelis, Georgarakos, and Jappelli 2015**,** Bottazzi, Trucchi, and Wakefield 2015), productivity (Bernstein, Townsend, and McQuade 2020), and even health outcomes (Pool et al. 2018, Boen and Yang 2016).

One of the most well-studied aspects of wealth shocks is its impact on the marginal propensity to consume (MPC); much of the recent literature has centered around the Great Recession of 2008. In the US, Mian, Rao, and Sufi (2013) estimates a spending reduction of 5-7 cents for each $1 of housing wealth loss. Moreover, they find that households with higher pre-crisis leverage cut their consumption more steeply during the same period. In a similar vein, Christelis, Georgarakos, and Jappelli (2015) estimates that a 10% decrease in housing and financial cause a 0.56% and 0.9% decrease in household consumption expenditure, respectively. In Italy, Bottazzi, Trucchi and Wakefield (2015) estimates that a one euro decrease in financial wealth caused an 8.5 to 9 cent decrease in total annual consumption.

Household wealth shocks have also been shown to negatively impact economic productivity within the community. Bernstein, Townsend and McQuade (2020) studies innovative workers before, during, and after the 2008 financial crisis to see whether personal wealth shocks would affect worker productivity. Measuring innovative output through patent filings, they find that workers who experienced a negative housing wealth shock produced fewer patents and patents of lower quality. Furthermore, they find that those patents were less likely to draw upon information from outside the firm's existing knowledge base, and less likely to combine information from disparate fields. They found the largest effects to be for workers who suffered the greatest housing price declines.

The literature also indicates that negative wealth shocks can have repercussions outside of the economic realm. Pool et al. (2018) finds that among US adults aged 51 years and older, a loss of 75% or more of total net worth was associated with an increased risk of all-cause mortality. Boen and Yang (2016) finds that negative wealth shocks significantly predicted decreased physiological functioning in older adults. These findings suggest that the bank's failure may have negatively impacted the physical and psychological health of its African American depositors, which may have inhibited their ability to recover financially in subsequent years.

While studies on historical wealth shocks are less common, there are a few which examine occurrences during the Civil War era. An observational study by Ager, Boustan, and Erikkson (2021) uses federal census data to assess the long-term impacts of a sudden wealth shock via the loss of ownership of slaves in the Reconstruction. They find that families who owned more slaves in 1860 lost substantially more wealth than equally wealthy households with few or no slaves pre-War. However, by 1900, they find that the sons of the original heads of

household had almost entirely rebounded from this disparity, and by 1940 the grandsons' wealth was entirely unrelated to their grandfathers' slaveholding patterns. The authors hypothesize that these wealthy families were able to recover primarily because they were able to rely on a tight social network of other elites based on marriage, not because of entrepreneurship or other skills.

Feigenbaum, Lee, and Mezzanotti (2019) studies the impact of the capital destruction resulting from General Sherman's military march during the Civil War. They find that the march, which occurred between 1864-65, caused a significant decrease in agricultural investment, farming asset prices, and overall manufacturing activity. Furthermore, they observe that aspects of this contraction were still apparent almost 60 years later, in 1920. Based on their knowledge of local banks and access to credit, the authors argue that the slow pace of recovery was due, in part, to the underdevelopment of financial markets in the area.

Unlike the wealthy families in the Ager, Boustan, and Erikkson (2021) study who were able to rely on a tight social network to rebound from the shock of the loss of ownership of slaves, freedmen lacked access to a wealthy social network. As a result, they lacked the resources needed to avoid the long-term impacts of the negative wealth shock caused by the bank's failure. The findings of Feigenbaum, Lee, and Mezzanotti (2019) on the impact of capital destruction resulting from General Sherman's military march during the Civil War also suggest that the underdevelopment of financial markets in the South contributed to slow economic recovery. This lack of access to financial markets likely further hindered the ability of African American communities to recover from the failure of the Freedman's Bank and contributed to their long-term economic hardships.

The literature on negative wealth shocks highlights the significant impact of such shocks on various economic and non-economic outcomes, including consumption, productivity, and

health. The studies presented in this literature review shed light on the potential effects of the Freedman's Bank failure, a significant historical event that affected African American depositors during the Reconstruction era. Although historical wealth shocks are less common in the literature, they provide insight into the lasting effects of such events on economic and financial development. The studies suggest that access to credit and financial markets is critical for recovery, and that social networks may play an essential role in helping individuals and families weather such shocks.

This literature review highlights the impact of formal savings mechanisms on low-income and unbanked populations. The studies reviewed indicate that formal savings have a positive effect on a range of outcomes, including business investment, agricultural output, ability to deal with financial shocks, and overall household behavior regarding savings. Additionally, this literature review demonstrates the significant impact of negative wealth shocks on various outcomes, including productivity, consumption, and health. The studies presented shed light on the potential effects of the Freedman's Bank failure on African American depositors during the Reconstruction era. While there is limited research on the impact of the Freedman's Bank on its patrons, the review presents three studies that offer contrasting views on the bank's impact. Stein and Yannelis (2020) report positive impacts on the bank's depositors, while Célerier and Tak (2021) argue that the bank had an overall negative socioeconomic impact. Traweek and Wardlaw (2022) find that black depositors responded similarly to white depositors during nationwide panics but were slower to react to bank-specific crises, leading to white depositors being more likely to redeem their deposits in full before the bank's failure. Thus, further research is needed to better understand the impact of the Freedman's Bank on its patrons.

Data

The failure of the Freedman's Bank was a significant event in the economic history of the United States, specifically the South that could have had a large impact on the financial condition of southern African Americans. Until now, a lack of available data has prevented most in-depth analyses. The most complete, reliable, and accessible source of data from the Reconstruction era is the United States Federal Census. However, because it is performed on a decennial basis, Census data does not lend itself to precise analysis of this situation. Instead, this study constructs two unique datasets sourced from archival documents to analyze the impact of the bank's failure on black and white taxpayers in Kentucky and Georgia.

The first archival source in this study is a collection of annual tax reports to the Auditor of Public Accounts in Kentucky. Scans of the reports were obtained through the HathiTrust digital library and provide county-level information on population counts, annual total personal property values, land values, and crop yields reported by black and white taxpayers between 1873 and 1883, reported for a total of 117 counties and 2,135 observations.

The second dataset is a collection of annual tax reports made to the Comptroller General of Georgia. The reports were obtained from scans of microfilmed records at the Georgia Archives in Atlanta and provide county-level information on population counts, annual total personal property values, land values, and value of money and solvent debts reported by black and white taxpayers between 1874 and 1890, reported for a total of 138 counties and 4,193 observations.

The primary feature of these records that sets them apart from other financial data from the Reconstruction era is that they report values for white and black taxpayers separately and on an annual basis. This allows for an examination of trends in the finances of African American

taxpayers, using the white taxpayers as a control. This is particularly useful given the lack of detailed data on the financial situation of black people during this period.

It is important to note that there are also limitations to these records. State governments in the South were still very racist institutions after the Civil War, and many did not report much, if any information at all on black taxpayers until the mid-1870s at the earliest. Additionally, assessment and reporting of the assets most likely to be affected by the bank's failure, such as money and solvent debts, was limited and inconsistent. Despite these limitations, this data provides some of the most comprehensive empirical information available on the finances of African Americans in the South during the Reconstruction era. It is also important to note that these annual reports were constructed from the handwritten tax ledgers of individual county tax collectors, and as such, are vulnerable to human error during both the original reporting process and subsequent transcription.

The Georgia dataset contains variables representing county, year, polls, which serves as a proxy for population by indicating the number of people paying poll taxes, land value, money and solvent debts, total value of personal property assessed, a numeric county identifier, an identifier variable for African American observations, a treatment identifier variable for black counties starting in 1875, and a treatment identifier variable for black counties starting in 1876. Due to missing records, values for all variables are missing for the year 1878. Per capita versions of land value, money and solvent debts, and total value of personal property were generated to account for the differences in population between counties. These variables were calculated by dividing the value of each observation by the number of people paying poll taxes in each county.

$$totval\_pc = totval/polls \quad (1)$$

TABLE 1. SUMMARY STATISTICS FOR GEORGIA VARIABLES OF INTEREST

Variable	Obs.	Mean	Std. dev.	Min	Max
polls	4,412	1825.148	11384.63	5	280929
landval_pc	4,401	470.307	2439.323	0.1682179	127921.9
moneysolvent_pc	4,194	104.7608	158.913	0.0040551	1653.246
totval_pc	4,412	880.9839	1324.911	1.036198	36779.83

The Kentucky dataset contains variables representing county, year, male population over 21, land value, total value of personal property assessed, tobacco measured in pounds, corn measured in bushels, wheat measured in tons, a numeric county identifier, an identifier variable for African American observations, a treatment identifier variable for black counties starting in 1875, and *failure2* (a treatment identifier for black counties starting in 1876). As with the Georgia data, I generated per capita versions of land value, total value of personal property, tobacco, corn, and wheat in order to control for variation in population size between counties, calculated by dividing the value of each observation by the population.

$$totval\_pc = totval/pop \quad (2)$$

TABLE 2. SUMMARY STATISTICS FOR KENTUCKY VARIABLES OF INTEREST

Variable	Obs.	Mean	Std. dev.	Min	Max
pop	2,536	1511.882	3078.868	1	48793
totval_pc	2,533	628.1642	791.9401	2	12741.27
landval_pc	2,502	398.6034	498.7479	0.2057613	4020.769
tobacco_pc	2,246	346.1287	504.7899	0.0039904	4581.594
corn_pc	2,464	148.5079	122.167	0.1183199	1570.72
wheat_pc	2,328	15.85351	21.41712	0.00986	193.9791

There are missing observations in both datasets, and there are a number of explanations for this phenomenon. The first possible cause is clerical errors made by the county tax assessors who failed to report the data to the state. Another reason could be that certain counties had no population to assess, resulting in a lack of data for those years; similarly, the late establishment of some counties also contributed to the missing data. Additionally, missing values were more common in reports on Black taxpayers, indicating a potential racial bias in data collection or reporting.

TABLE 3. SUMMARY OF MISSING OBSERVATIONS IN GEORGIA DATASET

Variable	Obs=.	Obs<.
pop	38	2,536
totval_ pc	41	2,533
landval_ pc	72	2,502
tobacco_ pc	328	2,246
corn_pc	110	2,464
wheat_ pc	246	2,328

TABLE 4. SUMMARY OF MISSING OBSERVATIONS IN KENTUCKY DATASET

Variables	**Obs=.**	**Obs<.**
polls	4	4,412
landval_pc	15	4,401
moneysolvent_pc	222	4,194
totval_pc	4	4,412

Despite these issues, there does not appear to be any discernible pattern in the missing values that would systematically bias the results of analysis. Therefore, while the missing data may limit the scope of the analysis, the impact on the validity of the results is likely minimal.

TABLE 5. MEANS FOR VARIABLES OF INTEREST, GEORGIA

			Treatment Group		
Variables	Full Sample	Control Group	Pretreatment	Post-treatment	Post-treatment, Lagged
land value	470.307 (2439.323)	698.3607 (2748.194)	215.82 (1773.284)	242.976 (2076.566)	242.3811 (2097.695)
money and solvent debts	104.7608 (158.913)	197.5123 (172.746)	2.441 (3.929)	1.806 (5.085)	1.779113 (5.209)
total value of property	880.984 (1324.911)	1681.766 (1491.642)	83.11 (53.316)	80.009 (59.485)	80.338 (59.276)

Note: all values are in per capita terms; values in parenthesis represent standard deviation

Upon the first analysis of the Georgia dataset, it was found that the most significant gap between black and white taxpayers was in the value of money and solvent debts, with black taxpayers owning an average of only 1.236% of the value of money and solvent debts owned by their white counterparts. Additionally, there was a significant difference in personal property values, with black taxpayers having only around 4.942% of the value of personal property of white taxpayers. However, the difference was least noticeable in the case of land value, as black taxpayers owned land worth only about three times less than that of white taxpayers.

Within the treatment group, average value of money and solvent debts and total personal property value decreased in the post treatment period. However, it was interesting to note that there was an increase in the average land value. This result aligns with the expectations based on the context of the bank's failure, as it is reasonable to assume that financial assets like money and solvent debts, as well as overall property, would be more susceptible to the impact of the bank's closure, while the value of a tangible asset such as land would not be directly affected, and would be able to continue to grow in the post-treatment period.

TABLE 6. MEANS FOR VARIABLES OF INTEREST, KENTUCKY

			Treatment Group		
Variables	Full Sample	Control Group	Pretreatment	Post-Treatment	Post-Treatment, Lagged
tobacco	346.129 (504.79)	461.33 (605.493)	343.724 (415.623)	171.495 (232.504)	185.097 (241.52)
corn	148.508 (122.167)	225.7922 (105.75)	95.757 (109.445)	58.123 (62.106)	57.531 (63.929)
wheat	15.854 (21.417)	25.792 (24.537)	2.838 (3.071)	3.896 (4.109)	3.874 (4.219)
land value	398.603 (498.748)	742.375 (493.226)	39.322 (36.331)	38.343 (31.173)	37.682 (31.071)
total value of property	628.164 (791.94)	1166.348 (808.403)	87.352 (52.59)	76.432 (44.517)	74.644 (44.267)

Note: all values are in per capita terms; values in parenthesis represent standard deviation

In Kentucky, no category demonstrated the same level of inequality as money and solvent debts in Georgia. The largest difference in values between treatment and control group is seen in the value of land; black taxpayers owned 5.2% of the value of land which white taxpayers owned. There is a similar magnitude of disparity for property value; the value of black taxpayers' personal property was about 7.489% of white taxpayers, on average.

In contrast to the Georgia treatment group, the average land value in the Kentucky treatment group decreased compared to its pre-treatment value, which may be attributed to either spillover effects from the Freedman's Bank failure leading to freedmen selling some of their land, or unrelated factors specific to the state.

Figure 1. Average Value of Total Personal Property in Georgia, per capita
Indexed values 1874=100

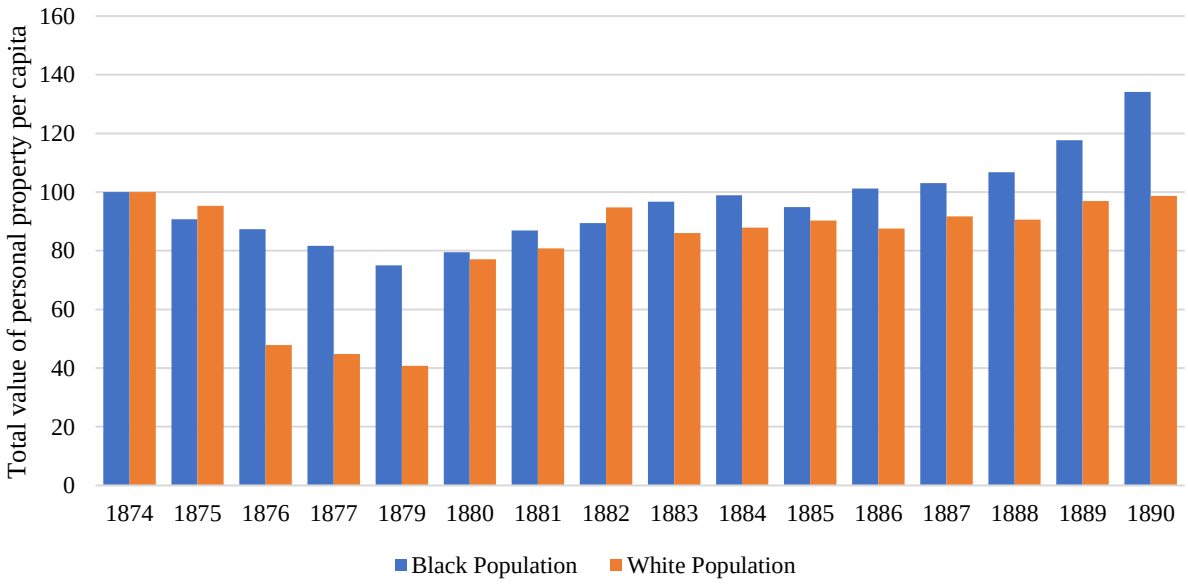
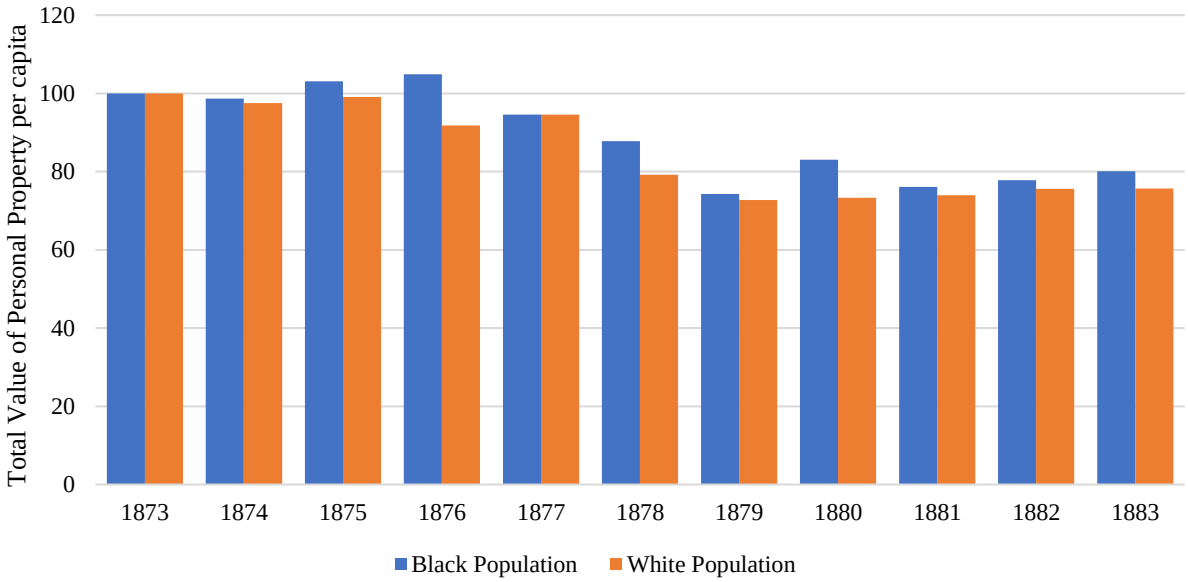


Figure 2. Average Value of Total Personal Property in Kentucky, per capita
Indexed values 1874=100



Interestingly, when indexed to their 1874 values, the black populations in both Georgia and Kentucky do better in terms of personal property value than the white populations. In Georgia, both populations experienced a decrease in value in the years following the bank's failure. Nonetheless, they started to recover in 1880. By 1890, the black population had exceeded the 1874 baseline by over 30%, while the white population had not yet fully recovered (Figure 1). In Kentucky, the dataset shows that the value decrease began in 1875 for the white population, with the black population following in 1876, but the limited timeframe of the data prevents a comprehensive analysis of the recovery trends; nonetheless, both populations began to recover by 1880, and similar to Georgia, the black population appeared to recover slightly better than the white population (Figure 2).

Methods and Results

A difference-in-differences (DID) approach is used to estimate the causal effect of the treatment variables (*failure* and *failure2*) on the outcome variable (total value of personal property). The DID method compares the change in the outcome variable, *totval_pc*, over time for the treatment group (counties where the failure variable was equal to 1) with the change in the outcome variable over time for the control group (counties where the failure variable was equal to 0) and estimates the causal effect of the treatment variable by subtracting the difference in changes between the treatment and control groups.

The difference-in-differences (DID) regression measures the change in *totval_pc* before and after the bank's failure and compares this change between black and white taxpayers. A positive coefficient estimate would suggest that the bank's failure had a positive impact on the personal property value of black taxpayers relative to their white counterparts, and a negative coefficient estimate would indicate a negative impact. It is expected that the bank's failure will have a negative impact on the total value of personal property of black taxpayers, who were the primary depositors at the bank compared to white taxpayers. Therefore, the coefficient estimate should be negative, indicating a decrease in the total value of personal property of black taxpayers compared to their white counterparts. This would suggest that the bank's failure had a disproportionate impact on the economic well-being of black depositors, who were already at a disadvantage due to historic racial disparities in wealth accumulation.

To control for potential confounding factors, the following independent variables in the Kentucky regression are land value, tobacco, corn, and wheat. In the Georgia regression, the independent variables are land value and money and solvent debts. County and year fixed effects are included in both regressions. Controlling for variables like agricultural yields, land values,

and solvent debts is necessary when assessing the bank's impact on the economic condition of depositors because these variables could have influenced depositors' economic conditions independently of the bank. For example, changes in agricultural yields and land values can affect the overall economic well-being of the region, and depositors may have been impacted by these factors regardless of whether they were associated with the bank or not. Controlling for these variables ensures that any observed changes in the economic conditions of depositors are solely attributed to the bank and not influenced by other factors. Additionally, including fixed effects for county and year in the regression accounts for factors that affects observations similarly by county and year, thus providing a more accurate assessment of the bank's impact.

Two regressions are performed for each state, one to test each treatment timeframe. For Kentucky, the regression equations are:

$$totval\_pc_{it} = \beta_0 + \beta_1 failure_{it} + \beta_2 \text{black}_{it} + \beta_3 (failure_{it} \times black_{\text{it}}) + \beta_4 landval\_pc_{it} + \beta_5 tobacco\_pc_{it} + \beta_6 corn\_pc_{it} + \beta_7 wheat\_pc_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (3)$$

$$totval\_pc_{it} = \beta_0 + \beta_1 failure2_{it} + \beta_2 \text{black}_{it} + \beta_3 (failure2_{it} \times black_{\text{it}}) + \beta_4 landval\_pc_{it} + \beta_5 tobacco\_pc_{it} + \beta_6 corn\_pc_{it} + \beta_7 wheat\_pc_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (4)$$

For Georgia, the regression equations are:

$$totval\_pc_{it} = \beta_0 + \beta_1 failure_{it} + \beta_2 \text{black}_{it} + \beta_3 (failure_{it} \times black_{\text{it}}) + \beta_4 landval\_pc_{it} + \beta_5 moneysolvent\_pc_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (5)$$

$$totval\_pc_{it} = \beta_0 + \beta_1 failure2_{it} + \beta_2 \text{black}_{it} + \beta_3 (failure2_{it} \times black_{\text{it}}) + \beta_4 landval\_pc_{it} + \beta_5 moneysolvent\_pc_{it} + \alpha_i + \gamma_t + \epsilon_{it} \quad (6)$$

The results of the difference-in-difference regressions, included in Tables 7-10, indicate that the treatment variables, failure and failure2, were not statistically significant in both the Georgia and Kentucky analyses.

In Georgia, the coefficient estimate for failure, displayed in Table 7, was -50.436 (p=0.326), indicating that the failure of the Freedman's Bank did not have a significant effect on African American taxpayers in Georgia compared to white taxpayers. Similarly, the coefficient estimate for failure2, shown in Table 8, was -52.761 (p=0.320), suggesting that the effect of the bank's failure did not differ significantly between African American and white taxpayers in Georgia with a one-year lag.

Table 7. Georgia regression results for treatment variable *failure*

ATET: totval_pc	Coefficient	Robust std. err.	t	P>|t|	Obs.=4,193
failure (1 vs 0)	-50.43574	28.3747	-1.78	0.326	

Table 8. Georgia regression results for treatment variable *failure2*

ATET: totval_pc	Coefficient	Robust std. err.	t	P>|t|	Obs.=4,193
failure2 (1 vs 0)	-52.76095	29.03229	-1.82	0.320	

In Kentucky, the coefficient estimate for failure, seen in Table 9, was -13.414 (p=0.263), indicating no significant difference in the effect of the bank failure on African American taxpayers compared to white taxpayers. Likewise, the coefficient estimate for failure2, in Table

10, was -0.757 (p=0.897), suggesting that the bank failure did not have a significant differential effect on African American taxpayers in Kentucky when lagged a year.

Table 9. Kentucky regression results for treatment variable *failure*

ATET: totval_pc	Coefficient	Robust std. err.	t	P>|t|	Obs.=2,135
failure (1 vs 0)	-13.41425	5.877314	-2.28	0.263	

Table 10. Kentucky regression results for treatment variable *failure2*

ATET: totval_pc	Coefficient	Robust std. err.	t	P>|t|	Obs.=2,135
failure2 (1 vs 0)	-0.756981	4.618881	-0.16	0.897	

The results of the regression analyses in both Georgia and Kentucky indicate that the treatment variables were not statistically significant. Therefore, we cannot conclude that the failure of the Freedman's Bank had a significant effect on African American taxpayers in these states compared to white taxpayers. The inclusion of relevant control variables and fixed effects helped to mitigate potential confounding factors.

Analysis

This study suggests that the closure of the Freedman's Bank did not have a statistically significant effect on the financial condition of African American taxpayers who lived in Georgia and Kentucky. However, despite the fact that none of the estimates were statistically significant at the 5 or 10% levels, all four coefficients exhibited a negative sign, which is consistent with the anticipated result. While these findings do not definitively establish a causal relationship between the demise of the Freedman's Bank's and the economic well-being of African

Americans, they do suggest the possibility that the failure may have had a negative effect, emphasizing the need for additional research to explore the possibility further.

There are a few limitations to the analysis that must be acknowledged. One limitation is that the available data sources only provided one year of pretreatment data for Georgia and two years for Kentucky. This limited amount of data before the treatment occurred could have significantly limited the regression's ability to capture the effect of the treatment variable accurately. As such, it is possible that the analysis may not fully capture the impact of the bank's failure on the outcome variable.

The archival sources used in this study provided a limited range of data that could be used for the difference-in-difference analysis, which may have resulted in an omitted variable bias. The study only had access to data on personal property value, land value, and crop yields in Kentucky, and personal property value, land value, and the value of money and solvent debts in Georgia. Economic theory suggests that income, education, occupation, and health status are important determinants of an individual's economic well-being. In the absence of these variables, the analysis may have failed to fully capture the complex relationships between the closure of the Freedman's Bank and the economic outcomes of African American taxpayers in Georgia and Kentucky. For example, individuals with higher levels of education and income may have been more likely to invest their money in alternative financial institutions, thereby reducing their reliance on the Freedman's Bank. Additionally, individuals with poorer health may have experienced greater financial hardship as a result of the bank's closure, as they may have been less able to work and earn an income. By not including these variables in the analysis, the true impact of the Freedman's Bank's closure on African American taxpayers in Georgia and Kentucky may have been underestimated or overestimated. Further research that considers these

variables could help to provide a more complete understanding of the relationship between the bank's closure and economic outcomes. Such variables could also include demographic characteristics, employment status, access to healthcare, and other social and economic factors that may have an impact on the economic wellbeing of depositors.

Another limitation of this study is that the sample of taxpayers analyzed may not accurately represent the overall impact of the Freedman's Bank's failure. One factor that may have influenced the accuracy of the study is that not all black taxpayers in Georgia and Kentucky were depositors at the bank. This could be due to the fact that some individuals may have lived too far from the branch locations and did not have access to transportation. Furthermore, the study may not have captured individuals or families with small amounts of assets who may not have been included in the tax ledgers or may not have reported their assets, which could affect the accuracy of the data.

This sampling bias could have obscured the results of the study. When only a small portion of the treatment group is actually influenced by the treatment, the results may not accurately reflect the overall impact of the treatment. In this case, if only a small portion of African American taxpayers in Georgia and Kentucky were depositors at the bank, then the regression may not have been able to detect the actual impact of the bank's closure within the context of the broader African American population in those areas. Because of this dilution, the impact may in fact be greater than that found in this analysis. Therefore, further research is necessary to determine the full extent of the impact of the Freedman's Bank's failure on African American depositors in Georgia and Kentucky.

Despite these limitations, the present study contributes to the understanding of the impact of the Freedman's Bank failure on its depositors. However, future studies could benefit from the

inclusion of a larger and more representative sample of individuals and more comprehensive data sources to provide a more accurate analysis of the effects of the Freedman's Bank collapse.

This study's findings contradict the limited existing literature on the impact of the Freedman's Bank on its patrons. While previous studies have suggested both positive and negative socioeconomic effects of the bank on its depositors, this study's difference-in-difference regression analyses do not support either of these findings. Instead, the results indicate that the bank's failure did not have a significant impact on African American taxpayers in Georgia and Kentucky compared to white taxpayers. When considered in the context of the existing literature, the results of this study highlight the need for further research on this topic, as it reveals the discrepancies and inconsistencies that can arise when examining the same historical event through different lenses and methodologies.

Conclusion

The study utilized a difference-in-difference analysis to determine whether the closure of the Freedman's Bank had a significant impact on the economic well-being of African American taxpayers in Georgia and Kentucky. The data used in the analysis were obtained from annual tax ledgers from the years before and after the bank's closure. The study's findings provide valuable insights into the economic condition of freedmen in the South during the Reconstruction era and contribute to ongoing research on the Freedman's Bank. Due to the limitations of the available data, the analysis could not identify a statistically significant treatment effect. Even so, the study underscores the potential of previously unused archival data sources that could be leveraged for further research on this crucial topic.

Moreover, this study has drawn attention to the significant disparity in the conclusions of previous research, which further underscores the need for more comprehensive and rigorous studies that can produce stronger and more robust results. The findings of this study should prompt future researchers to approach the topic with more attention to detail and nuance, in order to better understand the complexities of the Freedman's bank and its impact on its depositors.

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